Appendix 21

ECONOMIC IMPACT
ASSESSMENT

Mallee Wind Farm

Economic Impact Assessment (EIA)

Prepared for Umwelt (Australia) Pty Ltd

Ethos Urban

Prepared by Ethos Urban

16 September 2024 | 3220437

'Gura Bulga'

Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.

'Dagura Buumarri'

Liz Belanjee Cameron

'Dagura Buumarri' – translates to Cold Brown Country. Representing Victoria.

'Gadalung Djarri'

Liz Belanjee Cameron

'Gadalung Djarri' – translates to Hot Red Country. Representing Queensland.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We pay our respects to their Elders past, present and emerging.

In supporting the Uluru Statement from the Heart, we walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people for a better future.

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This document has been prepared by:		**This document has been reviewed by:**	
Alex Wilson	16 September 2024	John Noronha	16 September 2024

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The Project is located approximately 16 kilometres (km) north east of Buronga in the Murray region of south western NSW within the Wentworth Local Government Area (LGA) and 17 km north east of Mildura, Victoria (VIC). It will include the installation, operation, maintenance and decommissioning of up to 76 wind turbine generators (WTGs), a single grid scale 100 megawatts (MW) /200 megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project design incorporates up to 76 WTGs, with a maximum blade-tip height of 280 metres (m) above ground level, and an installed capacity of up to 402 MW.

Ethos Urban has been engaged to prepare this Economic Impact Assessment (EIA) to support the Environmental Impact Statement (EIS) for the Project.

The main findings of this EIA are summarised as follows:

Regional Economic Context

1. The population of the EIA Study Area (LGAs of Wentworth Shire and Mildura Rural City Council) is estimated at **65,240** persons as of June 2023. Over the period 2023-2036, annual population growth in the EIA Study Area is expected to be **+0.6%** p.a. compared to the NSW growth rate of **+1.1%** p.a. Wentworth Shire is projected to experience a decline in population of a combined **-150** persons over the period. This decline in population highlights the need for local investment projects that provide new employment opportunities for residents and potentially attract new residents to the area. Further, large scale renewable energy projects provide an alternative income stream for local farmers and workers. These factors may contribute to retaining, and potentially expanding the population within the two local LGAs.
2. The EIA Study Area had an unemployment rate of **3.9%** in December 2023, compared to the NSW rate of **3.3%** with approximately **1,385** jobseekers unemployed. The Project provides new short-term employment opportunities for the region's labour force participants (including unemployed job seekers, subject to suitable skills match), with a small amount of ongoing employment also supported once the facility is operational.
3. The EIA Study Area's occupational and business structures indicate a good base exists to service the needs of the Project, with approximately **9,830** workers and **870** businesses involved in construction related activities. However, concurrent demands from other major infrastructure projects and the regional economy need also to be considered when assessing local labour availability.
4. The EIA Study Area's major regional township of Mildura has the capacity and labour force to service many aspects of the Project (and potentially some concurrent demands), with smaller settlements such as Wentworth, Buronga and Gol Gol, also likely to provide some labour, accommodation and other general services to the Project.

Economic Impact Assessment

5. The Project will require approximately **$866 million** in investment during the construction phase, of which approximately **$130 million** will be retained in the EIA Study Area and will support **225 direct and 360 indirect** Full Time Equivalent (FTE) positions (on average) over the **36 month** construction period. Once operational, **30 direct** and **85 indirect** FTE jobs will be supported by the Project.
6. The EIA Study Area is expected to benefit from **95 FTE** construction jobs (**25 FTE** direct and **70 FTE** indirect) and **47 FTE** (**30 FTE** direct and **17 FTE** indirect) ongoing jobs associated with the Project.
7. The 'external' Project labour requirement is expected to generate an accommodation need for **360 FTE** workers at the peak of the Project. This represents **26%** of total commercial accommodation rooms/cabins within a 60-minute drive of the Project Area. However, some further capacity is available in private rentals (e.g., long-term houses/units, and potentially unoccupied dwellings) - some of which may become available to the market to support the Project. While this data indicates some capacity currently exists in the EIA Study Area to accommodate non-local workers, it is recognised the long-term rental housing market (a preference for many construction workers) has very limited supply; while increased demand from concurrent regional

infrastructure projects (refer to **Section 4.3**) and seasonal accommodation demands (tourism, agricultural activities etc) also need to be factored in.

8. At the Project's peak 400 on-site workers will be required comprising: 40 local workers (requiring no accommodation), 300 workers accommodated in a purpose-built Temporary Worker Accommodation (TWA) and 60 workers accommodated in commercial (hotels, motels etc) and short-term (Airbnb etc) accommodation.

9. Construction workers relocating to the region would be expected to inject approximately **$4.6 million** in new spending into the economy over the Project's construction phase, supporting approximately **8 FTE** jobs in the service sector in the EIA Study Area over this time.

10. Cumulative impacts are associated with significant development of major renewable energy projects in the SW REZ in the coming years and ongoing demand from the tourism, agriculture and mining sectors. Potential impacts may include insufficient accommodation and workers to service the Project and concurrent demands. In this regard strategies to manage accommodation demand (commitment to a TWA), local procurement and employment should be considered by the Proponent.

11. Approximately **57,330.31 ha** of existing agricultural land will be required to host the Project, with a Disturbance Footprint of **444.95** ha (within the Project Area 444.69 ha plus 0.26 ha for offsite road works) which represents less than **1.0%** of the Project Area. This land, which will be leased from the existing landowners, is mainly used for large-scale cropping of grains and legumes, particularly wheat, chickpeas and beans, and some grazing. No loss of employment associated with the Project Area is anticipated, either directly (on-site) or through the supply chain. Agricultural activities are expected to be ongoing within the Project Area and ultimately co-exist during the operational phase of the Project. The main relevant agricultural impacts include:

    - Temporary removal of **444.69 ha** of land within the Project Area from agricultural land use for the duration of the Project.
    - Temporary curtailment of agricultural primary productivity to the estimated value of up to **$154,307** per year for the duration of the Project, associated with the temporary removal of 444.95 ha from agricultural land use.

12. The ongoing economic stimulus associated with the operation of the Project is estimated at approximately $220 million (over 30 years, Consumer Price Index (CPI) adjusted) in relation to landowner lease payments, operational wage stimulus, and Planning Agreement (PA) payments.

13. Operation of the Project could potentially support small-scale tourism and educational opportunities in the future, especially in light of the significant development of the renewable energy sector in the nearby SW REZ over the coming years.

14. In order to minimise potential Project impacts the following mitigation measures are recommended:

    - Prior to commencing construction of the Project, the Proponent should prepare an Accommodation Employment Strategy (AES), in consultation with relevant stakeholders. Details of the TWA should be central to the AES.
    - Prepare a Community Shared Benefit Strategy (CSBS).

Net Economic Benefit Assessment

A summary of net economic outcomes is included in **Table A**.

Table A: Mallee Wind Farm – Net Economic Benefit Assessment

Factor	Value
Negative Economic Outcomes	
Temporary loss of agricultural land (30 years)	444.95 ha
Estimated Annual Value of Agricultural Economic Loss	$154,307
Net Loss of employment (includes direct and indirect jobs)	0 jobs
Positive Economic Outcomes	
Construction Phase (36 Months)	
Estimated Development Costs	+$866 million
EIA Study Area investment (including wage stimulus)	+$130 million (assumes 15% of total investment)
Construction employment (average no. of FTE jobs for 36 months)	225 FTE Direct + 360 FTE Indirect *Total: 585 FTE*
EIA Study Area employment (average no. of FTE jobs for 36 months)	*EIA Study Area jobs* *25 FTE direct on-site* *70 FTE indirect off-site* *Total: 95 FTE*
Operational Phase (30 Years)	
Operational employment average no. of ongoing FTE jobs)	30 FTE Direct + 85 FTE Indirect *Total: 115 FTE*
EIA Study Area operational employment (average no. of FTE ongoing jobs)	*30 FTE direct on-site* *17 FTE indirect off-site* *Total: 47 FTE*
Operational Economic Stimulus	
Total net local economic stimulus (operational wage stimulus, VPA payments, landowner lease payments)	**$220 million**
Total Economic Benefits (Construction and Operational Phases)	**$350 million**
Decommissioning Phase	
Likely to generate employment, business contract and spending stimulus benefits for the EIA Study Area	Not quantified

1.0 Introduction

1.1 Background

Spark Renewables Pty Limited (Spark Renewables) proposes to develop the Mallee Wind Farm (the Project) to generate renewable wind energy and supply to the National Electricity Market (NEM). The Project will also contribute to reducing greenhouse gas (GHG) emissions associated with energy generation and provide significant economic benefits to the Murray region of New South Wales (NSW).

The Project is located approximately 16 kilometres (km) north east of Buronga in the Murray region of south western NSW within the Wentworth Local Government Area (LGA) and 17 km north east of Mildura, Victoria (VIC). It will include the installation, operation, maintenance and decommissioning of up to 76 wind turbine generators (WTGs), a single grid scale 100 megawatts (MW) /200 megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project design incorporates up to 76 WTGs, with a maximum blade-tip height of 280 metres (m) above ground level, and an installed capacity of up to 402 MW.

The Project is a State Significant Development (SSD) under the State Environmental Planning Policy (Planning Systems) 2021 (SRD SEPP) as the estimated development cost (EDC) of the Project is over $30 million (EDC for the Project is **$866 million**). A development application (DA) for the Project is required to be submitted under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Umwelt (Australia) Pty Ltd (Umwelt) engaged Ethos Urban to prepare an Economic Impact Assessment (EIA) for the Project. This EIA report supports the Project's Environmental Impact Statement (EIS) and responds to the Secretary's Environmental Assessment Requirements (SEARs) for economic impacts, which are:

- **Economic** – *including any benefits of the economic impacts or benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, and details of how the construction workforce will be managed to minimise local impacts, including a consideration of the construction workforce accommodation.*

This EIA addresses economic impacts and benefits for the region and State as a whole, including construction workforce accommodation considerations. SEARS relating to social factors are addressed in a separate Social Impact Assessment which has been prepared for the Project by Umwelt.

1.2 Methodology and Data Sources

Methodology

The following methodology has been applied to this EIA:

- Identification of a relevant Study Area (EIA Study Area) for the assessment which reflects likely labour force, accommodation, and supply chain linkages available to support the Project. The EIA Study Area is defined in terms of host and surrounding LGA boundaries and is defined in **Section 2.4**.
- Review of federal and state policies relevant to investment in the renewable energy sector, including the Paris Climate Accord, NSW DPE (now DPHI) Large Scale Wind Energy Guideline, 2016, and published resources by EnergyCo relevant to the South West Renewable Energy Zone (SW REZ).
- Baseline analysis of population, labour markets, occupational structure and business structure for the EIA Study Area and NSW, with reference to the latest available data (at the time of writing) relating to the Australian Bureau of Statistics (ABS) Estimated Resident Population, Department of Environment and Planning State and Local Government Population Projections, ABS Census, ABS Business Counts and Department of Jobs and Skills - Small Area Labour Markets.
- Assessment of the capacity and opportunities of townships in the EIA Study Area to participate and service the Project. This information has been compiled through a site visit, a desktop review of townships and accommodation data (accommodation provider websites, STR, Airbnb and Vrbo databases, website searches) and discussions with local real estate agents.
- Estimated Project investment, with an EDC figure provided by the Proponent, and the estimated share of investment retained in the EIA Study Area informed by benchmarking analysis of similar sized completed renewable energy facilities located in regional areas.

- Assessment of Project employment (direct and indirect) for construction and operational phases. Direct employment is jobs created to support the on-site construction and operation of the Project. Indirect employment is jobs supported through the industrial and consumption/induced impacts of each Project stage. Relevant ABS multipliers are applied to the construction and operational phases. Employment numbers have been provided by the Proponent based on estimated Project labour requirements. Ratios of direct Study Area (local) and non-Study Area (imported) employment are based on the Proponent's anticipated labour force requirements and the EIA Study Area's existing workforce capacity.
- Identification of business and industry participation opportunities, with reference to baseline analysis outcomes regarding workforce size and skills composition and procurement activities proposed by the Proponent.
- Assessment of agricultural impacts which includes employment and production impacts through land consumption and disruption to activities, and benefits to host landowners from new incomes and improved on-site infrastructure.
- Assessment of accommodation and housing impacts with reference to the baseline analysis and the estimated number of construction workers that may require accommodation at the Project's peak.
- Assessment of cumulative impacts relating to the potential concurrent construction of major infrastructure projects in the EIA Study Area/within 80 km of the Project Area. Importantly the introduction of the SW REZ is likely to generate significant demand for new projects over the coming years. This includes assessing potential impacts on accommodation and labour and providing measures to manage identified cumulative impacts.
- Estimates of economic stimulus impacts (construction and operation phases) including Project wages and spending, landowner leasing incomes, and Proponent's Community Benefit Sharing Program. Construction stimulus is expressed in 2023 dollars (and calculated over the Project's 36 month construction phase), while operational stimulus is calculated over 30 years using 2023 dollars but indexed to 3.0% Consumer Price Index (CPI) annually.
- Description of proposed mitigation measures relating to accommodation, workforce and procurement and community benefit sharing.

Note, detailed assumptions and calculations are provided throughout the report.

Data Sources

The following specific data sources have been used in compiling this EIA:

- ABS Average Weekly Earnings, November 2023
- ABS, Counts of Australian Businesses, including Entries and Exits, June 2018 to June 2022
- ABS Census of Population and Housing, 2021
- ABS Estimated Resident Population, 2022 (April 2023 release)
- ABS Household Expenditure Survey, 2015-16
- NSW Tourist Accommodation Snapshot March Qtr. 2022, STR.com
- Australian National Accounts: Input-Output Tables, 1998-99
- Air DNA, July 2023
- Department of Jobs and Skills - Small Area Labour Markets, December Quarter 2023
- NSW Department of Planning, State and Local Government Population Projections 2022, 2022 NSW Common Planning Assumption Projections
- Tourism Research Australia 2017
- STR.com
- www.energy.nsw.gov.au/renewables/renewable-energy-zones
- www.tripadvisor.com
- Umwelt, Mallee Wind Farm Scoping Report, October 2022
- www.tripadvisor.com

1.3 This Report

This report contains the following chapters:

Chapter 1: Introduction

Chapter 2: Project Context

Chapter 3: Baseline Regional Economic Profile

Chapter 4: Economic Impact Assessment

2.0 Project Context

2.1 Project Location

The Project is located in the Murray region of south western NSW, within the SW REZ. The Project is situated within the Wentworth Shire LGA. The Project is located approximately 16 km north east of Buronga, NSW (population 6,511), 17 km north east of Mildura, VIC (population 32,738) and 40 km east of Wentworth, NSW (population 1,305) (ABS, 2021). Smaller localities of Mallee, Red Cliffs and Trentham Cliffs are located to the south and south west of the Project.

The Project Area encompasses approximately 57,330.31 hectares (ha) of predominantly cropping and grazing land and adjoins the Mallee Cliffs National Park, which is located directly south and south east. The Project Area is zoned primarily as RU1 Primary Production with some pockets of C2 Environmental Conservation under the Wentworth LEP 2011. There is no C2 zoned land within the Disturbance Footprint and no Project infrastructure will be cited within C2 land.

The Project's local context is presented in **Figure 2.1** below.

A number of small, medium, and major regional centres and towns located within a 60 minute drive from the Project Area's main access point along Arumpo Road (-34.009306, 142.419917). These settlements are listed below, in order of 2023 population size and include:

- **Mildura (VIC)**, significant regional service centre located approximately a 30-minute drive to the south-west of the Project Area.
- **Red Cliffs (VIC)**, small sized agricultural focused township in orbit of Mildura located approximately a 45-minute drive to the south of the Project Area.
- **Wentworth (NSW),** a once important regional service centre, now, a medium sized township located approximately a 45-minute drive to the south-west of the Project Area.
- **Buronga (NSW)**, small township located approximately a 25-minute drive to the south-west of the Project Area.
- **Gol Gol (NSW),** small township located approximately a 30-minute drive from the Project Area to the south.

These regional centres and townships, to differing extents, are likely to play important roles in supporting the requirements of the Project.

2.2 Project Description

The Project will include the installation, operation, maintenance and decommissioning of up to 76 WTGs, BESS facility, ancillary infrastructure and temporary facilities associated with the construction of the Project. The current design incorporates WTGs with a maximum blade-tip height of 280 m above ground level (AGL) with an installed capacity of up to 402 MW.

The key components of the Project include:

- Up to 76 (three (3) blade) WTGs, with a maximum blade-tip height of 280 m above ground.
- A single grid-scale 100 MW / 200 MWh megawatt hour (MWh) BESS.
- Permanent ancillary infrastructure including internal roads, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
- Temporary facilities used for the construction, repowering and/or decommissioning of the Project, including but not limited to the temporary workforce accommodation, site offices, amenities, construction compounds and laydown areas (including stockpiling and materials storage areas), concrete or asphalt batching plants, minor 'work front' construction access roads, environmental management and monitoring and signage and temporary meteorological masts.
- Off-site road works, involving upgrades to the proposed local transport route and establishment of site access points to facilitate delivery of wind turbine components to the Project Area as required.

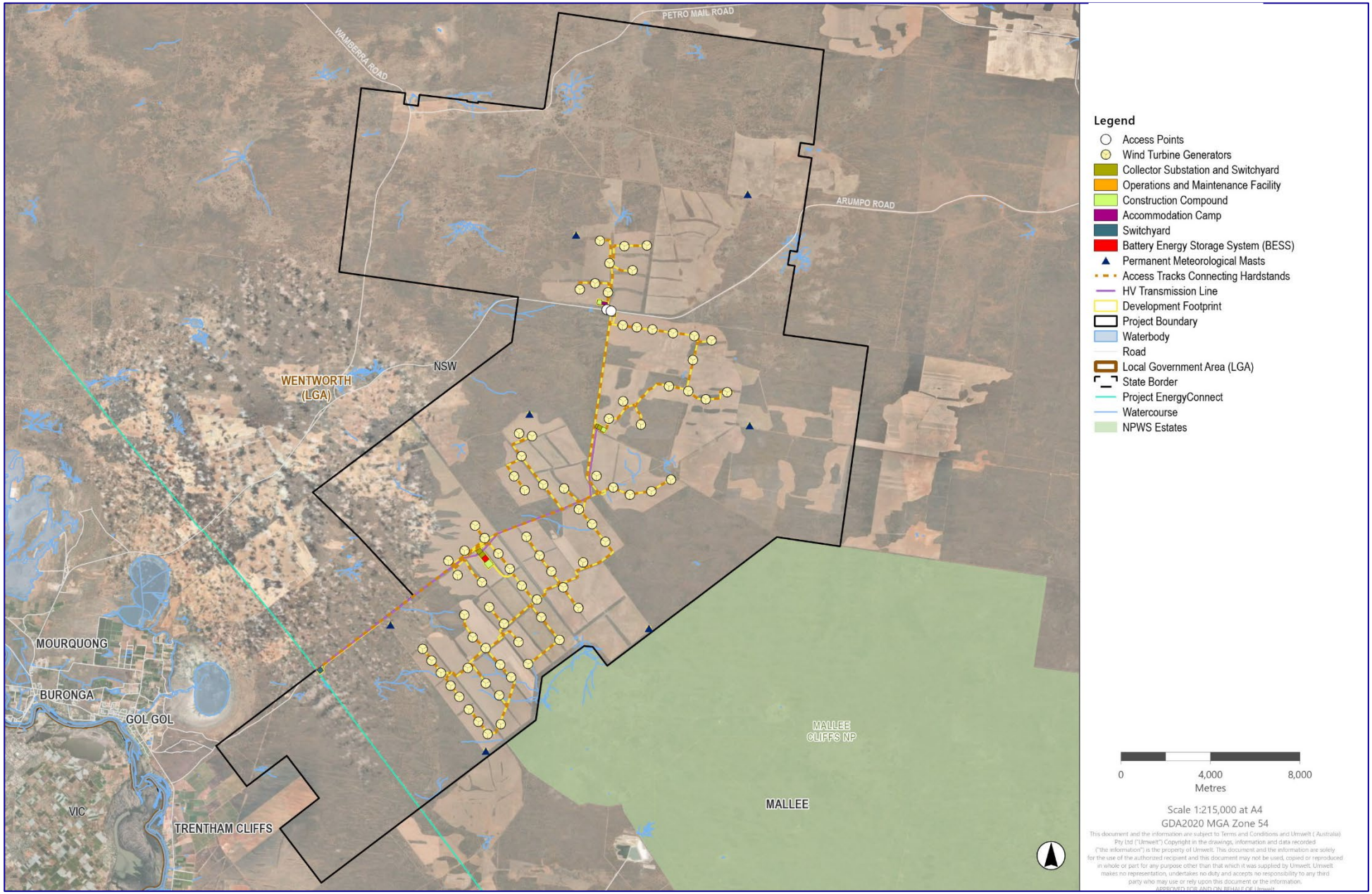

Figure 2.1 ***Mallee Wind Farm – Project Overview***

Source: Umwelt; Spark Renewables

2.3 Policy Context

International agreements and domestic government policy settings are important factors in influencing demand and investment in the renewable energy sector, an overview of the key policies relevant to the Project includes.

2.3.1 Paris Climate Accord and Updated Federal Government Target

The Paris Accord is a comprehensive international climate agreement to which Australia is a party. The Accord provides a framework for participating nations to set themselves nationally determined contributions (NDCs) beginning in 2020, with review at five-year intervals. It sets out a global consensus to limit temperature increases to below two degrees Celsius when compared to pre-industrial levels. An additional goal is to maintain this increase at less than one and a half degrees Celsius. NDCs do not have any set lower limit but are required to progress over time (beginning with the intended NDC pledged during the Paris conference), and to be 'ambitious.' Australia's previous target was to achieve a reduction of emissions by 5% from 2000 levels by 2020 and the previous Liberal Federal Government committed to a reduction of 26-28% below 2005 levels by 2030 and net zero emissions by 2050.

In July 2022, an updated Nationally Determined Contribution (NDC) was submitted by the Federal Government and reflected a pre-election promised by the incoming Labor Party to fulfil Australia's obligations under the Paris Agreement. The updated NDC includes a commitment to a reduce greenhouse gas emissions by 43% by 2030 and reaffirms the previous commitment to net zero emissions by 2050.

2.3.2 NSW Wind Energy Guidelines

NSW Wind Energy Guideline 2016

The NSW DPE (now DPHI) Wind Energy Guideline, 2016 provides the community, industry and regulators with guidance on the planning framework for the assessment of large-scale wind energy development proposals that are State significant developments (SSD). The objectives of this Guideline are to:

- provide clear and consistent guidance to the community, industry and regulators about how to measure and assess key environmental impacts of SSD wind energy development in NSW
- facilitate better outcomes by requiring early identification of impacts to drive better siting and design
- facilitate meaningful, respectful and effective community and stakeholder engagement across the development assessment process, from pre-lodgement to post-approval
- encourage benefit-sharing between wind energy operators and the communities in which they operate, where appropriate
- provide greater accountability for the management of impacts over the life of a project by linking commitments to conditions and/or appropriate monitoring and adaptive management strategies.

Draft Wind Energy Guideline, November 2023

The existing wind energy guideline document dates back to 2016, with the significant change occurring in the industry since then. NSW DPHI is now in the process of reviewing and updating the Guideline. In this regard, the draft Guideline:

- identifies desirable areas for wind energy development based on a range of considerations including wind resource potential, proximity to transmission, and land use constraints.
- provides advice to assist the industry in selecting sites and designing projects.
- includes new guidance on landscape and visual impact assessment in a technical supplement.
- includes minor updates to align the noise impact assessment methodology with updates to the South Australian wind farm noise guidelines (2021) (these updates do not change the noise criteria and would not materially change modelling results).
- adopts a new noise criterion of 50dB(A) for passive recreation areas within National Parks to minimise land use conflicts.
- includes a calculator for estimating the potential costs of decommissioning to ensure host landowners are well informed about the likely costs, and

- addresses commonly raised concerns including traffic and transport management, aviation risk and night lighting.

2.3.3 Draft Benefit Sharing Guideline, November 2023

As part of the wider *Draft Energy Policy Framework* (2023) developed by the NSW Department of planning and Environment (DPIE), a Benefit Sharing Guideline has been prepared. The aim of the Guideline is to 'ensure that benefit sharing is transparent, focussed on communities, and delivers positive, tangible and long term social and economic' and to 'help local communities be more resilient to change'. The draft Guideline proposes a rate for benefit sharing to be $1,050 per megawatt per annum for wind farm developments, with the payments are indexed to CPI.

2.3.4 Project EnergyConnect

South Australia, NSW and Victoria are being connected via an interconnector (Project EnergyConnect) that will allow power to flow between the regions in the National Energy Market, with transmission infrastructure a key factor supplying renewable energy to the national grid. Project EnergyConnect will deliver 330 kilovolt (kV) / 500kV above ground transmission lines, with approximately 800MW transfer capacity from Robertstown in South Australia to Wagga Wagga in NSW with a connection to Red Cliffs in Victoria. The total length of the transmission line will be approximately 900km with the approved corridor illustrated in **Figure 2.2** below.

Project EnergyConnect is now under construction with the South Australian component completed with 206km of transmission lines installed as of December 2023.

DPE (now DPHI) granted approval for the NSW – Western Section (SA / NSW border to Buronga) on 28 September 2021. This section of the project involves the construction of 130km of 330Kv transmission line between the NSW / SA border near the township of Chowilla connecting to the existing Buronga substation (with the substation being upgraded).

On 2 September 2022, the eastern section of Project EnergyConnect was granted approval by DPE. This section of the project contains two key components including a 375km of 330Kv transmission line constructed between the soon to be upgraded Buronga substation, a new Dinawan substation, near Coleambally; and 162 km long 500 kV transmission line between the new Dinawan substation and the existing Wagga Wagga substation. Work has begun on the eastern section in mid-2023 with the first transmission tower expected to be constructed in mid-2024.

2.3.5 South-West Renewable Energy Zone

The state's South-West has been chosen as a REZ location due to a host of approved and planned projects, relatively low build costs and a strong mix of solar and wind resources. It is part of the NSW government's long-term plan to deliver five REZs across the state.

The SW REZ aims to produce enough energy to power up to 1.3 million homes each year. The Energy Corporation of NSW (EnergyCo) is the network planner and will bring together investors and undertake early planning for the SW REZ so benefits for local communities are maximised. Where appropriate, the NSW Government will change the regulatory settings to incentivise generators to cover part of the cost of building new transmission for REZs (NSW Electricity Strategy (Overview), pg. 11). The SW REZ is expected to support over 2,000 construction jobs during peak construction periods, with an intended network capacity of 2.5 gigawatts (GW).

The SW REZ is outlined in **Figure 2.3** below.

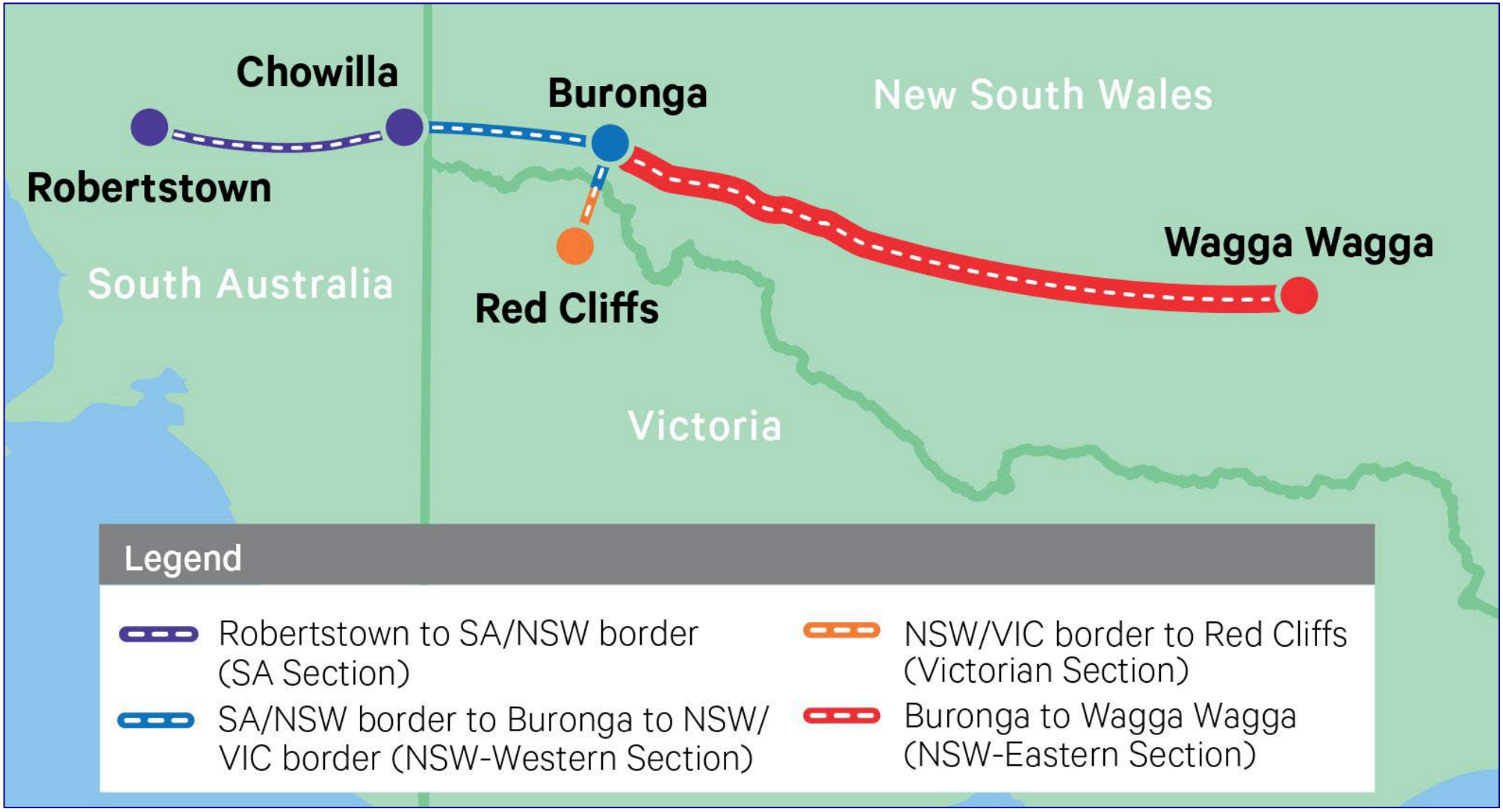

Figure 2.2 EnergyConnect Interconnector – Proposed Corridor

Source: Transgrid

Figure 2.3 South West Renewable Energy Zone (SW REZ)

Source: www.energyco.nsw.gov.au/renewable-energy-zones/south-west-renewable-energy-zone

2.4 EIA Study Area Definition

The EIA Study Area for the Project has been defined in terms of the following Local Government Areas (LGAs):

- **Wentworth Shire** – Location of the Project
- **Mildura Rural City** – Main Regional City in proximity to the Project

The two identified LGAs are likely to provide accommodation services and local procurement and employment for the Project due to their main townships being located within a 60-minute drive from the Project's main access point.

Importantly, the EIA Study Area's local and regional communities, to differing extents, have the potential to contribute to the Project and derive economic benefits from both the construction and operational phases of the Project.

Although Balranald Shire and Renmark Paringa Council LGAs neighbour the EIA Study Area they have not been included due to their main townships being located well beyond a 60-minute drive from the Project's main access point.

The EIA Study Area and Project location are shown in **Figure 2.4.**

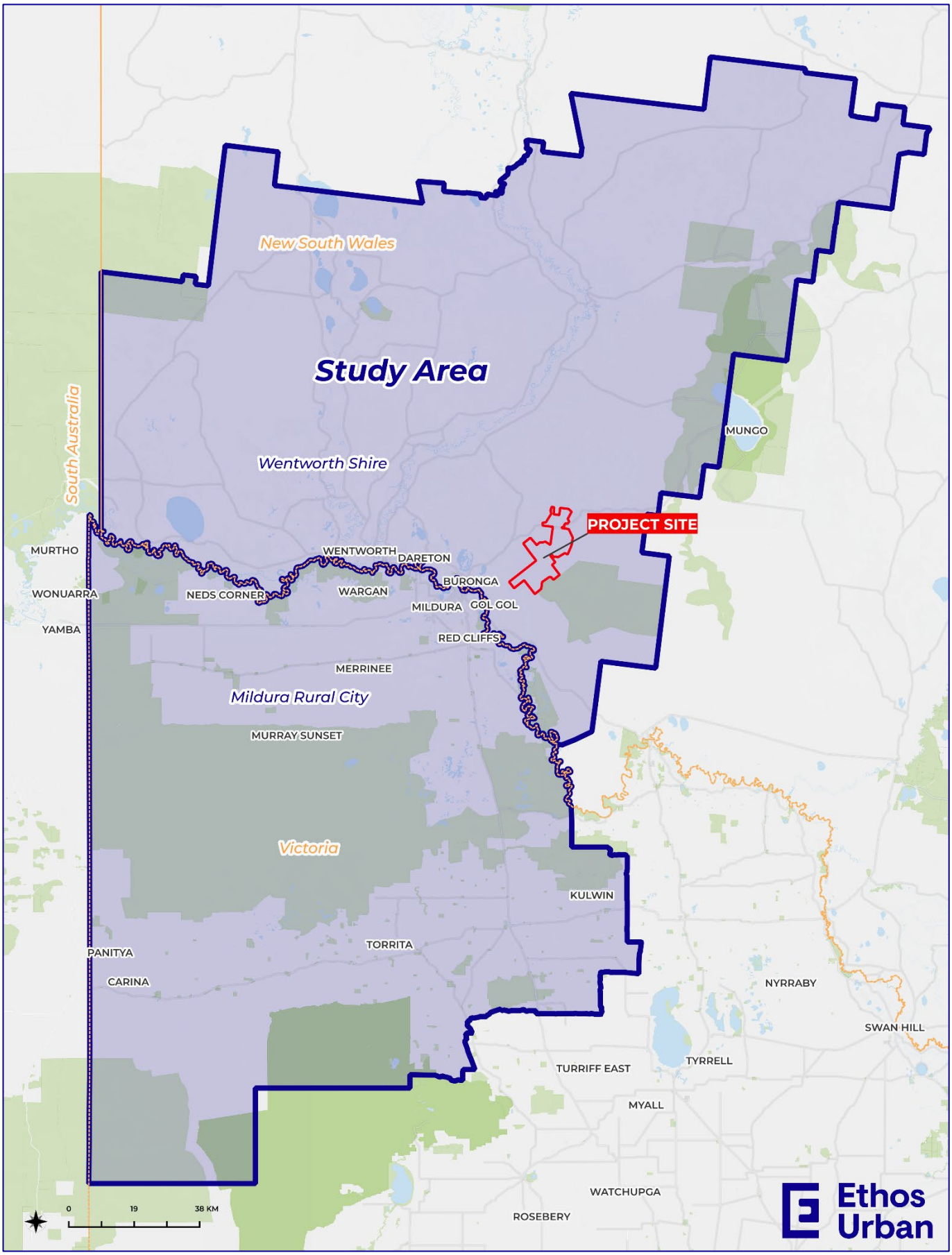

Figure 2.4 Mallee Wind Farm - EIA Study Area

Source: Ethos Urban

2.5 Summary

1. The Proponent is proposing to construct the 402 MW Mallee Wind Farm. The Project is located approximately 16 km north east of Buronga, 17 km north east of Mildura, Victoria (VIC) and approximately 50 km north east of Wentworth. The Project is positioned in the municipality of Wentworth Shire Council.
2. The Project Area covers 57,330.31 ha and is well connected to the regional centre of Mildura and to smaller townships including Wentworth, Buronga, Gol Gol and Red Cliffs.
3. Subject to planning approval, it is anticipated construction of the Project is expected to start in 2026 with the Project operational in 2028 with an anticipated 36-month construction phase.
4. Federal (Paris Climate Accord) and State (NSW Wind Energy Guideline) policies provide guidance for the renewable energy sector in the short-to medium-term. Additionally, the NSW Government is in the process of setting up the (SW REZ which covers the area in which the Project is to be located. The SW REZ will be connected to the National Grid via the EnergyConnect interconnector which will allow renewable energy to be supplied to the national grid. Project EnergyConnect will deliver 330 kilovolt (kV) / 500kV above ground transmission lines, with approximately 800MW transfer capacity from Robertstown in South Australia to Wagga Wagga in NSW with a connection to Red Cliffs in Victoria.
5. This EIA, guided by the Project SEARS, will provide an understanding of potential economic benefits arising for the local, regional and State economies and communities through the construction and operational stages of the Project, as well as any potential negative impacts associated with the Project.

3.0 Baseline Regional Economic Profile

3.1 Population Trends and Forecasts

The population of the EIA Study Area is estimated at 65,240 persons as of June 2023, including 57,550 persons located in the Mildura Rural City Council area and 7,690 persons located in the Wentworth Shire Council area (source: ABS ERP, 2024 release).

Over the period 2023-2036, annual population growth in the EIA Study Area is expected to be +0.7% pa (or +400 persons p.a. over 13 years) and this compares to the NSW growth rate of +1.1% p.a. over this period. Mildura Rural City Council Area is projected to experience an average population growth of +0.7% for the period 2023-2036 which is reflective of the population growth of the EIA Study Area (source: 2022 NSW Common Planning Assumption Projections; Victoria in Future, 2023).

However, the Wentworth Shire Council LGA is projected to experience a small decline in population of -150 persons between 2023-2036. This decline in population highlights the need for local investment that provides new employment opportunities for residents and potentially attracts new residents to the area. Further, large-scale renewable energy projects provide an alternative income stream for local farmers and workers. These factors may contribute to retaining, and potentially expanding the population within Wentworth.

The Project will provide new income to the host landowners (farm operators), while the construction and operational phases of the Project will provide an economic stimulus (additional jobs, project contracts, new spending etc) to the local economy, as well as support the emergence of the region's renewable energy sector.

Population estimates, reflected in **Table 3.1**, are based on official population projections prepared by the NSW and Victorian (VIC) governments and the most recent ABS estimated resident population (ERP) figures for 2023.

Table 3.1 Mallee Wind Farm EIA Study Area - Population Trends and Projections, 2023 to 2036

Area/LGA	2023	2036	2023 to 2036	
			Total Growth (no.)	Average Annual Growth Rate (%)
Population (no.)				
Wentworth	7,690	7,540	-150	-0.2%
Mildura	57,550	62,840	+5,290	+0.7%
Total EIA Study Area	**65,240**	**70,380**	**+5,140**	***+0.6%***
New South Wales	**8,200,840**	**9,398,170**	**+1,197,330**	***+1.1%***

Source: ABS ERP (cat. 3218.0); 2022 NSW Common Planning Assumption Projections (LGA); Victoria in Future, 2023; Ethos Urban

3.2 Labour Force

The EIA Study Area had a labour force of **35,600** persons and an unemployment rate of **3.9%** at December 2023. The unemployment rate is significantly higher compared to NSW (**3.3%**). The EIA Study Area has approximately **1,385** persons who are unemployed as shown in **Table 3.2** (source: Department of Jobs and Skills, Small Area Labour Markets, December Quarter 2023).

The Project is likely to require **400 FTE** workers at peak construction. It is anticipated that approximately 25% (refer section to **Section 4.2**) of these workers will be sourced from within the EIA Study Area (**100 FTE**), providing new opportunities for unemployed job seekers (subject to appropriate skills match) or 'backfilling' employment opportunities associated with jobs vacated by workers taking up Project employment.

The Project also has the potential to provide new opportunities for workers who are beginning a career in the renewable energy sector. This transition is predominately driven by Global, Federal and State emissions reduction targets associated with electricity generation. Labour supply factors are further explored in **Chapter 4.0**.

Table 3.2 Mallee Wind Farm EIA Study Area, Resident Labour Force Statistics, December Quarter 2023

LGA/Area	Labour Force	Unemployed	Employed	Unemployment Rate
Wentworth Shire	4,200	220	3,980	5.2%
Mildura Rural City	31,400	1,160	30,240	3.7%
EIA Study Area	**35,600**	**1,385**	**34,220**	**3.9%**
NSW	***4,530,400***	***148,600***	***4,381,800***	***3.3%***

Source: Australian Government Department of Jobs and Skills, *Small Area Labour Markets*, December Quarter 2023
Note: Figures rounded.

3.3 Occupational Structure

The skills base of the EIA Study Area is reflected in its occupational structure. ABS Census data for 2021 highlights that approximately **34.8%** of employed residents in the EIA Study Area were occupied in construction-related activities (e.g., technicians and trades workers, machinery operators and drivers, and labourers).

The representation of these occupations in the EIA Study Area is significantly above the State average (**26.1%**), indicating a generally suitable occupational base for the Project exists in the region. In total, **9,830 workers** in the EIA Study Area are occupied in construction-related activities, highlighting the potentially strong worker base available to support larger infrastructure projects, as reflected in **Table 3.3**.

Table 3.3 Mallee Wind Farm EIA Study Area – Occupational Structure, 2021

Occupation	EIA Study Area (no.)	EIA Study Area (%)	NSW (%)
Managers	4,250	15.0%	14.6%
Professionals	4,550	16.1%	25.8%
Technicians and Trades Workers	3,790	13.4%	11.9%
Community and Personal Service Workers	3,370	11.9%	10.6%
Clerical and Administrative Workers	2,960	10.5%	13.0%
Sales Workers	2,600	9.2%	8.0%
Machinery Operators and Drivers	1,980	7.0%	6.0%
Labourers	4,060	14.4%	8.2%
Inadequately described/ Not Stated	700	2.5%	1.9%
Total	**28,260**	**100.0%**	**100.0%**

Source: ABS Census of Population and Housing, 2021

3.4 Business Structure

A tangible benefit of a major investment project is the extent to which local businesses can participate through project contracts and other service provision.

The EIA Study Area includes **870** construction businesses (rounded), representing **15.7%** of all businesses located in the EIA Study Area (refer **Table 3.4**) (source: ABS, cat 8165.0 Counts of Australian Businesses, June 2022). This data indicates a reasonable presence in the EIA Study Area of the types of firms that have the potential to service aspects of the Project. This opportunity is discussed in more detail in the following chapter (**Chapter 4.0**).

Although construction-related businesses will likely be the main beneficiaries of the Project, businesses in other sectors supporting the Project (directly and indirectly) are also likely to benefit, including:

- Retail trade
- Accommodation and food services
- Financial and Insurance Services
- Rental, hiring and real estate services
- Health care and social assistance.

These sectors make up approximately **27.0%** of all businesses located in the EIA Study Area and their services will likely play a role in supporting the needs of project workers, especially those relocating to the EIA Study Area to work on the construction phase of the Project.

Table 3.4 Mallee Wind Farm EIA Study Area – Business Structure, 2022

Industry	Non employing	1-4 Employees	5-19 Employees	20-199 Employees	200+ Employees	Total
Agriculture, Forestry and Fishing	896	364	122	39	3	1,423
Mining	5	3	0	3	0	10
Manufacturing	87	68	35	17	0	207
Electricity, Gas, Water and Waste Services	10	5	5	0	0	21
Construction	482	292	82	11	0	867
Wholesale Trade	66	49	26	8	0	149
Retail Trade	155	110	73	15	0	353
Accommodation and Food Services	81	101	72	14	0	268
Transport, Postal and Warehousing	185	63	24	10	0	283
Information Media and Telecommunications	8	4	4	0	0	18
Financial and Insurance Services	81	31	7	3	0	122
Rental, Hiring and Real Estate Services	407	41	24	4	0	476
Professional, Scientific and Technical Services	188	107	40	9	0	344
Administrative and Support Services	128	65	41	19	3	254
Public Administration and Safety	3	4	3	3	0	8
Education and Training	22	24	12	4	0	62
Health Care and Social Assistance	141	94	28	12	0	275
Arts and Recreation Services	21	19	7	0	0	49
Other Services	173	132	32	0	0	338
Currently Unknown	3	0	0	0	0	5
Total	**3,142**	**1,576**	**637**	**171**	**6**	**5,532**

Source: ABS: 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2018 to Jun 2022

3.5 Township Services and Capacity

Based on discussions with the Proponent, approximately **90%** of the construction workforce is likely to be non-local (i.e. sourced from beyond the EIA Study Area). This means that on average, around **205 FTE** workers would require accommodation per month across the **36 month** construction phase, with this figure increasing to approximately **360 FTE** workers at peak construction.

3.5.1 Commercial Accommodation

A review has been undertaken of commercial and private accommodation located within the EIA Study Area's major townships. These townships generally represent a maximum drive time of 60 minutes from the Project Area. The EIA Study Area's commercial accommodation capacity is currently around **1,389 rooms/cabins**, as shown in **Table 3.5** (source: STR; TripAdvisor; Ethos Urban field visit).

Most accommodation options in the EIA Study Area are located in Mildura and Wentworth, reflecting Mildura's role as a regional service centre and Wentworth as a significant township for the Wentworth LGA. A more limited provision of visitor accommodation is located in the smaller towns of Red Cliffs, Buronga, and Gol Gol. Existing accommodation in Mildura, in particular, plays a key role in supporting the tourism sector.

The range of short-term commercial accommodation options available in the EIA Study Area is reasonably diverse and includes motels, hotels, guest houses, and caravan/holiday parks. However, the depth of supply may not be sufficient to service accommodation demands associated with multiple concurrent infrastructure projects in the EIA Study Area as well as existing markets. The cumulative impact assessment in **Section 4.3**. of the report highlights the construction phase of three (3) renewable energy projects located in the EIA Study Area which will likely overlap with the Project.

From an economic perspective, the key concern is that the commercial accommodation demands of the Project in addition to other large infrastructure projects in the EIA Study Area may lead to a shortage of commercial rooms for other sectors, including general business, agriculture/horticulture and tourism, resulting in potential negative impacts for these sectors.

Table 3.5 Commercial Accommodation

Township	Establishments	Rooms	Cabins	Total Supply (Rooms)
Mildura	37	1,043	82	1,125
Red Cliffs	2	18	17	35
Wentworth	8	163	0	163
Buronga	4	19	25	44
Gol Gol	2	4	18	22
EIA Study Area	**53**	**1,247**	**142**	**1,389**

Source: STR; TripAdvisor; Ethos Urban

3.5.2 Room Occupancy Rate

While official room occupancy rates are unavailable at a local level, the NSW Government publishes quarterly snapshot data sourced from the STR database (an official Australian Government database). The STR Tourist Accommodation Snapshot for March Quarter 2024 shows the Murray River Regions, in which part of the EIA Study Area is located, averaged annual room occupancy rates of **68.9%**, which is slightly below the NSW occupancy rate of **75.5%** for this period. The March Quarter data includes notable holiday times, therefore, the Murray River Region's commercial accommodation sector recorded a vacancy rate of approximately **31.1%** over this period, indicating a reasonable supply of room availability, although noting the Murray River Region includes townships beyond the EIA Study Area with comparatively high levels of accommodation including Albury, Moama, and Deniliquin. This unoccupied supply is likely to be higher during non-peak seasons.

Mildura is located in the Western Murray Tourism Region (WMTR) of Victoria and includes Wentworth. The *Murray Region Accommodation Study, 2022* outlined that the region had **258 establishments, 2,123 rooms, and 4,512 beds** of accommodation supply with motels and motor inns reflecting **32%** of the total room supply. Note the WMTR includes an area significantly larger than the EIA Study Area.

NSW Tourist Accommodation Snapshot for March 2024 is summarised in **Table 3.6**, with the NSW and Vic Murray Tourism Regions shown in **Figure 3.1** and **Figure 3.2** respectively.

Table 3.6 NSW Commercial Room Accommodation Occupancy Rates by Tourism Region, March 2024

Tourism Region	Occupancy March Qtr. 2024
NSW	75.5%
Sydney Tourism Region	79.5%
Blue Mountains	58.6%
Capital Country	60.8%
Central Coast	66.9%
Central NSW	63.5%
Hunter	71.2%
New England North West	61.2%
North Coast NSW	65.1%
Riverina	68.1%
Snowy Mountains	60.7%
South Coast	69.6%
Murray River Regions	**68.9%**

Source: NSW Tourist Accommodation Snapshot March Qtr. 2024

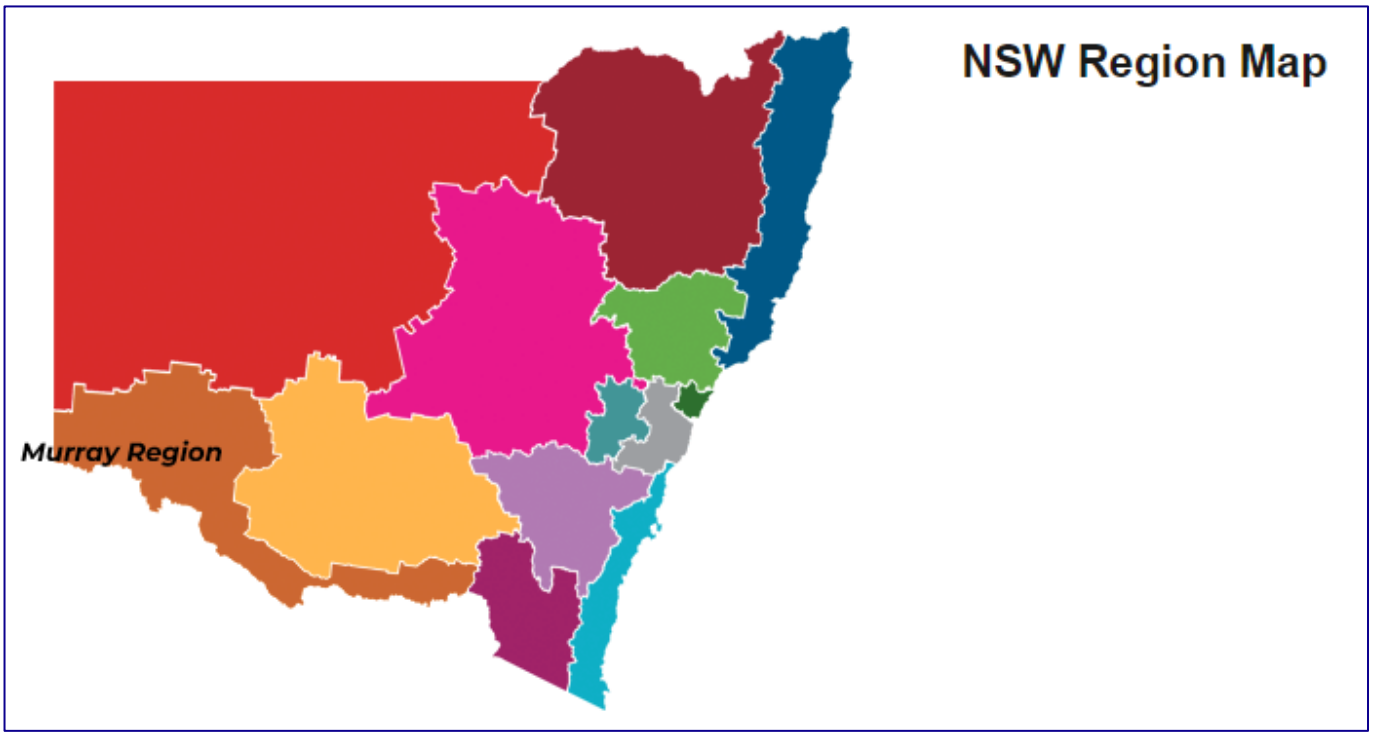

Figure 3.1 The Murray Tourism Region, NSW

Source: destinationnsw.com.au

Figure 3.2 Murray Region (VIC)

Source: The Murray Region Accommodation Study, 2022

3.5.3 Private Accommodation

The private accommodation market is often used to support construction worker needs for major renewable energy projects. This could be through leasing of holiday homes and investment properties, either privately (including Airbnb), or through real estate agents.

Short-term accommodation provides an option for construction workers. Approximately **220** active short-term rentals are currently advertised in the EIA Study Area (source: www.airdna.co in July 2023). This represents an estimated **594** rooms, based on an average of **2.7** rooms per rental. However, it is likely that many of these rooms already play a role in servicing a range of visitor sectors including business travellers, tourists, seasonal agriculture workers and the visiting friends and family cohort. Note, vacancy rates are not available for short-term rentals.

The EIA Study Area has a marginally higher share of unoccupied dwellings (**9.9%**) when compared to the NSW average (**9.4%**) (source: ABS Census, 2021), as shown in **Table 3.7** . Wentworth Shire, however, has a significant share of unoccupied dwellings (**15.8%**) which are likely to include some holiday homes. It is possible that a portion of these unoccupied dwellings may enter the market (subject to tenant suitability) to support the Project and other major infrastructure projects in the region.

Table 3.7 Private Dwellings – Economic EIA Study Area, 2021

LGA	Occupied Dwellings		Unoccupied Dwellings	
	no.	%	no.	%
Wentworth Shire	2,550	84.2%	480	15.8%
Mildura Rural Shire	21,280	90.9%	2,130	9.1%
Total EIA Study Area	**23,830**	**90.1%**	**2,610**	**9.9%**
NSW	**2,900,470**	**90.6%**	**299,520**	**9.4%**

Source: ABS, Census of Population and Housing, 2021
Note: Figures rounded

As with many large projects relying on local accommodation, local rental markets can reach full utilisation and at times require further supply to be brought to the market during construction. Potential exists that the private accommodation demands of the multiple concurrent renewable energy projects in the EIA Study Area (including the Project) could result in a shortage of established (long-term) rental supply putting upward pressure on prices and the potential for local renters to be priced out of the market.

The vacancy rate for long-term rental properties at in the EIA Study Area was only **0.7%** in June 2023, representing just **50** vacant properties (source: SQM Research for June 2023). This indicates a very constrained rental market in the EIA Study Area and as such the local rental market is unlikely to play a role in accommodating non-local workers in the Project's construction phase. Projects currently under construction, such as Project EnergyConnect (NSW - Western Section), will be completed by the time the Project begins construction. Consequently, the demand for private accommodation will vary in accordance with the construction phases of State Significant projects within the EIS Study Area.

3.5.4 Township Services

In addition to accommodation, workers locating temporarily to the EIA Study Area will require a wide range of other convenience services, and the Project will also need to source trade, equipment hire, fuel, concrete supply, vehicle mechanical services, and other services from businesses located in the immediate region.

The following sections provide an overview of the services located within regional/townships in the EIA Study Area (listed by population size), capable of servicing some aspects of the Project.

Mildura (VIC)

Midura located approximately 30km southwest of the Project Area, or a 35-minute drivetime, is a major regional centre for Victoria's Murray region and includes a population of 35,930 persons. Mildura provides significant access to major civic, education, health, industrial and commercial services for an expansive agricultural area comprising a network of many smaller towns. Key services include:

- Good range of commercial accommodation options
- Expansive range of retail services in the CBD and surrounding activity centres including:
  - Kmart

  - Supermarket – 2x Woolworths, 2x Coles, ALDI and IGA
  - Retail shopping along Langtree Mall
  - Automotive Retailers – Supercheap Auto, Repco and Autobarn
  - Bunnings Warehouse
  - Spotlight
  - Car Dealerships
  - Harvey Norman
- Large range of professional/commercial services – solicitors, accounting, conveyancing etc.
- Major banks and financial institutions
- Entertainment – parks, hotels, clubs, sports and recreational activities.
- Mildura Airport, which operates daily commercial services to and from many eastern seaboard cities including Melbourne, Sydney and Brisbane.
- Mildura Base Hospital – which operates as the major regional hospital with emergency department for the surrounding region.
- Mildura Private Hospital – offers a comprehensive range of acute medical and surgical services and rehabilitation programs.
- Education – network of education institutions comprising one tertiary institution (SuniTAFE); three secondary schools (two public, one private) and six primary schools (four public and two private), two combined schools (P-12, both private); and a one public special school.

Importantly, Mildura has an extensive range of service industry geared to civil construction works. Key businesses include:

- Sunraysia Concrete Pumping
- Hanson Australia
- Mildura Toyota for ute hire
- Coates Hire
- FWG Concrete - FWG Hire - FWG Contracting
- Midura Truck Centre
- Mitchell Truck Repairs
- William Adam CAT
- MM Electrical Mildura
- Mallee Machining Services
- Hip Pocket Workwear
- Sunraysia Freight Co
- Metalworks Mildura
- Force Metal Fabrications

Red Cliffs (VIC)

Red Cliffs, situated approximately 40km southwest or a 45-minute drivetime from the Project Area, is a medium sized township of 3,830 persons located on the Calder Highway - the key car and truck route connecting Mildura to central and southern Victoria. The township offers a reasonable range of facilities and services including:

- Commercial accommodation – a limited range of accommodation establishments
- Automotive mechanics
- Limited service Industry
- Supermarket – Ritchies IGA
- Cafes, bakeries, restaurants and take-away
- Commonwealth Bank branch and other ATMs
- Fuel supplies (Shell and AMPOL)
- Postal Services
- Terry White Chemmart

- Entertainment (parks, hotels, clubs, sports and recreational activities – swimming pool, bowls club etc)
- Sunraysia Medical Centre
- Four schools are present in Red Cliffs, including two public primary schools, one private primary school and one public secondary school.

Wentworth (NSW)

Wentworth, with a population of approximately 1,350 persons, is located 50km to the southwest of the Project Area or a 45-minute drive-time. Wentworth is a medium sized township located at the Murray Darling junction where Australia's two most important rivers intersect and traditionally known for once being one of Australia's busiest inland ports. Now, Wentworth acts as a service town for the surrounding agricultural area. Key services in Wentworth include:

- A good range of commercial accommodation options
- Wentworth Medical Practice and Wentworth Health Service (local hospital).
- Supermarket/ grocers – IGA plus liquor
- Entertainment & Dining – various small cafes, pubs and takeaway options
- Fuel Supplies – BP and Ampol service stations
- Postal Services - AusPost
- Education – one public primary school
- Emergency Services – Ambulance dept, Fire and Rescue and Police

The service industry in Wentworth is limited, as the township is principally residential and commercial in nature and mainly supports agricultural activities for the wider agricultural region. Key service industry businesses include Elders and East End Welding.

Buronga (NSW)

Buronga, with a population of 1,260 persons, is located approximately 20 minutes' drive time to the southwest of the Project Area. Situated in the Wentworth LGA, Buronga functions as a local service hub for surrounding agriculture activities on the NSW side of the Murray River.

Buronga is primarily residential in nature with supporting small-scale retail, entertainment, dining, takeaway and commercial services. Notably, Midway Market Place provides everyday convenience with the newly constructed local centre including an IGA supermarket, Shell service station, pharmacy, café and takeaway stores. Little commercial accommodation or service industry is available in Buronga.

Gol Gol (NSW)

Gol Gol, with a population of approximately 1,160 persons, is located 25km or a 25-minute drivetime to the south of the Project Area. Similar to Buronga, the township's proximity to Mildura sees the township have a limited range of industrial and commercial services, with the township primarily residential in nature. Services include small-scale retail, entertainment, dining, takeaway and commercial services which are principally located along Adelaide Street. Being situated along the Murray River, the township contains two commercial accommodation options fronting the river.

3.6 Baseline Regional Economic Profile Summary

The key findings of this Baseline Regional Economic Profile are as follows:

1. The population of the EIA Study Area (Local Government Areas (LGAs) of Wentworth Shire and Mildura Rural City Council) totalled 65,240 persons as of June 2023. Over the period 2023-2036, annual population growth in the EIA Study Area is expected to be +0.6% pa compared to the NSW growth rate of 1.1% p.a. Wentworth Shire is projected to experience a decline in population of a combined -150 persons over the period. This decline in population highlights the need for local investment projects which provide new employment opportunities for residents and potentially attract new residents to the area. Further, large scale renewable energy projects provide an alternative income stream for local farmers and workers. These factors may contribute to retaining, and potentially expanding the population within the two local LGAs.

2. The EIA Study Area had an unemployment rate of 3.9% in December 2023, compared to the NSW rate of 3.3%; with approximately 1,385 jobseekers unemployed. The Project provides new short-term employment opportunities for the region's labour force participants (including unemployed job seekers, subject to suitable skills match), with a small amount of ongoing employment also supported once the facility is operational.

3. The EIA Study Area's occupational and business structures indicate a good base exists to service the needs of the Project, with approximately 9,830 workers and 870 businesses involved in construction related industries.

4. The EIA Study Area's major regional township of Mildura has the capacity and labour force to service many aspects of the Project, with smaller settlements such as Wentworth, Buronga and Gol Gol, also likely to provide some labour, accommodation and other general services to the Project.

4.0 Economic Impact Assessment

4.1 Project Investment

The total construction cost for the Project is estimated to be approximately **$866 million**, according to information provided by the Proponent. Major investment costs are associated with the purchase of turbine components including the blades, rotors, towers and nacelles, associated equipment, battery storage components etc. Additionally, significant investment is required for civil, electrical, and grid connection works.

A review of confidential information sourced from constructed renewable energy projects in Australia (based on unpublished Engineering, Procurement, and Construction (EPC) data) shows approximately 15% of construction investment is generally retained within the host EIA Study Area for these types of projects. Applying this ratio of 15%, and noting the proximity of the Project to the major regional centre of Mildura, the construction phase is likely to generate **$130 million** in wages, contracts, and other service provisions for the EIA Study Area's economy over the construction period.

4.2 Project Employment

Project employment is assessed in terms of direct jobs (i.e., on-site-related) and indirect (or flow-on) jobs in the local and wider economies (i.e., jobs that are supported through the industrial and consumption impacts of the initial investment).

Construction Phase

Direct Construction Employment

An average of **225** Full Time Equivalent (FTE) jobs will be supported (on average) over the construction phase, which is expected to last 36 months. Actual workforce numbers will vary from month to month depending on the intensity of construction at the time. At the Project's peak, which is estimated to last for several months, the Proponent estimates **400 FTE** positions will be supported by on-site construction activities.

Based on Ethos Urban's experience of wind farm construction projects in similar rural locations, anticipated demands of multiple concurrent projects within the SW REZ, and estimates provided by the Proponent, the following employment split is considered realistic:

- **10%** or an average of **25 FTE** jobs are expected to be sourced from within the EIA Study Area (local employment), rising to **40 FTE** local jobs at the Project's peak.
- **90%** or an average of **205 FTE** jobs are expected to be sourced from outside the EIA Study Area (non-local employment), rising to **360 FTE** non-local jobs at the Project's peak.

Construction-related jobs are expected to be associated with a wide-range of on and off-site activities, including:

- Labour recruitment
- Training
- Installation and assembly of turbine components
- Vehicle and equipment hire
- Civil works including earthworks, supply of construction materials, foundations, external roads and internal access tracks
- Engineering services
- Operation of specialised equipment including cranes
- Transport and logistics
- Electrical works including cabling, connections, and BESS setup.
- Installation of monitoring equipment
- Fencing
- Security
- Waste disposal
- Business and financial services
- Administrative services.

As indicated in **Chapter 3.0**, the business structure of the EIA Study Area indicates a reasonable mix of these types of services are present, although somewhat constrained in the EIA Study Area due to its relatively small economic base. Mildura will be the main township with business capacity to service some aspects of the Project. Smaller townships may be able to provide limited Project support services.

Indirect Construction Employment

In addition to direct employment, significant employment will be supported indirectly through the employment multiplier effect. By applying an industry-standard multiplier for the construction industry of 1.6 (based on ABS Type B multipliers), the Project is estimated to generate an additional **360 FTE** jobs indirectly (on average) over the 36 month construction period.

Indirect or flow-on jobs (captures industry and consumption effects) include those supported locally and in the wider economy (including within other parts of NSW, Victoria and nationally), as the economic effects of the capital investment flow through the economy. Indirect employment creation in local and regional economies includes jobs supported through financial and property services, accommodation, food and beverage, trade supplies, fuel supplies, mechanical support, transportation, etc.

For the purposes of this assessment, it is assumed that **20%** of indirect jobs or **70 FTE** jobs (rounded) are supported in the EIA Study Area. This assumption is made with reference to findings from completed renewable energy projects in regional areas, where generally **20%** share of indirect jobs is applied and noting the impact of non-local workers (and their spending) likely to be associated with the Project.

Total Construction Employment

In summary, **585 FTE** jobs (**225 FTE** direct jobs and **360 FTE** indirect jobs) are expected to be supported (on average per month) by the Project during the 36 month construction phase.

The amount of direct EIA Study Area employment (i.e., related to on-site construction activities) required for the Project is estimated to be approximately **25 FTE** jobs per month, with a further **70 FTE** jobs per month supported indirectly in the EIA Study Area (i.e., off-site through supply chains and consumption activities). A summary of construction employment is shown in **Table 4.1**.

Table 4.1 Construction Employment Summary

Direct Average Monthly Employment FTE	Direct Average Monthly EIA Study Area Employment FTE (25% Share)	Indirect Average Monthly Employment FTE	Indirect Average Monthly EIA Study Area Employment FTE (20% Share)	Total Average Monthly Employment FTE	Total Average Monthly EIA Study Area Employment FTE
225	**25**	**360**	**70**	**585**	**95**

Source: The Proponent; Ethos Urban, ABS Input-Output Tables.
Note: Figures rounded

Operational Phase

Thirty (**30**) **FTE** direct jobs will be supported locally (on-site) on an ongoing basis through the operation and maintenance of the Project.

Indirect Operational Employment

Additional jobs will also be supported indirectly through the employment multiplier effect. By applying an industry-standard multiplier for the electricity industry of 2.9 (based on ABS Type B multipliers) to the direct operational and maintenance jobs, a further **85 FTE** jobs (rounded) would be supported in the wider State and national economies, with some of these jobs supported locally through operational supply chains and consumption impacts.

For the purposes of this assessment, it is assumed that **20%** of indirect operational jobs are created in the EIA Study Area (refer to previous assumption). This equates to approximately **17 FTE** ongoing EIA Study Area positions.

Operational-related employment is for the lifetime of the Project (i.e., 30 years); therefore, while ongoing job creation is relatively small, it represents new long-term employment opportunities at a local, regional and national level.

Total Operational Employment

In summary, approximately **115 FTE** jobs (**30 FTE** direct and **85 FTE** indirect) are expected to be supported by the Project, with **47 FTE** of these positions supported in the EIA Study Area.

4.3 Cumulative Effects Assessment

The Project will likely compete for labour, accommodation, and other resources with major infrastructure projects being constructed concurrently in the EIA Study Area (principally renewable energy projects being driven by investment in the SW REZ). Identified projects located within a 75 km radius (straight line distance) of the Project Area and an assessment of their risk to the Project are outlined in **Table 4.2**.

In relation to proposed renewable energy projects, the following is noted:

- The development status of projects varies, some projects are approved but construction has yet to start, and other projects are currently going through the planning process; therefore, construction timing is uncertain and not all projects may end up proceeding, particularly given the 2.5 GW intended network capacity for the SW REZ.
- New developments, currently not in the planning system, may emerge in the period prior to the construction of the Project especially as the SW REZ matures.

When assessing potential cumulative impacts, the anticipated timing of the Project is an important factor. It is anticipated that construction works will commence within one year of Project approval i.e. construction commencing in 2026. The construction phase of the Project is anticipated to be 3 years (36 months).

In this regard, there are a number of major renewable energy and energy storage projects which are almost certain to overlap with the Project which may result in labour, accommodation and supplier shortages.

Referring to the NSW DPI (now DPHI) Cumulative Impact Assessment Guidelines for State Significant Projects, a Standard Assessment has been determined for the EIA, based on the following definition:

- **Standard Assessment** - The Project is unlikely to result in significant impacts on the matter, including cumulative impacts. Standard assessments are characterised by:
  - Impacts are well understood
  - Impacts are relatively easy to predict using standard methods
  - Impacts are capable of being mitigated to comply with relevant standards or performance measures
  - the assessment is unlikely to involve any significant uncertainties or require any detailed cumulative impact assessment.

The Economic Impact Ratings, included in ***Table 4.2***, are based on the following parameters:

Low: Impacts possible but unlikely. No mitigation required.

Medium: Impacts likely. Targeted mitigation required.

High: Impacts certain. Significant mitigation measures required.

Table 4.2 Mallee Wind Farm – Potential Surrounding Concurrent Infrastructure Projects

Project	Detail	Potential Economic Cumulative Impacts	Economic Impact Rating
Koorakee Energy Park	Located 55km south east of the Project Area. Currently in the planning and assessment phase, EIS in preparation If approved, construction would be over 24 to 36 months with a construction workforce of 300 – 400 FTE employees.	Construction: Cumulative impacts are likely with an overlap of construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**High**
Lake Victoria Wind Farm	Approximately 71 km west of the Project Area. Currently in the planning and assessment phase, EIS in preparation If approved, construction would be over 18-24 months commencing in Q4 2025 with a peak construction workforce of 375 employees.	Construction: Cumulative impacts are likely with an overlap of construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**High**
Mallee Solar Farm	Currently in the planning and assessment phase, EIS in preparation If approved, construction would be over 24-36 months with a construction workforce of 300 employees.	Construction: Cumulative impacts are possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Medium**
Euston Wind Farm	Approximately 75 km from the Project Area. Currently in the planning and assessment phase, EIS in preparation If approved, construction would be over 18-24 months commencing in Q2 2025 with a peak construction workforce of 250 employees.	Construction: Cumulative impacts are likely with an overlap of construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**High**
Gol Gol Solar Farm	Located adjacent to the Project Area. Currently in the planning and assessment phase, SEARS requested If approved, the construction phase of the project is expected to take approximately 24-36 months and expected to require 200 FTE at peak.	Construction: Cumulative impacts are possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Medium**

Project	Detail	Potential Economic Cumulative Impacts	Economic Impact Rating
Gol Gol Wind Farm	Located adjacent to the Project Area. Currently in the planning and assessment phase, SEARS requested If approved, the construction phase of the project is expected to take approximately 24-36 months and expected to require 300-400 FTE	Construction: Cumulative impacts are possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Medium**
Gol Gol Battery Energy Storage System	Located adjacent to the Project Area. Currently in the planning and assessment phase, SEARS requested If approved, the construction phase of the project is expected to require 150 FTE	Construction: Cumulative impacts are possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Medium**
Euston Mineral Sands Project	Approximately 75 km from the Project Area. Currently in the planning and assessment phase. If approved, construction would be over 18-months commencing in 2026 with a construction workforce of 250-300 employees.	Construction: Cumulative impacts are unlikely, although possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Low**
Buronga Landfill Expansion	Approved, operational with expansion construction anticipated late 2024. The construction phase peak workforce is expected to be 10FTE	Construction: Cumulative impacts are unlikely, although possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal	**Low**
Project EnergyConnect (NSW - Eastern Section)	The project has been approved; construction is expected to last 18 months commencing in late 2026 with a peak construction workforce of 500 employees.	Construction: Cumulative impacts are possible if there is an overlap of peak construction periods. Economic impacts include insufficient availability of labour, key services and accommodation in nearby towns. (Refer to section 4.10 for proposed mitigation measures). Operational: Economic impacts during operation are expected to be minimal.	**Medium**

Source: Umwelt; NSW Major Projects Portal; Ethos Urban

4.4 Labour Force and Business Participation Assessment

In terms of cost efficiencies (lower transport, labour costs etc), where many large construction projects located in regional areas are, where possible, serviced locally or from within the immediate region (EIA Study Area).

The EIA Study Area has moderate capacity in terms of construction-related workers (**9,830** workers) and construction-related businesses (**870** businesses), including many located in the immediate region and this overall capacity may be able to service some local Project needs and concurrent infrastructure projects, subject to careful management.

Additionally, the EIA Study Area currently contains **1,385** unemployed labour force participants, some of whom could work on the Project and/or other major infrastructure projects (subject to a suitable skills mix). Alternatively, unemployed jobseekers may play a 'backfill' role in the labour market, engaging in jobs vacated by other workers transferring to employment on the Project or other major infrastructure projects.

The Proponent has proposed the following initiatives to support local content:

- Procurement of goods and services for the Project to be sourced from a combination of local/regional and non-local/regional locations, depending on the nature of the good or service. Some goods and services, such as WTG installation or transformer components are specialised and unlikely to be available locally or regionally.
- Where a good or service is available locally to the Project Area, businesses will be given the opportunity to tender for supply in parallel to procurement for the supply and installation of WTGs, as well as design and construction of the Ancillary Infrastructure and Temporary Facilities.
- Local contractors and service providers will be encouraged to register their interest in supplying goods and services through an Industry Capability Network prior to and throughout the construction phase of the Project. This database will be provided to the key tenderers to encourage local procurement and employment.

Additionally, the proponent is developing an Aboriginal Participation Plan (APP) in line with the relevant State policies including the *First Nations Guidelines* - electricity Infrastructure Roadmap (August 2022); *First Nations Guidelines: South West* (May 2024), Department of Climate Change, Energy, the Environment and Water. The APP will be finalised prior to construction and will seek to promote First Nations employment and procurement of services.

Given a level of uncertainty exists regarding labour force and supplier availability in the EIA Study Area due to identified cumulative impacts and a desire to maximise local inputs (where possible); the Proponent should prepare an Accommodation and Employment Strategy (AES) (refer to **Section 4.10** – Proposed Mitigation Measures) to guide the sourcing of local employment and suppliers based on market conditions in the lead up to the construction phase of the Project commencing.

4.5 Housing and Commercial Accommodation Sector Impacts

As noted, **360 non-local FTE** workers may need to be accommodated in the EIA Study Area at the Project's peak (which is likely to last for several months).

The analysis included in **Chapter 3.0** indicates inadequate capacity currently exists in the EIA Study Area to accommodate the number of non-local workers expected at the peak of the Project; while increased demand from concurrent regional infrastructure projects (refer to **Section 4.3**) and seasonal accommodation demands (general business travel, tourism, agricultural activities etc) also needs to be factored in. Data suggests a very tight established rental market, which would make hosting Project workers locally difficult and further constrain the general housing market.

With regard to the above, and considering there is currently no temporary workforce accommodation (TWA) available within a 60-minute drive of the Project with the capacity to house the workforce associated with the Project, the proponent has committed to developing an onsite TWA.

It is anticipated that 40 workers (of the peak 400 workers) are likely to be locally based and existing residents in the locality. Of the remaining workforce (360 workers), approximately 300 workers at peak construction are proposed to be accommodated in the purpose-built on-site TWA facility, with the remaining 60 peak workers expected to be housed in short-term accommodation (Airbnb) or commercial accommodation (motels, hotels, B&B etc) providing some financial benefit to these providers.

4.6 Local Wage Spending Stimulus

Construction employment estimates outlined earlier in this report indicate that **90%** of the direct **225 FTE** construction jobs (**205 FTE** workers) may need to be sourced from outside the EIA Study Area, particularly specialist and management positions.

This level of employment would equate to **$45.7 million** in wages (2023 dollars) on the basis that each non-local worker is employed for the 36-month construction phase and earns the average full-time total construction wage of $100,000 pa (source: ABS, *Average Weekly Earnings 6302.0 - Full Time Adult Total Earnings*, November 2023).

As a TWA is proposed to be developed on the Project Site, the level of worker spending captured in EIA Study Area is anticipated to be significantly lower compared to if non-local workers were housed in private housing or commercial accommodation, or in a TWA in a nearby town in the EIA Study Area. If a high quality and high amenity camp is developed it would be expected that worker movements to the local communities for personal reasons would be infrequent and spending by these non-local workers would be limited. Based on interviews undertaken with workers living in existing TWA in Australia, it is reasonable to assume approximately 10% of post-tax wages are likely to be spent by workers in the local and regional economy (EIA Study Area).

With regard to the above, an estimated **$4.6 million** in wages (2023 dollars) would likely be directed to local and regional businesses and service providers during the construction period. In view of the wide range of goods and services available in the EIA Study Area, this spending would include the following:

- Retail expenditure, including spending on supermarket items, clothing, personal spending on trade equipment, books, homewares etc.
- Recreation spending associated with day trips or passing trade during travel to and from the Project Site, gaming (lottery, sports betting, etc), purchases in pubs and clubs (although noting that expenditures at restaurants are included in the retail category)
- Personal, medical and other services, such as GP and physio fees, local prescriptions, and so on.

This level of personal spending would generate the equivalent of approximately **8 FTE** jobs (on average per month) in the services sector and associated supply chains (based on 1 FTE job allocated for every $200,000 of induced spending), supporting jobs in the EIA Study Area such as in retail, trade supplies, health services, cafes and restaurants etc. These jobs are included in the 'indirect employment' estimates outlined in **Section 4.2** above.

4.7 Agricultural Impacts

Approximately **57,330.31** ha of existing agricultural land will be required to host the Project, with a relatively small Disturbance Footprint of **444.69** ha. Land within the Disturbance Footprint is currently used for large scale cropping of grains and legumes, particularly wheat, chickpeas and beans.

No loss of employment associated with the Project Area is anticipated, either directly (on-site) or through agricultural supply chains. Some disruption is likely during construction; however, the scale of current agricultural activities will continue broadly similar after construction.

The relevant key findings from the Soils, Land and Agriculture Impact Assessment (prepared by Minesoils, 2024) include the following:

- Temporary removal of **444.69 ha** of land within the Project Area from agricultural land use for the duration of the Project.
- Temporary removal of potential agricultural primary productivity to the estimated value of up to **$154,307** per year for the duration of the Project.
- Temporary impacts on soil resources and LSC within the Project Area where surface disturbance occurs.

4.8 Offsite Road Works

Transportation of some Project components, such as wind turbine blades, nacelles and transformers, would require over-size, over-mass (OSOM) vehicles that exceed the regulatory limits of standard vehicle dimensions. Large components, such as wind turbine blades, would be shipped to Australia from overseas and transported to the site from the Port of Newcastle. Any road upgrades and modifications required between Port of Newcastle

and Sturt Highway/ Carey Street roundabout at Euston, NSW would be undertaken by separate planning assessment and approvals.

An OSOM Transport Route has been identified for the transportation of some Project components, such as wind turbine blades, nacelles and transformers, which would require over-size, over-mass (OSOM) vehicles that exceed the regulatory limits of standard vehicle dimensions. Large components, such as wind turbine blades, would be shipped to Australia from overseas and transported from the Port of Newcastle.

Any road upgrades and modifications required between the Port of Newcastle and Sturt Highway/ Carey Street roundabout at Euston, NSW would be undertaken by separate planning assessment and approvals.

A Local Transport Route has been established for targeted assessment in the EIS between Euston and the Arumpo Road site access points.

Offsite road works are required to facilitate safe vehicle movements at the following locations on the Local Transport Route as assessed in the EIS:

- Sturt Highway roundabout at the intersection of Carey Street, Euston
- Sturt Highway roundabout onto Silver City Highway, Buronga
- Silver City Highway onto Arumpo Road.
- Arumpo Road into Site Entry #1, Arumpo
- Arumpo Road into Site Entry #2, Arumpo.

These road works are modifications to the existing road network and can generally be classified as:

- Traffic Management: Activities related to optimising traffic flow, including roundabout adjustments, sign removal, and island modifications.
- Infrastructure Installation/Modification: Tasks involving the installation or modification of hardstands, gates, and fences.
- Vegetation Management: Activities related to clearing or trimming vegetation along the road corridor.
- Signage and Lighting: Adjustments to signage and lighting fixtures for improved visibility and safety.
- Road Widening and Realignment: Widening of the road and adjustment of the alignment to facilitate safe turning movements including installation of intersection treatments (CHR, BAL etc).

4.9 Ongoing Economic Stimulus

Landowners

Local landowners involved in the Project will receive annual lease payments (indexed with CPI) to host Project infrastructure. These payments are confidential between the Proponent and landowners, although have been included (in aggregate) in the overall ongoing stimulus figure later in **Section 4.9**.

Community

The Proponent will enter into a Planning Agreement (PA) with Wentworth Shire (Council), in line with the DPHI *Draft Benefit Sharing Guidelines, 2023.* The Proponent proposes to distribute the funding as outlined below:

- **One third** of this funding will go to Council for projects identified in Council's Development Contributions Plan.
- **One third** of this funding will go to a community benefit fund to be administered either by Spark Renewables or by a committee of Council (such as a s355 committee under the NSW Local Government Act 1993), which will provide grant funding to initiatives that collectively benefit proposals put forward by the local community subject to the guidelines in the fund charter; and,
- **One third** of this funding will be administered by Spark Renewables and will go to initiatives to share Project benefits with the neighbouring community and local First Nations groups

Local Wage Stimulus

The Project will support **47 FTE** jobs (direct and indirect) in the EIA Study Area during the operational phase. These jobs will provide an estimated stimulus within the EIA Study Area of approximately **$2.2 million** (2023 dollars) in Year 1 of operations. This figure is based on the assessment that there will be no loss in direct or indirect agricultural jobs associated with the Project (i.e., agricultural activities will continue at existing levels across the Project Area). Refer to **Section 4.6** for wage stimulus methodology.

Total Operational Stimulus

The total economic stimulus associated with the operation of the Project is estimated at approximately **$220 million** over 30 years of operation, (2023 dollars, CPI adjusted) relating to operational wage stimulus, host landowner payments, and VPA payments.

4.10 Proposed Mitigation Measures

With regard to the analysis conducted in **Chapter 3.0** and **Chapter 4.0**, the potential mitigation measures recommended by this EIA are summarised below in **Table 4.3**.

Table 4.3 Proposed Mitigation Measures

Mitigation ID	Mitigation measure
EIA01	**Accommodation and Employment Strategy (AES)** Prior to commencing construction, Spark Renewables will prepare an AES for the Project in consultation with relevant stakeholders. This AES should include: • Measures to ensure there is sufficient accommodation for the workforce associated with the construction phase of the Project, including detailed information (e.g. final capacity, layout and components) relating to the proposed on-site TWA • Measures to address any specific cumulative impacts arising associated with other State significant development projects in the area. • Measures to prioritise (where practicable) the employment of local workers and the procurement of local businesses for the construction and operation of the Project. • A program to monitor and review the effectiveness of the strategy over the life of the Project, including regular monitoring and review during the construction phase. It is understood, the Proponent will develop a TWA at the Project Area to mitigate accommodation demand pressures, as previously noted. This facility is likely to form a key component of the Project's AES.
EIA02	**Community Shared Benefit Strategy (CSBS)** To ensure the broader community benefits from the construction and operation of the Project, Spark Renewables will develop a CSBS, which should include the following: • The Proponent entering into a PA with Wentworth Shire, which details the Community Fund • Outlines other community benefit initiatives.

Source: Ethos Urban

4.11 Decommissioning

The WTGs have an expected operating life of approximately 30 years and the agreements with the host landholders provide for the operations to continue for 30 years. At the end of those 30 years, the following options may be considered:

- Continued use of the Project Area as a wind farm and battery storage utilising the existing WTGs and other facilities (subject to contractual agreement with the host landholders and condition of equipment)
- Replace the WTGs and battery storage with technology current at that time and continue the wind farm and battery storage operation for a further term (subject to contractual agreement with the host landholders and further development consent)
- Decommission the wind farm and battery storage and remove the WTGs and other infrastructure from the site and rehabilitate as required.

Should decommissioning be required, all costs associated with decommissioning will be borne by the Proponent or their representative.

- Key stakeholders including relevant landholders would be consulted regarding the Decommissioning and Rehabilitation Plan.

- All above ground structures not required for the ongoing agricultural use of the land, including the WTGs and substations will be removed and the land rehabilitated so that it can return to agricultural use.
- Internal roads, if not required for ongoing farming purposes or fire access, would be removed. Access gates, if not required for farming purposes, would also be removed. Host landholders will be involved in any discussion regarding the removal or hand-over of infrastructure on their properties.
- Below ground infrastructure, including WTG foundations, hardstands and some cabling may be left in situ and covered in clean fill material to a suitable depth, with the land returned to approximate prior condition and use as far as practicable.

The decommissioning phase would require similar equipment and activities to the construction phase including mobile and heavy equipment (e.g. cranes, earthworks machinery, compressor and rock crusher). Prior to the commencement of decommissioning activities, the Proponent will prepare a detailed decommissioning and rehabilitation plan in consultation with DPHI and Wentworth Shire Council to guide the implementation of the decommissioning works.

If decommissioning were to occur, these activities pose similar potential impacts and benefits as construction activities, albeit over a shorter timescale. Decommissioning activities would involve a significant on-site workforce to dismantle the infrastructure and other workers to transport project components from the site for disposal or recycling. The Project Area then would require a range of resources to undertake rehabilitation activities.

Decommissioning would therefore support significant employment, and business contracts and provide a spending stimulus to the EIA Study Area over the decommissioning period.

4.12 Estimated State Benefits

In addition to supporting NSW State policy directions (refer to **Section 2.3**) the Project is estimated to deliver the following key NSW State-wide economic benefits:

- Capital investment: **$260 million** or 30% of total Project capital investment (recognising the large import component associated with wind farms)
- Construction employment: **235 FTE jobs** or 40% of total average construction employment (direct and indirect) – noting significant employment is likely to come from Victoria.
- Ongoing employment: **45 FTE jobs**, or 40% of total operating employment (direct and indirect) – noting significant employment is likely to come from Victoria.
- Supports ongoing industry transition in Regional NSW from agriculture and other activities to renewable energy.

Future decommissioning investment and employment opportunities, to be determined (refer to **Section 4.11**).

4.13 EIA Conclusions

1. The Project will require approximately **$866 million** in investment during the construction phase (of which approximately **$130 million** will be retained in the EIA Study Area) and will support **225 direct** and **360 indirect** FTE positions on average over the 36 month construction period. Once operational, **30 direct** and **85 indirect** FTE jobs will be supported by the Project.

2. The EIA Study Area is expected to benefit from **95 FTE** construction jobs (**25 direct** and **70 indirect**) and **47 FTE** (**30 direct** and **17 indirect**) ongoing jobs associated with the Project.

3. The EIA Study Area has moderate capacity in terms of construction-related workers (**9,830 workers**) and businesses (**870 businesses**) to manage the requirements of the Project, and concurrent regional infrastructure projects if required.

4. The Project will provide new participation opportunities for businesses and workers located in the EIA Study Area, having regard for the good match of skills and resources available and procurement activities by the Proponent.

5. The 'external' Project labour requirement is expected to generate an accommodation need for **360 FTE** workers at the peak of the Project. This represents **26%** of total commercial accommodation rooms/cabins within a 60-minute drive of the Project Area. However, some further capacity is available in private rentals (e.g., long-term houses/units, and potentially unoccupied dwellings) - some of which may become available to the market to support the Project. While this data indicates some capacity currently exists in the EIA Study

Area to accommodate non-local workers, it is recognised the long-term rental housing market (a preference for many construction workers) has very limited supply; while increased demand from concurrent regional infrastructure projects (refer to **Section 4.3**) and seasonal accommodation demands (tourism, agricultural activities etc) also needs to be factored in.

6. With regard to the labour requirement for the Project and the associated accommodation needs for non-local workers, it is anticipated that 40 workers (of the peak 400 workers) are likely to be locally based and existing residents in the locality. Of the remaining workforce (360 workers), approximately 300 workers at peak construction are proposed to be accommodated in the purpose-built on-site TWA facility, with the remaining 60 peak workers expected to be housed in a combination of local housing or commercial accommodation.

7. Construction workers relocating to the region would be expected to inject approximately **$4.6 million** in new spending into the economy over the construction phase, supporting approximately **8 FTE** jobs in the service sector in the EIA Study Area over this time.

8. Cumulative impacts are associated with the significant development of major renewable energy projects in the SW REZ in the coming years and ongoing demand from the tourism, agriculture and mining sectors. Potential impacts may include insufficient accommodation and workers to service the Project and concurrent demands. In this regard strategies to manage accommodation demand, local procurement and employment should be considered by the Proponent.

9. The Project Area is approximately **57,330.31 ha**. The total Disturbance Footprint is **444.95 ha** (Within the Project Area **444.69** ha plus **0.26 ha** for offsite road works) which represents less than **1.0%** of the Project Area. This land, which will be leased from the existing landowners, is mainly used for large-scale cropping of grains and legumes, particularly wheat, chickpeas and beans, and some grazing. No loss of employment associated with the Project Area is anticipated, either directly (on-site) or through the supply chain. Agricultural activities are expected to be ongoing on the Project Area and ultimately co-existing during the operational phase of the Project. The main relevant agricultural impacts include:

   – Temporary removal of **444.69 ha** of land within the Project Area from agricultural land use for the duration of the Project.
   – Temporary removal of potential agricultural primary productivity to the estimated value of up to **$154,307** per year for the duration of the Project

10. Ongoing economic stimulus associated with the operation of the Project is estimated at approximately **$220 million** (over 30 years, CPI adjusted) relating to landowner lease payments, operational wage stimulus, and VPA payments.

11. Operation of the Project could potentially support small-scale tourism and educational opportunities in the future, especially in light of the significant development of the renewable energy sector in the nearby SW REZ over the coming years.

12. In order to minimise potential Project impacts the following mitigation measure is recommended:

    Prior to commencing construction of the Project, it is recommended the Proponent:

   – prepare an AES, in consultation with relevant stakeholders. Details of the TWA should be central to the AES.
   – prepare a Community Shared Benefit Strategy (CSBS).