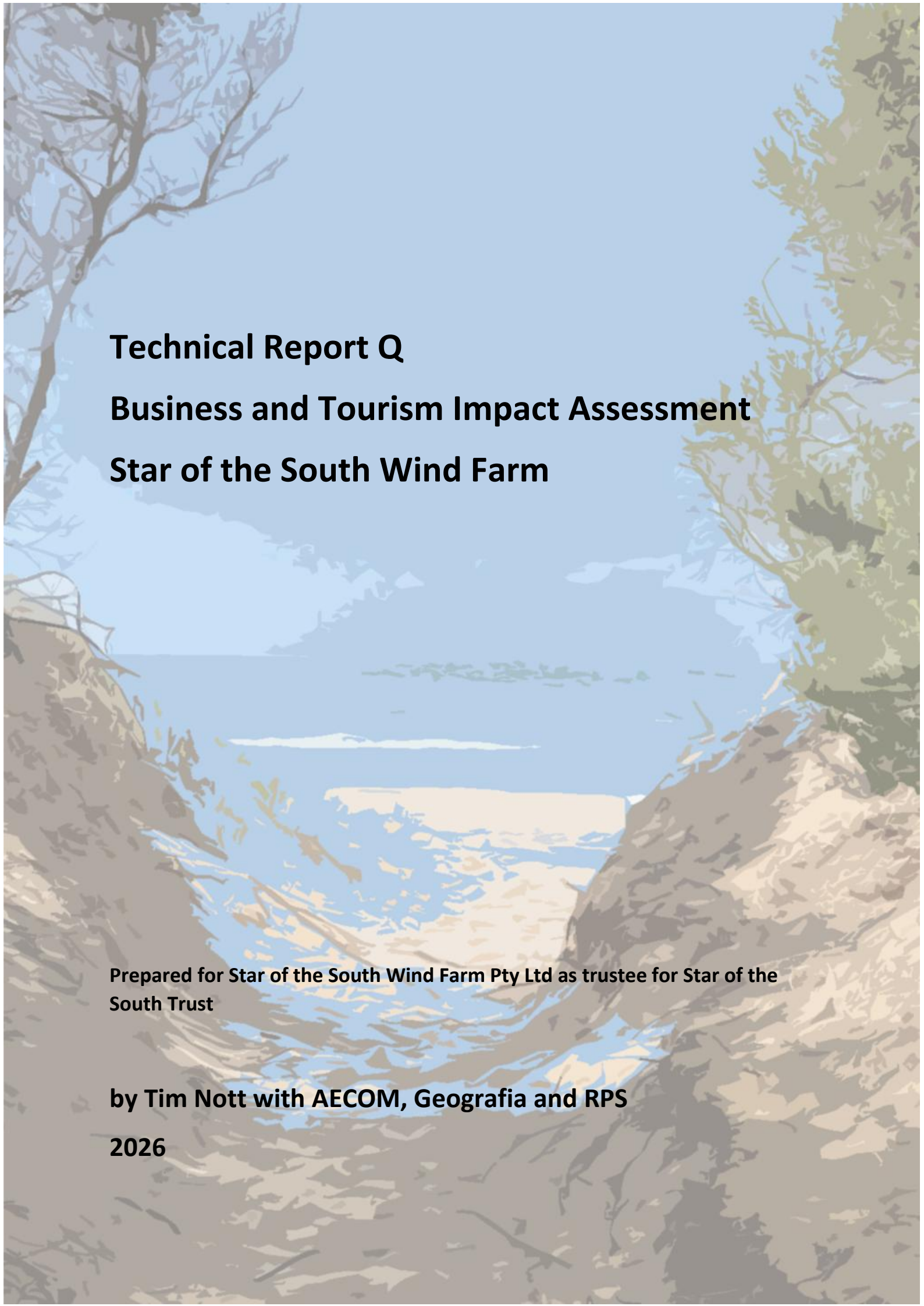

Technical Report Q
Business and Tourism Impact Assessment
Star of the South Wind Farm

Prepared for Star of the South Wind Farm Pty Ltd as trustee for Star of the South Trust

by Tim Nott with AECOM, Geografia and RPS

2026

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The authors acknowledge the Traditional Owners of the lands and waterways on which we work and live. In particular, we acknowledge the people of the Gunaikurnai nation as the Traditional Owners of the land and waters where Star of the South is proposed, and pay our respects to their Elders, past, present and emerging.

Contents

Figures

Tables

EXECUTIVE SUMMARY

Overview

Star of the South is Australia's most advanced offshore wind project. Located off the coast of central Gippsland, the project comprises an offshore wind farm and supporting transmission infrastructure to transfer energy to the existing electricity network.

A delegate of the Commonwealth Minister for the Environment decided that the project is a controlled action (as set out in notice dated 2 June 2020) and is required to be assessed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) through preparation of an Environmental Impact Statement (EIS) and the Victorian Minister for Planning has determined that an Environment Effects Statement (EES) is required (as set out in notice dated 11 May 2020) under the *Environment Effects Act 1978* (EE Act).

The purpose of this report is to assess the potential business and tourism impacts associated with the project to inform the preparation of the EES and EIS required for the project. This report focusses principally on the effects of the project on the business and tourism sectors in the communities near the wind farm or its transmission infrastructure, and in the Gippsland region as a whole. The report provides a series of mitigation measures to reduce or ameliorate the possible adverse impacts of the project as well as measures to bolster its positive impacts.

Existing environment

Two study areas for this assessment have been identified. The local study area comprises the statistical areas (SA2s) containing the onshore infrastructure and the areas from which the wind farm would be seen. The regional study area, comprising the Latrobe-Gippsland SA4, is the broader region in which the project is set and would provide much of the workforce and supporting services for the wind farm.

The local study area is a relatively sparsely populated district, characterised by farming, forestry, small towns and national parks and reserves. The population of the area is forecast to grow relatively slowly. The economy of the local study area is dominated by primary production, natural gas production, small town services and tourism. The number of visitor nights in the local study area is estimated broadly at 1.6 million per year, with around 0.3 million of these spent at Wilsons Promontory National Park. These people are attracted mainly by the natural attractions of Wilsons Promontory, Nooramunga, Ninety Mile Beach and Tarra Bulga Parks, as well as the opportunities to fish, boat, cycle, camp and walk amongst nature. Foster, Yarram and the coastal towns and villages provide low key hospitality services, although tourism supports, directly and indirectly, 10-15% of employment in the area.

The Gippsland region has a range of urban settlements and extensive public lands in parks, state forests and reserves. The region has a varied landscape from the extensive coastline to the crest of the Victorian Alps. It has relatively slow population growth compared with the State as a whole. The regional economy is dominated by electricity generation using the large brown coal reserves of the Latrobe Valley. Farming, forestry and natural gas production are also important as well as regional urban services and tourism. The urban centres of the region also offer significant manufacturing and civil construction capacity.

Local and regional development policies are focused on positioning Gippsland for life beyond fossil fuels. This includes strategies for redeploying skilled workers into the renewable energy sector; for

broadening investment in advanced manufacturing and services; adding value to primary produce; and for strengthening the visitor economy.

The Gippsland coast is a hub of marine resource activity. Numerous offshore permit areas associated with telecommunications and oil and gas exploration and production are found there. Existing offshore infrastructure off the Gippsland coast is nearly wholly related to oil and gas exploration and production and includes numerous wells for exploration, appraisal and development. There are several long-distance cables and pipelines through the region and major shipping lanes that supply Tasmanian and Melbourne ports.

There are several commercial fisheries that operate within the Gippsland offshore region and marine tourism business operate to the west of the offshore project area near Wilsons Promontory. The offshore area is used for recreational activities including fishing, cruising, and SCUBA diving. Recreational fishing is a key attraction to the Gippsland region, with a wide variety of species targeted. Fishing clubs are active in nearshore and offshore waters and there are game fishing competitions in the area.

Impact assessment findings

An assessment was undertaken to evaluate potential business and tourism impacts associated with the project, considering the existing environment within the study area and associated construction, operational and decommissioning activities.

The following paragraphs identify the likely impacts on the local and regional business and tourism sector after the recommended mitigation measures have been implemented. The reader should note that the scope and scale of the project have not yet been fixed. The project assessed here is a wind farm with a capacity of up to 2.2 GW that will take up to seven years to construct. There is potential for timing, technologies and implementation strategies to shift within this project envelope, with consequences for overall employment numbers, impacts and scheduling.

- *Generation of large numbers of jobs in the Gippsland region during construction and operation*

The project would generate large numbers of additional jobs in Gippsland through the construction period, deepening the regional skills base in the emerging renewable energy sector and allowing for the redeployment of workers from the declining fossil fuel energy generators. Depending on the extent to which the Corner Inlet port is used for construction management of the wind farm, and the extent to which onshore construction design and management is conducted in the region, the project would generate an annual average of between 291 and 886 direct and indirect jobs during the seven-year construction period. Ongoing direct and indirect jobs during the operation of the wind farm and its transmission infrastructure have been modelled to be approximately 315.

In Australia as a whole, the project would generate $7.2 billion in additional Gross Domestic Product (GDP) during construction and $8.9 billion over the period of operation. It would generate an annual average of 2,600 jobs directly and indirectly during the construction period, including over 800 direct jobs, and generate 416 ongoing jobs (228 direct jobs) during the period of operation.

- *Potential disruption of the local and regional labour market during construction*

Such a large project, much of which is proposed to take place in relatively sparsely populated districts, is bound to have an impact on the local labour market. It seems likely that such a big project would entice workers with relevant skills away from existing firms, including farms, timber harvesting and manufacturing. Such workers may be hard to replace, even with mitigation measures in place, and would likely result in higher wages in affected sectors. These impacts would last for the

duration of the construction period. This would be good for workers but may be difficult for individual businesses in the area south of the Strzelecki Ranges. It would be unlikely to create region-wide production losses.

- *Potential disruption to the local and regional housing market during construction and operation*

The project would generate a large influx of temporary workers seeking accommodation. Star of the South has proposed a Workforce Accommodation Strategy to best match supply and demand associated with the project without adversely affecting the availability of accommodation for other purposes, including tourism. Even so, there would probably be some impact on the cost and availability of housing and commercial accommodation as demand rises. This would affect holiday-makers and workers from all industries present in the region. This impact would persist for the construction period, particularly during periods of peak demand. The operational period of the project would cause a smaller growth in housing demand, mainly in the local study area, especially in the towns of Foster and Yarram.

- *Potential visual impacts on visitation to coastal communities*

The reaction of visitors to the changed seascape is difficult to judge. There is potential for visitation to decline as some people react adversely to the view of the wind turbines in the seascape. This may be offset by an increase in the number of people in the region as a result of the project, a potential improvement in recreational fishing and interest in the wind farm itself.

- *Offshore construction impacts on recreational fishing and boating in the area of the wind farm and surrounds*

Any economic impact of disruptions to offshore recreational fishing and boating would be local to the coastal settlements from Port Albert to McLoughlins Beach and their service centres. For the most part, this activity would shift elsewhere in the local study area, although this may result in some extra costs for participants. Any impacts on the Gippsland region as a whole will be relatively minor and would dissipate following the construction period.

- *Adverse impacts on Reeves Beach campground during construction*

Construction noise impacts at Reeves Beach campground is very likely to reduce visitor numbers for up to two-and-a-half years during construction. Some visitation and visitation expenditure would be lost, either through people postponing their visit or travelling elsewhere. However, the consequent losses of tourism revenue to local and regional businesses would be relatively small.

- *Construction impacts on coastal communities closest to the wind farm*

Construction will result in noise impacts in limited locations around the local study area. These include the small communities around the onshore transmission line which will be affected as the mobile construction front passes nearby; and the coastal communities that may very occasionally hear the offshore pile-driving which is scheduled to take place over six months. Visitation overall is unlikely to be reduced but particular hospitality and tourism businesses that do not benefit from the influx of workers or windfarm visitors, may suffer adverse impacts on their turnover during the construction period. Overall impacts on the regional economy should be modest and should dissipate following the construction period.

- *Businesses affected due to traffic disruptions during construction*

Some minor disruption would be likely as a result of occasional road congestion and closures during the onshore construction period, with a consequent increase in costs for individual businesses and visitors. However, by engaging in a two-way flow of information via a stakeholder engagement

strategy and by programming works to avoid key holidays, the consequences for the regional economy as a whole would be negligible.

- *Loss of primary product for regional processors*

There may be a minor loss of farm and forest product for regional processors over the life of the project as a result of plantation land required for the transmission line. However, the consequences for the regional economy would be negligible.

- *Underwater construction noise impacts on recreational divers*

Divers may choose to utilise alternate locations, such as within Corner Inlet or west of Wilsons Promontory, whilst construction that produces intermittent noise is undertaken. Divers may be able to access alternative dive sites from the same ports and boat ramps that they currently use. They may continue to use the same accommodation that they currently use or similar accommodation within the region, with little overall impact on the local economy.

- *Offshore construction impacts on marine fauna and the tourism it generates*

The potential for disturbance/displacement of marine wildlife, most notably marine mammals and turtles, from the offshore wind farm area and surrounding waters could possibly result in higher costs for tour boats to access the wildlife. However, the likely impact on visitation would be very minor.

- *Potential impacts on business and tourism as a result of decommissioning the wind farm, including as a result of traffic congestion; impacts on business and recreational vessels; offshore construction noise, including underwater noise; the potential for oil spills; the employment of workers and their impact on the regional labour and housing markets; and removal of a source of work and visitor interest*

The business and tourism impacts of decommissioning the wind farm are assumed to be similar to those during construction but at a much lower scale. There would likely be little adverse impact on the local and regional economy apart from the removal of ongoing windfarm employment and a possible tourism attraction for the district.

- *Potential cumulative impacts with other identified large construction and energy projects in the region, including impacts on business and tourism as a result of traffic congestion; competition for workers and accommodation; and changes to the visual amenity of the seascape*

Many of the impacts identified for the project would be compounded by a number of other construction and energy projects in the region which may be developed with overlapping timeframes and locations. It will be important to ensure that the proponents of the various projects cooperate with each other on infrastructure-sharing, and labour-force and housing issues and the efficient use of regional resources.

Mitigation measures

Potential impacts on business and tourism due to the project would be avoided, minimised or managed through a range of recommended mitigation measures. These focus on a number of key areas:

- Recognising and mitigating the potential construction noise and physical disruption caused by the project, and ameliorating the impacts on the local tourism industry and other local businesses

- Ensuring that the large number of construction workers required for the project can be secured without disrupting other local industries or overwhelming the housing and accommodation sector
- Identifying the potential for the project to become a catalyst for improved business and tourism outcomes through regional and industry cooperation

The individual mitigation measures are listed in section 13 of the main report.

The following table provides a review of the residual impacts on the key assessment criteria developed for this report.

Assessment of residual business and tourism impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by the project?	Net incomes of businesses supplying the project or catering to the increased population would rise. Net incomes of businesses in the visitor economy may be particularly unsteady during the construction period but should stabilise once construction has been completed.
Would regional output and employment be reduced by the project?	No. Regional output would grow by between $9.4 billion and $11.5 billion over the life of the project, depending on the scale of construction employment in Gippsland. Construction is expected to take up to seven years. Direct and indirect jobs in Gippsland during the construction period are estimated at an annual average of between 291 and 886. Ongoing jobs in the region have been modelled to be approximately 315. (These results do not take into account jobs as a result of decommissioning or any induced changes to the tourism or other industries.)
Are opportunities to grow regional output and employment maximised?	The "local first" procurement policy of Star of the South will prioritise local service and component inputs to the project.
Would visitor numbers and their distribution be adversely affected by the project?	Visitor numbers to the local study area would likely change during the more disruptive parts of the construction period, with some shift away from the settlements between Port Albert and Woodside Beach to other parts of the coast in the region and elsewhere. Any displaced visitors should return to the area of the coast closest to the project area, although this may depend on attitudes to the change in the local seascape and work on enhancing other aspects of the visitor experience.
Would the capacity of the region to host further ecologically sustainable development be diminished by the project?	The demand from Star of the South would boost the potential viability of further investment in clean energy.
Would the project affect other relevant local and regional policy preferences, including improving employment diversity, capitalising	The project would add substantially to the diversity of the regional job stock. It would meet the regional policy preference for moving beyond the reliance on fossil fuel industries to more sustainable employment. The services in several coastal villages of southern Gippsland, one of the

on local and regional economic strengths or improving "hero" visitor attractions?	"hero" attractions of regional tourism, may be boosted through increased demand.

In summary, the project would generate significant numbers of jobs in the Gippsland region, and at a time when important local fossil energy producers are winding down. There will be some disruption to local housing and labour markets as a result and these impacts will need to be carefully managed, especially given the compounding factor of other similar major projects in the area. Tourism activity, including recreational fishing and boating, could also be disturbed at periods during construction. The wind farm would change the character of the seascape in this area and some visitors may take time to adjust.

ABBREVIATIONS

Abbreviation	Name in full
ABS	Australian Bureau of Statistics
AMSA	Australian Maritime Safety Authority
ASA	Air Services Australia
ASGS	Australian Statistical Geography Standard
CASA	Civil Aviation Safety Authority
DBBC	Double Bubble Curtain
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DELWP	Department of Environment, Land, Water and Planning
DISER	Department of Industry, Science, Energy and Resources
DJSIR	Department of Jobs, Skills, Industry and Regions
DMAC	Diving Medical Advisory Committee
DMP	Destination Management Plan
EE Act	Environment Effects Act 1978
EES	Environment Effects Statement
EIS	Environmental Impact Statement
EMF	Environmental Management Framework
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESD	Ecologically Sustainable Development
FFG Act	Flora and Fauna Guarantee Act 1988
FTE	Full time equivalent (referring to jobs)
GRP	Gross Regional Product
HDD	horizontal directional drilling
kJ	kilojoule
km	kilometre
LSA	Local study area
LVA	Latrobe Valley Authority
m	metre
MDS	Maximum Design Scenario
MGO	Marine Gas Oil
MNES	matter of national environmental significance
MSV	Maritime Safety Victoria
NAS	Noise abatement system
nm	nautical mile
NTM	Notice to mariners
OEI Act	Offshore Electricity Infrastructure Act 2021
PAWSA	Ports and Waterways Safety Assessment

Abbreviation	Name in full
RDA	Regional Development Australia
RDV	Regional Development Victoria
REVPAR	Revenue per available room (a key benchmark for commercial accommodation)
RSA	Regional Study Area
SA2	Statistical Area 2, defined by the ABS
SA4	Statistical Area 4, defined by the ABS, containing many SA2s
TRA	Tourism Research Australia, a Commonwealth Government agency

GLOSSARY

Term	Explanation
Array cables	Electrical cables that typically transmit generated energy from wind turbine generators to substations within the offshore wind farm.
Construction feeder port	The construction feeder port will be where the larger construction components are unloaded and loaded from. Large incoming vessels will deliver the manufactured construction components of the wind turbine generators and foundations to the port. These components will then be taken by ship to the offshore work area for installation.
Construction management port	The construction management port caters for the smaller vessels that support the construction activities in taking crew and supplies to the construction fields on a day-to-day basis during the project's construction phase.
Contingency measures	Mitigation measures that are implemented in response to monitoring results showing that required environmental performance outcomes are not being met.
Crew transfer vessel	Vessel that transfers construction and maritime crew between the port and the offshore work site or service operations vessel
Cumulative impact	The resultant impact of the project, in combination with one or more other existing or proposed projects in the area, on the same environmental asset. The total impact from the contributing projects is the cumulative impact.
Ecologically Sustainable Development	The EPBC Act 1999 defines the principles of economically sustainable development as: a) Decision-making processes should effectively integrate both long-term and short-term economic, social, environment and equitable considerations; b) If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation c) The principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations d) The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making e) Improved valuation, pricing and incentive mechanisms should be promoted
Effect	A change to the environment (including socio-economic changes) resulting from the project that may be positive or negative.
Environmental management framework	A framework for managing the environmental impacts and risks of the project. This includes all proposed mitigation measures (including boundaries around project design parameters) and any commitments for offsets. The contents of the framework effectively become the conditions of approval for the project (along with any further conditions set by regulators)

Term	Explanation
Export cable area	The offshore area where cables transmitting electricity from the offshore substation to the landfall point at Reeves Beach are proposed to be located.
Goss regional product	*GRP is the net measure of wealth generated by the region. GRP can be measured by using the incomes approach, where all incomes earned by individuals (wages and salaries), firms (gross operating surplus) and governments (taxes on products or services) are added.* *Alternatively, an expenditure approach can be taken where all forms of final expenditure, including consumption by households, consumption by governments, additions or increases to assets (minus disposals) and exports (minus imports), are added. The expenditure approach does not include intermediate expenditure, as this would lead to double counting. eg. the wheat and flour in a loaf of bread. These methodological approaches are the same as those used to calculate Gross Domestic Product (GDP) at a national level.* Remplan, 2021
Job-Year	A full-time equivalent job that lasts for the equivalent of one year. This provides a standardised measure of the number of jobs required during the construction of the project, when many people would be on short term assignments, sometimes for less than one year.
Local Study Area	An area defined for this study comprising contiguous SA2s through which the wind-farm transmission corridor will pass or from which the wind farm will be seen. These SA2s are Foster, Longford-Loch Sport, Wilsons Promontory and Yarram.
Mitigation measures	Actions, commitments or measures that are implemented to avoid, minimise or manage potential impacts. These include boundaries around project design parameters (including construction), as well as the implementation of actions, systems and procedures to avoid, minimise and manage impacts (including monitoring).
Offshore Cable Corridor	Area where offshore transmission cables from the wind farm would pass to the shoreline
Offshore Wind Farm Area	586 square kilometres, extending from 10 to 40 kilometres offshore from Reeves Beach. This area would contain the wind turbine generators (WTGs), foundations, offshore substations, interlink cables and inter array cables. The offshore wind farm is in Commonwealth waters.
Offshore project area	The Offshore Wind Farm Area plus the export cable area.
Operations and maintenance port	The operations and maintenance port provides an essential base where the smaller maintenance vessels, crew transfer activities and operations will be run from during the operational life of the wind farm.
Output (economic)	*Output data represents the gross revenue generated by businesses/organisations in each of the industry sectors in a defined region. Gross revenue is also referred to as total sales or total income*. Remplan, 2021
Project design envelope	A series of maximum extents of a project for which the significant effects are established. The detailed design of the project can then vary within this 'envelope' without rendering the EIS inadequate.

Term	Explanation
Regional study area	An area defined for this study which comprises the region in which the project would be located. This region would experience the main impacts on business, tourism and employment and has been defined as the Latrobe -Gippsland SA4.
Residual impact	The predicted impacts following the implementation of committed mitigation measures, taking into account the expected effectiveness of these measures.
Service operations vessel	A ship used to accommodate construction crews that will be undertaking the offshore works. Such vessels may be on station at the offshore work site for significant periods.
Subsea export cable	Electrical cables that typically transmit generated energy from wind turbine generators or a substation within a wind farm to the electricity network.
Substation	A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and consumer, electric power may flow through several substations at different voltage levels. A substation may include transformers to change voltage levels between high transmission voltages and lower distribution voltages, or at the interconnection of two different transmission voltages.
Transmission corridor	Belt of land linking landfall location to network connection points
Transmission infrastructure	All basic physical structures and facilities needed for the delivery of generated electricity to the network connection points
Wind turbine generator	The combined foundation, transition piece, tower, nacelle, rotor hub and rotor blades.

1 INTRODUCTION

The Star of the South Offshore Wind Farm (the project) is Australia's most advanced offshore wind farm. The project is located in Commonwealth waters off the coast of Gippsland, and will connect to the electricity network via the proposed VicGrid connection hub in Giffard. Located within and off the south coast of central Gippsland, it would help transform Victoria's future energy supply – complementing other forms of power generation and creating a more reliable system.

The project seeks to diversify Victoria's energy capability, expand its renewable generating capacity, and has the potential to provide around 1.2 million Victorian homes with clean energy while creating local jobs and investment. The project is strongly aligned with Victorian and Commonwealth government energy and climate policies. It provides emissions free renewable energy generation as Victoria reduces its reliance on fossil fuels, which contribute to climate change impacts. The project represents a significant opportunity to diversify Australia's energy resources. As Australia's ageing coal fleet retires, new sources of power are needed to address the anticipated gap in electricity generation. The project will address this gap, by harnessing Bass Strait's strong, consistent winds and delivering significant amounts of clean, reliable power to the grid starting in 2032. With a capacity of up to 2.2 gigawatts (GW), the project can meet approximately 20 per cent of Victoria's current electricity demand, enough to power around 1.2 million homes annually. The project is located within both Commonwealth and Victorian jurisdictions and is subject to planning and environmental assessment and approval under Commonwealth and Victorian legislation.

A delegate of the Commonwealth Minister for the Environment and Water has determined the project is a controlled action (as set out in a notice dated 2 June 2020) and must be assessed and approved under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) through an Environmental Impact Statement (EIS). The Victorian Minister for Planning has determined the project requires an Environment Effects Statement (EES) (as set out in a notice dated 11 May 2020) under the *Environment Effects Act 1978* (Vic) (EE Act). The purpose of this report is to assess the potential business and tourism impacts associated with the project to inform the preparation of the EES and EIS required for the project.

This report has relied upon input from various sources. These include head contractor AECOM and its associates undertaking specific technical assessments. Sections of this report considering marine risks to business and tourism, that is, those aspects of the project that would affect business and tourism activities that take place on the water, have been prepared by RPS.

The remainder of the report has been prepared by economic geographer Tim Nott, with assistance on economic modelling from Geografia Pty Ltd.

The report has been prepared progressively based on feedback from AECOM and Star of the South.

The views expressed in this report are those of the authors and are not necessarily endorsed by any other party.

2 PROJECT DESCRIPTION

Section 2 provides a high-level overview of the project in its entirety. Detailed descriptions of project components and construction processes are provided in Chapter 4 - Project description of the EIS for the whole of project assessment across the Commonwealth jurisdiction, and in Chapter 4 – Victorian works project description of the EES for the Victorian jurisdiction. Specific project parameters that have informed the Business and Tourism Impact Assessment are detailed in Section 8 of this report.

2.1 Project overview

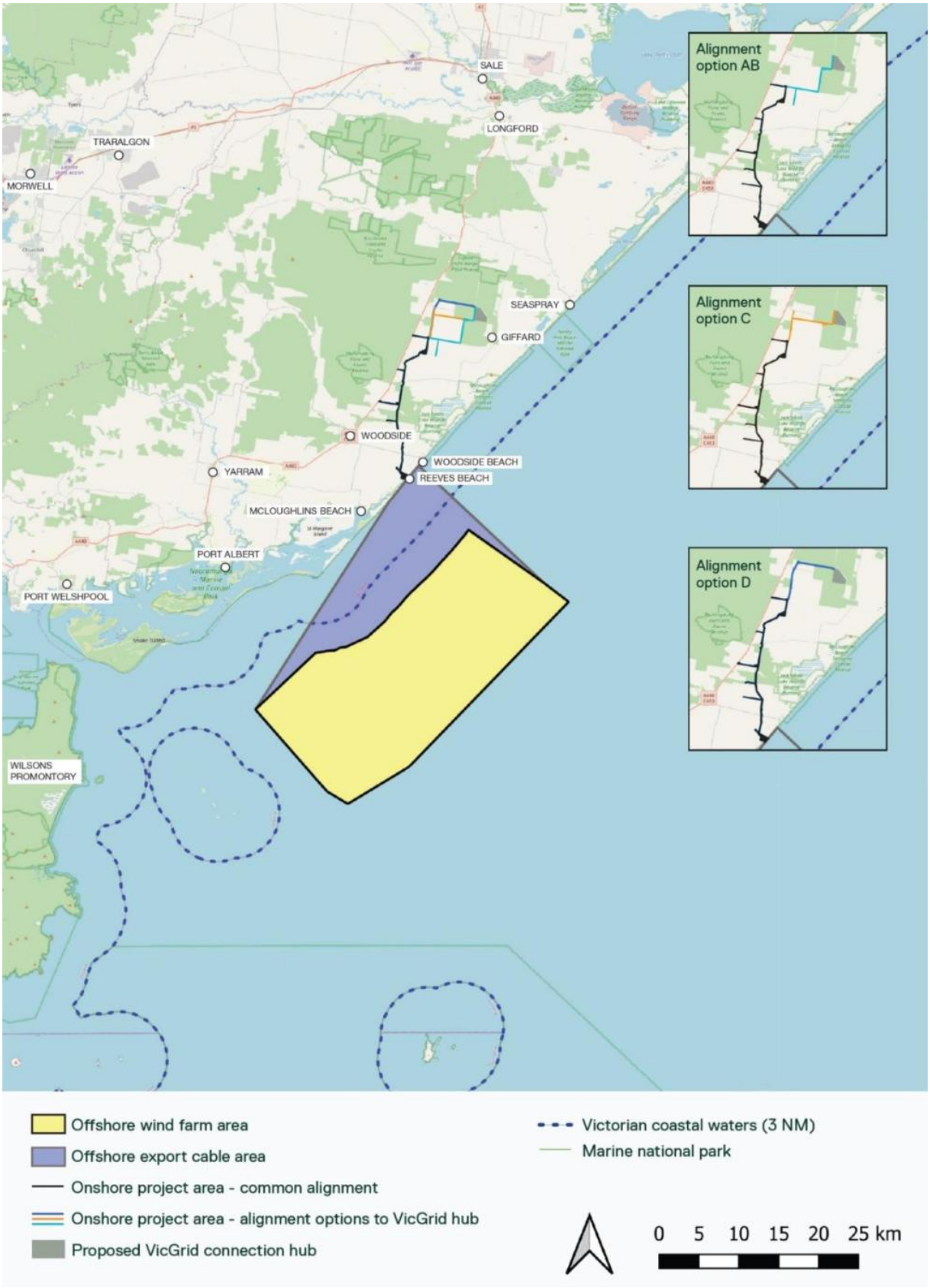
The offshore wind farm will be installed within a 586-square-kilometre offshore wind farm area, located approximately 10 to 40 kilometres off the coast of Gippsland, as shown in Figure 2 1.

The project comprises an offshore wind farm and supporting transmission infrastructure to generate and transfer power to the grid. The offshore infrastructure extends from the shore crossing at Reeves Beach, to the offshore wind farm area.

The onshore infrastructure primarily comprises of an underground cable system that will connect the project to the proposed VicGrid connection hub in Giffard (also referred to as 'proposed Giffard terminal station area'). The onshore transmission infrastructure is located in Central Gippsland, extending approximately 30 kilometres from Reeves Beach to the proposed VicGrid connection hub.

This technical report focusses on construction, operation and decommissioning of the onshore transmission system and the offshore wind farm and transmission components, within the project area shown in Figure 2-1.

Figure 2-1: Project location

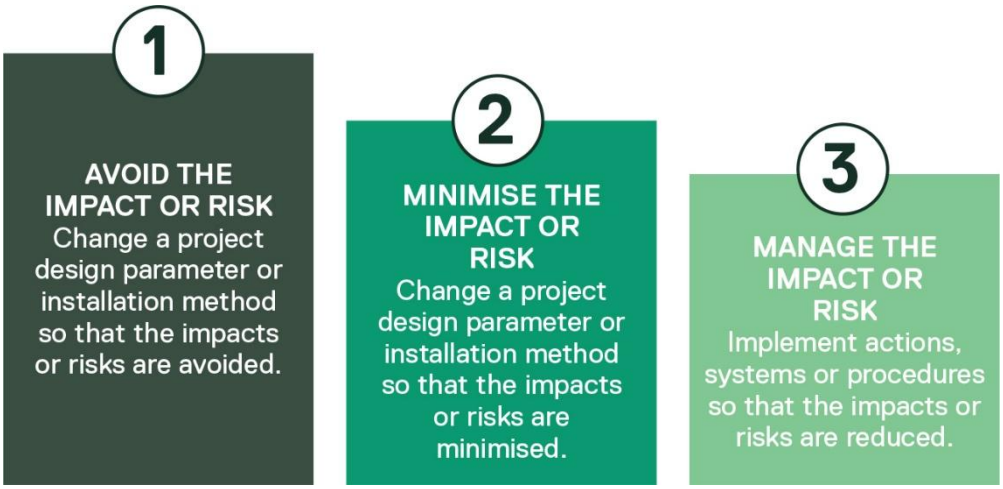


Source: Star of the South

2.2 Project development

Over several years of project development, opportunities to avoid and minimise environmental impacts have been realised in accordance with the mitigation hierarchy shown in Figure 2-2. The assessment framework has also enabled the identification and adoption of further avoidance and minimisation measures as part of the planning and environmental approvals process.

Figure 2-2: Mitigation hierarchy



Source: AECOM

Avoidance and minimisation of social and environmental impacts is central to the project's decision making and as such, the project would continue to be refined in response to technical requirements and potential environmental and social impacts identified during the development phase.

This was considered in the preparation of a project description which is found in Chapter 4 - Project description of the EIS for the whole of project assessment across the Commonwealth jurisdiction and Chapter 4 – Victorian works project description of the EES for the Victorian jurisdiction. A description of how avoidance of impact has informed the design in relation to business and tourism effects can be found in Section 6.6.

Examples of this include the decision to design the shore crossings without directly impacting coastal areas, utilising existing roads for construction site access wherever possible and adopting construction techniques which avoid impacts on sensitive receptors such as waterways.

Once avoidance and minimisation measures are exhausted, residual impacts and risks are managed. In the case of risks, mitigation measures can be applied both before and after an event occurs. Residual impacts and risks are then evaluated against the assessment criteria to ensure they are at an acceptable level.

2.3 Project area

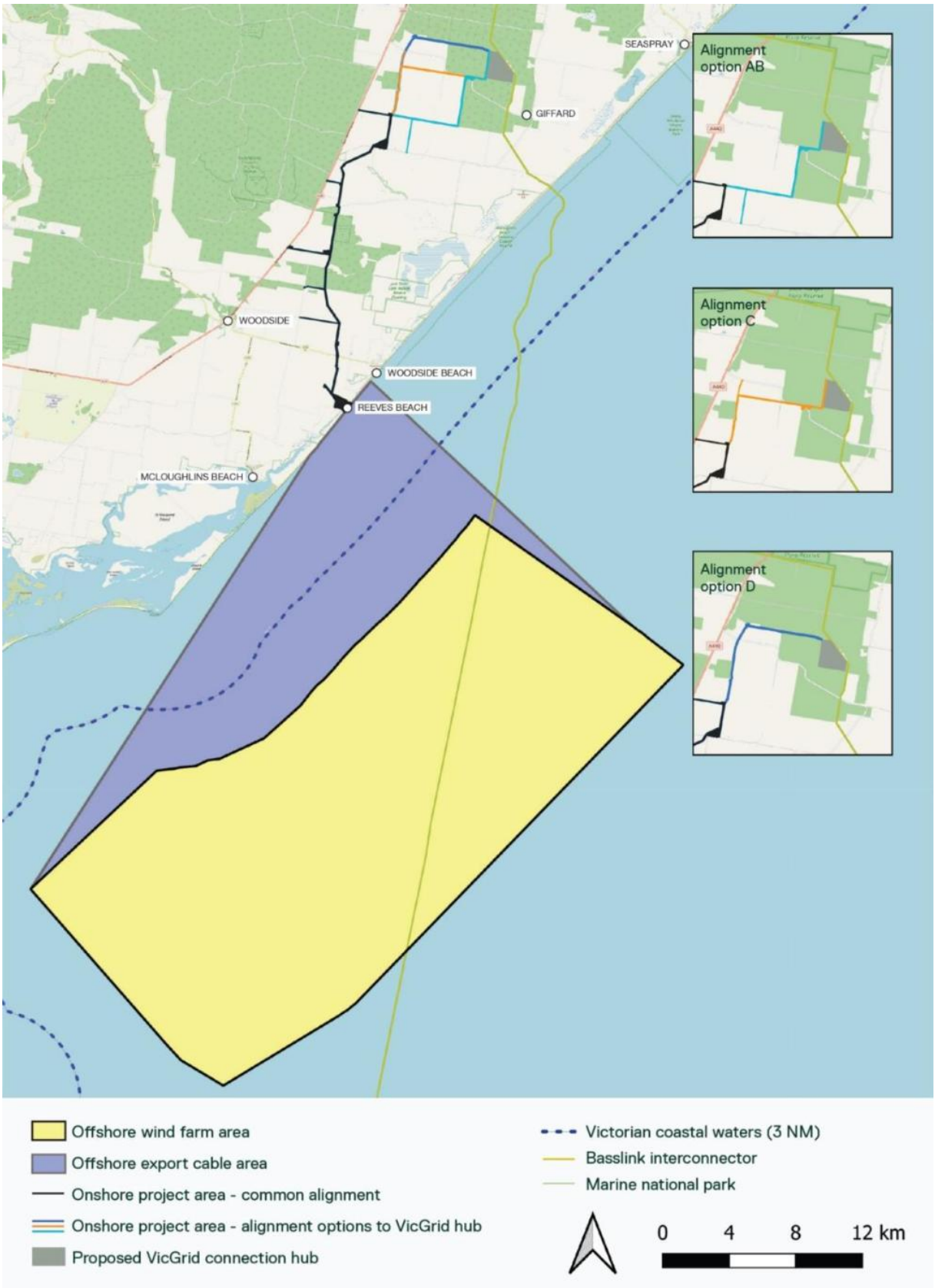
The project area is shown in Figure 2-3 has been broken down into three main sections - offshore, shore crossing, and onshore areas.

1. Offshore project area, comprising:

- **Offshore wind farm area**: A 586 square kilometre area extending approximately 10 to 40 kilometres offshore from the shore crossing. Includes offshore wind turbines installed on foundations, offshore substations and offshore transmission cables. This area is in Commonwealth waters.
- **Offshore export cable area**: A 232 square kilometre area extending from the offshore wind farm area to the shore crossing. Includes offshore export cables to connect the wind farm to land. This area traverses Commonwealth waters and Victorian coastal waters.

2. Shore crossing: Located at Reeves Beach, this is where the offshore export cables will transition to land and connect to the underground cable system onshore.
3. Onshore project area: An approximately 30 kilometre corridor extending from the shore crossing to the proposed VicGrid connection hub. Includes an underground cable system within a (common) alignment to Giffard West, at which point there are three alignment options (AB, C and D) to reach the proposed VicGrid hub in Giffard.

Figure 2-3 Project overview

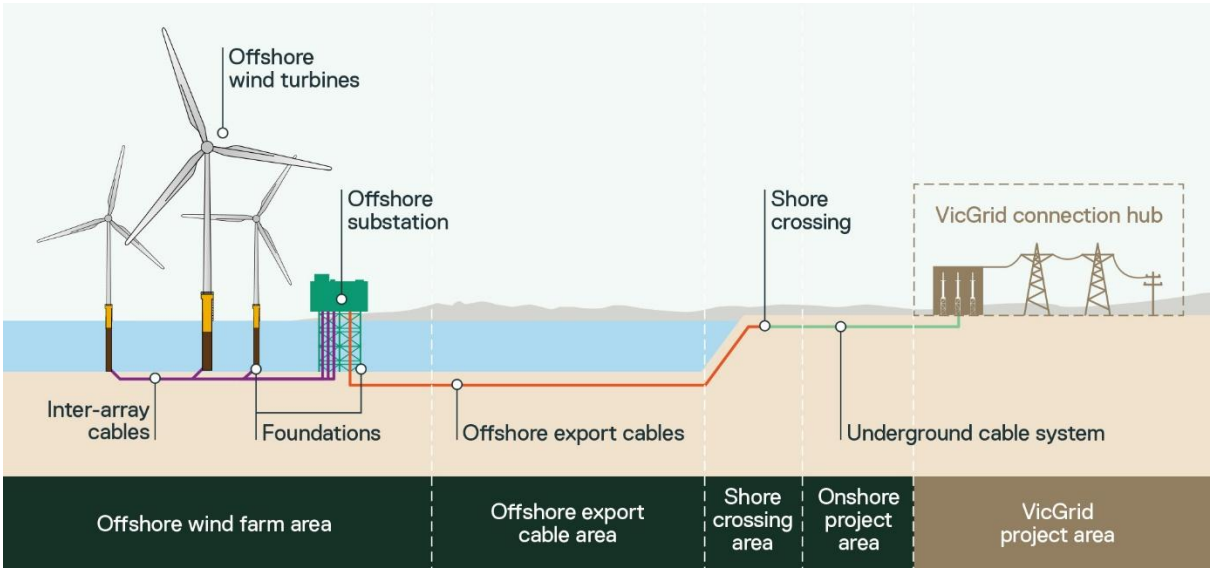


Source: AECOM

2.4 Key project components

The key components that make up the project are the offshore wind farm and transmission infrastructure (inter-array cables, offshore substations and offshore export cables), the shore crossing infrastructure and onshore transmission infrastructure.

Figure 2-4: Project components



Source: AECOM

Key components are shown in Figure 2-4 and include:

- Offshore wind farm and transmission infrastructure:
- Up to 147 offshore wind turbines installed on foundations with connecting inter-array cables
- Up to five offshore substations and three interlink cables
- Up to eight offshore export cables.
- Shore crossing infrastructure:
    - Up to eight trenchless crossings containing the offshore export cables
- Onshore transmission infrastructure, which consists of:
    - An underground cable system connecting to the proposed VicGrid connection hub

2.5 Construction approach

The offshore components of the project are likely to be constructed according to the general sequence below:

- Site preparation activities
- Offshore export cable installation

- Foundation installation
- Offshore substation topside installation
- Inter-array and interlink cable installation
- Offshore wind turbine installation.

Construction of the shore crossing involves 2 main activities and phases:

- Drilling and duct installation
- Cable pulling
- The construction of the shore crossing and onshore transmission system would involve the following key activities:
- Site establishment
- Cable system construction (including trenching, installation and jointing)
- Pre-commissioning and commissioning of the cable system
- Demobilisation and rehabilitation of areas disturbed by construction

2.6 Project timeline

The project has been under development for approximately seven years. If approvals are obtained in the next few years, construction could start around 2030 and electricity generation from 2032. The operational life of the project is approximately 30 years, with the possibility of repowering to extend its life, if deemed appropriate by Star of the South and regulators closer to the time.

Figure 2-5: Project timeline

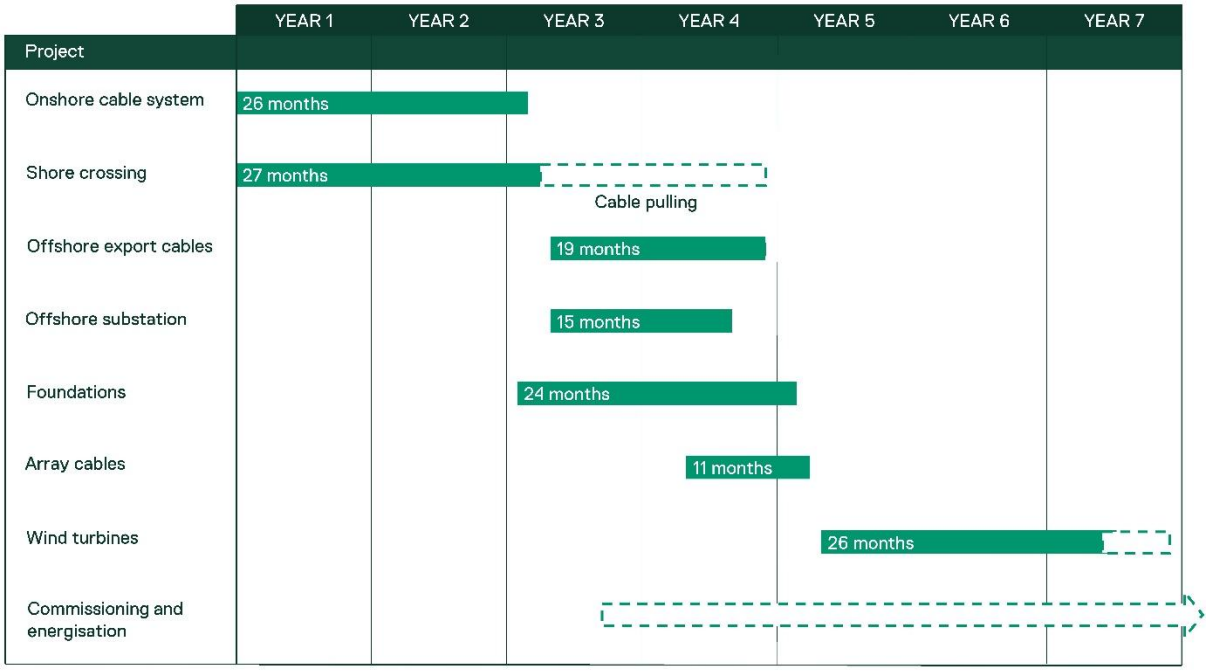
Source: AECOM

2.7 Construction schedule

The project is expected to take up to seven years to construct, if built to its full capacity in a single stage. The project could also be built in two stages, depending on energy market and government

requirements and timing. Figure 2-6 shows the order and maximum duration of construction for key components.

Figure 2-6: Indicative project construction schedule



Source: AECOM

2.8 Operational requirements

The project is expected to have an operational life of approximately 30 years. The offshore wind turbines will be available to operate continuously during the operations phase. Infrastructure will be monitored and operated remotely from a local O&M facility located at either Barry Beach Marine Terminal or Port Anthony, supported by a service operation vessel (SOV) and/or crew transfer vessel (CTV) logistics strategy.

O&M activities will be both preventative (planned) and corrective (unplanned). Preventative activities are carried out as part of regular scheduled services, such as removing marine growth. Corrective maintenance covers unexpected repairs, component replacement and breakdowns

The underground cable system will be remotely monitored through control and condition monitoring systems. Routine access will be minimal, with testing required once or twice a year at the link pits located at each joint bay.

A small workforce will undertake periodic inspections and routine maintenance of the cable system using light service vehicles, including cable easement inspections to monitor and control vegetation and confirm compliance with easement terms.

2.9 Decommissioning

Key principles that will apply to decommissioning offshore include:

- Planning and budgeting for decommissioning, as required under the Offshore Electricity Infrastructure Act 2021 (Cth)
- Considering environmental conditions and stakeholder interests when developing decommissioning plans
- Returning the seabed to baseline conditions as far as reasonably practicable.

Decommissioning is expected to involve similar types and numbers of vessels and equipment as the construction phase. Requirements at the time will determine the scope of decommissioning activities and impacts. The anticipated duration is up to three years. Indicative activities include:

- Removing offshore substation topsides and foundations to just below the seabed
- Removing offshore wind turbines, transition pieces and monopiles to just below the seabed
- Removing scour protection where reasonably practicable and appropriate to do so
- Retaining offshore cables in situ.

Decommissioning of onshore components will be planned and carried out in accordance with regulatory and landholder requirements current at the time. The decommissioning approach is expected to be agreed with regulators before project operations cease. The assessment of the project assumes current industry practices will be adopted.

To minimise disturbance, most below-ground infrastructure is expected to be left in place, with cable ends cut, sealed and securely buried. Surface infrastructure such as signage, markers, link and fibre pits may be removed if required by landholders or if environmental impacts arise.

3 SCOPING

3.1 Study objective

This business and tourism assessment aims to describe and, as far as reasonably practicable, predict the impacts of the Star of the South wind farm on the economy of the project area and the Gippsland region in which it is located. The assessment suggests ways in which adverse impacts can be avoided or ameliorated, as well as ways in which beneficial impacts may be enhanced.

3.2 EIS guidelines

The *Guidelines for the Content of a Draft Environmental Impact Statement for Star of the South Offshore Wind Farm Project* ('the guidelines') set out the requirements to allow the Commonwealth Minister for the Environment to make an informed decision on the approval of the project under the EPBC Act.

The aspects of the guidelines relevant to the business and tourism assessment are shown in Table 3-1, as well as where these items have been addressed in this report.

Table 3-1: EIS requirements addressed within this business and tourism assessment

Requirement	Sections addressed
For information given the assessment must state: a) the source of the information b) how recent the information is c) how the reliability of the information was tested d) what uncertainties (if any) are in the information	References are provided for data and information, using a simplified Harvard referencing style, and have been collected in section 16; any qualification of information or data is provided in the body of the report at the corresponding points
Details of any public consultation activities undertaken, and their outcomes	Addressed in section 5 of this report
Projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies;	Assessment of individual impacts, positive and negative, in Sections 9, 10, 11 and 12 and employment, output and GDP/GRP modelled in Appendix B; summarised in Section 14
Information on the amount of domestic and/or overseas investment for capital infrastructure (versus alternatives)	Not addressed in this report.
Employment opportunities expected to be generated by the project (including construction and operational phases)	Employment modelled in Appendix B and described in sections 9 and 10.
Economic and social impacts should be considered at the local, regional and national levels	Local and regional study areas identified. Local impacts described; regional impacts assessed. National employment, economic output and Gross Domestic Product/Gross Regional Product for the project modelled using input output techniques – see Appendix B

3.3 EES evaluation objectives and scoping requirements

The Scoping Requirements for Star of the South Offshore Wind Farm Environment Effects Statement (EES) ('scoping requirements') by the Minister for Planning, set out the specific environmental matters the project must address in order to satisfy the Victorian assessment and approval requirements.

The scoping requirements include a set of evaluation objectives. These objectives identify the desired outcomes to be achieved in managing the potential impacts of constructing and operating the project in accordance with the *Ministerial guidelines for assessment of environmental effects* under the EE Act.

The following evaluation objective is relevant to the assessment of business and tourism impacts:

> *To avoid and minimise adverse effects on land use, social fabric of the community, local infrastructure, and local businesses and tourism during construction, operation and decommissioning of the project.*

The aspects from the scoping requirements relevant to the evaluation objective are shown in Table 3-2 as well as the location where these items have been addressed in this report.

The main body of this report assesses the local and regional impacts on business and tourism of the Star of the South project. This is required for the project under the Commonwealth EIS process which assesses the whole project. The Victorian Government does not have approvals powers for project components that occur outside its jurisdiction and, in this case, has no decision-making powers for projects that occur in Commonwealth waters.

Appendix C presents the assessment of business and tourism issues associated with works within the Victorian jurisdiction, which are subject to an EES. These relate principally to the construction and operation of the onshore and near-shore electricity transmission infrastructure.

Table 3-2 Scoping requirements relevant to business and tourism impact assessment

Aspect	Scoping requirement	Section addressed
Key issues	Potential disruption to existing and/or proposed land uses, with associated economic and social effects	Addressed in Technical report T: Planning and also sections 9, 10, 11, 12 and Appendix C of this report
	Potential economic and social effects from the project, such as through disruption of business, industry (including agriculture and fisheries) or tourism opportunities.	Sections 9, 10, 11, 12 and Appendix C; also addressed in Technical report N: Commercial and recreational fisheries and Technical report S: Agriculture
Priorities for characterising the existing environment	Describe the local community and social setting, including businesses and industry within the area such as agriculture and fisheries	Section 7 but also addressed in Technical report N: Commercial and recreational fisheries and Technical report S: Agriculture
	Characterise tourism usage of the project area and its surroundings, including national parks and reserves	Section 7.3
Design and mitigation measures	Outline measures to minimise potential adverse effects of the project and enhance benefits to the community and local businesses and industry	Section 13 and Appendix C

Assessment of likely effects	Identify potential economic effects of the project, considering direct and indirect consequences on employment, local and regional economy and industries in the area, including agriculture and fisheries.	Sections 9, 10, 11, 12 and Appendix C
	Identify potential impacts from workforce requirements such as additional demand on housing and public services in the immediate and broader area.	Sections 9, 10, 11, 12 and Appendix C as well as Technical report R: Social
	Identify potential impact on tourism and tourist attractions within the project area and surrounding natural reserves	Sections 9, 10, 11, 12 and Appendix C
Approach to manage performance	Describe proposed measures to mitigate, offset or manage social, land use and economic outcomes for communities living, and businesses operating, within the project area and its environs as well as proposed measures to enhance beneficial outcomes	Section 13 and Appendix C

4 EVALUATION FRAMEWORK

The assessment has considered legislation, policy and standards relevant to business and tourism along with specific assessment criteria that have been derived for the purposes of the study.

4.1 Legislation, policies, guidelines and standards

The legislation, policies, guidelines and standards relevant to this assessment are summarised in Table 4-1.

Table 4-1: Legislation, policy, guidelines and standards relevant to the assessment

Document title	Summary	Relevance to the project
Commonwealth government		
Environmental Protection and Biodiversity Conservation Act 1999	Provides a framework for protection of the Australian environment including its biodiversity and its natural and culturally significant places	Requires decision making that will promote ecologically sustainable development (ESD), including decision-making processes that will "*effectively integrate long-term and short-term economic, environmental, social and equitable considerations*"
Guidelines for the content of a Draft Environmental Impact Statement for Star of the South Offshore Wind Farm Project (EPBC 2020/8650)	Guidelines for what should be in the EIS	Requires description and assessment of "*…the social, economic and cultural aspects of* (affected Commonwealth marine areas) *including considerations of the characterised visual impact of the action*"
Gippsland Regional Plan, 2020-2025, a plan authored jointly by Regional Development Australia, Regional Development Victoria, Regional Partnerships Gippsland and One Gippsland	Identifies a vision and priorities for cooperation on regional development between all levels of government and other stakeholders	Identifies *renewable, clean and community energy initiatives* and investment and innovation in new energy as key priorities for regional development
Navigation Act 2012	Regulates international ship and seafarer safety, shipping aspects of protecting the marine environment and the actions of seafarers in Australian waters. It gives effect to the relevant international conventions (MARPOL 73/78, COLREGS 1972) relating to maritime issues to which Australia is a signatory. The Act also has subordinate legislation contained in Regulations and Marine Orders.	Enacts the Marine Orders relating to offshore activities, which regulate the movement of vessels during the construction and operation phases of the project.
Offshore Electricity Infrastructure Act, 2021	Enables and regulates electricity infrastructure in Commonwealth Waters.	Allows offshore renewable energy to support the objective of

Document title	Summary	Relevance to the project
		delivering, "a reliable, secure and affordable energy system…"
Victorian government		
Marine and Coastal Act 2018 and Marine and Coastal Policy 2020	Protection and enhancement of the Victorian marine and coastal environment between the outer limit of Victorian coastal waters (3 nm) and 200 m inland of the high-water mark of the sea. All use, development and works on marine and coastal Crown land by any party, including committees of management and local government, requires consent under the Marine and Coastal Act 2018.	Establishes the following principles that are relevant to the project: That planning and management incorporate an ecosystem-based approach including avoidance of cumulative impacts That development be consistent with the principles of ecological sustainability That planning and management decisions be based on the best available environmental, social and economic information That management of impacts incorporate the precautionary principle. That risk management and regulatory approaches be proportionate to the risk involved.
Offshore Wind Policy Directions Paper, Victorian State Government, 2022	Identifies targets for offshore wind energy generation.	Support for Gippsland offshore wind generation zone.
Local Government		
Investment Roadmap, 2021, Latrobe City Council	Identifies opportunities and priorities for investment attraction.	Identifies four key focus areas for investment attraction: • Industry-led education, skills and training • Advanced manufacturing • Regional and rural health • Circular economy – including the development of renewable energy.
Latrobe, South Gippsland and Wellington Planning schemes	Provide policy and direction for land-use and development approvals in key municipalities	Identifies where economic activities can locate in the key municipalities
Economic Development Strategy 2021-2031, South Gippsland Shire Council	Economic development strategy for South Gippsland	Identifies "new energy" as a key industry for the municipality.
Economic Development Strategy 2016-2022, Wellington Shire Council	Economic development strategy for Wellington Shire	Identifies five strategic objectives including economic diversity – leveraging existing industries and assets to diversify the local economy.
Towards 2030 – Gippsland Destination Management Plan,	Details brand and experience themes, cooperative marketing and proposed product	Identifies Wilsons Promontory and southern Gippsland touring route as "hero" attractions for the

Document title	Summary	Relevance to the project
Destination Gippsland (2019 and updated 2022)	development for the Gippsland tourism region	region; identifies Wilsons Promontory, Latrobe Valley and southern Gippsland villages as "destination hubs" which should be the focus of investment in visitor services. Advocates for improved coastal infrastructure.
Wellington Renewable Energy Impact & Readiness Study, 2023, by Urban Enterprise for Wellington Shire Council	Details the planned and proposed renewable energy projects in Wellington and the impacts that these will have on the social, economic and infrastructure capacity of the Shire	Identifies key pressure points and opportunities that will be created in the local economy by the growth of renewable energy
Renewable Energy Impact and Readiness Study, 2024, by Urban Enterprise for South Gippsland Shire Council and Latrobe City Council	As above for Latrobe City and South Gippsland Shire	As above

4.2 Reasonably practicable

EPA Victoria Publication 1856 Reasonably Practicable provides guidance as to the factors to consider when defining proportionate controls to minimise harm, as follows:

- Eliminate first: Can you eliminate the risk?
- Likelihood: What's the chance that harm would occur?
- Degree (consequence): How severe could the harm be on human health or the environment?
- Your knowledge about the risks: What do you know, or what can you find out, about the risks your activities pose?
- Availability and suitability: What technology, processes or equipment are available to control the risk? What controls are suitable for use in your circumstances?
- Cost: How much does the control cost to put in place compared to how effective it would be in reducing the risk?

The items above have been considered when assessing the suitability of mitigation measures for the project.

4.3 Assessment criteria

While the relevant scoping guidelines and policies identify key areas for investigation, no particular criteria for assessing impacts on business and tourism are specified in relevant legislation or regulation. In this assessment, therefore, the analysis falls back on criteria that are common to most regional economic impact assessments; criteria that examine impacts on the level of turnover, jobs and visitors, as well as on regional capacity to host further investment. The chosen criteria against which the impacts are measured are that:

- The net income of directly affected businesses is not unduly adversely affected by the project

- Regional output and employment are not reduced by the project
- Where opportunities exist, regional output and employment are maximised where possible
- Visitor numbers and their distribution are not adversely affected by the project
- The capacity of the region for further ecologically sustainable development is not diminished by the project.

The policy review summarised in Table 4-1 has also identified a set of local and regional economic policy preferences against which the project can be assessed. The most relevant of these for this technical assessment are:

- The diversity of employment opportunities is not reduced by the project
- The project capitalises on existing regional strengths and infrastructure
- The project does not adversely affect the existing "hero" visitor attractions and the capacity of the tourism destination hubs identified in the Destination Management Plan (Destination Gippsland, 2019 and updated in 2022).

These criteria are used to describe and measure the impact of the proposed Star of the South wind farm.

Importantly, the assessment details the potential impacts of the project on the study areas and their communities, not the impacts on individual businesses.

Fairness

Underlying the assessment criteria, the principle of fairness has been raised by many people during community consultation for the project. In this context, fairness is the notion that, where there is a choice in project design and operation, the communities which suffer the disbenefits of a project should also enjoy its benefits. This was raised most commonly in relation to the employment generated by the project. Many of those consulted in the Gippsland region were of the opinion that any social disruption and environmental costs of the project should be balanced to some extent by the maximisation of employment in the region and the local areas most affected. This has been taken into account in the impact assessment.

5 CONSULTATION AND ENGAGEMENT

Star of the South has undertaken extensive engagement with a broad range of stakeholders and communities throughout the project's development phase and preparation of the EIS/EES to communicate project information; obtain, understand and discuss feedback; and identify potential issues and opportunities for consideration in the EIS/EES. A summary of this engagement is documented in Appendix - EIS/EES Consultation Report.

Engagement activities

Key activities undertaken between 2019 and 2025 to engage with identified stakeholders include:

- Direct engagement with community members in Port Albert, Port Welshpool, Woodside Beach, Manns Beach and McLoughlins Beach
- Discussions with stakeholders and community members through meetings, phone calls, emails or visits to the Gippsland office
- Presence at community events and pop-up stalls across Gippsland
- Sharing of information via the project's website, social media and monthly e-news
- Community Advisory Group
- Feedback obtained during workshops for other scopes (e.g. Ports and Waterways Safety Assessment workshops).

Stakeholders engaged by SOTS

Key stakeholders identified and engaged with include:

- General community
- Commercial fishers
- Fishing charter businesses
- Gippsland businesses
- Gippsland community groups including rotary clubs and progress associations
- Gunaikurnai Land and Waters Aboriginal Corporation (GlaWAC)
- Latrobe City Council
- Local accommodation providers
- Parks Victoria
- Recreational fishers
- Regional Development Victoria
- South Gippsland Shire Council
- Wellington Shire Council
- Wildlife Coast Cruises

Table 5-1: Summary of business and tourism issues raised with SOTS during consultation

Stakeholder/partner and type of response	Issues raised	Where considered within this report
General community	Impact of the project on local tourism and town facilities	Considered throughout the impact assessment in sections 9, 10, 11 and 12
	Effects of a local workforce increase	Considered in sections 9.9, 9.10, 9.11, 10.2 and 10.3 as well as 12.3
Accommodation providers	Potential impacts on accommodation providers.	Results of survey of accommodation providers provided in section 10.4.2. Impacts on visitor economy considered throughout the impact assessment in sections 9 to 12.
Latrobe City Council Regional Development Victoria South Gippsland Shire Council Victorian Trades Hall Council Wellington Shire Council	Interest in the local and regional development of Gippsland, including any impacts on regional businesses and tourism, including workforce accommodation.	Impacts on local and regional economy considered throughout the impact assessment in sections 9 to 12.
GLaWAC	Potential for Aboriginal businesses to be involved in the project.	Opportunities for aboriginal workers and local businesses addressed in section 9.9.6
Local businesses	Potential for local businesses to support the project and gain economic benefit	Local business opportunities addressed in 9.9.5 and 9.9.6
Parks Victoria	Potential impacts and mitigation measures being considered for key locations including Reeves Beach and Wilsons Promontory. This includes specific consultation undertaken for the purposes of this report.	Impacts on Reeves beach addressed in section 9.5. Visual impacts on Wilsons Promontory discussed in section 10.4

Table 5-2 lists specific stakeholders consulted for this report and how their feedback has been considered in the business and tourism impact assessment. The report has also taken into account the results of community consultation undertaken by other parts of the EES team, including surveys of recreational fishers and boaters, park users and land-holders.

Table 5-2: Stakeholder engagement undertaken for business and tourism

Community and stakeholders	Consideration in project design or impact assessment
Discussions with representatives of organisations that have an interest in the local and regional development of Gippsland including: • Committee for Gippsland • Destination Gippsland (regional tourism board) • Grow Gippsland • Invest Victoria • Latrobe City Council • Latrobe Valley Authority • Port Albert Progress Association • Regional Development Victoria • South Gippsland Shire Council • Victorian Trades Hall Council • Wellington Shire Council • Yarram Traders and Tourism Inc. (August and September 2021 and subsequent informal discussions with Council representatives).	These discussions were used to identify and/or confirm the likely type of impacts that the project would have on regional businesses and tourism. Stakeholders also identified various ways in which the project's adverse impacts could be ameliorated, or positive impacts reinforced.
Discussions with representatives of Parks Victoria (December 2021)	Review of impacts and potential amelioration measures for key locations including Reeves Beach and Wilsons Promontory.
Participation in study area tour of several affected locations with members of the Community Advisory Group for the project (6 April 2022)	Improved understanding of local concerns about the impact of the wind farm and the opportunities it presents for local communities.
Presence at pop-up information stalls for Star of the South in Port Albert and McLoughlins Beach and discussions with individual community members and visitors (23 April 2022)	Improved understanding of the views of locals and visitors on the wind farm, its impacts and opportunities.
Face to face survey of accommodation providers (May 2022 and March 2025)	Views from tourism business operators that would be most affected by the project about likely impacts and potential amelioration measures.

6 METHODOLOGY

As context to the assessment approach, the Star of the South Offshore Wind Farm is a large project that covers a wide geographic area and has the potential for significant influence across Commonwealth waters and Victorian coastal waters, the state of Victoria and in particular the central Gippsland region. Accordingly, the impacts (both positive and negative) of the project are assessed in terms of their materiality at the scale of Commonwealth waters and Victorian coastal waters, the state of Victoria and the Gippsland region.

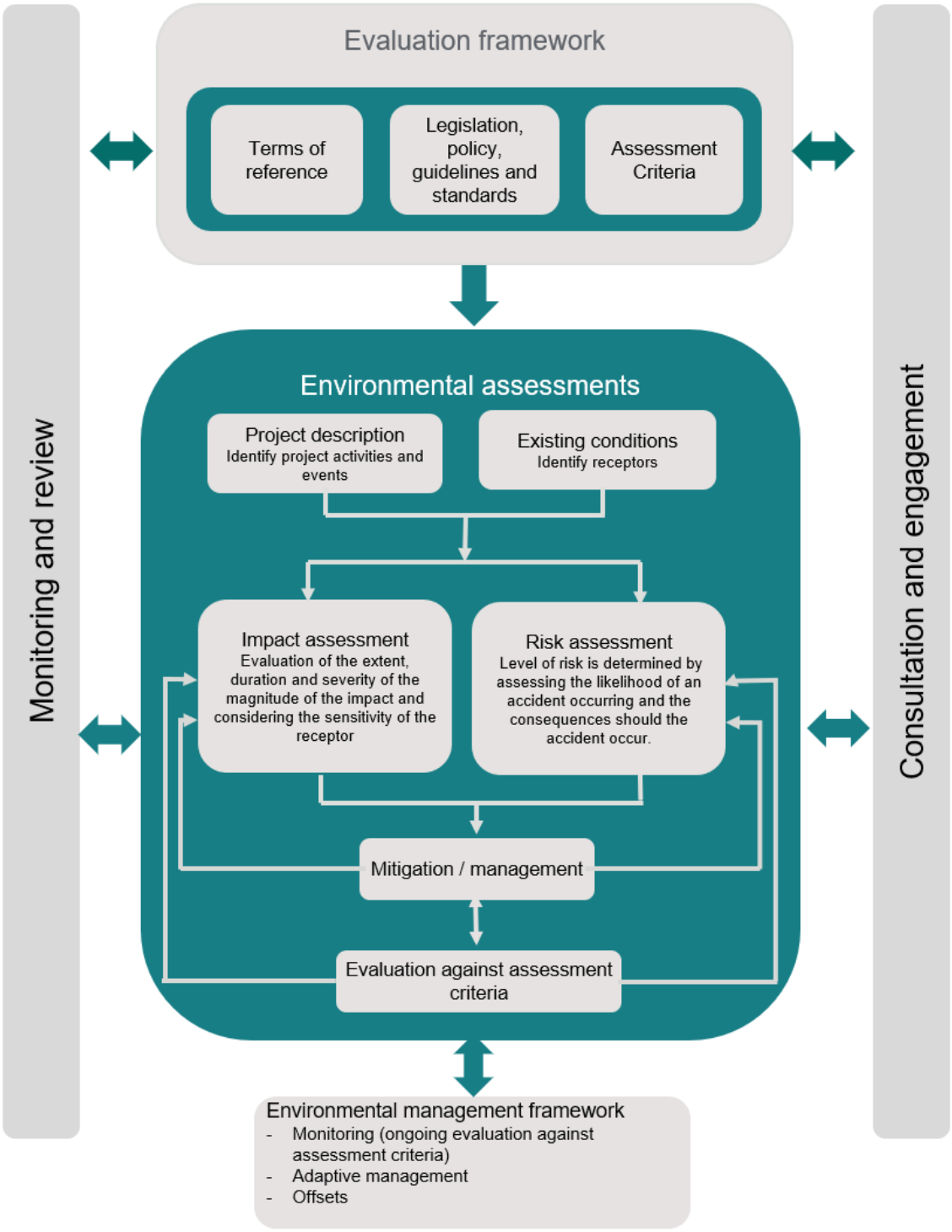
6.1 Overview of assessment framework

This section describes the framework used to assess potential environmental impacts and risks associated with the proposed project.

The assessment has been guided by an evaluation framework that comprises applicable legislation, policy, guidelines and standards, the Commonwealth EIS guidelines and the EES scoping requirements and study-specific assessment criteria. The approach generally aligns with guidance issued by the Australian National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for the Environmental Assessment of Major Offshore Infrastructure (Reference: *Environment Management Plan Content Requirement, 16/12/12022)* and the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023* (OPGGS Regulations).

An overview of the assessment framework is presented in Figure 6-1.

Figure 6-1: Overview of assessment framework



The environmental assessment in relation to business and tourism was undertaken according to the following steps:

- **Existing conditions:** Characterisation of existing (baseline) environmental conditions and identification of sensitive assets, values and uses that may be affected by construction, operation and decommissioning of the project.
- **Project description:** Review of the key project components and proposed construction, operation and decommissioning activities to identify potential project interactions with sensitive receptors (i.e. events). This includes identification of the maximum design scenario for the purposes of impact and risk assessment, taking into account the parameter range within the project design envelope as outlined in Chapter 4 – Project description of the EIS for the whole of project assessment across the Commonwealth jurisdiction and Chapter 4 – Victorian works project description of the EES for the Victorian jurisdiction and selection of the parameter value with potentially greatest impact or risk.
- **Impact assessment:** Assessment of consequences based on the predicted magnitude of the impacts and the sensitivity of potentially affected receptors, taking into account proposed mitigation measures and their likely effectiveness. The impact assessment methodology is described in Section6.4.
- **Risk assessment**: Assessment of likelihood and consequences of accidents (i.e. events that are not certain to occur). The risk assessment methodology is described in Section 6.5.
- **Avoid, mitigate and manage:** Identification of mitigation measures to avoid, minimise and manage impacts or risks **Error! Reference source not found.**and to address the GED as required under the EP Act.
- **Evaluation against assessment criteria:** Evaluation of predicted residual impacts or risks against assessment criteria set out in Section 4.3. If the impact or risk assessment indicates that the criteria are not met, then changes to the project design are made or further mitigation measures are introduced. Residual impacts and risks are those that remain following the implementation of all mitigation measures committed to by the project, taking into account their expected effectiveness.
- **Monitoring and review:** Continual checking for changes to legislation, policy, guidelines and standards and the project description and subsequent refinement and updating of assessments as required.
- **Consultation and engagement:** Consideration of feedback from community, stakeholders and regulators to ensure that concerns and expectations are met. Stakeholder consultation and engagement will continue throughout the life of the project.

For impacts (expected events) the likelihood of the event is considered to be certain, therefore only an evaluation of consequence is required. For risks (accidental events) both likelihood and consequences need to be considered. The evaluation of consequences for both impacts and risks takes into consideration the nature and scale of the effects, the predicted extent, severity and duration, the likely effectiveness of mitigation measures to reduce consequences as well as the sensitivity of the receptor.

An example, 'project activity' is construction piling, and in this case the 'event' is underwater noise and the 'consequence' would be injury or disturbance to marine mammals. Underwater noise is an expected event as the generation of underwater noise is a planned part of construction that cannot be avoided as part of the activity. Underwater noise would be detectable within and beyond the activity area. It is expected that marine fauna would encounter the underwater noise due to their known presence in the activity area. An example of an accidental event is where the 'project activity'

is vessel presence, and in this case the 'event' is 'collision with marine fauna' and the 'consequence' would be injury or disturbance to marine mammals. This event unlikely to occur but is still possible.

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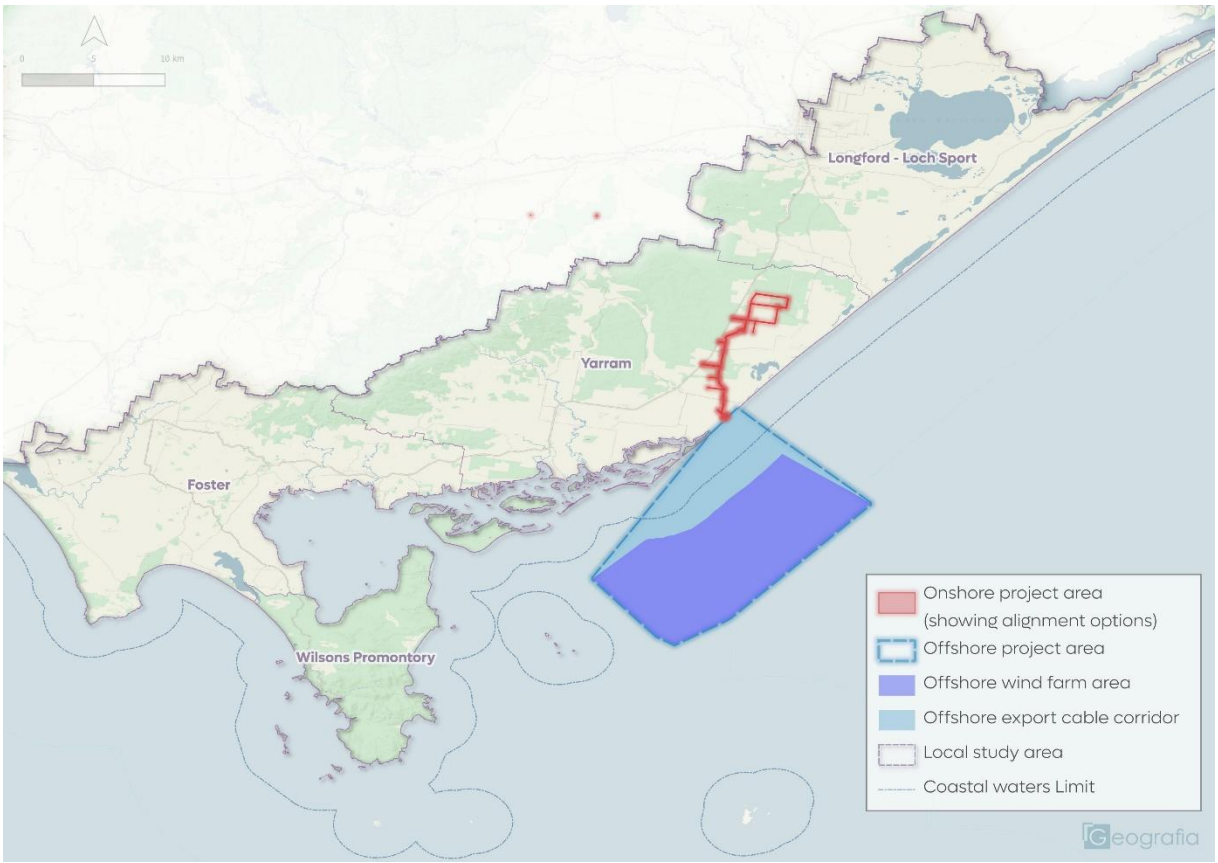
6.2 Study area

For the purposes of this evaluation, two onshore study areas have been defined:

- **The local study area** (LSA) comprises the area containing the businesses, attractions and land that would be most directly affected by the wind farm and its transmission infrastructure or from which the project can be seen. The boundaries of this area have been set with regard to:
    - land on which the onshore transmission infrastructure for the project is based
    - coastal areas that the windfarm could be seen from
    - convenient statistical areas for which important data on population forecasts, employment and business is readily available.

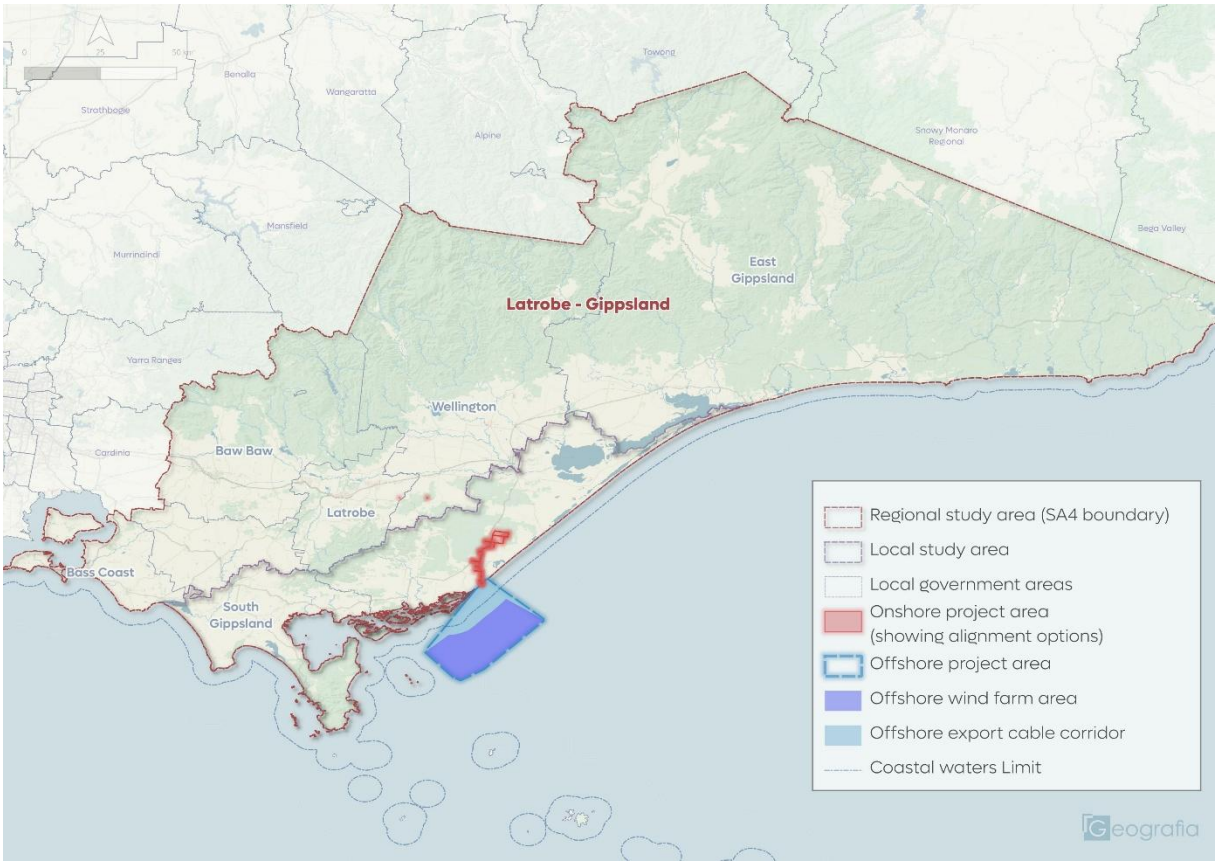
  In this case, the Statistical Area 2s (SA2) in the Australian Statistical Geography Standard (ASGS) developed by the Australian Bureau of Statistics (ABS, 2021) have been used. The four contiguous SA2s of Foster, Longford-Loch Sport, Wilsons Promontory and Yarram represent the LSA, as shown in **Error! Reference source not found.**.

Figure 6-2 Local study area



- **The regional study area** (RSA) represents the wider onshore region in which the project is set. This is this region likely to experience the main impacts on business, tourism and employment. The Latrobe – Gippsland Statistical Area 4 (SA4) is the appropriate statistical area for this region (see **Error! Reference source not found.**).

Figure 6-3: Regional study area



The corresponding offshore area is the largest spatial area that may be impacted through planned or unplanned project activities. For the purposes of this report, the largest area potentially impacted by the project encompasses the maximum spatial extent of effects from an oil spill caused by a vessel collision. The spatial extent of impacts resulting from other pathways are much smaller than the potential oil spill area. Full details of the oil spill modelling process for the project are described in the Star of the South Offshore Wind farm – Oil Spill Summary Report (RPS, 2024).

6.3 Methods to determine the existing environment

A comprehensive assessment was undertaken to understand the existing environment of the study areas to inform the environmental impact assessment for the works. This assessment incorporated:

- An examination of relevant Australian Bureau of Statistics (ABS) and other datasets relating to the study areas
- A review of guidelines and policies of Commonwealth, state and local government agencies relating to the region
- Consultation with stakeholders from a variety of state and local government agencies
- Discussions with community members at formal and informal events in the local study area
- Review of internet databases such as those listing tourism assets, Shire Council and Chamber of Commerce listings
- Review of Australian Maritime Safety Authority (AMSA) automatic identification system data that describes the nature and travel patterns of vessels
- Field surveys of boat ramp users and visual aerial survey conducted for the project.

6.4 Impact assessment method

An impact is where a project activity or activities in any of the project phases (construction, operation or decommissioning) results in a change in the existing environment.

The impact assessment has been based on a maximum design scenario which enables a realistic and conservative approach to considering possible impacts that could occur due to the construction, operation or decommissioning of the project. Impacts can be positive or negative, direct or indirect. Impacts are described following the application of mitigation measures (residual impact).

Whether an impact results in a consequence to environmental receptors depends on the sensitivity of receptors and the magnitude of the impact.

- **Sensitivity**: the intolerance of a receptor to damage from an external factor and the time taken for its subsequent recovery
- **Magnitude**: the severity, extent and duration of an impact.

As assets, values and uses in the affected area are interconnected, sometimes an impact will give rise to a follow-on (secondary or indirect) impact which has also been considered as part of the assessment.

The impact assessments have involved identifying the magnitude of changes to the environment, positive or negative, that the project may have on the existing conditions. The method used has been specific to each individual technical study in accordance with relevant guidelines and standards. The technical reports each contain a section that describes their impact assessment method in detail, in particular the modelling or analysis that has been undertaken to predict the changes that may occur due to the implementation of the project.

The factors that have been considered when assessing the consequences of the project are as follows:

- Severity, extent, and duration
- Sensitivity of the affected receptors
- Assessment criteria

- The principles of ecologically sustainable development as defined in the Ministerial guidelines for assessment of environmental effects (DTP, 2023) and in section 3A of the EPBC Act
- Stakeholder input and feedback
- The likely effectiveness of measures to avoid, minimise and manage impacts
- Assumptions and uncertainties associated with the assessment.

The impact assessments have considered the potential for combined impacts generated by the project on the one receptor but resulting from different actions. For example, shorebirds and seabirds are potentially affected by the loss of habitat within the transmission corridor, together with bird strike associated with the operation of the wind farm (referred to as inter-related impacts in the technical reports). The combined impact of these changes is assessed within the shorebird and seabird assessment. The approach to cumulative impact assessment is outlined in Section 6.8 below.

For the purposes of the impact assessment the project description defined a project design envelope (PDE). The PDE comprises ranges for certain design parameters (for example, an upper and lower limit for wind turbine generator heights). This allows for flexibility in the eventual design for the project that is necessary within an evolving industry where technology is rapidly changing. The impact and risk assessment has been based on a Maximum Design Scenario (MDS) which enables a realistic and conservative approach to considering possible impacts and risks that could occur due to the construction, operation or decommissioning of the project. The MDS consists of a defined set of project parameters from within the PDE that represent the greatest potential impact to an identified sensitive receptor or receptor group. As the MDS is defined based on specific impacts, the MDS assessed will vary between the impacts and risks assessed . See Section 9, Section 10 and Section 11 for the MDS used for this assessment.

6.4.1 Assigning a sensitivity level

To assign a sensitivity level, the existing environment is described and potentially affected communities/activities (‘receptors’) are identified. In this case, there are several receptors of different types including visitors/visitation, visitor attractions, businesses, industries, employment levels and so on.

The sensitivity of each of the receptors has been determined to be either high, medium or low according to the descriptions relevant to business and tourism presented in Table 6-1. Assigning receptor sensitivity includes consideration of the following factors:

- Adaptability – how easily can the receptor adapt to the new conditions?
- Tolerance – how well can the receptor continue through the likely changes?
- Recovery – how easily will the receptor recover from the disruption?

Table 6-1 Receptor sensitivity

Sensitivity to impact	Description
High	*Limited or no ability to adapt to new conditions*. This could include circumstances where a major part of the market for a business is disrupted; such as when a new road bypasses an existing petrol station, for example. *Limited or no ability to tolerate the changes predicted*. An example could be where construction noise and disruption are so severe that visitors are forced to choose other locations to stay. *Limited or no likelihood of return to prior conditions*. An example of this could be where the land occupied by a business is required for the project and the business would need to close.
Medium	*Some ability to adapt to new conditions*. This could include the potential for an affected business to pivot to meet the needs of a new or hitherto subsidiary market with only moderate expense. This may apply to accommodation providers who find that their tourist market has declined because of nearby construction but who are able to partially offset their losses by catering to construction workers. *Some ability to tolerate changes*. This could include farmers, for example, who are able to use alternative farmland for the duration of the impact with only moderate disruption to output and income. *Partial return to prior conditions likely*. This could include, for example, the temporary closure of a beach-side campground due to construction that could later reopen albeit with some changes in outlook and character.
Low	*Ability to adapt to new conditions*. This could include circumstances where the project creates new markets to replace ones that may be disrupted and which businesses can access with little change in income or expenditure. *Ability to tolerate changes predicted*. This would include circumstances where the income and employment in affected businesses would not change significantly. *Return to prior conditions likely*. This includes circumstances in which visitor numbers returned to previous levels following the impact.

6.4.2 Assigning a magnitude level

The magnitude of the impact on the environment includes consideration of the following factors:

- Extent – site, local, regional or widespread
- Duration – short, medium or long term (also considering frequency and permanence)
- Severity – degree of change from existing condition

The magnitude of a specific impact is based on the criteria outlined in Table 6-2.

Table 6-2: Magnitude criteria

Terms		Description
Extent	Localised	Affecting a particular location of no more than two or three square kilometres
	Medium scale	Affecting a district, for example, affecting the Offshore project area (OPA) or several small towns and villages
	Large scale	Affecting the whole local study area
	Regional	Affecting the whole Gippsland region (and beyond)
Duration	Short-term	Up to one year, and/or occasionally
	Medium-term	For the whole construction period (up to 8 years), and/or frequently
	Long-term	Permanently or beyond the construction period, and/or constantly
Severity	Permanent	Irreversible change, substantial change to the value
	Reversible or of limited period	Changes are reversible once the activity has ceased,
	Unlikely to be detectable	Changes are within normal seasonal or industry fluctuations

The magnitude is assigned for the maximum credible effect with consideration of mitigation and management measures. The magnitude is reached by combining the results of each of the assessment criteria with results shown in Table 6-3.

Table 6-3: Magnitude description

Sensitivity to impact	Description
Negligible	Impacts that may be real but which are small and likely to be lost in the normal fluctuations of the local and regional economy
Low	Impacts that are localised to one or two businesses, one activity or one location; which are of relatively short duration; and which are reversible or of little consequence
Medium	Impacts that may affect a district or an industry; which last for all or most of the construction period; and which are reversible or which can be accommodated with some changes
High	Impacts that are likely to affect the whole local study area; which last for the whole construction period and beyond; and which may have long-lasting consequences
Very High	Impacts that may affect much of the Gippsland region; which last for the whole construction period and beyond; and which are likely to be irreversible or have long-lasting consequences

The magnitude descriptions do not cover all the possible permutations of the magnitude criteria. There is therefore some subjectivity in allocating a description to a particular impact. The authors

have made a judgement about the likely balance between the extent, duration and severity of the impact.

6.4.3 Assigning a consequence level

Consequence is the potential outcome of an event affecting a receptor. It is determined by combining magnitude of the impact and sensitivity of the receptor. The consequence level is assigned based on the receptor sensitivity level and magnitude level using the matrix in Table 6-4.

Consequences are assigned based on the maximum credible impact for each pathway. Where uncertainty exists, a conservative approach to assessing consequence is adopted.

Table 6-4: Consequence level matrix

Magnitude	Sensitivity		
	Low	**Medium**	**High**
Negligible	Negligible (E)	Negligible (E)	Minor (D)
Low	Negligible (E)	Minor (D)	Moderate (C)
Medium	Minor (D)	Moderate (C)	Major (B)
High	Moderate (C)	Major (B)	Severe (A)
Very high	Major (B)	Severe (A)	Severe (A)

Table 6-5 provides a description of the consequence levels for impacts on business and tourism receptors.

Table 6-5: Business and tourism consequence levels

Consequence level	Consequence level descriptors
Severe	Impacts on business and tourism values during construction and operation of the project that are large; permanent or long-lasting; and highly consequential for large parts of the Gippsland region.
Major	Impacts on business and tourism that are significant; permanent or long lasting; and affect large parts of the local study area.
Moderate	Impacts on business and tourism that are moderate; for the project construction period; and in multiple locations.
Minor	Impacts on business and tourism that are noticeable but small; extend for parts of the construction period; and affect a limited area.
Negligible	Minor change that is unlikely to have a noticeable impact on business and tourism

Again, the consequence levels do not cover all the possible permutations of the sensitivity and magnitude descriptions. There is therefore some subjectivity in allocating a consequence to a particular impact. The authors have made a judgement about the likely balance between the receptor sensitivity and the extent, duration and severity of the impact.

6.4.4 Residual impacts

While there are clear steps in the assessment process, it may not always follow a linear progression. Typically, assessment requires multiple iterations of impact evaluation considering the assessment criteria and application of mitigation measures as the technical studies progress and additional information becomes available. The completed impact assessments are based on the final mitigation measures that will be implemented, and therefore describe the residual impacts. The residual impacts constitute the predicted consequences following the implementation of the mitigation measures and also taking into account the expected effectiveness of these measures

6.5 Risk assessment method

A risk is where a project activity or activities could result in an unexpected (accidental) event in any of the project phases (construction, operation or decommissioning) that causes a change to the existing environment.

The level of risk is determined by combining the likelihood of an accident occurring and the consequences should the accident occur. The assignment of consequence level follows the process outlined above.

The following steps were undertaken to identify, analyse and evaluate risks:

- Develop a risk matrix based on the likelihood of an accident occurring and the consequences, should the accident occur
- Identify controls and requirements to mitigate identified risks
- Assign likelihood and consequence ratings for each risk to determine risk ratings considering design, proposed activities and mitigation.

6.5.1 Assigning a likelihood level

Likelihood is the probability of an unexpected (accidental) event occurring. The likelihood criteria range from ‘rare’ where the event may occur only in exceptional circumstances to ‘almost certain’ where the event is expected to occur in most circumstances.

Likelihoods are assigned with consideration of mitigation and management measures according to the levels presented in Table 6-6.

Table 6-6: Guide to likelihood levels

Level	Description
Rare	The event may occur only in exceptional circumstances
Unlikely	The event could occur but is not expected
Possible	The event could occur
Likely	The event would probably occur in most circumstances
Almost Certain	The event is expected to occur in most circumstances

Source: AECOM

6.5.2 Risk matrix

Risk is defined as combination of the likelihood of an event occurring (using Table 6-6) and the consequence of that event occurring (using Table 6-4).

A risk rating is then determined by these factors using the risk matrix, presented in Table 6-7.

The level of detail of the assessment undertaken for each risk pathway is proportionate to the identified level of risk (i.e. risk ranking).

Table 6-7: Risk matrix

Likelihood rating	Consequence				
	Negligible (E)	**Minor (D)**	**Moderate (C)**	**Major (B)**	**Severe (A)**
Rare	Very low	Very low	Low	Medium	Medium
Unlikely	Very low	Low	Low	Medium	High
Possible	Low	Low	Medium	High	High
Likely	Low	Medium	Medium	High	Very high
Almost certain	Low	Medium	High	Very high	Very high

Source: AECOM

6.6 Avoidance and minimisation through design

The impact assessment process is iterative and the design of the transmission alignment has been informed by earlier versions of environmental assessments in order to avoid and minimise potential impacts, including during:

- Pre-referral corridor selection
- Post-referral corridor selection
- Post feasibility licence award
- Post VicGrid establishment corridor selection.

At each decision point, the project, where reasonably practical, has sought to avoid and minimise impacts to a suite of environmental, heritage, socio-economic and landholder values. Avoid and minimise principles have materialised through reduced construction footprints and re-routing where sensitive values have been identified. These strategic considerations, informed by site validation have resulted in the footprint under which the onshore project is being assessed.

Relevant to this topic, the following measure has been adopted in relation to the design, construction and operation of the project to avoid and minimise impacts:

- Establishment of a Workforce Accommodation Strategy that seeks to manage the impacts of peak demand during project construction.

6.7 Avoidance, mitigation and management

Once avoidance and minimisation measures have been exhausted, the next step is management of the residual impacts and risks. In the case of risks, the mitigation measures can be applied prior to

the event occurring and/or after the event. The residual impacts and risks are evaluated against the assessment criteria to ensure impacts and risk are of an acceptable level.

The assessments describe the impacts and risks with all the mitigation measures implemented i.e. with both initial and final mitigations. Initial mitigation measures are defined as the standard suite of mitigation measures that will be implemented by the project such as measures required under legislation, national or international standards and standard measures implemented on similar projects. Final mitigation measures are any additional mitigation measures adopted to address the findings of impact/risk assessments to further reduce impacts and risks to acceptable levels. The completed impact and risk registers for this technical report are presented in Appendix A and show the reduction in impact/ risk that occurs between the initial rating and final rating due to the application of final mitigation measures.

The impact assessment method is a tool based on a range of broad assessment criteria for business and tourism. In the management of business and tourism impacts, in particular, it is sometimes the case that the introduction of helpful mitigation measures makes no difference to the assessment rating. This does not mean that the mitigation measure is not worth putting in place, simply that it has not triggered a change in rating. The assessment focuses on the usefulness on the mitigation measures rather than the change in rating.

6.8 Cumulative impact assessment

Cumulative impacts arise when the effects of a single project on a single receptor are considered alongside the effect of other projects on the same receptor. The project has considered the potential for cumulative impacts associated with other proposed projects. It is noted that projects that are operational are considered as part of the baseline environment, and the cumulative impact assessment focuses on proposed or future actions.

A staged approach to cumulative impact assessment has been adopted. This approach is split into four stages:

- Stage 1 Identifying potentially cumulative projects or actions
- Stage 2 Shortlisting identified projects or actions
- Stage 3 Gathering information
- Stage 4 Assessment

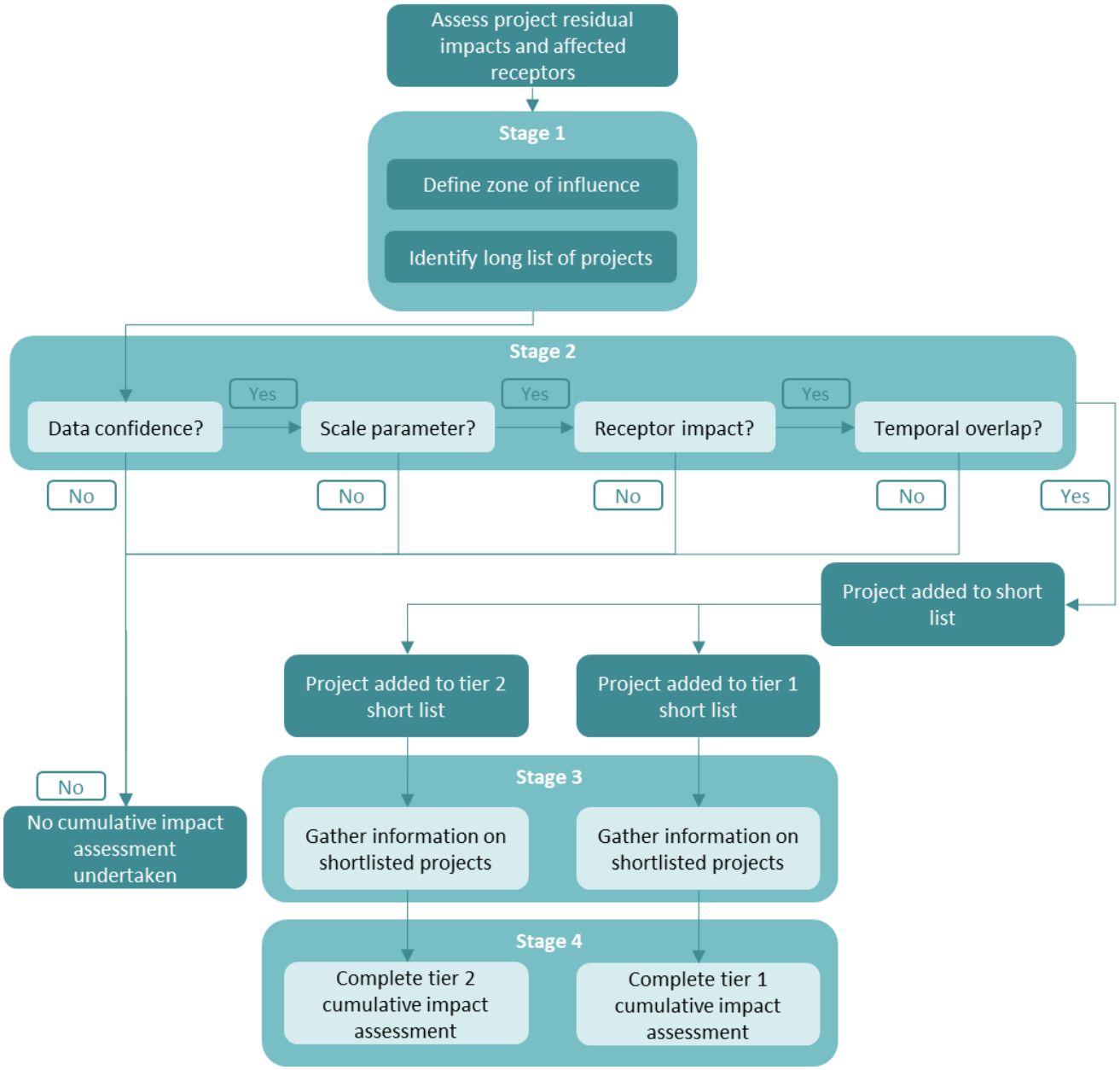
This approach is focused on the assessment of potential adverse cumulative effects on receptors or similar groups of receptors, as relevant. The availability of information necessary to conduct a cumulative impact assessment depends on the status of the proposed project or action within the planning and approval regulatory steps. Therefore, a level of certainty reflecting the availability of detail and information necessary for the assessment is assigned to each proposal:

- Tier 1 High certainty – Project planning application/EIS/EES has been submitted to regulators, or the project has been approved, or the project is under construction.
- Tier 2 Medium certainty – Project referrals have been submitted to the regulators.
- Tier 3 Low certainty – Project is in the proposal stage and little information is publicly available.

The cumulative impact assessment has followed a staged approach, as shown in

Figure **6-4**.

Figure 6-4: Cumulative impact assessment process



Source: AECOM

The EIS scoping guidelines for the project states that the assessment should 'address the potential cumulative impact of the proposed action on ecosystem resilience'. Both the EIS and EES scoping guidelines state that climate change impacts must also be considered. Ecological resilience is generally defined as "the ability of ecosystems to resist permanent structural change and maintain ecosystem functions" (DAWE, 2016). An assessment of ecosystem resilience including an assessment of climate change is addressed in the assessment of Ecosystem Resilience contained within the EIS Chapter 24 - EIS Summary and conclusions.

6.9 Limitations, uncertainties and assumptions

The following limitations, uncertainties and assumptions apply to this assessment:

- Impact assessments described in this report are based on the best available and up-to-date information. Any changes to this baseline or information occurring post-publication may affect the results
- Transiting vessels are considered to travel between the boundary of the offshore export cable corridor and offshore wind farm area to the respective port boundary.

6.10 Linkages to other technical reports

This report has drawn on the work of other specialists involved in the Star of the South impact assessment including:

- Technical report D: Marine mammals and turtles
- Technical report N: Commercial and recreational fisheries
- Technical report P: Shipping and navigation
- Technical report R: Social
- Technical report S: Agriculture
- Technical report T: Planning
- Technical report U: Seascape, landscape and visual
- Technical report W: Onshore noise
- Technical report X: Traffic and transport.

The specialists undertaking these assessments worked collaboratively on many issues to evaluate the potential impacts and design suitable mitigation measures to be adopted by the project.

Technical report R: Social and *Technical report Q: Business and tourism* address some closely related issues. The social report considers the impact of project activities on the community, its social fabric, the resources it relies upon, and the things people value. The business and tourism report often considers the same project activity or change, but evaluates its impact on economic activity, including impacts on business, jobs or visitation. As an example, both reports consider the impact of the scenic views of the offshore wind farm. The social report focuses on the impacts on community values (e.g. how will local residents respond to the change in local character? Or how will it affect the things they like to do in the area?); whereas the business report assesses whether the presence of the infrastructure will have economic implications for the region (e.g. will there be changes to visitation and tourism revenues?).

The scope of this business and tourism report does not include evaluation of the impacts to the following economic receptors which are dealt with in separate reports:

- Farming, forestry: see Technical report S: Agriculture
- Commercial fisheries: see Technical report N: Commercial and recreational fisheries
- Large scale marine industries such as oil and gas: see Technical report O: Infrastructure and coexistence with other users
- Commercial shipping and navigation: see Technical report P: Shipping and navigation.

7 EXISTING ENVIRONMENT

This section describes key aspects of the local and regional economy that may be affected by the project, or which would shape its impact. This section provides a general overview of the existing business and tourism environment in the study areas. The overview is drawn from various statistical and other sources, local discussions and from the experience of the authors. Further details of the existing environment are provided where necessary for the discussion of particular impacts in sections 9, 10, 11 and 12.

The Offshore Wind Farm Area is within the Commonwealth marine environment, a matter of national environmental significance (MNES), which is designated 3- 200 nautical miles from the Australian coastline. The Commonwealth marine environment includes areas that are protected for their high conservation values and includes the socioeconomic values of that area. The socioeconomic values of the Commonwealth marine environment relevant to this scope are described further in the sections below.

7.1 Population and housing

The level and distribution of population in the study areas highlights the number of residents likely to be affected by the proposed wind farm. Trends in population growth show, to some extent, how successful the study areas have been in attracting residents and providing them with desirable work and lifestyle opportunities. This gives an indication of the capacity of the study areas to absorb the change created by the wind farm.

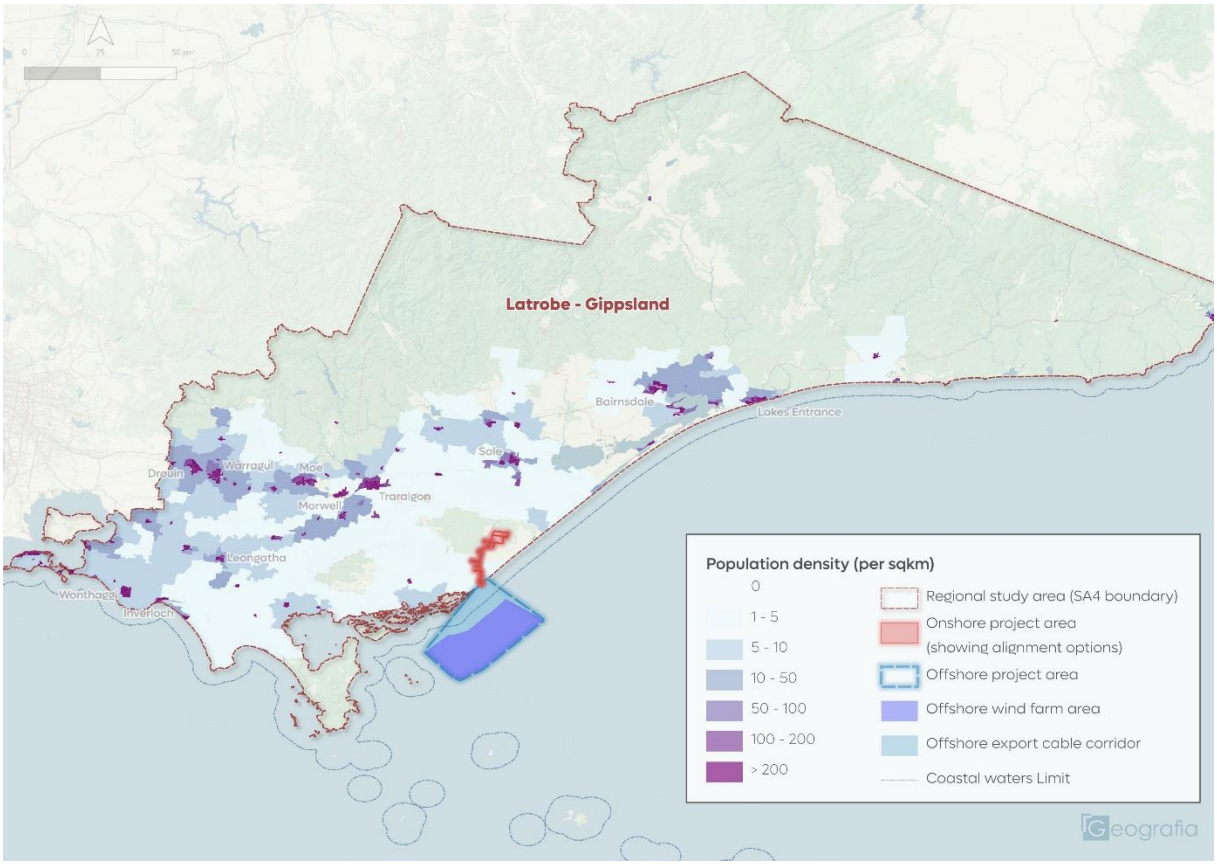
7.1.1 Current population

The estimated resident population of the study areas in 2024, according to the ABS (2025) was:

- Local study area – 20,259
- Regional study area – 311,434

The distribution of population across the region according to the census in 2021 is indicated by the map of population density shown in Figure 7-1 below.

Figure 7-1: Population density in the regional study area, 2021



Source: Geografia from ABS Census of Population and Housing, 2021

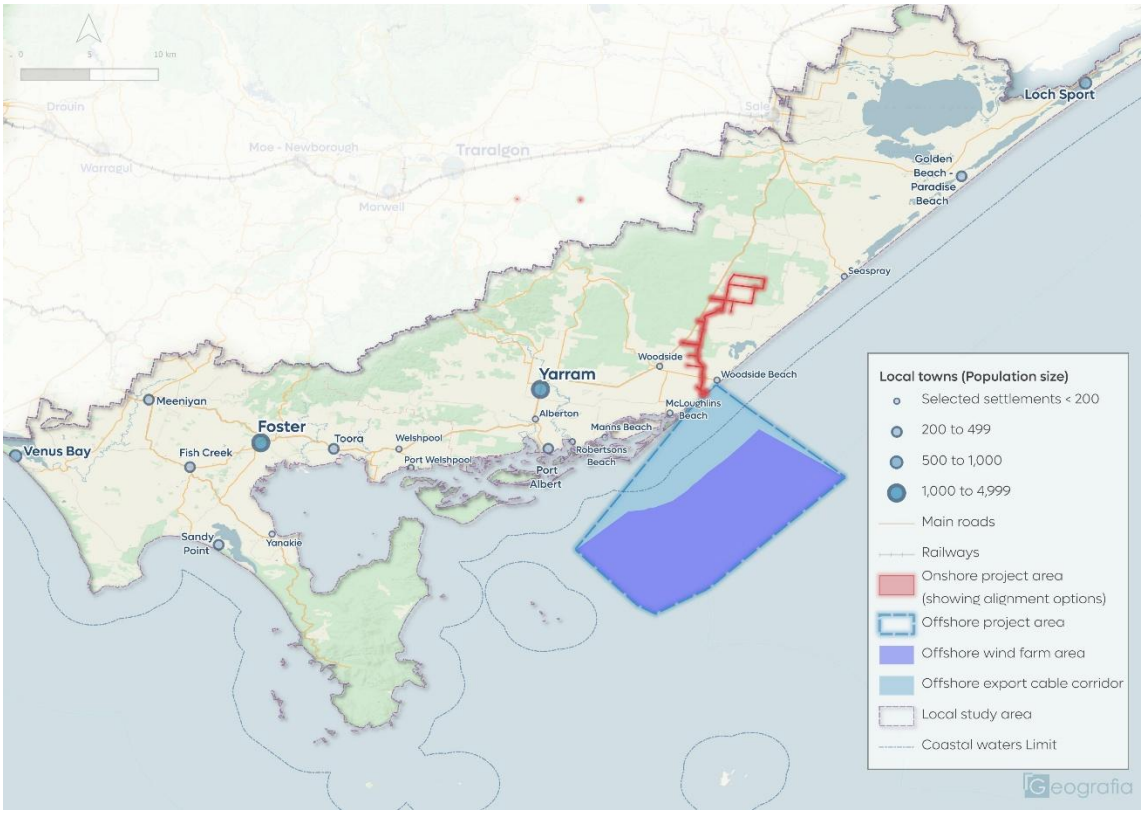
7.1.2 Urban population

The Census of Population and Housing conducted by the ABS identifies the population of settlements within the study areas. In 2021:

- 41% of people in the Local study area lived in towns with a population of 200 or more
- 75% of people in the Regional Study Area lived in towns with a population of 200 or more.

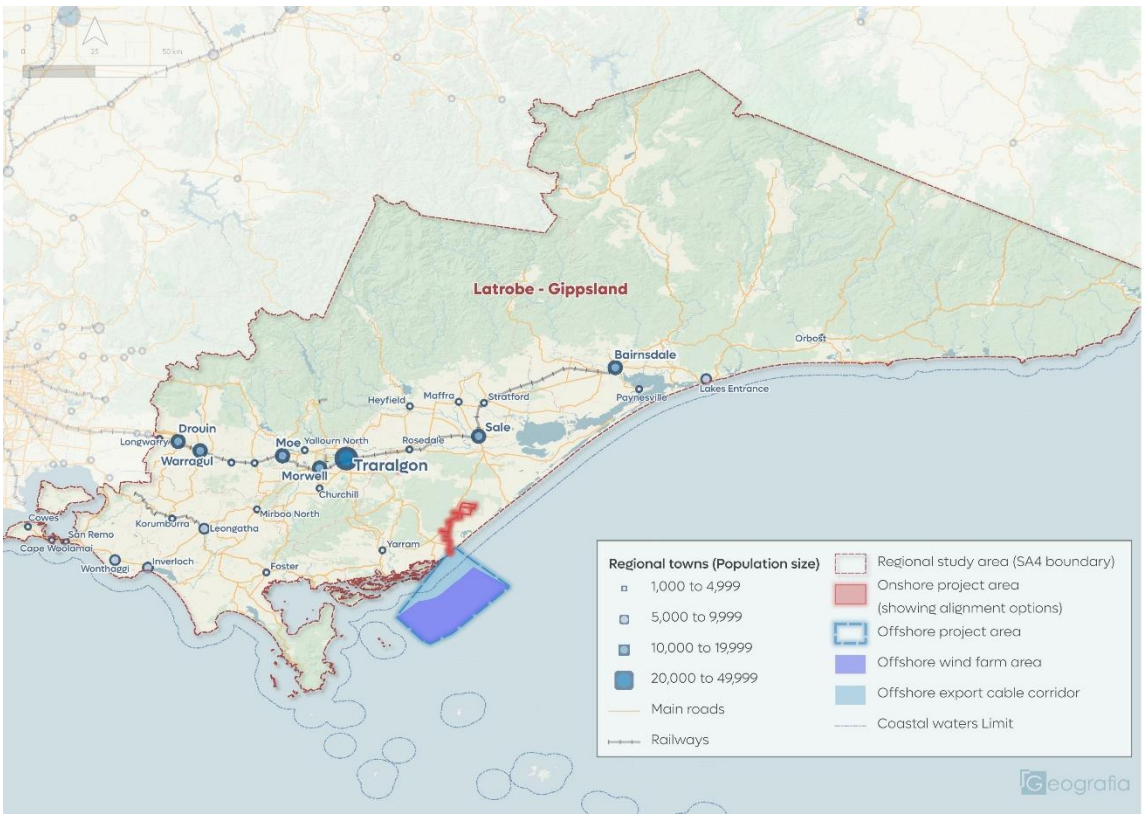
The urban centres of the study areas are shown in the following figures.

Figure 7-3: Urban centres in the local study area



Source: Geografia from ABS Census of Population and Housing, 2021

Figure 7-2: Main towns in the regional study area



Source: Geografia from ABS Census of Population and Housing, 2021

7.1.3 Population trends

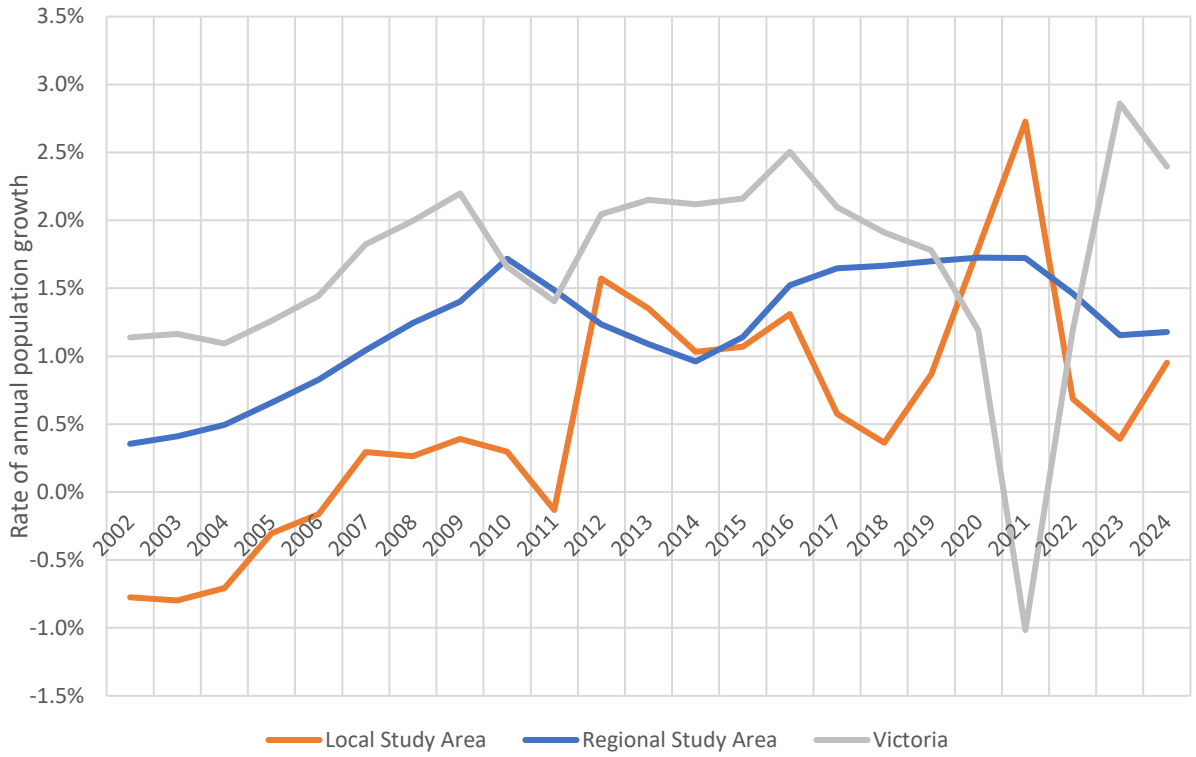
The rate of growth in the study areas over the eight year period 2016 to 2024 has been:

- Local study area – 1.0% per year
- Regional Study Area – 1.5% per year.

This compares with a growth rate in Victoria as a whole of 1.5% per year over the same period.

However, these figures have been significantly affected by the unusual population movements during the COVID period; longer term trends are shown in Figure 7-4.

Figure 7-4: Annual population growth rates, Local and Regional Study Areas and Victoria, 2002 to 2024



Source: ABS, 2025; Tim Nott
Note: Figures measure growth rate from 1 July to 30 June each year.

A review of the population growth rates shows:

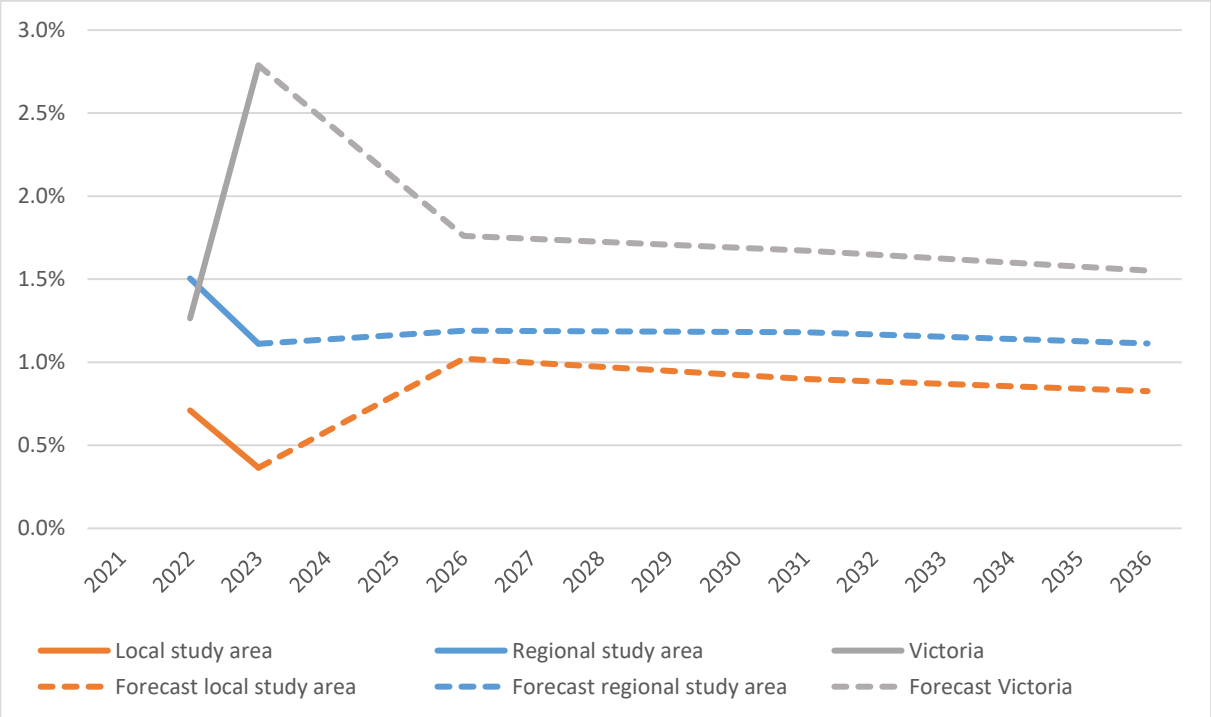
- For most of the last 20 years, the rate of population growth in the study areas has been less than in Victoria as a whole. Structural change in the energy industry and in farming, forestry and fishing has been largely responsible for a relatively low rate of growth in both the local and regional study areas.
- The rate of population growth in the local study area in the 2000s was often negative and always less than 0.5% per year. Since 2012, the rate of growth has rarely been below 0.5%, a result of tourism industry expansion and settlement by retirees in the coastal areas of Foster and Ninety-Mile Beach but not Yarram.

- In the years 2020 and 2021, population growth in the State as a whole was adversely affected by the restrictions imposed as a result of the COVID-19 pandemic. Growth in the Regional Study Area, however, was maintained during this period as fewer people migrated into Melbourne for work and study. Growth in the Local Study Area spiked during this period both as a result of fewer people leaving for Melbourne and because some city dwellers moved into this attractive coastal area to escape the most severe COVID-19 restrictions. Following the easing of COVID restrictions, growth rates in the various jurisdictions appear to be returning to previous patterns.

7.1.4 Population forecast

The Victorian State Government produces small area population forecasts periodically, the latest being in 2023. The forecast population growth rates for the study areas are shown below. The forecasts show the disruption following COVID19 and the expected return to a more steady rate of growth thereafter. This reflects the Government's expectations for the study areas and their capacity to accommodate growth (Figure 7-5).

Figure 7-5: Forecast population growth rates, study areas and Victoria, 2016 to 2036



Source: Victorian State Government, 2023; Tim Nott

Key aspects of the State Government's population forecast include:

- Both study areas were expected to have lower rates of growth than the State as a whole, with Melbourne to remain the engine of growth for the State.
- The local study area was expected to have a lower rate of growth than its region, with the local study area continuing to be affected by low growth in farming, forestry and fishing. In addition, the local study area is too far from Melbourne to experience the growth in commuter settlements that is happening elsewhere in Gippsland, mainly in Bass Coast and Baw Baw Shires to the north and west.

- Population growth in the period 2023 to 2036 was expected to be approximately:
  - 2,500 in the local study area
  - 49,700 in the regional study area.

7.1.5 Housing

Housing availability may be affected by the project due to the number of workers, both temporary and long term, that would be employed in the construction and operation of the wind farm. Table 7-1 provides an estimate of the number of dwellings in the study areas, and the share which are unoccupied.

Table 7-1: Occupied and unoccupied dwellings, study areas, 2021

Area	Population – census count	All private dwellings	Occupied dwellings	Unoccupied dwellings	Unoccupied dwellings %
Foster SA2	9,446	7,593	3,906	3,199	45.0%
Longford – Loch Sport SA2	4,915	4,361	1,918	2,211	53.5%
Wilsons Promontory SA2	16	13			
Yarram SA2	5,605	3,277	2,172	732	25.2%
Local study area	**19,982**	**15,244**	**7,996**	**6,142**	**43.4%**
Bass Coast LGA	40,789	28,938	16,662	10,831	39.4%
Baw Baw LGA	57,626	24,485	21,441	1,924	8.2%
East Gippsland LGA	48,715	25,948	19,771	4,564	18.8%
Latrobe LGA	77,318	35,620	30,610	2,961	8.8%
South Gippsland LGA	30,577	17,114	12,001	4,148	25.7%
Wellington LGA	45,639	23,503	17,538	4,612	20.8%
French Island	139	134	54	71	56.8%
Regional Study Area	**271,416**	**155,760**	**118,800**	**29,102**	**19.7%**
Victoria					11.1%

Source: ABS, 2022
Note: *All private dwellings* is more than the sum of *occupied* and *unoccupied dwellings* because of undercounting during census data collection

Review of the statistics on dwelling stock shows:

- In 2021, the local study area had approximately 15,200 dwellings, of which around 6,100 or 43% were unoccupied; that is 43% of the dwellings were vacant because they were:
  - In the process of changing occupiers
  - Being held vacant by the owners
  - Homes where the occupiers were absent on Census night
  - Second homes
  - Holiday homes.

  This is a high percentage of unoccupied dwellings, which is usually an indication that the area is a holiday destination. Across Victoria, around 5%-10% of homes are vacant because they are being held vacant, are changing occupiers or where the occupiers are temporarily absent. For the local study area, then, around 33%-38% of the dwellings are holiday homes. More

detailed interrogation of the figures shows that holiday homes are concentrated in beachside communities such as Venus Bay, Sandy Point, Port Albert, Seaspray and Loch Sport.

- In the regional study area, the proportion of unoccupied dwellings is less than the local study area but is still relatively high, at 19%, compared with 11% in Victoria as a whole. The share of unoccupied dwellings is highest in the coastal municipalities. The Bass Coast LGA, containing the holiday destination of Phillip Island, has by far the largest share of holiday homes at 39%. This area provides beachside holiday destination close to the eastern side of Melbourne. Altogether, the regional study area has approximately 29,100 unoccupied dwellings.

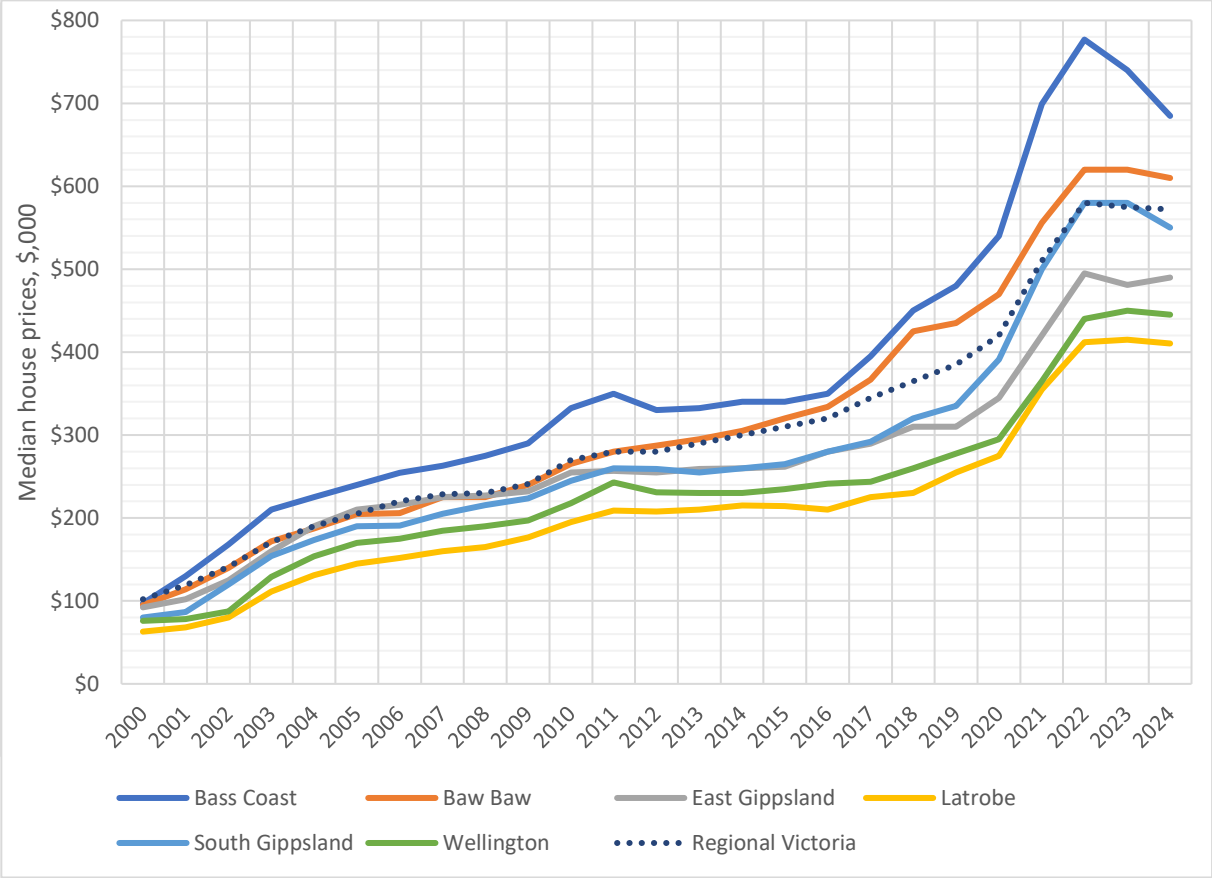
The proportion of unoccupied dwellings in the region was several percentage points lower than in 2016. In part, this is likely to have been a result of people usually resident in Melbourne moving into the region temporarily during the COVID restrictions.

7.1.6 House prices

The price of housing in the study areas is one indicator of the combined demand generated by population growth and visitors, although prices are affected by other factors such as the tax regime.

The following chart illustrates the median value of houses in the municipalities of the regional study area over the period from 2000 to 2024.

Figure 7-6: Median house prices, regional municipalities, 2000 to 2024 ($,000 at current prices)



Source: Valuer General Victoria, 2025. Current prices unadjusted for inflation

Table 7-2: Average annual rates of growth in median house prices, regional municipalities, 2004 to 2024

Period	Bass Coast	Baw Baw	East Gippsland	Latrobe	South Gippsland	Wellington	Regional Victoria
2004 to 2024	5.7%	6.1%	4.9%	5.9%	5.9%	5.5%	5.7%
2004 to 2014	4.2%	5.0%	3.2%	5.1%	4.1%	4.1%	4.7%
2014 to 2024	7.3%	7.2%	6.5%	6.7%	7.8%	6.8%	6.7%
2019 to 2024	7.4%	7.0%	9.6%	10.0%	10.4%	9.9%	8.2%
2023 to 2024	-7.4%	-1.6%	1.9%	-1.1%	-5.2%	-1.1%	-0.5%

Source: Valuer General Victoria, 2025. Current prices unadjusted for inflation

In general, over the 20 years to 2024, house prices in Gippsland have appreciated at around the rate found in Regional Victoria as a whole. Between 2019 and 2024, prices in South Gippsland Shire have appreciated most rapidly, and particularly over the COVID period.

With population growth rates reducing to pre-COVID levels, and with other changes to housing policy, the growth in prices has eased.

7.2 Jobs and industry

7.2.1 Jobs

The industrial structure of the study areas provides indications about how well the skills and scale of the existing work-force and businesses would match the needs of the wind farm development (and vice versa).

The broadscale industrial structure of the study areas is illustrated by the number and share of jobs in each industry, as shown in (Table 7-3). The ***location quotient*** is a way of identifying industries which are relatively strong in the area. Here, those industries with a location quotient of more than 1 have a larger share of jobs in the study area than in Victoria as a whole.

Table 7-3: Jobs by industry, study areas, 2021

	Jobs in the area		Share of jobs in the area			Location Quotient	
Industry	Local study area	Regional Study Area	Local study area	Regional Study Area	Victoria	Local study area	Regional Study Area
Agriculture, forestry & fishing	1,592	9,198	21.6%	8.1%	2.1%	10.25	3.86
Agriculture	1,461	8,046	19.8%	7.1%	1.9%	10.70	3.84
Forestry and logging	42	437	0.6%	0.4%	0.0%	11.55	7.83
Fishing, hunting and trapping	23	154	0.3%	0.1%	0.0%	19.87	8.67
Other Agriculture, forestry and fishing	66	561	0.9%	0.5%	0.2%	4.71	2.61
Mining (incl. gas production)	330	1,124	4.5%	1.0%	0.3%	16.94	3.76
Manufacturing	279	6,985	3.8%	6.2%	7.0%	0.54	0.88
Electricity, gas, water & waste services	164	3,339	2.2%	3.0%	1.1%	1.96	2.59
Construction	593	9,795	8.0%	8.7%	9.4%	0.85	0.92
Wholesale trade	115	2,132	1.6%	1.9%	2.8%	0.55	0.67
Retail trade	452	11,363	6.1%	10.0%	9.4%	0.65	1.07
Accommodation & food services	435	8,170	5.9%	7.2%	6.2%	0.95	1.17
Transport, postal & warehousing	286	3,466	3.9%	3.1%	4.7%	0.83	0.66
Information media & telecommunications	13	919	0.2%	0.8%	1.6%	0.11	0.52
Financial & insurance services	47	1,489	0.6%	1.3%	4.1%	0.16	0.32
Rental, hiring & real estate services	52	1,303	0.7%	1.2%	1.5%	0.48	0.79
Professional, scientific & technical services	244	4,057	3.3%	3.6%	8.4%	0.39	0.43
Administrative & support services	163	2,471	2.2%	2.2%	3.1%	0.70	0.69
Public administration & safety	948	7,728	12.9%	6.8%	5.6%	2.29	1.21
Education & training	463	10,150	6.3%	9.0%	8.8%	0.72	1.02
Health care & social assistance	635	18,761	8.6%	16.6%	14.1%	0.61	1.18
Arts & recreation services	134	1,762	1.8%	1.6%	1.7%	1.05	0.90
Other services	151	4,517	2.0%	4.0%	3.5%	0.59	1.15
Not described/Other	268	4,346	3.6%	3.8%	4.6%	0.79	0.84
Total	7,367	113,091	100.0%	100.0%	102%	0.98	0.98

Source: ABS, 2017; Tim Nott

Note: Industries with a location quotient of more than 1 in the study areas are highlighted in yellow. These industries have a higher share of jobs in the Study Areas than in Victoria as a whole.

The jobs figures from the 2021 Census of Population and Housing may reflect some minor distortions created by the COVID pandemic. Nevertheless, this review of employment by industry shows:

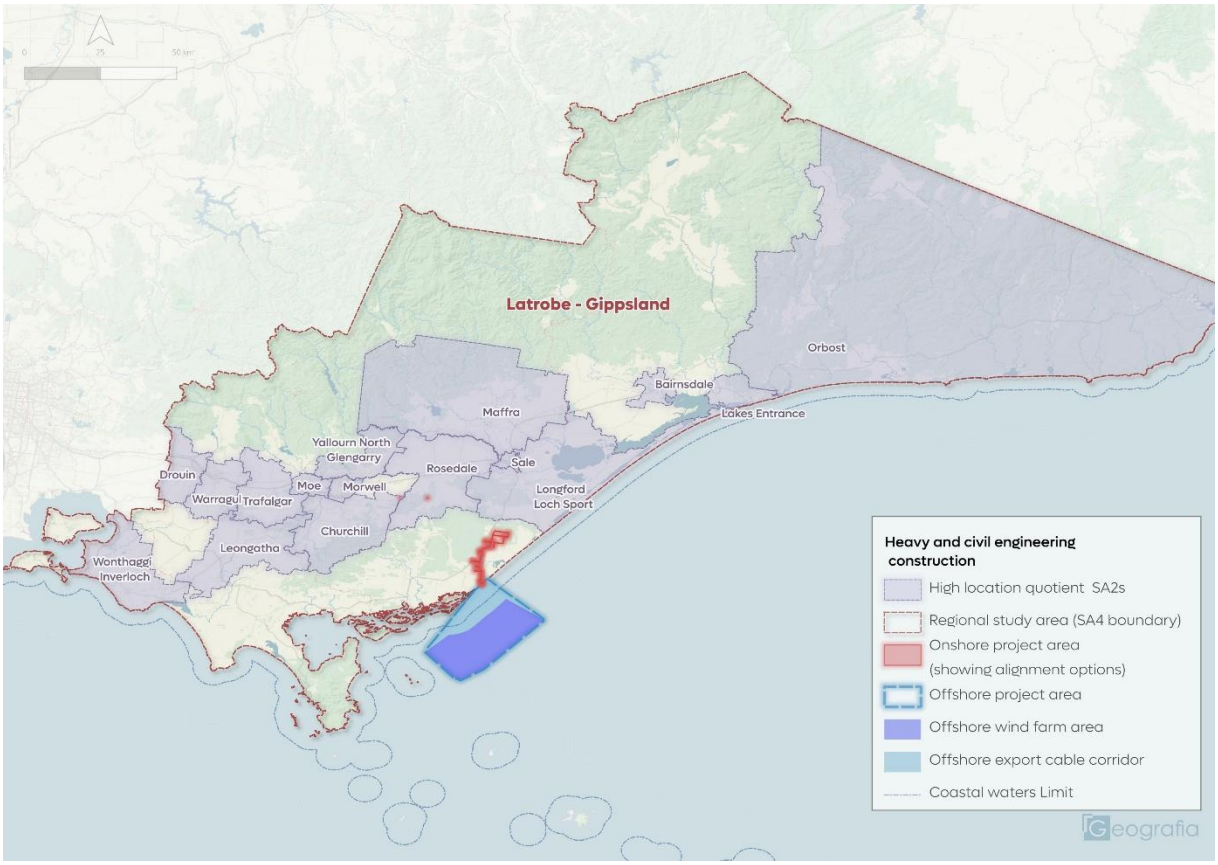
- In 2021, there were 7,400 jobs in the local study area and 113,100 in the regional study area.
- Agriculture, forestry and fishing provided by far the largest number of jobs in the ***local study area*** – 1,600, or around 22% of the total. This was followed by public administration and safety with 1,400 jobs (13% of the total); health care with 600 jobs, (9% of the total); and construction with 600 jobs (8% of the total).

- Health care and social assistance was the largest provider of jobs in the ***regional study area*** (mirroring Victoria as a whole), providing 18,800 jobs or around 17% of the total. This was followed by retail trade which generated 11,400 jobs, or 10% of the total.
- The industries which are more prevalent in the study areas than in Victoria as a whole are highlighted in yellow. For the local study area, agriculture, forestry and fishing, and mining (gas production), are the key local industries. Construction and public administration (defence and public land and water managers) are also important. The regional study area has a wider variety of specialties although primary production of all kinds and electricity, gas, water and waste are the stand-out industries.

These comparisons are instructive, but the broad industry categories can mask important local specialties in sub-industries. A number of sub-industries are of particular note to this study because of their potential to be affected by the wind farm construction. Electricity generation and gas production, for example are important industries, concentrated in Latrobe and Wellington municipalities. The following maps highlight where other key industries have a relatively high location quotient and are therefore local specialties and/or form industry clusters.

- **Heavy and civil engineering construction** is a strong industry in the region, even though the overall construction industry is not as prevalent in the region as in Victoria as a whole. Civil construction is strongest in the main towns and in areas connected to energy production and major infrastructure.

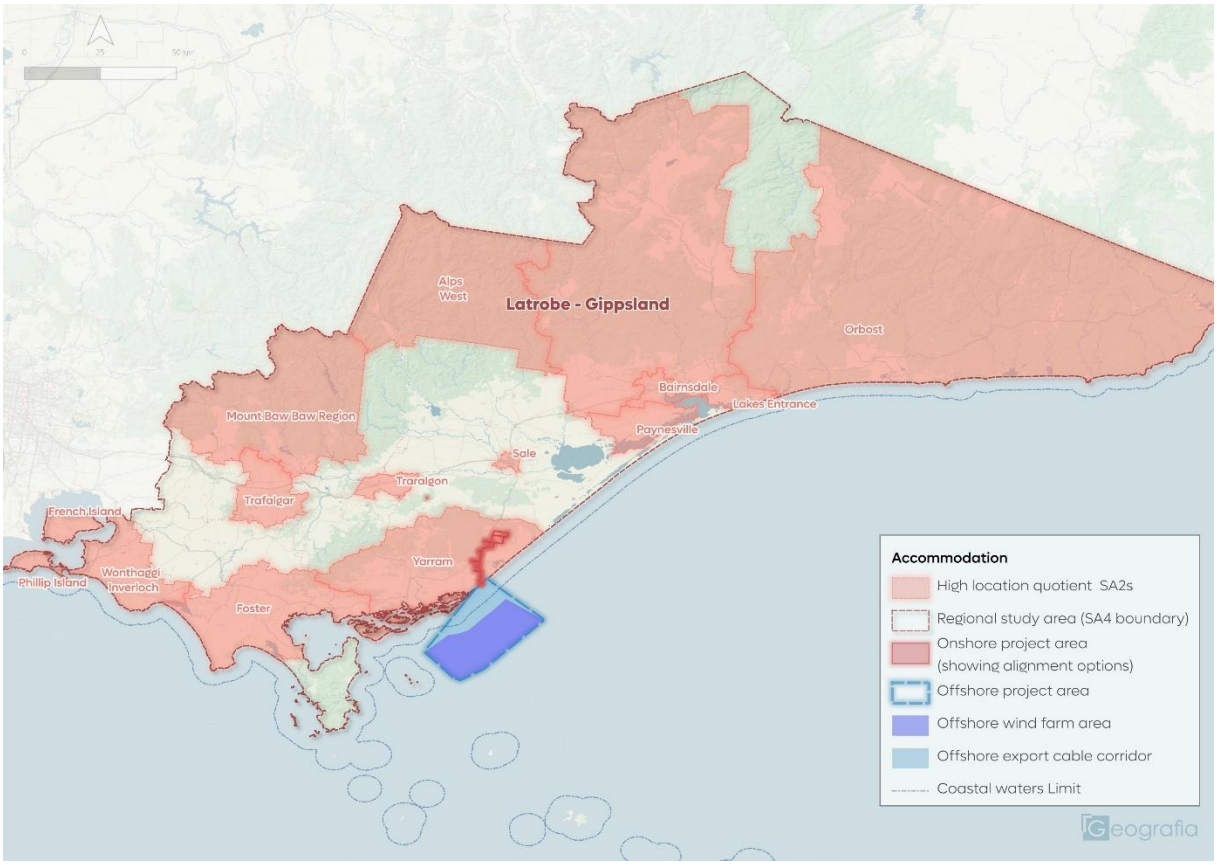
Figure 7-7: SA2s with high location quotient in heavy and civil engineering construction, 2021



Source: Geografia from ABS Census of Population and Housing, 2021

- Employment in **accommodation** (part of the accommodation and food industry) is a key tourism indicator. The accommodation sector is strongly represented in the local and regional study areas, particularly in the coastal communities (as well as in the Alpine holiday areas and several of the largest towns).

Figure 7-8: SA2s with high location quotient in accommodation employment, 2021



Source: Geografia from ABS Census of Population and Housing, 2021

This assessment of employment statistics indicates that the regional study area has an industrial capacity and specialties that could be useful in meeting the likely requirements for the construction of the wind farm. It also identifies that there is an important coastal accommodation industry in the local study area which may be affected, both positively and negatively, by the wind farm. The assessment is a statistical review; it does not take into account the specialties of individual enterprises that may have capacity to assist in the construction and operation of the windfarm in other ways. It should also be acknowledged that investment to create such specialties is also possible.

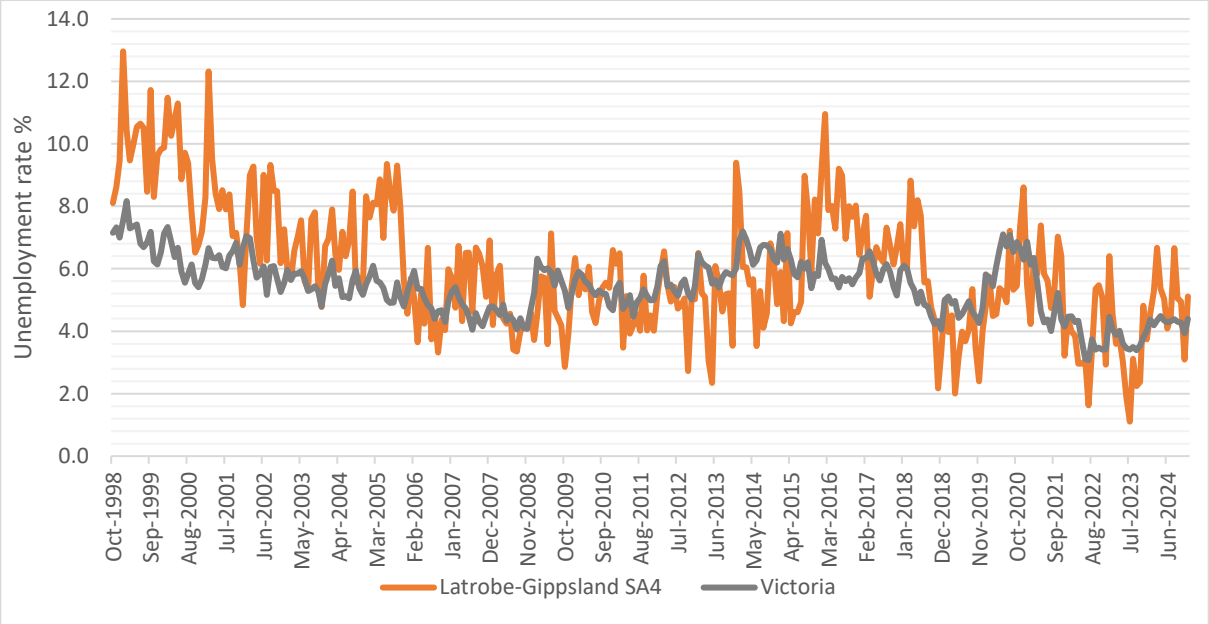
7.2.2 Unemployment

The number of people unemployed and the rate of unemployment gives an indication of the relative success of an economy. The unemployment rate highlights any structural issues that the economy may have. And the number of unemployed people provides a very broad indication of the capacity to

take on new investment. Up-to-date figures for unemployment are provided at the regional level by the ABS.

Figures for October 2023 show that there were 4,100 unemployed people in the Latrobe-Gippsland region (the regional study area) – an unemployment rate of 2.4%. This compares with a figure of 4,700 in October 2019 (pre-COVID). The monthly rate of unemployment is shown in Figure 7-9 below.

Figure 7-9: Monthly unemployment rate, Latrobe-Gippsland SA4 and Victoria, 1998 to 2024



Source: ABS, 2025

The rate of unemployment in Gippsland has broadly matched that in Victoria as a whole except for periods when key local industries were experiencing structural changes. This occurred during the 1990s following the privatisation of the electricity sector and the shedding of thousands of jobs. Another spike in the period 2015-2018 coincided with timber industry reform and the closure of the Hazelwood mine and power plant in 2017. The region has also had periods of relatively low unemployment, most recently in the years just prior to the COVID-19 pandemic. During this period, the monthly unemployment rate dipped to 2% when the rate in Victoria as a whole was over 4%. This is indicative of effective full employment and a relatively low capacity to take on new employment activities without drawing in new workers. Following the COVID-19 pandemic which caused a spike in the rate, unemployment is at relatively low rates – in the 2%-4% range. The prospects for employment remain mixed. The closure of Yallourn power station by 2028 was announced in 2021 (see box overleaf). The Victorian State Government has now also announced that the State will cease all coal-fired electricity generation by 2035, meaning the early closure of the Loy Yang plants, with the loss of many hundreds of jobs. These closures highlight the need for further industry diversification in the region.

Figure 7-10: Latrobe City Council media release on the early closure of Yallourn power station

Energy Australia announces closure of Yallourn power station

Latrobe City Council would continue to standby the community after Energy Australia today announced it would close the Yallourn power station in 2028 – four years earlier than planned….

The closure would result in the loss of hundreds of jobs directly associated with the power station and will impact local businesses that service the power station or are supported by the wages of power station workers. For every direct job at the power station, there are three or four indirect jobs in the community.

“Council is aware that any loss of jobs has a substantial impact on our communities and our families, and their physical and mental health, and empathises with people feeling stress at this time,” Cr Gibson said….

Retaining jobs in the Latrobe Valley was not only essential to the City’s economy, but also to keeping the City’s social fabric.

“We need to keep the families who call Latrobe City and Gippsland home, as these people are not only workers at Yallourn, but their families are employees in other sectors and treasured community volunteers,” Cr Gibson said.

Cr Gibson said while the community was proud of its history of generating electricity for more than 100 years for the state of Victoria, Council and the community have been actively transitioning away from coal-fired electricity generation.

“As a Regional City, we have long sought ways in which to diversify our economy. With or without the coal industry, we are working with government to develop a strategy and plan for transition,” Cr Gibson said.

“The community of the Latrobe Valley cannot continue to take substantial economic hits. Firstly, we lost the Hazelwood power station and now we are faced with the earlier closure of Yallourn.

“Latrobe City needs greater support from all levels of government to bring new industries, new employers and more jobs to our region, while assisting existing businesses to grow and create employment opportunities.

“We have so much technical expertise in the Latrobe Valley and we need to maximise opportunities to harness these.”

Cr Gibson called for the State and Federal governments to meet with Council to plan a way forward to ensure a just transition for Latrobe City to bring more industry, more government services, more jobs and more support to the community.

“Council has welcomed the State Government’s investment in the Latrobe Valley Sports and Community Initiative that has brought grand infrastructure to the City, but we need more,” she said.

“The Latrobe Valley is open and ready for business. Diversification is a long-term process where the breadth of our economic base would expand to capitalise on our natural and social assets.”

Latrobe City Council is ready to partner with community, industry and all tiers of government, leading transition through all its phases.

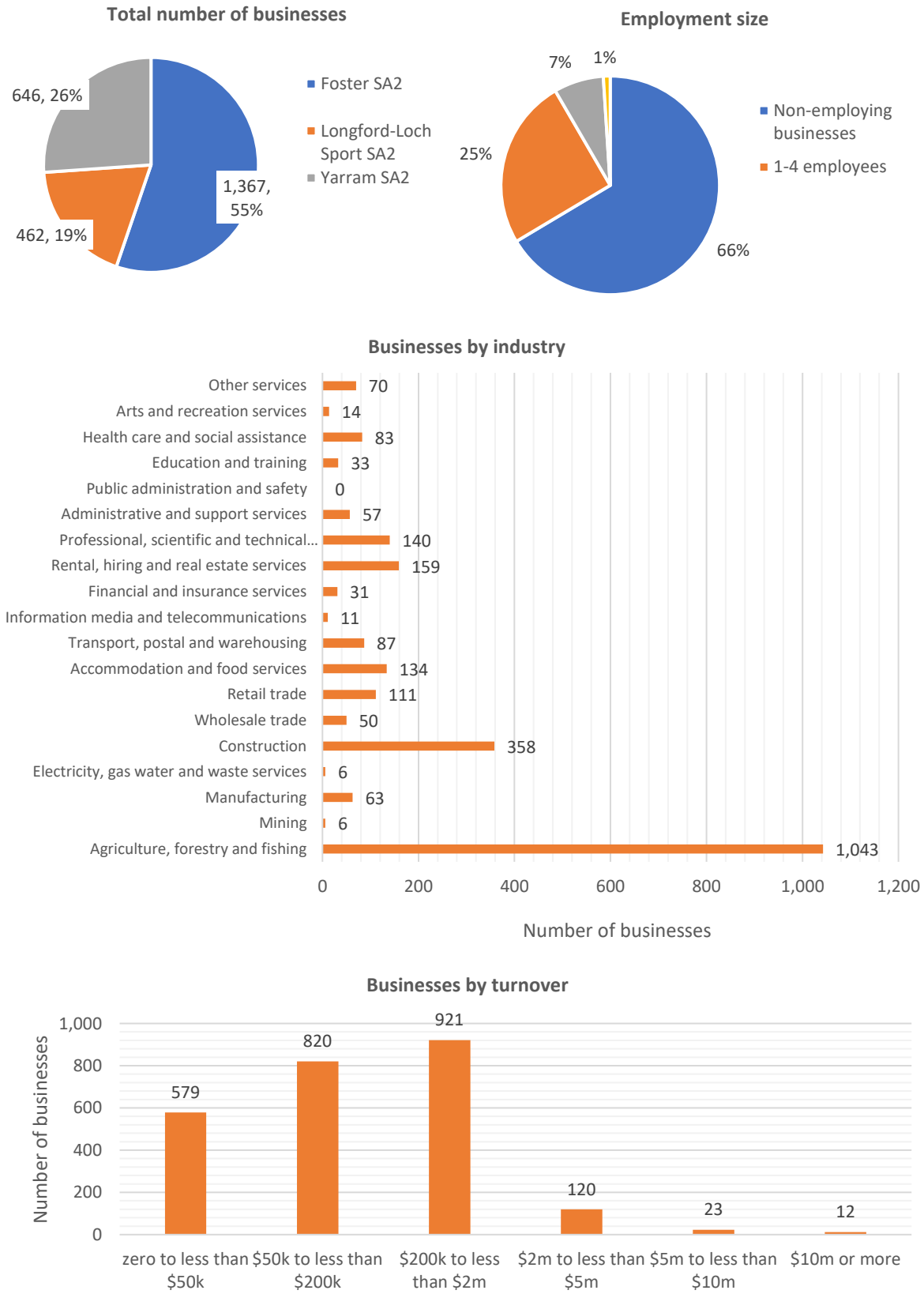
“We are a manufacturing hub, have a wealth of technical skills and are a centre of innovation. Latrobe City is well placed to grow its existing industries and welcome new ones,” Cr Gibson said.

Cr Gibson called for government support for projects listed in Council’s Strength-Led Transition document, with more funding for diverse manufacturing, health, public transport, agriculture and job re-training.

Source: Latrobe City Council, 2021a

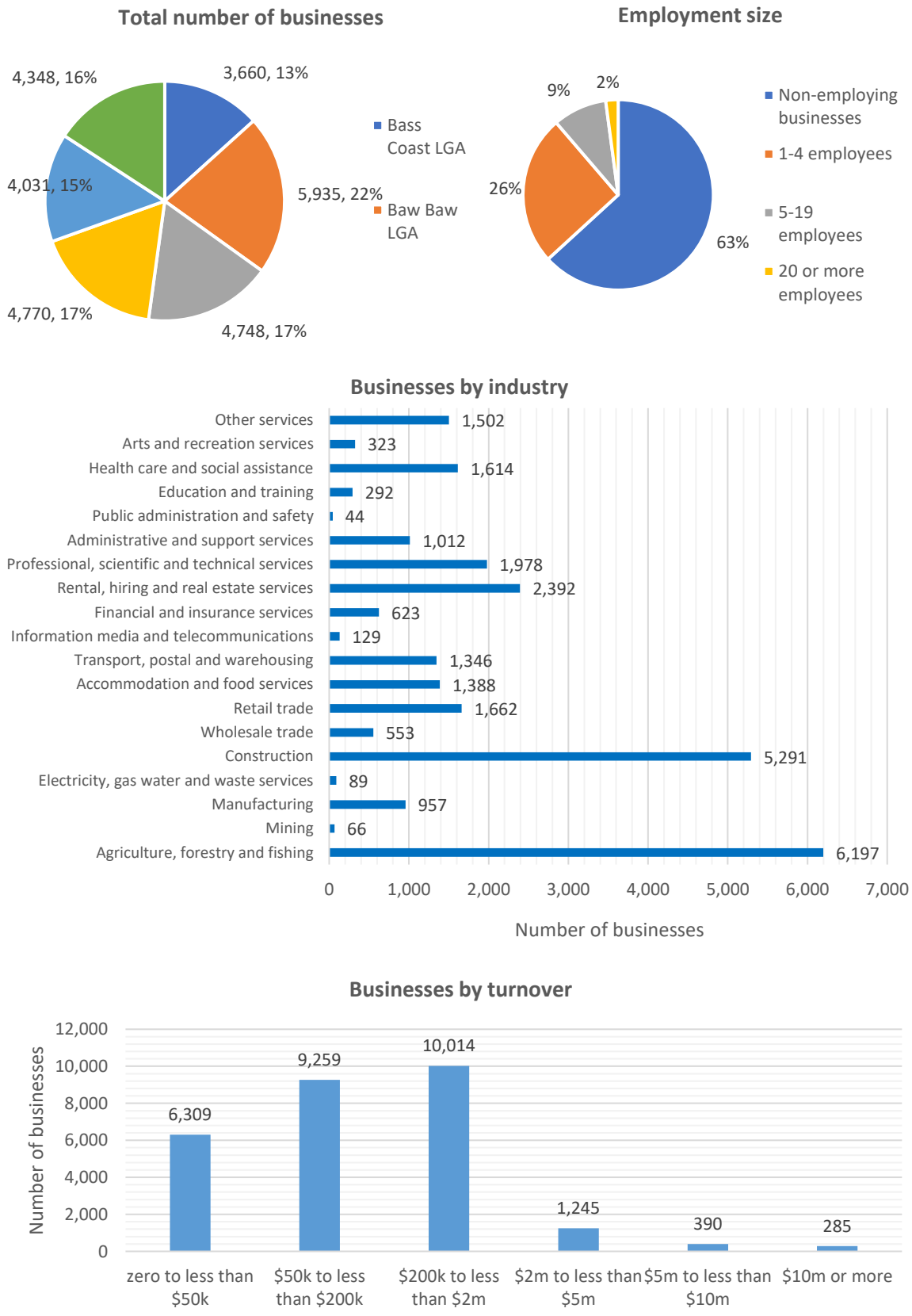
7.2.3 Businesses

Figure 7-11: Businesses in the local study area, 2024



Source: ABS,2024a

Figure 7-12: Businesses in the regional study area, 2024



Source: ABS, 2024a

- Businesses in the study areas are overwhelmingly small. The share of businesses with fewer than five employees is 92% in the local study area and 89% in the regional study area. This compares with 90% in Victoria as a whole. The local study area has a slightly higher proportion of small firms because of the preponderance of farming in its industry structure, with most farms being family-owned and operated enterprises.
- Study area businesses have a modal turnover of between $0.2 million and $2 million per year, slightly higher than for Victoria as a whole. Eleven enterprises have a turnover of $10 million or more in the local study area and 255 in the regional study area – less than 1% of the total in each case. This is a little smaller than in the state as a whole, where nearly 2% of enterprises have an annual turnover of $10 million or more. Again, this is likely a result of the high proportion of family farm businesses and construction trades people operating their own business in the study areas.
- The industrial structure in the study areas is quite different from the state as a whole, with a large number of farming, forestry and fishing enterprises – especially in the local study area. The study areas have correspondingly fewer firms engaged in transport and higher order services (media, financial, professional and administrative services), all of which are concentrated in Melbourne.
- Notwithstanding these observations, the regional study area has a similar proportion of manufacturing and construction enterprises as the state as a whole, and it is these sectors that would construct the wind farm and its associated infrastructure.

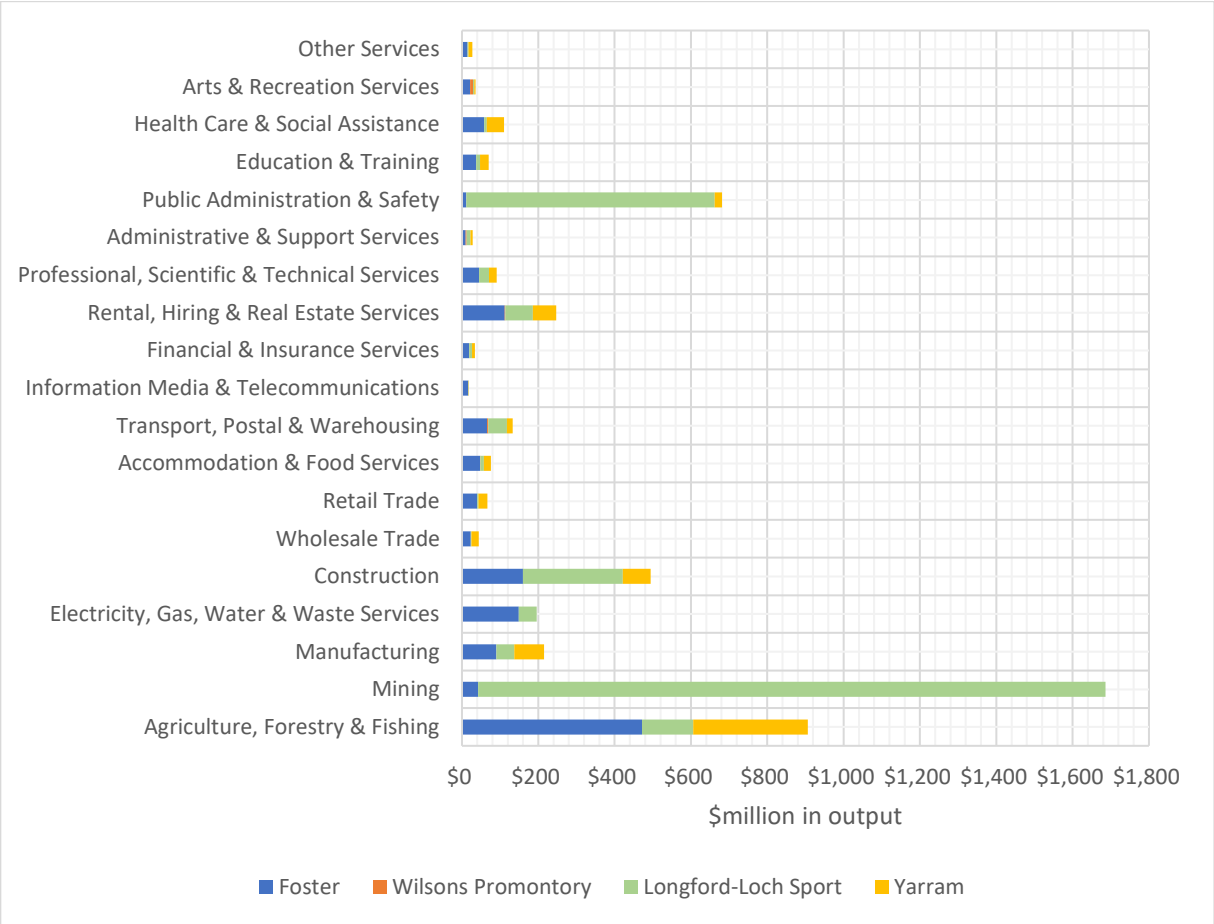
7.2.4 Output

The level of output (or total sales) shows how the study areas generate income.

- Output in the local study area, according to REMPLAN (2025), was $5,159 million in 2025
- Output in the regional study area was $51,371 million.

The charts below illustrate the output by industry in each component of the study areas.

Figure 7-13: Estimated output, local study area, 2025

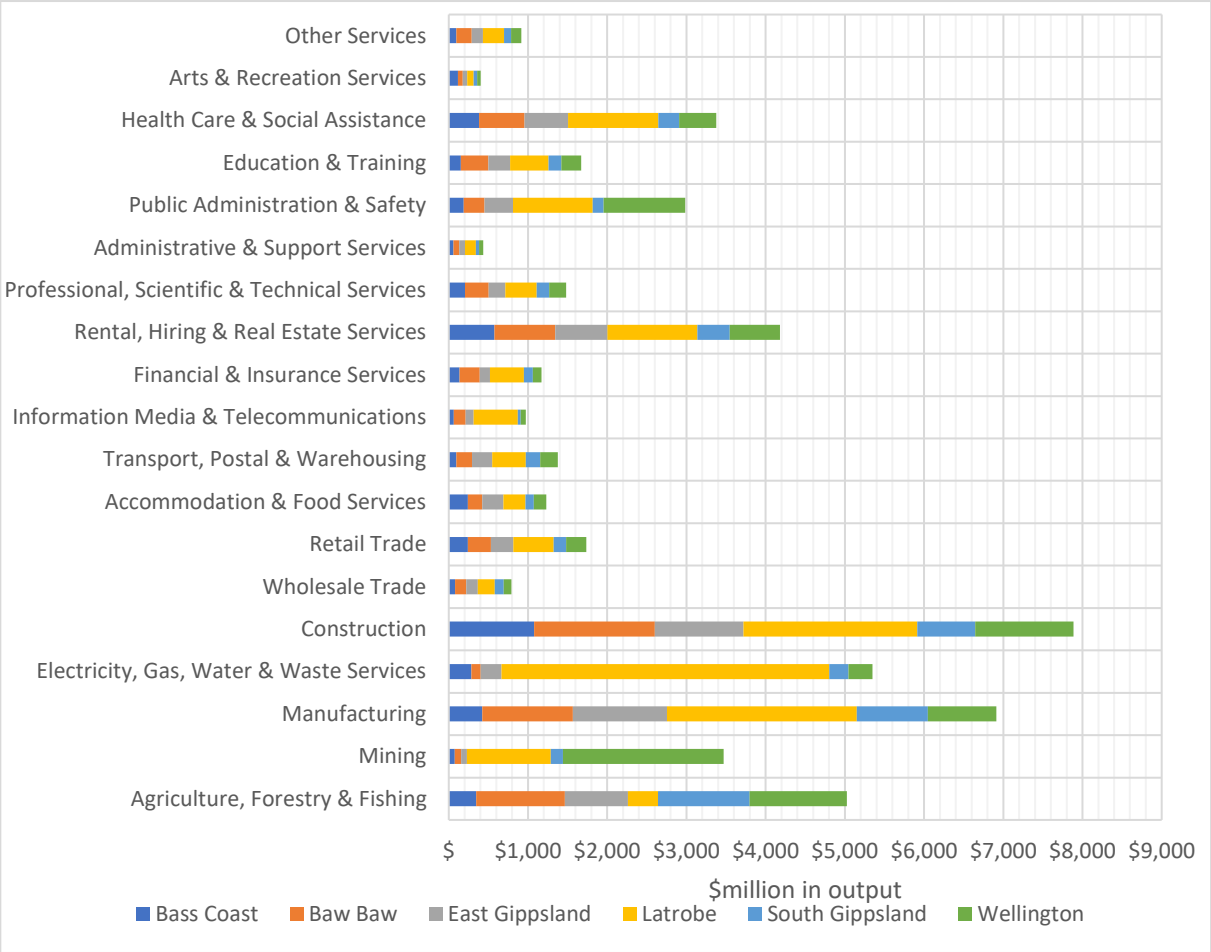


Source: REMPLAN, 2025

The largest sources of output in the local study area include:

- The offshore oil and gas industry based in Longford-Loch Sport SA2
- The RAAF defence base at East Sale in the Longford-Loch Sport SA2
- Farming and forestry spread throughout the area.
- Construction, associated with the industries noted above as well as road and other transport infrastructure

Figure 7-14: Estimated output, regional study area, 2025



Source: REMPLAN, 2025

The largest sources of output in the regional study area include:

- Construction, including civil construction associated with major industries as well as house-building in the rapidly growing areas in the west of the region
- Coal fired electricity generation in the Latrobe municipality and gas production in Wellington
- Manufacturing, in all municipalities of the region but especially Latrobe
- Rental, hiring and real estate services, including tourism rentals, and spread throughout the region
- Agriculture, forestry and fishing, mainly in the municipalities with large areas of farmland.

The picture of output reinforces the understanding of the key industries of the two study areas.

7.3 Tourism

Tourism is a key industry for this impact assessment. This section provides a snapshot of existing tourism assets in the study areas, on land and at sea, and gives a broad understanding of the scale and nature of visitation, using available statistics.

7.3.1 Tourism assets

The tourism assets of the **local study area** are those most likely to be affected by the wind farm; but the regional context is important. Gippsland as a whole is a strong and varied tourism region with important natural assets embodied in its national parks, coastlines, marine area and alpine areas. Visitors are drawn to the region for its natural places and the facilities that provide opportunities for outdoor recreation – camping, hiking, fishing, hunting, boating, water-sports of all kinds, cycling, skiing, four-wheel driving and sight-seeing. The region also has a growing food, wine and cultural offering, and these assets are becoming important in expanding visitation to the area (see section 7.4.3, for example).

The local study area is a microcosm of the wider region, with mountains, beaches, national parks, recreational assets and service centres. Figure 7-15 provides a map of the key tourism assets in the local study area.

Wilsons Promontory National Park

Overnight hikes – Northern Wilderness

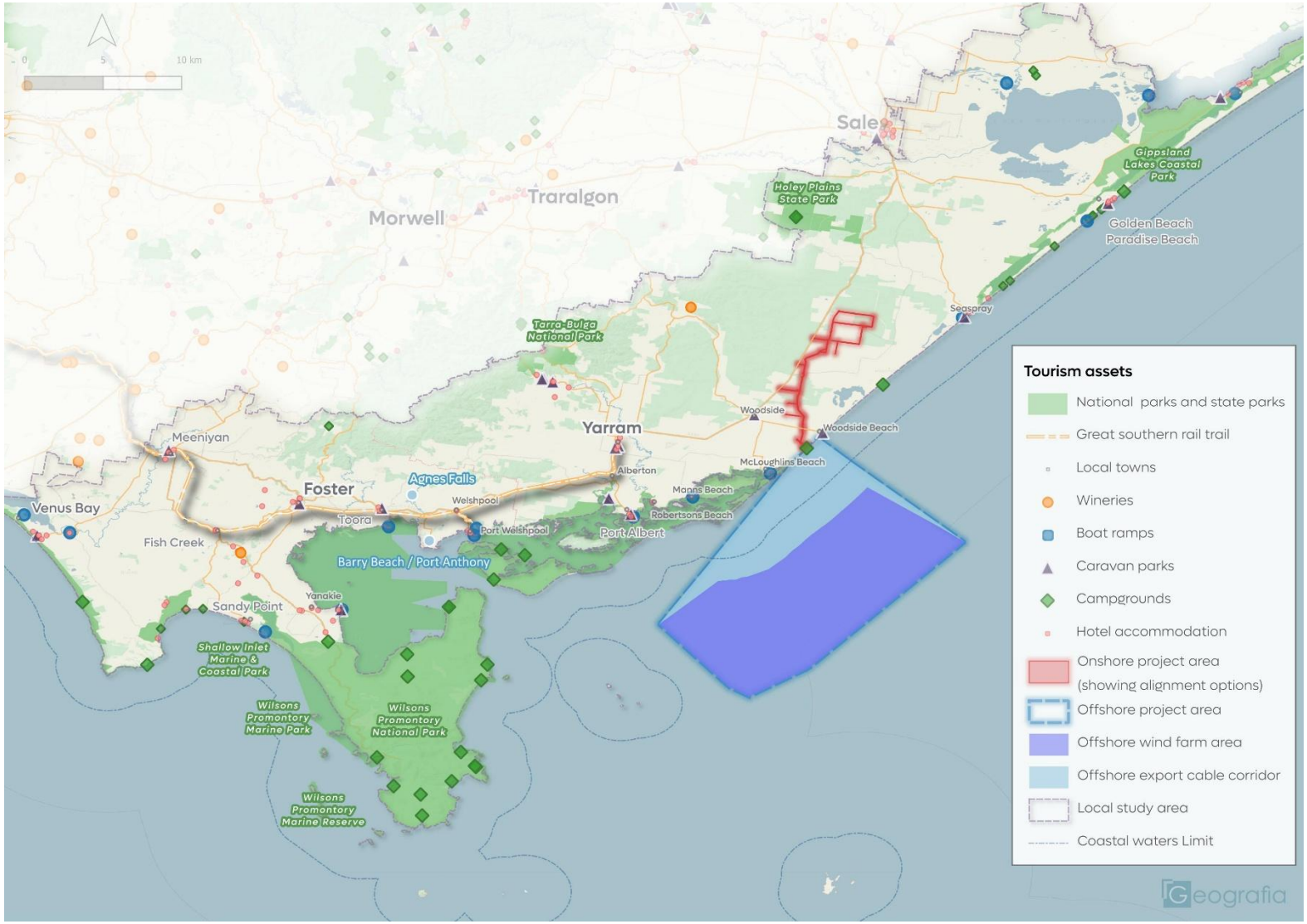
"A challenging walk, even for experienced hikers, the Prom's remote northern wilderness rewards hikers with secluded beaches, spectacular views and abundant wildlife."

"The northern section of Wilsons Promontory National Park is a remote wilderness zone with few facilities. Some track sections are marked with flagging tape only. Other sections are undefined. Hikers must have significant experience in off-track navigation."

Parks Victoria, 2021a

(The northern wilderness would be the closest part of Wilsons Promontory National Park to the Star of the South wind farm.)

Figure 7-15: Local study area - tourism assets



Source: Geografia

7.3.2 Marine tourism

Activities

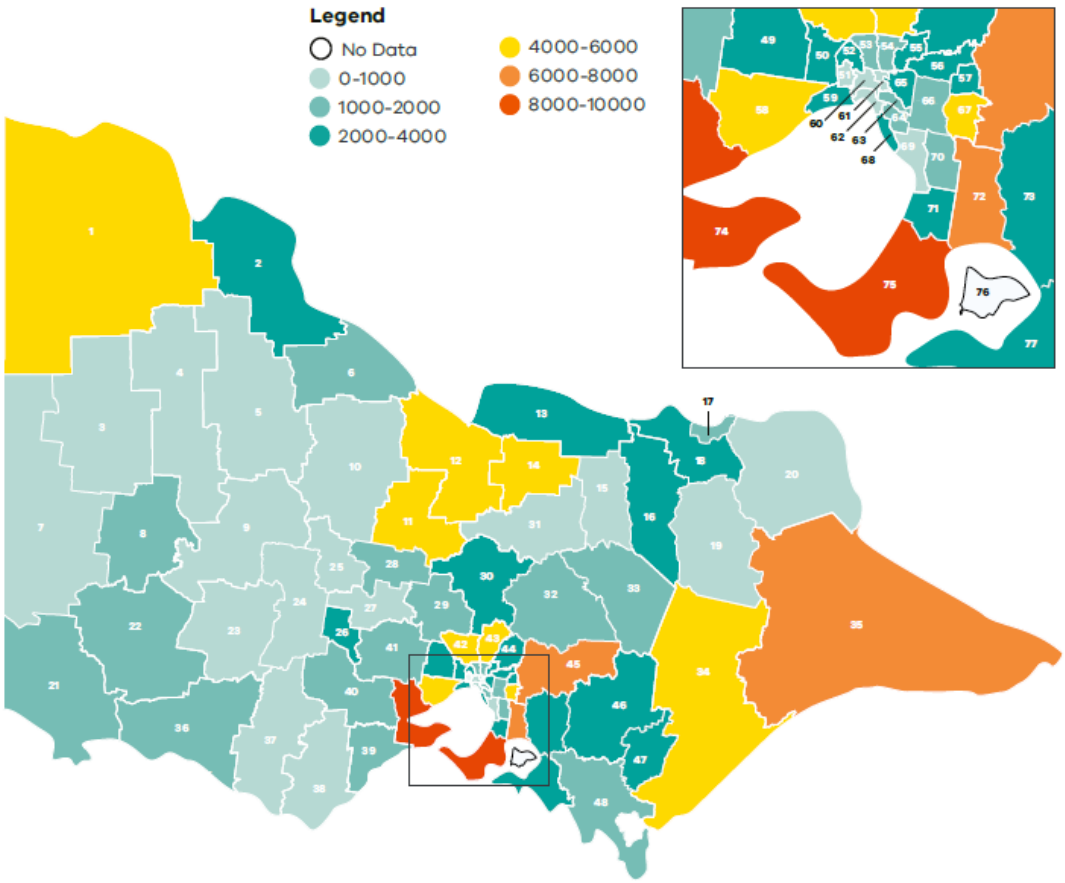
The marine environment of the local study area is used for recreational activities including fishing, cruising, and SCUBA diving. Recreational vessels used within the local study area include recreational sailing (yachts), motor cruising, jet skis, kayaks and canoes. Recreational vessels use both the Commonwealth and Victorian marine areas. The foreshore areas of Nooramunga/Corner Inlet, including the barrier islands, are used for fishing and beach activities in parts, although much of this part of the coast is fringed with mangrove and relatively inaccessible without a boat. Ninety-Mile Beach is a continuous sandy beach and hosts fishing and traditional beach activities, with surf lifesaving clubs at Woodside Beach and Seaspray. The area also accommodates seasonal shore-based whale watching, with Golden Beach hosting a whale-viewing platform.

Boating

The Victorian recreational boating strategy (Better Boating Victoria) identifies that '1 in 10 of Victorians regularly participate in recreational boating', with this rate expected to grow at 2.5 per cent per annum (DOT 2021a).

Recreational boating in Victoria is concentrated at 20 key locations (DOT 2021a). Gippsland Lakes was identified as the second-most popular boating centre of 400 facilities, with Corner Inlet identified as number five (DOT 2021a). Vessel registration is centred around these areas (see Figure 7-16) although users may travel throughout the state. The local study area contains several ports used by recreational vessels: Port Albert, Port Franklin and Port Welshpool; and has boat ramps at Golden Beach, Loch Sport, McLoughlins Beach, Manns Beach, Seacombe, Seaspray, Tidal River, Toora, Venus Bay and Yanakie. Recreational boats also pass through the local study area from elsewhere – especially from Lakes Entrance to the east.

Figure 7-16: Location of registered recreational vessels 2020-21



1 Mildura	17 Wodonga	33 Mansfield	49 Melton	65 Boroondara
2 Swan Hill	18 Indigo	34 Wellington	50 Brimbank	66 Monash
3 Hindmarsh	19 Alpine	35 East Gippsland	51 Maribyrnong	67 Knox
4 Yarriambiack	20 Towong	36 Moyne	52 Moonee Valley	68 Bayside
5 Buloke	21 Glenelg	37 Corangamite	53 Moreland	69 Kingston
6 Gannawarra	22 Southern Grampians	38 Colac Otway	54 Darebin	70 Greater Dandinong
7 West Wimmera	23 Ararat	39 Surf Coast	55 Banyule	71 Frankston
8 Horsham	24 Pyrenees	40 Golden Plains	56 Manningham	72 Casey
9 Northern Grampians	25 Central Goldfields	41 Moorabool	57 Maroondah	73 Cardinia
10 Loddon	26 Ballarat	42 Hume	58 City of Wyndham	74 Greater Geelong
11 Greater Bendigo	27 Hepburn	43 Whittlesea	59 Hobsons	75 Morningston Peninsula
12 Campaspe	28 Mount Alexander	44 Nilumbik	60 Melbourne	76 French Island
13 Moira	29 Macedon Ranges	45 Yarrra Ranges	61 Yarra	77 Bass Coast
14 Greater Shepparton	30 Mitchell	46 Baw Baw	62 Port Phillip	
15 Benalla	31 Strathbogie	47 Latrobe	63 Stonningham	
16 Wangaratta	32 Murrindindi	48 South Gippsland	64 Glen Eira	

Source: DOT, 2021

According to the Gippsland Lakes boating survey (Gippsland Ports, 2015), respondents participating in canoeing/kayaking over the year equated to 25% of all boating activities. The main places kayaking/canoeing took place within the Gippsland region were:

- Nooramunga Marine and Coastal Park
- Corner Inlet
- Wilson's Promontory.

Five yacht and sport boat clubs are found within the local study area, although these groups focus their activities within Corner Inlet and the Gippsland Lakes. Yachts use the offshore project area only infrequently. Established routes around the coast generally avoid the wind farm area. When travelling from Lakes Entrance to Deal Island, for example, yachts would normally be to the east of the project area, and when travelling to Refuge Cove they would normally be inshore of the project area. Of the vessels recorded during aerial surveys conducted as part of the marine mammals MESP program, a very small portion were yachts within the offshore wind farm area (see Figure 7-17).

The Victorian Recreational Boating Strategy Action Plan 2021-2030 describes the development of a Victorian Coastal 'Sail Trail' (DOT 2021b) and development of McLoughlins Beach as a low key 'destination location' (DOT 2021a) in concert with a boating tourism plan due to the significant market of marine tourism in the region's economy (DOT 2021a).

Recreational fishing

Recreational fishing is a popular activity in Victoria and strongly promoted by the Victorian Government. The Victorian Fisheries Authority in Partnership with Visit Victoria have developed the Victorian Recreational Fishing Tourism Strategy which presents strategic goals to be "Australia's premier multi-species, multi-region fishing tourism destination" (The State of Victoria, Victorian Fisheries Authority 2021).

An estimated $338 is spent per fisher per trip on accommodation, food and transport. In 2018/19 1.1 million Victorian residents participated in recreational fishing across Victoria and generated $7.5 billion combined direct and indirect output (The State of Victoria, Victorian Fisheries Authority 2021).

Domestic overnight recreational fishers visiting Victorian fishing destinations are mostly from Victoria, with some from Queensland and NSW and their number has increased by +11% over the last 10 years. Day fishing visitors have increased by 18% over the last 10 years, with the Gippsland/Upper Yarra region being the most popular region (The State of Victoria, Victorian Fisheries Authority 2021).

Recreational fishing is a key attraction to the Gippsland region and the local study area, with a wide variety of species targeted according to local respondents. Fishing clubs are active in nearshore and offshore waters and there are game fishing competitions in the area. Fishing charter boat businesses operate along the Gippsland coast, including at Lakes Entrance and Corner Inlet. Advocating for and supporting increased offshore charter fishing from Gippsland is listed as a high priority action in the Victorian Recreational Fishing Strategy 2021.

Most marine recreational fishing in the study areas is undertaken on day trips using motor-boats which are launched from boat ramps in harbours and coastal settlements. Boat ramps within the regional study area, particularly those within East, South and Central Gippsland, have been identified by DOT as medium and high priority for boat ramp renewal due to identified concerns around:

- Reduced access and increased congestion
- The condition of current boating facilities
- Boating safety
- Changing climate
- Shared use of the waterways (DOT 2021a).

The Victorian Recreational Boating Strategy Action Plan 2021-2030 (DOT 2021b) has identified upgrades to the existing facilities at Port Albert as a high priority and medium priority to Manns Beach.

To collect data on recreational fishing in the offshore project area, a boat ramp survey was conducted during weekends and public holidays in 2021 at McLoughlins Beach, Manns Beach, Port Albert and Port Welshpool, and again in 2022 and 2024 at Port Albert and Port Welshpool. Surveys were also conducted online and at fishing and boating expos. Aerial surveys for marine mammals, conducted in 2021, also yielded additional data on recreational fishing activity. Together, this information is extensive, if not fully comprehensive because of the timing of some of the surveys during the COVID pandemic. It has, nevertheless, enhanced our understanding of the spatial distribution of potential fishing activities in and around the offshore project area, as well as how these activities changed throughout the year.

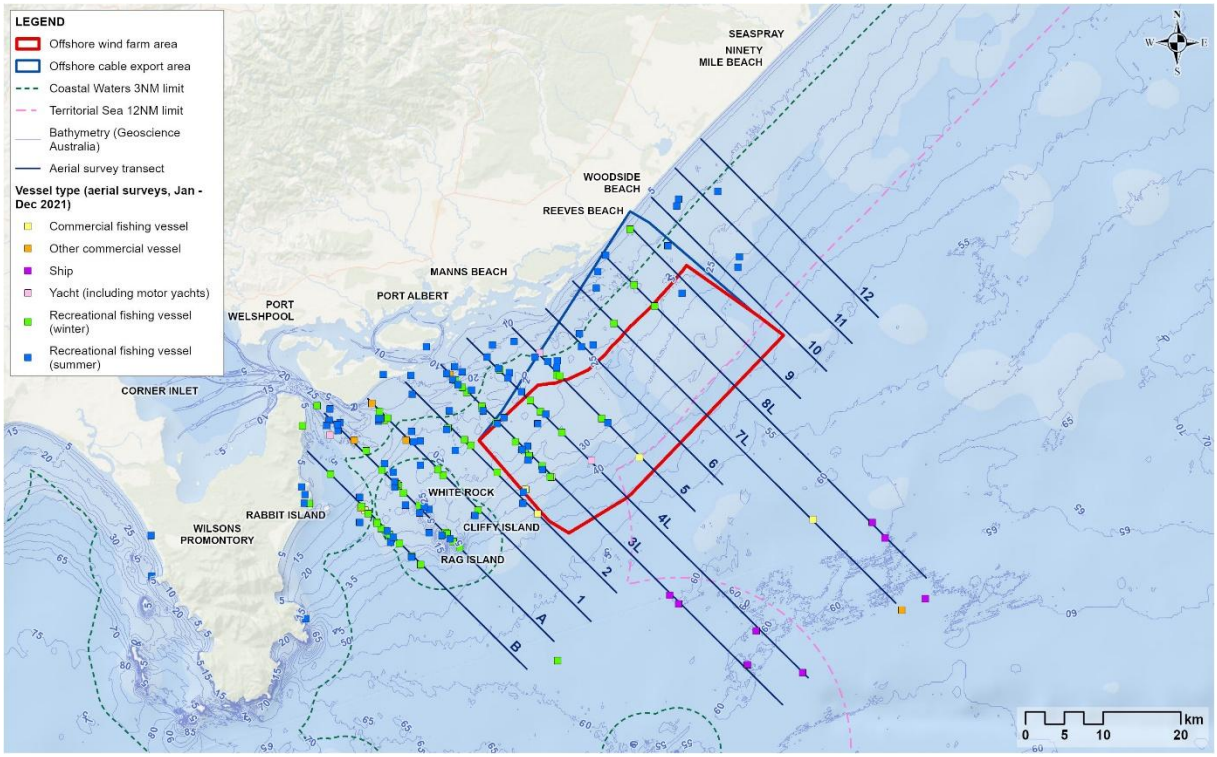
This data is presented in Technical Report N: Commercial and Recreational Fisheries (RPS, 2025n), summarised below:

- Recreational fishers who access the OWFA are predominantly from the Gippsland region (approximately 80%) and Melbourne, with others coming from the broader area of Victoria.
- Boat ramps at McLoughlins Beach, Port Albert and Port Welshpool are typically used by recreational fishers accessing the OWFA and nearby coastal area. Manns Beach is also used by boats fishing the OWFA although it is difficult to launch from this ramp (typically only smaller boats). Care is required when navigating through channels to the coast, particularly from McLoughlins and Manns Beach boat ramps where shallow water may restrict access.
- Only fishers with a boat around 5.5 metres or bigger head offshore towards the OWFA, and only in good weather (less than approximately 15 knots). Otherwise, they are more likely to fish in sheltered waters of Nooramunga/Corner Inlet.
- Boats that depart from Port Welshpool may target the Cliffy Island and western OWFA.
- Fishing activity appears to focus on the southwestern quarter of the OWFA.
- The main offshore fishing months are October to April although some fishers will fish other times of year if weather permits.
- Target demersal species include gummy shark, snapper, whiting and flathead. Target pelagic species include yellowtail kingfish and southern bluefin tuna.
- Bait fishing, including hook and line, trolling and jigging, is the main fishing method, both at anchor and drifting.
- Most fishers fish between two to four days per month during the peak season.
- The usual fishing depths are 20 to 30 metres (range five to 40 metres).
- Interviewed fishers generally believe that the project would benefit fishing opportunities through the addition of new habitat, in particular through increased numbers of pelagic species such as kingfish. However, many are also concerned about loss of access to the OWFA and capacity to fish near turbine structures.

Of the vessels recorded offshore during aerial surveys, 77% were recreational vessels, most of which were likely to be undertaking fishing activity. Of those, 14% were within the offshore project area (Figure 7-17).

The aerial surveys show that recreational boats which travel offshore cluster around several fishing grounds that mark reefs and other fish attractors. These include areas within State waters (less than 5.6 km offshore), around Cliffy Island and adjacent islands, and in the western part of the offshore project area. Some of the surveys occurred during Covid lockdown across winter and summer. Whilst there appears to be fewer vessels during these surveys it is not a clear pattern given the broader variability in data, particularly between summer-winter as well as weekday-weekend.

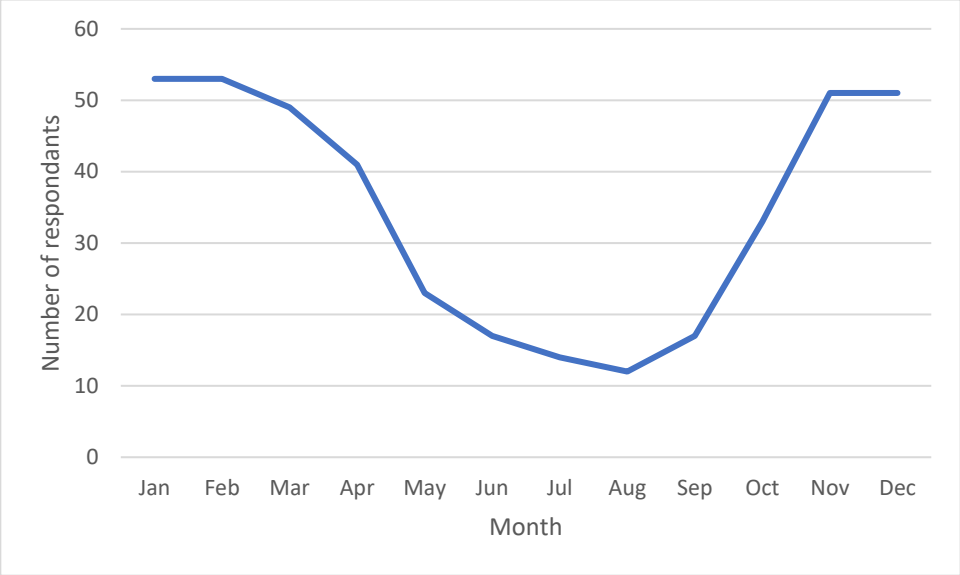
Figure 7-17: Arial survey of boat sightings in and around the offshore wind farm area



Source: Technical Report N: Commercial and recreational fisheries (RPS, 2025)

The majority of recreational fishing offshore is within October to April although some fishers fish other times of year if weather permits (Figure 7-18).

Figure 7-18: Recreational fishing seasonality, boat-ramp survey respondents



Source: RPS, 2025

This means that the number of recreational fishers in the offshore project area is sporadic, with most visitation from late spring through to early autumn, and mainly during daylight hours in good weather. Recreational fishers are also restricted in their take-home catch by bag limits and are mobile and adaptive in their fishing pattern so as to target a range of fish including retained 'food' fish and catch and release 'sports' fish.

Further detail on boat ramp survey results is available in Technical Report N: Commercial and recreational fisheries (RPS, 2025).

SCUBA Diving

Specific tourism assets within the regional study area that may be impacted by the wind farm construction or operations include SCUBA dive sites, as summarised in Table 7-4. These dive sites are a combination of reef and wreck dives. Most dive sites are accessible by boat, with few dive or snorkel locations accessible from the shore at Wilsons Promontory and Corner Inlet. There are four dive companies and dive clubs that conduct regular trips within the regional study area, however most divers in the area are self-sufficient divers using their own boats. There is limited information on how frequent and which time of year some of the dive sites are used within the Study Area, though where available this information has been noted.

Table 7-4: Summary of SCUBA dive sites within the waters of the Regional Study Area

Dive Site	Users	Home Port/ closest boat ramp	Frequency
Victorian Waters			
Beware Reef	Cross Diving Service, Marlo	West Cape, Cape Conran and Lakes Entrance	N/A
Beware Reef	Diveline, Frankston	West Cape, Cape Conran	4 x per year (January, May, August, September)
Cape Conran/Beware Reef	RMIT Underwater club	West Cape, Cape Conran	Annually in Summer
Anser Island, Kanowna Island, Anderson Islets and Skull Rock	RMIT Underwater club	Port Welshpool	Annually in Summer
Wilsons Promontory–eastern side (Tomatin, Rubicon, Sealer's Cove Refuge, Cove South and North Wall)	RMIT Underwater club	Tidal River, Norman Bay beach	Annually in Summer
	Self-sufficient	Tidal River, Norman Bay beach	N/A
Tin Mine Cove	Self-sufficient	Port Welshpool	N/A
Cheviot and Lady Mildred wrecks	Self-sufficient	Port Welshpool	N/A
Nooramunga Marine and Coastal Park (The Blackbird, Wave, Clonmel, Albert, and Victoria wrecks)	Self-sufficient	Port Albert/Welshpool	N/A
Corner Inlet	Self-sufficient	Port Welshpool	N/A
Cliffy Island (The Lune wreck)	Self-sufficient	Port Welshpool	N/A
Commonwealth waters			
Glenelg wreck	Experienced Self-sufficient recreational or technical divers	Port Albert or Lakes Entrance	N/A
Queensland wreck	Self-sufficient technical divers	Port Welshpool	N/A

Source: Visit Gippsland 2021.

Marine tourism businesses

Marine tourism businesses that operate within the study areas include whale/eco tours and cruise liners:

- Wildlife Coast Cruises: whale watching tour of Rabbit Island, Sealers Cove and Refuge Cove from September to mid-November, then a Wilson's Promontory eco tour from November – mid-April

- Wyldside Charters: sightseeing tour of the east coast of Wilsons Promontory from Port Welshpool, through Corner Inlet, to Rabbit Island and back
- Port Albert Fishing charters: fishing trips
- Long Jetty Prom Cruises: Prom scenic cruise and 'South Gippy' sunset cruise, operate from Long Jetty (Port Welshpool) and travel within Corner Inlet
- H2O Tours and Adventures: Scenic tours along sections of the Ninety Mile Beach, operating out of Paynesville
- Lakes Entrance Offshore Charters: Inshore or offshore sightseeing charter or private half-day/full day charters accessing the Bass Strait from the Gippsland Lakes entrance, operating out of Metung.
- Pennicott Wilderness Journeys: year-round tours of Anderson and Anser Islands, also Skull Rock and the Glennie group.

Since the closure of the Corner Inlet marine passenger terminal large cruise liners (approximately 1,000 passengers) have not spent a large amount of time within the local study area, however they still occasionally anchor at Sealers Cove on the eastern side of Wilsons Promontory (Barry Beach Marine Terminal Harbour Master, pers. comm.).

SCUBA diving businesses have not historically operated directly within the offshore project area; however, they do operate within the local and regional study areas. There are four dive companies and dive clubs that conduct regular trips within the regional study area, however most divers in the area are self-sufficient divers using their own boats as described in Table 7-4.

Boating and fishing supplies are offered by a range of onshore businesses including those that provide fishing tackle and bait, boat sales, rental and servicing, dive shops and equipment hire. The local study area has a small number of such businesses, including:

- Boat sales (Alberton)
- Boat rental (Port Albert)
- Fishing tackle (Foster, Port Albert, Yarram)
- Bait (outlets across the study area, including camp sites and petrol stations).

The nearest dive service is at Inverloch.

Boating visitors to the local study area source most of their equipment and services close to home; the shops in the local study area serve as top-up or back-up services and sources of information.

The larger towns of the regional study area have a more comprehensive range of boating services, especially at Bairnsdale, Inverloch, Morwell, Paynesville, Stratford, Traralgon and Warragul.

7.3.3 Key tourism statistics

Visitor numbers and other tourism statistics are not generally provided for individual attractions. This section uses various data sources to build a picture of the characteristics of tourism and existing trends in the study areas.

Statistics for the tourism sector have been derived from Tourism Research Australia (TRA) and other data sources for a variety of geographies including tourism region or sub-region and local government area. The Latrobe-Gippsland SA4, the regional study area for this project, contains two tourism regions – Gippsland and Phillip Island. The Gippsland tourism region includes the

municipalities of Baw Baw, East Gippsland, Latrobe, South Gippsland and Wellington, and most of the mainland part of Bass Coast. The Gippsland tourism region is further divided into two sub-regions, for which statistics are also produced – Gippsland, comprising west and central Gippsland: and Lakes, comprising East Gippsland Shire and the north-eastern part of Wellington Shire. A map of the tourism regions is provided in Figure 7-19 below.

Figure 7-19: Tourism regions and sub-regions of Victoria

Source: Department of Jobs, Precincts and Regions, 2022

The local study area for this project is wholly contained within the Gippsland tourism sub-region. The closest approximation to the local study area for tourism statistics are the two local government areas of South Gippsland and Wellington In the following description, a combination of statistical areas is used to illustrate key points.

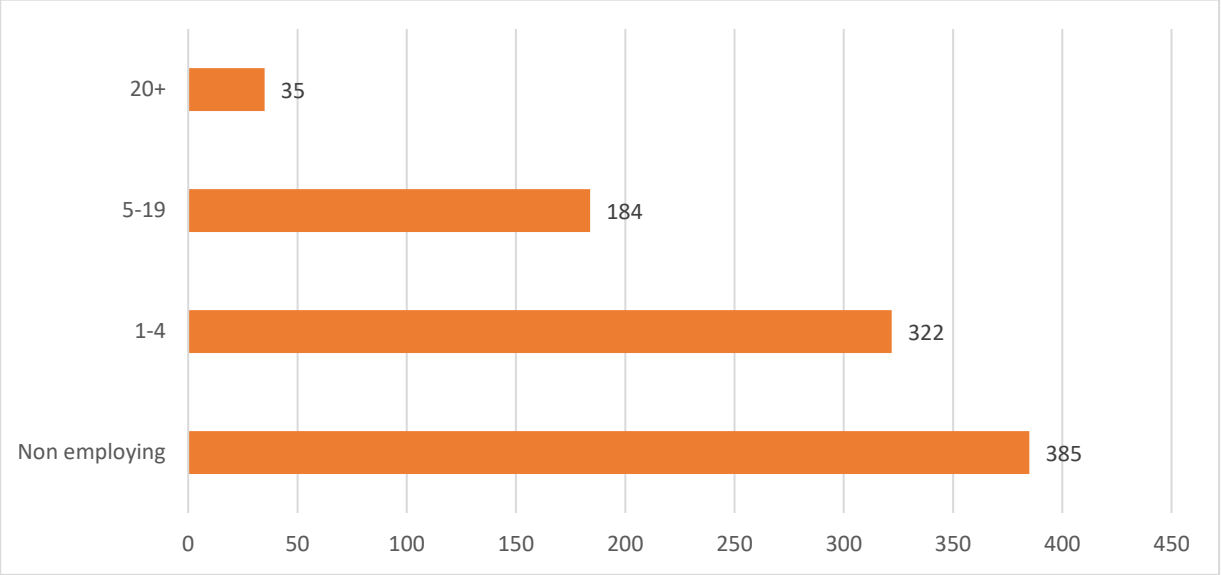
7.3.4 Tourism businesses

In 2024, South Gippsland and Wellington Shires had approximately 925 tourism businesses between them (TRA 2025). These businesses were engaged in providing accommodation, food services, selected retailing, travel services, and selected recreational and other services[1]. In common with most economic sectors, tourism in this area is dominated by small businesses (Figure 7-20).

Official figures of the number of tourism businesses in the local study area are not available but are estimated here to be approximately 300.

[1] It should be noted that many holiday homes that are rented out are not included in these figures.

Figure 7-20: Tourism business size, Wellington and South Gippsland, 2024



Source: TRA, 2025

7.3.5 Visitor spending

Visitors to the Gippsland tourism region spent approximately $1.7 billion in the year to December 2024 (Destination Gippsland, 2025). This was broken down as follows:

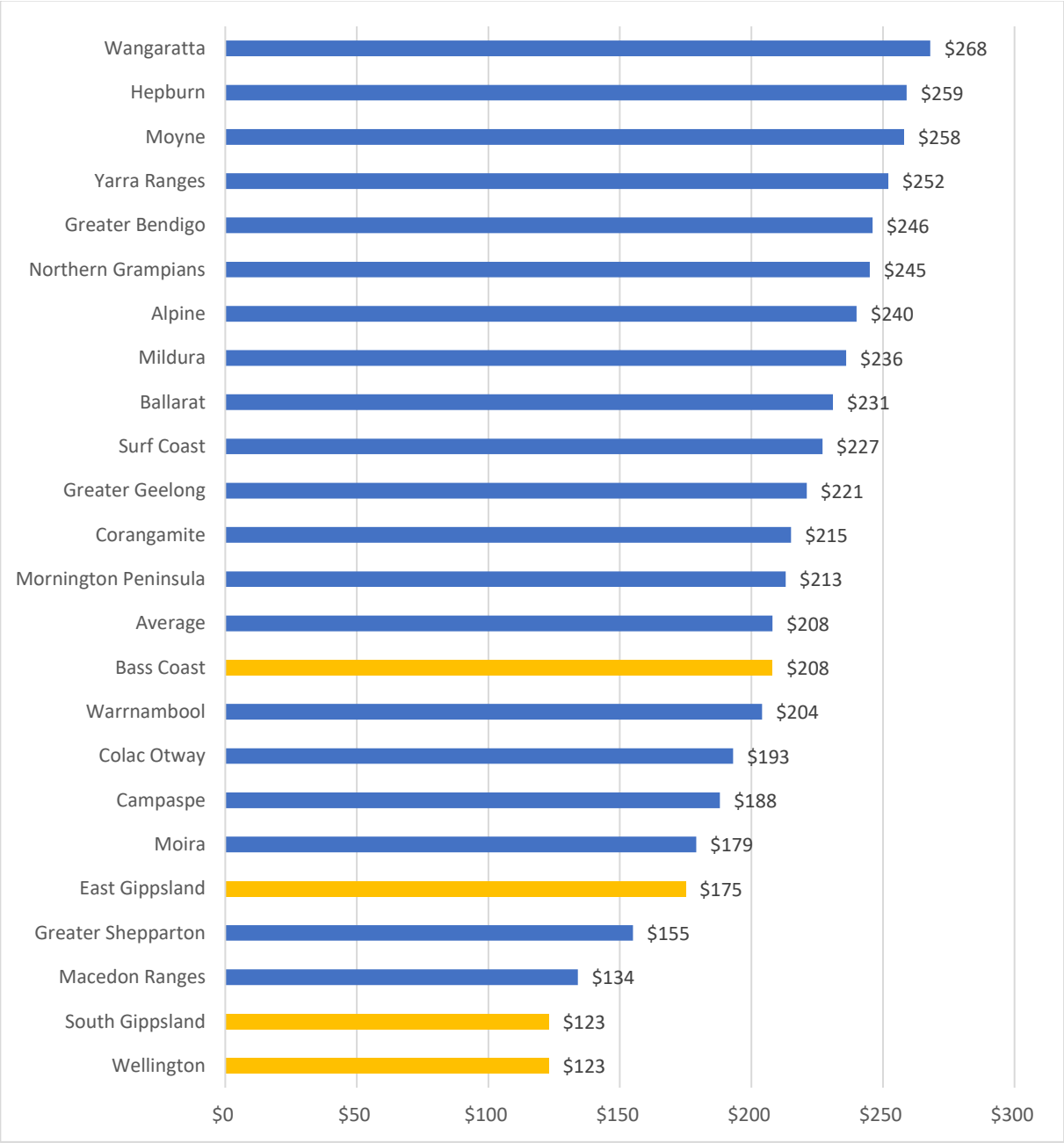
- Around 4.4 million daytrip visitors spent $464 million at an average of $105 each
- Approximately 2.8 million domestic overnight visitors spent $1.2 billion, and stayed for 7.6 million nights with an average spend of $155 per night
- Around 58,000 international overnight visitors spent $41 million and stayed for 731,000 nights with an average spend of $56 per night

These averages vary across the region. A finer grain understanding is provided by examining the average spending per night in selected local government areas in non-metropolitan Victoria, as illustrated for 2024 in Figure 7-21 below, which shows:

- The Gippsland municipalities have relatively low spend per night compared with the average for the selected Victorian council areas
- Amongst the coastal municipalities represented in this list, Wellington South Gippsland and East Gippsland have the lowest average spend per night.

Gippsland, including the local study area, is a relatively low-cost visitor destination for many.

Figure 7-21: Average visitor spending per night, selected non-metropolitan municipalities in Victoria, 2024



Source: TRA, 2025
Note: Spending data was not provided for all local government areas by the TRA

7.3.6 Tourism's economic contribution

In 2023-24, the tourism industry contributed approximately $1,333 million, directly and indirectly, to the gross regional product (GRP) of the Gippsland tourism region (DJSIR, 2025). This was 7.0% of the regional total. In the same year, the industry employed 14,100 people directly and indirectly, providing around 9.7% of the region's jobs.

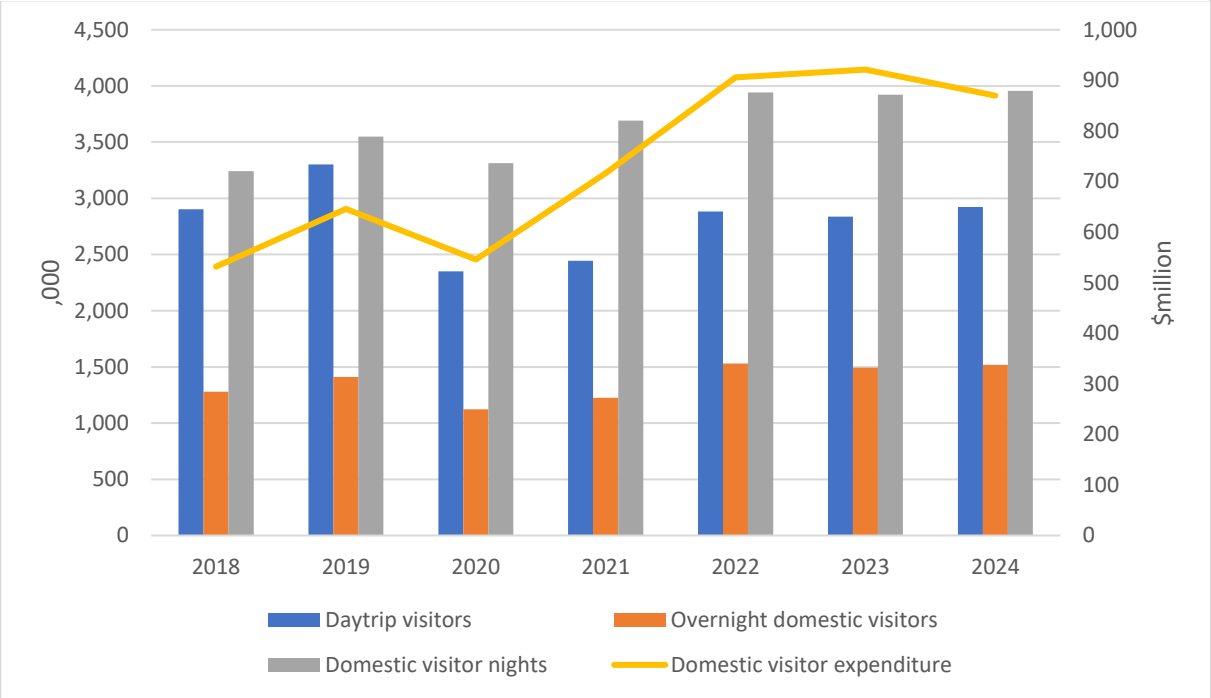
The local study area is estimated to account for, broadly, 20% of the region's visitors. This means the GRP generated by tourism in the local study area was, on a pro rata basis, $270 million. The accommodation sector alone accounts for 6% of jobs in the local study area and this author

estimates that tourism as a whole probably accounts for 10%-15% of jobs directly and indirectly, or 700-1,000 altogether, making the industry one of the key economic activities of the area.

7.3.7 Trends in visitation

The following chart shows the trends in visitation for the Gippsland tourism sub-region.

Figure 7-22: Trends in visitation, Gippsland tourism sub-region, 2018 to 2024 (year ending December)



Source: DJSIR, 2025

Note: Figures for international visitation and spending have not been provided for most years and have been omitted here. However, these typically form a small proportion of total visitors and visitor spending in Gippsland – in the range 2%-5%.

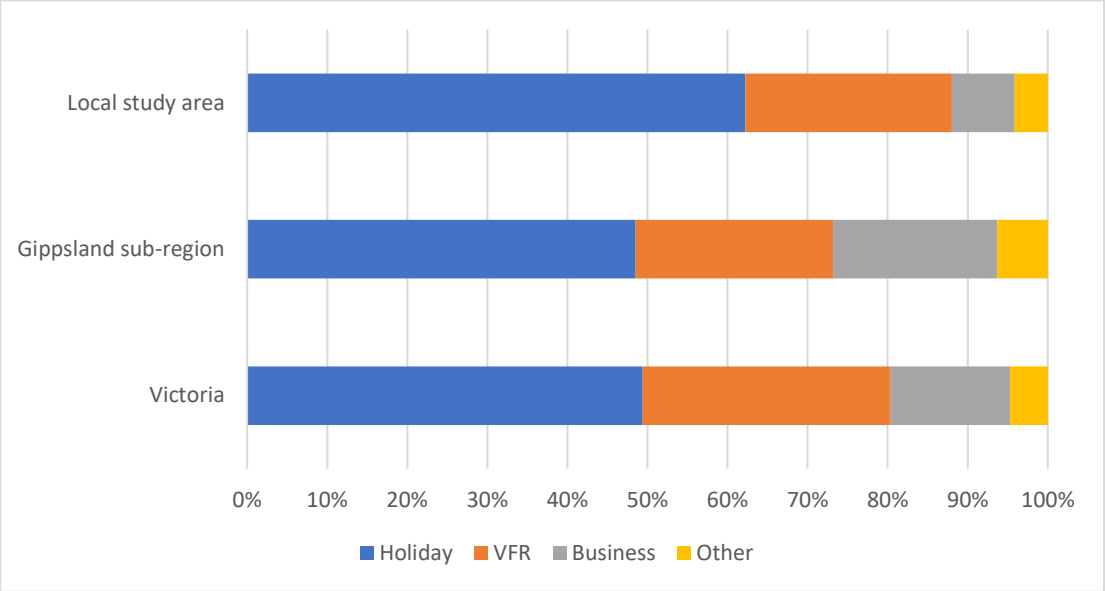
Domestic overnight visitors, visitor nights and spending are now all at or above the levels prior to the COVID-19 pandemic. Domestic visitor spending, in particular, has grown by 9% per year on average over the 2018 to 2024 period, well outstripping inflation and rates of population growth. However, visitor numbers appear to have plateaued since 2022.

Figures in the local government areas of South Gippsland and Wellington over 2024 indicate visitor nights of 2.7 million that year (TRA, 2025). Considering the balance of attractions, a best estimate of visitor nights in the local study area during 2024 is 1.6 million and 0.5 million overnight visitors.

7.3.8 Purpose of visit

Using figures from the National Visitors Survey and estimates by the author, the following table shows that the reason for travelling to the local study area is mainly for holidays, much more so than Gippsland or the State as a whole.

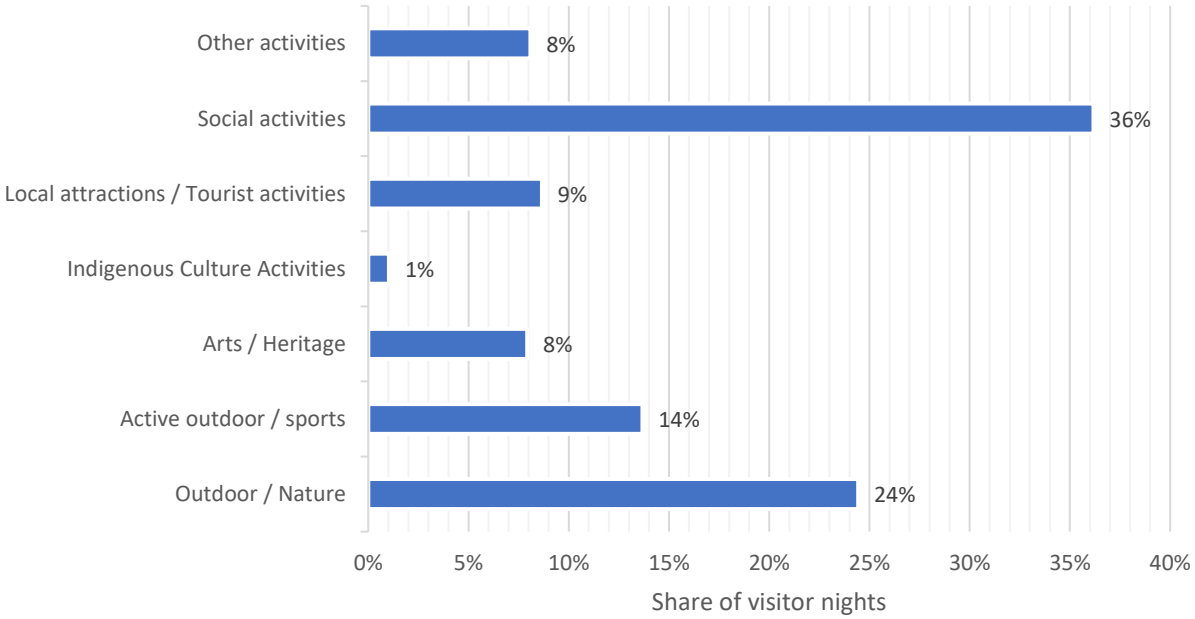
Figure 7-23: Purpose of trip, 2024



Source: DJSR. 2025; Local study area estimated by Tim Nott
Note: VFR – visiting friends and relatives

Data about the activities participated in is also provided by the National Visitors Survey.

Figure 7-24: Main activities of domestic overnight visitors, Gippsland tourism region, 2019



Source: TRA, 2021 (latest available for this question)

Apart from taking part in social activities (including visiting friends and relatives), the main activity of visitors to the Gippsland tourism region is engaging with nature, followed by outdoor activities and sports (cycling, swimming, fishing and boating for example). Outdoor/nature, active pursuits and visiting local attractions are relatively more important for the local study area because of its balance of attractions.

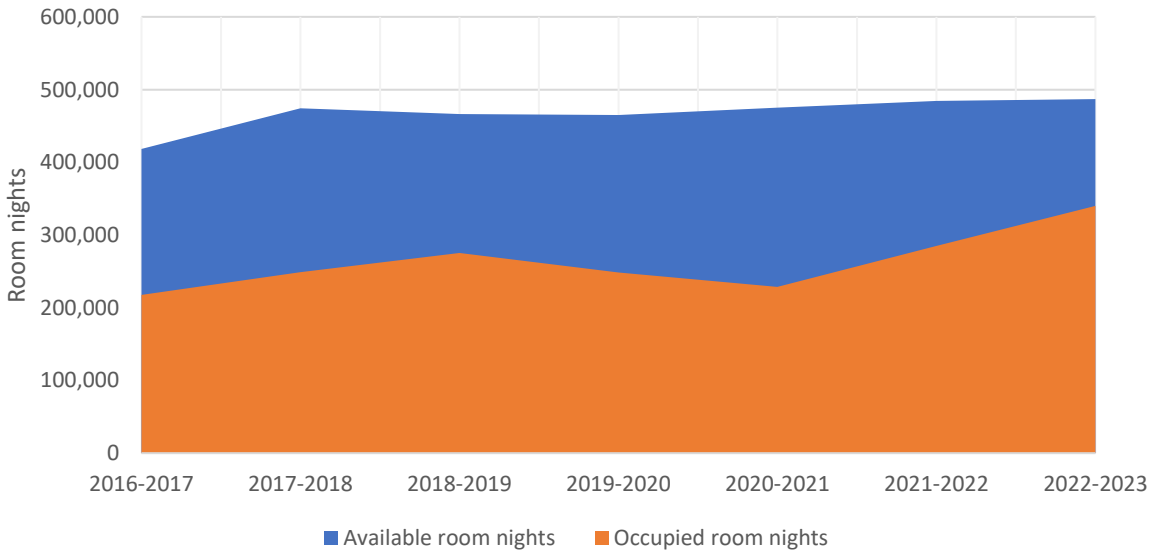
7.3.9 Accommodation

Data on most types of commercial accommodation – hotels, motels, guest houses, serviced apartments and holiday parks – are provided by STR for the Commonwealth Government (see STR, 2024). In 2022-23:

- the regional study area had 127 establishments with 3,520 available rooms
- the Gippsland tourism sub-region had 49 properties and 1,334 available rooms.

Figure 7-25 below shows the supply and demand for these types of accommodation in the Gippsland tourism sub-region (central Gippsland).

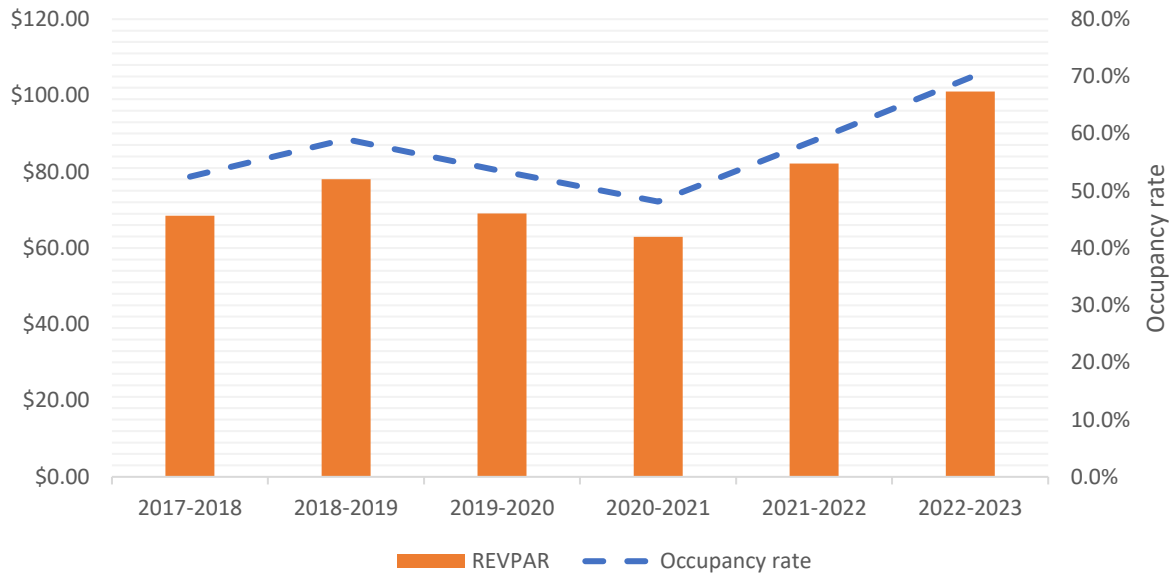
Figure 7-25: Supply and demand for commercial accommodation, Gippsland tourism sub-region, 2016-17 to 2022-23



Source: STR, 2023; Tim Nott

The supply of accommodation has grown slightly over the period. Prior to the COVID-19 pandemic, the demand for accommodation was also growing; and since the pandemic, demand has continued to grow. This is also shown in the occupancy rate of commercial accommodation and the revenue generated per available room (REVPAR), illustrated in Figure 7-26 below. The occupancy rate recovered to pre-COVID levels, and with continued growth, will lead to demand for further accommodation development.

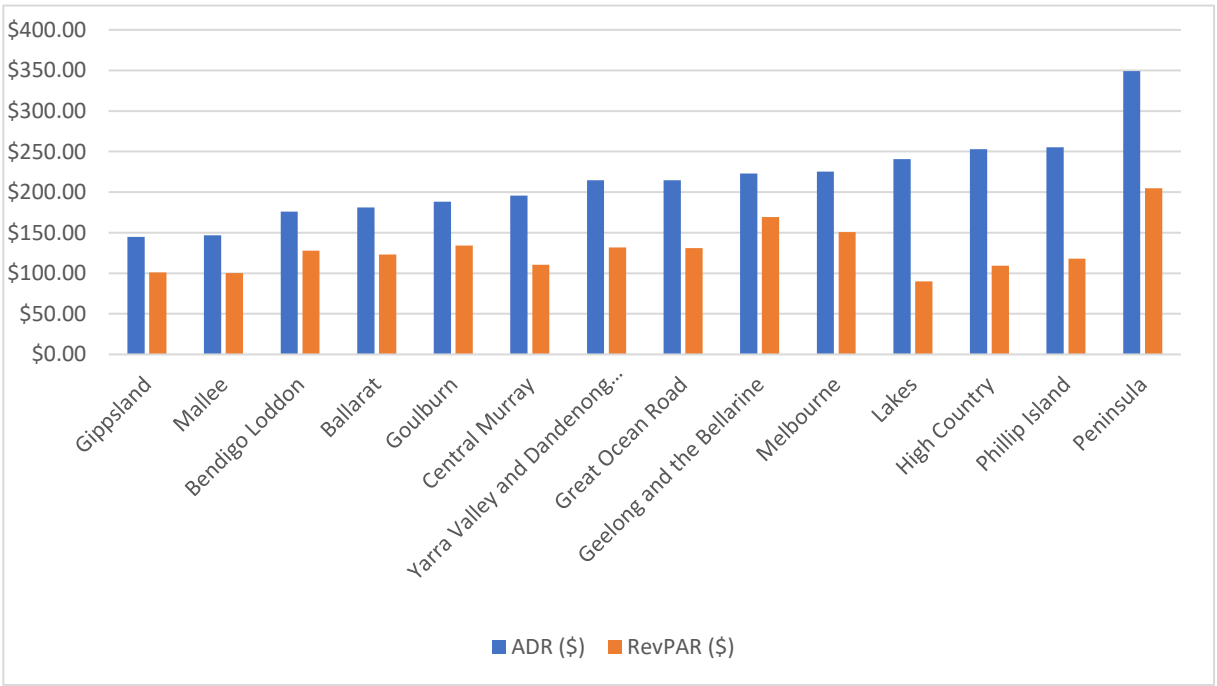
Figure 7-26: REVPAR and Occupancy rate, Gippsland tourism sub-region, 2016-17 to 2021-22



Source: STR, 2023; Tim Nott
Note: REVPAR = revenue per available room

The Gippsland tourism sub-region has a reputation as a relatively low cost holiday destination. This is borne out by a comparison of the average daily rate achieved by commercial accommodation in different regions, as shown in Figure 7-27 below.

Figure 7-27: Revenue generated by commercial accommodation, selected Victorian regions, 2022-23



Source: STR, 2023; ADR = Average Daily Rate; RevPAR = revenue per available room

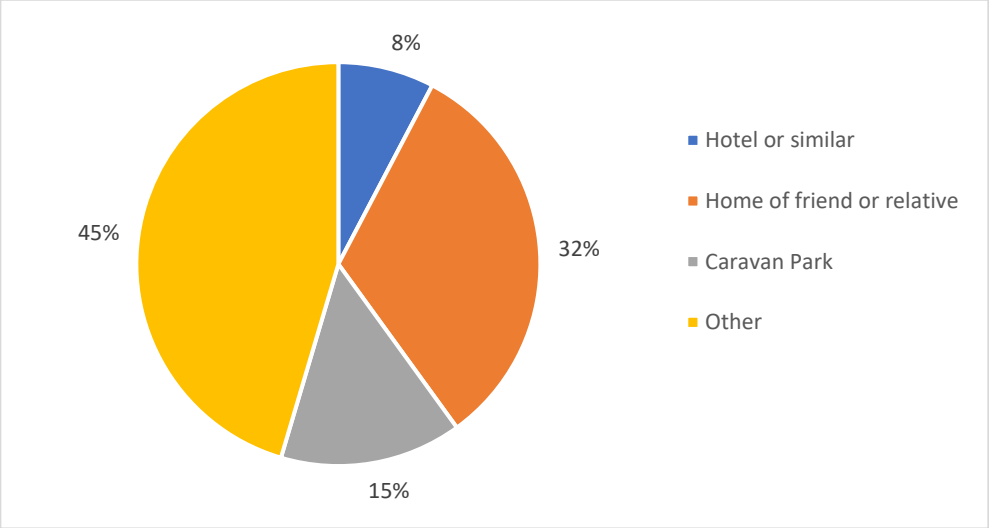
Note: includes all Victorian tourism regions for which data was available

Commercial accommodation in the Gippsland tourism sub-region was, on average, amongst the most inexpensive of all regions; and its rooms generated relatively low revenues. There are several reasons for this:

- There are very few high-end hotels or resorts in the sub-region which would serve to raise the average revenue generated. Even the Mt Baw Baw Alpine Resort in the region is the least expensive of Victoria's alpine resorts in which to stay. The hotels and motels in the towns are mainly geared to working visitors. There are few resorts or "destination" hotels in the sub-region (the closest to the local study area being the RACV resort at Inverloch).
- The region is known for its extensive camping facilities which provide low cost holidays for many, including most of those who stay at Wilsons Promontory, central Gippsland's chief tourism destination. The preponderance of camp sites provides an alternative source of accommodation, keeping prices in the rest of the commercial sector lower than they otherwise would be.
- The area also has a number of low key restricted accommodation facilities, including school camps and the Para Park Cooperative Game Reserve on Sunday Island in Nooramunga.
- The area in general is low-key, with few built attractions and few substantial sea-side towns that could support the demands of a wide variety of visitors.

Camping sites and holiday homes are not included in the commercial accommodation figures. These account for a substantial proportion of visitors as shown in Figure 7-28 below.

Figure 7-28: Visitor nights by accommodation types, South Gippsland and Wellington, 2019



Source: TRA, 2021a (latest available data on this question)
Note: "Other" includes holiday homes, camping and backpackers' hostels

As noted in section 7.1.5, the local study area contained 6,700 unoccupied dwellings in 2021, most of which would have been holiday homes, for the owners use or, in some cases, for short term rental. AirDNA (2025), for example, identifies 1,362 listings in the municipalities of South Gippsland and Wellington on the Airbnb short term rental site (although some of these listings are for hotel and caravan park accommodation).

Camping is a very popular form of accommodation for holiday-makers in the local study area including at:

- commercial caravan parks, with municipal and privately operated parks at, among other places, Yanakie, Foster, Port Welshpool, Yarram, Woodside, Woodside Beach and Seaspray
- commercial and free bookable camp-grounds in national parks and reserves, with Wilsons Promontory hosting by far the largest number of campers, with hundreds of thousands of visitor nights each year, mostly staying at Tidal River on the west coast of the Promontory
- free camping areas in key reserves, including along Ninety Mile Beach at sites such as Reeves Beach, Jack Smith campground and McGaurans Beach

Some camping occurs on the barrier islands of the Nooramunga Marine and Coastal Park, including at St Margaret Island, but there are few official camping grounds and usage is generally low compared with mainland sites.

7.4 Policy framework

There is a complex set of interconnected public policies in place to encourage economic development in Gippsland and its constituent parts. This section provides a sketch of regional development policy, relevant industry policy and, separately, tourism policy. The reader should bear in mind that some parts of the policy environment are evolving rapidly, as governments and priorities change, in light of the impacts of COVID-19, and in response to climate pressures.

Almost every government policy initiative has a geographic or regional dimension. Some initiatives are more explicit than others. Here, the focus is on *economic* development policies.

7.4.1 Regional development policy

1. National

Regional economic development policy at the Commonwealth level currently has four main pillars:

- Regional funding programs, including drought relief, COVID-19 relief and a variety of infrastructure and community development funds
- Regional Deals, based on the City Deals model[2], designed to improve the productivity and liveability of regions, although no Regional Deal has yet been signed for Gippsland or any part of it
- Regional Development Australia (RDA), providing support for a national network of committees made up of representatives of all levels of government, local businesses and community organisations that promote economic development in their areas
- Regional Australia Impact Statements, ensuring that all Commonwealth Government legislation considers any special impacts that new policy would have on regional areas.

This policy framework has been informed by the Australian parliamentary Select Committee on Regional Development and Decentralisation, which reported in 2018.

[2] City Deals are plans for cooperation between Commonwealth, State and local governments to improve economic, social and environmental outcomes. “City Deals work to align the planning, investment and governance necessary to accelerate growth and job creation, stimulate urban renewal and drive economic reforms.”

2. State

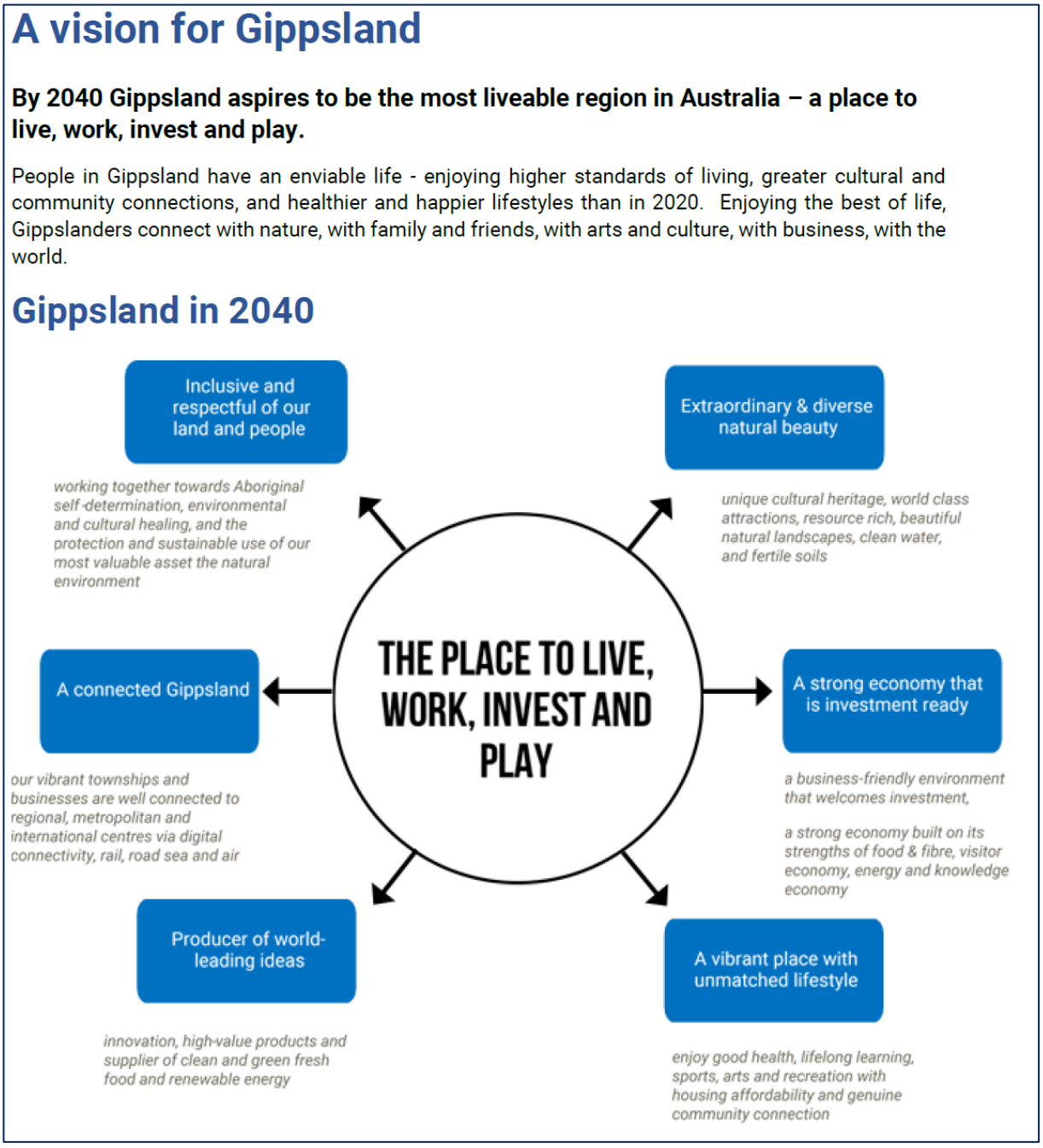
The Victorian State Government has a wide variety of policies and strategies that affect regional development outcomes. The key organisation in this area is Regional Development Victoria (RDV). The RDA for Gippsland – the Commonwealth auspiced organisation - is embedded in the RDV office for Gippsland. This ensures that the State and Commonwealth regional development policies for Gippsland are coordinated.

RDA and RDV as well as other regional organisations, have collaborated in producing the **Gippsland Regional Plan** (RDA et al, 2020). The vision for the region is shown in Figure 7-29.

The Regional Plan identifies strategic assets – which include the proposed offshore wind farm and the electricity transmission infrastructure – and recommendations for action are constructed around six themes:

- Collaborators and partners – cooperating for regional benefit
- Carers of our Country, environment and natural assets – managing the land sustainably
- Creators of a new economy
- A connected Gippsland – improving digital and transport networks
- Highly educated and skilled people, life-long learners – improving skills and knowledge development
- Healthy, happy & inclusive community – improving health and lifestyle outcomes.

Figure 7-29: Gippsland Regional Plan



Source: RDA Gippsland et al, 2020

The Regional Plan has targets which include, by 2040, to reduce greenhouse gas emissions to 75% of 2005 emissions and to achieve 40% renewable energy use.

The Plan has eight "game changer priorities". These include:

- *Increasing digital inclusion throughout Gippsland*
- *Progressing major transport infrastructure and services to open Gippsland to new business, visitors and residents:*

  - *A third Victorian international airport southeast of Melbourne*
  - *Expansion of the Port of Hastings*
  - *Faster Gippsland rail services*
- ***Renewable, clean and community energy initiatives***
- *Hero tourism destinations and Traditional Owner and Aboriginal cultural tourism*
- *Encouraging innovation and investment to sustainably grow our key industries:*
  - *Food and fibre*
  - ***New energy***
  - *Health*
  - *Advanced manufacturing*
  - *Knowledge services*
- *Commercialising carbon capture and storage*
- *Rehabilitating Latrobe Valley's mines and land*
- *Expanding programs that support and enable our most vulnerable communities and people.*

RDA et al, 2020 (emphasis added)

From these priorities, it is clear that renewable energy is an important component of regional thinking about the future:

> *Gippsland is emerging as an exciting renewable and clean electricity region. With three onshore wind farms in our south, Gippsland has prime locations and conditions for further onshore and offshore wind generation, as well as solar farms, battery storage and biomass facilities.*
>
> *…*
>
> *Our renewable and clean energy opportunities are amplified by Gippsland's significant advantages of legacy high-capacity transmission network, support businesses and power industry trained workforce, that also support the declaration for Gippsland as one of Australia's Renewable Energy Zones.*
>
> RDA et al, 2020, p23

RDV has also supported the **Latrobe Valley Authority (LVA)**, the main purpose of which is to assist the Latrobe valley community to transition from economic dependence on coal-fired power stations to more sustainable forms of employment. The Latrobe RDV office has prepared the Gippsland 2035 Transition Plan (LVA, 2023). The LVA has now been merged with the regional office of RDV which continues to work on the Transition Plan. The goals of this plan are to improve access to training and skilled employment; supporting workers transitioning from declining industries; increasing opportunities for local supply chains and local procurement; and improving collaboration to create business and employment opportunities. Renewable energy is seen as a key growth section in the plan, with support for a renewable industry training partnership to, "…identify transition opportunities and what new skills, qualifications and training are needed and should be designed and offered locally to build a renewable energy workforce in Gippsland" (LVA, 2023). Star of the South is one of the partners in this project, along with the Victorian Government, TAFE Gippsland and Federation University.

3. Local

Each of the six local councils in the Gippsland region has policies to promote local economic development, and most have current economic development strategies that coordinate Council

action in this field. In addition, municipal planning schemes identify economic development objectives and strategies against which applications for development approval are judged.

The project transmission infrastructure is located in Wellington Shire; the port to be used during the operation of the wind farm is likely to be in Corner Inlet in South Gippsland Shire (see section 9.9.3). Workers and services from Latrobe City will be involved in the project. The economic development strategies of these councils are therefore most relevant here.

South Gippsland Shire Council has a recent economic development strategy (2021) which has six strategic themes:

- Attracting and retaining investment
- Supporting enabling infrastructure
- Developing key industry sectors
- Building partnerships
- Increasing capability
- Enhancing towns and main streets

"New energy" is one of the key industries identified by the Strategy, as is "understanding the opportunities and implications from development of the new energy sector". The Council recognises that the proposed renewable energy investment will create economic opportunities but may also have some costs that need to be managed.

Wellington Shire Council has an existing economic development strategy (2016) with five strategic objectives:

- Economic diversity – leverage existing industries and assets to diversify the local economy
- Amenity & infrastructure – investment in critical infrastructure to support businesses and residents
- Leadership & governance – providing information and ensuring appropriate partnerships and structures
- Skills & education – improving skills to meet market needs
- Branding – promoting and celebrating Wellington's strengths.

This strategy was intended for the period 2016 to 2022 but continues to guide Council action in this area.

Latrobe City Council is currently renewing its economic development strategy but has an Investment Roadmap (2021) that identifies opportunities and priorities for investment attraction for the municipality. In particular, the Roadmap identifies four key focus areas:

- Industry-led education, skills and training
- Advanced manufacturing
- Regional and rural health
- Circular economy – including renewable energy

Workers with strong technical skills are ready to apply their knowledge in new areas. Access to these skills…. would allow advanced manufacturing to take off efficiently.

Latrobe City Council, Investment Roadmap

7.4.2 Industry development policy

This sketch of industry development policy focuses on Government policy regarding the offshore wind industry.

1. National

The Commonwealth Government provides general support to industry through its taxation and business policies and provides specific industry development assistance for some industries such as agriculture and tourism.

In order to meet its commitment to net zero emissions by 2050, the Commonwealth has a policy of accelerating the transition to renewal energy and the capacity of the renewable energy industry (see Powering Australia, DCCEEW, 2023). This has taken the form of expanded subsidies for households and businesses to transition away from fossil fuels as well as further assistance for renewable electricity generation. Assistance to generators is found in the Rewiring the Nation program - $20 billion in low cost finance to improve the capacity of the national electricity grid to accommodate renewable energy generation. Assistance has also been provided to accelerate the Offshore Renewable Growth Strategy. This has taken the form of legislation to establish the rules for offshore generation; defining areas in Commonwealth waters that are suitable for offshore wind generation; and assisting local industry and communities to participate in the economic benefits generated by offshore wind generators (see box).

Maximising opportunities for Australia's communities and workers

The offshore wind industry presents a unique opportunity for regional communities.

A single 2 GW project can cost between $8 billion and $10 billion. During construction about 1200 workers will be needed. During operations and maintenance about 600 workers will be needed.

Offshore wind is a complex industry with many components, jobs & skills required. This creates opportunities for communities close to offshore wind farms.

An offshore wind industry brings new, long term energy jobs to regions. The Government will require projects to demonstrate their commitment to using Australian manufactured inputs in their projects.

An offshore wind farm requires many people with different skills and training to work together. For example, an offshore wind farm will need:

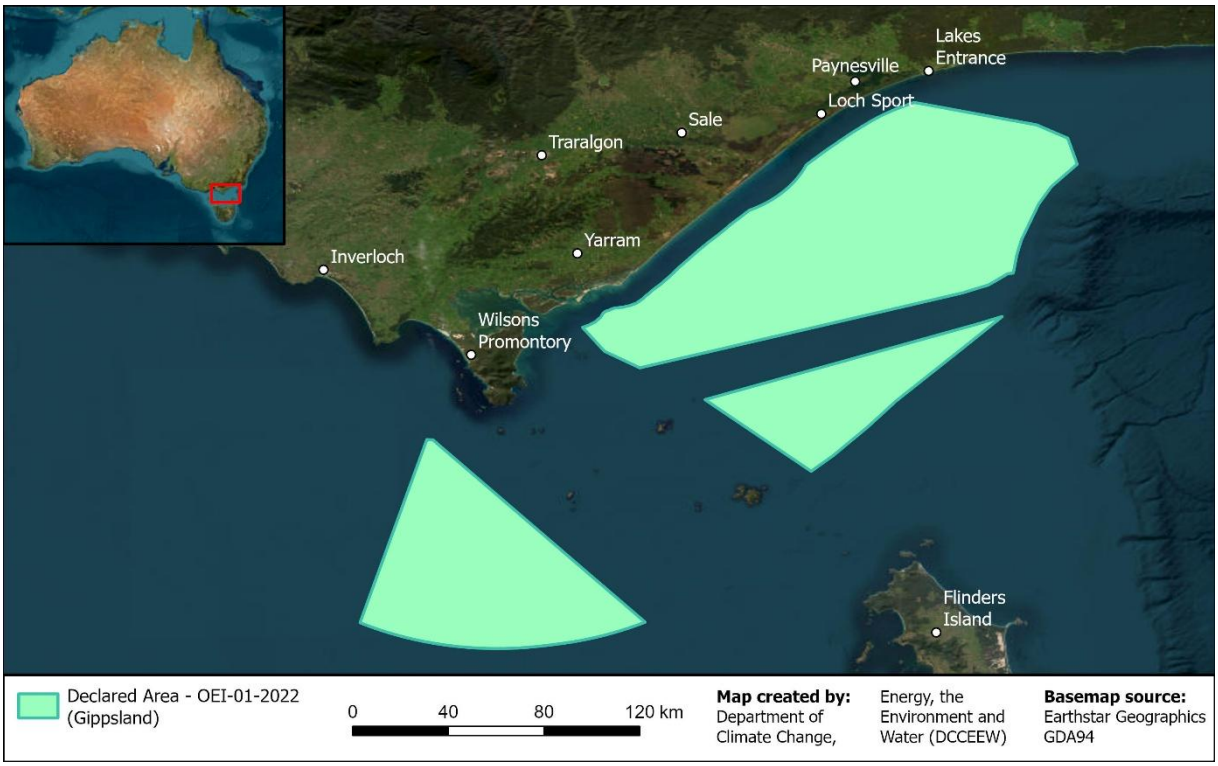
- project managers, engineers, cable installation managers and construction managers
- electrical, construction and mechanical tradespeople
- marine specialists
- business professionals.

Offshore wind developers will be required to talk to First Nations communities and existing marine users in the development of their projects to understand any concerns they have and develop arrangements for co-existence and benefit-sharing.

DCCEEW, 2023a

The Government has declared three areas off the Gippsland coast as being suitable for the potential operation of offshore wind farms. The Commonwealth has granted 12 feasibility licences for proponents to explore the development of wind farms in these areas, including one for the Star of the South project. The areas are a minimum of 10 km from the coast and their shape has evolved in response to community input. The areas are shown in the following diagram.

Figure 7-30: Offshore wind zones, Gippsland



Source: DCCEEW, 2025

2. State

The Victorian State Government has a policy of achieving net zero carbon emissions by 2050 and is currently supporting the development of an offshore wind energy sector to help achieve that goal. The State Government has issued a series of Implementation Statements on the industry, the latest of these, just released at the time of writing, being Implementation Statement 4 (Victorian State Government, 2025). This Statement outlines the State Government's approach, building on previous work and providing more detail. The key points are:

Procurement

- Registration of interest process for offshore wind feasibility licence holders to provide generation capacity for the legislated targets of at least 2GW by 2032, 4GW by 2035 and 9GW by 2040.
- Request for proposals to deliver the target generation capacity by the required timelines through an auction process in 2025/2026.
- Work with Commonwealth to progress necessary legislation and market reform to enable the industry to make its "critical contribution in the energy transition".

Transmission

- VicGrid, the Victorian Government agency responsible for planning and development of Renewable Energy Zones in Victoria. The role includes coordinating delivery of the transmission required to connect new offshore wind resources to the grid. The Gippsland

Offshore Transmission project is proposed to provide a 500kV transmission corridor from the Giffard hub to connect with the grid at Loy Yang in the Latrobe Valley.

- A transmission plan and investment framework will provide further information on future transmission development. This will include details of access arrangements and community benefit models.

Ports

- Assess the role of deepwater ports, including the Victorian Renewable Energy Terminal at the Port of Hastings, to support the construction and assembly of Victorian offshore wind projects. The Statement notes that the Port of Hastings has had difficulty so far in securing the environmental approvals required for its expansion but that this work is ongoing. In any case, other Victorian deepwater ports including Geelong and Portland are also planning to develop facilities to accommodate offshore renewable energy development.[3]

Workforce and industry development

- Set requirements for local content (that is, value adding activity in Australia and New Zealand), with developers expected to:
    - Propose opportunities for investment in the capital expenditure stages, with minimum targets likely after the first tranche of auctions[4]
    - Achieve 80% minimum local content during the operations and maintenance phase of the project (from 2032 onwards)
    - Meet the Major Projects Skills Guarantee requiring 10% of all labour hours to be performed by apprentices, trainees and cadets throughout the project
    - Demonstrate plans to maximise local steel and maximise materials, products and services produced or made in Victoria's regions
    - Work with the Industry Capability Network (ICN) to publish forward work packages allowing local businesses to participate in project procurement
    - Develop an industry engagement strategy that identifies how the project will generate industry development initiatives and investments in supply chain, workforce development, innovation and infrastructure
- Indicated that developers will need to work within the State's Social Procurement Framework, to support the employment of women, indigenous people and others who may be disadvantaged in the labour market
- Deliver a Wind Worker Training Centre, with $4.9 million available from the Victorian Government for its establishment
- Establish a Renewable Energy Jobs Taskforce, with unions, industry associations, local businesses and community groups to provide input into the development of the industry.

Protecting our Environment

- Supporting the environment effects assessment process with improved guidance for risk assessment.

[3] The reader should note that the Star of the South proposal anticipates use of the Port of Geelong and Bell Bay in Tasmania as its deepwater ports.

[4] The first tranche of generation capacity and will not initially be subject to a mandatory target.

Legislative and regulatory reform

- Streamlining the planning and environmental approval process while retaining robust controls.

Traditional owner partnerships

- Engage with traditional owners and support partnerships with the GunaiKurnai land and Waters Aboriginal Corporation as they respond to the offshore wind sector.

Industry, stakeholder and community engagement

- Encourage developers to engage with local communities and provide voluntary benefit-sharing plans. This would be in addition to the State-administered Community Benefit Plan to which developers would contribute.
- Provide digital images showing what the wind turbines off the Gippsland coast might look like (see https://www.energy.vic.gov.au/renewable-energy/offshore-wind-energy/wind-turbine-visualisations)
- Engage with the global offshore wind industry.

Of particular interest here, the ***draft Renewable Energy Zone Community Benefits Plan*** proposes initiatives to support communities affected by the transmission and generation infrastructure. These include:

- Payments to landholders who are affected by new easements (in addition to normal compensation arrangements)
- A Community Energy Fund to fund projects that improve energy outcomes or create benefits from the energy transition
- Resources for traditional owners to support the protection of country and deliver economic empowerment and self-determination in Renewable Energy Zones
- Payments to significantly affected neighbours of the transmission or generation infrastructure.

Importantly for this assessment, the Community Benefit Plan does not, so far, include funds for the development and support of local industries that may be affected by the transmission or generation infrastructure.

3. Local

Local government often promotes and facilitates investment in particular industries as part of its economic development work. In situations where substantial investment is likely to occur, it often works to identify and ameliorate potential disbenefits of, or impediments to the investment. In this case, the **Wellington Shire Council** has recognised that the Star of the South project is but one of a series of renewable energy projects across the Shire and offshore that would require workers, additional housing and other resources. Council has issued a position statement that supports renewable energy while recognising that each individual project needs to be subject to scrutiny of its local impacts (see box).

Wellington Shire Council Position

Support for renewable energy investment/transition

Consistent with the Council Plan, Council supports renewable energy investment and transition in the Wellington Shire. Council recognises, however, that individual renewable energy projects remain subject to required consultation and statutory assessment processes which are controlled by the State and/or Commonwealth Government

Economic benefits

• Council seeks to unlock the economic potential of renewable energy investment and will advocate for and support employment and procurement opportunities for the Wellington Shire community.

Community benefits

• Council will continue to advocate to the State and Commonwealth Government and seek the support of renewable energy proponents to establish lasting and legacy community benefit projects in the Wellington Shire, so the benefits of renewable energy investment are shared.

Wellington Shire Council, 2023

Wellington, South Gippsland and **Latrobe** Councils have commissioned advice about the likely impact of the substantial renewable energy investment in the region and what Councils need to do to ensure that their communities are ready for these projects (see Urban Enterprise, 2023 and 2024). These studies found that the Gippsland Renewable Energy Zone had a large project pipeline including:

- 12 offshore wind farms
- 2 onshore wind farms
- 10 solar farms
- 5 large battery storage projects
- 4 renewable hydrogen projects.

The advice of the studies focused on:

1. **Business supply chain factors** – the need to ensure that local enterprises can participate in at least some of the specialised inputs to the wind farm development as well as general construction and supporting industries. This will require suitable well-located industrial land, with Morwell having an advantage in this regard. Industrial land at BBMT/Port Anthony is extensive but has some servicing constraints.
2. **Jobs and skills** – the projects are expected to generate 8,000 jobs in development and 1,500 ongoing jobs by 2032. While the region has some of the necessary skills in related industries (oil and gas, electricity generation, construction, hospitality etc) there are gaps in skills and in the number of available workers which may lead to project delays. This will require dedicated training and retraining opportunities in the region to allow regional workers to participate fully.

3. **Housing and accommodation** – given the likely need to import some workers into the region and for regional workers to be close to their work places, there will be strong demand for rental housing, commercial accommodation and new housing stock, especially in Foster, Yarram, Leongatha, Korumburra and Sale. Housing demand will be geared towards smaller households with short to medium term stays. This will require ensuring that the residential land supply is available in these towns – especially those closest to BBMT/Port Anthony.
4. **Infrastructure** (ports, roads and urban) – BBMT/Port Anthony is well-placed to support the role of servicing offshore wind farms. Arterial and local road networks may need to be upgraded and urban infrastructure such as drainage, water supply and wastewater treatment in local towns may need to be improved to cope with new people and businesses.

Councils are using this advice in their responses to industry and government and South Gippsland and Wellington Shires have recently been successful in securing $4.7 million from the Commonwealth Government's Regional Precincts and Partnerships Program to improve land-use and infrastructure planning for the energy transition (Sentinel-Times, Aug 18 2025).

7.4.3 Tourism policy

1. National

Tourism Australia, a Commonwealth government agency, provides international marketing and promotion of destinations within Australia. Tourism Research Australia is a Commonwealth agency that undertakes visitor surveys and forecasts of visitor trends. The Commonwealth government also provides grant funding for tourism projects through its regional development programs and others.

2. State

Business Victoria provides marketing, research and support for the tourism industry in the State through its Tourism Victoria branch and grant funding for tourism projects, amongst others, through RDV and other sources. The Government has produced Experience Victoria 2033, a strategic plan to shape the visitor economy over the next 10 years. The plan has five pillars to strengthen the State's tourism offering following the pandemic and bushfires that affected large areas of the State in 2019-20 and significant floods in subsequent years:

- First peoples-led experiences
- Wellness
- Arts and culture
- Food and drink
- Nature.

This plan builds on the Visitor Economy Strategy in 2016 (Business Victoria, 2016) with its emphasis on facilitating investment, targeting Asia and having a stronger focus on regional Victoria.

Parks Victoria manage Wilsons Promontory, the most significant and extensive onshore National Park from which the Star of the South wind farm would be able to be seen. Parks Victoria have commenced the Wilsons Promontory Revitalisation project, which currently has six components:

- An exclusion fence across the Yanakie Isthmus
- An upgrade of the Tidal River visitor precinct
- New accommodation outside the northern park boundary
- New accommodation at Tidal River

- A new Telegraph Saddle trail to connect Tidal River and Mount Oberon
- An upgrade of the Wildlife Walk to make it all-abilities accessible.

These works are due to be complete in 2025.

The Victorian Recreational Boating Strategy Action Plan 2021-2022 describes the development of a Victorian Coastal 'Sail Trail' (DOT 2021b) to increase sailing tourism within the region, and development of McLoughlins Beach as a 'destination location' (DOT 2021a) in concert with a boating tourism plan due to the significant market of marine tourism in the region's economy (DOT 2021a). Details of this plan have not yet been released.

3. Regional

The regional study area is covered by two regional tourism boards – Philip Island and Gippsland. The Gippsland Regional Tourism Board covers the local study area and is of most interest here. The Board is a not for profit committee with members that include local government chief executives and industry representatives. It is supported by state and local government and its role is to "inspire, influence and lead positive outcomes through partnerships across Gippsland" (Destination Gippsland, 2022). The Board delivered a comprehensive destination management plan (Destination Gippsland, 2019) just before the COVID-19 pandemic. The plan was updated in 2022 in the wake of the pandemic and the extensive bushfires that had affected the region in 2019-20. The plan identifies experience "pillars" that support regional tourism and a series of priority projects that will improve and extend these pillars. Table 7-5 identifies these pillars and the priority projects designed to improve and extend the visitor experience. These priority projects are separated into ***immediate hero experiences*** for more well-established and ongoing attractions and ***emerging experiences*** for ancillary or less well-established attractions. Projects which are wholly or partly in the local study area are highlighted in bold.

Vision for the Destination Management Plan

Gippsland's natural beauty, outstanding experiences and life changing moments inspire the world to visit.

Destination Gippsland, 2022

This program of projects shows that the local study area is an important location for the planned future of regional tourism. The revitalisation of visitor facilities at Wilsons Promontory, for example, is one of the most high profile tourism projects in the State. Other projects include the local study area as one of a range of locations – the Recreational Fishing Tourism Plan and the improvement and marketing of village clusters as drive destinations, for example.

Table 7-5: Destination Management Plan - Pillars and Projects

Experience Pillar	Immediate hero experiences	Emerging experiences
World Class Natural Sanctuary	• **Wilsons Promontory revitalisation project and GLaWAC ecotourism and cultural tourism experience** • Buchan Caves visitor precinct • Cape Conran masterplan	• **Tarra Bulga Masterplan** • Yallock Bullock coastal trail • Dark Skies Experience • **Agnes Falls site development**
Lakes, Rivers & Coastal Paradise	• **Implementation of Recreational Fishing Tourism Plan and Recreational Boating Strategy** • Development of Gabo Island	• **Expand marine eco tours** • **Improved boating and fishing infrastructure** • Development of Bullock Island • **Improvements to Ninety Mile Beach**
Paddocks and Ocean Produce	• **Food and Drink Tourism Strategy** • Distillery and Brewery Cluster • Winery and Cellar Door Cluster • **Gippsland food branding**	• **Seafood cluster** • **Support for destination restaurant** • **Epicurean events**
Inspired Adventure	• Gippsland Lakes Aquatic Trail • Dinosaur Trail • Great Victorian Bathing Trail • Croajingalong Wilderness Coast Walk • **Wilsons Promontory Circuit Track** • **Gippsland Odyssey Trail (rail trails)** • Omeo Adventure Hub	• Central Gippsland G7 Mountain Bike Hub • Rokeby to Noojee Trail Extension • Latrobe Valley national sporting and event hub • Baw Baw Epic Adventure Ride • Timber Trail (Tall Trees Ride) • **Traditional owner-led experiences** • **Niche adventures – attracting operators** • Adventure activities at Baw Baw Alpine Resort
Vibrant Local Communities	• **Public art development (eg murals at Yarram)** • **Activation of towns on "hero" trails (including Toora, Port Welshpool etc)** • **Improve performing arts capacity**	• **Sydney-Melbourne touring route** • **Village clusters as drive journeys** • Great Alpine Road • **Night-time economy strategy**

Source: Destination Gippsland, 2022; Tim Nott
Projects based in or with direct relevance to the local study area are highlighted in bold.

In addition to these projects, the updated destination management plan calls for a range of supporting actions – collaboration between regional partners, including the indigenous community; collective marketing and common branding; development of local destination management plans to improve fine grain visitor experiences; and improvements to visitor facilities on public land. Each of these will have implications for tourism development in the local study area.

The Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) is the Registered Aboriginal Party for an area that includes 90-mile beach and the Nooramunga/Corner Inlet. GLaWAC has also purchased land at Yanakie next to Wilsons Promontory National Park as a potential cultural tourism destination.

4. Local

South Gippsland Shire Council has a Visitor Economy Strategy (2021) which identifies the tourism strengths of the municipality and provides an action plan for the next ten years. This action plan recognises the role of the natural environment in the attraction of South Gippsland – especially Wilsons Promontory as the major asset – but focuses on the aspects of tourism that are within Council's control or influence, including visitor centres, infrastructure such as the Great Southern Rail Trail and collaboration with businesses and state and regional agencies.

Figure 7-31: South Gippsland Visitor Economy Strategy (extract)

Source: South Gippsland Shire Council, 2021

Wellington Shire Council has established a tourism, lifestyle and investment campaign in conjunction with local businesses entitled ***The Middle of Everywhere*** which promotes the attractions of the Shire. The tourism component focuses on the natural attractions, touring routes, towns and visitor infrastructure.

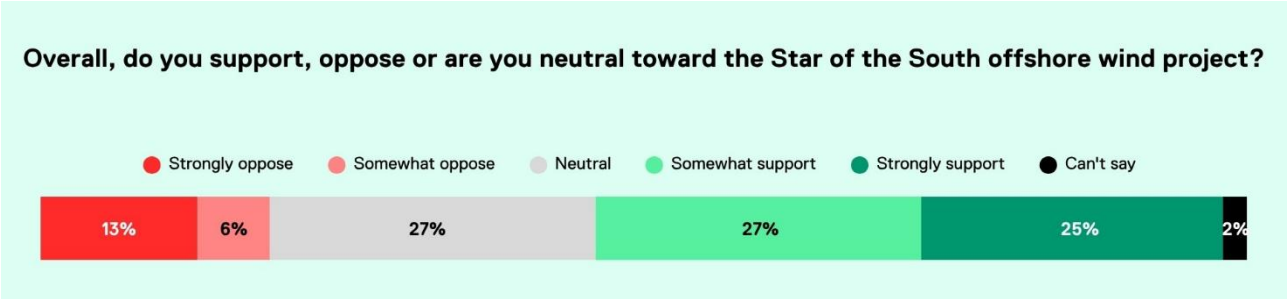
Latrobe City Council also has a tourism web presence – ***Visit Latrobe City*** – that promotes local activities and visitor services.

In addition to Council-wide tourism development and promotional organisations, there are local tourism and business organisations that promote tourism in more limited areas, including, for example, Tarra Territory Tourism Inc, which promotes tourism from Agnes Falls to Woodside, Balook to Port Albert and more; Yarram and District Progress Association; and Port Albert Progress Association.

7.5 Community survey – attitudes to Star of the South Windfarm

Star of the South has undertaken several community surveys of attitudes to the proposed offshore windfarm since 2019. The latest survey was undertaken by telephone in late 2024, with results from 401 residents of Central Gippsland, including 201 in coastal communities (broadly, the local study area defined in this report). Survey respondents skewed to older age groups, with 50% aged 55 or older. Some of the draft results are presented below.

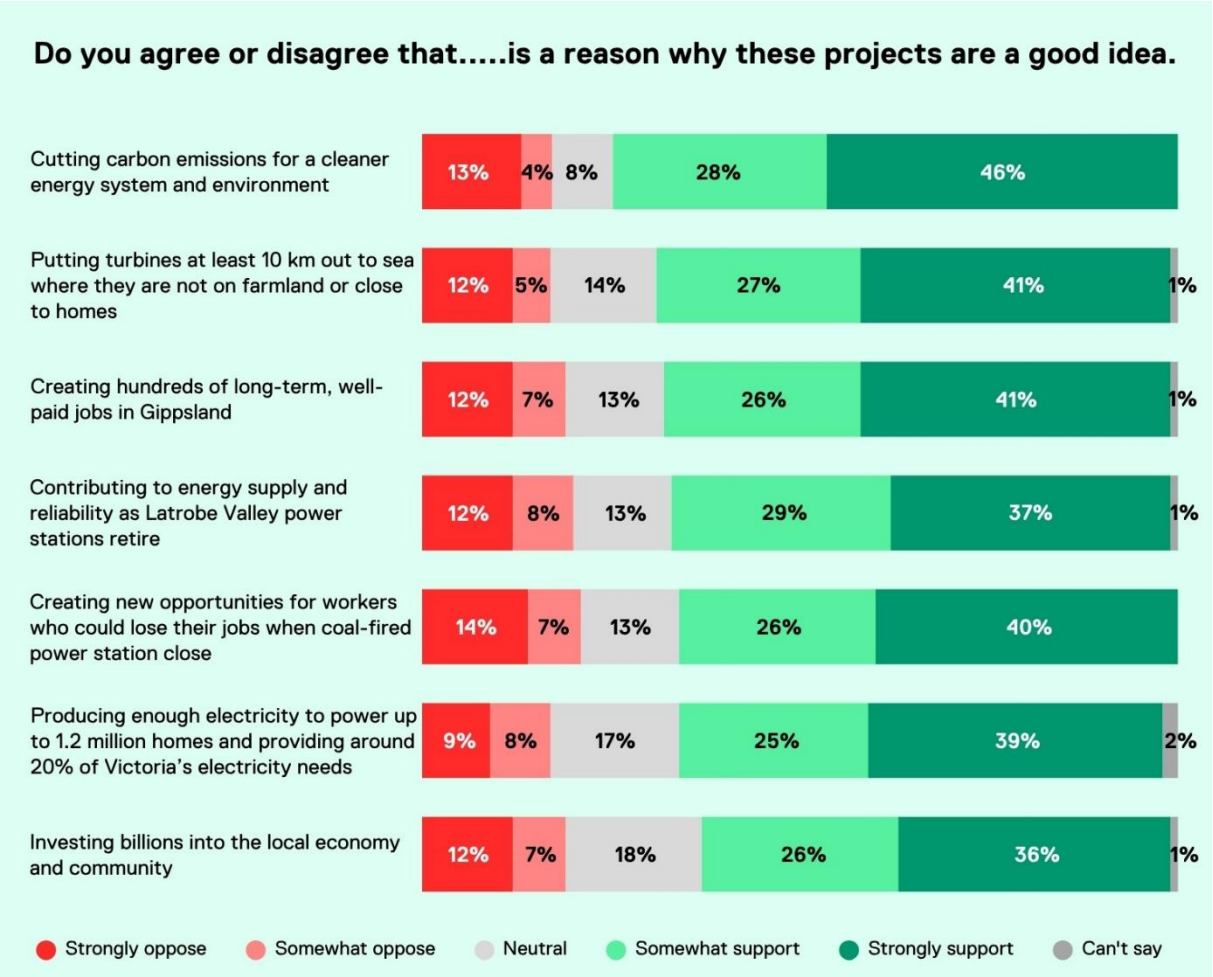
Figure 7-32: Support for Star of the South



Source: Star of the South, unpublished, 2024

Figure 7-32 indicates that project has net support from survey respondents in Central Gippsland. More detailed figures show higher support in coastal communities than elsewhere in the region.

Figure 7-33: Reasons to support the Star of the South project



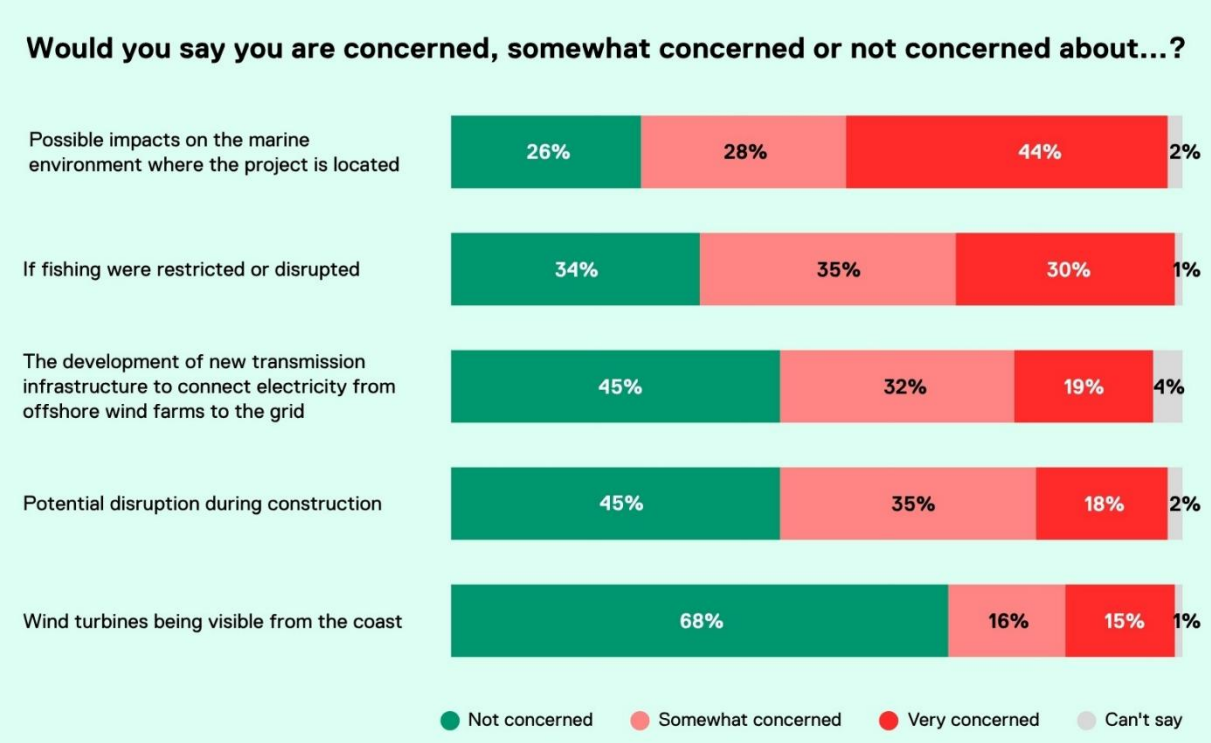
Source: Star of the South, unpublished 2024

The creation of jobs and the reduction of emissions without adverse neighbour impacts were key reasons for supporting the project.

Agreement with these statements was generally higher from:

- Coastal communities
- Women
- People aged 18-44
- Lived in Gippsland under 20 years
- Those exhibiting higher support for Star of the South

Figure 7-34: Concerns about the project



Source: Star of the South, unpublished 2024

Impacts on the marine environment, disruption during construction and the visibility of the wind turbines and the transmission infrastructure were key concerns about the project.

Concerns were higher amongst:

- Inland communities
- Women
- People who have lived in Gippsland for more than 20 years
- Those who are strongly opposed to the wind farm

7.6 Summary – key aspects of the existing environment

1) The local study area, comprising the SA2s containing the onshore infrastructure and the areas from which the wind farm would be seen, is a relatively sparsely populated district, characterised by farming, forestry, small towns and national parks and reserves. The population of the area is forecast to grow relatively slowly, following a bump in growth through the period of the COVID pandemic. The economy of the local study area is dominated by primary production, energy production – the gas from Bass Strait is processed in the area – small town services and tourism. The number of visitor nights in the local study area is estimated broadly at 1.6 million per year, with around 0.3 million of these spent at Wilsons Promontory National Park. These people are attracted mainly by the natural attractions of Wilsons Promontory, Nooramunga, Ninety Mile Beach and Tarra Bulga Parks, as well as the opportunities to fish, boat, cycle, camp and walk amongst nature. Foster, Yarram and the coastal towns and villages provide low key hospitality

services, although tourism supports, directly and indirectly, around 10%-15% of employment in the area.

2) The regional study area, comprising the Latrobe-Gippsland SA4, is the broader region in which the project is set and would provide much of the work-force and supporting services for the wind farm and its transmission infrastructure. The Gippsland region has a range of urban settlements and extensive public lands in parks, state forests and reserves. The region has a varied landscape from the extensive coastline to the crest of the Victorian Alps. It is forecast to have relatively slow population growth compared with the State as a whole. The regional economy is dominated by electricity generation using the large brown coal reserves of the Latrobe Valley. Farming, forestry and natural gas production are also important as well as regional urban services. The urban centres of the region also offer significant manufacturing and civil construction capacity.
3) Local and regional development policies are focused on positioning Gippsland for life beyond fossil fuels. This includes strategies for redeploying skilled workers into the renewable energy sector; for broadening investment in advanced manufacturing and services; and for strengthening the visitor economy.
4) Respondents to a recent survey for the project demonstrate net support for the Star of the South windfarm from the local and regional community. This is on the basis that the project will reduce emissions, create jobs and provide transition opportunities as existing fossil fuel industries wind down. Nevertheless, there are community concerns about the potential environmental impacts of the project and its effects on the landscape and seascape.

8 ISSUES FOR ASSESSMENT

The issues for assessment were identified by reviewing the project description for interactions between the key project components and the proposed construction, operations and decommissioning activities and sensitive receptors. These cause and effect pathways were designated as either impacts or risks based on whether the issues relate to situations that are expected or accidental.

The identified impacts are presented in Table 8-1 and risks are presented in Table 8-2. For each issue, a maximum design scenario has been defined as the basis for the assessments presented in Section 9, Section 10 and Section 11. The table also includes the initial and residual consequence and risk levels arising from the assessment undertaken. With the exception of the effects of a possible oil spill on tourism, all the issues identified in the table are impacts rather than risks.

The complete impact and risk register for this study is presented in Appendix A.

Table 8-1: Assessment issues - impacts

Impact ID	Impact pathway	Initial consequence rating	Residual consequence rating
Construction			
BTM-I001	Disruption of existing businesses and tourism routes as a result of road closures and congestion from construction traffic	Negligible	Negligible
BTM-I002	Loss of primary production for regional processors as a result of land taken out of production	Negligible-Minor	Negligible-Minor
BTM-I003	Construction noise impacts on coastal tourism	Moderate	Moderate
BTM-I004	Adverse impacts on Reeves Beach campground	Moderate	Moderate
BTM-I005	Underwater noise impacts from construction on recreational diving industry	Minor	Minor
BTM-I006	Offshore construction impacts on recreational fishing and boating	Minor	Minor
BTM-I007	Underwater noise impact on marine fauna, disrupting marine tourism	Negligible-Minor	Negligible-Minor
BTM-I008	Changes to regional employment during construction	Major positive	Major positive
BTM-I009	Disruption to the local and regional labour markets	Moderate-Major	Moderate
BTM-I010	Disruption to the local housing and accommodation market	Severe	Minor-Major

Impact ID	Impact pathway	Initial consequence rating	Residual consequence rating
Operation			
BTM-I011	Changes to regional employment during the operational period	Major (positive)	Major (positive)
BTM-I012	Disruption to the housing and accommodation market	Major	Moderate
BTM-I013	Changed seascape impacting visitation and tourism	Minor-Major	Minor-Major
Decommissioning			
BTM-I014	Disruption of existing businesses and tourism routes as a result of road closures and congestion from decommissioning traffic	Negligible	Negligible
BTM-I015	Offshore construction impacts on coastal tourism	Moderate	Moderate
BTM-I016	Underwater noise impacts from facility extraction on diving and marine life	Negligible	Negligible
BTM-I017	Changes to regional employment during decommissioning	Major (positive)	Major (positive)
BTM-I018	Impacts on the local and regional labour market from removal of wind farm jobs	Major	Major
BTM-I019	Impacts on the local accommodation sector from the change in employment opportunities	Moderate	Moderate
BTM-I020	Potential loss of visitation that has built up around the wind farm	Moderate	Moderate
Cumulative impacts			
BTM-I021	Other major projects in the region may compete with Star of the South for space, workers, accommodation and other resources Other projects may reinforce adverse impacts on businesses and tourism in the local study area	Varies	Varies

Table 8-2: Assessment issues - risks

Risk ID	Risk pathway	Initial risk rating	Residual risk rating
Construction			
BTM-R001	Oil spill impacts on tourism	Low	Low
Operation			
BTM-R002	Oil spill impacts on tourism	Low	Low
Decommissioning			
BTM-R003	Oil spill impact on tourism	Low	Low

9 CONSTRUCTION ASSESSMENT

This section discusses the potential impacts and risks associated with the project as a result of construction activities and the associated mitigation measures that aim to reduce impacts and risks to as low a level as reasonably practicable. Mitigation measures referred to are summarised in Section 13.

9.1 Project parameters that form the basis of impact assessment

Table 9-1 specifies the maximum design scenario that has been assessed for construction. These represent the values of project parameters from ranges specified in the project design envelope that represent the greatest potential impact to an identified sensitive receptor or receptor group.

Table 9-1: Maximum design scenario - construction

Area of impact	Key parameter values	Justification
Onshore construction impacts	The works and infrastructure are located within the onshore construction project area, which is defined by the area required for construction of the following: • Onshore Wind Farm transmission system infrastructure: ▪ Up to 8 underground cable circuits with the following upper limit footprints: ▪ Nominal temporary construction corridor width between shore crossing and VicGrid connection hub: 60 m width. ▪ Joints and bays at one-kilometre (approx.) intervals with upper limit joint footprints of 5 m x 15 m x 3 m (W/L/D) ▪ Other temporary construction infrastructure including access roads • Shore crossing infrastructure: ▪ Trenchless shore crossing approaches with maximum length of 1400 m and depth of up to 35 m ▪ Transition joints and bays with upper limit footprints of 10 m x 30 m x 5 m (W/L/D) • Temporary construction compounds with an upper limit footprint of 100 m x 100 m (W/L) Vehicles will be required to support movement of the following during construction: • Workforce • Bulk materials • Cable materials	The onshore construction project area defines the area within which construction activities would be occurring for the project. The anticipated workforce and material volumes define the maximum construction traffic required for the project.
Onshore and Offshore impacts – noise	In assessing the impact of noise, the key parameters for monopiles are: • Up to 152 monopiles required (147 WTG and 5 OSS) • Up to 4,000 kJ peak pile hammer energy • Up to 42 m pile penetration depth	Driving monopiles which produces the largest ensonified area (the area that receives underwater noise above threshold levels) for impulsive noise

Area of impact	Key parameter values	Justification
	• The average piling time per monopile is 2 to 2.5 hours, with a maximum duration of 4 hours per pile to reach target depth • This results in a maximum of 608 hours piling activity • Piling activity is anticipated to take around six months overall and will occur during the two year timeframe for offshore foundation works	sources associated with the project and from the maximum amount of infrastructure, leading to the largest area of impact to recreational divers and marine fauna.
Offshore impacts – displacement	The key parameters are: • Up to 147 wind turbines • Safety zones: A safety zone temporarily prohibits vessel access to a specific area, unless authorised, extending up to 500 metres around eligible infrastructure such as foundations and cables. Safety zones may be considered during construction, maintenance, or decommissioning activities • Protection zones: A protection zone restricts or prohibits certain activities in a specific area longer term, extending up to 1,852 metres (one nautical mile) from eligible infrastructure such as cables. Protection zones may be considered during operation to prevent interactions with installed infrastructure. • Escort vessels: Escort vessels will be used to monitor the offshore project area during construction, communicate with and support the safety of third-party vessels, and avoid disruption to construction activities. • Marine coordination centre: A marine coordination and construction management centre will manage vessel movements during construction and operations, including providing direction to escort vessels and issuing communications to mariners. The marine coordination and construction management centre is not a part of the assessment of the project.	Impacts to tourism from construction are from the maximum amount of infrastructure, installation vessels and associated safety zones leading to the maximum amount of restricted access to the marine area for the longest period of time. The two-stage construction scenario is not expected to change the risk profile compared to a single stage, although vessel operators may prefer a more rapid transition into the operations phase for planning purposes. It is assumed that the overall construction area (and hence degree of vessel displacement) will be broadly similar throughout both the two stage or single stage project as such the project is assessed as having the same area for all stages.

9.2 BTM-I001: Businesses affected due to traffic disruptions

Over the construction period, there would inevitably be some periods when road access through the local study area is restricted, for example, through temporary road closures, speed restrictions or slow-moving large loads.

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- TTP-M001 and SOC-M003: Stakeholder engagement plan

- TTP-M002: Traffic management plan
- TTP-M003: Road safety audits
- TTP-M004: Emergency Management Plan
- TTP-M005: Heavy vehicle transport route assessments
- TTP-M006: Site access strategy

Impacts

These disruptions are addressed in *Technical report X: Transport* for the project (AECOM, 2026a).

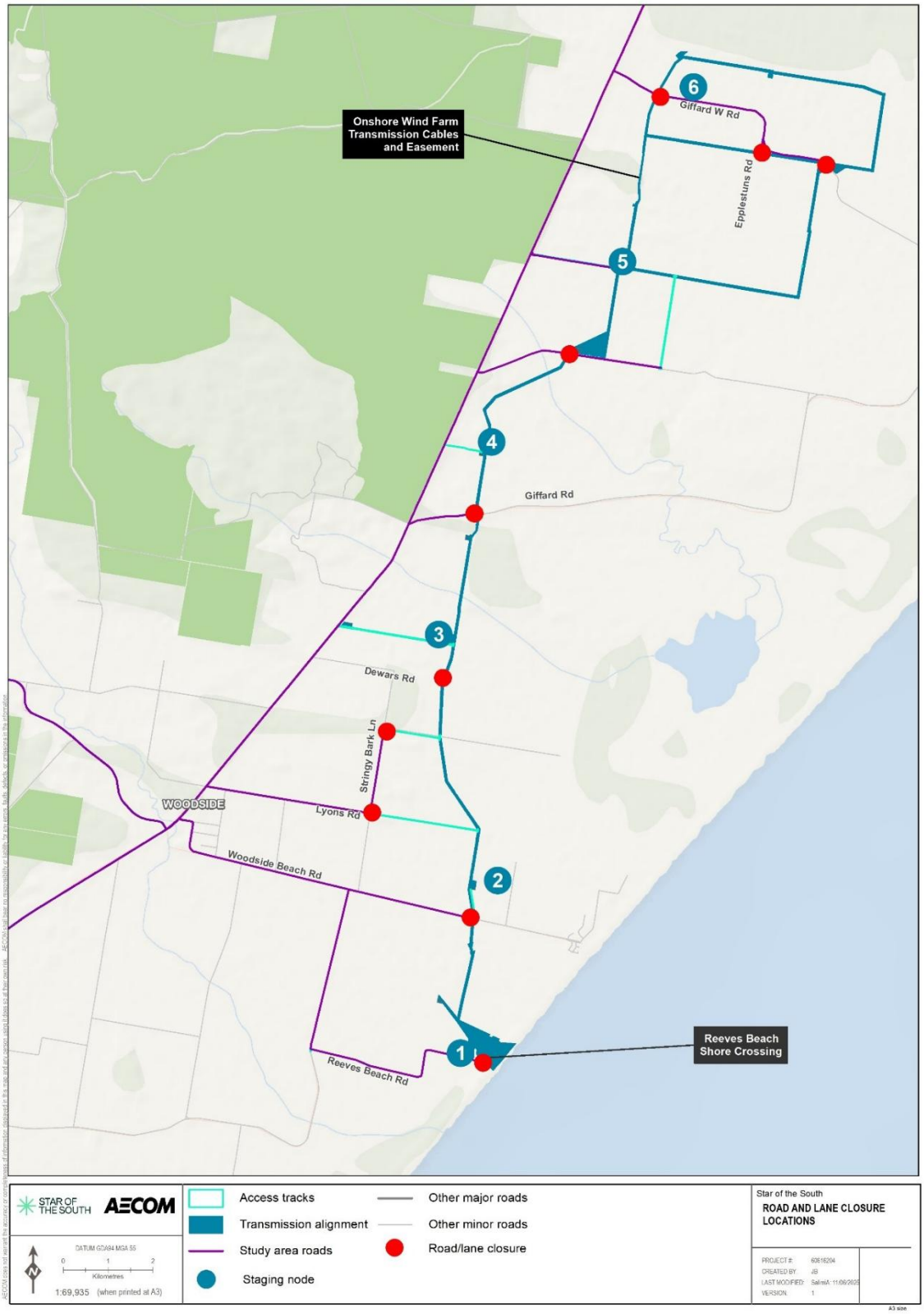
Road and lane closures will occur to allow cable-laying and associated construction activities and will affect roads around the onshore transmission route. These proposed closures are shown in Figure 9-1. These restrictions could increase travel times for local and regional businesses and for visitors to Woodside Beach in particular. This could increase costs for businesses and visitors. In addition, there will be an increase in freight movements and worker traffic across central Gippsland that will marginally increase road-user safety risks.

Designated roads would be closed or partially closed for up to three days at a time and only a few times in total across the construction period. The proposed Stakeholder Engagement Plan (TTP-M001) and Traffic Management Plan (TTP-M002) should minimise disruption by, for example, taking into account bushfire season and major local events when scheduling roadworks. This should reduce the impact of closures on Woodside Beach Road on the holiday season at the Woodside beach township.

Technical report X found that,

> *Overall, impacts to the transport network during construction are expected to be relatively minor and can be managed through measures outlined in a Traffic Management Plan (TMP) for the project, with the road network capacity found to be sufficient to accommodate anticipated traffic volumes.* (AECOM, 2026a)

Figure 9-1: Road and lane closure locations



Source: AECOM, 2026a

Consequence Rating

Table 9-2: BTM-I001 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The anticipated traffic disruptions will affect roads in the local study area for several days at a time and only on a few occasions in total over the onshore construction period. Local visitors and businesses will be able to adapt.	If the lane closures on Woodside Beach Road occur in peak periods – key holidays and events – visitors may be deterred, and local businesses may suffer. Otherwise, visitors and local businesses will tolerate the small disruptions proposed.	Visitor numbers and local businesses should recover immediately following the road closures unless peak period disruption causes visitors to forego repeat visitation.	Low
Magnitude			
Extent	Duration	Severity	Rating
The lane and road closures are restricted to minor roads around the onshore transmission route, although speed restrictions may operate on the South Gippsland Highway.	Road and lane closures will be in place in any one location for only a few days in total over the two year onshore construction period	Lane and road closures will cease once works have finished.	Low
Consequence Rating			**Negligible**

Mitigation

The proposed Stakeholder Engagement Plan should provide for a two-way flow of information and advice between the project and the local and regional community. The engagement would provide information about local festivals and events, allowing Star of the South to better coordinate its construction timetable.

The Traffic Management Plan (TTP-M002) in relation to business and tourism will include assessment and management of construction impacts and changes, and will be developed in consultation with relevant road authorities.

Specifically, this will include the programming of construction works to major traffic changes during key holidays in the region, where possible.

Mitigation measures

BTM-M001: **Stakeholder Engagement Plan – Business and Tourism**

A Stakeholder Engagement Plan will be developed and implemented prior to construction in accordance with TTP-M001 .

In relation to potential changes to local business and tourism during the construction phase, the plan will include communications, enquiries and complaints management procedures that allow feedback

from Councils and the local community. Relevant business and community organisations will be included in stakeholder engagement activities.

BTM-M002: **Traffic Management Plan – Business and Tourism**

The Traffic Management Plan required in TTP-MM02 will include assessment and management of construction impacts and will be developed in consultation with relevant road authorities. In relation to business and tourism, the plan will include the programming of construction works to avoid major traffic changes during key holidays in the region, where possible.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-3: BTM-I001 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	The incomes of individual businesses in the local study area should not be adversely affected by traffic delays.
Would regional output and employment be reduced by this impact?	Any impacts on regional output and employment would be negligible.
Are opportunities to grow regional output and employment maximised?	Opportunities to grow regional output and employment would likely be unaffected.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers should not be adversely affected despite some minor delays on Woodside Beach Road out of peak periods.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity would not be diminished.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	No local and regional policy preferences would be affected.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Low**
Residual consequence rating	**Negligible**

Even with the mitigation measure in place, very minor disruption remains likely as a result of occasional road congestion and closures due to construction. However, impacts on the local and regional economy would be negligible.

9.3 BTM-I002: Loss of primary production for regional processors

The draft report on agricultural impacts of the project by RMCG (*Technical report S: Agriculture and Forestry*) found that the development of the onshore cable and associated infrastructure would have a modest impact on farm and forestry production. These losses in primary production may have an impact on regional processors and associated service businesses.

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- AGM-M001: Compensation for economic impacts
- AGM-M002: Preparation of landholder specific Property Management Plans

Impact

Losses in ***farm*** production experienced during the construction phase of the project would be unlikely to have a significant impact on regional processors because of the ability of the regional farm sector to make good any shortfall in supply from the study area.

Forestry losses from the creation of a transmission line easement would include one production rotation over the life of the wind farm project (that is, the construction and operational phases of the project). This would result in the loss of between $71,000 (alignments Option AB and C) and $260,000 (alignment Option D)[5] in production value once over the life of the project, depending on the precise alignment of the transmission easement through the plantation areas. This represents less than 0.1% of the total annual plantation forestry production for Victoria (RMCG, 2025).

It is likely that much of the affected forestry products are processed in the region and that any loss in production may be felt by these downstream processors, including timber mills and dryers, the Maryvale pulp mill, transport firms and the construction sector. While the affected area contributes a very small share of State and regional production, replacing that share is more problematic than with farm production. Forestry is currently subject to a range of pressures that are tending to reduce supply including:

- "Repeated incremental losses of plantation forestry areas to various infrastructure projects" in the area (RMCG, 2025)
- Phasing out of the use of native forests in favour of plantations
- Increased forest fire risk, especially in plantations, as a result of climate change

These factors may mean that any loss of production is not readily replaced from within the region, with an impact on supply to regional processors and a consequent impact on revenues and jobs.

Figures for plantation forestry revenues and employment are not readily available for the region. However, using data from Schirmer et al (Schirmer et al, 2018, p16) it is possible to make a broad estimate of potential impact.

- Expected loss of plantation output = $71,000 to $260,000 once over the life of the project (from RMCG, 2021)
- Potential loss of downstream output, using a multiplier of 1.1 for indirect impacts (derived from Shirmer et al) = $78,000 to $286,000

[5] See *Victorian Environment Effect Statement Attachment I – Victorian works project description* for description of alignment options. These relate to alignments of the transmission line close to the Vicgrid connection at Giffard.

- Output per FTE job per year in downstream activities = $252,000 (derived from Schirmer et al, 2018)
- Potential number of FTE jobs lost over the project period = 0.3 to 1.1 for one year out of 37 years.

This figure would be reduced to the extent that alternative sources of plantation timber can be found.

Consequence Rating

Table 9-4: BTM-I002 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Farming output is likely to be easily sourced from other farms in the region. Forestry output may not be so easily sourced, but small losses such as this may be within the normal seasonal fluctuations for the timber processing industry.	Regional processors are likely to be tolerant of small variations in supply of raw materials.	Timber processors may not recover the wood supply from other sources but would be able to continue to operate with little or no change.	Low
Magnitude			
Extent	Duration	Severity	Rating
May affect processors throughout the region.	For the whole life of the project.	This is a permanent impact but may be hidden by other industry changes.	Low-Medium
Consequence Rating			**Negligible-Minor**

Mitigation

No further mitigation measures beyond those already in Technical Report S: Agriculture and Forestry, are suggested here.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria.

Table 9-5: BTM-I002 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	The net incomes of some forest product manufacturing enterprises may be reduced as a result of the loss of raw materials. However, any such loss would be small and experienced over a long period with negligible impacts.
Would regional output and employment be reduced by this impact?	In the event that alternative timber supplies cannot be found there would a small negative impact on regional output over the life of the project.
Are opportunities to grow regional output and employment maximised?	Opportunities for regional output and employment may be diminished marginally
Would visitor numbers and their distribution be adversely affected by this impact?	No impact on visitor numbers
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity to host investment would not be enhanced.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	This impact would not improve employment diversity or strengthen existing key industries.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Low-Medium**
Residual consequence rating	**Negligible-Minor**

A small and temporary loss of employment is possible over the life of the project but the consequences for the regional economy would be small.

9.4 BTM-I003: Construction noise impacts on coastal tourism

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- ONV – M001: Managing noise and vibration from construction activities
- ONV – M002: Out of hours construction noise mitigation measures
- ONV – M003: Vibration safe working distances
- ONV – M004: Transmission system construction – batch locations – noise control
- ONV – M005: Unavoidable works – shore crossing drilling – noise control
- ONV – M006: Unavoidable works – offshore piling – noise control
- ONV – M007: Noise and vibration monitoring

Impacts

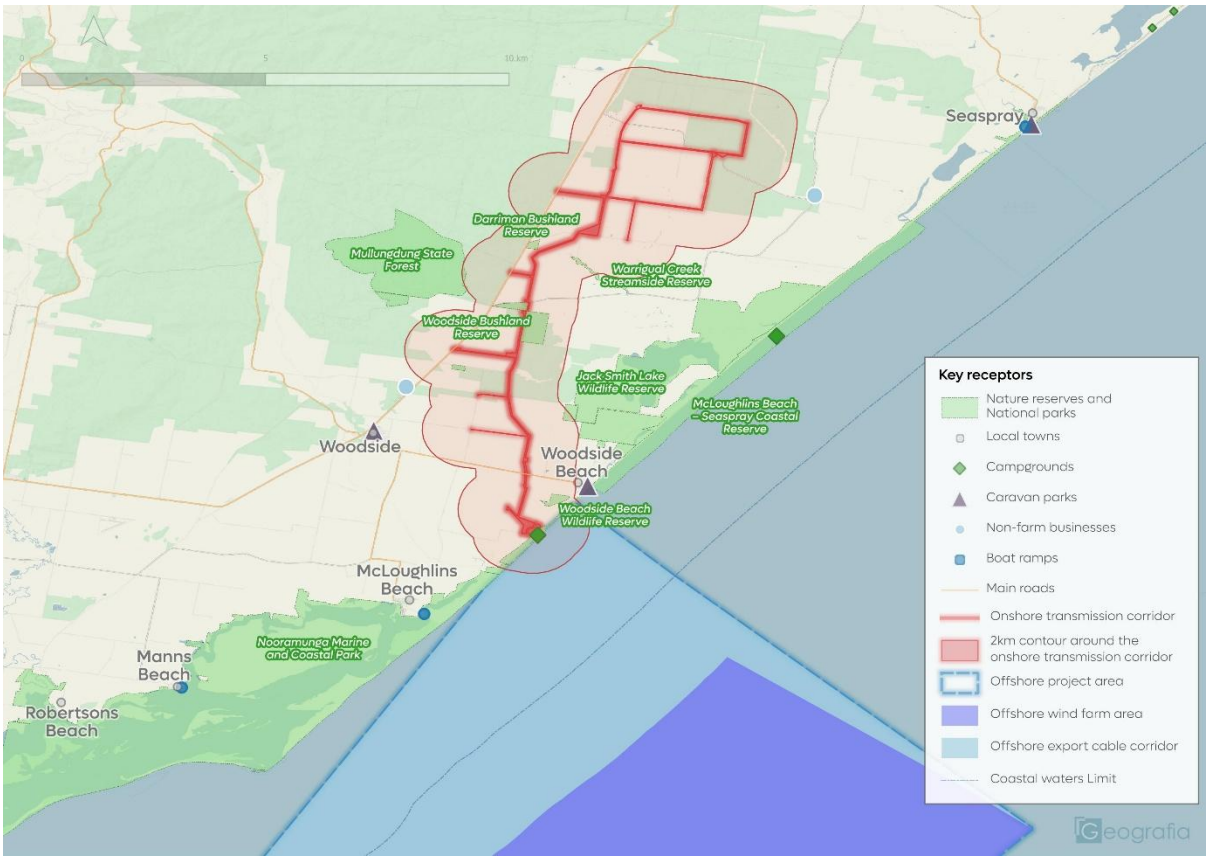
The **onshore construction** for the project includes the shore crossing at Reeves Beach (see BT04) and the installation of underground transmission infrastructure to connect with the VicGrid facility at Giffard. This will involve trenching; trenchless crossing of key roads and streams; construction and operation of work-sites, access roads and batching plants; construction and worker traffic and operation of construction machinery. This will affect mainly the farming families along the transmission corridor and, with the exception of the trenchless crossing for the shore crossing, works will generally be undertaken during normal day-time construction hours. The onshore construction works are expected to take approximately 26 months to complete according to Star of the South (see section 2.7). The trenching and cable installation will move across the landscape such that the works will be concentrated in one place for several weeks before moving to the next location. The shore crossing works, undertaken concurrently, are expected to take up to 27 months. Five batching plants are proposed at locations along the transmission route; each is expected to operate for up to a year.

For onshore works, key receptors are:

- Nature reserves – the McLoughlins Beach – Seaspray Coastal Reserve, Woodside Bushland Reserves, Mullungdung State Forest, Warrigal Creek Streamside Reserve, Darriman Bushland Reserve
- Campground - Reeves Beach campground (see BT04)
- Townships – Woodside and Woodside Beach townships,
- Individual non-farm businesses – including Woodside Ranch Luxury Farmstay, Barooma Homestead and any other home-based businesses in the area

These are shown in Figure 9-2. It should be noted that, while precise visitor numbers are not available from the land managers, none of the inland reserves shown attracts significant numbers of tourists, although they may be visited by local residents.

Figure 9-2: Key receptors within 2,000 m of the onshore construction corridor



Source: SOTS; Geografia

Technical Report W: Noise and Vibration (AECOM, 2026) estimates noise levels at nearby receptors, including houses, businesses and nature reserves. The conclusions of Technical Report W are as follows:

- For construction noise from the onshore transmission system:
  Construction noise may interfere with domestic and recreational activities at noise sensitive receptors less than 2000 metres from mobile works for approximately four weeks.

  Construction noise may interfere with normal conversation at noise sensitive receptors less than 2000 metres from mobile works for approximately four weeks
  (AECOM, 2026)

  The character of the noise will be typical of rural construction works – intermittent heavy machinery, earth moving, rock crushing and occasional higher pitched sounds such as chainsaws. This noise may be heard from receptors during normal construction hours (07.00 to 18.00 on weekdays and 07.00 to 13.00 on Saturdays) and for limited periods in most cases. Of the reserves likely to be most affected, only Reeves Beach campground in the McLoughlins Beach – Seaspray Coastal Reserve, has a locally significant number of tourists, who come mainly to enjoy the beach and to fish. The affected area of this Reserve will also be impacted by other sources of construction noise (see section 9.5 on Reeves Beach). Occasional visitors would be able to access

beach areas in the same Reserve, further from the source of noise via Woodside Beach or McLoughlins Beach.

- For noise from batching plant operations:

  Noise may be heard from key receptors but will be below the acceptable threshold for such operations set by the Victorian EPA, except Reeves Beach campground and Woodside H27 Bushland Reserve, where there "the noise may interfere with human tranquillity and enjoyment outdoors" (Technical report W).

- For noise from the shore crossing works, including some 24 hour working and near-shore vessel operations:

  Noise will be disturbing at Reeves Beach campground (see section 9.5). Extrapolating from Technical Report W, the construction noise may occasionally be heard from the closest parts of the McLoughlins Beach-Seaspray Coastal Reserve and from the southern end of the Woodside Beach township but this would not be disturbing.

> *Construction noise is not expected to interfere with domestic and recreational activities at noise sensitive residential receptors in the vicinity.* (Technical Report W)

In summary, the general noise and disturbance created by the construction of the onshore transmission line is expected to be relatively limited in scale and duration. The noise from the cable installation will be noticeable up to two kilometres from the area of work for approximately four weeks in any one location. This will affect several local nature reserves as well as farms and some ancillary farm businesses including the Evolve Equine Assisted Learning and Development (Dewars Road, Woodside). The number of tourist visitors to the low key nature reserves is very small and unlikely to reduce significantly as a result of occasional noise. The impacts on the income of the equine businesses is likely to be small to non-existent, especially considering that the works will not continue overnight. The horse riding business may experience a temporary loss of daytime tranquillity but this is likely to be equivalent to occasional nearby agricultural operations such as logging, harvesting or barn construction.

The shore crossing at Reeves Beach will create a significant local disturbance for approximately 27 months. This will also affect the beach for a limited distance either side of Reeves Beach and may deter beachgoers, including recreational fishers, from accessing this area. While occasionally audible from Woodside Beach township, this is not expected to interfere with sleep or normal residential activity there.

The **offshore construction** of the wind farm would involve the installation of large turbines, pile driving and vessels manoeuvring in an area broadly 10 to 40 kilometres from shore, and closer to shore for some activities such as laying the export cable and constructing the shore crossing. These activities would be seen from the shoreline and, to some extent, from the coastal communities in the area. The noise from pile driving for the wind turbine foundations may occasionally be heard from the shore and be disturbing. The pile driving campaign is expected to last six months, with pile driving estimated to last for up to 608 hours during that period. While it is intended that pile driving is undertaken during daylight hours, there may be occasions when the process extends into the night.

Pile driving is noisy – more than 100 decibels at its source. However, the nearest onshore receptors are 10 km from the closest foundation and the majority of the foundations are more than 20 km from the nearest receptor. The noise will be progressively attenuated from the source such that, in the great majority of cases, it is unlikely to be heard from the shore. Nevertheless, for the closest foundations, and with the wind in the right direction (which is around 5% of the time), people at key receptors may be able to hear the piling noise and this may be disturbing, especially if that piling happens to extend into the night.

Key receptors are the beaches of the McLoughlins Beach-Seaspray Reserve (including Reeves Beach campground) and the coastal communities which stretch from Port Albert and Sunday Island to Woodside Beach and include Manns Beach, Robertsons Beach and McLoughlins Beach. On-water boating and fishing activities in the area could also be affected by noise during this phase of the construction.

The specifics of the noise impacts are presented in *Technical report W: Onshore noise*, which concludes:

> *Offshore works may interfere with sleep during the night at noise sensitive receptors on the coast.*
>
> *Offshore works may interfere with domestic and recreational activities at noise sensitive receptors on the coast for short periods.* (Technical Report W)

The mitigation measures recommended in Technical report W: Onshore noise include reducing the level of noise at the source through modification of equipment, ongoing monitoring, and providing notification to the community when weather and geotechnical conditions indicate sound may be audible.

For much of the construction period, it seems likely that the piling noise will not be experienced as a significant disturbance from the shore, being too far away or masked by weather conditions. Nevertheless, there may be occasional noise disturbance and this may put off visitors. The number of visitors affected is impossible to predict with certainty. It may be that the piling campaign falls outside the key holiday periods, and that there is little to no noise. In this case, the impact on visitation is likely to be minimal. If the piling campaign proceeds through key holidays and the piling noise can be heard 5% of the time, when the wind is blowing in the right direction, then this could amount to up to 30 hours over the six month campaign. Such noise is likely to be very faint for the piles furthest from the shore but could be disturbing for closer piling activities, especially if these extend into night-time hours.

If the noise is disturbing, some visitors may come away with a poor experience of the area that could result in marginally lower visitation during the piling campaign and beyond because:

- Owners of beach houses in the coastal hamlets may visit less often
- Members of the Para Park cooperative on Sunday Island may visit less often
- Visitors booking weekly or weekend holidays may choose other destinations, either in the region or elsewhere
- Casual visitors may stay for fewer nights
- Some day trippers may choose other destinations in the region

It should be noted that visitation also depends on a wide range of other factors, including the weather, relative accommodation prices and general economic conditions.

Taking into account commercial accommodation, holiday homes and visiting friends and relatives, the potentially noise-affected areas between McLoughlins Beach and Woodside Beach currently have approximately 50,000 visitor nights per year. The spending of these visitors supports accommodation, retail and other tourism businesses in the affected communities, elsewhere in the local study area and further afield.

If the possible noise impacts are sufficient to dissuade some people from visiting affected areas, it is likely that a portion of any displaced visitors would seek alternative locations within the local study area or the regional study area. There are alternative coastal and fishing destinations further west in Corner Inlet and to the west of Wilsons Promontory, or east along Ninety Mile Beach, the Gippsland Lakes or Croajingalong. However, some visitors could seek alternative destinations outside Gippsland or may simply cancel their visit or postpone them until the noise impacts (or the perception that there may be noise impacts) are gone. Any loss of spending by these visitors would represent a real loss to the affected businesses and communities and to the region. The likelihood of these losses is not known because the scale of the noise impacts are not known with certainty.

The businesses potentially affected include mainly the accommodation places directly impacted by the noise, and also those that cater for people visiting that part of the coast. Directly affected businesses include:

- Caravan Park in Woodside Beach
- Short term rental accommodation in Mclaughlins Beach, Manns Beach, Robertsons Beach and Woodside Beach

Indirectly affected businesses could include:

- Other accommodation places in surrounding settlements such as Port Albert, Woodside and Yarram, which may cater to people who would otherwise use affected beaches
- Businesses that cater to visitors including those in the Port Albert and Yarram town centres – cafés, restaurants and takeaway food businesses, supermarkets and bait and tackle shops, for example

However, any loss of spending would likely be small because of the limited time of the possible noise impacts. In addition, there may be offsetting factors which reduce any potential impacts, as detailed below.

Firstly, Star of the South would bring people into the region to work on the project. These people would make local expenditures that may offset tourism losses to some extent. The scale of project employment in Gippsland is not finalised at the time of writing. A discussion of the likely maximum and minimum number of jobs in Gippsland and the timing of project employment is provided in section 9.9. Project employment in Gippsland during the installation of the wind turbine foundations is estimated to peak between 140 and 1,400 in any one quarter. Section 9.9.5 identifies that the project would generate up to 683 direct annual FTE jobs in Gippsland during construction. Even if only half these jobs were taken by people requiring short term accommodation, they would generate up to 125,000 additional visitor nights per year, some of which could be provided by short term rental properties where bookings might otherwise be affected by intermittent noise.

Secondly, there may be an increase in people visiting the area to look at the wind farm construction because of the impressive size of the turbines and because this is intended to be the first offshore wind farm in Australia.

There is a risk that the impacts of construction noise would be sufficient to put off some visitors to the affected coastal communities, especially if the offshore piling noise is audible during key holiday periods. However, it seems likely that, overall, the offsetting factors would more than compensate for any losses. Nevertheless, impacts may be felt by individual businesses which are not able to take advantage of the influx of workers or windfarm visitors.

Consequence Rating

Table 9-6: BTM-I003 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Accommodation places may be able to adapt to new to new sources of income, with workers temporarily replacing tourists in some cases	Tourism businesses in the region are typically small and already operate with a relatively high degree of uncertainty associated with seasonal conditions. Many are unlikely to be tolerant of adverse changes	Once the noise of the offshore construction has gone, visitation should return to normal (although see the discussion in section 10.4).	Medium
Magnitude			
Extent	Duration	Severity	Rating
The impact will be felt directly by coastal communities and accommodation providers between Port Albert-Sunday Island and Woodside Beach.	The impact may be felt intermittently over 6 months, with the possibility of some lingering adverse reaction from visitors who have been affected.	The noise may very occasionally be loud enough to disturb sleep but the impact on visitation is likely to be offset by the influx of workers. The noise will cease after construction.	Medium
Consequence Rating			**Moderate**

Mitigation

The mitigation measures proposed in Technical Report W: Noise and Vibration would be useful in reducing the noise at source, as far as reasonably practicable, and in keeping the community informed about the times when more noisy construction is likely.

Even after reducing the noise at source, there may still be some disturbance to the recreational enjoyment of local reserves, the beach and the coastal settlements between Port Albert and Woodside Beach, including occasional disturbance to sleep.

Further measures outlined here aim to mitigate construction impacts on local businesses. Measures to support the tourism sector post-construction are discussed in the Operational Impact Assessment (see section 10.4).

- **Establish a complaints mechanism for businesses and individuals affected by the wind farm construction as part of the Stakeholder Engagement Plan**

A complaints mechanism will form part of the Stakeholder Engagement Plan. This plan will include a process to advise of all onshore and offshore construction timing, sequencing and

impacts. The project will provide respite offers that reflect the individual circumstances and level of impact (see ONV-M005).

- **Support accommodation providers in noise affected areas**

At certain times the wind farm construction would require the services of large numbers of workers in Gippsland, as outlined in section 9.9.3. Some of these workers would be local residents; however, many would be transient workers who would require short term accommodation. A Workforce Accommodation Strategy has been provided by Star of the South (see 9.11 for more detail). This identifies a stepped series of responses to ensure that the workforce does not overwhelm the local accommodation sector. One of the first steps in the strategy is for workers to seek accommodation in the short term rental market. This could include accommodation where the occupancy rates may otherwise be affected by noise.

Star of the South will engage with the local accommodation sector as part of its Workforce Accommodation Strategy to coordinate demand and availability. Understanding the likely demand would enable accommodation providers to plan investment[6]. Even if peak employment does not coincide with coastal noise impacts, improved revenue for accommodation businesses during some parts of the construction period would allow those businesses to better weather any downturn that may result from construction noise or other impacts.

- **Establish a Community Benefit Fund**

Star of the South will develop and implement a Community Benefit Fund, funded directly by the project, working in partnership with the Gippsland community across all phases of the project's life by sharing financial benefits to contribute to thriving regional communities. Funding may contribute towards tourism and recreation initiatives, amongst others, decided in collaboration with the community.

Sharing the financial benefits of the project with the community in this way will also provide opportunities to resolve issues that may arise during the construction process. If the collaborating parties agree, this could include measures designed to improve visitation outcomes in affected areas by, for example, creating or enhancing visitor attractions and bolstering tourism promotion.

The details of this fund, including the decision-making framework and the scale of resources available, have yet to be resolved. Wider community participation in the fund would occur once it became clear that the project was proceeding to construction.

Mitigation measures

BTM-M003: **Develop and implement a community benefit fund**

Develop and implement a community benefit fund, in consultation with the community and Councils.

In addition, other measures proposed elsewhere in this report will assist in mitigating the construction impacts on coastal tourism, including BTM-M001 - Stakeholder Engagement Plan and BTM-M006 – Workforce Accommodation Strategy (fully appended in Technical Report R: Social).

[6] Some accommodation providers are already considering investments to accommodate Star of the South construction workers, although most of these are unlikely to invest until the project has approval.

Residual impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-7: BTM-I003 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by these impacts?	Net incomes of businesses in the noise-affected communities and service centres may be affected if the construction noise deters visitors.
Would regional output and employment be reduced by these impacts?	There is a chance that visitors would be deterred and that regional output and employment would reduce. However, this is likely to be offset by the influx of workers and windfarm visitors. Any impact should be temporary, with reestablishment of more normal trading following the construction period.
Are opportunities to grow regional output and employment maximised?	Not applicable
Would visitor numbers and their distribution be adversely affected by these impacts?	Potential visitors to the coastal settlements close to the Nooramunga Marine and Coastal Park may be displaced. Many of these would find alternative destinations in the local and regional study areas but some would either not travel or travel elsewhere.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity may be diminished for the duration of the construction impacts but the effect would be temporary and limited.
Would these impacts affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	There may be a temporary adverse impact on parts of the Gippsland coastal villages, which are designated as part of a hero trail in the regional tourism destination management plan.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Moderate**

Even with the suggested mitigation measures in place, construction impacts may be noticeable for some years in limited parts of the local study area. While visitation overall is unlikely to be reduced, particular hospitality and tourism businesses that do not benefit from the influx of workers or windfarm visitors, may suffer adverse impacts on their turnover during the construction period. These potential adverse effects may be ameliorated through the complaints mechanism or by projects agreed through the community benefit fund.

9.5 BTM-I004: Adverse impacts on Reeves Beach campground

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- ONV – M001: Managing noise and vibration from construction activities
- ONV – M002: Out of hours construction noise mitigation measures
- ONV – M003: Vibration safe working distances
- ONV – M004: Transmission system construction – batch locations – noise control
- ONV – M005: Unavoidable works – shore crossing drilling – noise control
- ONV – M006: Unavoidable works – offshore piling – noise control
- ONV – M007: Noise and vibration monitoring

About Reeves Beach

Reeves Beach campground is set amongst the coastal communities identified in the previous sub-section. However, it would be affected by shore crossing works as well as offshore works, and warrants special attention here.

Reeves Beach is one of the closest points on land to the wind farm and would be the landfall for the offshore transmission cable. The foreshore in this location is part of the McLoughlins Beach – Seaspray Coastal Reserve, the south-eastern extent of Ninety Mile Beach.

Reeves Beach is accessed from the local road network by Reeves Beach Road, which terminates at the Reeves Beach campground. This is a free camping area in the foreshore reserve amongst the dune system. It is managed by Parks Victoria and has room for up to 50 informal camp sites. There is one toilet at the site but no other services.

The campground (Figure 9-3) is popular with recreational beach fishers and grey nomad travellers, amongst others. It also has cultural value to the Gunaikurnai people (see Technical Report K: Aboriginal Cultural Heritage). It is secluded and remote from any other development, with Woodside Beach being the closest settlement - around 3 km as the crow flies or 13 km by road. The campground is one of many[7] free and commercial caravan and camping grounds on the coast of Ninety Mile Beach, Nooramunga and Corner Inlet. However, as with all campgrounds, it has its own unique position and many regular visitors.

[7] Figure 7-15 shows approximately 17 caravan and camping grounds in Corner inlet, Nooramunga and Ninety Mile Beach.

Figure 9-3: Reeves Beach campground

Source: base map from Google Maps

The following information about the campground has been provided by Parks Victoria:

- *There is a strong community connection to the campground*
- *Popular with campers from local areas such as Yarram, Woodside, Latrobe Valley*
- *Many repeat visitors return every year*
- *Campers may spend most of summer holidays and long weekends at campground and return every year*
- *Campers are recreational users attracted to the free camping and recreational opportunities in the reserve (fishing, beach etc)*
- *Site users value:*
    - *Rest and relaxation, escape to nature*
    - *Social interaction with family or friends*
- *There are no annual visitation numbers available*
- *The campground is free and is not bookable.*
- *Very popular over the summer months, particularly summer holidays, weekends and long weekends. Quieter period is Anzac day through to November.*
- *During peak periods the campground is full*
- *…The site is managed as a basic campground with limited facilities. There are no plans to change the general level of service, however existing facilities and infrastructure need upgrading – eg Toilet facility needs upgrading to modern standards.*
- *The road into the campground is managed by Council*
- *How the wind farm would affect users following construction seems to be subjective.*

(Parks Victoria, personal communication)

A user review of the campsite by a visitor to the region is provided in the box below.

Figure 9-4: User review of Reeves Beach campground

Review of **Reeves Beach**

Reviewed 6 November 2018 via mobile

We spent 5 nights here camping over the Melbourne Cup long weekend. We were pleasantly surprised how being camped so close to an amazing beach is free!
The beach is just a short walk over the sand dunes & is part of the 90 mile beach…... Really quite stunning.
The Reeves Beach Camping area is suitable for all size caravans & tents but would advise getting there early as possible over a holiday long weekend as it does get very busy.
There is only 1 long drop toilet for the whole area so having an ensuite on board would save you lining up.
There is no power or water so be prepared with carrying plenty of extra water if staying for an extended time. We had heard there was no mobile reception there but as we use Telstra we had no problem with coverage. Also, able to pick up tv stations easily.
I would thoroughly recommend free-camping here.
Review on tripadvisor.com.au, 2018

Information on the level of use of the campground is not collected by Parks Victoria, although the location is reportedly very popular in the usual peak periods (see section 7.3.9). A broad estimate of the use of the campground is made here.

Assuming around 50 sites, a 20% occupancy rate (typical of low specification camping sites) and an average of two visitors per occupied site-night, the campground caters for approximately 7,000 visitor nights each year. Of these, from discussions with Parks Victoria, perhaps as many as 50% are by visitors from outside the local study area, and up to 20% (1,500) are from outside the regional study area. In addition, the beach access at this location adds to the general attractiveness of the area, catering for locals and day-visitors, some of whom are staying in nearby coastal towns.

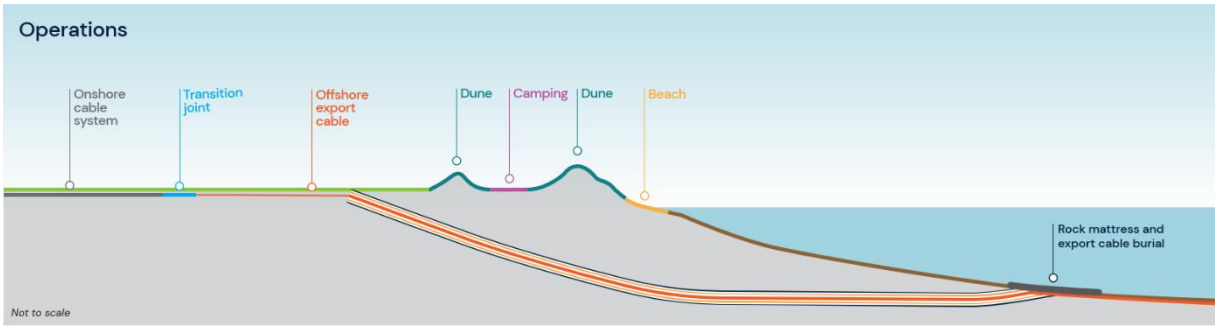
Impact

The proposed works at Reeves Beach comprise:

- Temporary construction management works, including establishment of a fenced work site and occasional road closures; the work site would be approximately 250 m from the Reeves Beach campground
- Trenchless crossing from pastoral land west of the coastal dune, under the dune and emerging from the seabed up to about one kilometre from the shore (or where the water depth is around 10 metres); the works would involve horizontal drilling of up to 10 bore holes to accommodate eight circuits (with up to two spare bores) and installation of a duct casing and the cables which will connect onshore and offshore infrastructure
- Construction of joint bays and ancillary pits to connect the onshore and offshore cables.
- Construction and operation of a temporary batching plant for concrete and other materials to be used in the cable laying activities

The works are illustrated below.

Figure 9-5: Works proposed around Reeves Beach



Source: Star of the South, 2026

The whole shore crossing is expected to take up to 27 months to complete, although cable-pulling may take longer to align with offshore work. (see Figure 9-6).

Figure 9-6: Shore crossing construction schedule

Source: Star of the South, 2026

The assessment of onshore noise and vibration impacts (Draft Technical Report W: Noise and Vibration) indicates that Reeves Beach would be one of the most affected parts of the study area by several different aspects of the construction process.

The duct construction, once started, would need to continue in a 24-hour operation until each hole was complete. This work would be consistently noisy. According to Technical Report W,

> *The works may interfere with sleep during the night at Reeves Beach campground since the predicted levels* (65-76 dB) *due to the shore crossing drilling are above the existing ambient levels* (40 dB) *measured within it.*
>
> *…Therefore, there is a risk that construction noise would interfere with human tranquillity and enjoyment outdoors in natural areas.*
>
> Technical Report W (decibel figures added)

The campground is approximately 250 m from the location of the proposed cable joint bay where the onshore and offshore cables meet. As well as the duct construction, this work site would generate

construction noise from erection of temporary buildings and from other machinery and vehicles. The campground is 500 m from the nearest batching plant which would also generate noise during the day and would operate for up to seven months. There would also be some noise generated by the offshore end of the duct construction works, including ship manoeuvring, installation of a jack-up rig and sheet piling. The in-water activities would be of a relatively short duration compared with the rest of the offshore crossing works.

In addition, Reeves Beach would be one of the closest points to the offshore pile-driving required to place the foundations of the wind turbines into the ocean floor. According to AECOM (2026), this process may also be noisy enough to interfere with sleep very occasionally during the 6-month foundation construction period (see Figure 9-7), depending on, amongst other things:

- Distance of the piling activity from the site
- Weather conditions and wind direction, with onshore winds from the offshore work area to Reeves Beach blowing only 5% of the time on average
- Seabed geology.

As discussed in the previous section, there is a possibility that the piling will have no impact at all, given that the several factors need to be in conjunction for the noise to be heard. Nevertheless, the conclusion of the noise impact assessment on this point is:

> *Offshore works may interfere with sleep during the night at noise sensitive receptors on the coast.*
>
> *Offshore works may interfere with domestic and recreational activities at noise sensitive receptors on the coast for short periods.*
>
> *The predicted levels due to the offshore piling under conditions favourable to the propagation of noise are up to 22 dB above the existing ambient levels measured within Reeves Beach campground.*
>
> *Therefore, there is a there is a risk that offshore construction noise would interfere with Human tranquillity and enjoyment outdoors in natural areas.*
>
> (AECOM, 2026, section 9.9)

Reeves Beach campground will have:

- Up to 18 months of consistent disturbing construction noise, including overnight as the duct construction is completed
- Up to seven months of frequent disturbing construction noise during the day as site establishment and onshore cabling tasks are completed and the batching plant is in operation. Some of this may overlap with the trenchless crossing task
- Up to six months of the potential for disturbing noise, including at night, as the offshore piling and cable pulling is completed

The campground will have an environment potentially disturbed by construction noise for up to two and a half years.

The impact on visitation and tourism would depend at least in part on the strategy adopted by the campground manager. At the time of writing, Parks Victoria has not reviewed the potential impacts on the Camp ground and has made no decision on its approach.

The options for management of the campground during this period are likely to include:

1. ***Closure during the most disturbing construction tasks***
   During the trenchless crossing and cable pulling tasks, the overnight noise would be up to 36 dB above the ambient noise. This could be very disturbing for campers and caravanners. Closing the campground would prevent poor visitor experiences and preserve its reputation as a tranquil beachside facility as far as reasonably practicable.
   The campground could also be closed at some other times for short periods because of construction operations or because there are consistently loud activities (this could include establishment of the batching plant or nearby cable laying).

2. ***Open with notification***
   Keeping the campground open, with suitable warnings to users about the lower levels of amenity in general and specifically when noisy activities are likely to occur.

Without a decision on the management arrangements, the scale of the economic impacts of the wind farm on Reeves Beach campground are difficult to determine with certainty. Even though potential visitors to Reeves Beach campground may be prevented or discouraged from staying there, they may well find other places to stay in the local or regional study areas.

If the campground is closed, there would be some who would postpone or cancel their visit to the area. For example, recreational fishers from outside the local study area who visit Reeves Beach every year may not be able to find a suitable alternative and simply stay at home or visit another location outside the district. Any local expenditure involved in staying at Reeves Beach by these visitors would be lost to the local study area. This could include supplies bought at Yarram, for example.

For those seeking alternative camping areas, the closest sites in equivalent locations near the beach are:

Free camping

- Jack Smith Campground (17 km) – four-wheel drive access only
- St Margaret Island (12 km) – boat access only
- McGaurans Beach (38 km)
- Glomar Beach (62 km)

Camping fees required

- Woodside Beach Caravan Park (14km)
- Seaspray Caravan Park (55 km)
- Long Jetty Foreshore Caravan Park, Port Welshpool (59 km).

From discussions with local accommodation providers, there is a strong possibility that the alternative campsites would be full during busy holiday periods. Finding nearby local alternatives may therefore be problematic. Parks Victoria may wish to open a temporary campsite to accommodate those displaced from Reeves Beach. However, finding a location for such a campsite would also be difficult, with relatively few access points to Ninety Mile Beach that would be comparable or suitable. Possibilities may include improving access to Jack Smith Campground to allow 2WD vehicles or expanding the McGaurans Beach camping area.

The impact on the local study area of the closure or substantial reduction in the patronage of Reeves Beach campground would be the loss of the spending by an unknown number of visitors. In the opinion of the author, given:

- the estimate of 7,000 visitor nights per year at the campsite in total
- the estimate of up to 20% of visitors (1,500) from outside the regional study area
- the opportunities to stay at alternative campsites in the local study area, at least for much of the year excluding the busiest times of the year.

- it would be very unlikely that more than 750 visitor nights per year (that is, half the visitors from outside the region) were lost to the region if the campground were closed or access was significantly restricted. Nevertheless, any such a loss would impact negatively on local businesses, especially in Woodside and Yarram, that would otherwise cater to the campers. The visitors to the free-camping area are likely, on average, to spend relatively little, but if the visitors ***did*** spend at the same rate as the average overnight visitor to Gippsland ($123 per night in 2024 according to TRA, 2025), the total loss of spending could be up to $92,000 for each year that the campground was closed with smaller losses for the periods during which it is open but intermittently affected by noise. This is sufficient to support up to one full-time job in the tourism businesses of the area.

In addition to the loss of spending, there could be a decline in the reputation of the camp ground as an amenable visitor destination. This could affect visitation for some years after the construction period, as online reviews may persist for years after the event with consequent small, ongoing losses to the local economy.

Consequence Rating

Table 9-8: BTM-I004 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Visitors to the campground at Reeves Beach could go elsewhere but could find difficulty finding a similar location during popular holiday periods	Visitors may be discouraged from visiting the campground by construction noise over four+ years	The tranquil nature of the campground would be restored once construction is finished but this may take some time to be communicated to potential visitors. There is a risk the reputation of the area would be compromised for some time after construction	Medium
Magnitude			
Extent	Duration	Severity	Rating
7,000 annual visitor nights at Reeves Beach campground and surrounding beach and reserve	Two-and-a-half years	Impacts are for a limited time but reputational damage may linger	Medium
Consequence Rating			**Moderate**

Mitigation

The impacts of closure could be mitigated through the provision of other free beach camping sites in nearby locations. Further discussions are required with the foreshore managers (Parks Victoria) about whether expansion of alternative sites is possible and desirable. Publicity would be required to inform potential visitors and to help them identify alternative camp sites (free and otherwise).

When the campground is open but affected by intermittent noise, potential users of Reeves Beach would need to be informed of the potential for noise and the safety risks posed by construction traffic. This would require signs on site as well as publicity online and in the regional visitor information centres.

Mitigation Measures

BTM-M004: **Consultation with Parks Victoria on Reeves Beach campground**

Consultation with Parks Victoria will be undertaken to identify and support management options of the Reeves Beach campground during construction of the project. Appropriate resources will be provided to notify potential campground users of construction noise or activity, and to promote alternative camping locations if required.

Any impacts on visitation may be ameliorated to some degree through visitor projects that may be agreed through the Community Benefit Fund (BTM-M003). In particular, such projects could prevent any lingering adverse publicity through destination promotion.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-9: BTM-I004 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Tourism service businesses close to Reeves Beach, mainly in Woodside and Yarram, are likely to experience a drop in income if the camp site is closed or visitation is reduced. Publicity regarding existing alternatives would help to reduce any losses.
Would regional output and employment be reduced by this impact?	There may be a minor temporary fall in output and employment if potential visitors choose alternative destinations outside the region as a result of the campsite closure.
Are opportunities to grow regional output and employment maximised?	Not applicable.
Would visitor numbers and their distribution be adversely affected by this impact?	There may be a minor drop in visitor numbers for up to 2.5 years if the Reeves Beach campground is closed or restricted.

Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Following temporary construction impacts there would be no loss of capacity .
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	The possible temporary closure or restriction of the campsite could reduce options for free camping on the Gippsland coastal drive but this effect would be minor and temporary.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Moderate**

Even with the mitigation measures in place, some people may be deterred from visiting the local study area, either postponing their visit or travelling elsewhere. However, the consequent losses of tourism revenue to local and regional businesses would be relatively small (estimated here at less than $0.1m per year) and restricted to the construction period around the campground (a maximum of 2.5 years).

9.6 BTM-I005: Underwater noise impact from construction activities on the recreational diving industry

To manage interactions with other users, vessel activity and underwater noise; initial mitigation measures will be implemented (see Technical Report D: Marine Mammals and Turtles (RPS, 2025d and in Technical Report O: Infrastructure and Other Users (RPS, 2025o)).

- OFF-M22: Stakeholder communication.
- OFF-M10: Notices to Mariners
- OFF-M12: Safety and protection zones
- OFF-M03: Demarcation areas
- UWN-M01: Piling soft start procedure
- UWN-M03: Noise abatement system

Description

Underwater noise emissions will be generated by construction vessels and construction activities including piling which could potentially impact recreational divers, both self-sufficient and recreational diving businesses utilising the eastern coast of Wilsons Promontory, islands off the Gippsland coast, and shore sites in East Gippsland. Recreational divers include both recreational (no decompression) and technical (decompression) diving that is for a non-commercial purpose, typically on SCUBA systems. Depending on dive site they may be diving from a vessel or from a shoreline. Recreational diving could be undertaken at any time throughout the year (see Table 7-4).

The main source of intermittent noise will be from underwater piling operations for the installation of monopiles for the wind turbines. There is potential for non-impulsive (continuous) noise to be generated by vessel propellers or dynamic positioning (DP) thrusters.

Impacts

The potential extent of underwater noise generated during construction was modelled (Attachment I – Underwater noise modelling). The potential impact of this noise on commercial petroleum divers and marine research divers was considered in Technical Report O: Infrastructure and other users (2025). While Technical Report O focused on commercial divers, the assessment criteria it uses can also be applied to recreational divers to assess impacts.

The Diving Medical Advisory Committee (DMAC) notes that there is limited understanding of the effects of sound pressure waves on divers, and that the multiple factors involved make it difficult to determine a safe or tolerable distance for diving operations (DMAC 12 Safe Diving Distance from Seismic Surveying Operations, Rev. 2.1 – 2020). Based on a number of studies examining the potential effects of underwater noise emissions on both military and recreational divers Parvin (2005) suggested 145 dB re 1 µPa (SPL) as a safety criterion for recreational divers within a frequency range between 100 and 500 Hz. Therefore, to assess the potential impacts from piling on divers, a sound exposure threshold of 145 dB re 1 µPa (SPL) was applied.

Star of the South has committed to using noise abatement systems (NAS: UWN-M03) during pile driving (see Technical Report D: Marine mammals and turtles).

Modelling (Attachment I: Underwater noise modelling) indicated that NAS, such as double bubble curtains (DBBC), modified hammer system (MHS) and Hydro Sound Dampener (HSD) provide effective noise reduction. The application of NAS is consistent with advice provided in the Department of Climate Change, Energy, Environment and Water (DCCEEW) Guidance - Key environmental factors for offshore windfarm environmental impact assessment under the EPBC Act (DCCEEW, 2023).

With the implementation of an effective NAS, the area that may be impacted by underwater noise above 145 dB re 1 µPa (SPL) at some point during construction includes the closest identified recreational dive sites, e.g. Cliffy Island and the SS Glenelg (see Table 7 4). This would occur intermittently, when piling activities are underway at shallower sites on the western and eastern sides of the OWFA respectively. Lower levels of underwater noise, below 145 dB re 1 µPa (SPL), could potentially intermittently affect amenity at sites on the eastern side of Wilsons Promontory when piling is occurring at the western side of the OWFA.

This could cause intending divers to cancel or postpone their trip to the area, with a consequent loss of local income. The loss would be small given the scale of diving as a recreational activity but could impact particular local businesses that provide supplies to divers.

Consequence Rating

Table 9-10: BTM-I005 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Divers and dive firms are able to access other parts of the local and regional study area	Divers would be excluded from a small number of dive sites around the OWFA during piling.	Diving at key sites could resume once the piling ceased.	Medium

Magnitude			
Extent	Duration	Severity	Rating
Without mitigation, the affected area stretches from Wilsons Promontory to Seaspray and to beyond the Hogan Group of islands.	Would last for the six months of piling.	The impact will be reversed following construction	Low
Consequence Rating			**Minor**

Mitigation

Stakeholder communications (OFF-M02) will provide regular updates and advanced notice of planned activities throughout the project's construction.

Notification to recreational divers would be achieved through communication to businesses that may operate in the area, dive clubs, and dive-specific services within the region (for example, dive shops where visitors might visit prior to recreational diving activities within the region). This would allow divers to plan their activities around underwater noise generating activities.

Mitigation Measures

No further mitigation measures are proposed but **UWN-M03**: Noise abatement system is presumed to be in place during pile driving activities for monopile and jacket pile foundations.

Residual impact

Divers may choose to utilise alternate locations, such as within Corner Inlet or west of Wilsons Promontory, whilst construction that produces intermittent noise is undertaken. Divers may be able to access alternative dive sites from the same ports and boat ramps that they currently use. They may continue to use the same accommodation that they currently use or similar accommodation within the region, with little overall impact on the local economy.

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measure identified above.

Table 9-11: BTM-I005 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	There may be adverse impacts on a small number of businesses in the local study area if divers choose other locations for their activities.
Would regional output and employment be reduced by this impact?	There may be a negligible impact on regional output and employment.
Are opportunities to grow regional output and employment maximised?	Negligible impact on opportunities to grow regional output and employment.

Would visitor numbers and their distribution be adversely affected by this impact?	Visitor (recreational divers) distribution may be altered throughout the construction period.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Negligible impact on regional capacity
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	No impacts on other key economic policies.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Low**
Residual consequence rating	**Minor**

With implementation of the mitigation measure described above, the impact to recreational divers and the local economy is expected to be minor.

9.7 BTM-I006: Offshore construction impacts on recreational fishing and boating

When evaluating this impact, the following initial mitigation measures as outlined within Technical Report N: Commercial and Recreational Fisheries (RPS, 2025n) are assumed to be implemented:

- OFF-M22: Stakeholder communication
- VES-M01: Vessel Operations Framework
- VES-M04: Vessel movement controls
- OFF-M03: Demarcation areas
- OFF-M12: Safety and protection zones
- SNV-M09: Charting of final layout on navigational charts
- OFF-M10: Notice to Mariners
- SPL-M02: Spill Response Plan

Description

As described in section 7.3.2, offshore recreational fishing and boating is a key visitor attraction in the local study area and takes place in Nooramunga, Corner Inlet and in the offshore project area and surrounding waters. Trips offshore are one of several fishing options for recreational fishers who may also use the waters of Corner Inlet depending on tides and weather and the size of the boat available. The area is also used for sailing and other recreational boating excursions.

Information from boat ramp surveys for the project, "*indicates that recreational fishers can be restricted in their capacity to fish much of the OWFA area due to distance and weather limitations, and because many can only fish weekends and holidays. Many recreational fishers are also less interested in heading offshore as far as the OWFA due to the presence of fishing reefs nearer to shore and because of their relatively short daily fishing window.*" (RPS, 2025).

Trips to offshore waters from the boat ramps between McLoughlins Beach and Port Welshpool number very approximately 7,000 boat trips per year, with each boat carrying, on average, three people (from Technical Report R – Social Impact Assessment).

Recreational and charter fishing can continue in the offshore wind farm during construction, as long as it adheres to navigation rules and remain outside of designated construction areas for safety.

The OEI Act provides for safety zones to be established around eligible infrastructure to manage safety and protect infrastructure from damage (OIR, 2024). Safety zones are typically temporary, with the location, size and duration to be determined on a project-by-project basis (OIR, 2023). Star of the South expects to seek approval from the OIR to apply safety zones around infrastructure during the construction phase. Safety zones can extend up to 500 metres around eligible infrastructure and limit all non-project vessels from entering the zone. Each safety zone would be removed once the installation process is completed and it is safe to do so.

Impacts

During project construction, offshore recreational fishing and boating may be affected in a number of ways:

- Temporary displacement from construction areas

  During offshore construction, parts of the OWFA may be restricted to ensure operational safety. At times, the restricted zones may cover some of the favoured fishing areas at the western end of the offshore project area. Nevertheless, most of the OFWA would be free of restrictions at any one time and recreational fishing boats would be able to access alternative fishing grounds within the OFWA and in nearby locations both offshore and in Corner Inlet/Nooramunga.

- Changes in the catchability of target fish species as a result of underwater noise and construction disturbances

  Potential impacts to fish availability/catchability during construction are assessed in Technical Report N: Commercial and Recreational Fisheries (RPS, 2025n). Recreational fishers and charter fishing operators usually target fishing grounds outside of the OWFA. The areas impacted by noise emissions and other construction disturbance is negligible compared to the broader area actively fished by charter and recreational fishers, and both groups have capacity to target unaffected area within the OWFA and elsewhere. Therefore the consequence of these activities on fish availability for these fishers is expected to be negligible.

- Reduced amenity of the offshore experience because of construction noise

  The tranquility of the fishing experience and the opportunity to be in nature are key attractions for many fishers and boaters. During the six month pile driving campaign, this experience would be disturbed close to the source of the noise and for some kilometres downwind of the piling operation, depending on weather conditions. This noise is likely to restrict the area of amenable offshore fishing locations. Depending on the location of the piling operations, this may cause recreational fishing boats to seek other destinations.

- Reduced amenity, for some, as a result of the visual changes to the seascape (see section 10.4 for a larger discussion of the visual impact)

- Increase in the demands on fishing and boating infrastructure as a result of use by project workers.

> The recreational activities of project workers staying in the area will include fishing and boating. With a peak quarterly construction workforce of up to 1,400 in the region, project workers could generate significant demand for boat and time on boat ramps

The scale of the economic impact on the local study area is difficult to say at this stage. Extrapolating from Technical Report R: Social, there appear to be approximately 21,000[8] visitor trips each year currently to offshore destinations from the boat ramps between Port Welshpool and McLoughlins Beach. According to the boat ramp surveys (see section 7.3.2), approximately 80% of these visitors are from Gippsland, with the remainder from elsewhere, mostly from Melbourne. Many of the offshore trips are to areas within or close to the project area but a significant proportion are to islands and other destinations on the eastern coast of Wilsons Promontory, 10 km or more from the project area (see Figure 7-17).

For the most part, it appears likely that recreational fishing boats will be able to move to relatively undisturbed fishing grounds if the piling operations prove noisy. This means that visitors would continue to use the same accommodation and services that they currently use, with little overall impact on the local economy.

However, if the piling noise covers the favoured fishing grounds or proves unusually persistent and intrusive, some visitors may undertake their activities within Nooramunga/Corner Inlet or travel further westward along the coast of Wilsons Promontory away from the offshore project area. Some visitors, however, may decide to keep clear of the offshore construction area altogether and travel elsewhere to access offshore fishing grounds. The closest alternatives include Inverloch and Venus Bay to the west and Seaspray and Lakes Entrance to the east.

Some of those staying in the towns and villages from Port Albert to McLoughlins Beach may switch their launching place to Port Welshpool, which is closer to Corner Inlet and the coast of Wilsons Promontory. This would entail additional costs and travelling time. The move may place additional pressure on boat ramps at Port Welshpool and further west in Corner Inlet (Port Franklin, and Yanakie).

To the extent that fishers move to alternate locations to access offshore fishing grounds, there may be some loss in the income of local services including accommodation and the small number of dining and retail outlets at Port Albert and surrounds. The lost income may shift from one part of the local study area to another; it may flow to another part of the region; or it may be lost to the region altogether. However, any loss of spending by existing fishers and boaters may be offset to some extent by increased demand for recreational fishing opportunities from project workers.

The total period of disturbance for offshore recreational fishing and boating could be up to four years and 11 months. However, disturbance in any one location within or close to the OWFA would be much more limited and would depend on the numbers of piles at or surrounding the location and the construction safety zones established as well as on the weather conditions on any particular day. The key noise disturbance from offshore piling would only last up to six months, and less in any one location. Importantly, recreational fishers and boaters would be notified through the stakeholder communication process about the location of piling and safety zones, giving them opportunity to plan their visits to alternative areas offshore or in Corner Inlet/Nooramunga. Nevertheless, even

[8] That is, 7,000 boat trips per year, each with an average of three people aboard.

minor disruptions to one of the most popular recreational activities in the local study area may cause some reputational damage to the area that may take some time to dissipate.

Consequence Rating

Table 9-12: BTM-I006 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Fishers and boaters displaced by offshore construction would be able to find alternatives in nearby offshore locations or at Nooramunga/ Corner Inlet.	Affected people would generally be able to continue their recreation elsewhere in the area.	Following construction boating and fishing would be able to return to the OFWA.	Low
Magnitude			
Extent	Duration	Severity	Rating
The economic impacts would be felt mainly between Port Albert/ Sunday Island and Woodside Beach. Any activity displaced from this area is likely to be picked up elsewhere in the local or regional study areas.	For the whole offshore construction period, but mainly during the six months of piling activity.	Impact on fishing would be reversed following construction, potentially with enlarged fishing opportunities post construction with positive consequences for visitor services. Nevertheless, there may be some reputational damage that would take some time to dissipate	Medium
Consequence Rating			**Minor**

Mitigation

Mitigation of the construction impacts on recreational fishing and boating would depend on reducing the level and period of disturbance and supporting local communities to cope with any adverse consequences.

Stakeholder communications (OFF-M02) will provide regular updates and advanced notice of planned activities throughout the project's construction, so that recreational boaters and charter operators can plan their activities accordingly. This will include the distribution of Notice to Mariners (OFF-M10) and other communications.

Monitoring the use of boat ramps would allow the community to understand whether there have been shifts in the location of demand caused by the wind farm construction process. This would allow planning for infrastructure improvements to cope with changes in demand if required.

A monitoring program proposed for fish assemblages (MEMP-M07) will provide greater confidence in the predictions of negligible consequence for commercially and recreationally important fish species. For more detail, please refer to Technical Report C: Fish and invertebrates (RPS, 2025b).

The Workforce Accommodation Strategy (see section 9.11 and Technical Report R: Social) can be used to place project workers in short term accommodation where trade might otherwise be affected by windfarm construction activity. This will offset, to some extent, any losses of existing fishing and boating customers.

Mitigation and monitoring measures

No further mitigation measures are proposed; however, recreational fishing and boating may be the subject of projects decided with the community through the Community Benefit Fund. The following monitoring measure is proposed:

BTM-M007: Stakeholder Engagement Plan – boat ramps
In order to gauge how the project is affecting the preferences of boat users and recreational fishers at boat ramps, the stakeholder engagement will provide evidence for potential infrastructure improvements or demand management measures.

Residual impact

The following table provides an assessment of the impacts on the key assessment criteria after the implementation of the mitigation measures identified above.

Table 9-13: BTM-I006 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	There may be minor impacts on the revenue of individual accommodation and service businesses in the Nooramunga area if the offshore construction makes offshore boating unpleasant.
Would regional output and employment be reduced by this impact?	Regional output and employment is unlikely to be significantly affected as most of the visitors affected would be likely to access other parts of the region for fishing and boating activities.
Are opportunities to grow regional output and employment maximised?	Economic opportunities in the region will remain largely unaffected.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers in the Nooramunga communities could be reduced if some of the existing boating and fishing participants choose to travel elsewhere to access offshore areas. Any people choosing to travel elsewhere would most likely choose other places in the region. Any losses would be offset, to some extent, by the increase in demand from project workers.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	There would be no significant reduction in the capacity for further sustainable development once any short-term construction impacts have finished.
Would this impact affect other relevant local and regional policy preferences, including improving	Any loss or transfer of boating activity would affect some of the coastal villages in the local study area

employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	which, collectively, have been identified as a hero attraction for the region. Fishing and boating activity may temporarily decrease in the areas from Port Albert to McLoughlins Beach but increase at Port Welshpool and other parts of the local and regional study areas.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Medium**
Residual consequence rating	**Minor**

The economic impact of extended disruptions to offshore recreational fishing and boating would be local to the coastal settlements from Port Albert to Woodside Beach and their service centres. For the most part, this activity would shift elsewhere in the region, although this may result in some extra costs for participants. Business impacts would be offset, to some extent, by additional demand from project workers. Any impacts on the Gippsland region as a whole will be minor and should dissipate following the construction period.

9.8 BTM-I007: Offshore construction impacts on marine fauna resulting in disruption of marine tourism

To manage vessel activity, interactions with other users and underwater noise, initial mitigation measures will be implemented (see Technical Report D: Marine Mammals and Turtles (RPS, 2025d) and Technical Report O: Infrastructure and other users (RPS, 2025o)). These measures will also reduce potential impacts to marine fauna, for example by reducing the risk of vessel collision and oil spill.

- SNV-M07: Vessel Passage Plan
- VES-M01: Compliance with COLREGS, SOLAS and MARPOL
- VES-M03: Marine coordination centre
- VES-M04: Vessel movement
- VES-M06: Vessel collision - marine mammals
- VES-M10: Restricted speed in southern right whale Biologically important Area
- UWN-M01: Soft start procedure
- UWN-M02: Maintenance of turbines
- UWN-M03: Noise abatement system (NAS)
- UWN-M04: Noise level limit for pile driving activities and model validation
- UWN-M05: Southern Right Whale Reproductive Biologically Important Area Limit
- UWN-M06: Marine Fauna Observers (MFOs)
- UWN-M15: Installation of export cable within southern right whale Biologically Important Area
- CRF-M09: Opportunities for work on the project

Description

Marine tourism businesses operating within local and regional study areas, including whale watching or ecotours, boating/sailing, private charter and sight-seeing tours, may be temporarily impacted by construction activities.

Wildlife viewing and the natural landscape is a primary focus for many of these businesses. Whale watching tours target resting/migrating southern right whales and migrating humpback whales, and fur seals, seabirds and dolphins are also advertised as a highlight of many sightseeing/scenic tours in the area, some tours even passing by fur seal haul outs/colonies.

Wildlife Coast Cruises is the main operator for eco tours in the study region. Wildlife Coast Cruises operates out of Port Welshpool, offering a full day cruise between mid-November and mid-April and a whale cruise between late August and late-October. The full day tour travels south from Port Welshpool around the coast of Wilson's Promontory from the east to west and back. The whale watching tour route is variable and dependent on conditions, but generally follows the east coast of Wilsons Promontory, passing the Cliffy Island group and heading south around Wilsons Promontory, though occasionally travelling as far east as Snake Island during the southern right whale migratory season. They do not typically operate within the offshore project area.

Several activities or risks were identified as having the potential to influence marine mammal presence in the area, including:

- Underwater noise impacts from construction piling
- Underwater noise impacts from construction activities, including vessel activities and drilling (of foundations in the event of refusal during pile driving – estimated 10 percent of the time)
- Risk of vessel strike of marine mammals or turtles as a result of vessel movements during construction
- Indirect effects such as changes in abundance/distribution of prey resources.

For further details on the impact assessment and adopted mitigation measures of these risks on marine mammals and turtles, please refer to Technical report D: Marine mammals and turtles (RPS, 2025a).

Impacts

No marine tourism businesses operate directly within the offshore wind farm area, instead staying close to Wilsons Promontory and nearby islands, and therefore no vessels will be directly displaced during construction of the Project.

Marine tourism businesses could potentially be impacted if there is disturbance or displacement of marine wildlife, particularly marine mammals, from the areas in which they operate. Underwater noise from pile driving and vessel operations for WTG installation have the greatest potential for impact to marine fauna.

For piling activities, the project has committed to implementing the best available noise abatement system feasible for the site's water depths, metocean conditions, pile size and vessels. Modelling indicates baleen whales moving through the OWFA may exhibit behavioural disturbance at up to 6 km from piling with a noise abatement system in place (Technical Report D: Marine mammals and turtles (RPS, 2025a). Disturbance ranges may be larger for whales that are static within the local area, i.e. foraging or resting. Toothed whales and fur seals are less sensitive to piling noise due to the different frequencies at which they primarily hear.

Marine tours operating along the east coast of Wilsons Promontory will likely be 11 km or more from the closest piling location (50 km or more from the furthest). Therefore, underwater noise is not likely to reduce the opportunity for tourism vessels to view animals around the Wilsons Promontory coastline.

Tours operating out of Corner Inlet or those operating along Ninety Mile Beach or the ocean entrance adjacent to the Gippsland Lakes are unlikely to be impacted, as it is expected that individuals will continue to move through the area (Edren et al., 2010; Leunissen, 2017; Russel et al.,2016).

There is a possibility that the avoidance behaviour would reduce the number of whale sightings from shore during the construction period, although foraging whales and other marine mammals may simply move to undisturbed places along the coast. This is unlikely to affect any particular tourism business in the area and should not lead to a significant reduction in opportunities to view whales from the shore along 90 mile beach as a whole.

Other impacts of the project (noise, visual and physical presence) on marine tourism customers during construction are described in section 9.4 .

Consequence Rating

Table 9-14: BTM-I007 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Existing tour operators may need to shift their normal tour routes slightly in order to access whales and turtles. This shift could fall within the normal variability of tour routes.	The businesses would be able to tolerate minor changes in tour routes although longer routes would likely be reflected in tour prices, which may affect demand.	Tour operators would be able to adapt to the new conditions.	Low
Magnitude			
Extent	Duration	Severity	Rating
This would affect one or two existing tour operators	Any effects on wildlife are expected to be short-term for the period of construction.	The change affects only a few businesses but the presence of charismatic marine fauna is part of the region's natural attraction and is a part of regional tourism marketing.	Low-Medium
Consequence Rating			**Negligible-Minor**

Mitigation

Mitigation measures developed for marine mammals and turtles (see Technical Report Marine mammals and turtles, RPS, 2025a) will reduce the risk of potential indirect effects (disturbance / displacement of animals) to marine tourism operators.

In addition, there will be opportunities for local commercial seafarers to obtain work on the project. Examples of opportunities include guard vessel duties, environmental monitoring or surveys (mitigation measure CRF-M09 in Technical Report N: Commercial and Recreational Fisheries).

Mitigation Measures

No additional mitigation measures are proposed as the initial mitigation measures would have reduced the residual impact to businesses to minor proportions.

Residual impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-15: BTM-I007 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Net incomes of a small number of businesses may be affected if tour costs rise. This may be offset by opportunities for local seafarers to work on the project.
Would regional output and employment be reduced by this impact?	Opportunities for locally impacted marine businesses in gaining employment in project activities would reduce any output and employment losses.
Are opportunities to grow regional output and employment maximised?	Not applicable.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers on tours may be reduced slightly if the cost of tours rises to enable longer journeys to view charismatic marine fauna. Any impact should dissipate following construction.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Not applicable.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	Not applicable.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Low-Medium**
Residual consequence rating	**Negligible-Minor**

The residual impact to tourism businesses due to the disturbance/displacement of marine fauna would be small.

9.9 BTM-I008 Project Employment

9.9.1 Introduction

The Star of the South project would generate a significant number of jobs in designing and constructing the wind farm and the associated transmission infrastructure. Many jobs would also be generated in designing and manufacturing the wind turbine equipment and associated cabling, installation ships and so on as well as in servicing the workers and businesses involved, although not all these jobs would be located in Australia. The total employment impact on the Gippsland region, on Victoria and Australia is captured in economic modelling undertaken for the project, the results of which are presented in this section and in more detail in Appendix B.

The reader should bear in mind that the schedule and figures presented here are best estimates at the time of writing. There is potential for timing, technologies and implementation strategies to shift, with consequences for overall employment numbers and scheduling. The number of jobs will also depend on the scale of the contract that Star of the South is able to secure for the provision of electricity.

The employment figures make no allowance for any additional jobs that might result from requiring 10% of workers to be learning workers as per the Victorian Government's Major Projects Skills Guarantee (see section 7.4.2).

In presenting the employment figures in this section, it would often be normal practice to round the numbers to the nearest ten or hundred to indicate the level of likely accuracy. In this case, though, the job figures are used to model various scenarios and the decision has been taken not to round them in order to provide maximum transparency and allow the reader to do their own calculations if they wish.

The job numbers for the project are presented in a variety of ways depending on the context:

- **Quarterly jobs** – Star of the South has provided a project employment schedule that indicates the estimated number of jobs on the project by quarter in various components of the project. These figures measure the average full time equivalent (FTE) jobs for the quarter directly employed on the project. Presenting the employment this way allows us to better see the ebb and flow of employment in the various tasks and locations. These quarterly job numbers have been translated into annual numbers for modelling purposes.
- **Peak employment.** Peak employment is the highest level of employment on the project in any given period. For example, peak quarterly employment on the project in Australia over the construction period is estimated at 1,673.
- **Average annual jobs** – provides the average annual number of FTE jobs for a given period. For example, the project is estimated to have direct employment of around 228 in Australia each year during the 30 year operational period. Displaying the jobs this way allows comparison with other projects and is most useful when measuring steady employment.
- **Job years** – are FTE jobs that last for the equivalent of one year. This is useful for providing a standardised measure of the number of jobs required during the construction of the project, when many people would be on short term assignments, sometimes for less than one year and when job numbers would be fluctuating significantly. For example, the project is

estimated to generate 5,690 job years in direct employment in Australia during the seven year construction period (an average annual employment of 813).

- **Direct and indirect employment** – Direct employment includes the people who are directly employed on the project by Star of the South or its construction contractors. Indirect employment includes people who are employed in Australia in firms that either supply materials or services to Star of the South or its contractors; or who are employed because of the spending by workers directly engaged on the project. Indirect employment has been modelled for the project by Geografia P/L based on the direct employment figures provided by Star of the South (see Appendix B). For example, direct and indirect employment in Gippsland during the operational phase of the project is estimated to total around 315 annual jobs, comprising 213 direct jobs and 102 indirect jobs.

When looking at employment numbers in this report, the reader should bear these distinctions in mind.

9.9.2 Works schedule

Detailed estimates for employment during construction and operation of the wind farm have been provided by Star of the South for both onshore (land-based transmission infrastructure) and offshore (wind turbines and associated ports) work. These have been combined here to give an overall estimate of the scheduling of the work and jobs required at each phase and to provide a basis for modelling the economic impacts.

In addition to the jobs during construction and operation, Star of the South estimates employment of approximately 100 FTEs each year between primary approval and the start of construction. These workers will be located mainly in the Star of the South office in Melbourne with some in Gippsland and other locations.

The combined construction schedule and the estimated number of full-time equivalent (FTE) jobs required each quarter is shown on the following pages. These are direct jobs (that is people employed by SOTS or its key contractors in project construction) throughout Australia. Key features of the schedule include:

- Construction of the onshore transmission infrastructure and the shore crossing would commence first, taking 27 months to complete
- Offshore works would take up to 5 years to complete, with construction handover complete by the end of year 7
- The timing of offshore works would allow power to be generated and transmitted to the grid when the first turbine is completed
- Operations and maintenance – the ongoing work – would continue from 12 months before the time the first power is transmitted to the grid until the end of the project life
- Year 8 would be the first full year of operation at maximum capacity and this would continue for 30 years

It should be noted that this is the current timing of tasks to undertake the entire project in one go and over the maximum likely timeframe. Technical or commercial considerations may change this schedule as more detailed project planning and licencing are undertaken.

The number of full time equivalent (FTE) jobs each year during the construction period is shown in Table 9-16 below.

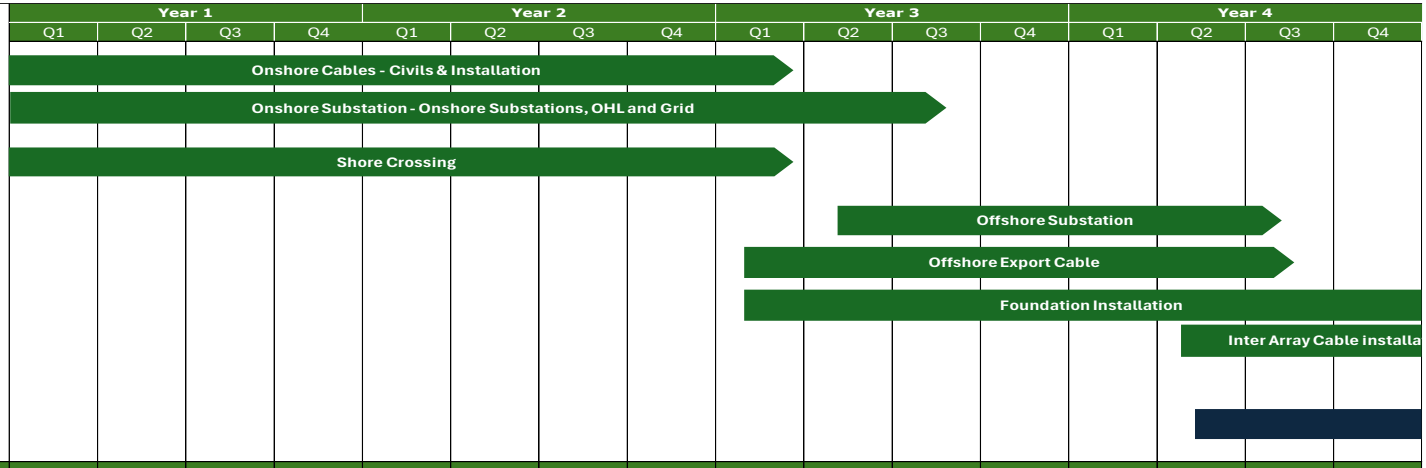
Table 9-16: Estimate of total direct FTE job years during construction, Australia

Year	Job-years during construction period	Ongoing FTE employment
Year 1	285	
Year 2	298	
Year 3	1,108	
Year 4	1,431	
Year 5	909	
Year 6	813	
Year 7	847	
Year 8 and beyond		228
Total job years	5,690	
Average annual jobs	813	228

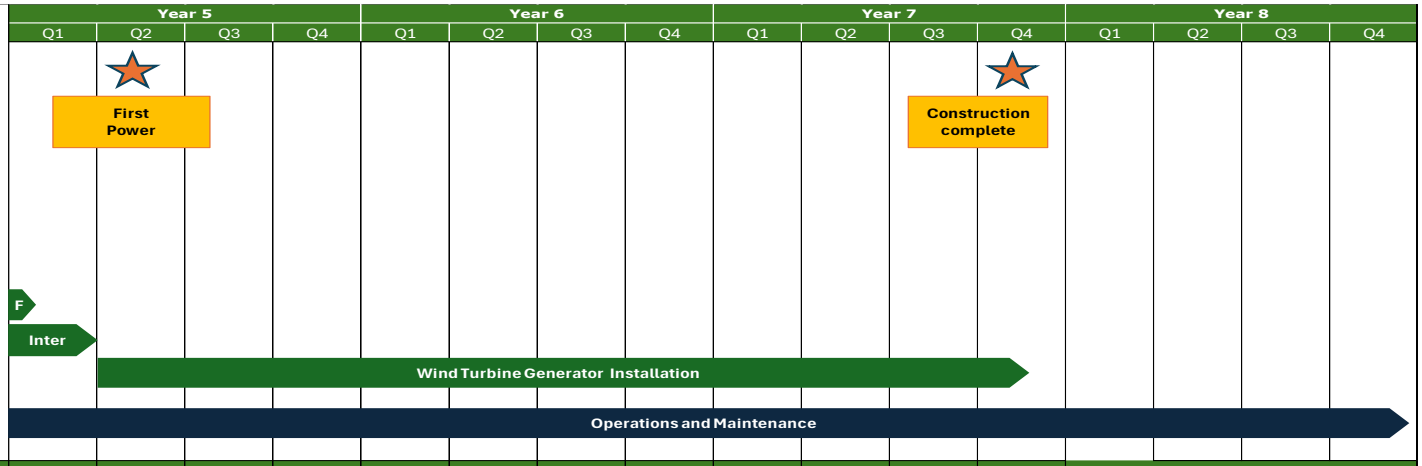
Source: Star of the South, unpublished; Tim Nott
Notes: job-year is one full time equivalent (FTE) job for one year

Altogether the project would generate approximately 5,690 job years over the seven year construction period, an average annual equivalent of 813 jobs over the period. A small number of these jobs would be in ongoing operation and maintenance from Year 4. These ramp up to 228 FTE jobs during the first full year of operation at maximum capacity in year 8 and are assumed to continue at that level for the 30 year life of the project. In addition to these, there may be occasional but significant additional temporary jobs required during the operational phase for larger equipment replacement tasks if required. The number and timing of these jobs remains unknown at present.

Figure 9-7: Project schedule and estimated FTE job numbers, Year 1 to Year 8 (continued on following page)



	Year 1				Year 2				Year 3				Year 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Construction																
Onshore Transmission: Cable + Shore Crossing																
Onshore management	13	32	27	42	31	23	32	15	6	2	2	2	2	2	0	0
Onshore technical staff	131	304	231	315	210	142	232	144	60	3	2	3	2	3	0	0
Administration, logistics and others	2	5	4	6	4	3	5	3	1	1	1	1	1	1	0	0
Onshore Transmission: Substation (excluded)																
Onshore management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onshore technical staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration, logistics and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	146	341	262	363	245	168	268	161	67	5	4	5	4	5	0	0
Offshore Wind Farm																
Onshore management	0	0	0	0	0	7	13	13	120	124	124	124	124	167	167	139
Onshore Technicians / Logistics Personnel	0	0	0	0	0	8	17	32	249	249	249	249	249	482	482	346
Administration	0	0	0	0	0	1	2	2	21	22	22	22	22	30	30	25
Offshore Technicians and Vessel Crew	0	0	0	0	0	50	75	75	584	722	722	722	722	959	959	635
Offshore Management - Shore Crossing	0	0	2	2	2	2	2	2	2	2	2	2	2	2	0	0
Offshore technical staff - Shore Crossing	0	0	12	12	12	12	12	12	0	4	2	4	2	4	0	0
Administration and others - Shore Crossing	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Total	0	0	14	14	14	80	121	136	976	1,124	1,122	1,124	1,122	1,645	1,638	1,145
Operations and maintenance																
Onshore Transmisison maintenance																
Onshore management	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2
Onshore technical staff	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3
Administration, logistics and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5
Offshore maintenance																
Onshore Mgmt	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	13
Onshore Technicians / Logistics Personnel	0	0	0	0	0	0	0	0	0	0	0	0	0	8	16	27
Onshore administration	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Offshore Technicians and Vessel Crew	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	19	27	102
Total workforce deployment in Australia																
Management	13	32	29	44	32	31	46	29	127	128	128	129	129	182	178	154
Administration	2	5	5	7	5	4	7	5	23	23	23	23	23	32	31	27
Onshore technical staff	131	304	231	315	210	150	249	176	309	252	251	255	254	496	501	376
Offshore technical staff	0	0	12	12	12	62	87	87	584	726	724	726	724	963	959	695
Total project employment	146	341	276	377	259	248	389	297	1,043	1,129	1,125	1,133	1,130	1,673	1,670	1,252



	Year 5				Year 6				Year 7				Year 8			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Construction																
Onshore Transmission: Cable + Shore Crossing																
Onshore management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onshore technical staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration, logistics and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onshore Transmission: Substation (excluded)																
Onshore management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onshore technical staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration, logistics and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offshore Wind Farm																
Onshore management	139	106	106	106	106	106	106	106	106	106	106	106	0	0	0	0
Onshore Technicians / Logistics Personnel	346	132	132	132	132	132	132	132	132	132	132	132	0	0	0	0
Administration	25	19	19	19	19	19	19	19	19	19	19	19	0	0	0	0
Offshore Technicians and Vessel Crew	635	362	362	362	362	362	362	362	362	362	362	362	0	0	0	0
Offshore Management - Shore Crossing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offshore technical staff - Shore Crossing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration and others - Shore Crossing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,145	619	619	619	619	619	619	619	619	619	619	619	0	0	0	0
Operations and maintenance																
Onshore Transmisison maintenance																
Onshore management	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Onshore technical staff	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Administration, logistics and others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Offshore maintenance																
Onshore Mgmt	13	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Onshore Technicians / Logistics Personnel	35	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Onshore administration	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Offshore Technicians and Vessel Crew	60	90	90	120	120	120	120	120	154	154	154	154	154	154	154	154
Total	110	159	159	189	189	189	189	189	223	223	223	223	223	223	223	223
Total workforce deployment in Australia																
Management	154	132	132	132	132	132	132	132	132	132	132	132	26	26	26	26
Administration	27	23	23	23	23	23	23	23	23	23	23	23	4	4	4	4
Onshore technical staff	384	175	175	175	175	175	175	175	175	175	175	175	43	43	43	43
Offshore technical staff	695	452	452	482	482	482	482	482	516	516	516	516	154	154	154	154
Total project employment	1,260	783	783	813	813	813	813	813	847	847	847	847	228	228	228	228

Source: Star of the South, unpublished

9.9.3 Location of direct project employment

The location of these jobs matters to the scale of the impact on the study areas. However, the location of at least some of these jobs has not yet been finalised; there are a number of potential port locations still under consideration, for example; and some locations will depend on the contractors engaged for the project and their preferred construction methodology and approach. Table 9-17 identifies the potential locations of each broad component of the project.

Table 9-17: Potential employment locations

Project component	Potential locations	Notes
Onshore transmission infrastructure	Gippsland Melbourne (or elsewhere)	The majority of jobs in constructing the onshore transmission infrastructure would be in Gippsland but some management and specialist design may be sourced from Melbourne (or interstate or internationally). A small number of jobs required for ongoing maintenance and operation of the transmission infrastructure are assumed to be located in Gippsland.
Construction feeder port	Expected to be Geelong and Bell Bay (Tas) and/or Hastings	The Construction feeder port will be where the larger construction components are unloaded, stored and reloaded. Incoming vessels will deliver the large manufactured construction components of the WTGs and foundations to the port, which will be loaded onto a specialised offshore installation vessel for installation in the offshore wind farm site
Construction management port	Barry Beach Marine Terminal or Port Anthony in Gippsland and/or Construction feeder ports	This port will provide ready access to the offshore construction site for construction staff and small supplies. There is a chance that some of this task will be undertaken by the construction feeder ports. The project may use a combination of service operation vessels on likely 14 day rotations or crew transfer vessels returning to port daily
Operational ports	Barry Beach Marine Terminal or Port Anthony in Gippsland	This is where the smaller maintenance vessels, crew transfer activities and port maintenance activities will be run from on a day-to-day basis. Workers will most likely commute daily to their offshore work-sites.
Design and management for offshore components	Management and Design offices in Gippsland, Melbourne and elsewhere in Australia (and overseas)	Management and design offices could be located in Gippsland at the port or more likely in the Latrobe Valley. This function could also be in offices of Star of the South, their tier one contractors and specialists located throughout Australia and beyond.

These potential work sites within the project envelope give rise to a number of scenarios for where jobs would be located. However, for the purposes of this assessment, the impact on the study areas is the key factor, with impacts on Victoria and Australia as a whole providing secondary considerations. The assessment therefore looks at just two scenarios that provide the likely upper and lower bounds of the number of jobs in Gippsland. The two scenarios are shown in Table 9-18. The Table shows:

- Of the total number of job years during the construction period, between 4,778 (84%) and 1,508 (27%) are likely to be in Gippsland, depending on the location of key contractors and whether or not the Gippsland ports are used for the majority of staff transfers to offshore

work-sites. This represents an annual average of between 683 and 215 additional FTE jobs in Gippsland over the project construction period.

- Between 564 (10%) and 3,795 (67%) job years during the construction period are likely to be located elsewhere in Victoria – mainly in Melbourne and Geelong. This is an annual average of between 81 and 542 over the construction period.
- Under either scenario, around 6% of jobs are likely to be in Australia outside Victoria, including, potentially, Bell Bay, one of the proposed construction feeder ports and at potential contractors in Western Australia.

Table 9-18: High and low scenarios for job years in Gippsland and corresponding job years in other locations during the construction period

	Onshore transmission		Land-based management, administration and logistics for offshore work		Offshore work		Total	
	Number	Share	Number	Share	Number	Share	Number	Share
Gippsland								
High scenario	485	95%	1,301	62%	2,992	97%	4,778	84%
Low Scenario	445	87%	397	19%	667	22%	1,508	27%
Elsewhere in Victoria								
High scenario	26	5%	469	22%	70	2%	564	10%
Low Scenario	59	12%	1,341	65%	2,396	78%	3,795	67%
Elsewhere in Australia								
High scenario	0	0%	320	15%	28	1%	347	6%
Low Scenario	7	1%	320	16%	28	1%	354	6%
Total								
High scenario	511	100%	2,089	100%	3,090	100%	5,690	100%
Low Scenario*	511	100%	2,057	100%	3,090	100%	5,658	100%

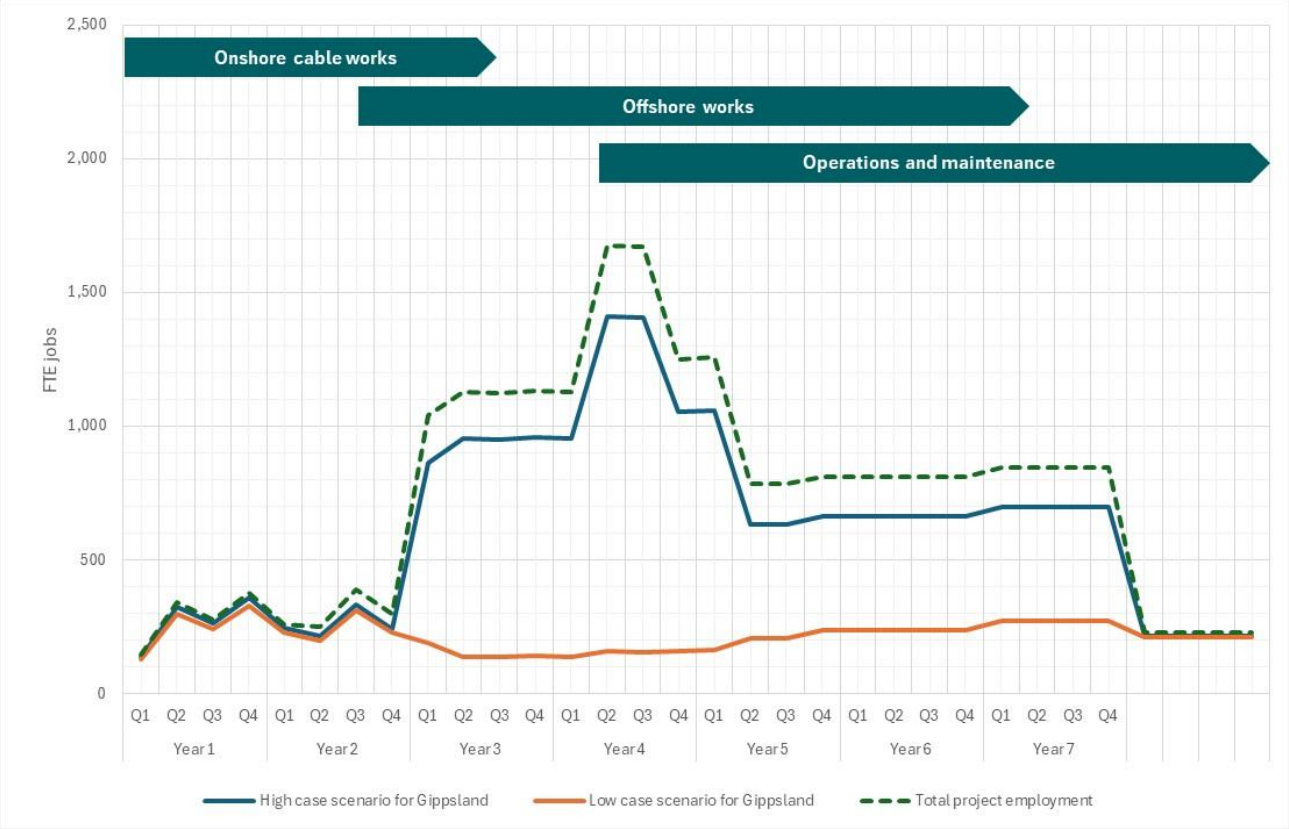
Source: Star of the South, unpublished; Tim Nott

*The low scenario assumes 32 job-years will be undertaken overseas, hence totals do not match.

Star of the South has indicated a preference for achieving a regional job outcome that reflects the use of Gippsland ports for the construction management, and is therefore at the higher end of the spectrum of scenarios.

The scheduling of employment in these scenarios is illustrated in Figure 9-8 below.

Figure 9-8: High and low scenarios for direct project employment in Gippsland (FTEs by quarter)



Source: Star of the South, unpublished; Tim Nott

9.9.4 Regional input-output model results

The employment of workers by Star of the South would generate further rounds of employment in the region. Further employment would be generated in businesses supplying the project and through the expenditure of workers. An input-output model has been constructed for this project by Geografia Pty Ltd. A description of the model and results is provided in Appendix B. The model takes as its starting point the direct employment estimates identified in the previous section. The model does not take into account any employment changes as a result of project decommissioning or tourism impacts generated by the project.

The expected employment results for the Gippsland region are shown in the following two charts.

Figure 9-9: Annual FTE jobs in Gippsland - high scenario

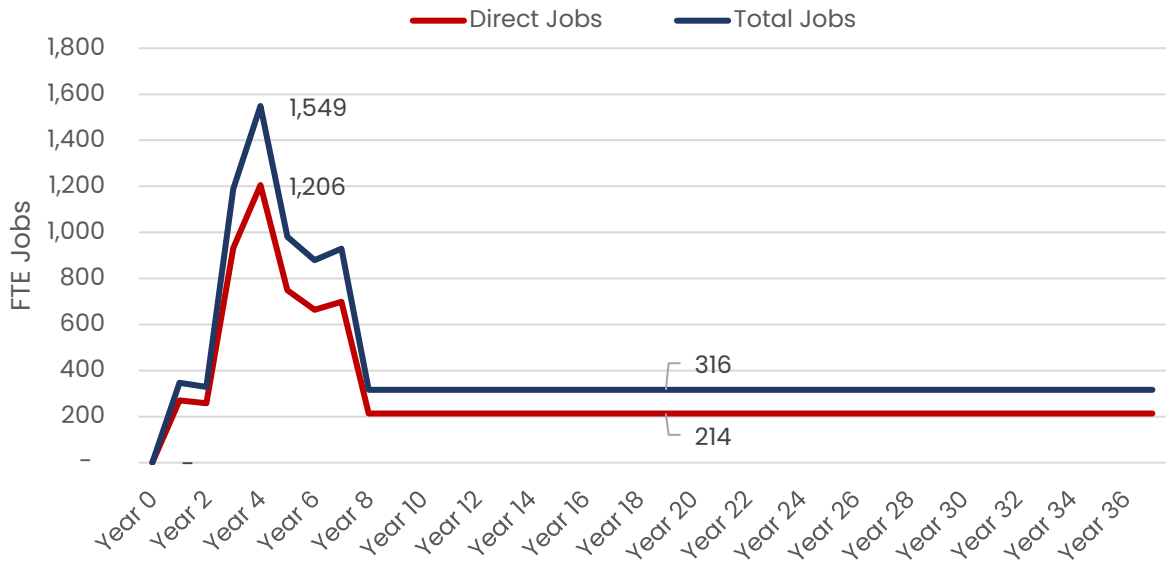
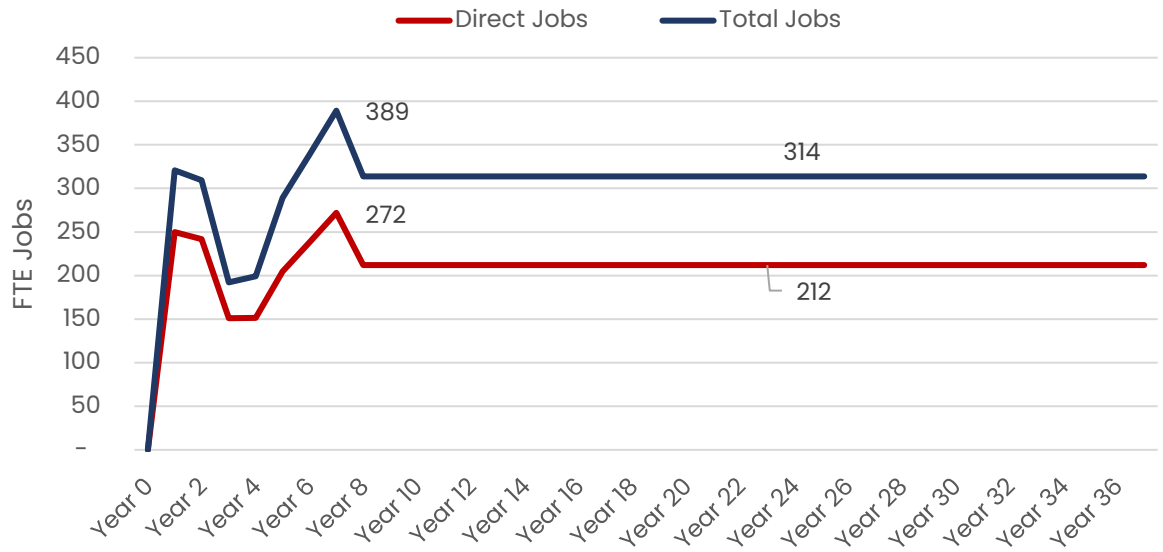


Figure 9-10: Annual FTE jobs in Gippsland - Low Scenario



Source: Geografia – see Appendix B

Note: figures in these charts are peak annual FTE jobs

Under the high scenario, direct and indirect jobs in Gippsland during construction peak at 1,549 per year. Ongoing jobs are estimated at 316 per year.

Under the low scenario, direct and indirect jobs in Gippsland during construction peak at 389. Ongoing jobs are estimated at 314.

9.9.5 Jobs in Gippsland

The project will generate, on average, between 215 and 683 additional annual FTE jobs in Gippsland directly over the seven year construction period, with the variation depending mainly on the location of contractors and their construction methodology and approach, as well as the extent to which the Corner Inlet Port is used for the transfer of offshore workers.

These jobs would be for a range of skill areas including:

- Electricians and electrical engineers
- Construction trades including marine construction workers
- Mariners
- Logistics experts, warehouse workers and dockworkers
- Civil engineers and project managers
- Administrative workers
- General labourers

In addition, there will be a need for a many different workers engaged indirectly in servicing the project, including people in manufacturing, infrastructure, construction, transport, wholesaling, consultancy services, retailing and hospitality. The modelling by Geografia (Appendix B) puts these at between 76 and 204 additional annual FTE jobs in Gippsland.

Total additional annual FTE jobs in Gippsland during the construction period are estimated at 291 (low scenario) and 886 (high scenario).

Both high and low employment scenarios would provide a benefit to the Gippsland region, considering the assessment criteria outlined in section 4.3; however, the high impact scenario would provide more of a benefit and should be preferred as an outcome, especially considering the principle of fairness, that is, that the communities subject to adverse project impacts should also enjoy the benefits, as far as reasonably practicable.

There is a clear expectation amongst the people consulted for this project that the Star of the South would generate significant employment for Gippsland workers (see, for example the survey results in section 7.5). The local jobs, as well as the reduction in carbon emissions, are seen by many as the balancing benefits against the adverse impacts of disruption and changes to the environment that the project would generate. Maximising local jobs would be a large contributor to the ongoing social licence of the project.

Some regional stakeholders have pointed to other infrastructure projects in the region as having made only token use of capable local firms and workers, with an apparent outflow of incomes and opportunities for skill development. This leads to some suspicion of major new investments. In general, the loss of social licence by infrastructure investors can lead to:

- Higher costs to investors through increased scrutiny from local regulatory bodies, and delays in approvals
- Difficulty in recruiting and retaining workers because community members are not proud to be associated with the project
- Loss of confidence in local skills and enterprises

However, it is clear that Star of the South has recognised the need to generate and maintain social licence for the project. It has undertaken extended community engagement; established a local presence with an office in Yarram; employed local enterprises where available; and has firmed on BBMT/Port Anthony as the operations and maintenance port as well as the favoured port for construction management. This will be key in bolstering the direct project employment in Gippsland.

Star of the South has committed to seeking local supply opportunities for the project (see adjacent box). The firm has also undertaken extensive supply chain mapping in order to identify required products and to gauge the capacity of firms in Gippsland, Victoria and Australia. A document showcasing the potential of regional firms to contribute to Star of the South has been prepared for major contractors likely to bid on the project.

Figure 9-11: Offshore wind supply opportunities in Australia

Source: Star of the South, 2024

Offshore wind supply opportunities		Capability		
		Existing	Leverage	New
Development	Environment and planning services	✓		
	Engineering services	✓		
	Surveys	✓		
	Floating LiDAR services	✓		
Offshore wind turbines	Nacelle			✓
	Blades			✓
	Tower – steel plate (no joins)			✓
	Tower – fabrication >5 metres diameter			✓
	Tower – platforms, ladders, rails		✓	
Offshore wind turbine foundations	Transition piece – steel plate (no joins)			✓
	Transition piece – fabrication			✓
	Transition piece – platforms, ladders, rails, boat landing		✓	
	Monopile – steel plate (no joins)			✓
	Monopile – fabrication			✓
	Scour protection	✓		
Offshore cables	Inter-array cables			✓
	Export cables			✓
Offshore substation	Topside			✓
	Foundation (jacket)			✓
Onshore transmission and substations	Structures and buildings	✓		
	Electrical, protection and control systems			✓
	Transformers <550MVA / 400kV	✓		
	Transformers >550MVA / 400kV			✓
	Onshore export cable (underground)			✓
	Onshore construction services	✓		
	Horizontal Directional Drilling (HDD) services	✓		
Vessels	Survey vessel			✓
	Heavy lift vessel			✓
	Cable laying vessel			✓
	Crew transfer vessel		✓	
	Service operation vessel		✓	
	Guard vessels	✓		
	Workboats	✓		
	Vessel crew	✓		
Ports and facilities	Construction port infrastructure services	✓		
	Construction port services	✓		
	Operations port infrastructure services	✓		
	Operations port services	✓		
	Warehouse construction	✓		
Operations and maintenance	Offshore operations and maintenance		✓	
	Onshore operations and maintenance	✓		
	Vessel maintenance	✓		

✓ **Existing**: capability already exists. ✓ **Leverage**: opportunities to build on and expand existing capabilities. ✓ **New**: opportunities requiring significant investment and involvement from the global supply chain. ○ Export opportunity.

'Look Local First'

Star of the South's mission is to advance the offshore wind industry in Australia, leaving a positive legacy for future generations. One way we're doing that is by supporting local suppliers to participate in, grow with, and maximise opportunities created in Australia's new offshore wind industry.

Together with our key contractors, we'll look to Gippsland first, then Victoria, Australia and New Zealand. When local suppliers can't supply what we need, we'll seek the support of the international supply chain. Our contractors will take the same approach.

We are committed to supporting Aboriginal and Torres Strait Islander businesses to participate in the offshore wind industry and derive economic benefit.

Source: Star of the South, 2024

Consequence Rating

The generation of employment for the Gippsland region and elsewhere in Australia is a positive impact of the project. Even the low employment scenario for the region is positive, although clearly, the higher employment scenario is to be preferred from a regional development perspective.

Table 9-19: BTM-I008 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The regional community has a long history of adapting to large incoming investments and will be able to adapt to the wind farm.	The regional community is likely to welcome the employment generated by the project. However, the project risks a loss of social licence if the share of local and regional jobs in the project is relatively small.	The project will create a long term increase in employment, not just through the construction period.	Medium (positive)
Magnitude			
Extent	Duration	Severity	Rating
Given the extensive nature of the project, the consequences of the job outcome will be felt across Central Gippsland (and beyond).	The job outcome will be felt throughout the project construction period (and beyond)	The difference between 291 average annual jobs (low scenario) and up to 886 jobs (high scenario) is significant – sufficient to support a town about the size of Foster. Other things being equal, the impacts will dissipate following construction. However, there is often a minority of workers who will stay following such projects, adding to the skills profile of the region.	High (positive)
Consequence Rating			**Major positive consequence**

9.9.6 Mitigation

To speak of mitigation in this case is to identify ways in which the potential benefit for the region can be maximised. This means identifying how the project can ensure the highest possible share of jobs is based in Gippsland, while still achieving the main project outcomes. This will rely on several factors:

- ***Use of the Corner Inlet Port***

  Star of the South has indicated a preference for using the Corner Inlet Port for its construction management port as well as its operations and maintenance port. This would boost average annual employment in the region on the offshore construction tasks from 138 under the low scenario to 534 in the high scenario. The use of the Corner Inlet Port will depend on the capacity of the Port and the management and operational strategy of the major contractors for the project.

- ***Creation of a regional supply chain***

In its Implementation Statement 4, the State Government identifies a contract requirement for project proponents to propose,

> *"…opportunities for investing in the construction and capital expenditure stages to maximise local content for the development and construction phase of the project and support increased levels of local content in future projects. Projects* ***after the first tranche auction*** *will likely be required to comply with a minimum local content requirement in the capital expenditure phase.*" (Victorian State Government, 2025, emphasis added)

This recognises that the first offshore wind project is unlikely to have a fully formed local supply chain. Nevertheless, Star of the South has committed to a local first policy and has undertaken and publicised its supply chain mapping for the project which identifies a range of potential regional suppliers (see previous subsection). Ongoing information including briefings for regional suppliers will enable those firms to participate fully in the project. The local first policy could also entail having weightings in contract bidding processes that favoured regional firms or firms that were willing to establish a meaningful presence in the region. In this way, Star of the South could provide the initial impetus to the establishment of a new industry employing thousands over coming decades.

- ***Wind Worker Training Centre***

The State Government's proposed Wind Worker Training Centre has yet to be fully fleshed out at the time of writing. Nevertheless, given that Gippsland waters are intended to be the location of the largest component of the offshore wind industry, it would be appropriate for a significant component of the training centre to be located in the region. This would benefit regional workers, including those transferring from declining fossil fuel industries, and would attract workers from elsewhere.

Workforce Development Strategy

Once the final parameters of the project are understood, a Workforce Development Strategy will be required that identifies the project schedule, the number of workers of various types required at each stage and how they will be sourced. In this Plan, a key aim should be to maximise the number of workers that are based in Gippsland – people who already live in the region or who move to the region for the project. This will include:

- Continuing to support the establishment of the Wind Worker Training Centre in Gippsland and developing programs to maximise the number of people trained by the centre
- Working with other stakeholders to develop a strong offshore wind workforce in the region
- Establishing procurement processes that have a weighting towards existing Gippsland firms or to firms which will establish a management and operational presence in the region for the project
- Encouraging participation in procurement by Gippsland firms by holding local briefings
- Working with other stakeholders to support local component manufacturing, service provision and research
- Working with local and regional stakeholders to ensure that those disadvantaged in the local labour-market – including aboriginal workers and people with disabilities - have access to jobs on the project

- Ensuring sufficient attractive accommodation is also a key to attracting skilled workers (and this is dealt with in section 9.11)

Mitigation Measures

BTM-M005: Workforce Development Strategy

Develop and implement a Workforce Development Strategy, in consultation with Councils and other relevant stakeholders, that will identify project labour needs and how to maximise participation by Gippsland firms and Gippsland workers.

Residual Impacts

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-20: BTM-I008 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Spending on the project would generate increased revenues for many regional businesses.
Would regional output and employment be reduced by this impact?	No. Regional output and employment would grow as a result of the project. Regional output is estimated to be larger by between $9.4 billion and $11.5 billion over the life of the project.
Are opportunities to grow regional output and employment maximised?	The mitigation measure which is focused on maximising regional participation in project contracts. and investigating opportunities for maximising local content
Would visitor numbers and their distribution be adversely affected by this impact?	Temporary workers from elsewhere would boost visitor numbers in the region. This may be offset at times as other visitors could be deterred by construction noise and other disturbances.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	The development of new skills, new infrastructure and new business arrangements would boost the capacity of the region to host further ecologically sustainable development.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	The project would reinforce regional skills in important and emerging industries in the renewable energy sector. It would also capitalise on existing strengths in electricity production and transmission.
Residual sensitivity rating	**Medium (positive)**
Residual magnitude rating	**High (positive)**
Residual consequence rating	**Major positive consequence**

The project would generate large numbers of additional jobs for Gippsland through the construction period, deepening the regional skills base in the emerging renewable energy sector and allowing for the redeployment of workers from the declining fossil fuel energy generators. The preferences of Star of the South and the mitigation measures identified should boost the scale of the employment benefit to the region.

9.10 BTM-I009: Disruption to the local and regional labour markets

Impacts

As shown in the previous section, construction of the project would require somewhere between approximately 1,500 and 4,800 job years in Gippsland over the seven year construction period. Construction employment in Gippsland would peak in the fourth year of the project, with up to 1,400 workers required in some quarters.

The work would be managed by one or more tier 1 contractors which would coordinate the specialist teams, including sub-contractors, required to complete each task[9]. Many of these civil and electrical sub-contractors could be existing Gippsland firms. Some, particularly for the more specialist tasks, may be brought in from outside the region.

The project would be a challenge for the local and regional labour-market to accommodate. In 2021, the Commonwealth Government's Labour Market Information Portal (Australian Government, 2022) estimated construction employment in Gippsland at 10,700. Under the high employment scenario for Gippsland, the wind farm project would require the equivalent of up to 13% of the region's entire construction work-force at some points during the construction period. In practice, dedicating up to 13% of the regional construction workforce to this project is very unlikely, given the wide range of other significant projects in the region and the normal level of ongoing building work that requires workers In addition, the wind farm construction requires a range of specialised workers who are unlikely to be currently present in the region in sufficient numbers. The means that the project would require additional workers beyond the current resources in the region. This may occur in a number of ways, including:

- ***Capable workers may be attracted from other industries in the region if work on the project pays higher wages or provides other opportunities[10]***. This could bid up wage costs for other industries including farming and forestry as has been seen in other large infrastructure projects in sparsely populated areas. The input-output model results (Appendix B) suggest that widespread increases in wage costs would not result. However, there may be localised increases, especially in areas where there have previously been relatively few employment choices. In an era when the wages share of the economy has been stagnant or declining, especially in farming, mining and utilities (see Reserve Bank of Australia, 2019), this may be seen as a reasonable outcome. The downsides may be:
    - high wages could cause the postponement or cancellation of other worthwhile investment projects that have long-lasting economic benefits to regional communities
    - existing industries would struggle to find workers, with adverse impacts on production and output
    - following the project, local wages would decline – other things being equal.

[9] It is important to note that, at the time of writing, no contracting arrangements have been finalised but the methods described here are standard practice for large construction projects.

[10] According to research by Robert Half, (2025) 52% of Australian workers would feel "compelled to change jobs for a higher salary"

- ***Additional workers may be brought in from outside the region***. Regional firms or those brought into the region for the project may bring their existing workforce from outside the region or hire new workers from elsewhere. This solution would be especially relevant where specialist skills are required for relatively short assignments. To the extent that these workers stay in Gippsland beyond their involvement on the Star of the South project, this would represent a gain of skills and capacity for the region.
- ***Regional workers may be trained to meet the demand***. Regional workers could be trained in advance to take part in project construction. This could include the provision of training courses for unemployed workers or young people just entering the labour-market. Star of the South has outlined typical job descriptions for the positions that will likely be required for required for construction and operation of the wind farm. As noted above, the firm is also working with other stakeholders on the Wind Worker Training Centre.
- ***Regional workers may be redeployed***. Managed redeployment of workers in declining industries could provide jobs for a skilled work-force and ameliorate the impacts of major workplace closures. In particular, the Yallourn power station in the Latrobe Valley is due to close in 2028 but would begin shedding workers well before-hand. Redeployment of these workers would be a tangible symbol of the change from fossil fuels to renewable energy. This solution relies on a future stream of renewable energy and other significant civil construction projects after Star of the South to generate a lasting industry that would keep the redeployed workers in jobs. Fortunately, there is a raft of projects slated which, if successful, would keep Gippsland workers employed for many years (see section 9.9).

Wage price competition with other local industries would have some adverse impacts on existing local industries by decreasing the supply of workers. In addition, unemployment in the region and the State as a whole is currently low, making it more likely that workers will need to be attracted from other businesses. Some mitigation is likely to be required to avoid harms to the other sectors of the regional economy.

Consequence Rating

Table 9-21: BTM-I009 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Many regional businesses that have workers drawn away by Star of the South could struggle to attract new workers because of the current low unemployment rate in the region and elsewhere. This may be offset to some extent by the move of workers from declining industries such as coal and gas.	Most businesses will be able to tolerate the loss of some workers although there may be impacts on regional output as a result of the lack of capacity to expand. Over the long term, there would be a stimulus for improvements in productivity through capital replacing labour.	Most businesses will recover following the project; and if the project becomes an industry, more people could be expected to move to the region to take up available jobs.	Medium
Magnitude			
Extent	Duration	Severity	Rating
The project would draw people from throughout Gippsland, although the largest impacts would be on the nearest firms.	The effects would last throughout the construction period, waxing and waning	Impacts on companies in the local study area without access to large alternative labour pool	Medium-High

	with the demands of the project schedule.	could be significant. Elsewhere, civil construction projects could also be affected. These impacts will dissipate following the construction period.	
Consequence Rating			**Moderate-Major**

Mitigation

Gippsland has the opportunity to play a major role in hosting an offshore wind industry to support the roll out of 9 GW of electricity production by 2040, as per Victorian Government policy. The offshore projects and other large-scale renewable energy generators in the region would be constructed over several decades. This would allow people to make a career in the industry, enabling many of those brought in to work on the construction of Star of the South to remain and contribute to the life of the region. However, the Star of the South operators can only cooperate with others seeking this outcome (see section 9.9).

A more concrete mitigation measure would be the creation of a Workforce Development Strategy that aims to maximise the regional benefits of the project and minimise any adverse impacts on existing local industries. Such a plan is outlined in the previous section (see section 9.9.6). In minimising the disruption to local labour-markets it could also include:

- Working with fossil energy companies in the region (coal, oil and gas) and Regional Development Victoria to help workers being made redundant to transition to the renewable energy sector, identifying the training and other support that might be required.
- Working with suppliers to identify hard-to-source skills and develop strategies to attract the necessary workers or provide local training. Cable jointers, for example, have been nominated by Star of the South as a category of key worker in relatively short supply and which would be required by the project. Such workers would also be required by a range of other projects in the region – Marinus Link and other onshore and offshore wind farms. The provision of local training courses for cable jointers would allow workers to be trained prior to the project and as part of the project once it starts.
- Working with local employment agencies to ensure that the employment opportunities generated by the project directly and indirectly are promoted to the potential labour-force, including those disadvantaged in the labour-market such as aboriginal workers. It seems likely that some existing local workers in farms, timber mills and other manufacturing and construction enterprises in Central Gippsland would be attracted to work on the project if wages or other opportunities (training, career advancement etc) are more attractive.
- There is the potential for more isolated places with small existing labour pools (Yarram, Foster, Woodside, Toora etc) to be left without sufficient workers for existing industries. In this case, there is a need to promote the available work beyond the local area in a bid to attract workers from elsewhere. Local employment agencies may need to expand to provide this service for businesses and may need support to undertake this new role. Local businesses may also need assistance in accessing such services[11]. This could be provided in the form of financial

[11] The average cost to recruit a new employee is $3,500-$5,000 according to human resources firm Employment Hero (2021) and would be much higher for higher skill and professional roles.

assistance to collective business organisations (chambers of commerce, Victorian Farmers Federation branches etc) or Council economic development departments to develop recruitment campaigns.

Mitigation Measures

Following production and implementation of the Workforce Development Strategy (BTM-M005) no additional mitigation measure is proposed.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-22: BTM-I009 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Project spending and employment would generate a general increase in regional business incomes. However, even with the mitigation measures in place, some local firms in sectors not connected with the windfarm may find that wages are being bid up by the project and/or that new workers are harder to find.
Would regional output and employment be reduced by this impact?	Regional output and employment would rise as a result of the project.
Are opportunities to grow regional output and employment maximised?	The Workforce Plan aims to maximise opportunities for the regional labour-force. This should be read in conjunction with the mitigation measures outlined in section 9.9.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers and distribution would not be affected by this impact.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	A tightening of the labour-market would reduce the capacity of the region to host further ESD during the construction period. If a longer term offshore electricity industry is created, it would draw in workers to settle in the region, gradually relieving the pressure on other sectors.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	A tight labour-market would make improving the diversity of employment opportunities in non-project sectors more difficult without drawing more workers into the region.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Moderate**

Such a large project, much of which is proposed to take place in relatively sparsely populated districts, is bound to have an impact on the local labour market. It seems likely that such a big project would entice workers with relevant skills away from existing firms, including farms, timber harvesting and timber mills. Such workers may be hard to replace, even with mitigation measures in place, and would likely result in higher wages in affected sectors. These impacts would last for the duration of the construction period – around seven years in total. This may be difficult for individual businesses in the area south of the Strzelecki Ranges but is unlikely to create region-wide production losses.

It is clear that the creation of a full-scale offshore wind energy industry is the intention of State and Commonwealth Governments. The workforce implications of this are being addressed more widely in the Victorian Government's Renewable Energy Jobs Taskforce. Further actions and recommendations from this Taskforce may be expected to affect the way in which Star of the South tackles its own workforce planning.

9.11 BTM-I010: Disruption to the local housing and accommodation market

Impact

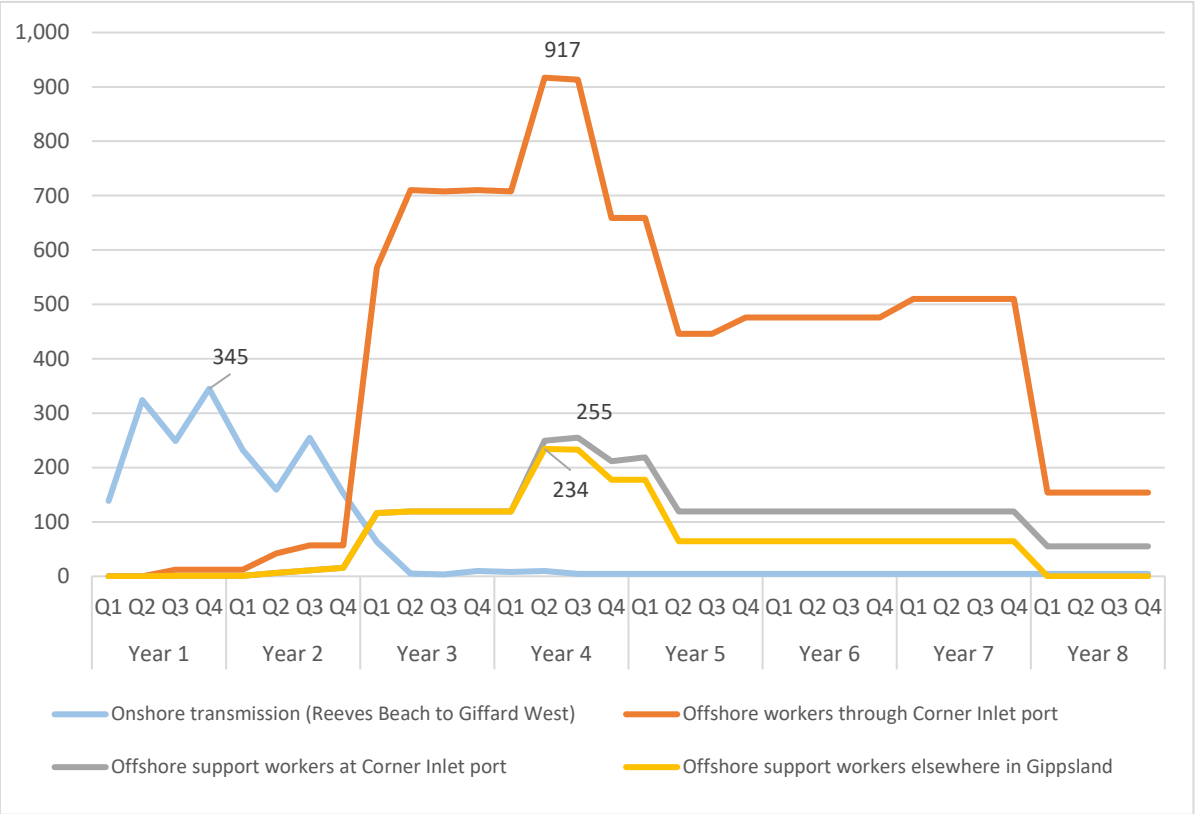
This part of the assessment assumes the high scenario for project employment in Gippsland will be achieved. This scenario will create substantial regional employment benefits but the scale of employment could overwhelm the local housing and accommodation market without careful management. Put another way, many of the regional employment benefits will not materialise unless sufficient accommodation can be made available for the anticipated workers.

In the high employment scenario, workers on the project are assumed to be centred around:

- Reeves Beach to Giffard West for the onshore transmission work
- The Corner Inlet Port (BBMT/Port Anthony) for the people working offshore and half of the land-based offshore management and support workers plus all those involved in offshore operations and maintenance during the construction period
- Elsewhere in Gippsland – presumed to be the Latrobe Valley towns or Sale – for the remaining land-based offshore management, design and administration workers

The anticipated scale of the employment at each location over time is shown in Figure 9-12. The number of jobs in the peak quarter is shown.

Figure 9-12: Jobs at project work locations, high employment scenario for Gippsland



Source: Star of the South; Tim Nott

In planning to accommodate these workers, several key issues need to be taken into account:

- The actual number of workers at each location at any one time, and overall, remains uncertain and will depend on the scale of the final project, the final project schedule and the location of individual contractors and their construction methodology and approach.
- The number of Gippsland-based workers who can commute from their homes to the various worksites remains unknown. This will depend on the success or otherwise of efforts to train/retrain regional workers; to attract workers from other regional industries; and the capacity of regional enterprises to successfully bid for contracts and sub-contracts on the project (see section 9.10).
- Given the scale of the project and the size of the local and regional workforce, even with retraining of existing workers, significant numbers of workers will be required from beyond a normal commuting distance, and these will require short and medium-term accommodation. Given the scale and location of the respective labour-markets, most of the outside workers are likely to come from Melbourne.
- In the post-COVID years, the commercial accommodation sector in the Central Gippsland region has reached annual occupancy rates as high as 70%. This means that the existing short term accommodation market has limited capacity to host new workers without displacing existing customers. In the local study area, occupancy rates are highly seasonal, in common with many beachside holiday destinations. Accommodating temporary workers in peak periods will mean displacing tourists, with flow-on effects to other local tourism and recreation businesses.

- While the large towns along the Princes Highway corridor – from Drouin to Sale – have thriving housing markets and a range of urban growth areas – the towns of the local study area have much smaller housing markets, with limited urban growth opportunities. The social impact report for the project (Technical report R: Social) identifies that longer term residential lettings in Yarram and Foster – the closest district towns to the project work sites - are of the order of 30-60 per year with dwelling construction of the order of 10 to 20 per year. Housing activity is commensurately smaller in the other towns and villages of the local study area. This level of new provision would not be sufficient to accommodate the demand from the project under the high employment scenario; and taking up all the new rental housing would displace workers in existing industries and retirees who have made up a portion of new residents in the area, with adverse impacts on those parts of the local economy.
- The settings of the national housing market are not currently delivering supply commensurate with demand, with an increase in the ratio of house prices to average earnings; an increase in social housing waiting lists; an increase in homelessness; and a 20% increase in rents since 2020 (Rachel Ong ViforJ et al, 2025). The market cannot be relied on to provide sufficient housing for the project without further intervention.
- The pressures on the housing market resulting from a large construction project can be seen in the example of the Bass Coast Shire during the construction of the desalination plant in 2009 to 2012. House prices in the Shire experienced an uplift which was about 13% above the trend, but then reverted to the trend once the construction was complete – a minor boom followed by a minor bust. This is shown in Figure 7-6. The consequence of this price growth was to increase costs for *all* new renters and purchasers in the area during the period. This had adverse impacts on the attraction of new workers and visitors to the area

Consequence Rating

Table 9-23: BTM-I010 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The housing and accommodation sector in the local study area is geared to the needs of low population growth and the visitor market. It is not highly adaptive, being small and unused to large projects for many years. The short term accommodation market in the Princes Highway corridor is larger and more geared to large projects and will be able to adapt more easily.	The accommodation sector in parts of the local study area may be overwhelmed without careful management. This could result in significant loss of tourists and a decline in the non-accommodation parts of the visitor industry.	There would likely be a rise in the cost of short term accommodation and on house prices and rents if supply does not meet demand.	High
Magnitude			
Extent	Duration	Severity	Rating
Includes all the local study area and parts of Central Gippsland.	For the period of construction although property price and access impacts could take some time to dissipate.	Other things being equal, housing demand would be reversed following the project, although prices are “sticky” and may take	High

		some time to return to the pre-construction trend.	
Consequence Rating			**Severe**

Mitigation

Recognising these issues, Star of the South is proposing a Workforce Accommodation Strategy (see Technical Report R: Social) that has a stepwise approach to meeting the accommodation needs of the workforce which can mitigate potential impacts as the housing requirements get larger. This is termed the Workforce accommodation mitigations framework and is shown in the tables below, separately for the onshore transmission task and the offshore wind farm construction.

Table 9-24: Workforce accommodation mitigation framework, onshore transmission

Steps		**Construction**	
Workforce	Category	Technical staff	Onshore management, administration, logistics and others
	Peak Quarterly Workforce	299	46
Minimise demand	1	Project planning with the aim of minimising the number of workers requiring accommodation at peak periods.	
	2	Recruit labour from 60-minute drive catchment or from Latrobe Valley, supported by a shuttle bus service if required.	Recruit labour from 60-minute drive catchment or from Latrobe Valley
	3	Partner with local recruitment agencies and training providers to increase participation of local workers where possible.	
Secure access to and/or augment existing supply	4	Develop agreement with existing short stay accommodation providers to supply rooms for use by workers from outside of 60-minute catchment (focusing on Sale and Yarram). Number of rooms to be secured as part of the agreement would not exceed 25% of the current supply	Workers to independently secure longer-term accommodation within existing rental and/or Airbnb markets-
	5	Develop agreement with existing short stay accommodation providers to develop new accommodation capacity. 100% of any new capacity developed in partnership with the Project available	-

		for use by the workforce outside of the 60-minute catchment. Type of existing stay accommodation could include caravan parks.	
Develop temporary accommodation	6	Develop suitable temporary accommodation options with capacity to accommodate workers not housed via steps 1 to 5, in collaboration with local councils.	
Steps		**Operations and Maintenance**	
Workforce	Category	Technical staff	Onshore management, administration, logistics and others
	Permanent Workforce	3	2
Minimise demand	1	Recruit labour from 60-minute drive catchment or from Latrobe Valley	
Secure access to existing supply	2	Workers to independently secure longer-term accommodation in the region.	

Source: Star of the South, 2025a, in Technical Report R: Social

Table 9-25: Workforce accommodation mitigations framework, offshore wind farm

Steps		**Construction**		
Workforce	Category	Offshore Technical staff	Onshore management, administration and logistics (Port Based)	Onshore management, administration and logistics (Latrobe Valley or Sale)
	Peak Quarterly Workforce	917	255	234
Minimise demand	1	Project planning with the aim of minimising the number of workers requiring accommodation at peak periods.		
	2	Recruit labour from 60-minute drive catchment		

Secure access to existing supply	3	Offer workers 1 night of accommodation before and after offshore shift rotation, either on vessel or within a port-based accommodation facility	Workers access rental properties in Yarram (10), Korumburra (10), Foster, Meeniyan and Leongatha (10) (limited to 30 per annum).	Workers to independently secure accommodation in the region.
	4	Provide workers with a shuttle bus service to specified Melbourne metropolitan areas to avoid the need to overnight in the region.	Develop agreement with existing holiday rental accommodation providers to supply the property for use by workers outside of 60-minute catchment (focusing on Foster, Yarram and surrounds). Number of properties to be secured would not exceed 25% of current supply. Properties to be used in-lieu of accommodation secured via step 3.	-
Develop temporary accommodation	5	Develop suitable temporary accommodation options with capacity to accommodate workers not housed via steps 1 to 4 in collaboration with councils		
Steps		**Operations and maintenance**		
Workforce	Category	Offshore Technical staff	Onshore management, administration and logistics (Port based)	Onshore administration and logistics (Latrobe Valley, Sale or broader Gippsland)
	Permanent Workforce	154	55	0
Minimise demand	1	Recruit labour from 60-minute drive catchment		
Secure access to existing supply	2	Workers access on market rental properties in Yarram (10), Korumburra (10), Foster, Meeniyan and Leongatha (10) (30 in total per annum), and/or rental properties acquired during the construction phase vacated by construction workers leaving the region.		
	3	Develop agreement with existing holiday rental or other short-term accommodation providers to supply the property for use by workers outside of 60-minute catchment. Number of properties to be secured would not exceed 25% of current supply.		

Develop accommodation	4	Develop suitable accommodation options with capacity to accommodate workers not housed via steps 1 to 3, in collaboration with local councils.

Source: Star of the South, 2025a, in Technical Report R: Social

The workforce accommodation mitigation framework is an innovative and sensible approach to meeting project housing needs in a situation of uncertainty. If step one does not meet the need, step two is triggered, then step three and so on. The key features that mitigate against harming the local and regional economy are:

- No more than 25% of the existing short term accommodation should be used to house project workers. This will ensure that the local and regional study areas can continue to service their tourism and other work-related markets, reducing the impact on other parts of the local and regional economy.
- No more than 10% of the current level of leasing or purchasing of dwellings in the local study area (and Leongatha) should go to project workers to avoid creating an unsustainable rise in prices and reducing opportunities for workers in other industries, instead putting an emphasis on increasing the supply of housing

The draft Workforce Accommodation Strategy and its mitigation framework will need to be finalised in conjunction with local stakeholders including the accommodation industry once the scale of project employment is understood. At this stage, consideration may need to be given to focussing on the settlements closest to the port, as these will likely experience the highest demand during the offshore construction and beyond. Flexibility in the share of short term accommodation occupied will also be required in order that the project can support accommodation providers that may otherwise be experiencing a downturn in occupancy as a result of wind farm construction impacts.

Star of the South acknowledges in the Workforce Accommodation Strategy that, if the last steps in the framework are required for the construction phase – that is, the development of a workers' village or other temporary accommodation solutions on behalf of the proponent – that this will require secondary approvals through the normal planning process.

Sufficient resources will need to be provided to plan, undertake and monitor the Strategy. Given the long lead times for accommodation provision, it is important that the Workforce Accommodation Strategy be finalised in a timely way to ensure that housing requirements can be met.

Mitigation and monitoring measures

BTM-M006: Workforce Accommodation Strategy

Develop, update and implement the draft Workforce Accommodation Strategy, in collaboration with the relevant Councils and accommodation providers, prior to construction to minimise impacts of the project workforce on available accommodation providers within the local area (in accordance with SOC-M001).

In finalising the Strategy, the following actions will be undertaken:

- Regular review and amendment of the Strategy, as required
- Make available sufficient resources to actively plan, manage and monitor the Strategy.
- Report on the broad Strategy outcomes to a Community Advisory Group or relevant Councils

- If required, once the scale of the project and likely workforce is known with more certainty, collaborate with local authorities and other stakeholders to plan the provision of supplementary accommodation

BTM- M008: Workforce Housing Monitor
Monitor the number and share of project workers who live in the region or who move to the region. Identify the type of accommodation used by each worker who moves into the region. This data can be used to monitor and adjust the Workforce Accommodation Strategy, if required.

BTM-M009: Accommodation Surveys
Monitor visitation to the local study area through accommodation surveys in order to understand impacts on tourism businesses. This could include asking a range of accommodation providers to continually report on their occupancy in order to gauge the ongoing state of the industry and the availability of short term accommodation for the project. This will be necessary in monitoring the Workforce Accommodation Strategy.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 9-26: BTM-I010: Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Net incomes of individual businesses would be unlikely to fall as a result of this impact and many would grow because of improved occupancy rate of accommodation providers.
Would regional output and employment be reduced by this impact?	Regional output and employment should be improved through improved occupancy rates and the construction of new accommodation.
Are opportunities to grow regional output and employment maximised?	Opportunities to grow regional output and employment would be enhanced through improvements in the capacity of the local housing and accommodation sectors.
Would visitor numbers and their distribution be adversely affected by this impact?	There would inevitably be a tightening of the housing and accommodation market as spare capacity is utilised. This would result in higher accommodation prices which may deter some visitors to the central Gippsland region. However, this should only last for the life of the onshore construction period.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	In the short term, regional housing capacity would be used and extended by the project, making it more difficult for other ESD projects. In the longer term, the region should be left with a higher level of housing and accommodation following the project construction than would otherwise have been the

	case. This would provide support for higher rates of investment in ESD in the future.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	This impact would create support for higher levels of housing development, much of which can be channelled to urban growth areas identified in the various council planning schemes. This would boost local investment potential and support for the regional housing and accommodation sectors.
Residual sensitivity rating	**Low-Medium**
Residual magnitude rating	**Medium-High**
Residual consequence rating	**Minor-Major**

The wide range of potential consequences reflects a number of uncertainties including, amongst other factors, the extent to which local workers can be recruited; the level of existing vacant dwellings that can be brought into the market; and the willingness and capacity of local and regional property investors to develop new stock.

With the Workforce Accommodation Strategy in place, the risk of damage to the tourism industry of the region is reduced, and the local study area should be able to maintain its underlying level of growth. Nevertheless, there would probably be some impact on the cost and availability of rental accommodation given high demand during holiday periods. This would affect holiday-makers and workers from all industries present in the region. This impact would persist for the construction period but should dissipate once construction is complete.

If it becomes clear that a full-scale offshore wind energy industry is being created, more comprehensive steps in the Workforce Accommodation Strategy may be required to meet the demands of workers and visitors.

9.12 BTM-R001: Oil spill impact on tourism

Project parameters that define the basis of risk assessment for oil spills are detailed within Attachment 1-Oil Spill Modelling Summary (RPS, 2024).

When evaluating this risk, the following initial mitigation measures as outlined within Technical report P: Shipping and navigation are assumed to be implemented:

- OFF-M22: Stakeholder communication
- VES-M01: Vessel Operations Framework
- VES-M04: Vessel movement controls
- OFF-M03: Demarcation areas
- OFF-M12: Safety and protection zones
- SNV-M05: Project vessel safety requirements
- SNV-M09: Charting of final layout on navigational charts
- OFF-M10: Notice to Mariners
- SPL-M02: Spill Response Plan
- VES-M05: Vessel biosecurity controls

Description

Construction activities present the risk of spillage of various oil mixtures into the sea. The likelihood of accidental releases from breakdown and vessel collision is very low, although dropped loads from cranes and misaligned valves are known to occur in the industry. A vessel collision resulting in an oil spill is the worst case scenario but this is a very unlikely occurrence in the offshore commercial industry given the level of regulation, advanced management framework and high skill level of crew onboard vessels. For example, a review of the Australian Transport Safety Bureau's marine safety database of vessel incidents since August 1991 identified no collision, grounding or sinking of a vessel whilst engaged in oil and gas industry activities (ATSB, 2018).

The main credible causes of accidental release to the environment are:

- Dropped objects due to human error or equipment failure
- Failure or mechanical breakdown of equipment that uses, stores or transfers oil
- Failure to align valves during liquid transfers
- Vessel collision.

To determine the potential risk to business and tourism off the Gippsland coast following an oil spill from a vessel, analysis was performed on modelling results for floating oil from the nearshore (northern) end of the Offshore Wind Farm Area. Oil discharges are only visible to people at concentrations above approximately 60 parts per million (AMSA 2014). For surface oil, 1 g/m^2 is visible as a silver sheen and approximates the concentration that initiates potential socioeconomic effects (Attachment I - Oil Spill Modelling Summary).

A surface spill of Marine Gas Oil (MGO) along the nearshore boundary of the Offshore Wind Farm Area would be expected to drift a relatively small distance (less than 50 km) as floating oil before prevailing sea conditions reduce surface concentrations to low exposure levels (<1 gm/m^2) due to entrainment, evaporation and dispersion (refer to Attachment I - Oil Spill Modelling Summary; RPS, 2024). The predominant drift trajectories for floating oil are alongshore (north-east / southwest), rather than towards shore. As a result, concentrations of surface oil ≥ 10 g/m^2 (where biological impacts may occur) are not expected to approach within 10 km of shorelines as floating oil. In the unlikely event of an oil spill, say from a vessel collision in the closest parts of the OWFA to the shore, there would be a 1-2% chance of surface oil reaching a beach in the local study area. The odour from a spill of the scale possible in this case would be likely to dissipate within weeks.

Much of the MGO would be expected to evaporate within a day. The rest would most likely entrain into the water column, with the predominant drift trajectories also alongshore, driven by currents. There is potential that, in certain weather conditions, entrained oil could enter the surf-zone of the open coast inshore and towards the north-east or the entrance to Corner Inlet. This is unlikely to occur at noticeable concentrations (Attachment I- Oil Spill Modelling Summary).

A spill response plan (SPL-M02) is proposed by SOTS to deal with accidental hydrocarbon discharge. This plan sets out policies for the rapid assessment, notification, monitoring and initial limitation of ecosystem damage prior to any further action by the Australian Maritime Safety Authority. The plan is intended to reduce the exposure time and area for oil spills

Risks

The immediate impact of a noticeable oil spill on business and tourism may be to deter people from visiting affected beaches and waterways. The odour, oil residue and any beach clean-up activities

could cause some visitors staying at the beach to cut short their holidays; others may travel to nearby unaffected beaches. Recreational boaters and fishers may shift their activities away from contaminated waters. The scale of the impact would depend in part on the time of year, and the number of tourists present; a spill during the summer holiday period would have much more of an impact than during the winter, for example. Following the clean-up period, and depending on the scale of the spill, there could be a period in which the reputation of the affected area as a beachside destination was damaged, resulting in visitation that was lower than it otherwise would have been.

Whilst the objective impact may be low and dissipate within a matter of weeks, reputational impacts can linger. Poor holiday experiences and bad online reviews of a destination can last for some years, taking time and resources to remedy. The adverse impacts would be felt through lower tourism revenue and employment in the affected areas. This would affect mainly the accommodation providers closest to the affected beaches but could also reduce revenues in other businesses in the main service towns.

.**Consequence Rating**

Table 9-27: BTM-R001 - Risk Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The local tourism industry would not adapt to an oil spill but would weather it.	The revenues of small businesses in the tourism sector are subject to high levels of variability as a result of the weather and general economic conditions. Nevertheless, some have few resources to cope with unanticipated shocks.	Recovery would depend on the restoration of the reputation of the area as a clean and pleasant environment. This could take some time following the clean-up of a spill at the higher end of the possible range.	Medium
Magnitude			
Extent	Duration	Severity	Rating
The coast of the local study area and the communities that depend on it. In the event of a spill, coastal locations each have a 1% chance of being impacted by oil at concentration of 100ppb or more.	Depends on the extent and severity of the spill and the time taken to clean it up. Immediate clean-up from a spill at the higher end of the likely scale would take weeks; reputational damage would take longer to dissipate.	The impacts of any oil spills are reversible. For any spills that reach the coast, they would be expected to manifest as a sheen on the water and any odour would dissipate within weeks.	Medium
Consequence Rating			**Moderate**
Likelihood			**Rare**
Risk			**Low**

Mitigation

As described above, the oil spill modelling undertaken for the project is conservative, and the likelihood of a severe event is very low. If an oil spill did occur, it is more likely to be smaller than that

which was modelled. With the implementation of the spill response plan (SPL-M02), a small to moderate spill is anticipated to be barely perceptible to coastal communities or tourism operators. Additionally, the proposed Stakeholder Communication measure (OFF-M22) would provide mechanisms to have discussions with local stakeholders including accommodation providers and recreational fishers in relation to the effects of any noticeable spill. These discussions could lead to further remedial action in the form of additional tourism promotion or business and community support if the spill did impact the local visitor economy.

Monitoring Measure

With implementation of the Spill Response Plan (SPL-M02) and the Stakeholder Communication (OFF-M22), no further mitigation measures are considered to be warranted.

Residual risk

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above and the consequent assessment of risk.

Table 9-28: BTM-R001 - Assessment of residual risk

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	With the implementation of socio-economic monitoring in the spill response plan, any adverse impacts on incomes of individual businesses can be assessed and mitigated.
Would regional output and employment be reduced by this impact?	Yes, there may be minor impacts on tourism in the local study area and the Gippsland region following an accidental spill during construction. Impacts may persist beyond the immediate spill and clean-up but but are unlikely to be significant.
Are opportunities to grow regional output and employment maximised?	Not applicable
Would visitor numbers and their distribution be adversely affected by this impact?	Yes, there could be a decline in visitation to beaches affected by the oil spill for the period that the spill was detectable. Impacts may persist beyond the immediate spill and clean-up but are unlikely to be significant.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Yes, any reduction of visitation has the potential to affect sustainable investment.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	The reputation of Gippsland’s coastal villages may be affected by an accidental oil spill; the spill response plan would monitor any economic impacts, allowing remediation if required.
Consequence	**Moderate**
Likelihood	**Rare**

Residual risk rating	Low

In the very unlikely event of a noticeable oil spill during project construction, there could be impacts on visitation in the local study area. However, given the likely scale of any spill and the mitigation measures in place, any adverse impacts on business and tourism would be modest.

9.13 Summary of residual construction impacts and risks

Key residual impacts of the construction phase following the mitigation and management measures would include the following:

- There would be occasional minor road congestion and traffic delays resulting from road closures during the onshore construction period.
- There may be a small loss of timber for the local and regional forest products manufacturing industry resulting from the transmission easement through plantations. However, the effect on the regional industry would occur over the life of the project and any impact would be small.
- Noise from windfarm construction may have occasional effects on communities in the local study area, including along the route of the transmission line and on the coastal communities between Sunday Island, Port Albert and Woodside Beach during the offshore piling phase. This may have some impact on demand from visitors, although that will be offset to some extent by increased demand from the windfarm workforce. Mitigation measures should further reduce any business impacts during this period. Nevertheless, there may be some temporary shift in visitor revenues to other parts of the local and regional study area.
- There would be a decline in visitation to the Reeves Beach campground, through possible closures and loss of amenity, for extended parts of the project construction period. Intending visitors may find alternative destinations in the local study area although some trips would be postponed or taken elsewhere, including outside the region.
- Divers who would otherwise dive in areas close to the OWFA may choose to utilise alternate locations whilst construction that produces intermittent noise is undertaken. Divers may be able to access alternative dive sites from the same ports and boat ramps that they currently use, with little overall impact on the local economy.
- There would be some temporary disruptions to offshore recreational fishing and boating as a result of offshore construction. However, given the ability of fishers and boaters to access alternative areas from Nooramunga/Corner Inlet launching ramps, the economic impact should be modest. Business impacts would be offset, to some extent, by additional demand from project workers. Any impacts on the Gippsland region as a whole will be minor and should dissipate following the construction period.
- It is possible that marine mammals will seek to avoid offshore construction and that this may temporarily reduce the number of whale sightings. However, this is not likely to affect the wildlife tour boats which will continue to have opportunities to view animals around the Wilsons Promontory coastline.
- The project would generate large numbers of additional jobs for Gippsland through the construction period, deepening the regional skills base in the emerging renewable energy sector and allowing for the redeployment of workers from the declining fossil fuel energy generators.

- In the smaller, more remote settlements of the local study area, the onshore construction period may generate labour supply shortages and higher wage costs for local businesses not engaged in the project. These effects should be much lower in the larger settlements of the Princes Highway corridor, with their larger labour pools and ability to more easily attract workers from elsewhere.
- Even with a Workforce Accommodation Strategy in place, there may be a tightening of the housing market as existing spare capacity is consumed. Rental costs for visitors and other workers would rise somewhat and, at the margins, this may deter some visitors, with adverse impacts on visitor service businesses other than accommodation. However, the impacts on the local economy would be offset by the spending of project workers. In the longer term, the region should be left with a higher level of housing and accommodation following the project construction than would otherwise have been the case. This would provide support for higher rates of growth and investment in the future.
- Modelling of an accidental oil spill in the closest parts of the OWFA to the shore indicates a 1% chance of that spill reaching the beaches of the local study area and that any such spill would not be perceptible to residents for long, if at all. Nevertheless, a perceptible spill could generate poor visitor outcomes and economic losses for the local tourism industry. A spill response plan and stakeholder communication measures are proposed to provide monitoring of social and economic impacts, allowing appropriate remediation if required.

In summary, the construction phase of the project would have some adverse impacts on tourism in the local study area as a result of noise, restrictions on recreational fishing and higher accommodation prices. These impacts would lift once construction is completed. Other sectors, particularly in the smaller and more remote towns, may experience labour supply shortages and higher wage costs for the period of construction. On the other hand, direct and indirect employment by the project would be very substantial, providing a lift in demand for services of all type, including housing and accommodation. The skills and infrastructure developed during the construction phase of the project would position the region to host further sustainable development.

10 OPERATION ASSESSMENT

This section discusses the potential impacts and risks associated with the project as a result of operation of the project and the associated mitigation measures that aim to reduce impacts to as low a level as reasonably practicable. Mitigation measures referred to are defined in Section 13.

10.1 Project parameters that form the basis of impact assessment

Table 10-1 specifies the maximum design scenario that has been assessed for operation.

Table 10-1: Maximum design scenario - operation

Risk	Key parameter values	Justification
Onshore operation	The works and infrastructure are located within the onshore operation project area, which is defined by the area required for the following: • Onshore transmission infrastructure: ○ Up to 8 underground cable circuits with the upper limit easement footprint of 40m	The onshore operation project area defines the maximum land area to be utilised by the operation of the project.
Offshore operation – visual impacts	The following infrastructure within the Offshore Wind Farm Area of 586 km^2: • 147 turbines of 271 m blade tip height, or 113 turbines of 350 m blade tip height, in an indicative wind farm layout • Up to 5 offshore substations • Aviation and marine lighting.	Both turbine scenarios have the potential to represent the greatest infrastructure visible, and therefore greatest potential impacts to visual receptors.

Offshore operation – boating impacts	The key parameters are:
	• Up to 147 wind turbines
	• Up to 418 km of inter-array cables
	• Up to 40 km of interlink cables
	• Up to 286 km of offshore export cables
	• Up to five substations
	• Safety zones: Designated areas that restrict and prohibit certain activities for non-project vessels up to 500 metres from WTG monopiles, offshore substations, inter-array, interlink and export cables.
	• Types of vessels typically include:
	  ○ Wind turbine generator maintenance and support vessels,
	  ○ Inter-array cable maintenance and support vessels
	  ○ Substation maintenance and support vessels
	  ○ Export cable maintenance and support vessels
	  ○ Crew transfer vessels.
		The parameters of the maximum design scenario that has been assessed for impacts to vessels from operations are those from the maximum amount of infrastructure, operations vessels and associated safety zones leading to the maximum amount of restricted access to the marine area for the longest period of time.

Displacement or interaction with non-project vessels	• Up to 147 wind turbines throughout the whole Offshore Wind Farm Area extent • Turbine blades as low as 35 m LAT • Up to 650 km of inter-array cables	The maximum amount of infrastructure, installation vessels and associated safety zones leading to

Risk	Key parameter values	Justification
	• Service operation vessels in the project area every day for the life of the wind farm • Potentially annual ROV vessel present • Potentially annual seabed surveys and depth of burial surveys once every three years • Cable repair vessels present as required.	the maximum amount of restricted access to the marine area for the longest period of time.

To assess potential impacts associated with the project, the operational assessment has also considered the following assumptions:

- Conservatively it has been assumed that the turbines would be facing the coast for maximum visibility. In reality, the turbines would be orientated according to the wind direction.
- Following construction, all cable trenches will be covered with topsoil and seeded with appropriate groundcover. Similarly, all joint bays will be covered with topsoil and seeded, leaving just the link pit lids above ground.
- Permanent infrastructure sites may also include a co-located storage of a wide range of polluting material including fuels, chemicals and wastes.

10.2 BTM-I011: Ongoing employment

Description

The employment scheduling and modelling results are reported in general in section 9.9 and in Appendix B. In summary, the number of jobs in Gippsland during the 30-year operation period are estimated to be as shown in Table 10-2, with a negligible difference between the high and low employment scenarios.

Table 10-2: Estimated ongoing employment in Gippsland (direct and indirect FTE jobs)

	Annual jobs
Transmission maintenance and management	5*
Workers at the Corner Inlet port	55
Offshore workers	154
Total direct annual employment	***214***
Indirect annual employment in Gippsland	102
Total annual employment	**316**

Source: Star of the South, unpublished; Tim Nott; Geografia
Note: *Under the low scenario, two workers engaged in transmission management are assumed to be located in Melbourne

The operational phase of the project would generate a wide range of jobs in supporting industries and as a result of the spending of direct employees. These are estimated at 102 annual jobs but the precise scale of the indirect employment in Gippsland will depend on the presence of key suppliers. It is likely that these would grow over time, especially if the offshore wind industry continues to expand.

Impacts

The project would have a beneficial impact on the availability of work in Gippsland.

The port facility would employ some people with generic skills (administrative workers, labourers etc). However, most workers would be specialised port logistics workers, sailors and wind farm maintenance workers. The great majority of these would either be trained to take up the roles or be imported from elsewhere to make their homes in the district. Some could be workers that transfer from the construction phase of the project. The impact on the supply of key workers to other enterprises and industries in the area should therefore be low.

The number of indirect workers will depend on the capacity of local enterprises and the infrastructure to support them and any new entrants that might be required. For example:

- Both Yarram and Foster have small scale industrial precincts that could accommodate a small number of new industrial supply firms, given appropriate subdivision and infrastructure provision. Larger industrial enterprises wishing to locate near the wind farm would likely need to find suitable sites in Morwell or Sale, where there are large parcels of industrial land.
- Foster is the closest district town to the port. However, the historic commercial centre is constrained. Further work in planning and site assembly would be required to develop further services such as a substantial supermarket, for example.
- Port Albert is an attractive and historic seaport, which has been a significant visitor destination. The hotel in the town centre burnt down some years ago and has never been rebuilt. A hotel has the potential to provide a focal point for visitors and residents and to reinvigorate the town to provide a recreational outlet for new residents attracted to work on the wind farm.

Without these and other new facilities, the local study area is unlikely to make the most of its potential to generate and accommodate the indirect workers required by the wind farm.

Consequence Rating

Table 10-3: BTM-I011 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The labour-market of the local study area will adapt to the ongoing project employment but will require new workers to move to the area	The activity at the port will create a range of new skilled work opportunities both directly and indirectly in suppliers and retailers' goods and services.	This will be a long term addition to the local job stock.	Medium
Magnitude			
Extent	Duration	Severity	Rating
Approximately 210 additional jobs will be created directly in the local study area and a further 100 indirectly in the region.	This will be long term employment	The wind farm would likely have the largest FTE employment of any enterprise in the local study area and would provide a long term	High

		increase in the local job stock.	
Consequence Rating			**Major - Positive**

Mitigation

With the Workforce Development Strategy (BTM-M005) in place, no further mitigation measures are proposed here. As an issue for further consideration, Star of the South could work with all relevant stakeholders to support supply chain business in the local and regional study areas.

Residual Impacts

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 10-4: BTM-I011 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Net incomes of businesses supplying the project or catering to the increased population would rise.
Would regional output and employment be reduced by this impact?	Regional output and employment would increase.
Are opportunities to grow regional output and employment maximised?	Regional employment opportunities would be expanded. Maximising employment opportunities may depend on establishing a regional renewable energy supply industry.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers would not be directly affected by this impact.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	To the extent that regional capacity is taken up to service the Star of the South wind farm project, there may be less capacity to service other projects. This may apply to port capacity, for example.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	The jobs created by the project would add to the diversity of the regional job stock.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**High**
Residual consequence rating	**Major - Positive**

The ongoing employment based around the operations and maintenance port would give a substantial boost to the economy of the local study area, providing a range of jobs requiring new and extended skills for the area.

10.3 BTM-I012: Disruption to housing market

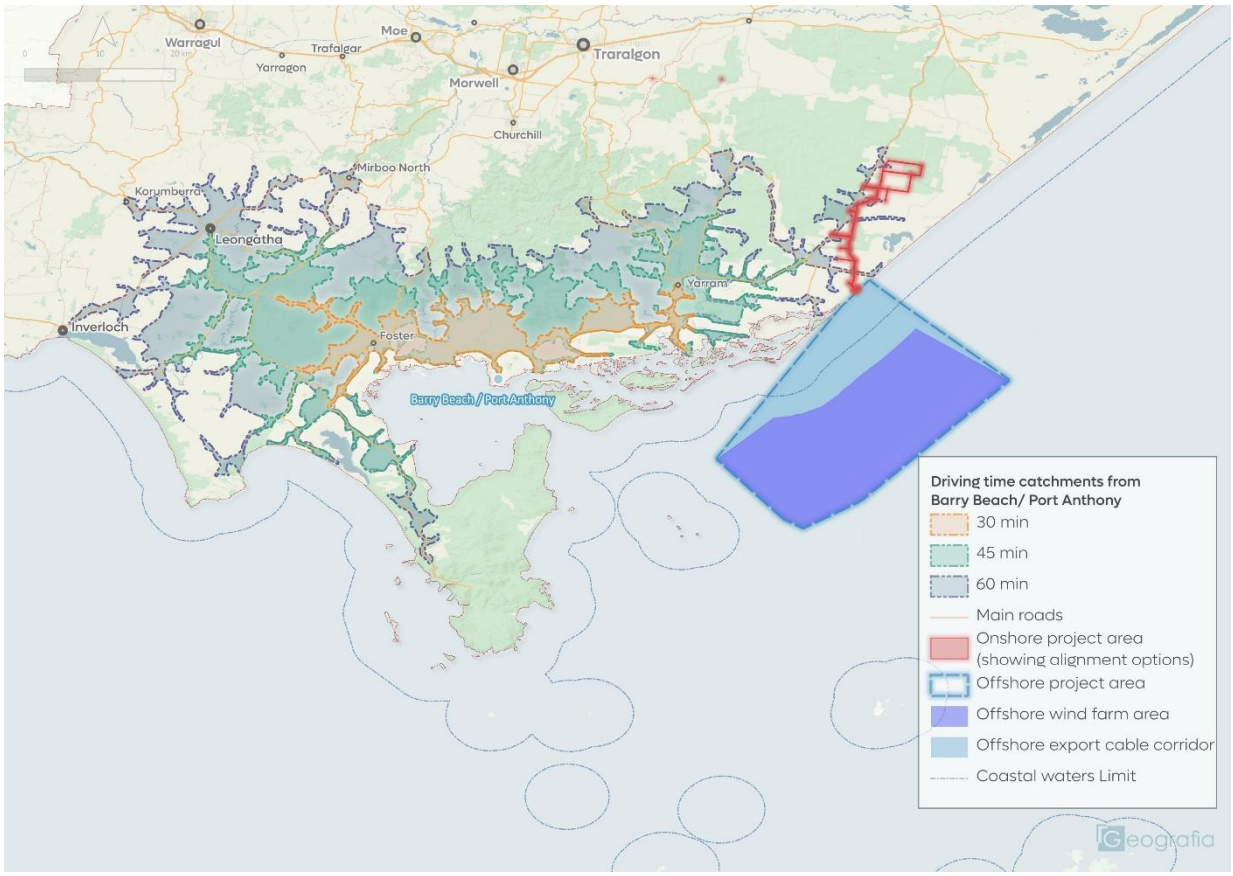
Impacts

This section should be read in conjunction with the assessment of the potential accommodation market disruption caused by the construction workforce in section 9.11.

The project anticipates 212 to 214 new direct FTE jobs. Up to five of these will be in maintaining the transmission line between Reeves Beach and Giffard West. These jobs are likely to be based locally or in the Latrobe Valley as part of a wider line maintenance contract. The Corner Inlet port will be the work location of 209 people, including maintenance workers who travel out to sea to work on the wind farm. These people will require housing within reasonable commuting distance of the port.

The great majority of workers are likely to live within one hour of the site and many would live within 30 minutes travel time. The approximate 30 minutes, 45 minute and 60 minute driving time contours to Barry Beach Marine Terminal/Port Anthony are shown in Figure 10-1.

Figure 10-1: Approximate 30 minute, 45 minute and 60-minute driving time contours to Barry Beach Marine Terminal/Port Anthony

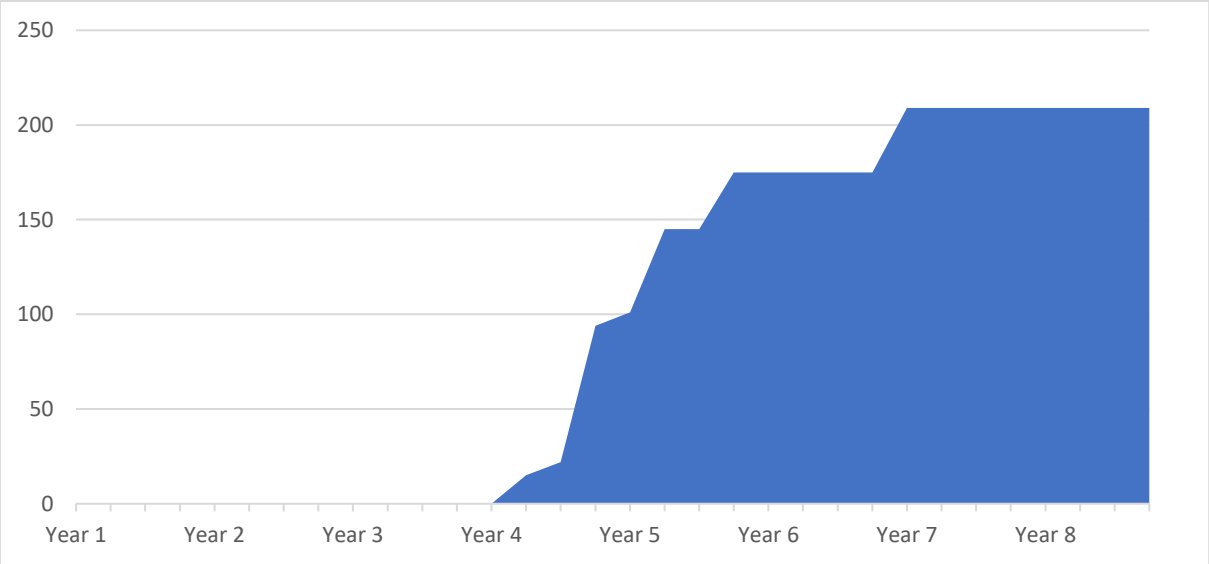


Source: Geografia

The thirty minutes travel contour encompasses the main towns of Foster and Yarram as well as smaller settlements such as Fish Creek, Port Franklin, Toora, Port Welshpool, Port Albert and Robertsons Beach. Foster and Yarram each have a secondary school, hospitals and supermarket facilities and are generally well-serviced small towns that would be obvious locations for families moving to the area. The smaller rural and seaside towns provide secondary residential locations. Leongatha – a town of almost 6,000 people - is on the edge of the 45 minute travel contour and has an extensive set of commercial and community services as well as urban growth areas. Further afield, the towns of Korumburra and Inverloch are on the edge of the 60 minute travel contour, and also have a range of urban services.

The steps proposed by Star of the South to house the ongoing workers are described in the Workforce Accommodation Mitigation Framework (see Table 9-25). The ongoing workforce at the port is expected to build up from year 4 of the construction period, as shown in Figure 10-2.

Figure 10-2: Anticipated operations and maintenance workers based at Corner Inlet port, year 1 to Year 8



Source: Star of the South, unpublished; Tim Nott

Consequence Rating

Table 10-5: BTM-I012 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The local area around the port can adapt to growth up to a point. However, the capacity of the local housing industry will need to expand somewhat to meet the new demand	Growth is likely to be welcomed for the additional services that can be supported, unless house price rises begin to push local families out of the area.	The project workers will be a long term addition to the area.	Medium
Magnitude			
Extent	Duration	Severity	Rating

Impacts will be felt by the area within commuting distance of the Corner Inlet port, mainly within 30 to 60 minutes of the port.	The project workers will be a long term addition to the area	This is a long term impact. At higher levels of construction employment that overlap with the build-up of permanent workers, there will likely be strong demand for accommodation which the area may struggle to meet initially	High
Consequence Rating			**Major**

Mitigation

The Workforce Accommodation Strategy will provide appropriate mitigation for the numbers of project workers moving into the area.

The Workforce Accommodation Mitigation Framework (see section 9.11) expects the following sequence of sourcing accommodation for the ongoing employees:

1. Workers will be recruited who already live within commuting distance of the port.
2. Workers will source their own accommodation from within commuting distance, but taking no more than 10% of the normal level of transactions (rent or sale), amounting to around 30 per year in total, as well as rental properties acquired during the construction phase that are vacated by construction workers.
3. Star of the South will develop an agreement with existing short term accommodation providers to lease their properties for longer periods to Star of the South workers. The number should amount to no more than 25% of the existing supply of short term accommodation in order to protect the tourism industry. Based on the short term accommodation supply within 30-40 minutes of the port, this would amount to 80-100 rooms. [12]
4. Develop suitable accommodation options with capacity to accommodate workers not housed via steps 1 to 3 in collaboration with local councils

More housing will be required to accommodate permanent project workers in areas close to the Corner Inlet Port. Foster and Yarram are likely to be favoured locations because of the presence of key services – hospitals, primary and secondary schools and supermarkets. The Workforce Accommodation Strategy and Workforce Development Strategy will need to monitor whether sufficient housing is available to attract workers to the area.

Star of the South acknowledges that, if the last steps in the framework are required – that is, the development of new accommodation options on behalf of the proponent – that this will require secondary approvals through the normal planning process.

[12] These figures are extrapolated from the draft Workforce Accommodation Strategy by Star of the South, 2025 – see Technical Report R: Social

Mitigation Measures

With the Workforce Accommodation Strategy (BTM-M006) and its associated monitoring actions in place, no further mitigation measures are proposed here.

Residual Impacts

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 10-6: BTM-I012 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	There is potential for the incomes of enterprises in the housing industry to be boosted.
Would regional output and employment be reduced by this impact?	Regional output and employment should be increased by the growth in housing generated by the project.
Are opportunities to grow regional output and employment maximised?	Sustainable housing growth as a result of the project would maximise output and employment over the long term.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers should not be strongly affected by the arrival of permanent project workers, although there may be short term accommodation supply constraints during busy holiday periods. However, if mitigation measures fail, there may be some decrease in housing stock available for short term rental and an increase in prices.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	An expansion of the housing sector in the local study area should boost its capacity to host further development. Population growth should support improved service provision to the local population.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	A modest increase in population growth would support an expansion of services in the villages and towns of the southern Gippsland area, with benefits for both residents and visitors.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Moderate**

The project would cause a growth in housing demand in the local study area, especially in the towns of Foster and Yarram. With a Workforce Accommodation Strategy in place this should provide a positive local development benefit without creating general housing shortages or price rises. Nevertheless,

holiday rentals may be in unusually short supply during busy periods until new housing supply comes on stream. The impact would be felt principally at the beginning of the operational period, with a new equilibrium achieved in the housing market over several years.

If Star of the South marks the start of an extensive offshore energy industry, a more comprehensive and coordinated Workforce Accommodation Strategy would be required.

10.4 BTM-I013: Visual impacts on visitation and tourism revenues

The following assessment looks at the potential impacts of the windfarm on visitors' perceptions of the coast and consequent effects on the tourism industry. However, coastal tourism has a wide variety of influences which need to be taken into account when assessing net changes in visitation. It would not be possible to look at a pre- and post-project figure for visitation and say that the scale of the difference was due to one factor. Therefore, these other influences are also referenced in discussing the potential net change in coastal tourism.

Community surveys by Star of the South indicate that there is some concern about the windfarm being visible from the coast (see, Figure 7-34). Approximately 31% of survey respondents in Central Gippsland feel "somewhat concerned" or "very concerned" on being prompted about this issue in the latest survey of community attitudes (Star of the South, unpublished). There is a fear amongst some members of the local and regional community that the change in the appearance of the seascape would deter visitors; that visitors who are seeking to access the natural values of the coast would no longer visit the areas where the wind farm is visible. It is feared that these visitors would either stay at home or travel to other areas, with the result that the tourism economy of the areas from which the wind farm is visible would decline. Such a decline in tourism would lower demand in the area, with an impact on property prices and the wider local economy.

With such a significant change in the seascape, there must be a risk that visitation would change and, potentially, decline. Unfortunately, there is no directly comparable Australian experience on which to draw since the Star of the South would be the first offshore wind farm in the country, and there does appear to be a difference between the impacts of onshore and offshore windfarms[13].

The approach to assessing this question here has been three-fold:

- Reviewing evidence from overseas examples
- Talking with existing stakeholders, including consulting with accommodation providers and tourism operators
- Providing a discussion about the expectations of different types of coastal visitors and how these can be met in the new conditions provided by the wind farm.

10.4.1 Overseas experience

There has been anxiety in many locations overseas about the effect of proposed offshore wind farms on coastal tourism economies. This has been reflected in studies that have asked beach-goers whether they would be happy to continue visiting the coast if a wind farm were visible. These "stated preference" surveys inevitably show that, other things being equal, some people would choose to

[13] See, for example, Jensen et al, 2018, which describes a study measuring the impact of onshore and offshore wind-farms on property prices in Denmark. This found that while there was some impact on prices within 3km of onshore wind farms, there was no impact on prices from a wind farm that was 9 km from the coast.

avoid views of wind farms. This has then been translated into a likely economic loss, as a proportion of visitors are assumed to go elsewhere. Such forecast losses can be significant. A study of beaches in Catalonia forecast welfare[14] losses of €230 million per season as a result of wind farms (Voltaire et al, 2017). A US study identified potential welfare losses of up to USD$100 million at some east coast beaches (Parsons and Firestone, 2018). A stated preference study of offshore wind farms by the University of North Carolina prompted one pundit to predict annual losses of USD$12 billion and half of all tourism dollars in New Jersey (Scala, 2021). **However, despite these studies, there appears to be no evidence for real and long-lasting economic losses in the tourism sector following the introduction of offshore wind farms**.

Using data from Airbnb, we estimate a difference-in-differences model that compares Block Island to three nearby tourist destinations in Southern New England before and after construction. Our results suggest that ***construction of the Block Island Wind Farm caused a significant increase in nightly reservations, occupancy rates, and monthly revenues for Airbnb properties*** *in Block Island during the peak-tourism months of July and August but had no effect in other months. The findings indicate that offshore wind farms can act as an attractive feature of a location, rather than a deterrent.*

Carr-Harris and Lang, 2019

One study of rental properties in proximity to the first significant offshore wind farm in the US found that, following construction, rents in the area were higher than comparable beach areas (see adjacent box), although the wind farm was relatively small (five turbines) and was seen as a curiosity by visitors.

A more comprehensive assessment of the initial round of offshore wind farms in the UK – those in the range 2 km to 13 km from shore – found, "…none of these offshore developments has led to an adverse effect upon onshore tourism or recreational use in their onshore hinterlands." (Inch Cape Offshore Limited, 2013).

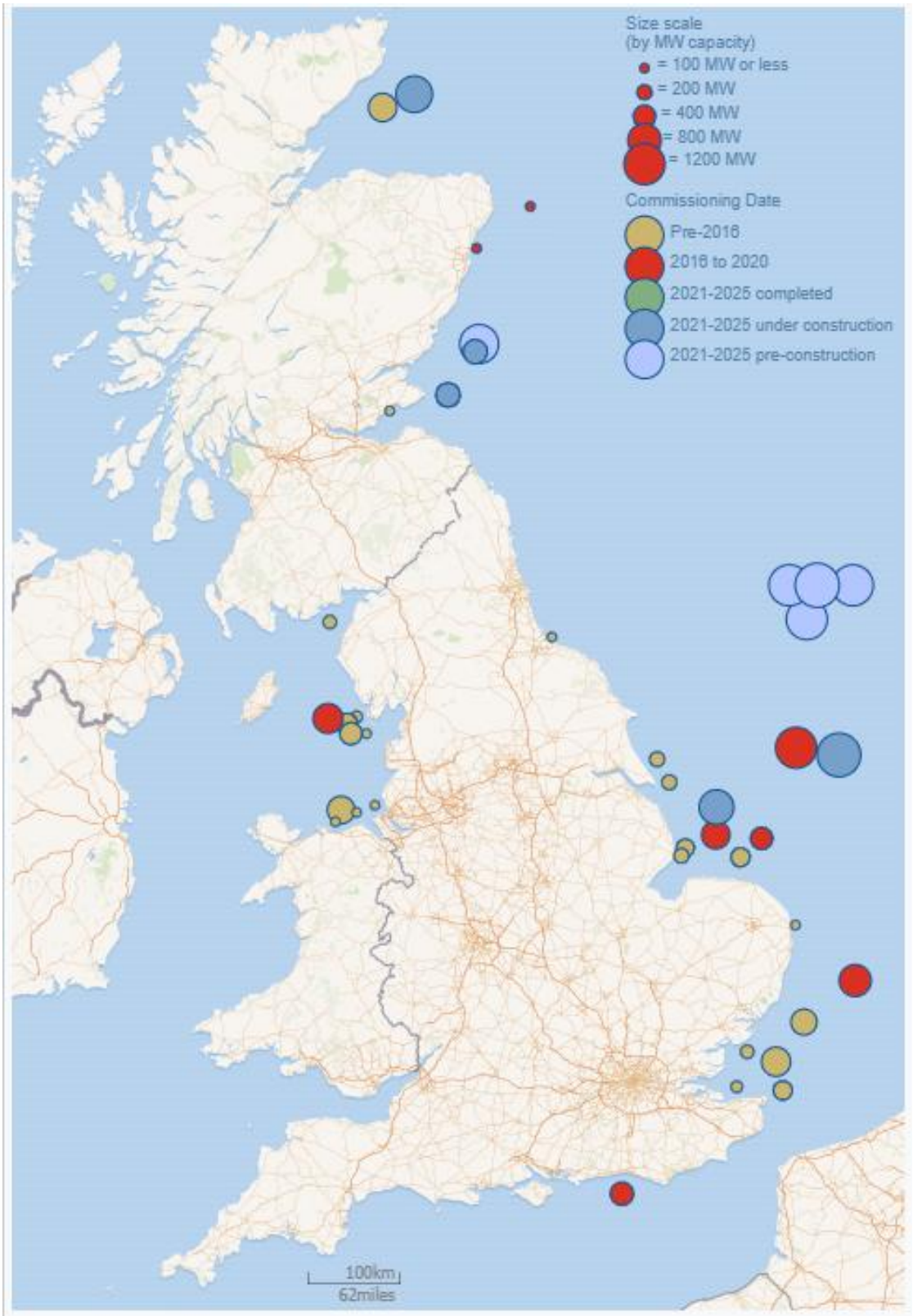
The UK has one of the world's largest and long-established offshore wind industries. If offshore wind farms have a significant impact on tourism, the evidence should be visible in the UK by now. A limited assessment of the impacts on tourism in the UK using available data has been undertaken in this report using the following methods:

- Data on visitation to local authorities and regions in the UK has been collected through the Great Britain Tourism Survey by Kantar (2020) for the tourist boards of England, Scotland and Wales. Data has been analysed for the years 2013 to 2019.
- The assessment in this present report has taken the 28 wind farms in the UK that are 20 kilometres or less, at the nearest point from the shore-line, and identified the closest local authorities – 22 in all. These local authorities were allocated to a larger region containing multiple local authorities.
- Data on domestic overnight visitor expenditure for each of the affected local authorities has been collected and tracked for the years 2013 to 2019. One group of wind farms was developed during that period and one group was developed prior. An average level of visitation for each group was calculated.
- In order to account for regional effects (that is, for the impact of regional trends on visitation to the coastal local authorities), the regional share of visitor nights in each local authority has been tracked for the pre- and post-2013 wind farm local authorities. In most cases, tourism is an important component of the economy of the coastal local authorities. However, these

[14] In this case, "welfare" means the level of social good, which could include a wide variety of priced and unpriced values. The concept of welfare economics underpins tools such as cost benefit analysis.

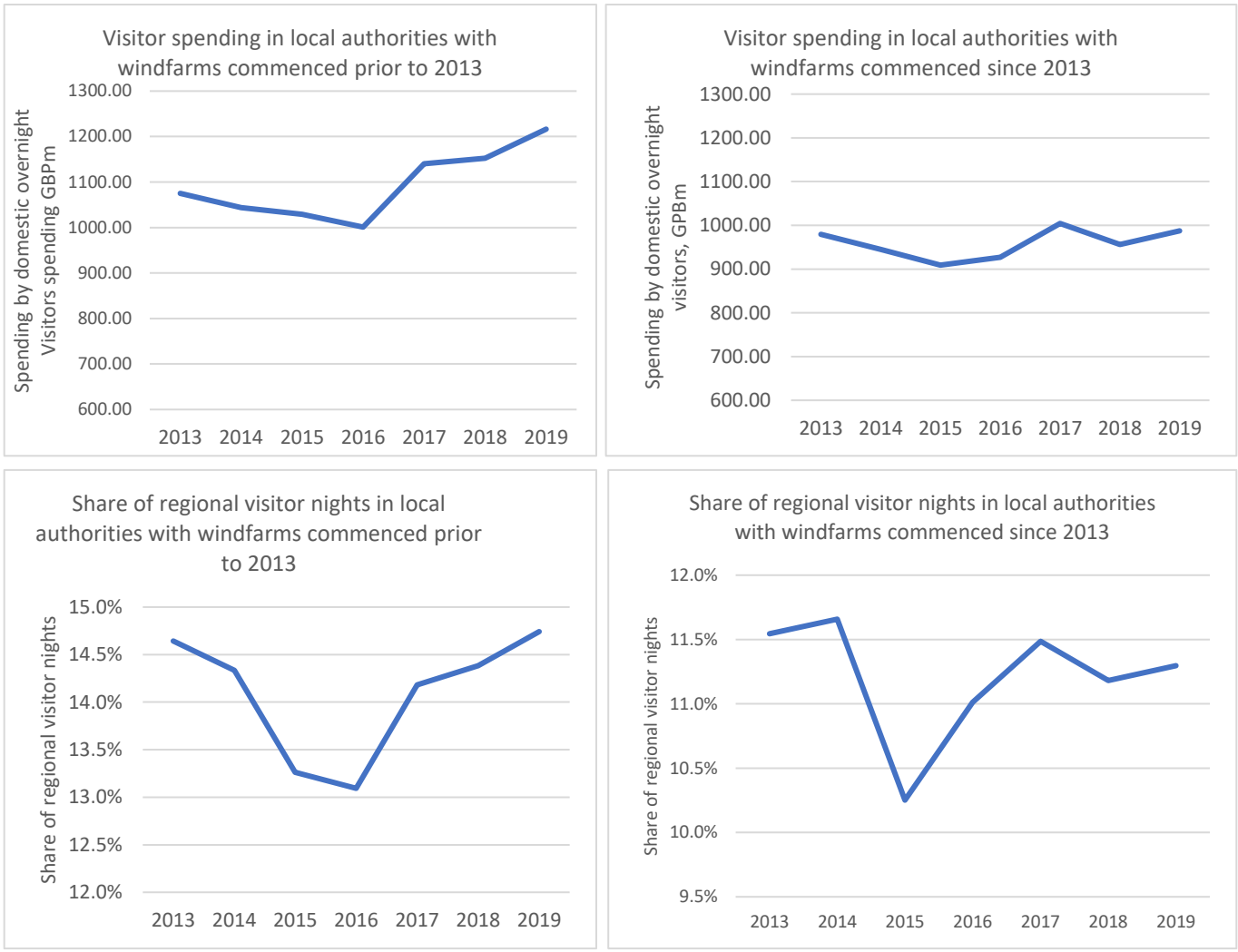
municipalities generally form a relatively small part of the regional visitor economy, typically hosting less than 15% of visitor nights.

Figure 10-3: Offshore wind farm locations, UK



Source: Wikipedia, 2022

Figure 10-4: Trends in visitor spending and visitor nights in UK local authorities with offshore wind farms, 2013 to 2019



Source: Kantar, 2014-2020; Tim Nott

These charts show:

- For the group of local authorities which had offshore wind farms developed prior to 2013, visitor spending grew over the period 2013 to 2019. For the group of local authorities where offshore wind farms had been developed from 2013 onwards, visitor spending remained more or less the same in 2019 as it was in 2013.
- The share of regional visitor nights spent in local authorities with offshore wind farms was more or less the same at the end of the period as it was at the beginning.
- The share of regional visitor nights undertaken in the affected local authorities dipped in 2015 and 2016. These years coincided with several factors:
    - The summer weather in 2015 was relatively poor, with low average temperatures and the highest rainfall for 50 years in some parts of the country. This would have had a particularly noticeable effect on visitation to coastal holiday areas which rely on warm weather.

- Recovery from recession and the uncertainties of the Brexit vote in 2016 coupled with the Rio Olympic Games in 2016 made 2015 and 2016 years in which overseas travel was particularly popular. Holiday destinations within the UK were adversely affected as a result.

The results of this assessment must be treated with some caution; tourism is affected by a wide range of factors. Nevertheless, the most logical and convincing reading of the figures suggests:

- The ongoing presence of offshore wind farms has had a negligible impact on visitor spending in affected coastal municipalities. Areas with long-standing offshore wind farms continue to grow their visitor revenues and maintain their market share. Other factors, including the summer weather and broader economic trends, are the key contributors to change.
- There *may* be some short-term impacts on visitor spending around the time of construction of the wind farms. This is indicated by the data showing that the municipalities where offshore wind farms had been constructed most recently did not grow as strongly as those with more long-standing facilities; and that their market share did not quite recover as strongly. However, this effect appears to be minor. The figures show a loss of regional share of visitor spending by affected local authorities averaging 0.2% over the period, which is well within the range of natural variability.

The figures from the UK show that there has certainly been no collapse of visitor spending and, if there has been any effect on visitor numbers, it has been very minor and limited to the construction period. It could be suggested that, even if some people would theoretically prefer not to see offshore wind farms in their holiday seascape, they are attracted to places for a wide variety of reasons - the activities they are able to undertake, family and historic connections, property ownership, and the quality of onshore landscapes – and these collectively may render the changed nature of the seascape a minor consideration.

The UK is not Australia; the tourism markets are somewhat different, and the landscapes, population density and attitudes to nature are also different. Nevertheless, the evidence suggests that, following the disruption of construction, it is *possible* for coastal areas to absorb offshore wind farms into their economic environment without significant tourism impacts.

10.4.2 Consultation

Given that stated preference surveys appear to be unsuited to the purpose, a large scale survey of visitors to the coast was not undertaken for the business and tourism impact assessment. Instead, a series of structured discussions was undertaken with accommodation providers in the local study area between Wilsons Promontory and Seaspray. Accommodation providers were chosen as a group with a direct business interest in the number and satisfaction of visitors to the area. These discussions included presenting the respondents with photomontages of the proposed wind farm from various vantage points on the coast. These had been prepared by Hansen Partnership, undertaking Technical report U: Seascape, landscape and visual impact assessment (SLVIA) for the project.

Two sets of discussions were undertaken, one in May 2022 with 13 business operators, and one in 2025 with 10 operators; three operators were surveyed in both 2022 and 2025. The survey in 2022 consulted on the proposal at that time for a wind farm that was only seven kilometres from the coast at its closest point compared with 10km for the present proposal. Nevertheless, the visual and

psychological effect of the wind farm is little different from the current proposal and the issues in 2022 and 2025 remain generally the same. Key results from both surveys are provided here.

May 2022 Survey

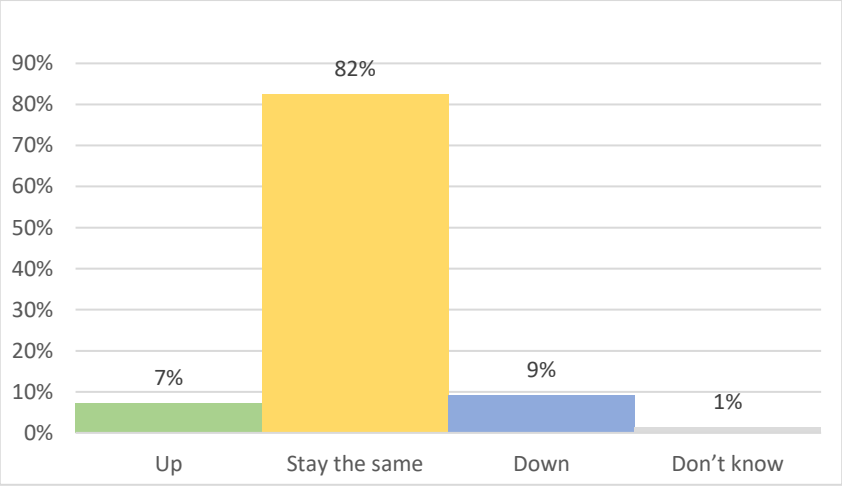
The 13 business operators owned or managed accommodation that accounted for approximately 480,000 annual visitor nights in 18 locations, around 30% of the estimated total in the local study area.

The accommodation places included:

- Motels
- Lodges and guest houses
- Caravan parks
- Cabins and camp sites in national parks
- Holiday homes.

The key question asked of the operators was whether they thought, once the wind farm was operating, the number of visitors at their establishment would go up, down or stay the same. The results, weighted by visitor nights at each establishment, are presented in Figure 10-5 below.

Figure 10-5: What would happen to visitor numbers at your business after the wind farm is installed? May 2022 (Weighted by visitor nights)



Source: Tim Nott

Of the unweighted responses, four thought visitor numbers would increase, three that they would decrease and six thought they would stay the same (one operator with two locations thought that one would have more visitors and one would be unaffected).

On the wind farm appearance for visitors to the east coast of Wilsons Promontory "**Would they like it – no! Would it stop them coming here – NO!**"

"**It would industrialise our beach**" – accommodation provider at Woodside Beach

"**I love the look of them – and so do many - I expect we would have turbine watchers coming to stay**" Motel operator

"**The people who are upset would be offset by the people who are interested**" Motel operator

"**We're hanging out for the wind farm to get here. We've been waiting for years already!**" Motel operator

"**I'm not sure local services are geared up for such a big influx of workers. Better access to supermarkets and doctors will be needed and housing and local service workers are already in short supply**." Caravan park operator

"**I am worried about the effects on whales and other wildlife. These are important to our area**." Caravan park operator

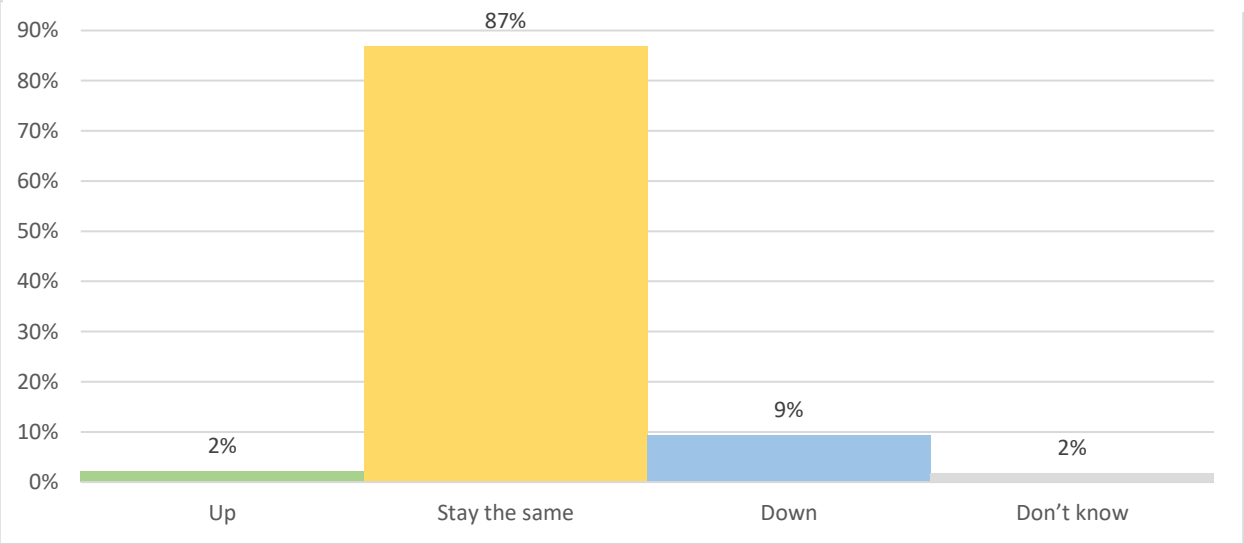
March 2025 Survey

In 2025, the 10 businesses surveyed had approximately 490,000 visitor nights between them, accounting for around 31% of all visitor nights in the local study area. The accommodation businesses included:

- Motels
- Caravan parks
- Cabins and camp sites in national parks
- Holiday cottages
- Farm stay

Figure 10-6 shows the results of the question about what would happen to visitor nights at each establishment, weighted by visitor nights.

Figure 10-6: What would happen to visitor numbers at your business after the wind farm is installed? March 2025 (Weighted by visitor nights)



Source: Tim Nott

Of the unweighted responses, two thought visitor numbers would go up, two thought visitor numbers would decline and five thought they would stay the same, with one undecided.

Survey Analysis

Unpacking these figures a little, in both surveys, the operators who did not believe that the wind farm would make much difference to their visitor numbers tended to be:

- Wilsons Promontory accommodation providers who believed that their users would continue to come for the natural attractions despite distant and fleeting views of the wind farm
- In locations from which the wind farm would not be seen such as the main towns of Foster and Yarram and
- Businesses whose main customer groups were focused on activities that would not be substantially affected by the wind farm, for example, workers, cycle tourers and wilderness adventurers

Accommodation operators who believe that visitation would increase tended to be:

- Providing a significant share of their accommodation to workers and/or
- Located in Port Albert, Port Welshpool, Woodside or Yarram, where there is optimism that the wind farm would become an attraction and that tourism infrastructure would improve; in these places, the wind farm would be visible but would not be a dominant feature

Operators who are most fearful that the wind farm would drive down visitation are generally:

- In beachside locations closest to the wind farm, or with clear views of the facility, especially at Woodside Beach and Seaspray, where most visitors are holiday-makers and the beach is the principal attraction

Allowing for the limitations of the survey, these differences in expectations about the impact of the wind farm appear not to have changed significantly over the period. Of the three operators common to both surveys, none had changed their minds about the visual impact of the wind farm on visitation to their business (each having a different opinion).

These views are from a representative sample of the accommodation providers in the area but should not be taken as definitive responses by the tourism business community. Most respondents were somewhat unsure of the likely impacts, putting forward only their best guesses. Many comments were hedged. In particular, many operators were keen to know what the impact of the wind farm would be on recreational fishing opportunities, which is one of the biggest draw cards for visitors to the area. Operators were also keen to understand the impacts on the marine environment more broadly, especially impacts on whales, seals and migratory birds. The health of these species is intrinsically important but also important to the visitor image of this coast as an opportunity to experience nature.

10.4.3 Impact

It is difficult to say with any certainty how the wind farm appearance would affect visitation to the area and the consequent impacts on local businesses. However, a review of visual assessments, evidence from elsewhere and discussions with local businesses, as well as extensive discussions amongst the assessment team, provide the following points:

- The proposed wind farm is of an impressive size and extent. It would be visible, on a clear day, from a long section of the coast, from the light house at Wilsons Promontory to east of Seaspray on Ninety Mile Beach. It would also be visible from vantage points in the hills surrounding the coast, on Wilsons Promontory and the Strzelecki Ranges. The turbines would also have safety lights at night which would be visible from shore.

  Whether views of the wind farm influence visitation to the area would depend largely on existing attitudes and intended activity of the individual or group:
  - People who are ideologically opposed to wind farms, or who believe action on climate change is unnecessary, may actively avoid any view of the facility and begin to take their holidays elsewhere.
  - People for whom the wind farm represents progress and an important response to a warming world and/or who admire the sculptural quality of the turbines are much less likely to be put off and may be attracted to visit the facility.
  - Recreational fishers are there mainly for the fish. If the reef effect of the underwater infrastructure around the turbines does indeed create an increase in fish stocks, these recreational fishers are likely to increase in number.

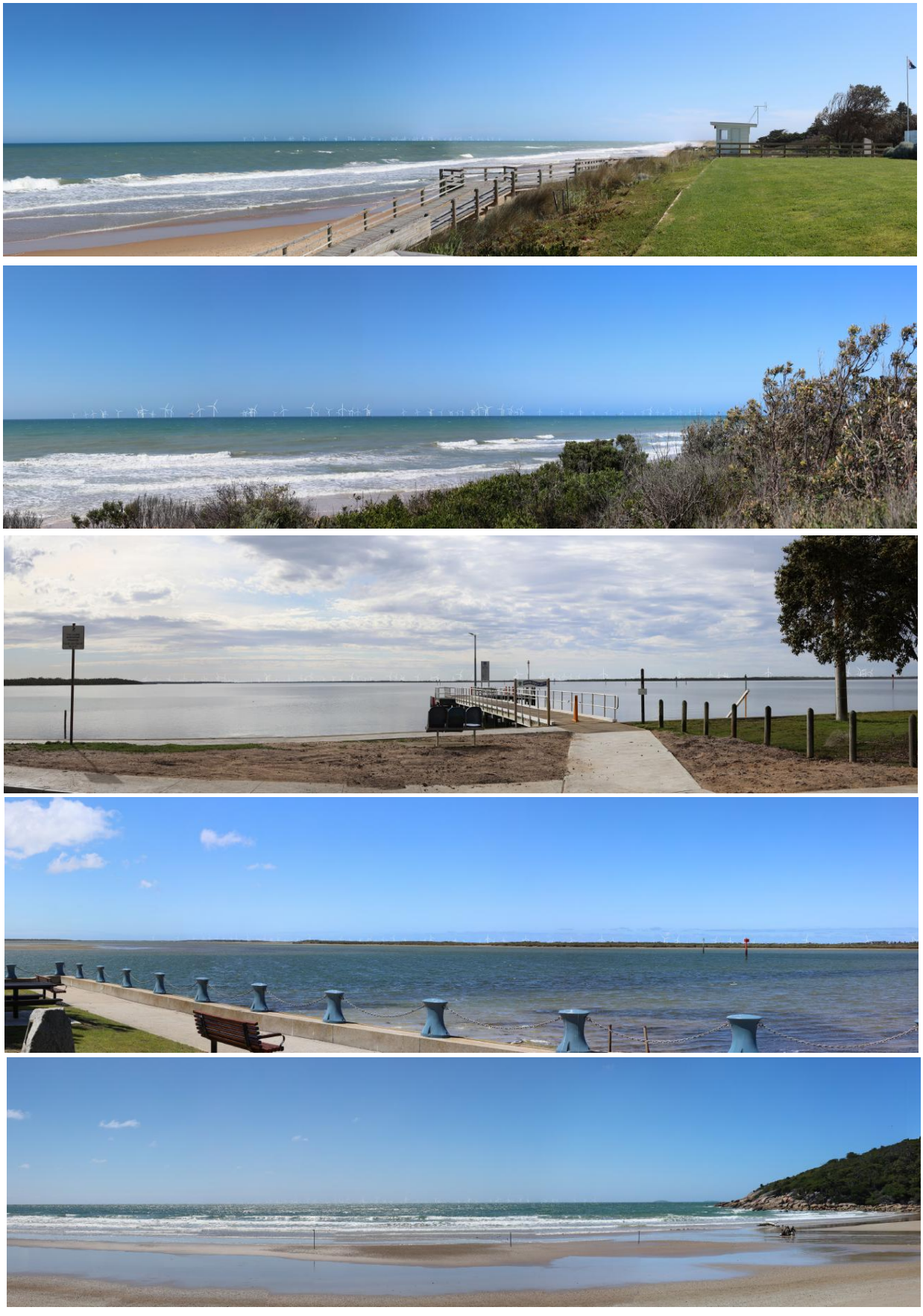
  - The main reason for visiting the area for some visitors (and residents) is to enjoy the solitude and wild, unspoiled nature of the coast at the southern end of Ninety Mile Beach and the islands of Nooramunga/Corner Inlet. For these people, the view would be changed substantially and at least some of the qualities which they value would be gone. Some of these people may seek alternative holiday destinations to recapture those wild beach qualities. There are certainly destinations in the Gippsland region where this is possible, including the northern end of Ninety Mile Beach, Cape Liptrap, Venus Bay, Tidal River, Croajingalong etc.
  - Some business operators are unsettled by the proposed extensive changes in the seascape, fearing that visitors will be driven away from the area altogether. At Seaspray, for example, while the Star of the South windfarm would be a fairly distant sight in a relatively small sector of the beach view, it is seen by some as the precursor to much closer and more significant wind farm developments that would change the outlook along the entire length of ninety mile beach.

- The locations which are most likely to be affected by the appearance of the wind farm are those which are closest and where the principal attraction is the unspoilt nature of the coast. This applies especially to Woodside Beach but could be felt to a lesser extent by Sunday Island, Seaspray and the Nooramunga villages of Mann's Beach, Robertsons Beach and McLoughlins Beach (where there is a popular walkway over to the ocean on Ninety Mile Beach).

- The scale of the impact on these settlements is impossible to predict. The mechanism of the impact would be a decline in existing visitors who come for the beach. This would reduce the revenues of local accommodation providers, with a potential reduction in property values as a result (although this is less certain since it depends on the scale of the effect and the overall coastal property market at the time). These villages have few commercial services, so any net decline in visitation would translate to a loss of spending in the larger nearby service towns such as Yarram and Woodside, and in the seaside towns of Port Albert and Port Welshpool where many local boats are launched.

- The larger coastal towns of Port Albert and Port Welshpool are further away from the wind farm and have a wider range of attractions. Port Albert, the closest of the larger towns, has a major boat ramp, a harbour, a set of historic buildings, a connection to the Great Southern Bike Trail and a small commercial sector (café, general store and commercial accommodation). In addition, the turbines would be partially screened from the town by the barrier islands. The main purposes for visiting the town are boating and fishing and as a base for exploring the wider district. These would not be adversely affected in any substantial way by the wind farm once it is operational. In fact, there may be a growth in activity as tour boats and fishing charters increase to visit the wind farm area. In addition, Port Albert (and Port Welshpool) already have built structures in their seascape in the form of harbour infrastructure and navigational beacons; it could be said that the quality of the seascape here is already not entirely natural.

Figure 10-7: Photomontage of views of the 350m high turbines, from top to bottom, Seaspray, Woodside Beach, Manns Beach, Port Albert and Johnny Souey Cove (Wilsons Promontory NP)



Source: Hansen Partnership, 2025

- The wind farm would be visible from the east coast of Wilsons Promontory, including from the light station at the southern end of the promontory. The numbers of people visiting the east coast is relatively small because it requires them to hike in. In 2024, the various hike-in sites on Wilsons Promontory had 19,000 site nights equating to approximately 30,000 visitor nights, compared with an estimated 320,000 visitor nights to Wilsons Promontory as a whole. The camp sites on the northern east coast (Five Mile Beach and Johnny Souey Cove) closest to the wind farm have been characterised by Parks Victoria staff as "quite difficult to get to" and used by people who are there to test themselves in difficult conditions. These conditions would persist despite distant views of the wind turbines. In addition, a number of respondents have indicated that the kind of people who value the environmental qualities of Wilsons Promontory are also likely to be those who would be most keen to see the development of renewable energy that can help protect the broader environment from climate change.

- Many of the local people consulted suggested that residents and regular visitors would get used to the wind farm over time; it would become just another feature of the visual setting of the area. Several local people have commented, for example, on how the Toora wind farm in the district has transitioned from being an intrusion on the landscape to being a welcome landmark.

Having looked at potential individual responses and the impacts on particular locations, it is still possible that the entire area would get a reputation as a place that had lost its natural qualities and that this would deter casual and occasional visitors. This outcome would have significant impacts on visitation across the southern part of the local study area. While these fears have not come to pass in the UK context, the Victorian context is different. The Gippsland region is much more sparsely settled and has much less human intrusion on the coast, a factor which is highly valued by sections of the Victorian community.

If the reputation as an area where natural qualities have been lost becomes prevalent, tourism losses could be significant. Estimated annual spending by overnight visitors in the local study area is $197 million. A 5% decline in visitation, for example, would amount to losses of $10 million per year. Such losses would be focused along the coastal fringe and its service towns.

Impact summary and offsetting factors

In summary, there are two principal sources of risk that the appearance of the wind farm in the seascape will have an adverse impact on visitation:

- Some visitors to the beachside villages and campsites that are closest to the wind farm may be put off by its appearance and choose to find alternative beachside destinations in the region or elsewhere. This would particularly affect the settlements of Woodside Beach and McLoughlins Beach (which, although located in Nooramunga, has a connection to the ocean beach) and the Reeves Beach campground. This may also affect other settlements such as Manns Beach, Robertsons Beach and Seaspray, although to a lesser extent as these places are either further away or are not reliant on the beach as their principal drawcard (fishing, relaxation and nature are the main attractions in the Nooramunga villages). A loss of visitors to these settlements would affect the nearby service towns of Woodside, Yarram and Foster.

- The coast of the local study area could gain a reputation as being unattractive, deterring visitors from coming to this part of Gippsland. This could reduce visitation across the local study area and beyond with consequences for all the coastal settlements and local service towns.

Against these risks, there is also the potential for net visitation to grow in the local study area as a result of:

- An increase in construction workers moving into the region on temporary contracts requiring accommodation and services
- An increase in awareness of the region as a result of the large numbers of project workers
- An increase in the permanent working population engaged on the project, directly and indirectly, and therefore more people visiting these friends and relatives
- An increase in the number of visits by people who are interested to view the impressive offshore wind farm as an engineering feat, as a scenic landmark and as a demonstration of the response to climate change
- A possible improvement in fishing as a result of the reef-effect created by the in-water infrastructure of the wind farm and an increase in recreational fishing visitors

It is difficult to forecast what the balance between these influences would be: would the loss of "wildness" and putting off those who object to windfarms in principle outweigh the gains from an increase in the temporary and permanent population and visits by those who welcome the windfarms? It *is* true that the negative factors may happen regardless but that the growth factors may need some assistance in the form of further investment to create positive visitor experiences.

Consequence Rating

Table 10-7: BTM-I013 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Many businesses can adapt to new markets but some beachside businesses may have limited capacity to offer alternative attractions if visitors are put off by the changed seascape	Tourism businesses in the region are typically small and already operate with a relatively high degree of uncertainty associated with seasonal conditions. Many are unlikely to be tolerant of adverse changes	Would expect substantial recovery of beachside visitors over time as people become accustomed to the change in the seascape unless there is a strong adverse reaction to the loss of wildness. Elsewhere, would expect conditions to improve compared with the present as a result of higher local population and more workers in the area	Low-Medium
Magnitude			
Extent	Duration	Severity	Rating
Principally affecting the coastal parts of the local study area but with the potential to affect the whole area if the coast is perceived	A change to the seascape for the life of the project, although attitudes may change so that wind farm becomes just another	A significant change to the seascape, although attitudes may differ over time	Medium-High

to have lost its natural qualities	local feature for regular visitors and locals		
Consequence Rating			**Minor-Major**

10.4.4 Mitigation

The wind farm would diminish the wild quality of the coast. Given the project location, nothing much can be done about that. Mitigation (or enhancement) from a tourism perspective would rest on improving other aspects of the visitor experience, creating a positive visitor reputation and new reasons to visit. This would involve enhancing existing attractions, creating new ones and promoting the coast to new and existing audiences. The wind farm itself could potentially form the core of a new attraction.

Recreation and tourism initiatives could be supported through the Community Benefit Fund (BTM – M003), funded directly by the project. Initiatives will be decided in collaboration with the community, Councils and other key stakeholders.

Mitigation Measures

With the implementation of BTM-M003, no further mitigation measures are proposed here.

In responding to potential tourism development, further consideration should be given to the development of a strategic framework to guide investment in the "Windfarm Coast". This would necessarily involve local councils, regional tourism marketing and the local tourism industry as well as other wind farm developers.

Residual Impacts

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 10-8: BTM-I013 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	If positive effects on visitation (growth in workers, improved fish availability, interest in the wind farm) are outweighed by negative effects (loss of wild coast), the number of visitors may decline. Businesses most at risk of having a decline in income are those accommodation and service enterprises in coastal settlements within sight of the wind farm – Port Albert to Seaspray. Without investment in marketing and the creation of a better visitor experience, there is a risk that visitation will decline, with adverse impacts on net incomes.
Would regional output and employment be reduced by this impact?	If visitation declines, then output and employment would be reduced.
Are opportunities to grow regional output and employment maximised?	No – requires tourism investment

Would visitor numbers and their distribution be adversely affected by this impact?	Without investment in visitor facilities and marketing, there is a risk that visitor numbers to the local study area would decline
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Any decline in visitation would reduce the potential for further development.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	Any decline in visitation may detract from the Gippsland coastal villages as a hero attraction.
Residual sensitivity rating	**Low-Medium**
Residual magnitude rating	**Medium-High**
Residual consequence rating	**Minor-Major**

There is potential for visitation to decline if sufficient people react adversely to the view of the wind turbines in the sea, particularly in the several small coastal settlements closest to the wind farm. This may be offset by an increase in recreational fishing opportunities and the additional workers, as well as any investment in recreation and tourism initiatives that may be decided in conjunction with the community.

10.5 BTM-R002: Oil spill impact to tourism

An assessment of impacts due to an oil spill from collision of a project vessel during the operation phase uses the same spill scenario and modelling as that for the construction phase (Section 9.2.9). However, while the duration of the operation phase would be much longer than the construction phase, maintenance vessels used during the operation phase would typically be smaller, fewer in number and more manoeuvrable than construction vessels. They are also expected to have smaller fuel carrying capacity. Furthermore, a vessel collision resulting in an oil spill is a very unlikely occurrence in the offshore commercial industry given the high skill level of crew onboard vessels. For example, a review of the Australian Transport Safety Bureau's marine safety database of vessel incidents since August 1991 identified no collision, grounding or sinking of a vessel whilst engaged in oil and gas industry activities (ATSB, 2018).

These points have considerable influence on the likelihood and consequences of an oil spill and mean that for much of the operation phase the risk profile is likely to be considerably less than assessed in Section 9.6 for the construction phase. Nevertheless, in the event of a breakdown of project infrastructure requiring major component replacement it is likely that a jack up vessel or similar large construction vessel along with support vessels would be required to complete the work, potentially for an extended period incorporating other heavy maintenance activities. In this case the risk profile is expected to be similar to that for the construction phase. Therefore, please refer to section **Error! Reference source not found.** for an assessment of impact from oil spill to business and tourism.

10.6 Summary of residual impacts and risks during operation

Key residual impacts of the operational phase of the project following the mitigation and management measures would include the following:

- The ongoing employment at the operations and maintenance port and elsewhere will add to the stock of regional jobs and increase the diversity of regional job opportunities for the life of the project.
- The project would cause a growth in housing demand in the local study area, especially in the towns of Foster and Yarram. With a Workforce Accommodation Strategy in place this should provide a positive local and regional development benefit without creating housing shortages or price rises in the area. The impact would be felt principally at the beginning of the operational period, with a new equilibrium achieved in the housing market after a year or so.
- The balance of visitation to the area following the construction of the wind farm is difficult to predict with certainty. The increase in workers, hoped for improvements in fishing and interest in the wind farm must be set against the potential loss of people for whom the coast no longer has wild appeal.

11 DECOMMISSIONING IMPACT ASSESSMENT

This section discusses the potential impacts of the project as a result of decommissioning activities and the associated mitigation measures that aim to reduce impacts to as low a level as reasonably practicable. Mitigation measures referred to are summarised in Section 13.

The decommissioning principles and process are described in broad terms in section 2.9. Nevertheless, uncertainties around the process remain because few offshore wind farms have been decommissioned so far. These uncertainties include (Bennun et al., 2021):

- The regulatory environment (in many jurisdictions, regulations regarding offshore wind farm decommissioning are at present limited).
- Strategies for recycling components.
- The economic case for recycling and reuse of infrastructure at the time of decommissioning.
- The consequences of removal of habitats that have developed on project infrastructure.

Currently, the anticipated decommissioning impacts on business and tourism receptors are listed below, although this is unlikely to be a comprehensive list by the time decommissioning takes place.

Table 11-1: Impacts and risks associated with project decommissioning

	Impact/risk	Note
BTM-I014	Impact on traffic in the local study area	Very minor disruption to traffic, not as significant as during construction because less work required as cable being left in situ (see section 9.2)
BTM-I015	Offshore construction impacts on coastal tourism	Impacts assumed to be much less than those identified for construction as pile driving and shore crossing works would not be required (see section 9.4)
BTM-I016	Underwater noise impacts from facility extraction	Impacts assumed to be less than those identified for construction as pile driving would not be required (see sections 9.6 and 9.8)
BTM-I017	Employment of workers on decommissioning	Type of impacts assumed to be similar to those identified in section 9.9. The number of workers is likely to be lower. The impacts on the study areas could only be calculated once the location of those workers was understood (for example, regional impacts would be higher if offshore workers were stationed in the region). There could also be jobs for the regional workforce in recycling the dismantled windfarm components.
BTM-I018	Impacts on the local and regional labour market	The removal of well-paid wind farm jobs would have an adverse impact on the local and regional economy. This would be offset for a time by employment during decommissioning (assuming that many of the decommissioning jobs are based in Gippsland). The scale of the impact would depend on the numbers of workers involved at the time.
BTM-I019	Impacts on the local accommodation sector	The impacts on the accommodation and housing sector would depend on the numbers of workers involved at the time. It would also depend on the alternative employment opportunities that are available. For example, would workers be able to transition to jobs at other wind farms?

BTM-I020	Impacts on visitation and tourism businesses	It is reasonable to assume that the wind farm would have generated a spin-off visitor industry – tour boats, dive charters, an increase in recreational fishing and the onshore services including a wind farm visitors' centre, which support these activities. Participants in wind farm tour activities would decrease with a consequent loss of visitor spending and tourism employment. There may be potential for this to be balanced somewhat by the return of more natural seascapes and a renewed "wildness" of some parts of the area.
BTM-R003	Oil spill impact on tourism	The risk posed by oil spill assumed to be similar to that posed during construction, proportionate to the time that decommissioning vessels would be in the area (see section 9.12).

Mitigation measures to reduce the adverse physical and social impacts of decommissioning are likely to be similar to those recommended for the construction and operation of the facility, albeit at a lower level of intensity. However, concrete measures cannot be recommended with any confidence at this stage. Over the presumed 30-year operational timeframe, relevant legislation defining expected practice for these types of projects may well change. In addition, the socio-economic context may be quite different from that which currently prevails. The community may have different priorities resulting in different assessment criteria. These issues would need to be measured through an environmental impact assessment at the time. Nevertheless, the proponent should expect to make expenditures to reduce adverse business and tourism impacts as far as reasonably practicable during the decommissioning process.

12 CUMULATIVE IMPACTS WITH OTHER PROJECTS

This section provides an assessment of cumulative impacts with other proposed developments in the region. The method to consider cumulative impacts has been described in Section 6.8 and Chapter 6 - Assessment Framework within both the EIS and EES.

12.1 Projects within zone of influence

For the purpose of evaluating cumulative impacts, this assessment has identified other projects in the Gippsland region which have an overlap in geographic extent or timing, or which are in similar industries and will draw on the same labour-force and community resources.

The list of projects assessed for the business and tourism impact assessment are presented in Table 12-1. Each of these projects has been evaluated against the cumulative assessment criteria to determine whether there is the potential for cumulative impacts with the project and whether there is sufficient information available to undertake a meaningful assessment.

In assessing the potential cumulative impacts for the Star of the South project it is important to consider that some developments, predominately those 'proposed' (referred) or identified in development plans, may not actually be taken forward, or fully constructed. There is therefore a need to build in some certainty with respect to the potential impacts that may arise from such proposals, which is done by allocating projects into 'tiers'. This approach allows appropriate weight to be given to each tier when considering the potential cumulative impacts.

Table 12-1 Cumulative impacts – projects in zone of influence

Project or action	Data confidence	Scale parameter	Receptor impact	Temporal overlap	Conclusion
(within the zone of influence)	*Certainty tier*	*Is the project or action of sufficient scale to warrant inclusion?*	*Will the project / action adversely affect the same receptors as the project? And have a spatial overlap*	*Will the project / action result in adverse impacts to the same receptors as the project at the same time or on a timescale that could result in a cumulative impact?*	*Is the long list project / action shortlisted for assessment of cumulative impacts?*
Golden Beach Gas Project	Tier 1 – EES completed and assessed. Project approved and progressing towards construction	Yes – impacts likely to be a similar scale to Star of the South	Yes – May be overlap of onshore and offshore workforce skills and housing requirements; visual impact on beach users	Potentially	Screened IN
Loy Yang Battery Energy Storage System	Tier 1 – approved 200MW grid scale battery at Loy Yang Power Station	Yes	Yes – overlap with onshore construction and electrical works	Potentially – Final Investment Decision due in 2026	Screened IN
Marinus Link	Tier 1 – EES prepared for 1.5GW interconnector between Tasmania and Victoria	Yes	Yes – overlap with onshore and offshore cable works, workforce and housing requirements	Likely – first stage due in 2027-28; second stage in 2029-30	Screened IN
Esso decommissioning of Bass Strait oil and gas fields	Tier 1 – project underway	Yes	Yes – will use Barry Beach MT for transfer of removed infrastructure and will employ 100s of workers	Major removal activities to commence in 2027 and for some years afterwards – beyond 2032	Screened IN
Delburn Wind Farm	Tier 1 – 33 turbine wind farm given planning	Yes – although smaller scale, will require similar	Yes – overlap of onshore workforce and housing requirements	Unlikely – Construction expected to be completed by 2026	Screened out of cumulative assessment

	approval but not yet constructed	resources to Star of the South onshore work			due to unlikely overlap in time
Hazelwood Rehabilitation Project	Tier 2 –EPBC Act and EES referrals submitted	Yes – a significant project for the Latrobe Valley	Potential overlap of onshore workforce and housing	Potentially	Screened IN
Gippsland Offshore Wind Transmission Project	Tier 2 – EES referral submitted for onshore transmission line from Giffard to the Latrobe Valley to facilitate offshore wind projects	Yes	Yes – overlap of onshore workforce and housing requirements	Likely	Screened IN
Great Eastern Offshore Wind Farm	Tier 2 – EPBC Act referral submitted	Yes – 2.5GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened IN
Gelliondale Wind Farm	Tier 2 – planning application submitted in 2023 for onshore wind farm	Uncertain – although a smaller project, will require similar resources to Star of the South onshore work	Yes – overlap of onshore workforce and housing requirements	Unlikely	Screened out of cumulative assessment due to unlikely overlap in time
Gippsland Regional Port Project	Tier 2 – referred for EES	Uncertain	Yes – overlap of offshore workforce and impacts on recreational fishing and seascape	Unlikely – works would need to be completed to allow wind farm to be constructed	Screened out of cumulative assessment due to unlikely overlap in time
Seaspray Solar Farm	Tier 2 – seeking approval for 5MW facility	Uncertain	Yes – overlap of onshore workforce	Unlikely – targeting construction in mid-2025	Screened out of cumulative assessment due to unlikely overlap in time
Blue Mackerel North	Tier 3 – granted feasibility licence	Yes – 1GW project off Seaspray in Gippsland Offshore Wind Zone (OWZ)	Yes – overlap of onshore and offshore workforce and housing requirements; port use;	Potentially	Screened out of cumulative assessment due to insufficient data available

			impacts on recreational fishing and seascape		
Aurora Green	Tier 3 – granted feasibility licence	Yes - 3GW offshore project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
Gippsland Offshore Wind Farm 1	Tier 3 – granted feasibility licence	Yes – 2.84GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
Gippsland Offshore Wind Farm 2	Tier 3 – granted feasibility licence	Yes – 2.84 GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
Gippsland dawn	Tier 3 – granted feasibility licence	Yes - 2.085GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
High sea wind	Tier 3 – granted feasibility licence	Yes – 1.28GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
High sea wind	Tier 3 – granted feasibility licence	Yes – 2.5GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing	Potentially	Screened out of cumulative assessment

			requirements; port use; impacts on recreational fishing and seascape		due to insufficient data available
Navigator North	Tier 3 – granted feasibility licence	Yes – 1.5GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
Kut-Wut Brataualung	Tier 3 – granted feasibility licence	Yes – 2.2 GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
Kent Offshore Wind	Tier 3 – granted feasibility licence	Yes – 2GW project in Gippsland OWZ	Yes – overlap of onshore and offshore workforce and housing requirements; port use; impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available
CarbonNet	Tier 3 – proposed carbon sequestration under the seabed	Yes – offshore construction required off 90 mile beach	Potentially – overlap of onshore and offshore workforce and housing requirements; port use; and impacts on recreational fishing and seascape	Potentially	Screened out of cumulative assessment due to insufficient data available.

Source: DTP, 2025; AECOM, unpublished

Seven projects within the zone of influence have been assessed as having sufficient certainty and available data to warrant further investigation for their potential to generate cumulative business and tourism impacts along with the Star of the South project:

- Golden Beach Gas Project (GB Energy)
- Loy Yang Battery Energy Storage System (AGL)
- Hazelwood Rehabilitation Project (ENGIE Hazelwood).
- Decommissioning of Bass Strait oil and gas fields (Esso)
- Marinus Link (Marinus Link)
- Gippsland Offshore Wind Transmission Project (VicGrid)
- Great Eastern Offshore Wind Farm (Corio Generation)

Even though there is insufficient information about most of the other proposed offshore wind farms in the Gippsland Offshore Wind Zone, the policy intention of State and Commonwealth Governments is to create an offshore wind industry in this location (see section 7.4.2). The Victorian Government has targets for when this offshore wind energy should be provided - 2GW by 2032, 4GW by 2035 and 9GW by 2040. Several of the operators are likely to be competing to provide the 2032 and 2035 targets, the timing of which is likely to overlap with the Star of the South project. It is therefore important to identify the potential cumulative impacts from other windfarms at least in a notional way.

12.2 Potentially Cumulative Projects

Each of the projects identified for further investigation is described in more detail below. The reader should note that, while these projects have been deemed more certain than others, they remain proposals until actually constructed; there remains some uncertainty as market conditions can change along with government policies and funding.

- **Golden Beach Gas Project**

GB Energy's proposed project includes construction and operation of a pipeline and gas plant to produce gas from the Golden Beach gas field (in Victorian waters) for provision to the Victorian Transmission System.

The gas pipeline would be designed to flow in both directions which will allow for the Golden Beach gas field to be used as a gas reservoir or storage facility with a 40 year design life.

The proposed project includes the development if the following components:

- *two subsea horizontal wells approximately 3.8 kilometres offshore south from the town of Golden Beach, a 2.5 kilometre subsea pipeline and subsea infrastructure and a 1.3 kilometre pipeline shore crossing to the south of Golden Beach*
- *a 21 kilometre buried pipeline in a 30 metre wide right of way from south-west of Golden Beach to Longford*
- *associated pipeline infrastructure, including a compressor station off Sandy Camp Road in Dutson to compress the gas and collect water entrained in the gas.*

The development would occur in two stages. The first stage being the production of gas by extracting a portion (approximately 40 petajoules) of the gas within the reservoir. The second stage being the conversion of the reservoir to a gas storage facility, providing an initial withdrawal capacity of up to 250 terajoules per day. (DELWP, 2021a)

The EES for this project has been completed and assessed. The project has been approved is progressing towards investment and construction. The timing of the project remains uncertain; it may overlap with the anticipated construction of the Star of the South towards the end of the decade. Several aspects of the project are likely to require similar construction methods as those proposed for the Star of the South project and there will probably be an overlap in the demand for the relevant construction skills and enterprises. This workforce may be competing for housing with that working on Star of the South, especially with those engaged in the onshore transmission line component of the Star of the South project.

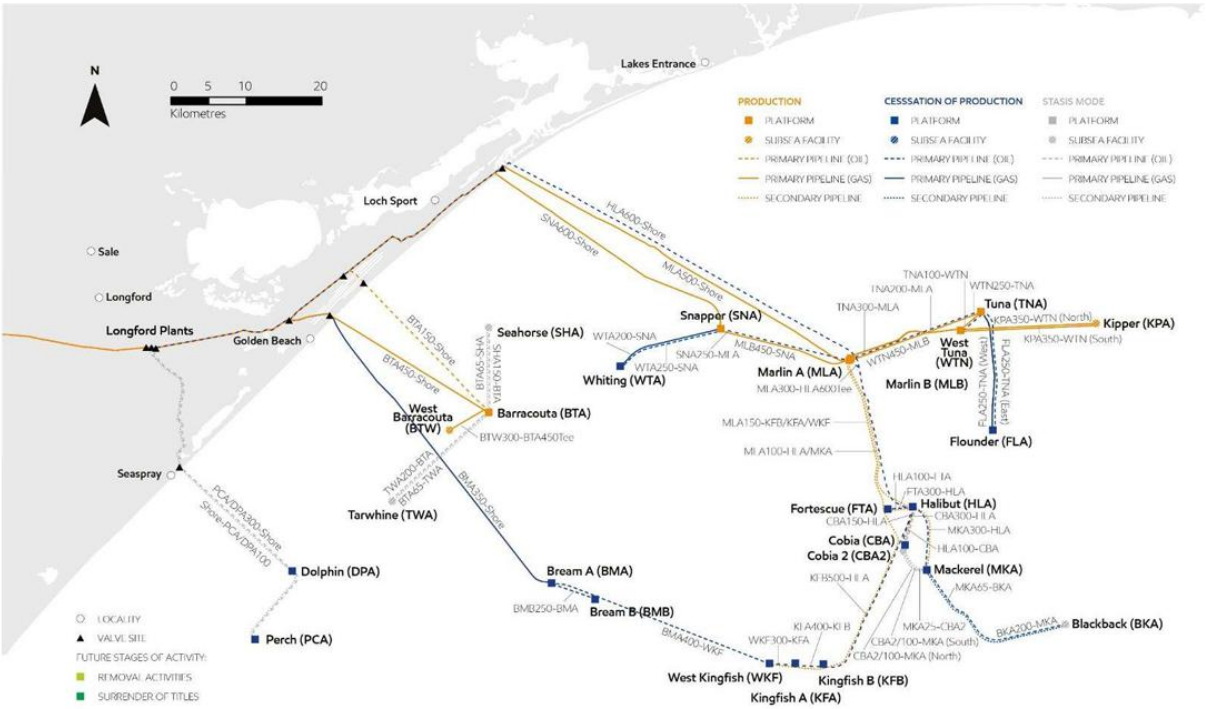
- **Loy Yang Battery Energy Storage System**

AGL has received planning permission for the development of a 200MW four-hour grid scale battery at the existing Loy Yang Power Station. A final investment decision is expected by 2026 (Renew Economy, 2023). This is one of several batteries being proposed around the country by AGL and others at key nodes in the electricity network. The battery will be able to store electricity made by renewable energy generators. No details are available about the workforce required for the project, but civil construction and electrical contractors will be the main sources of labour. This project will pull from the same regional labour pool that Star of the South will also draw from.

- **Decommissioning of Bass Strait Oil and Gas Infrastructure**

Esso has planned and undertaken preparatory work to cap the oil and gas wells and remove the associated on-sea infrastructure. The major removals work is to commence in 2027 and continue for a number of years (beyond 2032). Barry Beach Marine Terminal has been chosen to receive and undertake initial processing of the infrastructure. Several hundred jobs are likely to be involved in this project including mariners and marine engineers. This project will compete with Star of the South for labour, local accommodation and port space.

Figure 12-1: Status of facilities and pipelines, December 2024



Source: Esso Australia Resources, 2024

- **Hazelwood Rehabilitation Project**

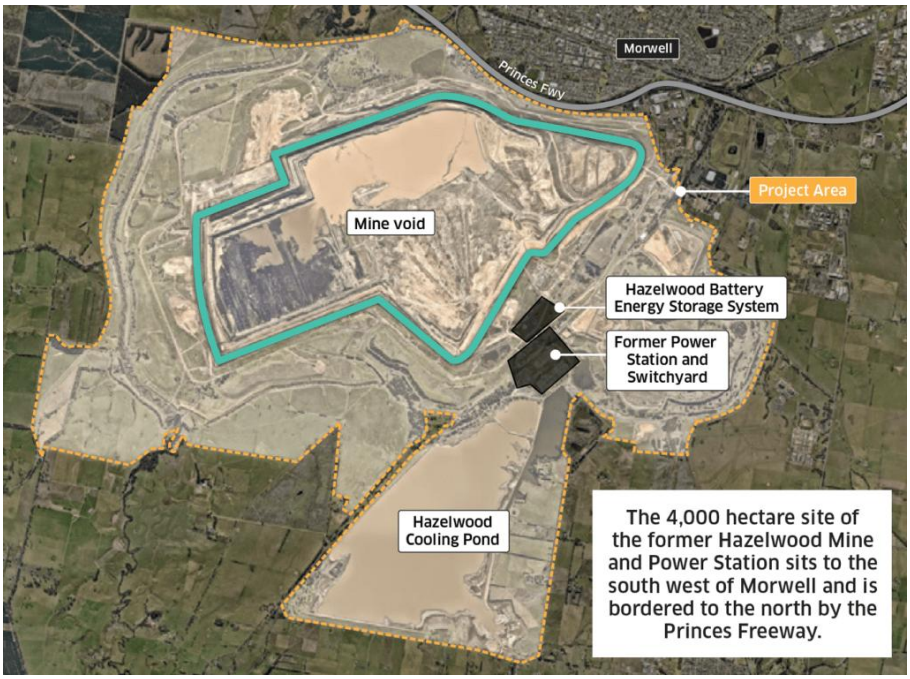
The purpose of the Hazelwood Rehabilitation Project is to rehabilitate the land disturbed by open cut mining operations and deliver a safe, stable, sustainable and non-polluting site….

The Hazelwood Rehabilitation Project involves decommissioning of remaining buildings, roads and infrastructure, earthworks to reprofile steep slopes, reinstating some water courses to a more natural alignment, and the proposed creation over time of a mine lake.

A full mine lake would help make the site safe and stable in the long term as well as provide significant potential economic, recreational and flood mitigation benefits to local communities and the region. (Engie, 2022)

The project area is shown below.

Figure 12-2: Hazelwood rehabilitation project area



Source: Engie, 2022

The Environment Effects Statement process for the Hazelwood mine rehabilitation project is currently being completed. The construction process may overlap with that of the Star of the South project towards the end of the decade. There is no indication at the time of writing about the scale of the work-force anticipated for the Hazelwood mine rehabilitation. Nevertheless, there may well be an overlap of general construction labour and civil design expertise between this project and Star of the South.

- **Marinus Link**

Marinus Link is a proposed 1,500 megawatt capacity undersea and underground electricity connection to further link Tasmania and Victoria as part of Australia's future electricity grid.

The increased transmission capacity may be delivered in two 750 MW developments. (Marinus Link, 2022)

This interconnector would allow the efficient transfer of energy between renewable energy zones, improving the resilience of the national electricity market.

The cable is proposed to make landfall on the mainland to the west of Wilsons Promontory, at Waratah Bay, and join the national electricity grid at Hazelwood (Australia New Zealand Infrastructure Pipeline, 2022). The project would have approximately 250 kilometres of undersea cable and 90 kilometres of underground cable.

The timing of the project is not certain but, *"The current target date for commissioning and commercial operation of the first 750 MW stage is 2027-28, with the commissioning and commercial operation of the second 750 MW stage currently scheduled for 2029-30*." (Marinus Link, 2025). This would place the later stages of the project in broadly the same timeframe as Star of the South.

Marinus Link would require large lengths of high-capacity electricity transmission cable and, assuming the onshore cable is buried in the same way as proposed by Star of the South, it will need exactly the same kind of skilled contractors as the onshore component of the Star of the South project. It would also have an overlapping worker's housing catchment, drawing particularly on accommodation in Foster and surrounds.

- **Gippsland Offshore Wind Transmission Project**

This VicGrid project will provide a common connection for the proposed offshore windfarms in the Gippsland Offshore Wind Zone to the national electricity grid. From a connection point at Giffard, 6km from the coast, a 500kW transmission line will be constructed to link to Loy Yang power station in the Latrobe Valley and the national grid. This project is required for Star of the South and for all the other proposed offshore wind farms. It represents a significant reduction in the potential resources required for the offshore wind industry – sharing the connection to the grid will remove the need for the construction of multiple transmission lines to the Latrobe Valley.

The project is in the process of undertaking an Environment Effects Statement. No estimate of employment requirements are available but, judging from earlier work for Star of the South, peak employment is likely to be in the hundreds. These will include civil construction and electrical contractors, with some overlap with the Star of the South onshore workforce.

- **Great Eastern Offshore Wind Farm**

The Great Eastern Offshore Wind Farm would be positioned along the southern boundary of the Star of the South wind farm (see Figure 12-4). If the construction timetable overlaps, it would create strong cumulative impacts:

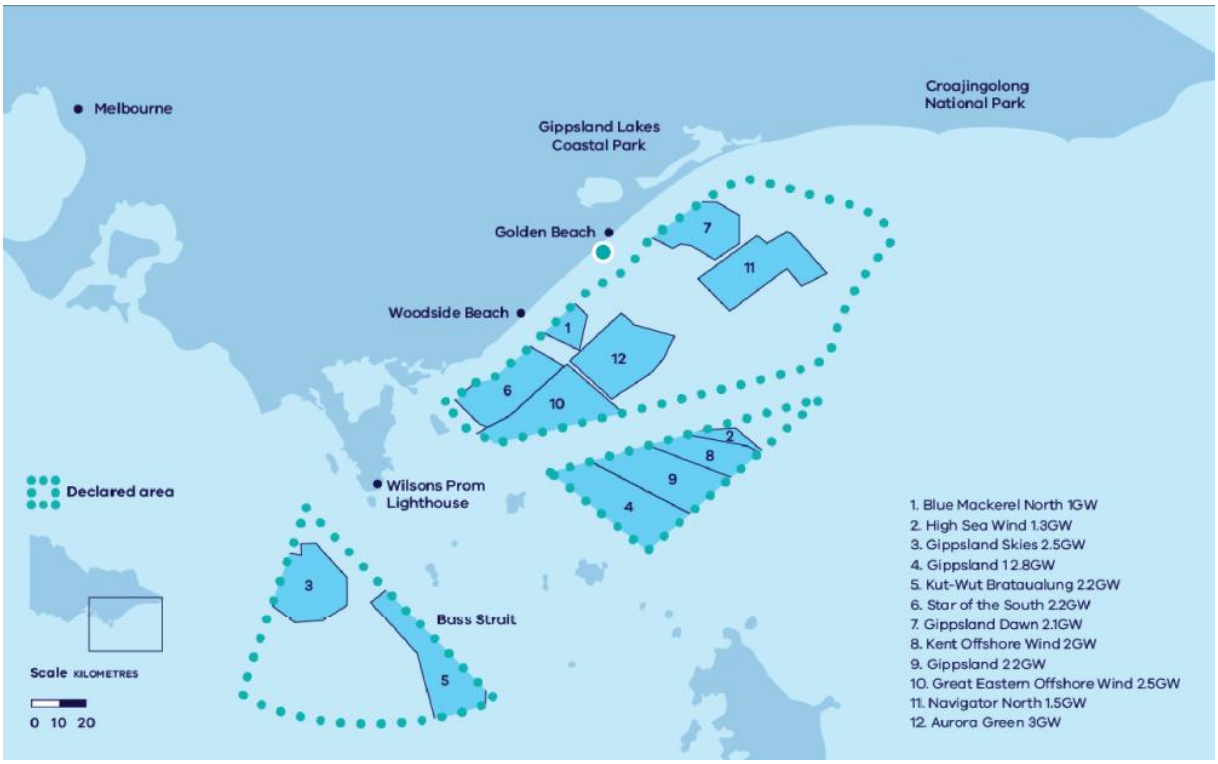
- The projects will be using a similar construction and operational workforce, both onshore and offshore, and will be competing for workers with existing and transferable skills
- Projects will create similar physical disruptions to traffic that may affect the same communities
- Projects will draw on overlapping housing and accommodation resources for their temporary workforce, especially if BBMT/Port Anthony is the port through which most offshore workers access their worksites
- The Great Eastern project may be visible from the coast but would be screened to some extent by Star of the South (see Figure 12-4)
- Each project will affect offshore recreational fishing and will displace non-project vessels during construction and operation

The projects would also create cumulative impacts on labour force and housing during operation.

- **Other offshore wind farms**

The legislated targets for power from offshore wind farms will drive the development of other wind farm projects. If further projects are developed off the Gippsland coast during the construction of Star of the South, they will have strong potential to create similar cumulative impacts to the Great Eastern Offshore Wind Farm. The projects potentially vying to supply the Victorian power targets are shown in Figure 12-4

Figure 12-4: Gippsland Offshore Wind Zone and prospective wind farms



Source: State Government of Victoria, 2025

12.3 BTM-I021: Cumulative Impacts

There is uncertainty around the timing and a lack of information about the level of employment required to develop these projects. This means any conclusions must be contingent on better data. Nevertheless, it is possible to identify, in broad terms, where there may be cumulative impacts if these projects overlap.

12.3.1 Traffic congestion and disruption

Traffic congestion and disruption as a result of construction traffic and road and lane closures would increase if these projects were to be developed simultaneously. This would have an impact on other industries throughout the local study area, particularly affecting tourism during the busy holiday periods.

Traffic congestion would increase around key locations such as the Corner Inlet port and Giffard West, where the offshore wind projects are to connect to the national grid. Road and lane closures would likely also be more common on the Hyland Highway, South Gippsland Highway and surrounding roads.

Recommendation

Mitigation measures would be the same for the cumulative impacts of several projects as they would be for the Star of the South project on its own; that is, undertaking works outside peak holiday times and ensuring a two-way flow of information through the Stakeholder Engagement Plan.

12.3.2 Impacts on offshore recreation and tourism

If constructed at the same time as the Star of the South, the other offshore wind farms would extend the area from which diving and recreational boating and fishing are excluded for the period of construction. This would be more likely to induce potential divers, boaters and fishers to pursue their pastimes elsewhere, either in the region or outside it, or to postpone their activities altogether.

Recommendation

Safety zones should not be created larger than necessary to ensure minimal impacts to recreational users.

12.3.3 Competition for workers

If all the screened in projects occur simultaneously with Star of the South, peak construction employment could be 4,000+, with a further 1,000+ if any one of the other wind farms were to be built at the same time. This is in a region where the heavy and civil engineering construction workforce was less than 1,400 in 2021 and the entire construction workforce of Gippsland was 10,700. Competition for workers, especially skilled workers, would be fierce across the region. The more projects that occur simultaneously, the higher the share of workers that would be required from outside the region.

- General construction workers would be required for all projects. If projects are simultaneous, construction wages would be bid up, attracting workers away from other types of construction such as house-building, and other local and regional industries, with consequent impacts on farming, timber milling, dairy production, hospitality and other sectors.
- Specialist electrical contractors would be required for transmission line work, construction and connection of substations for the Loy Yang battery, VicGrid and Marinus Link projects and the wind farms.
- Workers to undertake trenching and cable jointing would be needed for the wind farms and Marinus Link. VicGrid is proposing overhead electricity transmission which may rely on a somewhat different, although overlapping, workforce.
- Specialist drilling contractors for the horizontal directional drilling will be needed for the windfarms, Marinus Link and possibly for the Golden Beach Gas Project.
- Mariners and port logistical workers would be required for the Esso decommissioning, wind farms, Marinus Link and the Golden Beach Gas Project as well as the other offshore windfarms.

Star of the South has already identified that certain of the skills required, such as cable jointing, are in short supply more generally. Even with a significant number of workers from outside the region, there is no guarantee that the projects would be able to secure sufficient existing skilled workers from the Australian market. The risks from simultaneous projects are that:

- wages would be bid up, especially in skilled trades
- projects would be delayed while appropriate contractors and sufficient workers can be assembled
- other worthwhile projects in the region and elsewhere would be delayed or would not proceed

Recommendation

The Victorian State Government is developing the Victorian Energy Jobs Plan, due to be released in 2025 (DEECA, 2025). This is being prepared in collaboration with industry stakeholders, including Star of the South. As part of this plan, a Wind Worker Training Centre is contemplated to help the industry deliver the target of 9GW of offshore wind energy by 2040 (DEECA, 2025a). The State Government has pledged up to $4.9 million for such a centre. If created in a timely way, this training will go at least some way to ensuring that sufficient skilled workers are available for the industry and for at least some of the projects that may be running concurrently with Star of the South. From a regional development perspective, it would be beneficial if the training centre was located in Gippsland, where most of the Victorian offshore wind capacity is likely to be, and where there are workers seeking to transition from the declining fossil fuel industries.

Star of the South should continue to participate in industry planning and the industry training centre, with appropriate funding for workforce development, where such a workforce is currently insufficient. Some aspects of workforce development will also be mandated in the contract with the electricity network operator, including the use of local contractors and the provision of opportunities for apprentices, trainees and cadets.

12.3.4 Competition for accommodation and housing

If the projects overlap in time, competition for accommodation and housing would also be strong. From the section above, if the peak construction workforce in the identified projects numbers perhaps 4,000 – 5,000 people, most of those would need to be brought into the region from elsewhere. The commuting catchments of the various projects overlap with those from Star of the South. Key commuter towns for the Marinus Link project would include Inverloch, Foster, Leongatha, Mirboo North and the Latrobe Valley towns, with Foster and the Latrobe Valley towns also being important for Star of the South workers. Key commuter settlements for the Golden Beach gas pipeline would include Golden Beach, Seaspray, Yarram, Longford, Sale, Rosedale, Gormandale and the Latrobe Valley towns, with Sale, Rosedale, Yarram, Gormandale and the Latrobe Valley also being important locations for Star of the South workers. The Hazelwood rehabilitation project would likely mainly be serviced by workers from the Latrobe Valley. Any offshore wind projects, as well as the Esso decommissioning project, would likely use BBMT/Port Anthony for offshore work and would share the commuter catchment between Leongatha and Yarram as well as, potentially, the catchments around the onshore transmission line between Yarram, Sale and the coastal towns on Ninety Mile Beach.

The assessment of housing and accommodation capacity in section 9.11 identifies, in broad terms, that, while the main towns in the Princes Highway corridor could cope with the accommodation requirements likely to be generated by Star of the South, the housing market in the smaller towns of the local study area would not be adequate for the task without intervention. With all the identified projects taking place together, the accommodation and housing market throughout Central Gippsland would come under substantial stress. Much of the visitor economy would be displaced in order to make room for project workers, with significant adverse impacts on many of the non-accommodation segments of the tourism industry. There would be strong potential for a boom in property prices in the region followed by a bust once the projects have been completed. This disruptive pattern would be a disincentive to investment in smaller scale projects because of the scarcity of resources and uncertainty.

Recommendation

In order to avoid significant impacts on the housing and accommodation sector the major projects, including Star of the South, would need to be more self-sufficient in housing their construction workers. This would mean more reliance on the more interventionist steps in the workers accommodation strategy including, perhaps, more purpose-built housing and more extensive use of workers' camps.

Discussion of construction schedules with other project proponents may reveal ways to reduce costs in housing workers and create less disruption to local housing markets. This could be achieved by shared development of workers' camps or other temporary and permanent housing, for example, that are appropriately located to serve more than one project. These steps would require secondary approvals through the normal planning process.

12.3.5 Visual impacts on visitation and tourism

Further offshore wind farms within sight of the central Gippsland coast would have the potential to reinforce the perceptions that the coast was no longer natural or wild, as described in section 10.4. Any extension of the length of coast from which wind turbines can be seen would likely cause a portion of the existing visitor base to choose other holiday destinations. If wind turbines can be seen from the whole of Ninety Mile Beach, for example, a portion of existing visitors, for whom the opportunity to experience a natural seascape is paramount, may choose alternative seaside destinations such as Croajingalong, Bass Coast or outside the region altogether.

Recommendation

Countering the perception that the coast has lost its wild appeal will require cooperation between wind farm proponents, Councils and regional tourism bodies and funding for enhanced visitor infrastructure and promotion. Celebration of the wind farms, creating opportunities to view them and explain their importance, and improvements in other visitor attractions, infrastructure and marketing, will be the keys to ensuring that the balance of visitation is positive.

12.4 Consequence Rating

Table 12-2: BTM-I021 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
With each new overlapping project, the capacity of the study areas to adapt would decrease.	The wider regional community is used to large projects but the small communities of the local study area would struggle to respond to the opportunities and challenges presented by many overlapping projects	There is potential for a substantial boom-bust cycle that would damage the long term prospects of the area.	Varies for each of the previous impact categories
Magnitude			
Extent	Duration	Severity	Rating
The local study area would be most significantly affected but the impacts could be region-wide	The projects could overlap for the life of the wind farm but would be most severe during the construction period	The overlapping projects would generate demands for thousands of workers with substantial impacts on local and regional housing markets. The impacts are unlikely to be reversed but would be most severe during the construction period.	Varies for each of the previous impact categories
Consequence Rating			**Varies**

12.5 Recommendation

Mitigating cumulative impacts will require intensifying effort on the mitigation measures already outlined.

As a further consideration, effective mitigation will rely on working with other project proponents and relevant authorities to reduce adverse impacts of multiple overlapping large projects. Effective cooperation will be needed to reduce traffic disruption and adverse impacts on local and regional labour and housing markets; to reduce the collective draw of projects on regional resources; to minimise any adverse impacts on visitation; and to maximise the beneficial aspects of projects on employment, skills and visitor infrastructure.

13 SUMMARY OF MITIGATIONS AND MONITORING RECOMMENDATIONS

13.1 Mitigation and monitoring measures

The mitigation measures that are proposed to avoid, mitigate or manage business and tourism impacts associated with the project are summarised in Table 13-1.

Table 13-1: Mitigation and monitoring measures for business and tourism impacts

Measure ID	Mitigation measure	Stage
BTM-M001	**Stakeholder Engagement Plan – business and tourism** A Stakeholder Engagement Plan will be developed and implemented prior to construction in accordance with TTP-M001 and SOC3. In relation to potential changes to local business and tourism during the construction phase, the plan will include communications, enquiries and complaints management procedures that allow feedback from Councils and the local community. Relevant business and community organisations will be included in stakeholder engagement activities.	Construction and operation
BTM-M002	**Traffic Management Plan – business and tourism** The Traffic Management Plan required in TTP-MM02 will include assessment and management of construction impacts and will be developed in consultation with relevant road authorities. In relation to business and tourism, the plan will include the programming of construction works to avoid major traffic changes during key holidays in the region, where possible.	Construction
BTM-M003	**Develop and implement a community benefit fund** Develop and implement a community benefit fund, in consultation with the community and Councils.	Construction and operation
BTM-M004	**Consultation with Parks Victoria on Reeves Beach campground** Consultation with Parks Victoria will be undertaken to identify and support management options of the Reeves Beach campground during construction of the project. Appropriate resources will be provided to notify potential campground users of construction noise or activity, and to promote alternative camping locations if required.	Construction
BTM-M005	**Workforce Development Strategy** Develop and implement a Workforce Development Strategy, in consultation with Councils and other relevant stakeholders, that will identify project labour needs and how to maximise participation by Gippsland firms and Gippsland workers.	Construction and operation
BTM-M006	**Workforce Accommodation Strategy** Develop, update and implement the draft Workforce Accommodation Strategy, in collaboration with the relevant Councils and accommodation providers, prior to construction to minimise impacts of the project workforce on available accommodation providers within the local area (in accordance with SOC-M001). In finalising the Strategy, the following actions will be undertaken: • Regular review and amendment of the Strategy, as required	Construction and operation

	• Make available sufficient resources to actively plan, manage and monitor the Strategy. • Report on the broad Strategy outcomes to a Community Advisory Group or relevant Councils • If required, once the scale of the project and likely workforce is known with more certainty, collaborate with local authorities and other stakeholders to plan the provision of supplementary accommodation	
Measure ID	**Monitoring measure**	**Stage**
BTM-M007	**Stakeholder Engagement Plan – boat ramps** In order to gauge how the project is affecting the preferences of boat users and recreational fishers at boat ramps, the stakeholder engagement will provide evidence for potential infrastructure improvements or demand management measures .	Construction and operation
BTM-M008	**Workforce Housing Monitor** Monitor the number and share of project workers who live in the region or who move to the region. Identify the type of accommodation used by each worker who moves into the region. This data can be used to monitor and adjust the Workforce Accommodation Strategy, if required.	Construction and operation
BTM-M009	**Accommodation Surveys** Monitor visitation to the local study area through accommodation surveys in order to understand impacts on tourism businesses. This could include asking a range of accommodation providers to continually report on their occupancy in order to gauge the ongoing state of the industry and the availability of short term accommodation for the project. This will be necessary in monitoring the Workforce Accommodation Strategy.	Construction and operation

13.2 Mitigation measures from other studies

In addition to the mitigation measures listed above, the mitigation measures from other technical assessments that are also relied upon to reduce business and tourism impacts are summarised in Table 13-2.

Table 13-2: Mitigation measures from other studies relevant to business and tourism

Measure ID	Mitigation Measure and description	Technical Report	Stage
TTP-M001	Stakeholder engagement plan	X: Transport	Construction
TTP-M002	Traffic management plan	X: Transport	Construction
TTP-M003	Road safety audits	X: Transport	Operation
TTP-M004	Emergency Management Plan	X: Transport	Operation
TTP-M005	Heavy vehicle transport route assessments	X: Transport	Construction
TTP-M006	Site access strategy	X: Transport	All
AGM-M001	Compensation for economic impacts	S: Agriculture and Forestry	Construction
AGM-M002	Preparation of landholder specific Property Management Plans	S: Agriculture and Forestry	Construction
ONV-M001	Managing noise and vibration from construction activities	W: Noise and Vibration	Construction

ONV-M002	Out of hours construction noise mitigation measures	W: Noise and Vibration	Construction
ONV-M003	Vibration safe working distances	W: Noise and Vibration	Construction
ONV-M004	Transmission system construction – batch locations – noise control	W: Noise and Vibration	Construction
ONV-M005	Unavoidable works – shore crossing drilling – noise control	W: Noise and Vibration	Construction
ONV-M006	Unavoidable works – offshore piling – noise control	W: Noise and Vibration	Construction
ONV-M007	Noise and vibration monitoring	W: Noise and Vibration	Construction
VES-M01	Vessel operations framework	P: Shipping and navigation	Construction
VES-M03	Marine coordination centre	P: Shipping and navigation	Construction
VES-M04	Vessel movement controls	P: Shipping and navigation	Construction
VES-M05	Vessel biosecurity	B: Benthic ecology	Construction
VES-M07	Vessel speed restrictions	D: Marine mammals and turtles	Construction
UWN-M01	Soft start procedure	C: Fish and invertebrates	Construction
UWN-M03	Noise abatement system (NAS)	E: Offshore Ornithology & Bats	Construction
OFF-M03	Demarcation areas	P: Shipping and navigation	Construction
OFF-M10	Notice to mariners	P: Shipping and navigation	Construction
OFF-M12	Safety and protection zones	P: Shipping and navigation	Construction
OFF-M22	Stakeholder consultation	O: Infrastructure and co-existence with other users	Construction
SOC-M001	Workforce Accommodation Strategy	R: Social	All
SNV-M05	Project vessel requirements	P: Shipping and navigation	Construction
SNV-M07	Vessel Passage Plan	P: Shipping and navigation	Construction
SNV-M09	Charting of final layout on navigational charts	P: Shipping and navigation	Construction
SPL-M02	Spill response plan.	B: Benthic ecology	All
SPL-M03	Maintenance of offshore substations	B: Benthic ecology	All
CRF-M09	Opportunities for work on the project	N: Commercial and recreational fisheries	all

14 SUMMARY OF IMPLICATIONS

This study has assessed the impacts of construction and operation of the project on business and tourism assets and values to be protected.

The significance of the impacts has been assessed in accordance with the evaluation framework, based on applicable legislation, policy and standards and the evaluation objectives and environmental significance guidelines arising from the government terms of reference established to guide the assessments.

The following sections summarise these identified impacts under the relevant Commonwealth and Victorian legislation as well as providing an indication of the location of the various impacts.

14.1 Commonwealth Legislation

Under the EPBC Act Significant Impact Guidelines 1.1, a 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment, which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. In relation to the evaluation objectives set out in the Star of the South EIS Guidelines, the project would have a significant positive impact on employment. Modelling for this report (see Appendix B) shows that the project would generate:

- 4,730 direct and indirect jobs in Australia at the peak of the construction phase; an average annual FTE employment contribution of 2,560 during the seven year construction period; and 416 ongoing jobs once the project was operational. A significant share of the construction jobs would be in the Gippsland region at a time when the existing local fossil fuel energy generators are winding down.
- An increase in Australian GDP of $7,211 million during the construction period and $8,935 million over the period of operation.

In addition, the project has the potential, in conjunction with subsequent offshore wind energy projects, to support the development of an offshore wind energy manufacturing and servicing sector in Australia.

There will not be significant negative impacts on the socioeconomic values of the Commonwealth marine environment relevant to this scope.

14.2 Victorian Legislation

In relation to the evaluation objectives set out in the Star of the South EES Scoping Requirements, the project would have a number of impacts on business and tourism in Victoria.

An increase in regional jobs is the key benefit of the project from a business and tourism perspective:

- Employment modelling for this project (see Appendix B) shows that project expenditure would generate between 3,846 and 3,870 direct and indirect jobs in Victoria at the peak of the construction period; and 388 ongoing jobs during operation.
- Many of these ongoing jobs – around 315 – would be in the Gippsland region at a time when the existing local fossil fuel energy generators are winding down.

Offsetting the benefits of employment the project may generate adverse impacts for the local and regional economy. A range of effects have been assessed as likely to have ***moderate*** or ***major*** consequences, even after the implementation of mitigation measures:

- The effect of construction noise on coastal tourism in parts of the local study area, including at Reeves Beach Campground, may create a temporary loss of visitation if noise impacts prove intrusive.
- There may be some disruption to labour markets in the local study area during construction as workers are attracted away from existing local businesses.
- The housing and accommodation market within commuting distance of the project will inevitably get tighter. This will affect short term accommodation in particular, especially at peak holiday periods, with consequences for tourism and for other workers.
- There would be some ongoing change in attitudes towards the southern Gippsland area as a visitor destination because of the appearance of the wind farm in the seascape. The loss of wild coast has the potential to reduce visitation to the area. However, positive reactions and an uplift in visitation are possible with appropriate infrastructure development and marketing.

15 CONCLUSION

The purpose of this report is to assess the potential business and tourism impacts associated with the Star of the South Offshore Wind Farm to inform the preparation of the EES and EIS required for the project.

Overall, the project would generate substantial benefits in the form of new jobs and business opportunities for the Gippsland region, especially during the seven-year construction period at a time when regional jobs in fossil energy will be declining. Regional skills and job stock would be expanded and diversified for the long term with the operations and maintenance port for the wind farm located in the region. This regional employment in the project and supporting industries is a key benefit to set against the social and environmental disruption that the project could create. The Star of the South also has the potential to become the catalyst for development of manufacturing and servicing capacity in offshore electricity generation, with benefits for Gippsland, the Victorian and Australian economies.

Notwithstanding the employment generated by the project, there are a number of issues which need careful management and resources if adverse impacts are to be avoided.

During the construction phase, issues include ensuring that the demands for labour and accommodation do not overwhelm the local and regional economy. The tourism industry in affected coastal areas may also require support through this period to overcome any loss of patronage due to construction impacts. The effects on recreational fishing access are especially important to the local community and the existing visitor base.

In the longer term, the character of the coast as a visitor destination will change somewhat as a result of the presence of the wind farm. There are opportunities to strengthen this part of the coast as a visitor destination, including using the new wind farm as part of a significant new attraction; however, this will require further investment.

With the implementation of the mitigation measures outlined in this assessment, adverse impacts of the construction and operation of the wind farm on business and tourism in the region should be reduced and its beneficial impacts bolstered.

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APPENDIX A: IMPACT/RISK REGISTER

Project Impacts

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
Construction									
BTM-I001	Disruption of existing businesses and tourism routes as a result of road closures and congestion from construction traffic	Normal construction mitigation including consultation with local authority	Low	Low	Negligible	Stakeholder engagement and avoidance of key road closures during holidays and events	Low	Low	Negligible
BTM-I002	Loss of primary production for regional processors as a result of land taken out of production	Compensation to primary producers (land holders)	Low	Low-Medium	Negligible-Minor	No further mitigations required	Low	Low-Medium	Negligible-Minor
BTM-I003	Construction noise impact on coastal tourism	Reduce the noise at source through the use of appropriate technologies	Medium	Medium	Moderate	Establish a complaints mechanism in the Stakeholder Engagement Plan Support accommodation businesses through the Workforce Accommodation Strategy	Medium	Medium	Moderate

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
BTM-I004	Decline in visitation because of construction impacts on Reeves Beach campground	Normal work management plan including consultation with campground manager	Medium	Medium	Moderate-	Discussions with Parks Victoria on management; provision of resources for user information and promotion of alternatives	Medium	Medium	Moderate
BTM-I005	Underwater noise impacts from construction on recreational diving industry	Where diving and underwater noise sources may occur within a distance of 45 km, ensure that all parties are made aware of the planned activity where practicable. Development of Notice to Mariners prior to piling activities commencing Soft-start measures including ramping up (of the noise levels).	Medium	Low	Minor	Noise abatement measures will be applied during pile driving.	Medium	Low	Minor
BTM-I006	Offshore construction impacts on recreational fishing and boating,	Stakeholder communication plan Vessel management plan	Low	Medium	Minor	Monitor the use of boat ramps in the region and provide information and resources to address changes in demand.	Low	Medium	Minor

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
BTM-I007	Underwater noise impact on marine fauna, disrupting marine tourism	Soft-start measures including ramping up (of the noise levels). Stakeholder communication plan Vessel management plan Notice to Mariners	Low	Low-Medium	Negligible-Minor	No further measures required	Low	Low-Medium	Negligible-Minor
BTM-I008	Changes to regional employment during construction: The project may not maximise regional employment during the construction period	Stated preference of Star of the South for regional firms and workers State Government contracts requiring demonstration of regional jobs	Medium	High	Major positive	Workforce development strategy to maximise Gippsland employment	Medium	High	Major positive
BTM-I009	Disruption to the local and regional labour markets	Early collaboration with regional agencies and businesses to develop knowledge of the project	Medium	Medium-High	Moderate-Major	Workforce Development Strategy that aims to maximise benefits to regional workers and businesses	Medium	Medium	Moderate
BTM-I010	Disruption to the local housing and accommodation market: Shortage of		High	High	Severe	Workforce Accommodation Strategy	Low-Medium	Medium-High	Minor-Major

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
	commercial accommodation								
Operation									
BTM-I011	Changes to regional employment	Stated commitment by Star of the South to regional employment	Medium	High	Major (positive)	Workforce Development Plan	Medium	High	Major (positive)
BTM-I012	Disruption to the housing and accommodation market: Shortage of housing to accommodate operational workers	Maximise employment of local workers and potential carry-over of accommodation from construction phase	Medium	High	Major	Workforce Accommodation Strategy	Medium	Medium	Moderate
BTM-I013	Changed seascape creates a loss of amenity leading to fewer visitors, a decline in tourism revenues		Low-Medium	Medium-High	Minor-Major	No further mitigations proposed.	Low-Medium	Medium-High	Minor-Major
Decommissioning									
BTM-I014	Impact on traffic in the local study area	Normal construction mitigation including consultation with local authority	Low	Low	Negligible	No further measures suggested in advance of a new EES at the time of decommissioning	Low	Low	Negligible
BTM-I015	Offshore construction	Reduce the noise at source through the	Low	Low	Negligible	No further measures suggested in advance of a new EES at the	Low	Low	Negligible

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
	impacts on coastal tourism	use of appropriate technologies				time of decommissioning			
BTM-I016	Underwater noise impacts from facility extraction on diving and marine life	Soft start procedures	Low	Low	Negligible	No further measures suggested in advance of a new EES at the time of decommissioning	Low	Low	Negligible
BTM-I017	Employment of workers for decommissioning	Stated preference of Star of the South for regional firms and workers	High	Medium	Major (positive)	No further measures suggested in advance of a new EES at the time of decommissioning	High	Medium	Major (positive)
BTM-I018	Impacts on the local and regional labour market from removal of wind farm jobs	Consultation with workforce and adequate notice to seek alternative jobs	Medium	High	Major	No further measures suggested in advance of a new EES at the time of decommissioning	Medium	High	Major
BTM-I019	Impacts on the local accommodation sector from the change in employment opportunities	Advance notice to the local and regional community	Medium	Medium	Moderate	No further measures suggested in advance of a new EES at the time of decommissioning	Medium	Medium	Moderate
BTM-I020	Potential loss of visitation that has built up around the wind farm	Advance notice to the local and regional community	Medium	Medium	Moderate	No further measures suggested in advance of a new EES at the time of decommissioning	Medium	Medium	Moderate

Impact ID	Impact pathway	Initial mitigation	Initial impact level			Final mitigation	Residual impact level		
			Sensitivity	Magnitude	Consequence		Sensitivity	Magnitude	Consequence
Cumulative Impacts									
BTM-I021	Other major projects in the region may compete with Star of the South for space, workers, accommodation and other resources Other projects may reinforce adverse impacts on recreation and tourism in the local study area	Monitor regional projects				Recommendation to work with other project proponents and relevant authorities on mitigating actions	Varies by project		

Project Risks

Risk ID	Risk pathway	Initial mitigation	Initial risk level					Final mitigation	Residual risk level				
			Receptor sensitivity	Magnitude	Consequence level	Likelihood	Risk level		Receptor sensitivity	Magnitude	Consequence level	Likelihood	Risk level
Construction													
BTM-R001	Oil spill impacts on tourism	Best practice marine vessel management Spill response plans	Medium	Medium	Moderate	Rare	Low	Ensure Spill response plan monitors socio-economic impacts	Medium	Medium	Moderate	Rare	Low
Operation													
BTM-R002	Oil spill impacts on tourism	Spill response plan Stakeholder communication plan Vessel management plan	Medium	Medium	Moderate	Rare	Low	Ensure Spill response plan monitors socio-economic impacts	Medium	Medium	Moderate	Rare	Low

Decommissioning													
BTM-R003	Oil spill impact on tourism	Best practice marine vessel management Spill response plan	Medium	Medium	Moderate	Rare	Low	Ensure Spill response plan monitors socio-economic impacts	Medium	Medium	Moderate	Rare	Low

APPENDIX B: REGIONAL INPUT-OUTPUT MODEL

Star of the South

Economic Modelling Results March 2025

Prepared by

Geografia

Prepared for

STAR OF THE SOUTH

Geografia

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1.0 STAR OF THE SOUTH MODELLING RESULTS

A regional input-output model was calibrated to estimate the jobs, output and GRP impact of the Star of the South (SOTS) project in the Latrobe-Gippsland SA4 region (the Gippsland region), Victoria and Australia. A Vector Auto Regression (VAR) model analysis was also undertaken to ensure that no negative multiplier effects are occurring due to price effects from the project's expenditure stimulus. Following a review of the input assumptions by the client, the model was updated, and the results were revised. The final outputs are summarised here.

Method

Geographical Definitions

For this analysis, the Gippsland region is defined as the Latrobe-Gippsland ABS ASGS SA4 geography. The rest of Victoria is defined as the regions of Victoria excluding the Latrobe-Gippsland SA4, and the rest of Australia excludes Victoria.

Model Methodology

A regional input-output (I-O) model framework was used to estimate the regional economic impact of the Star of the South project. I-O models represent the flow of expenditure in a region's economy, primarily between industries, households, government and business expenditures. The interactions among industries in an economy can be organised according to a specific accounting system known as "input-output accounts." The ABS National Accounts provides the input-output accounts for Australia.

A Location Quotient methodology is also applied. This uses the ratio of local jobs by industry to construct an input-output account for the Gippsland region. A Leontief Inverse formula is then applied to the industry and household expenditure data to the Total Economic Multipliers. Total Multipliers represent flow-on expenditure to other supplying industries and household expenditure. Further details of the I-O model methodology are outlined in Appendix A.

Model Assumptions

The modelling first assumes that prices are fixed following the impact of the Star of the South construction and operation phases. This is a standard assumption for I-O models.

A discount rate of 4% is used to represent a time preference discount on future cash flows. This is recommended by the Victorian Department of Treasury and Finance (DTF) Technical Guidelines on Economic Evaluation.

The model also assumes that the Australian, Victorian and Gippsland economies and industry values are growing at a long-term rate of 3% per annum. This aligns with the national GDP forecasts by the Reserve Bank of Australia (Statement of Monetary Policy, February 2024, RBA).

Local direct economic impacts from the Star of the South project's construction and operations phase are provided by Star of the South in quarterly FTE inputs.

The annual averages of these employment assumptions are used as inputs to the I-O economic model. For of this analysis, two employment scenarios have been used, as informed by consultation with Tim Nott:

1. Scenario 1 (S1) assumes a **high proportion** of local FTE jobs in the Gippsland region.
2. Scenario 2 (S2) assumes a **low proportion** of FTE jobs in the Gippsland region (and a high proportion of FTE jobs elsewhere in Victoria and Australia).
3.

The main economic impacts of Star of the South are quantified in total Gross Regional Product (GRP) or Gross Domestic Product (GDP) impact; the total Output impact; and the total Direct and Indirect Employment impact. These are defined as follows:

- **Gross Regional Product or Gross Domestic Product** – the total economic values generated in a given economy, including the aggregate of total business profit/surplus, wages and remunerations and net taxes on products and services.
- **Total Output** – the total industry expenditures in a given economy, including expenditure by flow-on supplying industry sectors.
- **Total Direct and Indirect Employment** – the total employment impact from the project, including employment generated from flow-on supplying industry sectors.

The economic model outputs are only reflective of the economic activities that generate a known and quantifiable economic impact. Any other economic activities (e.g. ancillary tourism visitor activity to the infrastructure site) are not included in this assessment.

Furthermore, this economic assessment quantifies the economic impact of the construction and operation activities of the Star of the South and does not reflect any other ancillary activities that could be generated from this project (e.g. the generation of new tourism activities as a result of the construction of the project).

VAR Model Falsification Testing

Given the size of the project, concerns may arise regarding the reasonableness of assuming constant prices. This is important to consider because, in the presence of substantial economic impacts, positive price changes in a region's economy could result in a negative multiplier effect on other industries, where resources are reallocated from one industry to another, and consequently, economic impact results may be overestimated.

To ensure that constant prices are a reasonable assumption, a Vector Auto-Regressive (VAR) economic model was used to estimate the historical multiplier impacts of industry expenditures in the Gippsland Region. Using ABS Labour Force Industry by SA4 data, the VAR model identifies no flow-on negative multiplier effect from price effects in the Gippsland Region's Professional Services; Construction; and Electricity, Waste and Water industries (also known as the Utilities sector). Given this, the modelling assumption of constant prices is a reasonable assumption to apply.

Results

Table 1-1 to Table 1-3 summarise the key results for the three regions and two scenarios.

For jobs, construction roles are expected to peak in Year 4, then largely steady operational job estimates from Year 8 onwards to Year 37.

Region	Construction (Peak Jobs)	Operational (Ongoing)
Scenario 1		
Gippsland	1,206	214
Victoria	1,330	228
Australia	1,419	228
Scenario 2		
Gippsland	272	212
Victoria	1,318	228
Australia	1,419	228

Table 1-1: Direct Job Impacts (FTEs)
Note: Operational job estimates are the average values of the estimates for each of the 30 years of operation. See Table 4 for the separate values for each year. Source: Geografia, 2025

With respect to GRP, this refers to either Gross Regional Product (for Gippsland), State Product (for Victoria) or Domestic Product (for Australia). Summed values for the specified lifespan of each stage are provided.

Region	Construction (Sum) $m	Operational (Sum) $m
Scenario 1		
Gippsland	$1,020	$5,440
Victoria	$5,448	$7,669
Australia	$7,211	$8,935
Scenario 2		
Gippsland	$1,949	$5,402
Victoria	$5,426	$7,669
Australia	$7,211	$8,935

Table 1-2: GRP Impact – Total, Project Lifespan ($m)
Source: Geografia, 2025

Under the two scenarios, the overall output impact varies considerably depending on the discount rate applied to future impacts.

Region	4% NPV	0% NPV
Scenario 1		
Gippsland	$11,520	$27,135
Victoria	$15,409	$33,139
Australia	$16,861	$35,462
Scenario 2		
Gippsland	$9,381	$24,176
Victoria	$15,382	$33,104
Australia	$16,861	$35,462

Table 1-3: Total Output Impact over Project Lifespan ($m)
NPVs have been calculated for the total output value for the project lifespan with discount rates of 0% and 4%. Source: Geografia, 2025

Scenario 1

Scenario 1 job, GRP and Output impacts are shown in Figure 1-1 to Figure 1-9.

Construction peaks in Year 4 and operations continue from Year 8 to Year 37. In Gippsland Region, constructions roles peak at 1,206 direct FTE jobs in Year 4, supporting total (direct and indirect) FTE impact of 1,549 jobs. During the operational phase, the project is expected to support 214 direct FTE jobs in Gippsland Region and 316 total (direct and indirect) FTE jobs. Full results are provided in Table 1-4 to Table 1-6.

In Gippsland, direct jobs make up to 84% of the total job estimates during the construction phase and around 94% during operations. For Victoria, the shares are approximately 94% and 100% respectively.

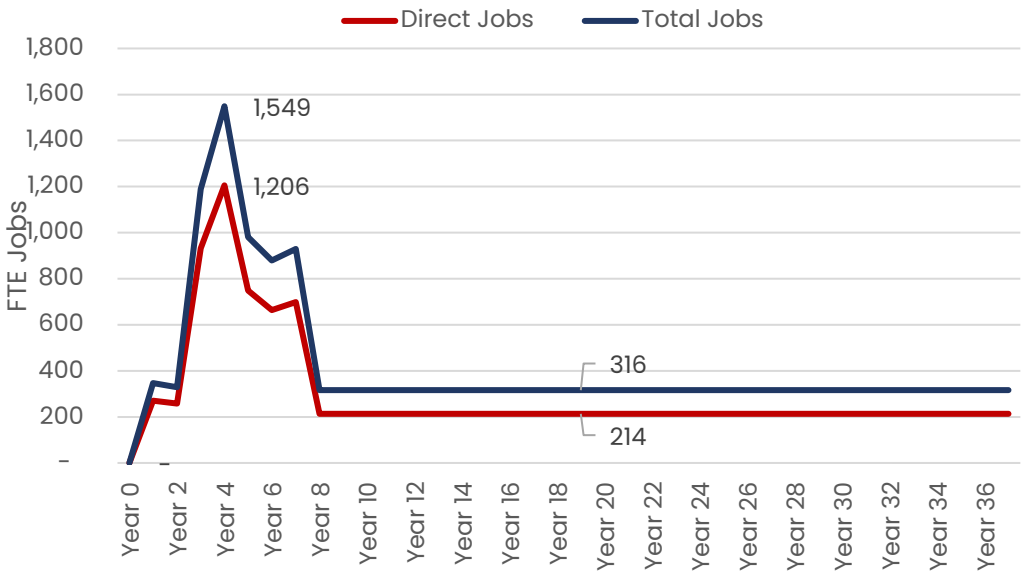

Figure 1-1: Scenario 1 Job Impact – Gippsland
Source: Geografia 2025

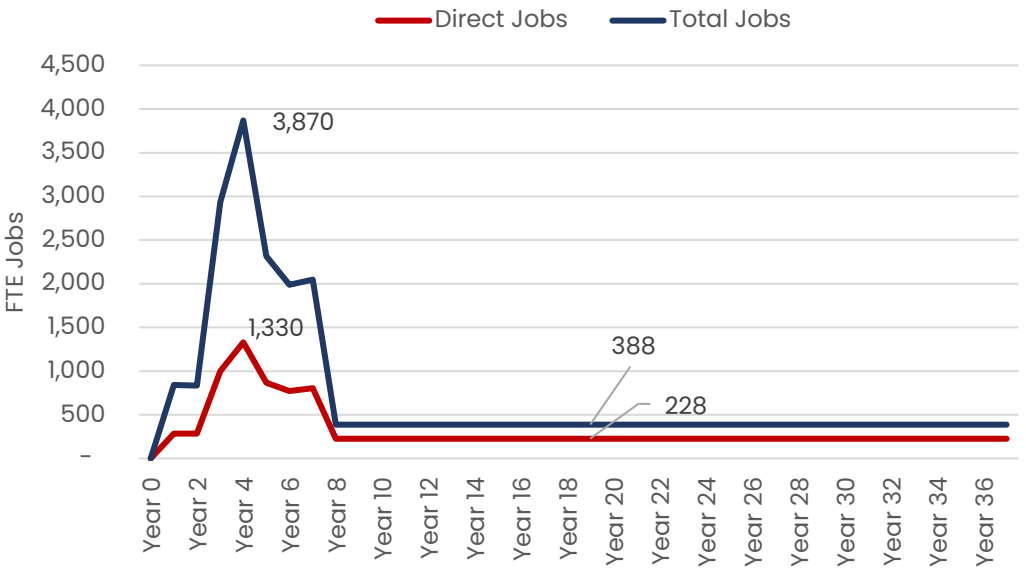

Figure 1-2: Scenario 1 Job Impact – Victoria
Source: Geografia 2025

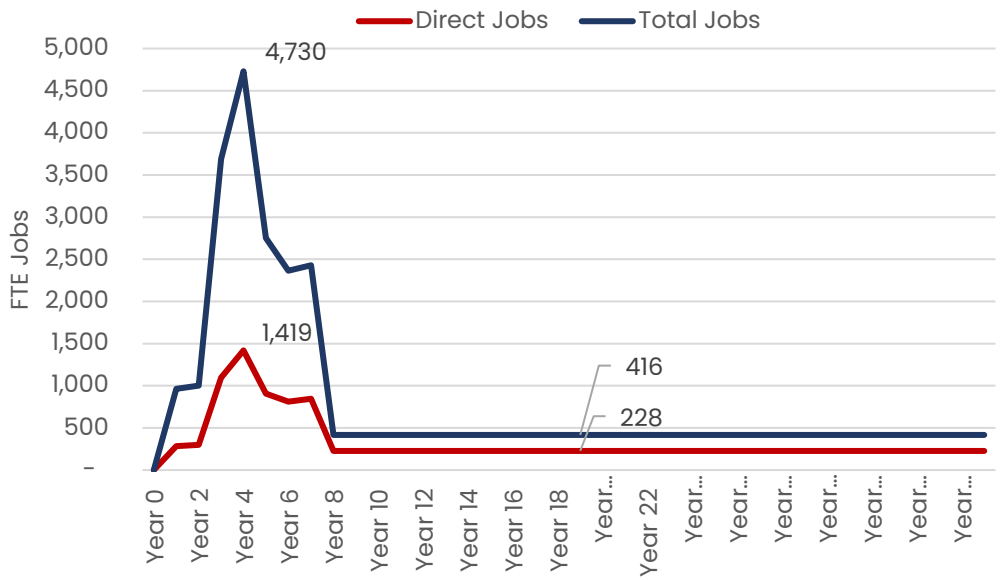

Figure 1-3: Scenario 1 Job Impact – Australia
Source: Geografia 2025

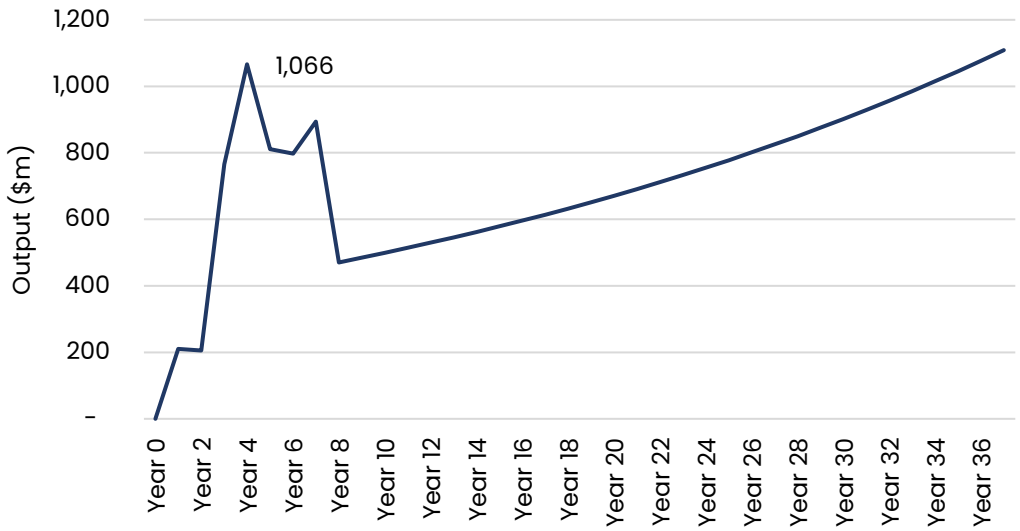

Figure 1-4: Scenario 1 Output Impact – Gippsland. ($m)
Source: Geografia 2025

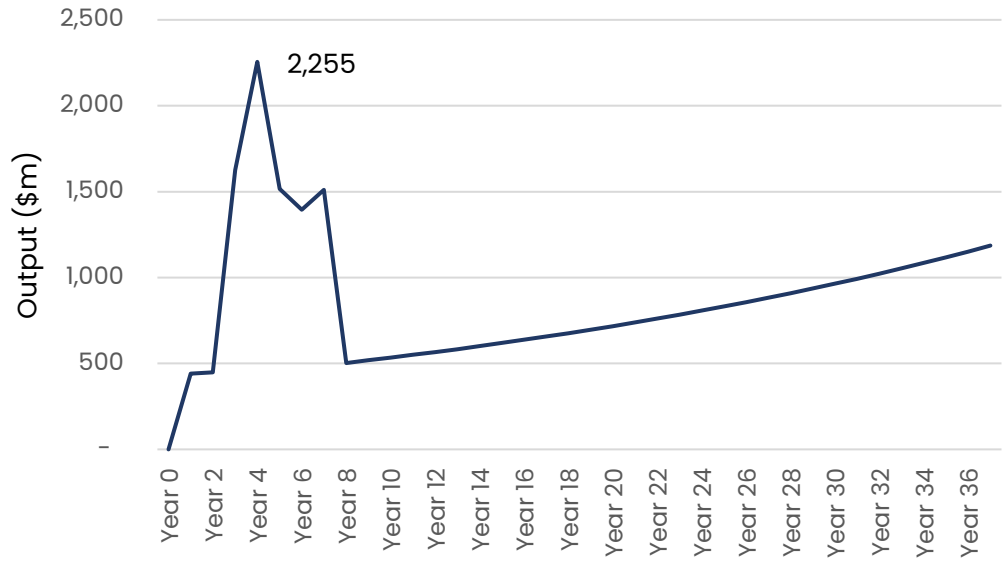

Figure 1-5: Scenario 1 Output Impact – Victoria
Source: Geografia 2025

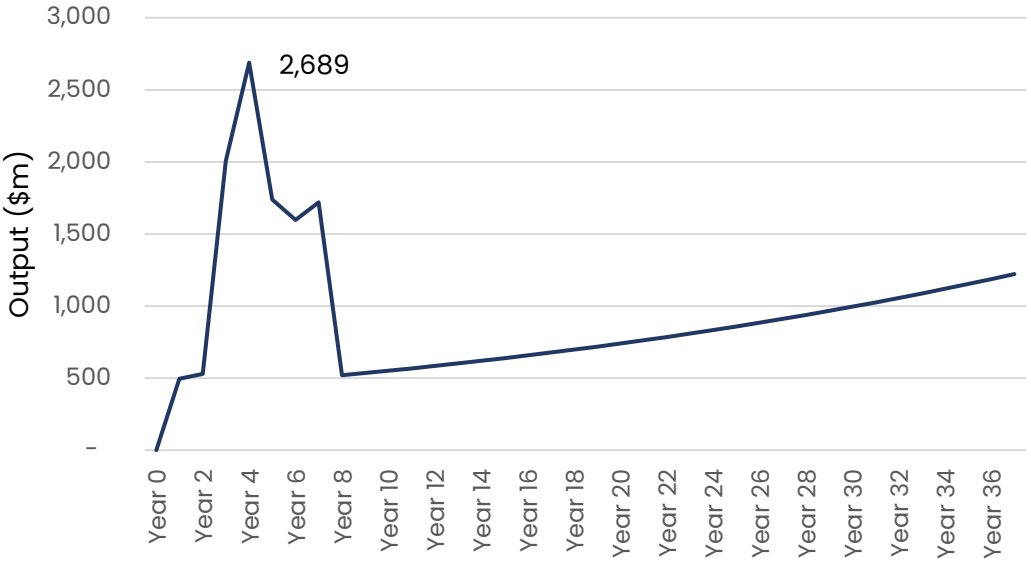

Figure 1-6: Scenario 1 Output Impact – Australia ($m)
Source: Geografia 2025

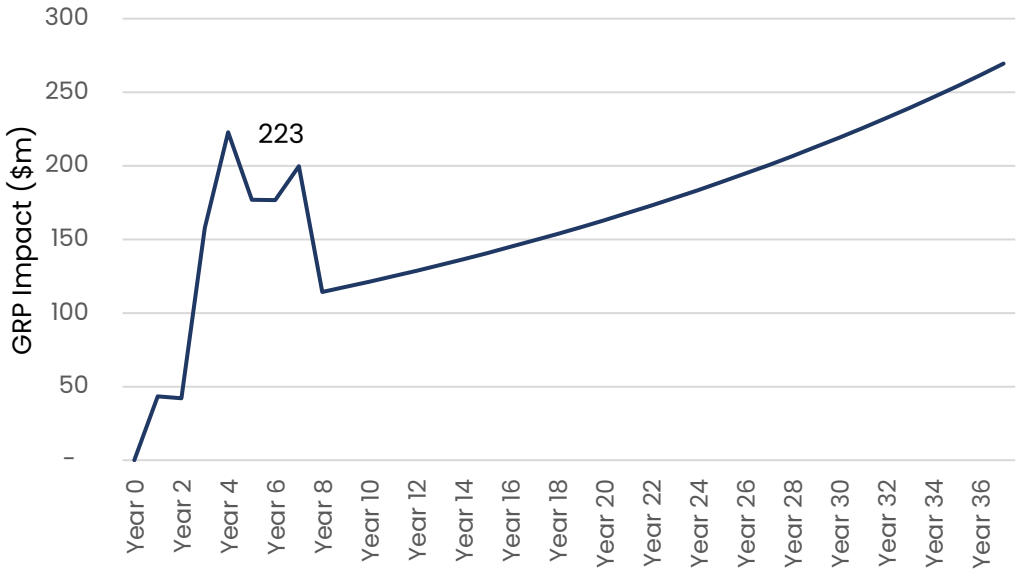

Figure 1-7: Scenario 1 GRP Impact – Gippsland ($m)
Source: Geografia 2025

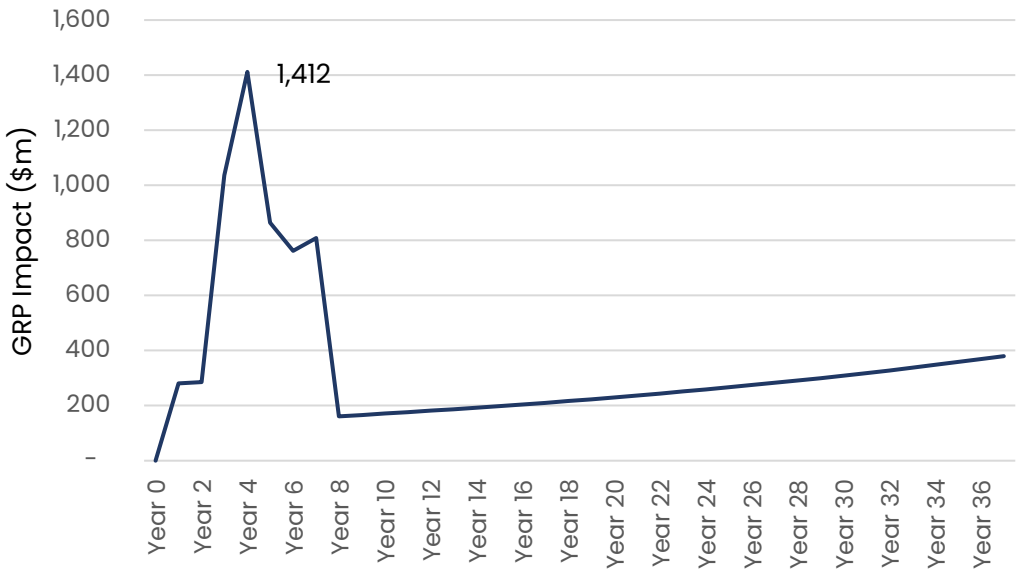

Figure 1-8: Scenario 1 GRP Impact – Victoria ($m)
Source: Geografia 2025

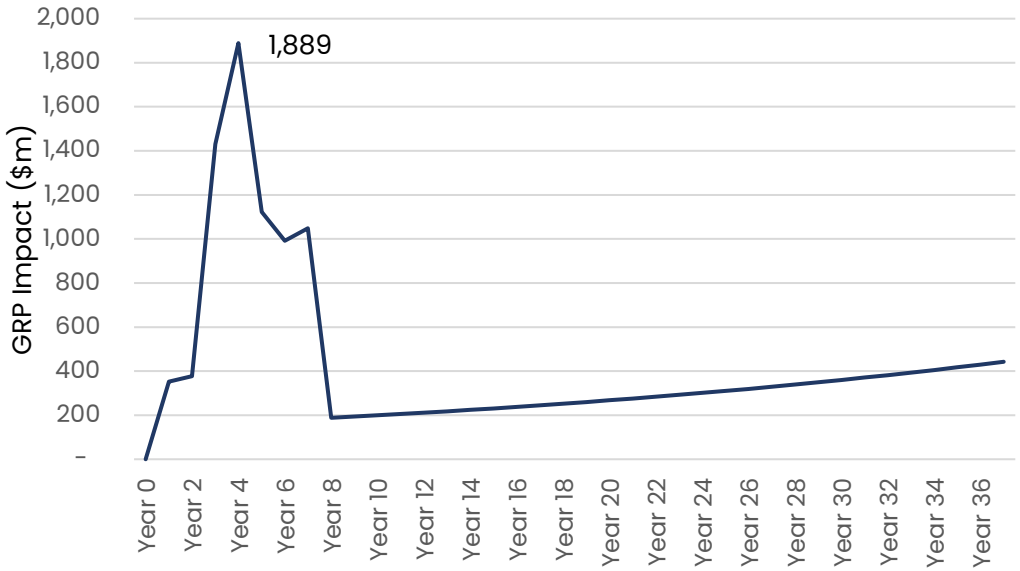

Figure 1-9: Scenario 1 GRP Impact – Australia ($m)
Source: Geografia 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	346	841	965
Year 2	330	832	1,003
Year 3	1,189	2,932	3,691
Year 4	1,549	3,870	4,730
Year 5	980	2,315	2,752
Year 6	879	1,988	2,367
Year 7	930	2,046	2,429
Year 8	316	388	416
Year 9	316	388	416
Year 10	316	388	416
Year 11	316	388	416
Year 12	316	388	416
Year 13	316	388	416
Year 14	316	388	416
Year 15	316	388	416
Year 16	316	388	416
Year 17	316	388	416
Year 18	316	388	416
Year 19	316	388	416
Year 20	316	388	416
Year 21	316	388	416
Year 22	316	388	416
Year 23	316	388	416
Year 24	316	388	416
Year 25	316	388	416
Year 26	316	388	416
Year 27	316	388	416
Year 28	316	388	416
Year 29	316	388	416
Year 30	316	388	416
Year 31	316	388	416
Year 32	316	388	416
Year 33	316	388	416
Year 34	316	388	416
Year 35	316	388	416
Year 36	316	388	416
Year 37	316	388	416

Table 1-4: Scenario 1 – Total Job Count (Direct and Indirect FTE) by Year and Region
Source: Geografia, 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	43	281	353
Year 2	42	286	377
Year 3	158	1,036	1,430
Year 4	223	1,412	1,889
Year 5	177	864	1,123
Year 6	177	762	991
Year 7	200	808	1,048
Year 8	114	161	188
Year 9	118	166	193
Year 10	121	171	199
Year 11	125	176	205
Year 12	129	181	211
Year 13	133	187	218
Year 14	137	192	224
Year 15	141	198	231
Year 16	145	204	238
Year 17	149	210	245
Year 18	154	217	252
Year 19	158	223	260
Year 20	163	230	268
Year 21	168	237	276
Year 22	173	244	284
Year 23	178	251	293
Year 24	184	259	301
Year 25	189	266	310
Year 26	195	274	320
Year 27	201	283	329
Year 28	207	291	339
Year 29	213	300	349
Year 30	219	309	360
Year 31	226	318	371
Year 32	232	328	382
Year 33	239	338	393
Year 34	247	348	405
Year 35	254	358	417
Year 36	262	369	430
Year 37	269	380	443

Table 1-5: Scenario 1 – Total GRP by Year and Region ($m)
Source: Geografia, 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	210	440	494
Year 2	205	448	528
Year 3	766	1,627	2,006
Year 4	1,066	2,255	2,689
Year 5	811	1,515	1,739
Year 6	798	1,396	1,597
Year 7	894	1,511	1,720
Year 8	471	503	519
Year 9	485	518	534
Year 10	499	534	551
Year 11	514	550	567
Year 12	530	567	584
Year 13	545	583	602
Year 14	562	601	620
Year 15	579	619	638
Year 16	596	638	657
Year 17	614	657	677
Year 18	632	676	697
Year 19	651	697	718
Year 20	671	718	740
Year 21	691	739	762
Year 22	712	761	785
Year 23	733	784	808
Year 24	755	808	833
Year 25	778	832	858
Year 26	801	857	883
Year 27	825	883	910
Year 28	850	909	937
Year 29	875	936	965
Year 30	902	964	994
Year 31	929	993	1,024
Year 32	956	1,023	1,055
Year 33	985	1,054	1,087
Year 34	1,015	1,085	1,119
Year 35	1,045	1,118	1,153
Year 36	1,076	1,152	1,187
Year 37	1,109	1,186	1,223

Table 1-6: Scenario 1 – Total Output by Year and Region ($m)
Source: Geografia, 2025

Scenario 2

Scenario 2 job, GRP and Output impacts are shown in Figure 1-10 to Figure 1-18. Construction peaks in Year 4 and operations continue from Year 8 onwards.

In Gippsland Region, constructions roles peak at 272 direct FTE jobs in Year 7, supporting total (direct and indirect) FTE impact of 389 jobs. During the operational phase, the project is expected to support 212 direct FTE jobs in Gippsland Region and 314 total (direct and indirect) FTE jobs. Full results are provided in Table 1-7 and Table 1-9.

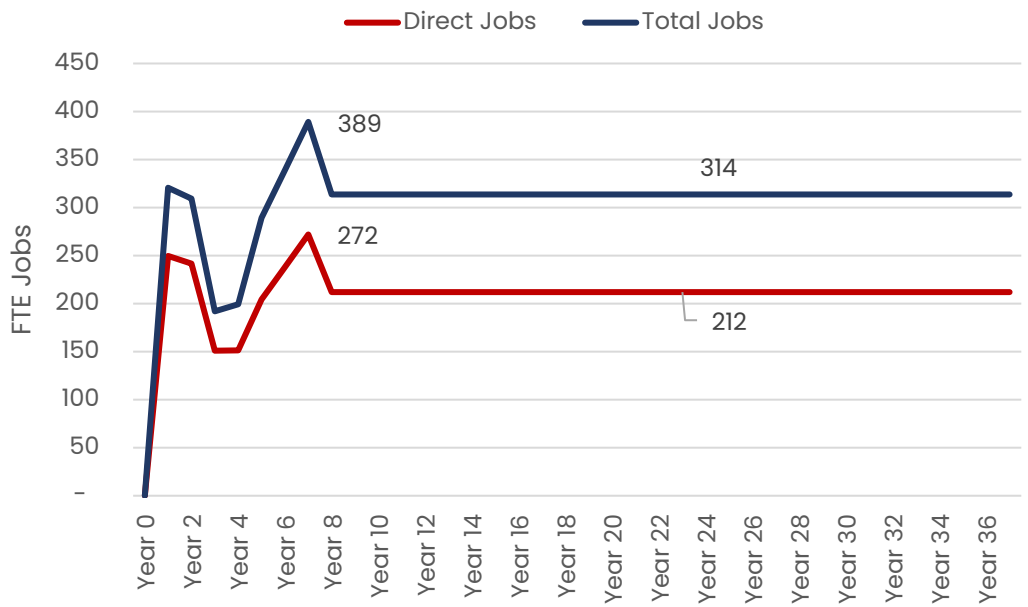

Figure 1-10: Scenario 2 Job Impact – Gippsland
Source: Geografia 2025

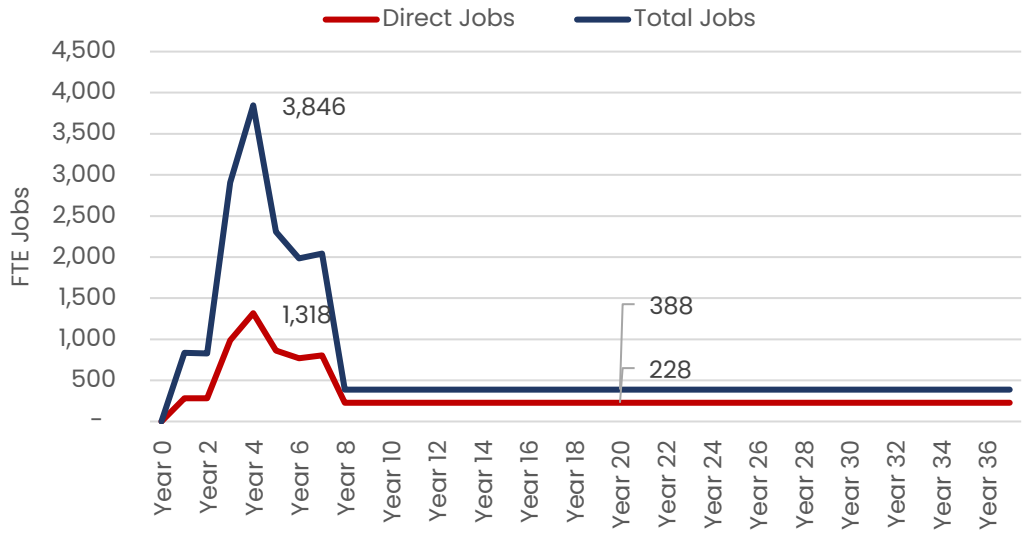

Figure 1-11: Scenario 2 Job Impact – Victoria
Source: Geografia 2025

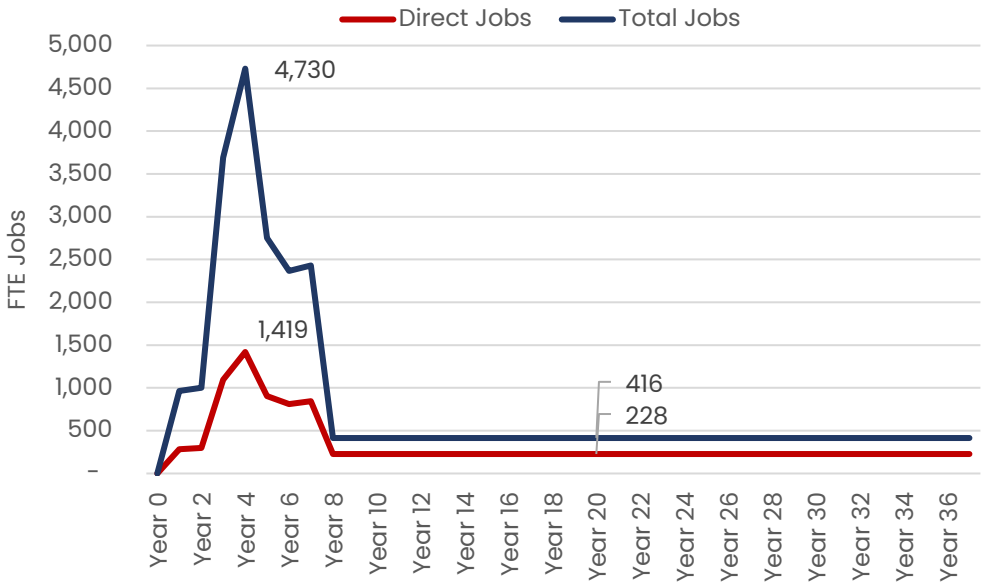

Figure 1-12: Scenario 2 Job Impact – Australia
Source: Geografia 2025

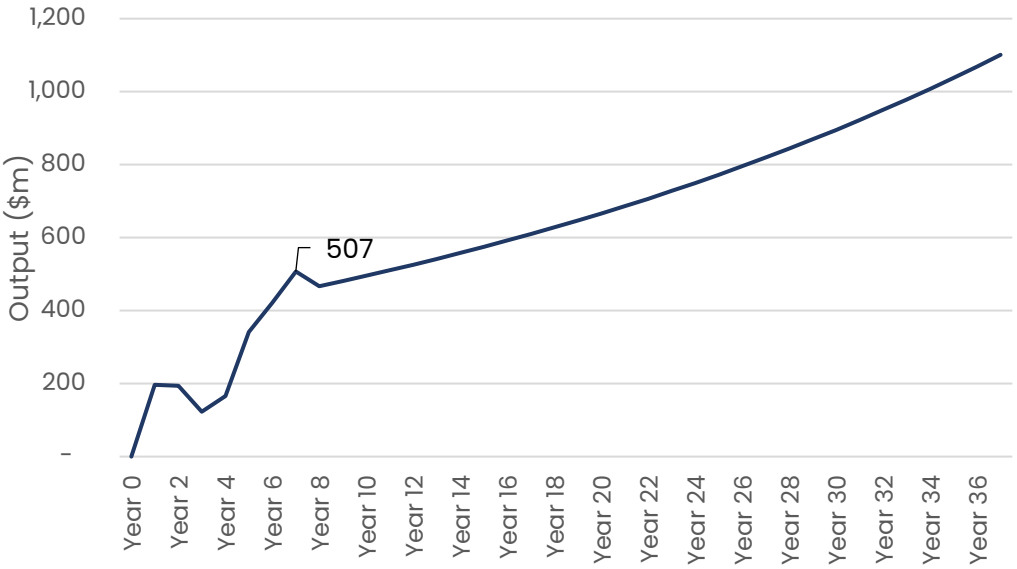

Figure 1-13: Scenario 2 Output Impact – Gippsland ($m)
Source: Geografia 2025

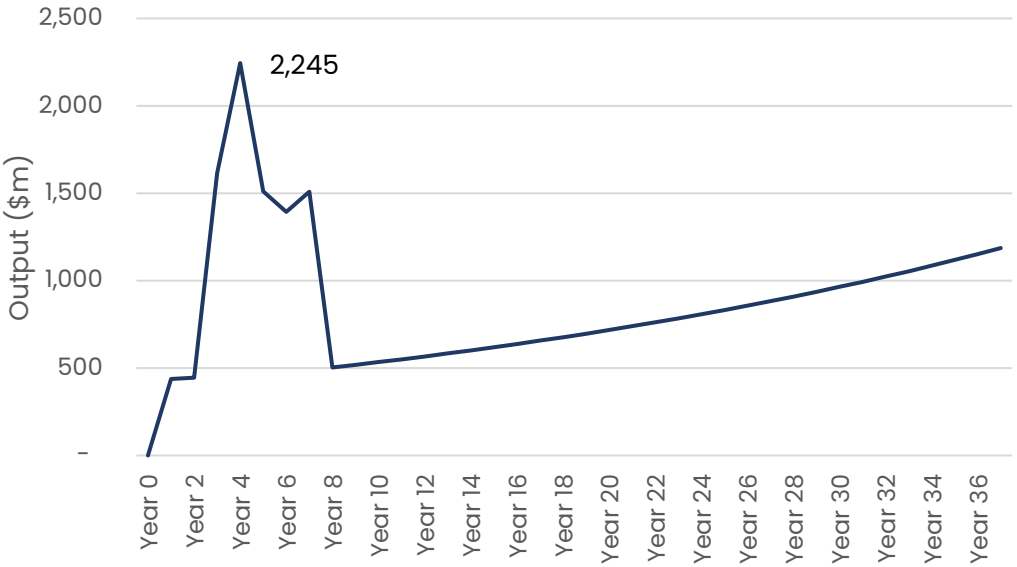

Figure 1-14: Scenario 2 Output Impact – Victoria ($m)
Source: Geografia 2025

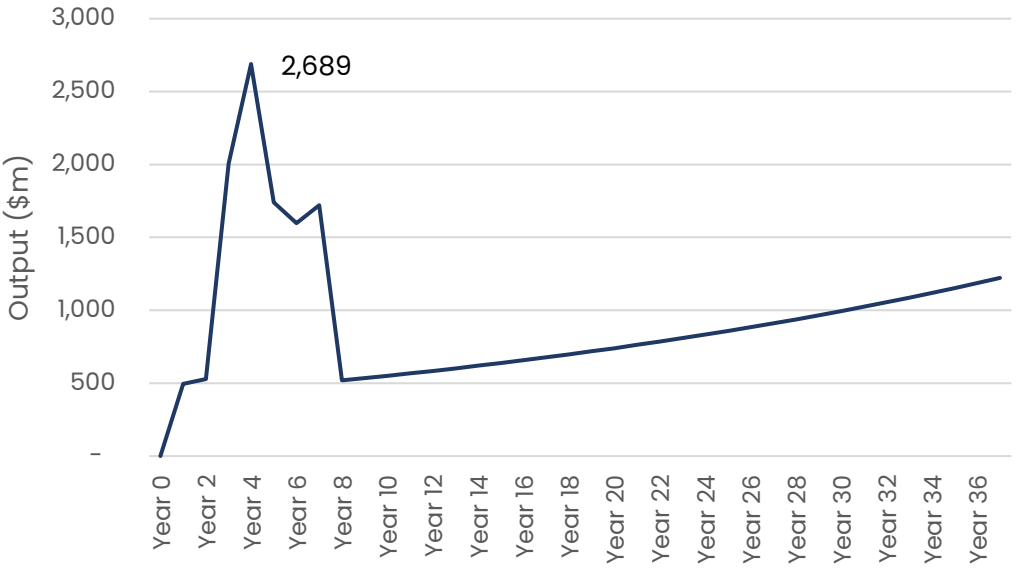

Figure 1-15: Scenario 2 Output Impact – Australia ($m)
Source: Geografia 2025

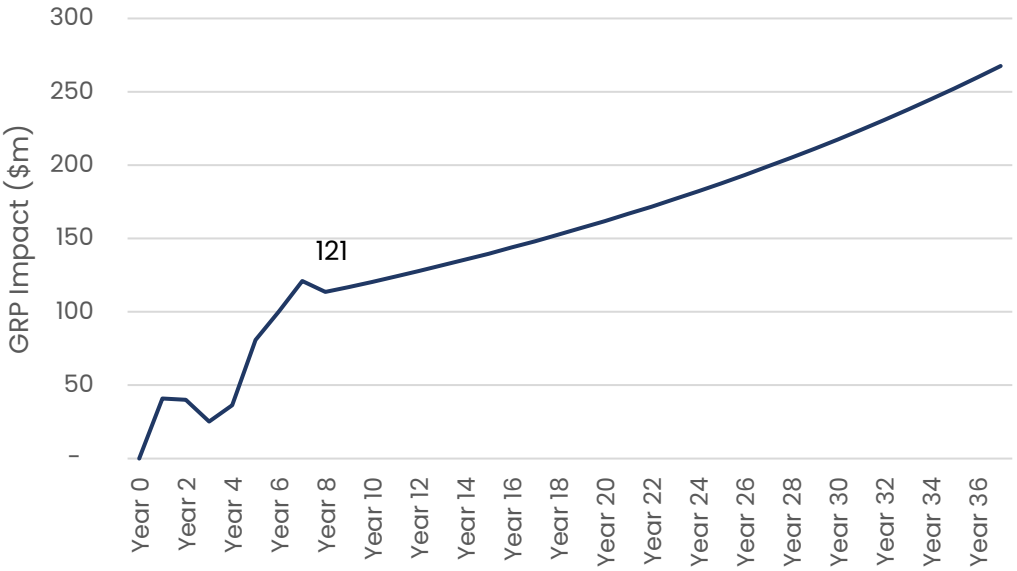

Figure 1-16: Scenario 2 GRP Impact – Gippsland ($m)
Source: Geografia 2025

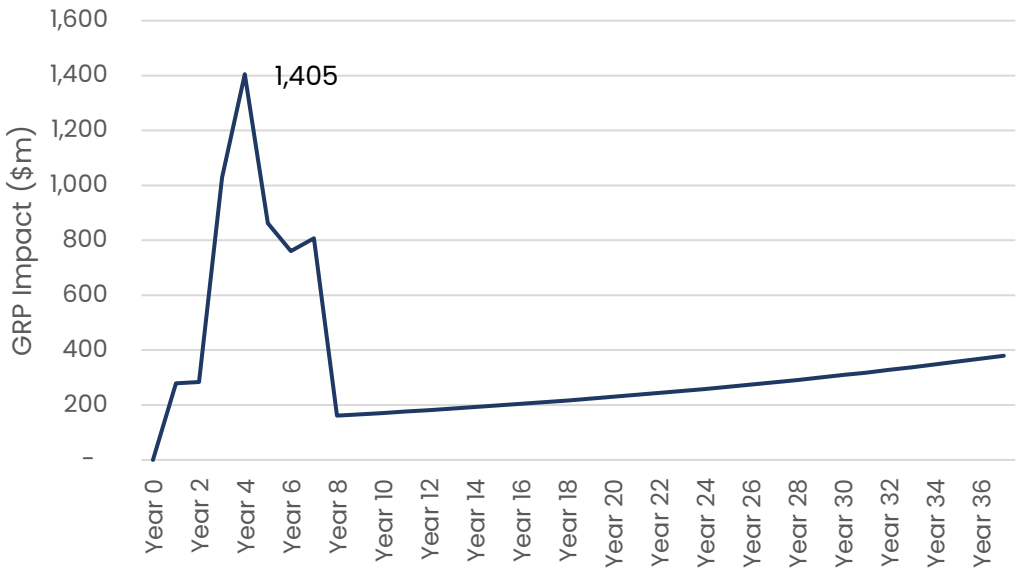

Figure 1-17: Scenario 2 GRP Impact – Victoria ($m)
Source: Geografia 2025

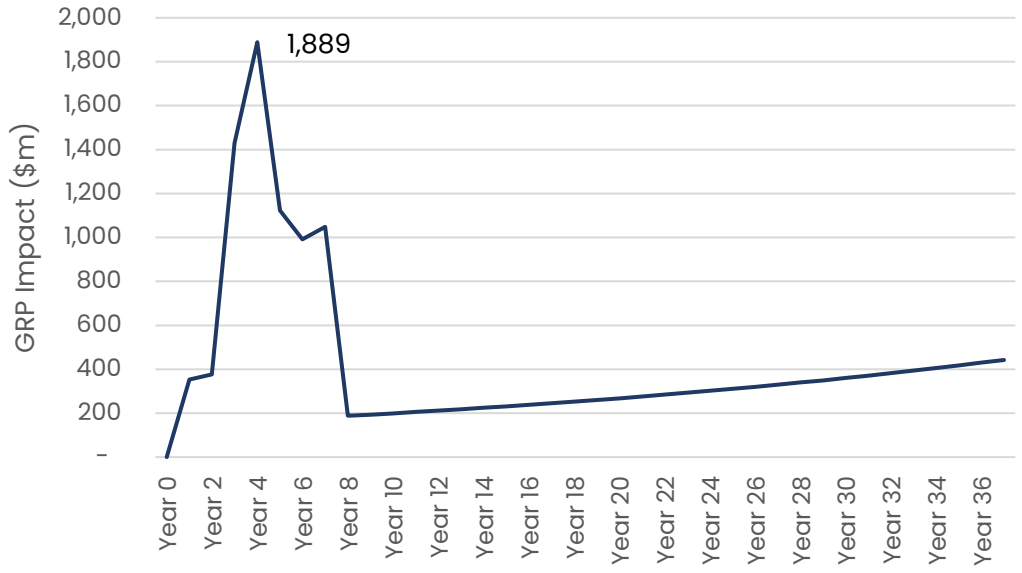

Figure 1-18: Scenario 2 GRP Impact – Australia ($m)
Source: Geografia 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	321	834	965
Year 2	309	827	1,003
Year 3	192	2,907	3,691
Year 4	199	3,846	4,730
Year 5	289	2,307	2,752
Year 6	339	1,984	2,367
Year 7	389	2,042	2,429
Year 8	314	388	416
Year 9	314	388	416
Year 10	314	388	416
Year 11	314	388	416
Year 12	314	388	416
Year 13	314	388	416
Year 14	314	388	416
Year 15	314	388	416
Year 16	314	388	416
Year 17	314	388	416
Year 18	314	388	416
Year 19	314	388	416
Year 20	314	388	416
Year 21	314	388	416
Year 22	314	388	416
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Year 25	314	388	416
Year 26	314	388	416
Year 27	314	388	416
Year 28	314	388	416
Year 29	314	388	416
Year 30	314	388	416
Year 31	314	388	416
Year 32	314	388	416
Year 33	314	388	416
Year 34	314	388	416
Year 35	314	388	416
Year 36	314	388	416
Year 37	314	388	416

Table 1-7: Scenario 2 – Total Job Count (Direct and Indirect FTE) by Year and Region
Source: Geografia, 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	41	279	353
Year 2	40	284	377
Year 3	25	1,029	1,430
Year 4	36	1,405	1,889
Year 5	81	862	1,123
Year 6	100	761	991
Year 7	121	807	1,048
Year 8	114	161	188
Year 9	117	166	193
Year 10	120	171	199
Year 11	124	176	205
Year 12	128	181	211
Year 13	132	187	218
Year 14	136	192	224
Year 15	140	198	231
Year 16	144	204	238
Year 17	148	210	245
Year 18	153	217	252
Year 19	157	223	260
Year 20	162	230	268
Year 21	167	237	276
Year 22	172	244	284
Year 23	177	251	293
Year 24	182	259	301
Year 25	188	266	310
Year 26	193	274	320
Year 27	199	283	329
Year 28	205	291	339
Year 29	211	300	349
Year 30	218	309	360
Year 31	224	318	371
Year 32	231	328	382
Year 33	238	338	393
Year 34	245	348	405
Year 35	252	358	417
Year 36	260	369	430
Year 37	268	380	443

Table 1-8: Scenario 2 – Total GRP by Year and Region ($m)
Source: Geografia, 2025

Year	Gippsland	Victoria	Australia
Year 0	0	0	0
Year 1	197	438	494
Year 2	194	446	528
Year 3	123	1,616	2,006
Year 4	166	2,245	2,689
Year 5	342	1,512	1,739
Year 6	421	1,394	1,597
Year 7	507	1,509	1,720
Year 8	467	503	519
Year 9	481	518	534
Year 10	496	534	551
Year 11	511	550	567
Year 12	526	567	584
Year 13	542	583	602
Year 14	558	601	620
Year 15	575	619	638
Year 16	592	638	657
Year 17	610	657	677
Year 18	628	676	697
Year 19	647	697	718
Year 20	666	718	740
Year 21	686	739	762
Year 22	707	761	785
Year 23	728	784	808
Year 24	750	808	833
Year 25	772	832	858
Year 26	795	857	883
Year 27	819	883	910
Year 28	844	909	937
Year 29	869	936	965
Year 30	895	964	994
Year 31	922	993	1,024
Year 32	950	1,023	1,055
Year 33	978	1,054	1,087
Year 34	1,008	1,085	1,119
Year 35	1,038	1,118	1,153
Year 36	1,069	1,152	1,187
Year 37	1,101	1,186	1,223

Table 1-9: Scenario 2 – Total Output by Year and Region ($m)
Source: Geografia, 2025

2.0 MODELLING DEFINITIONS

Input-Output Model

What is an Input-Output Table?

An Input-Output (I-O) table is a descriptive framework for showing the relationship between industries and sectors and between inputs and outputs in an economy. It is also an analytical tool for measuring the impact of autonomous disturbances on output, employment and income.

Input-output tables are provided by the ABS (2022) Input-Output database. Total Economic Impact is constructed using the following three categories:

1. **Initial Output Effects** – the estimated initial expenditure on the general regional economy.
2. **Production Induced Effects** – this is the estimated impact of the Initial Output Effects on the general economy. The Production Induced Effects are made up of two components:
    a. **The First Round Effects** – is the amount of output required from all industries of the economy to produce the Initial Output Effect; and
    b. **Industrial Support Effects** – the effects of second and subsequent rounds of induced production.
3. **Consumption Induced Effects** – the induced production of extra goods and services as a result of private final consumption expenditure of households affected by the initial output effects.

What is the Difference between Expenditure, Output, Value-Add and Gross Domestic Product?

Expenditure or industry consumption represents the internal consumption by households, business and government for a given industry.

Direct Industry Output is equal to expenditure (or industry consumption) less the costs to retailers of domestic goods sold, costs to industry of imported goods sold and net taxes on products.

Direct Industry Value Added is calculated by subtracting industry intermediate inputs (goods and services produced and supplied by other businesses).

Direct Industry Gross Regional Domestic Product is then calculated by adding net taxes on products at the industry-level to direct industry value-added.

APPENDIX C: IMPACTS FOR WORKS WITHIN VICTORIAN JURISDICTION

C1. INTRODUCTION

This appendix presents the assessment of business and tourism issues associated with works within the Victorian jurisdiction, which are subject to an EES. These relate principally to the construction and operation of the onshore and near-shore electricity transmission infrastructure.

The main body of this report has assessed the local and regional impacts on business and tourism of the Star of the South project. This is required for the project under the Commonwealth EIS process which assesses the whole project. The Victorian Government does not have approvals powers for project components that occur outside its jurisdiction and, in this case, has no decision-making powers for projects that occur in Commonwealth waters.

The impacts and mitigation measures for consideration in the Victorian EES are therefore a subset of the overall list of impacts discussed in the main body of the report. The existing conditions assessment for the EES is the same as it is for the EIS, as is the evaluation method and the business and tourism evaluation criteria developed to assess the project. The numbering of impacts and mitigation measures has also remained the same to assist the reader.

The issues for assessment are shown in Table 10 below.

Table 10: Assessment issues in Victorian jurisdiction

Impact ID	Impact pathway	Initial consequence rating	Residual consequence rating
Construction			
BTM-I001	Disruption of existing businesses and tourism routes as a result of road closures and congestion from construction traffic	Negligible	Negligible
BTM-I002	Loss of primary production for regional processors as a result of land taken out of production	Negligible-Minor	Negligible-Minor
BTM-I003	Construction noise impacts on coastal tourism	Minor	Minor
BTM-I004	Adverse impacts on Reeves Beach campground	Moderate	Moderate
BTM-I008	Changes to regional employment during construction	Moderate-Major positive	Moderate-Major positive
BTM-I009	Disruption to the local and regional labour markets	Minor	Minor

Impact ID	Impact pathway	Initial consequence rating	Residual consequence rating
BTM-I010	Disruption to the local housing and accommodation market	Moderate	Minor-Moderate
Operation			
Decommissioning			
Cumulative impacts			
BTM-I021	Other major projects in the region may compete with Star of the South for space, workers, accommodation and other resources Other projects may reinforce adverse impacts on businesses and tourism in the local study area	Varies	Varies

C2. CONSTRUCTION ASSESSMENT

C2.1 Project parameters that form the basis of impact assessment

Table 11 specifies the maximum design scenario that has been assessed for construction within the Victorian jurisdiction. These represent the values of project parameters from ranges specified in the project design envelope that represent the greatest potential impact to an identified sensitive receptor or receptor group.

Table 11: Maximum design scenario - construction

Area of impact	Key parameter values	Justification
Onshore construction impacts	The works and infrastructure are located within the onshore construction project area, which is defined by the area required for construction of the following: • Onshore Wind Farm transmission system infrastructure: ▪ Up to 8 underground cable circuits with the following upper limit footprints: ▪ Nominal temporary construction corridor width between shore crossing and VicGrid connection hub: 60 m width. ▪ Joints and bays at one-kilometre (approx.) intervals with upper limit joint footprints of 5 m x 15 m x 3 m (W/L/D) ▪ Other temporary construction infrastructure including access roads • Shore crossing infrastructure: ▪ Trenchless shore crossing approaches with maximum length of 1400 m and depth of up to 35 m ▪ Transition joints and bays with upper limit footprints of 10 m x 30 m x 5 m (W/L/D)	The onshore construction project area defines the area within which construction activities would be occurring for the project. The anticipated workforce and material volumes define the maximum construction traffic required for the project.

Area of impact	Key parameter values	Justification
	• Temporary construction compounds with an upper limit footprint of 100 m x 100 m (W/L) Vehicles will be required to support movement of the following during construction: • Workforce • Bulk materials • Cable materials	

C2.2 BTM-I001: Businesses affected due to traffic disruptions

Over the construction period, there would inevitably be some periods when road access through the local study area is restricted, for example, through temporary road closures, speed restrictions or slow-moving large loads.

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- TTP-M001 and SC0-M003: Stakeholder engagement plan
- TTP-M002: Traffic management plan
- TTP-M003: Road safety audits
- TTP-M004: Emergency Management Plan
- TTP-M005: Heavy vehicle transport route assessments
- TTP-M006: Site access strategy.

Impacts

These disruptions are addressed in *Technical report X: Transport* for the project (AECOM, 2026a).

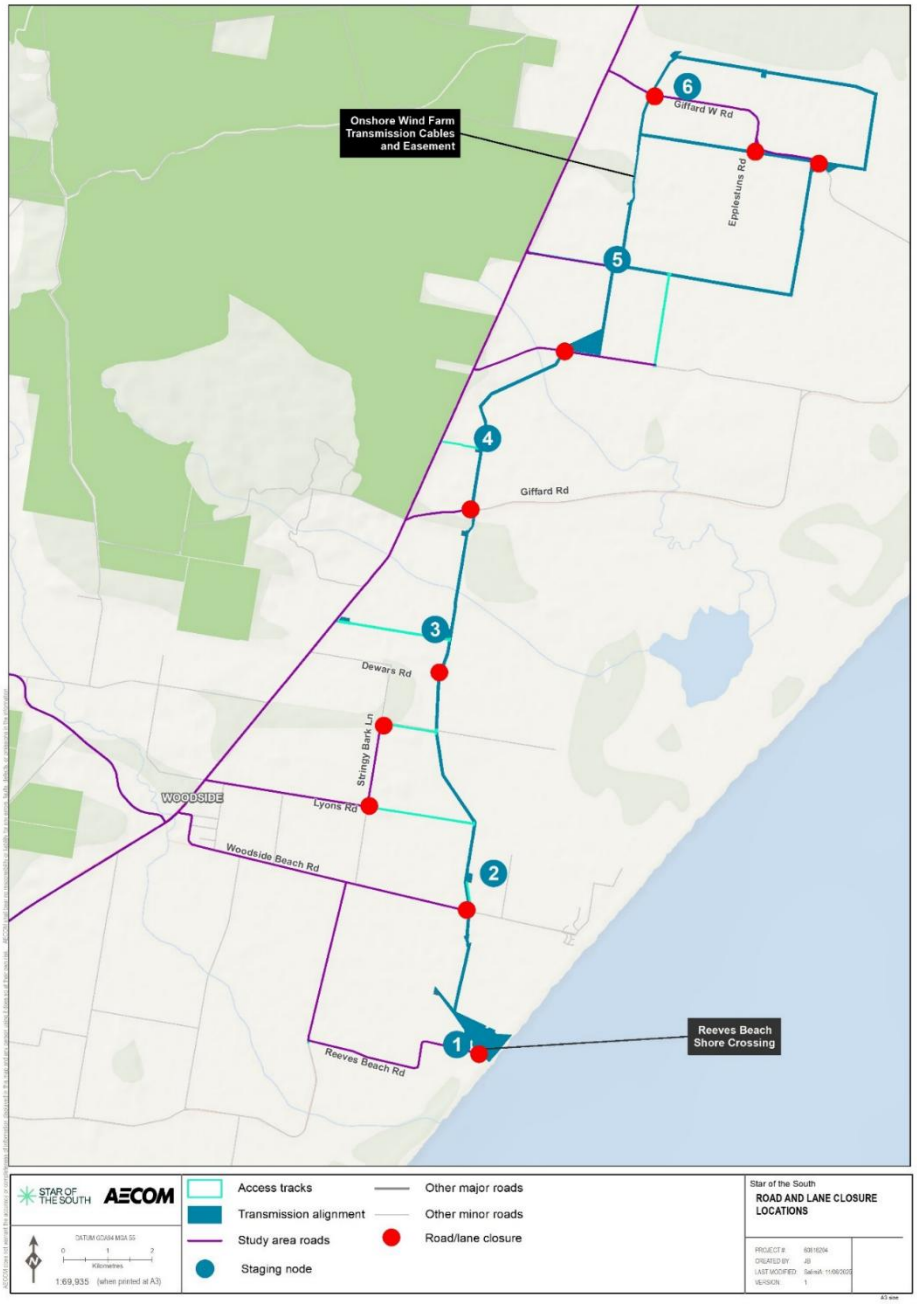
Road and lane closures will occur to allow cable-laying and associated construction activities and will affect roads around the onshore transmission route. These proposed closures are shown in Figure 9-1. These restrictions could increase travel times for local and regional businesses and for visitors to Woodside Beach in particular. This could increase costs for businesses and visitors.

Designated roads would be closed or partially closed for up to three days at a time and only a few times in total across the construction period. The proposed Stakeholder Engagement Plan (TTP-M001) and Traffic Management Plan (TTP-M002) should minimise disruption by, for example, taking into account bushfire season and major local events when scheduling roadworks. This should reduce the impact of closures on Woodside Beach Road on the holiday season at the Woodside beach township.

Technical report X found that,

> *Overall, impacts to the transport network during construction are expected to be relatively minor and can be managed through measures outlined in a Traffic Management Plan (TMP) for the project, with the road network capacity found to be sufficient to accommodate anticipated traffic volumes.* (AECOM, 2025a)

Figure 86: Road and lane closure locations



Source: AECOM, 2026a

Consequence Rating

Table 12: BTM-I001 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The anticipated traffic disruptions will affect roads in the local study area for several days at a time and only on a few	If the lane closures on Woodside Beach Road occur in peak periods – key holidays and events – visitors may be deterred,	Visitor numbers and local businesses should recover immediately following the road closures unless peak	Low

occasions in total over the onshore construction period. Local visitors and businesses will be able to adapt.	and local businesses may suffer. Otherwise, visitors and local businesses will tolerate the small disruptions proposed.	period disruption causes visitors to forego repeat visitation.	
Magnitude			
Extent	Duration	Severity	Rating
The lane and road closures are restricted to minor roads around the onshore transmission route, although speed restrictions may operate on the South Gippsland Highway.	Road and lane closures will be in place in any one location for only a few days in total over the two year onshore construction period	Lane and road closures will cease once works have finished.	Low
Consequence Rating			**Negligible**

Mitigation

The proposed Stakeholder Engagement Plan (TTP-M001 and SC0-M003) should provide for a two-way flow of information and advice between the project and the local and regional community. The engagement would provide information about local festivals and events, allowing Star of the South to better coordinate its construction timetable.

The Traffic Management Plan (TTP-M002) in relation to business and tourism will include assessment and management of construction impacts and changes, and will be developed in consultation with relevant road authorities.

Specifically, this will include the programming of construction works to major traffic changes during key holidays in the region, where possible.

Mitigation measures

BTM-M001: **Stakeholder Engagement Plan – Business and Tourism**

A Stakeholder Engagement Plan will be developed and implemented prior to construction in accordance with TTP-M001.

In relation to potential changes to local business and tourism during the construction phase, the plan will include communications, enquiries and complaints management procedures that allow feedback from Councils and the local community. Relevant business and community organisations will be included in stakeholder engagement activities.

BTM-M002: **Traffic Management Plan – Business and Tourism**

The Traffic Management Plan required in TTP-MM02 will include assessment and management of construction impacts and will be developed in consultation with relevant road authorities. In relation to business and tourism, the plan will include the programming of construction works to avoid major traffic changes during key holidays in the region, where possible.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 13: BTM-I001 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	The incomes of individual businesses in the local study area should not be adversely affected by traffic delays.
Would regional output and employment be reduced by this impact?	Any impacts on regional output and employment would be negligible.
Are opportunities to grow regional output and employment maximised?	Opportunities to grow regional output and employment would likely be unaffected.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers should not be adversely affected despite some minor delays on Woodside Beach Road out of peak periods.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity would not be diminished.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	No local and regional policy preferences would be affected.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Low**
Residual consequence rating	**Negligible**

Even with the mitigation measure in place, very minor disruption remains likely as a result of occasional road congestion and closures due to construction. However, impacts on the local and regional economy would be negligible.

C2.3 BTM-I002: Loss of primary production for regional processors

The assessment of agricultural impacts of the project presented in *Technical report S: Agriculture and Forestry* (RMCG, 2026) found that the development of the onshore cable and associated infrastructure would have a modest impact on farm and forestry production. These losses in primary production may have an impact on regional processors and associated service businesses.

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- AGM-M001: Compensation for economic impacts
- AGM-M002: Preparation of landholder specific Property Management Plans.

Impact

Losses in ***farm*** production experienced during the construction phase of the project would be unlikely to have a significant impact on regional processors because of the ability of the regional farm sector to make good any shortfall in supply from the study area.

Forestry losses from the creation of a transmission line easement would include one production rotation over the life of the wind farm project (that is, the construction and operational phases of the project). This would result in the loss of between $71,000 (alignments Option AB and C) and $260,000 (alignment Option D)[15] in production value once over the life of the project, depending on the precise alignment of the transmission easement through the plantation areas. This represents less than 0.1% of the total annual plantation forestry production for Victoria (RMCG, 2026).

It is likely that much of the affected forestry products are processed in the region and that any loss in production may be felt by these downstream processors, including timber mills and dryers, the Maryvale pulp mill, transport firms and the construction sector. While the affected area contributes a very small share of State and regional production, replacing that share is more problematic than with farm production. Forestry is currently subject to a range of pressures that are tending to reduce supply including:

- "Repeated incremental losses of plantation forestry areas to various infrastructure projects" in the area (RMCG, 2026)
- Phasing out of the use of native forests in favour of plantations
- Increased forest fire risk, especially in plantations, as a result of climate change.

These factors may mean that any loss of production is not readily replaced from within the region, with an impact on supply to regional processors and a consequent impact on revenues and jobs.

Figures for plantation forestry revenues and employment are not readily available for the region. However, using data from Schirmer et al (Schirmer et al, 2018, p16) it is possible to make a broad estimate of potential impact.

- Expected loss of plantation output = $71,000 to $260,000 once over the life of the project (from RMCG, 2021)
- Potential loss of downstream output, using a multiplier of 1.1 for indirect impacts (derived from Shirmer et al) = $78,000 to $286,000
- Output per FTE job per year in downstream activities = $252,000 (derived from Schirmer et al, 2018)
- Potential number of FTE jobs lost over the project period = 0.3 to 1.1 for one year out of 37 years.

This figure would be reduced to the extent that alternative sources of plantation timber can be found.

[15] See *Victorian Environment Effect Statement Attachment I – Victorian works project description* for description of alignment options. These relate to alignments of the transmission line close to the Vicgrid connection at Giffard.

Consequence Rating

Table 14: BTM-I002 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Farming output is likely to be easily sourced from other farms in the region. Forestry output may not be so easily sourced, but small losses such as this may be within the normal seasonal fluctuations for the timber processing industry.	Regional processors are likely to be tolerant of small variations in supply of raw materials.	Timber processors may not recover the wood supply from other sources but would be able to continue to operate with little or no change.	Low
Magnitude			
Extent	Duration	Severity	Rating
May affect processors throughout the region.	For the whole life of the project.	This is a permanent impact but may be hidden by other industry changes.	Low-Medium
Consequence Rating			**Negligible-Minor**

Mitigation

No further mitigation measures beyond those already in Technical Report S: Agriculture and Forestry, are suggested here.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria.

Table 15: BTM-I002 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	The net incomes of some forest product manufacturing enterprises may be reduced as a result of the loss of raw materials. However, any such loss would be small and experienced over a long period with negligible impacts.
Would regional output and employment be reduced by this impact?	In the event that alternative timber supplies cannot be found there would a small negative impact on regional output over the life of the project.
Are opportunities to grow regional output and employment maximised?	Opportunities for regional output and employment may be diminished marginally
Would visitor numbers and their distribution be adversely affected by this impact?	No impact on visitor numbers

Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity to host investment would not be enhanced.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	This impact would not improve employment diversity or strengthen existing key industries.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Low-Medium**
Residual consequence rating	**Negligible-Minor**

A small and temporary loss of employment is possible over the life of the project but the consequences for the regional economy would be small.

C2.4 BTM-I003: Construction noise impacts on coastal tourism

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- ONV – M001: Managing noise and vibration from construction activities
- ONV – M002: Out of hours construction noise mitigation measures
- ONV – M003: Vibration safe working distances
- ONV – M004: Transmission system construction – batch locations – noise control
- ONV – M005: Unavoidable works – shore crossing drilling – noise control
- ONV – M007: Noise and vibration monitoring.

Impacts

The **onshore construction** for the project includes the shore crossing at Reeves Beach (see BT04) and the installation of underground transmission infrastructure to connect with the VicGrid facility at Giffard. This will involve trenching; trenchless crossing of key roads and streams; construction and operation of work-sites, access roads and batching plants; construction and worker traffic and operation of construction machinery. This will affect mainly the farming families along the transmission corridor and, with the exception of the trenchless crossing for the shore crossing, works will generally be undertaken during normal day-time construction hours. The onshore construction works are expected to take approximately 26 months to complete according to Star of the South (see section 2.7). The trenching and cable installation will move across the landscape such that the works will be concentrated in one place for several weeks before moving to the next location. The shore crossing works, undertaken concurrently, are expected to take up to 27 months. Five batching plants are proposed at locations along the transmission route; each is expected to operate for up to a year.

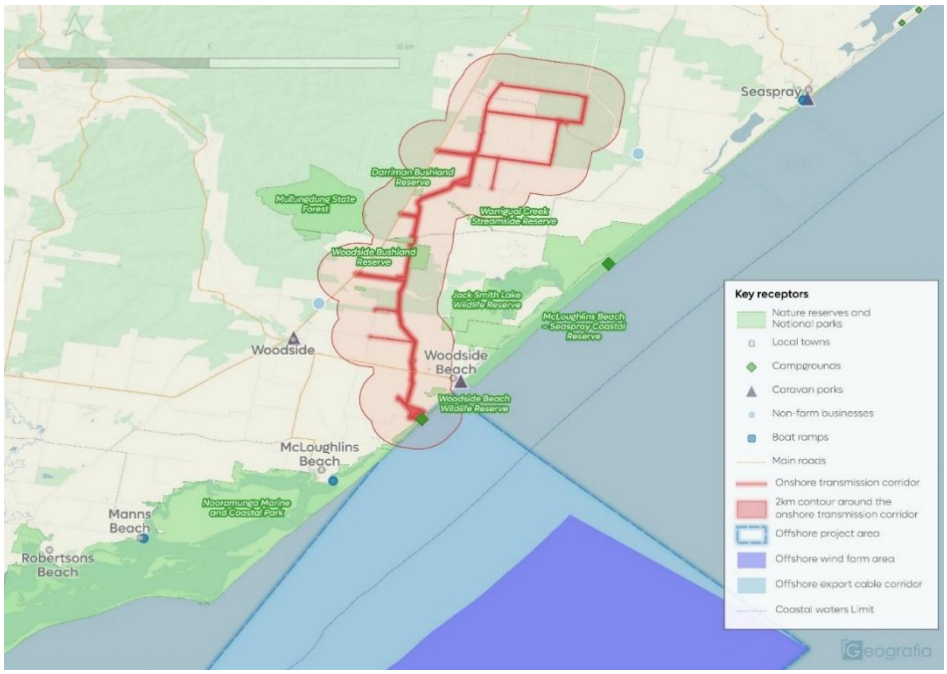
For onshore works, key receptors are:

- Nature reserves – the McLoughlins Beach – Seaspray Coastal Reserve, Woodside Bushland Reserves, Mullungdung State Forest, Warrigal Creek Streamside Reserve, Darriman Bushland Reserve

- Campground - Reeves Beach campground (see BT04)
- Townships – Woodside and Woodside Beach townships,
- Individual non-farm businesses – including Woodside Ranch Luxury Farmstay, Barooma Homestead and any other home-based businesses in the area

These are shown in Figure 9-2. It should be noted that, while precise visitor numbers are not available from the land managers, none of the inland reserves shown attracts significant numbers of tourists, although they may be visited by local residents.

Figure 87: Key receptors within 2,000 m of the onshore construction corridor



Source: SOTS; Geografia

Technical Report W: Onshore Noise and Vibration (AECOM, 2026) estimates noise levels at nearby receptors, including houses, businesses and nature reserves. The conclusions of Technical Report W: *Onshore Noise and Vibration* are as follows:

- For construction noise from the onshore transmission system:
  Construction noise may interfere with domestic and recreational activities at noise sensitive receptors less than 2000 metres from mobile works for approximately four weeks.

  Construction noise may interfere with normal conversation at noise sensitive receptors less than 2000 metres from mobile works for approximately four weeks
  (AECOM, 2026)

  The character of the noise will be typical of rural construction works – intermittent heavy machinery, earth moving, rock crushing and occasional higher pitched sounds such as chainsaws. This noise may be heard from receptors during normal construction hours (07.00 to 18.00 on weekdays and 07.00 to 13.00 on Saturdays) and for limited periods in most cases. Of the reserves likely to be most affected, only Reeves Beach campground in the McLoughlins Beach – Seaspray Coastal Reserve, has a locally significant number of tourists, who come mainly to enjoy

the beach and to fish. The affected area of this Reserve will also be impacted by other sources of construction noise (see section 9.5 on Reeves Beach in the main Business and Tourism technical report). Occasional visitors would be able to access beach areas in the same Reserve, further from the source of noise via Woodside Beach or McLoughlins Beach.

- For noise from batching plant operations:
  Noise may be heard from key receptors but will be below the acceptable threshold for such operations set by the Victorian EPA, except Reeves Beach campground and Woodside H27 Bushland Reserve, where there "the noise may interfere with human tranquillity and enjoyment outdoors" (*Technical report W*).

- For noise from the shore crossing works, including some 24 hour working and near-shore vessel operations:
  Noise will be disturbing at Reeves Beach campground (see section 9.5 in the main report). Extrapolating from *Technical Report W: Onshore Noise and Vibration*, the construction noise may occasionally be heard from the closest parts of the McLoughlins Beach-Seaspray Coastal Reserve and from the southern end of the Woodside Beach township but this would not be disturbing.

> *Construction noise is not expected to interfere with domestic and recreational activities at noise sensitive residential receptors in the vicinity.* (*Technical Report W*)

In summary, the general noise and disturbance created by the construction of the onshore transmission line is expected to be relatively limited in scale and duration. The noise from the cable installation will be noticeable up to two kilometres from the area of work for approximately four weeks in any one location. This will affect several local nature reserves as well as farms and some ancillary farm businesses including the Evolve Equine Assisted Learning and Development (Dewars Road, Woodside). The number of tourist visitors to the low key nature reserves is very small and unlikely to reduce significantly as a result of occasional noise. The impacts on the income of the equine businesses is likely to be small to non-existent, especially considering that the works will not continue overnight. The horse riding business may experience a temporary loss of daytime tranquillity but this is likely to be equivalent to occasional nearby agricultural operations such as logging, harvesting or barn construction.

The shore crossing at Reeves Beach will create a significant local disturbance for approximately 27 months. This will also affect the beach for a limited distance either side of Reeves Beach and may deter beachgoers, including recreational fishers, from accessing this area. While occasionally audible from Woodside Beach township, this is not expected to interfere with sleep or normal residential activity there.

Apart from the impacts on Reeves Beach, dealt with in the next section, it is unlikely that the onshore construction impacts will have a significant or lasting effect on visitation to the area. What adverse impacts there are on the patronage of local accommodation places from onshore construction would likely be more than offset by the patronage of workers employed on project construction. The onshore construction workforce in the area is expected to peak at 345 full-time equivalent workers per quarter and to average 161 over the three years of onshore construction (see section 9.11). Even if only half of these required accommodation for four nights per week, that would amount to approximately 16,800 additional visitor nights per year.

Consequence Rating

Table 16: BTM-I003 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Accommodation places that lose custom because of construction noise may be able to adapt to new sources of income, with workers temporarily replacing tourists in some cases	Tourism businesses in the region are typically small and already operate with a relatively high degree of uncertainty associated with seasonal conditions. Many are unlikely to be tolerant of adverse changes	Visitation should return to normal in the affected areas once project construction is finished	Low
Magnitude			
Extent	Duration	Severity	Rating
The impact will be felt directly by coastal communities and accommodation providers close to the onshore transmission corridor.	The impact may be felt intermittently over the onshore construction period but for limited periods within that time.	The noise may occasionally be loud enough to disturb normal daytime activities for limited periods, but impact on visitation is likely to be offset by the influx of workers. The noise will cease after construction.	Medium
Consequence Rating			**Minor**

Mitigation

The mitigation measures proposed in *Technical Report W: Noise and Vibration* would be useful in reducing the noise at source, as far as reasonably practicable, and in keeping the community informed about the times when more noisy construction is likely.

Even after reducing the noise at source, there may still be some disturbance to the recreational enjoyment of local reserves and Reeves Beach.

Further measures outlined here aim to mitigate construction impacts on local businesses. Measures to support the tourism sector post-construction are discussed in the Operational Impact Assessment (see section 10.4 in the main report).

- **Establish a complaints mechanism for businesses and individuals affected by the wind farm construction as part of the Stakeholder Engagement Plan**

A complaints mechanism will form part of the Stakeholder Engagement Plan. This plan will include a process to advise of all onshore construction timing, sequencing and impacts. The project will provide respite offers that reflect the individual circumstances and level of impact (see ONV-M005, *Technical Report W: Noise and Vibration*).

- **Support accommodation providers in noise affected areas**

At certain times the project construction would require the services of large numbers of workers in Gippsland, as outlined in section 9.9.3 of the main report. Some of these workers would be

local residents; however, many would be transient workers who would require short term accommodation. A Workforce Accommodation Strategy has been provided by Star of the South (see 9.11 in the main report for more detail). This identifies a stepped series of responses to ensure that the workforce does not overwhelm the local accommodation sector. One of the first steps in the strategy is for workers to seek accommodation in the short term rental market. This could include accommodation where the occupancy rates may otherwise be affected by noise.

Star of the South will engage with the local accommodation sector as part of its Workforce Accommodation Strategy to coordinate demand and availability. Understanding the likely demand would enable accommodation providers to plan investment[16]. Even if peak employment does not coincide with construction impacts, improved revenue for accommodation businesses during some parts of the construction period would allow those businesses to better weather any downturn that may result from construction noise or other impacts.

- **Establish a Community Benefit Fund**

Star of the South will develop and implement a Community Benefit Fund, funded directly by the project, working in partnership with the Gippsland community across all phases of the project's life by sharing financial benefits to contribute to thriving regional communities. Funding may contribute towards tourism and recreation initiatives, amongst others, decided in collaboration with the community.

Sharing the financial benefits of the project with the community in this way will also provide opportunities to resolve issues that may arise during the construction process. If the collaborating parties agree, this could include measures designed to improve visitation outcomes in affected areas by, for example, creating or enhancing visitor attractions and bolstering tourism promotion.

The details of this fund, including the decision-making framework and the scale of resources available, have yet to be resolved. Wider community participation in the fund would occur once it became clear that the project was proceeding to construction.

Mitigation measures

BTM-M003: **Develop and implement a community benefit fund**

Develop and implement a community benefit fund, in consultation with the community and Councils.

In addition, other measures proposed elsewhere in this report will assist in mitigating the construction impacts on coastal tourism, including BTM-M001 - Stakeholder Engagement Plan and BTM-M006 – Workforce Accommodation Strategy (fully appended in *Technical Report R: Social*).

Residual impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

[16] Some accommodation providers are already considering investments to accommodate Star of the South construction workers, although most of these are unlikely to invest until the project has approval.

Table 17: BTM-I003 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by these impacts?	Net incomes of businesses in the noise-affected communities and service centres may be affected if the construction noise deters visitors, although it seems likely that the onshore construction impacts on visitor businesses will be limited and offset by the accommodation needs of workers employed on the project.
Would regional output and employment be reduced by these impacts?	It is unlikely that the net effect of onshore construction will have an adverse impact on accommodation or visitor businesses in the local study area. Impacts would be temporary, with reestablishment of more normal trading following the construction period.
Are opportunities to grow regional output and employment maximised?	Not applicable
Would visitor numbers and their distribution be adversely affected by these impacts?	Visitation to Reeves Beach would be adversely affected – see following section. Otherwise, onshore construction is unlikely to affect the relatively small visitation to local parks, reserves and accommodation businesses in the onshore construction corridor.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Regional capacity is unlikely to be diminished in any significant way by onshore construction. The project would leave a legacy of more skilled and experienced workers that could be deployed in subsequent renewable energy projects.
Would these impacts affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	There may be a temporary adverse impact on parts of the Gippsland coastal villages, which are designated as part of a hero trail in the regional tourism destination management plan.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Medium**
Residual consequence rating	**Minor**

Even with the suggested mitigation measures in place, construction impacts may be noticeable for four to six weeks in any one location along the transmission corridor and two years adjacent to Reeves Beach. While visitation overall is unlikely to be reduced, particular hospitality and tourism businesses that do not benefit from the influx of workers or windfarm visitors, may suffer adverse impacts on their turnover during the construction period. These potential adverse effects may be

ameliorated through the complaints mechanism or by projects agreed through the community benefit fund.

C2.5 BTM-I004: Adverse impacts on Reeves Beach campground

When evaluating this impact, the following initial mitigation measures are assumed to be implemented:

- ONV – M001: Managing noise and vibration from construction activities
- ONV – M002: Out of hours construction noise mitigation measures
- ONV – M003: Vibration safe working distances
- ONV – M004: Transmission system construction – batch locations – noise control
- ONV – M005: Unavoidable works – shore crossing drilling – noise control
- ONV – M007: Noise and vibration monitoring.

About Reeves Beach

Reeves Beach campground is set amongst the coastal communities identified in the previous sub-section. However, it would be affected by shore crossing works as well as near-shore works, and warrants special attention here.

Reeves Beach would be the landfall for the offshore transmission cable. The foreshore in this location is part of the McLoughlins Beach – Seaspray Coastal Reserve, the south-eastern extent of Ninety Mile Beach.

Reeves Beach is accessed from the local road network by Reeves Beach Road, which terminates at the Reeves Beach campground. This is a free camping area in the foreshore reserve amongst the dune system. It is managed by Parks Victoria and has room for up to 50 informal camp sites. There is one toilet at the site but no other services.

The campground (Figure 9-3) is popular with recreational beach fishers and grey nomad travellers, amongst others. It also has cultural value to the Gunaikurnai people (see Technical Report K: Aboriginal Cultural Heritage). It is secluded and remote from any other development, with Woodside Beach being the closest settlement - around 3 km as the crow flies or 13 km by road. The campground is one of many[17] free and commercial caravan and camping grounds on the coast of Ninety Mile Beach, Nooramunga and Corner Inlet. However, as with all campgrounds, it has its own unique position and many regular visitors.

[17] Figure 7-15 in the main report shows approximately 17 caravan and camping grounds in Corner inlet, Nooramunga and Ninety Mile Beach.

Figure 88: Reeves Beach campground

Source: base map from Google Maps

The following information about the campground has been provided by Parks Victoria:

- *There is a strong community connection to the campground*
- *Popular with campers from local areas such as Yarram, Woodside, Latrobe Valley*
- *Many repeat visitors return every year*
- *Campers may spend most of summer holidays and long weekends at campground and return every year*
- *Campers are recreational users attracted to the free camping and recreational opportunities in the reserve (fishing, beach etc)*
- *Site users value:*
    - *Rest and relaxation, escape to nature*
    - *Social interaction with family or friends*
- *There are no annual visitation numbers available*
- *The campground is free and is not bookable.*
- *Very popular over the summer months, particularly summer holidays, weekends and long weekends. Quieter period is Anzac day through to November.*
- *During peak periods the campground is full*
- *…The site is managed as a basic campground with limited facilities. There are no plans to change the general level of service, however existing facilities and infrastructure need upgrading – eg Toilet facility needs upgrading to modern standards.*
- *The road into the campground is managed by Council*
- *How the wind farm would affect users following construction seems to be subjective.*

(Parks Victoria, personal communication)

A user review of the campsite by a visitor to the region is provided in the box below.

Figure 89: User review of Reeves Beach campground

Review of **Reeves Beach**

Reviewed 6 November 2018 via mobile

We spent 5 nights here camping over the Melbourne Cup long weekend. We were pleasantly surprised how being camped so close to an amazing beach is free!
The beach is just a short walk over the sand dunes & is part of the 90 mile beach…... Really quite stunning.
The Reeves Beach Camping area is suitable for all size caravans & tents but would advise getting there early as possible over a holiday long weekend as it does get very busy.
There is only 1 long drop toilet for the whole area so having an ensuite on board would save you lining up.
There is no power or water so be prepared with carrying plenty of extra water if staying for an extended time. We had heard there was no mobile reception there but as we use Telstra we had no problem with coverage. Also, able to pick up tv stations easily.
I would thoroughly recommend free-camping here.
Review on tripadvisor.com.au, 2018

Information on the level of use of the campground is not collected by Parks Victoria, although the location is reportedly very popular in the usual peak periods (see section 7.3.9 of the main report). A broad estimate of the use of the campground is made here.

Assuming around 50 sites, a 20% occupancy rate (typical of low specification camping sites) and an average of two visitors per occupied site-night, the campground caters for approximately 7,000 visitor nights each year. Of these, from discussions with Parks Victoria, perhaps as many as 50% are by visitors from outside the local study area, and up to 20% (1,500) are from outside the regional study area. In addition, the beach access at this location adds to the general attractiveness of the area, catering for locals and day-visitors, some of whom are staying in nearby coastal towns.

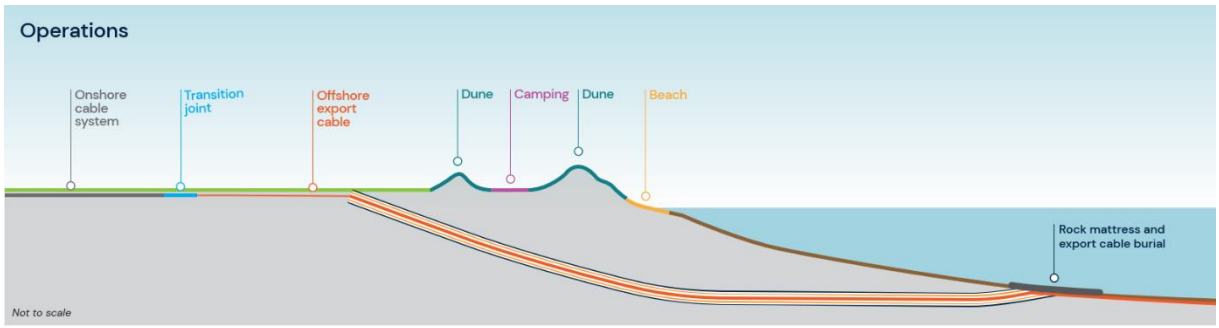
Impact

The proposed works at Reeves Beach comprise:

- Temporary construction management works, including establishment of a fenced work site and occasional road closures; the work site would be approximately 250 m from the Reeves Beach campground
- Trenchless crossing from pastoral land west of the coastal dune, under the dune and emerging from the seabed up to about one kilometre from the shore (or where the water depth is around 10 metres); the works would involve horizontal drilling of up to 10 bore holes to accommodate eight circuits (with up to two spare bores) and installation of a duct casing and the cables which will connect onshore and offshore infrastructure
- Construction of joint bays and ancillary pits to connect the onshore and offshore cables.
- Construction and operation of a temporary batching plant for concrete and other materials to be used in the cable laying activities

The works are illustrated below.

Figure 23: Works proposed around Reeves Beach



Source: Star of the South, 2025

The whole shore crossing is expected to take up to 27 months to complete, with cable-pulling occurring subsequently to align with offshore work see Figure 9-6).

Figure 24: Shore crossing construction schedule

Source: Star of the South, 2025

The assessment of onshore noise and vibration impacts presented in *Technical Report W: Onshore Noise and Vibration* (AECOM, 2026b) indicates that Reeves Beach would be one of the most affected parts of the study area by several different aspects of the construction process.

The duct construction, once started, would need to continue in a 24-hour operation until each hole was complete. This work would be consistently noisy. According to *Technical Report W: Onshore Noise and Vibration*,

> *The works may interfere with sleep during the night at Reeves Beach campground since the predicted levels* (65-76 dB) *due to the shore crossing drilling are above the existing ambient levels* (40 dB) *measured within it.*
>
> *…Therefore, there is a risk that construction noise would interfere with human tranquillity and enjoyment outdoors in natural areas.*

The campground is approximately 250 m from the location of the proposed cable joint bay where the onshore and offshore cables meet. As well as the duct construction, this work site would generate construction noise from erection of temporary buildings and from other machinery and vehicles. The

campground is 500 m from the nearest batching plant which would also generate noise during the day and would operate for up to seven months. There would also be some noise generated by the offshore end of the duct construction works, including ship manoeuvring, installation of a jack-up rig and sheet piling. The in-water activities would be of a relatively short duration compared with the rest of the shore crossing works.

Reeves Beach campground would have:

- Up to 18 months of consistent disturbing construction noise, including overnight as the duct construction is completed
- Up to seven months of frequent disturbing construction noise during the day as site establishment and onshore cabling tasks are completed and the batching plant is in operation. Some of this may overlap with the trenchless crossing task

The campground environment would be potentially disturbed by construction noise for up to two and a half years.

The impact on visitation and tourism would depend at least in part on the strategy adopted by the campground manager. At the time of writing, Parks Victoria has not reviewed the potential impacts on the campground and has made no decision on its approach.

The options for management of the campground during this period are likely to include:

1. ***Closure during the most disturbing construction tasks***
   During the trenchless crossing and cable pulling tasks, the overnight noise would be up to 36 dB above the ambient noise. This could be very disturbing for campers and caravanners. Closing the campground would prevent poor visitor experiences and preserve its reputation as a tranquil beachside facility as far as reasonably practicable.
   The campground could also be closed at some other times for short periods because of construction operations or because there are consistently loud activities (this could include establishment of the batching plant or nearby cable laying).

2. ***Open with notification***
   Keeping the campground open, with suitable warnings to users about the lower levels of amenity in general and specifically when noisy activities are likely to occur.

Without a decision on the management arrangements, the scale of the economic impacts of the wind farm on Reeves Beach campground are difficult to determine with certainty. Even though potential visitors to Reeves Beach campground may be prevented or discouraged from staying there, they may well find other places to stay in the local or regional study areas.

If the campground is closed, there would be some who would postpone or cancel their visit to the area. For example, recreational fishers from outside the local study area who visit Reeves Beach every year may not be able to find a suitable alternative and simply stay at home or visit another location outside the district. Any local expenditure involved in staying at Reeves Beach by these visitors would be lost to the local study area. This could include supplies bought at Yarram, for example.

For those seeking alternative camping areas, the closest sites in equivalent locations near the beach are:

Free camping

- Jack Smith Campground (17 km) – four-wheel drive access only
- St Margaret Island (12 km) – boat access only
- McGaurans Beach (38 km)
- Glomar Beach (62 km)

Camping fees required

- Woodside Beach Caravan Park (14km)
- Seaspray Caravan Park (55 km)
- Long Jetty Foreshore Caravan Park, Port Welshpool (59 km).

From discussions with local accommodation providers, there is a strong possibility that the alternative campsites would be full during busy holiday periods. Finding nearby local alternatives may therefore be problematic. Parks Victoria may wish to open a temporary campsite to accommodate those displaced from Reeves Beach. However, finding a location for such a campsite would also be difficult, with relatively few access points to Ninety Mile Beach that would be comparable or suitable. Possibilities may include improving access to Jack Smith Campground to allow 2WD vehicles or expanding the McGaurans Beach camping area.

The impact on the local study area of the closure or substantial reduction in the patronage of Reeves Beach campground would be some loss of the spending by visitors. In the opinion of the author, given:

- the estimate of 7,000 visitor nights per year at the campground in total
- the estimate of up to 20% of visitors (1,500) from outside the regional study area
- the opportunities to stay at alternative campsites in the local study area, at least for much of the year excluding the busiest times of the year.

- it would be very unlikely that more than 750 visitor nights per year (that is, half the visitors from outside the region) were lost to the region if the campground were closed or access was significantly restricted. Nevertheless, any such a loss would impact negatively on local businesses, especially in Woodside and Yarram, that would otherwise cater to the campers. The visitors to the free-camping area are likely, on average, to spend relatively little, but if the visitors ***did*** spend at the same rate as the average overnight visitor to Gippsland ($123 per night in 2024 according to TRA, 2025), the total loss of spending could be up to $92,000 for each year that the campground was closed with smaller losses for the periods during which it is open but intermittently affected by noise. This is sufficient to support up to one full-time job in the tourism businesses of the area.

In addition to the loss of spending, there could be a decline in the reputation of the campground as an amenable visitor destination. This could affect visitation for some years after the construction period, as online reviews may persist for years after the event with consequent small, ongoing losses to the local economy.

Consequence Rating

Table 18: BTM-I004 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Visitors to the campground at Reeves Beach could go elsewhere but could find difficulty finding a similar location during popular holiday periods	Visitors may be discouraged from visiting the campground by onshore and near-shore construction noise over two and a half years	The tranquil nature of the campground would be restored once construction is finished but this may take some time to be communicated to potential visitors. There is a risk the reputation of the area would be compromised for some time after construction.	Medium
Magnitude			
Extent	Duration	Severity	Rating
7,000 annual visitor nights at Reeves Beach campground and surrounding beach and reserve	Two-and-a-half years	Impacts are for a limited time but reputational damage may linger	Medium
Consequence Rating			**Moderate**

Mitigation

The impacts of closure could be mitigated through the provision of other free beach camping sites in nearby locations. Further discussions are required with the foreshore managers (Parks Victoria) about whether expansion of alternative sites is possible and desirable. Publicity would be required to inform potential visitors and to help them identify alternative campsites (free and otherwise).

When the campground is open but affected by intermittent noise, potential users of Reeves Beach would need to be informed of the potential for noise and the safety risks posed by construction traffic. This would require signs on site as well as publicity online and in the regional visitor information centres.

Mitigation Measures

BTM-M004: **Consultation with Parks Victoria on Reeves Beach campground**

Consultation with Parks Victoria will be undertaken to identify and support management options of the Reeves Beach campground during construction of the project. Appropriate resources will be provided to notify potential campground users of construction noise or activity, and to promote alternative camping locations if required.

Any impacts on visitation may be ameliorated to some degree through visitor projects that may be agreed through the Community Benefit Fund (BTM-M003). In particular, such projects could prevent any lingering adverse publicity through destination promotion.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 19: BTM-I004 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Tourism service businesses close to Reeves Beach, mainly in Woodside and Yarram, may experience a drop in income if the camp site is closed or visitation is reduced. Publicity regarding existing alternatives would help to reduce any losses.
Would regional output and employment be reduced by this impact?	There may be a minor temporary fall in output and employment if potential visitors choose alternative destinations outside the region as a result of the campsite closure.
Are opportunities to grow regional output and employment maximised?	Not applicable.
Would visitor numbers and their distribution be adversely affected by this impact?	There may be a minor drop in visitor numbers for up to 2.5 years if the Reeves Beach campground is closed or restricted.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	Following temporary construction impacts there would be no loss of capacity .
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving “hero” visitor attractions?	The possible temporary closure or restriction of the campsite could reduce options for free camping on the Gippsland coastal drive but this effect would be minor and temporary.
Residual sensitivity rating	**Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Moderate**

Even with the mitigation measures in place, some people may be deterred from visiting the local study area, either postponing their visit or travelling elsewhere. However, the consequent losses of tourism revenue to local and regional businesses would be relatively small (estimated here at less than $0.1m per year) and restricted to the construction period around the campground (a maximum of 2.5 years). These losses may be outweighed by the influx of workers on the project.

C2.6 BTM-I008 Project Employment – Victorian works

C2.6.1 Introduction

This section assesses project employment associated with project works within the Victorian jurisdiction only. Any discussion or provision of numbers for the whole project (ie across Commonwealth and Victorian jurisdiction), is provided for context only.

The Star of the South project would generate a significant number of jobs in designing and constructing the wind farm and the associated transmission infrastructure. Many jobs would also be generated in designing and manufacturing the wind turbine equipment and associated cabling, installation ships and so on as well as in servicing the workers and businesses involved, although not all these jobs would be located in Australia. The total employment impact on the Gippsland region, on Victoria and Australia is captured in economic modelling undertaken for the project, the results of which are presented in more detail in Appendix B.

The reader should bear in mind that the schedule and figures presented here are best estimates at the time of writing. There is potential for timing, technologies and implementation strategies to shift, with consequences for overall employment numbers and scheduling. The number of jobs will also depend on the scale of the contract that Star of the South is able to secure for the provision of electricity.

The employment figures make no allowance for any additional jobs that might result from requiring 10% of workers to be learning workers as per the Victorian Government's Major Projects Skills Guarantee (see section 7.4.2).

In presenting the employment figures in this section, it would often be normal practice to round the numbers to the nearest ten or hundred to indicate the level of likely accuracy. In this case, though, the job figures are used to model various scenarios and the decision has been taken not to round them in order to provide maximum transparency and allow the reader to do their own calculations if they wish.

The job numbers for the project are presented in a variety of ways depending on the context:

- **Quarterly jobs** – Star of the South has provided a project employment schedule that indicates the estimated number of jobs on the project by quarter in various components of the project. These figures measure the average full time equivalent (FTE) jobs for the quarter directly employed on the project. Presenting the employment this way allows us to better see the ebb and flow of employment in the various tasks and locations. These quarterly job numbers have been translated into annual numbers for modelling purposes.
- **Peak employment** – Peak employment is the highest level of employment on the project in any given period. For example, peak quarterly employment directly on the project in Australia over the construction period is estimated at 377.
- **Average annual jobs** – provides the average annual number of FTE jobs for a given period. For example, the Victorian aspect of the project is estimated to have direct employment averaging around 80 in Australia each year during the seven year construction period. Displaying the jobs this way allows comparison with other projects and is most useful when measuring steady employment.
- **Job years** – are FTE jobs that last for the equivalent of one year. This is useful for providing a standardised measure of the number of jobs required during the construction of the project, when many people would be on short term assignments, sometimes for less than one year

and when job numbers would be fluctuating significantly. For example, the Victorian aspect of the project is estimated to generate 561 job years in direct employment in Australia during the seven year construction period.

- **Direct and indirect employment** – Direct employment includes the people who are directly employed on the project by Star of the South or its construction contractors. Indirect employment includes people who are employed in Australia in firms that either supply materials or services to Star of the South or its contractors; or who are employed because of the spending by workers directly engaged on the project. Indirect employment has been modelled for the project by Geografia P/L based on the direct employment figures provided by Star of the South (see Appendix B). For example, direct and indirect employment in maintaining and operating the transmission infrastructure in Gippsland during the operational phase of the project is estimated to total around 7 annual jobs, comprising 5 direct jobs and 2 indirect jobs.

When looking at job numbers in this report, the reader should bear these distinctions in mind.

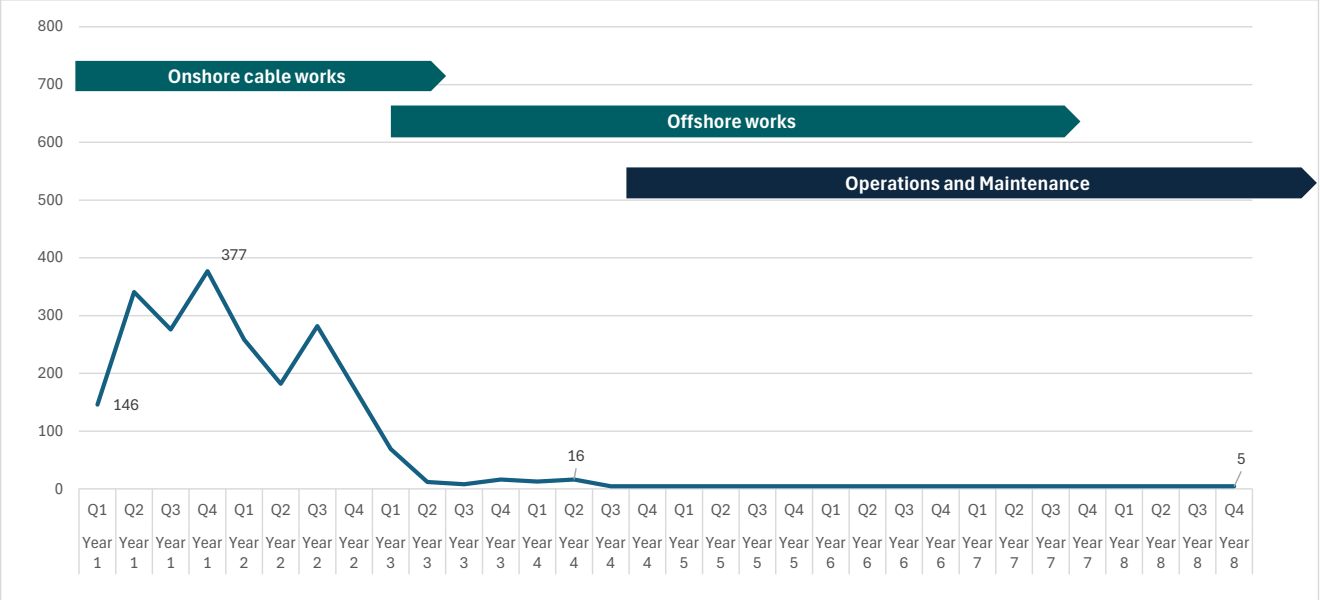
C2.6.2 Works schedule

Detailed estimates for employment during construction and operation of the wind farm have been provided by Star of the South for both onshore (land-based transmission infrastructure) and offshore (wind turbines and associated ports) work. Only the jobs involved in onshore works and shore crossing works in Victorian waters have been listed here as this appendix assesses works within the Victorian jurisdiction subject to the EES assessment.

In addition to the jobs during construction and operation, Star of the South estimates employment of approximately 100 FTEs each year between primary approval and the start of construction within the Victorian jurisdiction. These workers will be located mainly in the Star of the South office in Melbourne with some in Gippsland and other locations.

An estimate of quarterly full time equivalent jobs is presented in **Error! Reference source not found.**.

Figure 92: Onshore and near-shore direct jobs associated with Victorian works, Australia (FTEs by quarter)



Source: Star of the South, unpublished; Tim Nott

The construction of the onshore transmission works would commence first, with shore crossing works starting in the first year. All significant works in the Victorian jurisdiction would be completed by the middle of year 4. On completion of construction of the onshore transmission works, operation and maintenance work for the onshore transmission facilities would begin around the end of year 3 and would continue until the end of the life of the wind farm.

It should be noted that this is the current timing of tasks to undertake the entire project in one go and over the maximum likely timeframe. Technical or commercial considerations may change this schedule as more detailed project planning and licencing are undertaken.

Not all the jobs outlined above would be located in the study areas. Some will be based in offices of Star of the South or contractors based elsewhere. Realistic high and low scenarios for jobs located in Gippsland have been estimated here. In the high scenario, 95% of all jobs involved in the construction of onshore transmission are based in Gippsland. The remainder are management and design functions based elsewhere in Australia – most likely in Melbourne. In the low scenario, only 87% of onshore transmission jobs are based in Gippsland, with the remainder elsewhere in Australia.

The direct job outcomes for Gippsland are shown in Table 20 below. The difference between the high and low scenarios for Gippsland is modest – less than 10%. It is clear that most of the jobs on this aspect of the project will need to be located in Gippsland.

Table 20: Direct job years including high and low scenarios for Gippsland

	Onshore transmission	Offshore shore crossing	Operations and maintenance	Total direct jobs	High scenario for Gippsland	Low scenario for Gippsland
Year 1	278	7	0	285	271	249
Year 2	210	14	0	224	214	197
Year 3	20	5	1	26	25	24
Year 4	2	3	5	10	10	10
Year 5	0	0	5	5	5	5
Year 6	0	0	5	5	5	5
Year 7	0	0	5	5	5	5
Total job years	511	29	21	561	535	494
Average annual employment	73	4	3	80	76	71

Source: Star of the South, unpublished

Over the entire seven-year construction period, the jobs covered by works within Victorian jurisdiction and relevant to the EES constitute approximately 10% of the jobs in the total project (561 job years out of a total of 5,690).

These are direct jobs, comprising people who are engaged by Star of the South or its contractors in constructing the wind farm transmission infrastructure. In addition, there will be people employed in organisations supplying goods and services to the project as well as jobs generated as a result of the spending of those directly employed. Indirect employment has been modelled for the whole project

– see Appendix B. For the whole project, the relevant direct jobs generated a further 43% in indirect employment in Gippsland. This factor has been used here to generate an estimate of total direct and indirect jobs in Gippsland for the works in the Victorian jurisdiction. The results are shown in

Table 21 below.

Table 21: Estimate of direct and indirect employment in Gippsland during the construction period (EES works only)

	High scenario			Low scenario		
	Direct employment	Indirect employment	Total employment	Direct employment	Indirect employment	Total employment
Year 1	271	117	388	249	107	356
Year 2	214	92	306	197	85	282
Year 3	25	11	36	24	10	34
Year 4	10	4	14	10	4	14
Year 5	5	2	7	5	2	7
Year 6	5	2	7	5	2	7
Year 7	5	2	7	5	2	7
Total job years	535	230	765	494	213	707
Average annual employment	76	33	109	71	30	101

Source: Star of the South, unpublished; Geografia (Appendix B)

Total direct and indirect jobs in Gippsland during the construction period as a result of project activities in the Victorian jurisdiction are estimated to average between approximately 101 (low scenario) and 109 (high scenario) per year.

C2.6.3 Jobs in Gippsland

The project will generate, on average, 70 to 80 additional annual FTE jobs in Gippsland directly over the seven-year construction period as a result of project activities within the Victorian jurisdiction.

These jobs would be for a range of skill areas including:

- Electricians and electrical engineers
- Civil engineers and project managers
- Administrative workers
- Skilled construction workers and general labourers.

In addition, there will be a need for a many different workers engaged indirectly in servicing the project, including people in manufacturing, infrastructure, construction, transport, wholesaling, consultancy services, retailing and hospitality. From the modelling by Geografia (Appendix B), these indirect jobs are estimated at 30 to 40 additional annual FTE jobs in Gippsland over the construction period as a result of project activities within the Victorian jurisdiction.

Total additional annual FTE jobs in Gippsland during the construction period are estimated at between 101 and 109 as a result of project activities within the Victorian jurisdiction, as shown in

Table 21. However, this depends on the opportunities provided to regional contractors and on the skills and abilities of those enterprises and their employees.

There is a clear expectation amongst the people consulted for this project that the Star of the South would generate significant employment for Gippsland workers (see, for example the survey results in section 7.5 of the main report). The local jobs, as well as the reduction in carbon emissions, are seen by many as the balancing benefits against the adverse impacts of disruption and changes to the environment that the project would generate. Maximising local jobs would be a large contributor to the ongoing social licence of the project. In this case, maximising local jobs would entail hiring local contractors and/or asking external contractors to establish local offices to undertake design and management.

Some regional stakeholders have pointed to other infrastructure projects in the region as having made only token use of capable local firms and workers, with an apparent outflow of incomes and opportunities for skill development. This leads to some suspicion of major new investments. In general, the loss of social licence by infrastructure investors can lead to:

- Higher costs to investors through increased scrutiny from local regulatory bodies, and delays in approvals
- Difficulty in recruiting and retaining workers because community members are not proud to be associated with the project
- Loss of confidence in local skills and enterprises

However, it is clear that Star of the South has recognised the need to generate and maintain social licence for the project. It has undertaken extended community engagement; established a local presence with an office in Yarram; and employed local enterprises where available.

Star of the South has committed to seeking local supply opportunities for the project (see adjacent box). The firm has also undertaken extensive supply chain mapping in order to identify required products and to gauge the capacity of firms in Gippsland, Victoria and Australia. A document showcasing the potential of regional firms to contribute to Star of the South has been prepared for major contractors likely to bid on the project.

Figure 93: Star of the South commitment to seek local suppliers

Source: Star of the South, 2024

Consequence Rating

The generation of employment for the Gippsland region and elsewhere in Australia as a result of project activities within the Victorian jurisdiction is a positive impact of the project

Table 22: BTM-I008 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The regional community has a long history of adapting to large incoming investments and will adapt to this transmission project.	The regional community is likely to welcome the employment generated by the project. However, the project risks a loss of social licence if the share of local and regional jobs in the project is relatively small.	The project will create an increase in employment, with skills development that will position local workers to secure further similar work in the region and elsewhere.	Medium (positive)
Magnitude			
Extent	Duration	Severity	Rating
The consequences of the job outcome will be felt in the commuter catchment of the project, comprising much of Central Gippsland.	The job outcome for the onshore transmission development will be felt throughout the first three or four years of the project construction period	Other things being equal, the impacts will dissipate following construction. However, there is often a minority of workers who will stay following such projects, adding to the skills profile of the region.	Medium-High (positive)
Consequence Rating			**Moderate-Major positive consequence**

C2.6.4 Mitigation

To speak of mitigation in this case is to identify ways in which the potential benefit for the region can be maximised.

The works in Victoria require a smaller workforce than the whole project and so impacts and benefits will be proportionally lower. However, the broader mitigations that will apply to the project in Commonwealth Waters will also be employed for the Victorian works.

An outline of the broader mitigations is set out below:

- ***Creation of a regional supply chain***

  In its Implementation Statement 4, the State Government identifies a contract requirement for project proponents to propose,

  > *"…opportunities for investing in the construction and capital expenditure stages to maximise local content for the development and construction phase of the project and support increased levels of local content in future projects. Projects **after the first tranche auction** will likely be required to comply with a minimum local content requirement in the capital expenditure phase."* (Victorian State Government, 2025, emphasis added)

  This recognises that the first offshore wind project is unlikely to have a fully formed local supply chain. Nevertheless, Star of the South has committed to a local first policy and has undertaken and publicised its supply chain mapping for the project which identifies a range of potential regional suppliers (see previous subsection). Ongoing information including briefings for regional

suppliers will enable those firms to participate fully in the project. The local first policy could also entail having weightings in contract bidding processes that favoured regional firms or firms that were willing to establish a meaningful presence in the region. In this way, Star of the South could provide the initial impetus to the establishment of a new industry employing thousands over coming decades.

Workforce Development Strategy

Once the final parameters of the project are understood, a Workforce Development Strategy will be required that identifies the project schedule, the number of workers of various types required at each stage and how they will be sourced. In this Plan, a key aim should be to maximise the number of workers that are based in Gippsland – people who already live in the region or who move to the region for the project. This will include:

- Continuing to support the establishment of a Wind Worker Training Centre in Gippsland and developing programs to maximise the number of people trained by the centre
- Working with other stakeholders to develop a strong workforce in the region
- Establishing procurement processes that have a weighting towards existing Gippsland firms or to firms which will establish a management and operational presence in the region for the project
- Encouraging participation in procurement by Gippsland firms by holding local briefings
- Working with other stakeholders to support local component manufacturing, service provision and research
- Working with local and regional stakeholders to ensure that those disadvantaged in the local labour-market – including aboriginal workers and people with disabilities - have access to jobs on the project
- Ensuring sufficient attractive accommodation is also a key to attracting skilled workers (and this is dealt with in section 9.11)

Mitigation Measures

BTM-M005: Workforce Development Strategy

Develop and implement a Workforce Development Strategy, in consultation with Councils and other relevant stakeholders, that will identify project labour needs and how to maximise participation by Gippsland firms and Gippsland workers.

Residual Impacts

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 23: BTM-I008 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Spending on the project would generate increased revenues for many regional businesses.
Would regional output and employment be reduced by this impact?	No. Regional employment would grow as a result of the project.

Are opportunities to grow regional output and employment maximised?	The mitigation measure which is focused on maximising regional participation in project contracts and investigating opportunities for maximising local content
Would visitor numbers and their distribution be adversely affected by this impact?	Temporary workers from elsewhere would boost visitor numbers in the region. This may be offset at times as other visitors could be deterred by construction noise and other disturbances.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	The development of new skills, new infrastructure and new business arrangements would boost the capacity of the region to host further ecologically sustainable development.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	The project would reinforce regional skills in important and emerging industries in the renewable energy sector. It would also capitalise on existing strengths in electricity production and transmission.
Residual sensitivity rating	**Medium (positive)**
Residual magnitude rating	**Medium-High (positive)**
Residual consequence rating	**Moderate-Major positive consequence**

The project would generate additional jobs for Gippsland through the construction period as a result of project activities within the Victorian jurisdiction, deepening the regional skills base in the emerging renewable energy sector and allowing for the redeployment of workers from the declining fossil fuel energy generators. The preferences of Star of the South and the mitigation measures identified should boost the scale of the employment benefit to the region.

C2.7 BTM-I009: Disruption to the local and regional labour markets

Impacts

As shown in the previous sections, construction of the onshore transmission facilities and the shore crossing for this project would require approximately 500 job years in Gippsland over the seven-year construction period as a result of project activities within the Victorian jurisdiction, almost all of which would be required in the first four years. Construction employment in Gippsland would peak in the fourth quarter of the first year, with an average of 377 workers required.

The work would be managed by one or more tier 1 contractors which would coordinate the specialist teams, including sub-contractors, required to complete each task[18]. Many of these civil and electrical sub-contractors could be existing Gippsland firms. Some, particularly for the more specialist tasks, may be brought in from outside the region.

[18] It is important to note that, at the time of writing, no contracting arrangements have been finalised but the methods described here are standard practice for large construction projects.

In 2021, the Commonwealth Government's Labour Market Information Portal (Australian Government, 2022) estimated construction employment in Gippsland at 10,700. Peak quarterly employment on the project could be as high as 360 in Gippsland and would require the equivalent of 3% of the total regional construction workforce. Whether it is possible to source all workers from the region would depend on the other projects being undertaken at the time. In addition, the project requires some specialised workers, such as cable-jointers, who may not be currently present in the region in sufficient numbers. The project may require additional workers beyond the current construction resources in the region. This could occur in a number of ways, including:

- .
- Capable workers may be attracted from other industries in the region
- Additional workers may be brought in from outside the region
- Regional workers may be trained to meet the demand
- Skilled regional workers in declining fossil fuel industries may be redeployed

There is a limited potential for the small labour-markets in the local study area, where unemployment is low, to tighten during the construction period as local workers take advantage of construction work opportunities on the project. This may have some adverse impacts on existing local industries by temporarily decreasing the supply of workers or bidding up wages. Some mitigation may be required to avoid harms to the local economies of places such as Yarram and the surrounding farming districts.

Consequence Rating

Table 24: BTM-I009 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
Some local businesses that have workers drawn away by Star of the South could struggle to attract new workers because of the current low unemployment rate in the region and elsewhere. This may be offset to some extent by the move of workers from declining industries such as coal and gas.	Most businesses will be able to tolerate the loss of some workers although there may be impacts on local output as a result of the lack of capacity to expand	Most businesses will recover following the project; and if the project becomes an industry, more people could be expected to move to the region to take up available jobs.	Low
Magnitude			
Extent	Duration	Severity	Rating
The project would draw people from the commuter catchment for the project, although the largest impacts would be on the nearest firms in towns such as Yarram.	The effects would last for the first three or four years of the total project construction period.	Impacts on companies in the local study area without access to large alternative labour pool could be noticeable. These impacts will dissipate following the construction period.	Medium
Consequence Rating			**Minor**

Mitigation

The project will develop a Workforce Development Strategy that aims to maximise the regional benefits of the construction and operation of the wind farm and its transmission infrastructure, and minimise any adverse impacts on existing local industries (see section 9.9.6 in this appendix). In minimising the disruption to local labour-markets it could include:

- Working with fossil energy companies in the region (coal, oil and gas) and Regional Development Victoria to help workers being made redundant to transition to the renewable energy sector, identifying the training and other support that might be required.
- Working with suppliers to identify hard-to-source skills and develop strategies to attract the necessary workers or provide local training. Cable jointers, for example, have been nominated by Star of the South as a category of key worker in relatively short supply and which would be required by the project. Such workers would also be required by a range of other projects in the region – Marinus Link and other renewable energy generators. The provision of local training courses for cable jointers would allow workers to be trained prior to the project and as part of the project once it starts.
- Working with local employment agencies to ensure that the employment opportunities generated by the project directly and indirectly are promoted to the potential labour-force, including those disadvantaged in the labour-market such as aboriginal workers. It seems likely that some existing local workers in farms, timber mills and other manufacturing and construction enterprises in Central Gippsland would be attracted to work on the project if wages or other opportunities (training, career advancement etc) are more attractive.
- There is the potential for more isolated places with small existing labour pools (Yarram, Foster, Woodside, Toora etc) to be left without sufficient workers for existing industries. In this case, there is a need to promote the available work beyond the local area in a bid to attract workers from elsewhere. Local employment agencies may need to expand to provide this service for businesses and may need support to undertake this new role. Local businesses may also need assistance in accessing such services[19]. This could be provided in the form of financial assistance to collective business organisations (chambers of commerce, Victorian Farmers Federation branches etc) or Council economic development departments to develop recruitment campaigns.

Mitigation Measures

Following production and implementation of the Workforce Development Strategy (BTM-M005) no additional mitigation measure is proposed.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

[19] The average cost to recruit a new employee is $3,500-$5,000 according to human resources firm Employment Hero (2021) and would be much higher for higher skill and professional roles.

Table 25: BTM-I009 - Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Project spending and employment would generate a general increase in regional business incomes. However, even with the mitigation measures in place, some local firms in sectors not connected with the windfarm may find that wages are being bid up by the project and/or that new workers are harder to find.
Would regional output and employment be reduced by this impact?	Regional output and employment would rise as a result of the project.
Are opportunities to grow regional output and employment maximised?	The Workforce Plan aims to maximise opportunities for the regional labour-force. This should be read in conjunction with the mitigation measures outlined in section 9.9 of this appendix.
Would visitor numbers and their distribution be adversely affected by this impact?	Visitor numbers and distribution would not be affected by this impact.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	A tightening of the labour-market would reduce the capacity of the region to host further ESD during the construction period. If a longer term offshore electricity industry is created, it would draw in workers to settle in the region, gradually relieving the pressure on other sectors.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	A tight labour-market would make improving the diversity of employment opportunities in non-project sectors more difficult without drawing more workers into the region.
Residual sensitivity rating	**Low**
Residual magnitude rating	**Medium**
Residual consequence rating	**Minor**

.Construction of the onshore transmission infrastructure for the project may require some adjustments in the labour markets closest to the transmission corridor that could temporarily inconvenience some other local firms. However, this would likely be offset by increases in local demand from the project and its workers.

C2.8 BTM-I010: Disruption to the local housing and accommodation market

Impact

In the onshore employment scenarios, workers on the project are assumed to be centred around Reeves Beach to Giffard West for the onshore transmission work, with some workers engaged in the

shore crossing works operating from the Corner Inlet Port, and some construction management, design and administration based in the larger Gippsland towns.

Peak quarterly employment in the shore crossing works is 14 people and in the operations and management is 5 people.. These numbers can be accommodated easily by existing accommodation resources. The assessment here focuses on the workers engaged in the construction of the onshore transmission and land-side shore crossing works. Under the high scenario for Gippsland, peak quarterly employment on these tasks will be 345 people and the average annual employment over the three main years of construction will be 161.

In planning to accommodate these workers, several key issues need to be taken into account:

- The actual number of workers at each location at any one time, and overall, remains uncertain and will depend on the scale of the final project, the final project schedule and the location of individual contractors and their construction methodology and approach.
- The number of Gippsland-based workers who can commute from their homes to the various worksites remains unknown. This will depend on the success or otherwise of efforts to train/retrain regional workers; to attract workers from other regional industries; and the capacity of regional enterprises to successfully bid for contracts and sub-contracts on the project (see section 9.10 in this appendix).
- The construction of the transmission infrastructure is likely to require some workers who live beyond a normal commuting distance, and these will need short and medium-term accommodation.
- In the post-COVID years, the commercial accommodation sector in the Central Gippsland region has reached annual occupancy rates as high as 70%. This means that the existing short term accommodation market has limited capacity to host new workers without displacing existing customers. In the local study area, occupancy rates are highly seasonal, in common with many beachside holiday destinations. Accommodating temporary workers in peak periods will mean displacing tourists, with flow-on effects to other local tourism and recreation businesses.
- While the large towns along the Princes Highway corridor – from Drouin to Sale – have thriving housing markets and a range of urban growth areas – the towns of the local study area have much smaller housing markets, with limited urban growth opportunities. The social impact report for the project (Technical report R: Social) identifies that longer term residential lettings in Yarram and Foster – the closest district towns to the project work sites - are of the order of 30-60 per year with dwelling construction of the order of 10 to 20 per year. Housing activity is commensurately smaller in the other towns and villages of the local study area. This level of new provision would not be sufficient to accommodate the demand from the project; and taking up all the new rental housing would displace workers in existing industries and retirees who have made up a portion of new residents in the area, with adverse impacts on those parts of the local economy.
- The settings of the national housing market are not currently delivering supply commensurate with demand, with an increase in the ratio of house prices to average earnings; an increase in social housing waiting lists; an increase in homelessness; and a 20% increase in rents since 2020 (Rachel Ong ViforJ et al, 2025). The market cannot be relied on to provide sufficient housing for the project without further intervention.
- The pressures on the housing market resulting from a large construction project can be seen in the example of the Bass Coast Shire during the construction of the desalination plant in

2009 to 2012. House prices in the Shire experienced an uplift which was about 13% above the trend, but then reverted to the trend once the construction was complete – a minor boom followed by a minor bust. This is shown in Figure 7-6 in the main report. The consequence of this price growth was to increase costs for *all* new renters and purchasers in the area during the period. This had adverse impacts on the attraction of new workers and visitors to the area

Consequence Rating

Table 26: BTM-I010 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
The housing and accommodation sector in the local study area is geared to the needs of low population growth and the visitor market. It is not highly adaptive, being small and unused to large projects for many years. The short term accommodation market in the Princes Highway corridor is larger and more geared to large projects and will be able to adapt more easily.	The accommodation sector in parts of the local study area may be adversely affected without careful management. This could result in a loss of tourists and a decline in the non-accommodation parts of the visitor industry.	There would likely be a rise in the cost of short term accommodation and on house prices and rents if supply does not meet demand.	Medium
Magnitude			
Extent	Duration	Severity	Rating
Includes the commuter catchment around the onshore transmission corridor.	For the period of construction although property price and access impacts could take some time to dissipate.	Other things being equal, housing demand would be reversed following the project, although prices are “sticky” and may take some time to return to the pre-construction trend.	Medium
Consequence Rating			**Moderate**

Mitigation

Recognising these issues, Star of the South is proposing a Workforce Accommodation Strategy (see *Technical report R: Social*) that has a stepwise approach to meeting the accommodation needs of the workforce which can mitigate potential impacts as the housing requirements get larger. This is termed the Workforce accommodation mitigation framework and has a hierarchy of steps as shown in the table below.

Table 27: Workforce accommodation mitigation framework, onshore transmission

Steps		**Construction**	
Workforce	Category	Technical staff	Onshore management, administration, logistics and others
	Peak Quarterly Workforce*	299	46
Minimise demand	1	Project planning with the aim of minimising the number of workers requiring accommodation at peak periods.	
	2	Recruit labour from 60-minute drive catchment or from Latrobe Valley, supported by a shuttle bus service if required.	Recruit labour from 60-minute drive catchment or from Latrobe Valley
	3	Partner with local recruitment agencies and training providers to increase participation of local workers where possible.	
Secure access to and/or augment existing supply	4	Develop agreement with existing short stay accommodation providers to supply rooms for use by workers from outside of 60-minute catchment (focusing on Sale and Yarram). Number of rooms to be secured as part of the agreement would not exceed 25% of the current supply	Workers to independently secure longer-term accommodation within existing rental and/or Airbnb markets-
	5	Develop agreement with existing short stay accommodation providers to develop new accommodation capacity. 100% of any new capacity developed in partnership with the Project available for use by the workforce outside of the 60-minute catchment. Type of existing stay accommodation could include caravan parks.	-
Develop temporary accommodation	6	Develop suitable temporary accommodation options with capacity to accommodate workers not housed via steps 1 to 5, in collaboration with local councils.	
Steps		**Operations and Maintenance**	
Workforce	Category	Technical staff	Onshore management, administration, logistics and others

	Permanent Workforce	3	2
Minimise demand	1	Recruit labour from 60-minute drive catchment or from Latrobe Valley	
Secure access to existing supply	2	Workers to independently secure longer-term accommodation in the region.	

Source: Star of the South, 2025a, in Technical Report R: Social
*Peak quarterly workforce includes only the workers engaged in the onshore construction of the transmission infrastructure. It is 95% of the total outlined in section 9.9.2 is appendix, as per the high employment scenario for Gippsland.

The workforce accommodation mitigation framework is an innovative and sensible approach to meeting project housing needs in a situation of uncertainty. If step one does not meet the need, step two is triggered, then step three and so on. The key features that mitigate against harming the local and regional economy are:

- No more than 25% of the existing short term accommodation should be used to house project workers. This will ensure that the local and regional study areas can continue to service their tourism and other work-related markets, reducing the impact on other parts of the local and regional economy.
- No more than 10% of the current level of leasing or purchasing of dwellings in the local study area (and Leongatha) should go to project workers to avoid creating an unsustainable rise in prices and reducing opportunities for workers in other industries, instead putting an emphasis on increasing the supply of housing

The draft Workforce Accommodation Strategy and its mitigation framework will need to be finalised in conjunction with local stakeholders including the accommodation industry once the scale of project employment is better understood. Some flexibility in the share of short term accommodation occupied will be required in order that the project can support accommodation providers that may otherwise be experiencing a downturn in occupancy as a result of wind farm construction impacts.

Star of the South acknowledges in the draft Workforce Accommodation Strategy that, if the last steps in the framework are required for the construction phase – that is, the development of a workers' village or other temporary accommodation solutions on behalf of the proponent – that this will require secondary approvals through the normal planning process.

Sufficient resources will need to be provided to plan, undertake and monitor the Strategy. Given the long lead times for accommodation provision, it is important that the Workforce Accommodation Strategy be finalised in a timely way to ensure that housing requirements can be met.

Mitigation and monitoring measures

BTM-M006: Workforce Accommodation Strategy

Develop, update and implement the draft Workforce Accommodation Strategy, in collaboration with the relevant Councils and accommodation providers, prior to construction to minimise impacts of the

project workforce on available accommodation providers within the local area (in accordance with SOC-M001).

In finalising the Strategy, the following actions will be undertaken:

- Regular review and amendment of the Strategy, as required
- Make available sufficient resources to actively plan, manage and monitor the Strategy.
- Report on the broad Strategy outcomes to a Community Advisory Group or relevant Councils
- If required, once the scale of the project and likely workforce is known with more certainty, collaborate with local authorities and other stakeholders to plan the provision of supplementary accommodation

BTM- M008: Workforce Housing Monitor
Monitor the number and share of project workers who live in the region or who move to the region. Identify the type of accommodation used by each worker who moves into the region. This data can be used to monitor and adjust the Workforce Accommodation Strategy, if required.

BTM-M009: Accommodation Surveys
Monitor visitation to the local study area through accommodation surveys in order to understand impacts on tourism businesses. This could include asking a range of accommodation providers to continually report on their occupancy in order to gauge the ongoing state of the industry and the availability of short term accommodation for the project. This will be necessary in monitoring the Workforce Accommodation Strategy.

Residual Impact

The following table provides an assessment of the impacts on the key assessment criteria after implementation of the mitigation measures identified above.

Table 28: BTM-I010: Assessment of residual impacts

Assessment criteria	Assessment
Would the net incomes of individual businesses be adversely affected by this impact?	Net incomes of individual businesses would be unlikely to fall as a result of this impact and many would grow because of improved occupancy rate of accommodation providers.
Would regional output and employment be reduced by this impact?	Regional output and employment should be improved through improved occupancy rates and the construction of new accommodation.
Are opportunities to grow regional output and employment maximised?	Opportunities to grow regional output and employment would be enhanced through improvements in the capacity of the local housing and accommodation sectors.
Would visitor numbers and their distribution be adversely affected by this impact?	There would inevitably be a tightening of the housing and accommodation market as spare capacity is utilised. This would result in higher accommodation prices which may deter some visitors to the central Gippsland region. However,

	this should only last for the life of the onshore construction period.
Would the capacity of the region for further ecologically sustainable development be diminished by the project?	In the short term, regional housing capacity would be used by the project, making it more difficult for other ESD projects. In the longer term, the region should be left with a higher level of housing and accommodation following the project construction than would otherwise have been the case. This would provide support for higher rates of investment in ESD in the future.
Would this impact affect other relevant local and regional policy preferences, including improving employment diversity, capitalising on local and regional economic strengths or improving "hero" visitor attractions?	This impact would create support for higher levels of housing development, much of which can be channelled to urban growth areas identified in the various council planning schemes. This would boost local investment potential and support for the regional housing and accommodation sectors.
Residual sensitivity rating	**Low-Medium**
Residual magnitude rating	**Medium**
Residual consequence rating	**Minor-Moderate**

The range of potential consequences reflects a number of uncertainties including, amongst other factors, the extent to which local workers can be recruited; the level of existing vacant dwellings that can be brought into the market; and the willingness and capacity of local and regional property investors to develop new stock.

With the Workforce Accommodation Strategy in place, the risk of damage to the tourism industry of the region is reduced, and the local study area should be able to maintain its underlying level of growth. Nevertheless, there would probably be some impact on the cost and availability of rental accommodation given high demand during holiday periods. This would affect holiday-makers and workers from all industries present in the region. This impact would persist for the construction period but should dissipate once construction is complete.

If it becomes clear that a full-scale offshore wind energy industry is being created, more comprehensive steps in the Workforce Accommodation Strategy may be required to meet the demands of workers and visitors.

C3. OPERATION ASSESSMENT

Once constructed and operational, the onshore transmission infrastructure will largely be unobtrusive, comprising buried conduits carrying the transmission cables, with occasional maintenance hatches. The shore crossing will have a set of up to eight jointing bays, accessed via maintenance hatches, and these will be located in a field inland from the dunes of Reeves Beach. The onshore transmission infrastructure and shore crossing will require approximately five regional employees engaged in maintenance. These employees may be based locally or in contracting firms located in the larger towns of the Princes Highway corridor.

Apart from the minor positive effect on regional employment, there are no significant issues for business and tourism arising from the Victorian-based infrastructure for the project.

C4. DECOMMISSIONING IMPACT ASSESSMENT

The project description has this to say about the decommissioning of onshore infrastructure associated with the project:

> *Decommissioning will be planned and carried out in accordance with regulatory and landholder requirements current at the time. The decommissioning approach is expected to be agreed with regulators before project operations cease. The assessment of the project assumes current industry practices will be adopted.*
>
> *To minimise disturbance, most below-ground infrastructure is expected to be left in place, with cable ends cut, sealed and securely buried. Surface infrastructure such as signage, markers, link and fibre pits may be removed if required by landholders or if environmental impacts arise.*
>
> (Star of the South, 2025, *Victorian Environment Effect Statement; Attachment I – Victorian works project description*, Melbourne)

Given the intent to leave below-ground infrastructure in place, decommissioning is likely to require relatively few workers and have minimal effects on business and tourism in the region.

C5. CUMULATIVE IMPACTS WITH OTHER PROJECTS

C5.1 Introduction

This section provides an assessment of cumulative impacts with other proposed developments in the region. The method to consider cumulative impacts has been described in section 6 of the main Business and Tourism technical report. Section 12 of the main report applies the assessment framework to a series of potential proposed developments that may interact with the Star of the South project.

Seven projects have been assessed as having sufficient certainty and available data to warrant further investigation for their potential to generate cumulative business and tourism impacts along with the Star of the South project:

- Golden Beach Gas Project (GB Energy)
- Loy Yang Battery Energy Storage System (AGL)
- Hazelwood Rehabilitation Project (ENGIE Hazelwood).
- Decommissioning of Bass Strait oil and gas fields (Esso)
- Marinus Link (Marinus Link)
- Gippsland Offshore Wind Transmission Project (VicGrid)
- Great Eastern Offshore Wind Farm (Corio Generation)

In addition, given that the intention of State Government is to create an offshore wind industry capable of supplying 9 GW of electricity by 2040, it would be prudent to consider impacts from construction of onshore transmission infrastructure by other other offshore wind farms.

A description of these projects is provided in section 12.2 of the main report.

C5.2 BTM-I021: Cumulative Impacts

There is uncertainty around the timing and a lack of information about the level of employment required to develop these projects. This means any conclusions must be contingent on better data. Nevertheless, it is possible to identify, in broad terms, where there may be cumulative impacts if these projects overlap.

C5.2.1 Traffic congestion and disruption

If the Gippsland Offshore Wind Transmission Project or other connecting transmission lines are constructed at the same time as Star of the South, there would an increase in traffic congestion and disruption in the Giffard area and this would have an impact on farms and accommodation places in the district. However, given the scale of existing activity, the wider economic impacts are likely to be minor.

C5.2.2 Competition for workers

If all the screened in projects occur simultaneously with Star of the South, peak construction employment could be several thousand. This is in a region where the heavy and civil engineering construction workforce was less than 1,400 in 2021 and the entire construction workforce of Gippsland was 10,700. Competition for workers, especially skilled workers, would be fierce across the region. The more projects that occur simultaneously, the higher the share of workers that would be required from outside the region.

- General construction workers would be required for all projects. If projects are simultaneous, construction wages would be bid up, attracting workers away from other types of construction such as house-building, and other local and regional industries, with consequent impacts on farming, timber milling, dairy production, hospitality and other sectors.
- Specialist electrical contractors would be required for transmission line work, construction and connection of substations for the Loy Yang battery, VicGrid and Marinus Link projects and the wind farms.
- Workers to undertake trenching and cable jointing would be needed for the wind farms and Marinus Link. VicGrid is proposing overhead electricity transmission which may rely on a somewhat different, although overlapping, workforce.
- Specialist drilling contractors for the horizontal directional drilling will be needed for the windfarms, Marinus Link and possibly for the Golden Beach Gas Project.

Star of the South has already identified that certain of the skills required, such as cable jointing, are in short supply more generally. Even with a significant number of workers from outside the region, there is no guarantee that the projects would be able to secure sufficient existing skilled workers from the Australian market. The risks from simultaneous projects are that:

- wages would be bid up, especially in skilled trades
- projects would be delayed while appropriate contractors and sufficient workers can be assembled
- other worthwhile projects in the region and elsewhere would be delayed or would not proceed.

Recommendation

The Victorian State Government is developing the Victorian Energy Jobs Plan (see DEECA, 2025). This is being prepared in collaboration with industry stakeholders, including Star of the South.

Star of the South should continue to participate in industry planning and the proposed industry training centre, with appropriate funding for workforce development, where such a workforce is currently insufficient. Some aspects of workforce development will also be mandated in the contract with the electricity network operator, including the use of local contractors and the provision of opportunities for apprentices, trainees and cadets.

C5.2.3 Competition for accommodation and housing

If the projects overlap in time, competition for accommodation and housing would also be strong. From the section above, if the peak construction workforce in the identified projects numbers several thousand people, most of those would need to be brought into the region from elsewhere. The commuting catchments of the various projects overlap with those likely to be generated by the onshore components of Star of the South.

The assessment of housing and accommodation capacity in section 9.11 of the main report identifies, in broad terms, that, while the main towns in the Princes Highway corridor could cope with the accommodation requirements likely to be generated by Star of the South, the housing market in the smaller towns of the local study area would not be adequate for the task without intervention. With all the identified projects taking place together, the accommodation and housing market throughout Central Gippsland would come under substantial stress. Much of the visitor economy would be displaced in order to make room for project workers, with significant adverse impacts on many of the non-accommodation segments of the tourism industry. There would be strong potential for a boom in property prices in the region followed by a bust once the projects have been completed. This disruptive pattern would be a disincentive to investment in smaller scale projects because of the scarcity of resources and uncertainty.

Recommendation

In order to avoid significant impacts on the housing and accommodation sector the major projects, including Star of the South, would need to be more self-sufficient in housing their construction workers. This would mean more reliance on the more interventionist steps in the workers accommodation strategy including, perhaps, more purpose-built housing and more extensive use of workers' camps.

Discussion of construction schedules with other project proponents may reveal ways to reduce costs in housing workers and create less disruption to local housing markets. This could be achieved by shared development of workers' camps or other temporary and permanent housing, for example, that are appropriately located to serve more than one project. These steps would require secondary approvals through the normal planning process.

C5.3 Consequence Rating

Table 29: BTM-I021 - Consequence Rating

Sensitivity			
Adaptability	Tolerance	Recovery	Rating
With each new overlapping project, the capacity of the study areas to adapt would decrease.	The wider regional community is used to large projects but the small communities of the local study area would struggle to respond to the opportunities and challenges presented by many overlapping projects	There is potential for a boom-bust cycle that would damage the long term prospects of the area.	Varies for each of the previous impact categories
Magnitude			
Extent	Duration	Severity	Rating
The local study area would be most significantly affected	The three-year construction period of the onshore transmission infrastructure	The overlapping projects would generate demands for thousands of workers with substantial impacts on local and regional housing markets during the onshore construction period.	Varies for each of the previous impact categories
Consequence Rating			**Varies**

C5.4 Recommendation

Mitigating cumulative impacts will require intensifying effort on the mitigation measures already outlined.

As a further consideration, effective mitigation will rely on working with other project proponents and relevant authorities to reduce adverse impacts of multiple overlapping large projects. Effective cooperation will be needed to reduce traffic disruption and adverse impacts on local and regional labour and housing markets; to reduce the collective draw of projects on regional resources; to minimise any adverse impacts on visitation; and to maximise the beneficial aspects of projects on employment, skills and visitor infrastructure.

C6. SUMMARY OF MITIGATIONS AND MONITORING RECOMMENDATIONS

C6.1 Mitigation and monitoring measures

The mitigation measures that are proposed to avoid, mitigate or manage business and tourism impacts associated with the Victorian aspects of the project are summarised in Table 30.

Table 30: Mitigation and monitoring measures for business and tourism impacts

Measure ID	Mitigation measure	Stage
BTM-M001	**Stakeholder Engagement Plan – business and tourism** A Stakeholder Engagement Plan will be developed and implemented prior to construction in accordance with TTP-M001 and SC03. In relation to potential changes to local business and tourism during the construction phase, the plan will include communications, enquiries and complaints management procedures that allow feedback from Councils and the local community. Relevant business and community organisations will be included in stakeholder engagement activities.	Construction and operation
BTM-M002	**Traffic Management Plan – business and tourism** The Traffic Management Plan required in TTP-MM02 will include assessment and management of construction impacts and will be developed in consultation with relevant road authorities. In relation to business and tourism, the plan will include the programming of construction works to avoid major traffic changes during key holidays in the region, where possible.	Construction
BTM-M003	**Develop and implement a community benefit fund** Develop and implement a community benefit fund, in consultation with the community and Councils.	Construction and operation
BTM-M004	**Consultation with Parks Victoria on Reeves Beach campground** Consultation with Parks Victoria will be undertaken to identify and support management options of the Reeves Beach campground during construction of the project. Appropriate resources will be provided to notify potential campground users of construction noise or activity, and to promote alternative camping locations if required.	Construction
BTM-M005	**Workforce Development Strategy** Develop and implement a Workforce Development Strategy, in consultation with Councils and other relevant stakeholders, that will identify project labour needs and how to maximise participation by Gippsland firms and Gippsland workers..	Construction and operation
BTM-M006	**Workforce Accommodation Strategy** Develop, update and implement the draft Workforce Accommodation Strategy prior to construction to minimise impacts of the project workforce on available accommodation providers within the local area (in accordance with SOC-M001). In finalising the Strategy, the following actions will be undertaken: • Regular review and amendment of the Strategy, as required • Making available sufficient resources to actively plan, manage and monitor the Strategy. • Report on the broad Strategy outcomes to a Community Advisory Group or relevant Councils • If required, once the scale of the project and likely workforce is known with more certainty, collaborate with local authorities and other stakeholders to plan the provision of supplementary accommodation	Construction and operation

Measure ID	Monitoring measure	Stage
BTM-M008	**Workforce Housing Monitor** Monitor the number and share of project workers who live in the region or who move to the region. Identify the type of accommodation used by each worker who moves into the region. This data can be used to monitor and adjust the Workforce Accommodation Strategy, if required.	Construction and operation
BTM-M009	**Accommodation Surveys** Monitor visitation to the local study area through accommodation surveys in order to understand impacts on tourism businesses. This could include asking a range of accommodation providers to continually report on their occupancy in order to gauge the ongoing state of the industry and the availability of short term accommodation for the project. This will be necessary in monitoring the Workforce Accommodation Strategy.	Construction and operation

C6.2 Mitigation measures from other studies

In addition to the mitigation measures listed above, the mitigation measures from other technical assessments that are also relied upon to reduce business and tourism impacts are summarised in Table 31.

Table 31: Mitigation measures from other studies relevant to business and tourism

Measure ID	Mitigation Measure and description	Technical Report	Stage
TTP-M001	Stakeholder engagement plan	X: Transport	Construction
TTP-M002	Traffic management plan	X: Transport	Construction
TTP-M003	Road safety audits	X: Transport	Operation
TTP-M004	Emergency Management Plan	X: Transport	Operation
TTP-M005	Heavy vehicle transport route assessments	X: Transport	Construction
TTP-M006	Site access strategy	X: Transport	All
AGM-M001	Compensation for economic impacts	S: Agriculture and Forestry	Construction
AGM-M002	Preparation of landholder specific Property Management Plans	S: Agriculture and Forestry	Construction
ONV-M001	Managing noise and vibration from construction activities	W: Noise and Vibration	Construction
ONV-M002	Out of hours construction noise mitigation measures	W: Noise and Vibration	Construction
ONV-M003	Vibration safe working distances	W: Noise and Vibration	Construction
ONV-M004	Transmission system construction – batch locations – noise control	W: Noise and Vibration	Construction
ONV-M005	Unavoidable works – shore crossing drilling – noise control	W: Noise and Vibration	Construction
ONV-M007	Noise and vibration monitoring	W: Noise and Vibration	Construction

OFF-M22	Stakeholder consultation	O: Infrastructure and co-existence with other users	Construction
SOC-M001	Workforce Accommodation Strategy	R: Social	All

C7. SUMMARY OF IMPLICATIONS FOR THE EES

This study has assessed the impacts of construction and operation of the project activities within the Victorian jurisdiction on business and tourism assets and values to be protected.

The significance of the impacts has been assessed in accordance with the evaluation framework, based on applicable legislation, policy and standards and the evaluation objectives and environmental significance guidelines arising from the government terms of reference established to guide the assessments.

In relation to the evaluation objectives set out in the Star of the South EES Scoping Requirements, the project would have a number of impacts on business and tourism in Victoria.

An increase in regional jobs is the key benefit of the project activities within the Victorian jurisdiction from a business and tourism perspective:

- Employment modelling for this project shows that project expenditure on the onshore and near-shore components would generate approximately 561 job-years directly, an average of 80 full-time equivalent jobs over the seven year construction period. The onshore component of the construction would take place principally during the first three years of the construction period, peaking at an average of 285 jobs during year 1.
- Direct and indirect jobs in the Gippsland region would be between 707 and 765 job-years over the seven year construction period; an average of between 101 and 109 FTE jobs per year. This is at a time when the existing local fossil fuel energy generators are winding down.
- The operation and maintenance of the onshore transmission infrastructure is estimated to require 5 ongoing jobs for the 30-year life of the project.

Offsetting the benefits of employment, the project activities within the Victorian jurisdiction may generate adverse impacts for the local and regional economy. A range of effects have been assessed as likely to have ***moderate*** consequences, even after the implementation of mitigation measures:

- The housing and accommodation market within commuting distance of the onshore transmission corridor will inevitably get tighter. This will affect short term accommodation in particular, especially at peak holiday periods, with consequences for tourism and for other workers.
- There may be an adverse impact on visitation to Reeves Beach as a result of temporary closure or restrictions on the Reeves Beach campground.