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Environmental & Social Consultants

GREATER GIPPSLAND OFFSHORE WIND PROJECT

Social Risks and Opportunities Analysis

FINAL

November 2022

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

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Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.

Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
Final	Caroline Funnell	11/11/2022	David Knight	11/11/2022

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Abbreviations

Abbreviation	Description
AEMO	Australian Energy Market Operator
BFE	BlueFloat Energy
DELWP	Department of Environment, Land, Water and Planning
DFID	UK Department for International Development
DMP	Destination Management Plan
EES	Environment Effects Statement
EIS	Environmental Impact Statement
GLaWAC	Gunaikurnai Land and Waters Aboriginal Corporation
GW	Gigawatts
Ha	Hectares
ISP	Integrated System Plan
Km	Kilometres
kV	Kilovolt
LGA	Local Government Area
LVA	Latrobe Valley Authority
MP	Member of Parliament
OWP	Offshore wind project
RE	Renewable Energy
REZs	Renewable Energy Zones
SCA	Strzelecki Community Alliance Inc.
SIA	Social impact assessment

1.0 Introduction

1.1 Purpose

Umwelt has been engaged by BlueFloat Energy (BFE) to coordinate the planning and environmental approvals activities for Phase 1 of the Greater Gippsland Offshore Wind Project (the Project). Umwelt has undertaken a desktop environmental assessment for the Project to identify potential impacts and environmental risks that may result from the construction, operation, and decommissioning of the Project, and to inform the Project's planning and environmental approval strategy.

As part of this Phase 1 study, Umwelt has been engaged to undertake a preliminary social risk and opportunities analysis to inform next steps for the Project with regard to community engagement, social impact assessment, and to reduce risk and maximise project outcomes. This report identifies the preliminary social risks and opportunities relating to the Project, key stakeholder groups that should be engaged with, as well as next steps and recommendations.

1.2 Project Description

The Greater Gippsland Offshore Wind Project (the Project) is located in the Gippsland region of Victoria, to the south west of Sale. **Figure 1.1** shows the Project Area which contains the offshore and onshore components of the Project, including the transmission line route options, associated with its construction, operation, and decommissioning.

The wind turbines and offshore substations are located approximately 10–43 kilometres (km) from the Gippsland coastline between Woodside Beach and Seaspray, in an area of approximately 700 km^2. Within this area, the Project involves 139 'bottom-fixed' turbines[1], two to four offshore substations and associated infrastructure with the capacity to generate up to 2.085 gigawatts (GW) of electricity. The turbines will have a capacity between 15 MW and 20 MW, hub heights between 165 m and 190 m and rotor diameters of between 250m to 275m.

Route options for the transmission line incorporate 330kV subsea cables between the offshore substations and McLoughlins Beach – Seaspray Coastal Reserve, with an onshore landing either northeast or west of the Ninety Mile Beach Marine National Park. An underground cable will run approximately 8–16 km from the coast to a new substation. An overhead transmission line will then run approximately 79 km to the Hazelwood Terminal Station (transmission route option 1a and 1b) or 65 km to the Loy Yang Power Station (transmission route option 2). The transmission line will be located within an easement approximately 80m wide.

It is noted that the transmission line options proposed as part of the Project were identified prior to release of the Victorian State Governments Offshore Wind Implementation Statement 1 (DELWP, October 2022) and accordingly the location of the grid connection may be subject to further review and consideration.

[1] A bottom-fixed turbine is mounted on a structure fixed into the seabed.

The wind farm component of the Project is located in the Territorial Sea[2] and the Exclusive Economic Zone[3]. The onshore transmission line is located in the Wellington Local Government Area (LGA) with the grid connection point at the Hazelwood Terminal Station or Loy Yang Power Station in the Latrobe LGA.

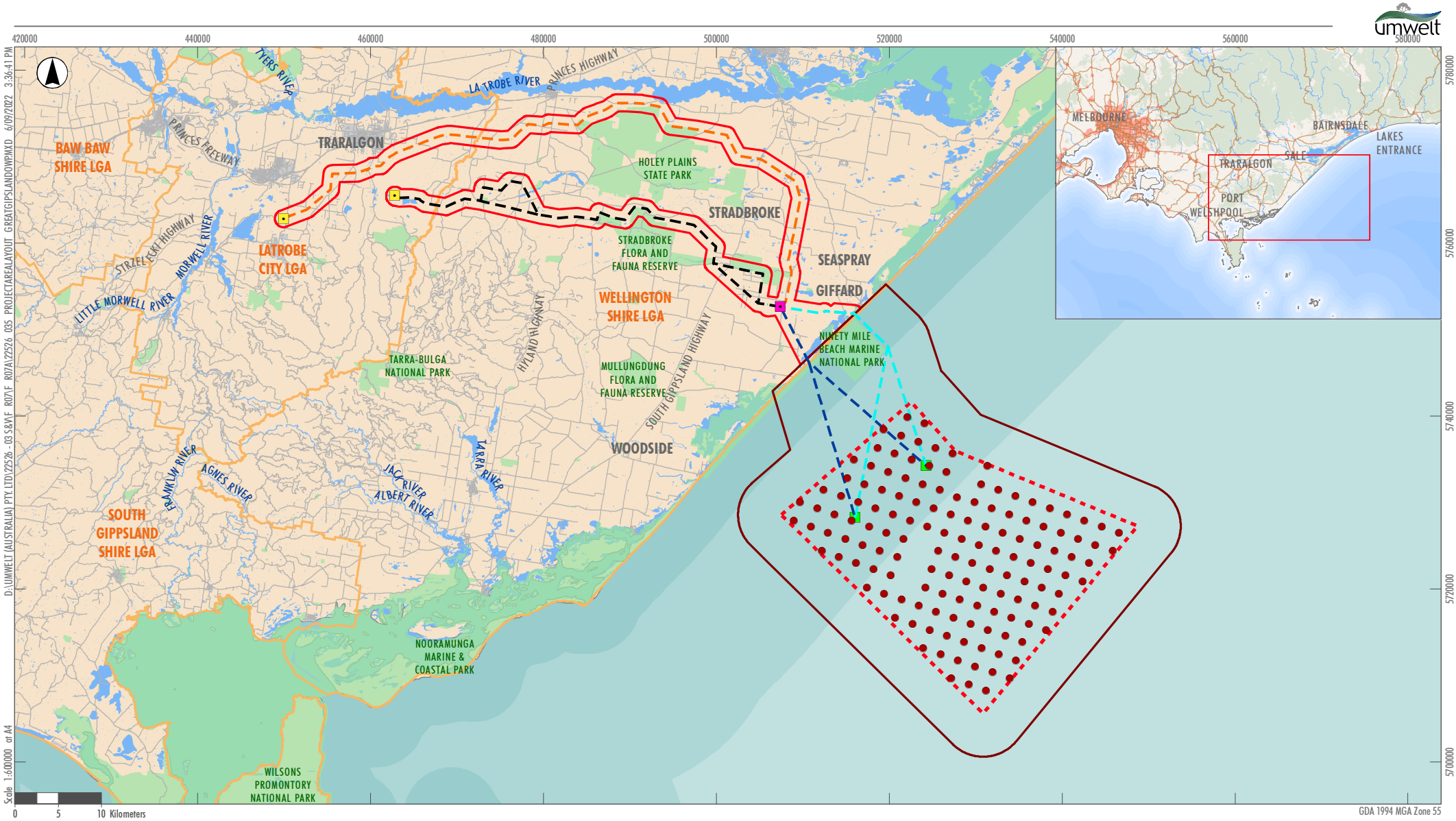
1.2.1 Area of social influence

The Study Area for the preliminary social risk and opportunities analysis is considered the 'area of social influence'. The area of social influence for the Project is defined as:

- The landholdings, property owners and residents situated on, or nearby, the onshore Project Area as well as the footprint of any ancillary infrastructure.
- The host Local Government Areas (LGA) of Wellington and Latrobe.
- Offshore users who value and/or use the offshore locality, which may include maritime industries, science and research institutes, recreational users and tourism operators.
- The broader Gippsland Region.

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

[2] The Territorial Sea is the belt of water extending up to 12 nautical miles from the low water mark of the coastline
[3] The Economic Exclusive Zone is the area beyond the Territorial Sea extending up to 200 nautical miles from the low water mark of the coastline



Legend

- Offshore Study Area boundary
- Onshore Study Area boundary

Greater Gippsland Offshore Wind Project Area consists of:

- Greater Gippsland Offshore Wind Project Area
- Overhead Transmission Route Option 1a and 1b
- Overhead Transmission Route Option 2
- Subsea Cabling Option 1
- Subsea Cabling Option 2

- Potential Turbine Layout
- Offshore Substation
- Existing Onshore Substation
- Indicative Onshore Substation

- Local Government Boundary
- State Forest, National Parks, Reserves
- Road
- Drainage Line

- VIC Coastal and Internal Waters
- Territorial Sea
- Exclusive Economic Zone (Amended by Perth Treaty 1997)

FIGURE 1.1

Project Area and Study Area

Data source: Vic Data (2022)

2.0 Existing Conditions

2.1 Development context

Victoria has a relatively emission intensive power supply compared to other advanced economies worldwide (DELWP 2019). Most of Victoria's greenhouse gas emissions (70% in 2019) (DELWP 2021), are from fossil fuel combustion for energy and transport, with 76% of the State's electricity produced by the State's three brown coal-fired power plants (DELWP 2018). As a result, the Victorian Government has acknowledged that the future reliability of the State's energy supply and the economic and social benefits associated with the renewable energy sector, in addition to the need to decarbonise the economy, rely on the development of a diverse and secure energy generation network (DELWP 2021).

Australia has many areas that may be suitable for offshore renewable energy infrastructure including offshore wind farms. Australian Commonwealth waters start 3 nautical miles from the coastline and extend to the boundary of Australia's exclusive economic zone.

In Australian Commonwealth waters, offshore renewable energy infrastructure is governed under the *Offshore Electricity Infrastructure Act 2021*. The Act enables the construction, operation and decommissioning of offshore electricity infrastructure. They outline how and where infrastructure projects for renewable energy generation or transmission can operate.

Enabling the offshore renewable energy industry supports the Australian Government's aim to reduce emissions from the electricity sector, increase affordable electricity supply and create jobs.

Declaring suitable areas for offshore renewable energy infrastructure is a ministerial decision. The Commonwealth Minister for Energy has announced that the Gippsland region in Victoria is an area that the Minister will consider declaring.

Victoria has some of the world's best offshore wind resources. In addition to the Commonwealth, both Australian Energy Market Operator (AEMO) and the Victorian Government have also declared the Gippsland Coast as being suitable for offshore wind farms and have identified them as being within a future Renewable Energy Zone (REZ). The establishment of Renewable Energy Zones (REZs) is intended to facilitate an increase in renewable energy development.

The Project is located within the Gippsland REZ (V4 in **Figure 2.1**) which is one of Victoria's six Renewable Energy Zones identified in AEMO's Integrated System Plan (ISP).

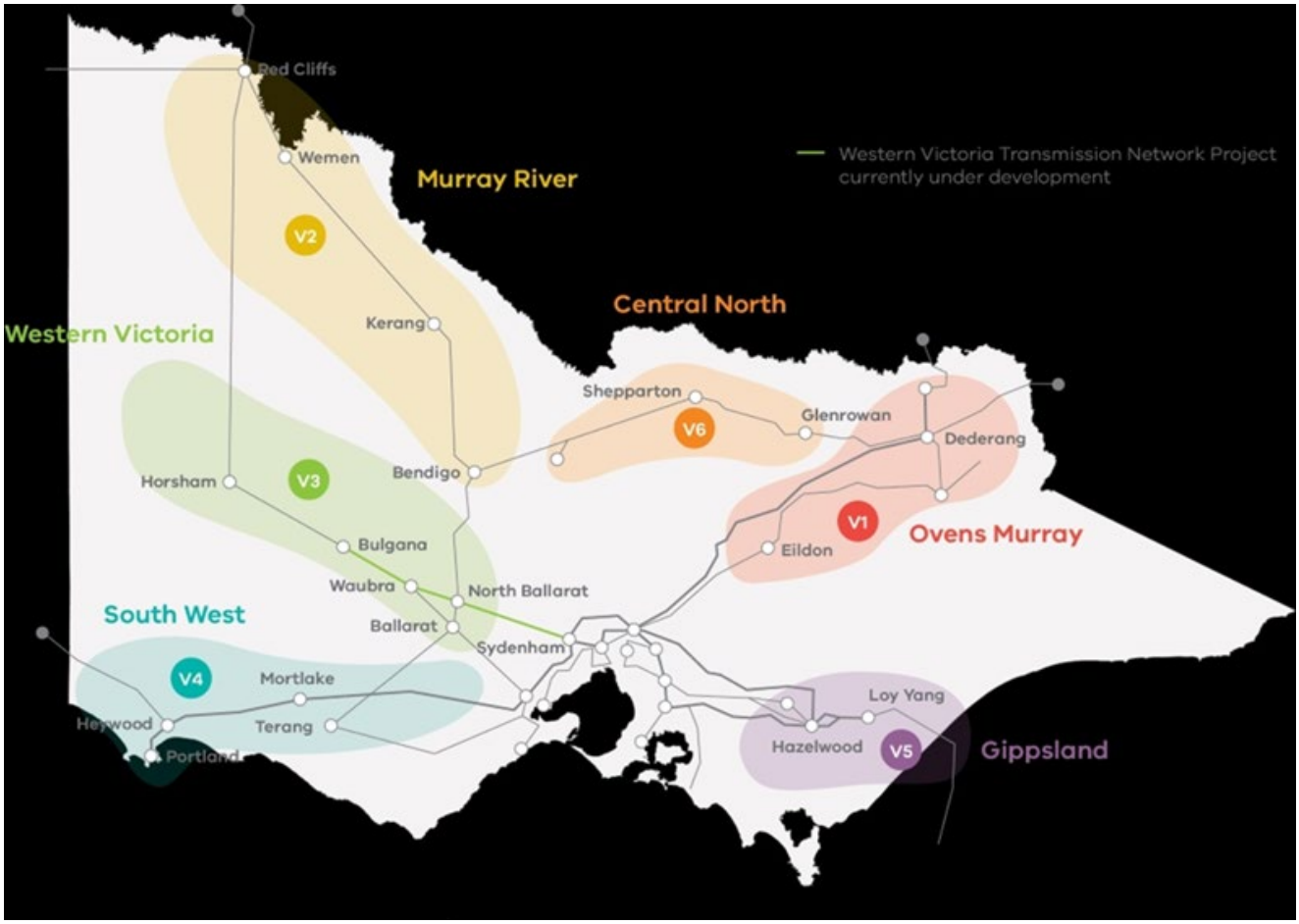


Figure 2.1 Victoria's Renewable Energy Zones

Victorian Government, DELWP (2021)

The Victorian Offshore Wind Policy Directions Paper (DELWP, 2021) outlined Victoria's vision for offshore wind, paving the way for Victoria to host the first offshore wind farms in Australia. The states coastal regions have the potential to support 13 GW of capacity by 2050.

Victoria is spearheading Australia's offshore wind sector, with offshore wind proposed to support its switch to renewables and play a vital role in Victoria's clean energy transition. Victoria has set ambitious targets of 2 GW of offshore generation by 2032, 4 GW of offshore wind capacity by 2035 and 9 GW by 2040.

In October 2022, the Victorian Government released the Offshore Wind Implementation Statement 12 which outlines the government's plans for the establishment of an offshore wind industry. This is the first in a series of implementation statements that will be released over the coming years and is designed to provide certainty and facilitate ongoing collaboration.

The Statement 1 includes announcements and updates on the transmission; Ports; Offshore Wind Energy Victoria; boosting the capability of local industry; and working with the Commonwealth to deliver streamlined regulation and legislation. Of relevance this Project, the Statement says:

> *Notice 2, VicGrid will lead the development of transmission infrastructure that provides a coordinated connection point near the Gippsland Coast and Portland.*

The Statement includes an area of interest for investigation and consultation, and existing transmission infrastructure as shown in **Figure 2.2** below. It also states:

> *Notice 3, VicGrid-led transmission will facilitate connection of up to 2-2.5 GW capacity in both Gippsland Coast and Portland*
>
> *The Victorian Government has committed to a first offshore wind target of at least 2 GW by 2032. To accommodate this, transmission infrastructure will be developed to facilitate connection of up to 2-2.5 GW generation capacity in both Gippsland and Portland respectively.*
>
> *In Gippsland, this will be enabled through a 500kV double circuit transmission line and terminal station that extends the existing transmission network from the Latrobe Valley towards the Gippsland Coast. This more significant transmission development is needed in Gippsland because the existing transmission network does not extend past the Latrobe Valley,3 and the alternative would be multiple uncoordinated transmission lines running from the coast to the Latrobe Valley.*

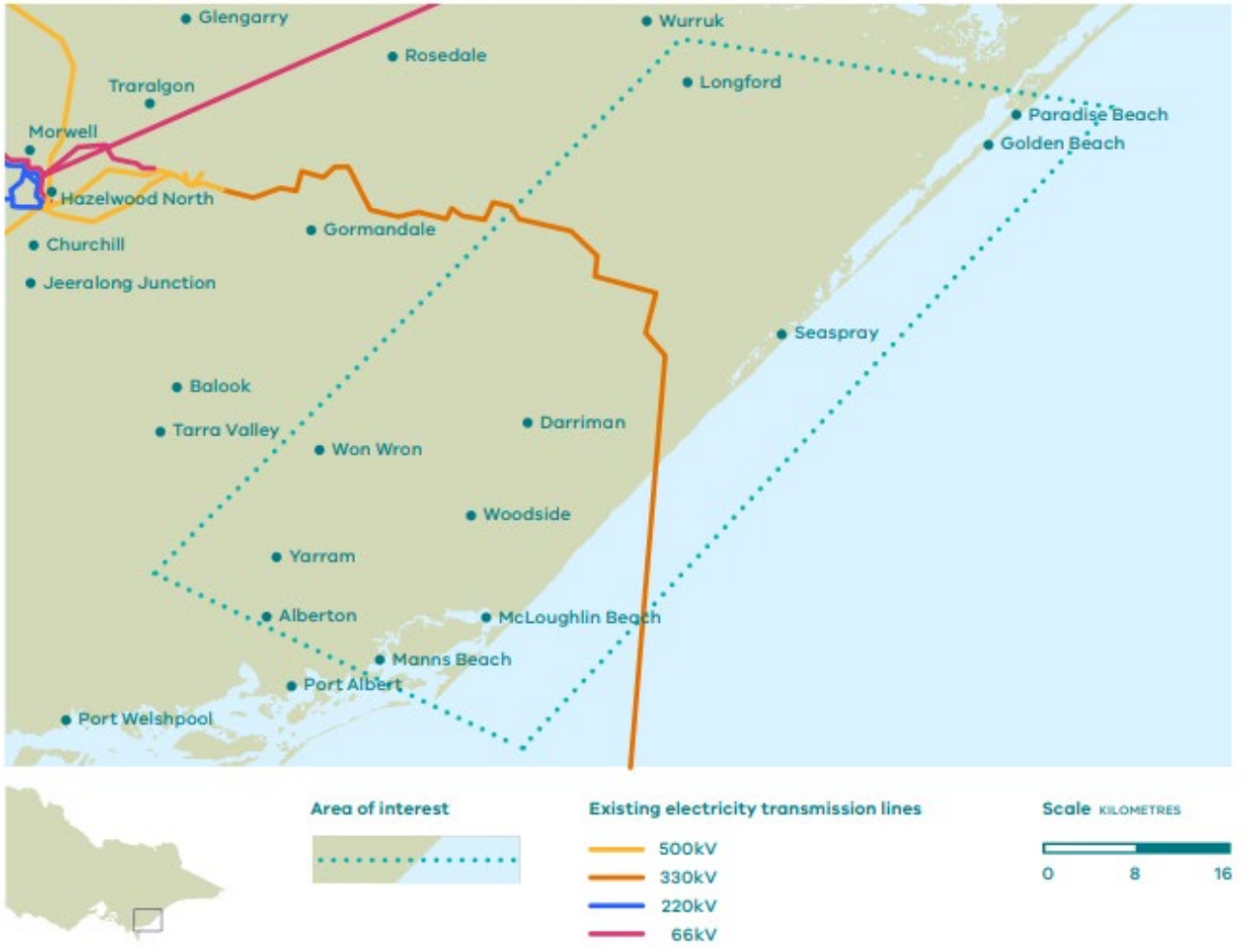


Figure 2.2 Existing electricity transmission network and area of interest

DELWP, 2021

It is noted the transmission line options proposed as part of the Project were identified prior to release of the Statement and accordingly the location of the grid connections may be subject to further review and consideration.

2.2 Sustainable Livelihoods Approach – Community Capitals

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

This methodology has been further developed by Coakes and Sadler (2011) to reflect the six capitals approach – human, social, natural, physical, political and economic/financial. The vulnerability of each capital area can be assessed through the selection of a suite of socio-economic indicators specific to each capital area to assess a community's vulnerability to change or conversely their adaptive capacity; with this approach widely applied within the energy project context.

Elements of each capital area are further outlined in **Figure 2.3**, with key characteristics of the social locality captured to inform a preliminary social baseline.

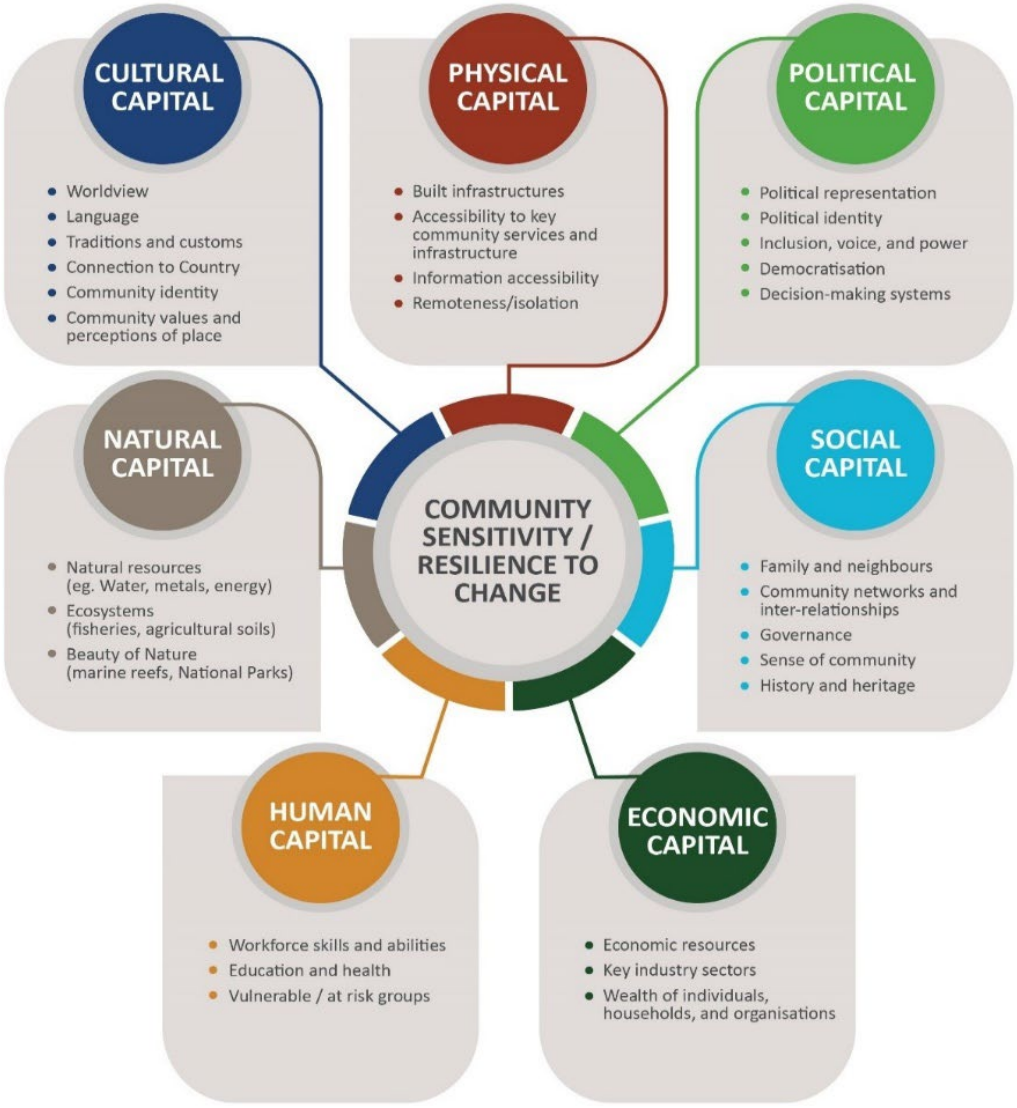


Figure 2.3 Community Capitals Framework

Adapted from Coakes and Sadler (2011)

2.2.1 Natural Capital

Natural capital refers to the natural assets and resources that contribute to community sustainability. Natural capital can include resources such as minerals, land, forests, and waterways, which provide benefit to the community, as well as environmental assets that provide cultural, social, or recreational value.

Covering the eastern 33,182 sq km of Victoria, Gippsland is Victoria's third largest electorate, covering 14.7% of the state's land surface. It stretches along the coast from Mallacoota in the east, to just north of Wilsons Promontory, covering the East Gippsland, Wellington and most of the Latrobe LGAs, as well as part of Baw Baw LGA and the unincorporated area of Gabo Island. The main towns include Sale, Lakes Entrance, Bairnsdale, Orbost, Morwell and Traralgon.

The Project's onshore infrastructure will be located in the Wellington LGA, which spans an area of over 10,924 sq km approximately 200 km east of Melbourne. This cable will connect to a substation in the Latrobe LGA, covering 1,426 sq km 150 km east of Melbourne.

Gippsland has always been an important driver of the Victorian and Australian economies because of its vital role in supplying energy, earth resources, water, and food. It also comprises nationally recognised tourist destinations and some of the state's most important environmental and cultural heritage assets. The Gippsland region is also home to significant water storages such as the Thomson Dam which accounts for 60% of Melbourne's drinking water (Infrastructure Victoria, 2019)

Further information relating to the identified LGAs is provided below.

- **Wellington** - The northern parts are remote and densely forested, rising from the Latrobe Valley into the mountains of the Victorian Alps, some of the highest peaks in Australia, with some parts used for timber production. The main population centres are generally located in the central fertile flood plains surrounded by land that is mainly used for grazing and agriculture. To the south, there are small coastal settlements, with both long term and short-term residents. These diverse natural features are fundamental in shaping the development of the Shire.
- **Latrobe** - Traditionally recognised as the centre of Victoria's electricity industry, derived from one of the largest brown coal reserves in the world, Latrobe is also at the centre of a large forestry industry which services Australian Paper's pulp and paper mill (the largest in Australia) and other sawmills. Other industries in the area include food processing (Lion - Morwell), engineering, post-secondary education with the new Federation University Australia and the service sector.

2.2.2 Human Capital

The level of human capital within a community is assessed by considering population size, age distribution, education and skills, general population health and the prevalence of vulnerable groups within the community. The social area of influence has the following key characteristics.

Table 2.1 Social area of influence key characteristics

Area	Description
A growing population	The population of Wellington in 2021 was 46,639 and Latrobe at 77,318 (ABS, 2021). The population of the Gippsland region is around 154,357 (ABS, 2021) and has been projected to reach 386,000 people by 2041 according to the Gippsland Regional Growth Plan (2014). As such, there has been a strong focus from the Victorian Government to develop the region to accommodate strong population growth dispersed across Gippsland. Gippsland's settlements will need to accommodate for a projected increase in population.
A low Aboriginal and Torres Strait Islander population	The two LGA's have an Aboriginal population of 1.5% (Wellington) and 1.9% (Latrobe). The Aboriginal and Torres Strait Islander Census population of Wellington in 2016 was 782 and 258 in Latrobe.
An older median age	The median age for Wellington is 46 years old and Latrobe is 42 years old.
An emphasis on trade qualifications and related skills	The three most common occupations in Wellington Shire are Managers (16.6%), Technicians and Trades Workers (16.2%) and Professionals (15.6%). In Latrobe, the Health Care & Social Assistance industry sector is the region's largest employer, with 5,385 jobs representing 16.63% of total employment, followed by retail (11.7%), public administration/safety (8.8%) and construction (8.7%). Workers are more likely to have trade qualifications than in other parts of Victoria.
Higher rates of unemployment	Unemployment is 6.2% in Wellington and 4.5% in Latrobe.

2.2.3 Social Capital

Various indicators can be used to examine and assess social capital. Such indicators can include the level of volunteering, population mobility, crime rates, and the demographic composition of the community, such as the percentage of people born overseas, language proficiency etc. The following provides a summary of the key characteristics of the area from a social capital perspective (refer to **Table 2.2**).

Table 2.2 Social capital key characteristics

Area	Description
Impacted by energy transitions	Recent years have seen the closure of Hazelwood and Energy Brix coal-fired power stations near Morwell. These closures have caused significant disruptions and changes to the Latrobe Valley and broader Gippsland community and economy, including the significant loss of jobs. As well as engaging with the extensive government and business entities involved in the energy transition in Gippsland, there are several key community /environmental groups, including Voices of the Valley and the Gippsland Climate Change Network, that are supportive of renewable energy projects across Gippsland.
High rates of volunteering	Volunteer rates across are 24.3% for Wellington and 17.1% for Latrobe.
Low rates of languages other than English spoken at home	3.7% of residents from Wellington and 6.7% from Latrobe speak another language at home.
A mobile population	The attraction of the region's natural amenity acts as one of the main drivers for population growth, particularly for sea changers. In Wellington, there is a dual housing market in operation, consisting both of retirees and families. The Shire gains population through migration from outer Eastern and South-eastern Melbourne, yet loses locally to neighbouring LGAs such as Latrobe, East Gippsland, and Baw Baw. In common with most parts of regional Australia, Wellington loses young adults to Melbourne for education, employment and lifestyle reasons.

<table>
<tr><th>Area</th><th>Description</th></tr>
<tr><td>Social impact of infrastructure on small settlements</td><td>
The undersea cable from the offshore turbines would land at McLoughlins Beach – Seaspray Coastal Reserve, within the Ninety Mile Beach Marine National Park. An underground cable would run inland to a substation north of Lake Denison and then an overhead transmission line would run to Loy Yang Power Station in the Latrobe LGA. The offshore location is between the localities of Seaspray and Woodside Beach, off the Ninety Mile Beach Marine National Park, and within Wellington LGA.
The construction of the onshore components of the project are close to Lake Denison and will potentially impact several small communities within Wellington Shire. Most of the corridor hosting the transmission is private agricultural land and forestry.
Community engagement will be of great importance with the communities of Seaspray and Woodside and other smaller settlements along the coast, who are likely to be impacted by construction and ongoing operations of this project and may express concern at the proximity of the project to both Lake Denison and the Ninety Mile Beach Marine National Park.

Key Populations and proximity to project (ABS, 2016)
<table>
<tr><th>Community</th><th>Population</th><th>Approx. Distance from Project</th></tr>
<tr><td>Sale</td><td>15,000 residents</td><td>30 km</td></tr>
<tr><td>Rosedale</td><td>2000 residents</td><td>50 km</td></tr>
<tr><td>Longford</td><td>1,789 residents</td><td>30 km</td></tr>
<tr><td>Golden Beach</td><td>293 residents</td><td>1 km</td></tr>
<tr><td>McGaurans Beach</td><td>NA</td><td>4 0 km</td></tr>
<tr><td>Seaspray</td><td>300 residents</td><td>30 km</td></tr>
</table>
</td></tr>
<tr><td>Social influence</td><td>
As offshore wind projects in Australia are largely in the planning phase, the Project has the capacity to attract interest from stakeholders that live in the general vicinity of the infrastructure, those that may be directly impacted by the Project activities, and/or those that have a significant interest in the topic of energy supply or coastal ecosystems. Consequently, while the social area of influence of the project may be defined geographically, interest in the Project and its outputs, is likely to be wide ranging.
A media analysis of references to “wind farm” and “Gippsland” between 2018 and June 2022 revealed a rapidly growing volume of local and domestic newspaper articles focused on wind farms in the Gippsland region. The key Projects receiving attention in the news are the proposed Star of the South Offshore Wind Farm, the Bald Hills Wind Farm and the Delburn Wind Farm. While media coverage of onshore wind farms may not directly reflect media coverage or community perceptions of offshore wind farms, it does provide insight into commentary surrounding wind turbines and renewable energy in the Gippsland region with relevance for the Project. Media is showing strong support for offshore projects like Star of the South from groups like Friends of the Earth and other climate change/ renewables organisations. There are pockets of opposition to wind farms in the region. However, this may mostly reflect proposed onshore, rather than offshore wind.
</td></tr>
</table>

Area	Description
Cumulative impacts	There are several other projects which have recently been developed, or currently being considered, which could result in changes to the community, or which may have further cumulative effects across the region, particularly in relation to impacts associated with concurrent construction activities. Despite the general support for a switch to renewable energy generation and consumption, it is possible the placement of the turbines may attract attention from marine protection groups concerned about how the Project will influence migratory patterns. On the nearby proposed Star of the South', of the 37% of respondents who indicated they had suggestions or concerns regarding site investigations, 40% were concerned about possible environmental impacts, whilst 20% were concerned about impacts on fish species (SOTS Community Consultation Summary 2019).

2.2.4 Economic Capital

Examining a community's economic capital involves consideration of several indicators, including industry and employment distribution, workforce participation and unemployment, income levels and cost of living pressures, such as weekly rent or mortgage repayments. The following provides a summary of the key characteristics of the communities within the area of social influence from an economic capital perspective (refer to **Table 2.3**).

Table 2.3 Economic capital key characteristics.

Area	Description
Energy production	Gippsland's energy production is closely linked to brown coal mining and electricity generation, with Latrobe Valley generating 85% of Victoria's electricity, from its large reserves of brown coal. Latrobe Valley currently hosts three operating coal-fired power stations with a combined energy generation capacity of 4.7GW; Loy Yang A and B and Yallourn.
Gippsland Renewable Energy Zone	The establishment of REZs is intended to facilitate an increase in renewable energy development. AEMO's Integrated System Plan has identified six Victorian REZs that the Victorian Government have committed to develop, these being: Central North, Gippsland, Murray River, Ovens Murray, South West, and Western Victoria (DELWP, 2021). This project is located within the Gippsland REZ.
Latrobe Valley Authority	In November 2016, the Victorian government established the Latrobe Valley Authority (LVA) and efforts are now underway to coordinate a productive and sustainable transition from the existing reliance on fossil fuels towards renewables, for the local economy and community. The LVA brings together local people, councils, industry, education providers, and state government to secure the economic future of the Latrobe Valley. The Latrobe Valley Authority is responsible for overseeing the Government's investment package in the region to create jobs and grow local businesses, including the establishment of the Latrobe Valley Economic Growth Zone and the Latrobe Valley Economic Development Program, designed to support economic diversification, growth, and resilience in the region (Victorian Government, 2019).

Area	Description
Gippsland Regional Growth Plan	The Gippsland Regional Growth Plan translates and integrates emerging state-wide regional land use planning policy. It provides the basis for regional coordination and future planning of infrastructure to support regional land use objectives. The Plan establishes a framework for strategic land use and settlement planning that can sustainably accommodate growth, including: • Gippsland Low Carbon Economy Transition Plan • post-secondary education • Gippsland's gateways • Centre for Sustainable Technologies • Gippsland Lakes Sustainable Development Framework • Gippsland's water • tourism infrastructure
Major industries	Gippsland's economy is predominantly based around natural resources and commodities, with key industry sectors including agriculture, forestry, dairy and pastoral industries, fishing, and coal mining, oil and gas extraction and processing. The agribusiness sector is a significant employer in the region, with over 37% of Gippsland's business involved in agriculture and fishing and a further 15% involved in upstream processing operations. Energy production is one of Gippsland's major industries, both in the coal-rich Latrobe Valley and Bass Strait's oil and gas fields serviced from Longford. The region produces around 90% of Victoria's electricity, 97% of Victoria's natural gas, and 14% of Australia's oil. Other strong growth industries include timber processing, and the manufacturing of paper products as well as the provision of services to the Gippsland region. The aged and health care industries have seen strong growth in recent years. Gippsland also supplies about 32% of Victoria's milk and 25% of its beef. Horticulture generates around 14% of Gippsland's agricultural production value and comprises 9%of the state's horticulture output. Dairy production is a major contributor to the Gippsland economy, being valued at close to $1 billion and employing around 6800 people on-farm and in related processing (8%of the region's workforce). Gippsland produces approximately one-third of Victoria's total dairy production and around one-fifth of Australia's dairy production. The combined output from plantations and timber from the public estate supports a significant timber, pulp and paper manufacturing sector that employs around 3400 people (nearly 4% of the region's workforce). In 2019-20 (pre significant Covid - 19 pandemic impacts), visitor expenditure generated 16,036 jobs for people employed in the tourism industry (direct and indirect jobs), which represents 12.6 of the region's total employment. Gippsland is also a major provider of sand to the construction industry In Wellington, the largest town is Sale, which has a significant regional centre function with a variety of services (high schools, TAFE, hospitals, local and state government) serving the entire Wellington area. The East Sale RAAF base is a major feature of the area and is a major training centre for the Air Force. Resultant defence industries and health care are major employers. Major agricultural centres of Maffra (second largest town in Wellington, with about 6,000 people), Stratford, Heyfield and Rosedale are situated in the Central Gippsland plains, along the Avon and Latrobe Rivers, and are mainly service centres for the surrounding rich farmland.

Area	Description
Wellington Renewable Energy Forum Group	Wellington's Renewable Energy Forum is a networking platform to facilitate, support and progress projects within the shire. Key stakeholders are involved from offshore wind, onshore wind, solar, hydrogen, biomass and other renewable energy projects. The Forum has been established to: • Enable Council and renewable energy stakeholders to update each other on key projects and initiatives. From a Council perspective, this is a more efficient way of being updated on the progress of projects. • Jointly progress shared outcomes including addressing common challenges and to provide a forum to discuss advocacy to state/federal governments on common compliance and funding matters.
A growing focus on tourism	Wellington's natural amenity encourages tourism to the region. The Ninety Mile Beach stretches from Port Albert to Lakes Entrance (in East Gippsland Shire), and the towns along this stretch are smaller and characterised by a high rate of holiday homes which are generally unoccupied on Census night but fill up over summer. These towns include Loch Sport, Golden Beach, and Seaspray. Tourism is an important industry for Gippsland. It generates an estimated $1 billion for the local economy, with the region attracted a record seven million visitors in the year ending March 2019. Destination Gippsland updated the Gippsland Destination Management Plan (DMP) in 2022 to identify strategic priorities for the region between 2021-2030.

2.2.5 Physical Capital

Physical or built capital includes provision of infrastructure and services to the community. Within this capital area it is important to consider the type, quality and degree of access to public, built and community infrastructure (including amenities, services and utilities) as well as housing (refer to **Table 2.4**).

Table 2.4 Physical capital key characteristics.

Area	Description
Lower rates of access to internet	18.5% of residents in Wellington Shire and 19.5% of those in Latrobe Shire are unable to access internet from their home dwelling.
Housing supply and availability	Future growth in Wellington is likely to occur in the main towns, particularly the northern part of Sale, where there is considerable residential supply and existing services. Minimal growth is forecast for the more remote rural areas, continuing the trend of stable population change. Residential development forecasts suggest the number of dwellings in Latrobe will increase by an average of 299 dwellings per annum to 41,782 in 2041. The age group with the highest net migration (general mobility) Latrobe City Council is 20–24-year-olds, this is forecast to occur in the period between 2026 to 2031. As with Wellington, this increase in population is likely to be to the larger towns like Traralgon.
Growth of Tourism	In the 5 years up to 2020/21, there were an average of 42,964 international visitors to Wellington and East Gippsland Shires. Average length stay for international visitors was 5.4 days, lower than the average for Victoria. In the 5 years up to 2019/20, International visitors to Wellington and East Gippsland Shires were more likely to be visiting on Holiday, accounting for 62.7 per cent of all visitors.
Low density land development	Currently new residential development across Gippsland is occurring at an average of 10 lots per developable hectare. In comparison with other regional cities and centres, this is considered low density.

2.2.6 Political Capital

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

Covering the eastern 33,182 sq km of Victoria, Gippsland is Victoria's third largest electorate, covering 14.7% of the state's land surface.

National Party Member of Parliament (MP) Hon Darren Chester holds the Federal seat of Gippsland. Darren is Minister for Veterans Affairs and Minister for Defence Personnel. He has been a vocal supporter of further investment in renewable technologies in regional communities to reduce emissions from energy generation.

At a state level, the Project sits within the Gippsland South electoral district. The sitting MP for Gippsland South is Danny O'Brien (The Nationals). He supports opportunities for renewable energy projects in Gippsland, including offshore wind and hydrogen, with proper planning and community consultation. The Project Area sits within the Shire of Wellington and the City of Latrobe, with the main project infrastructure within Wellington. East Gippsland Shire is north east of Wellington Shire.

2.2.7 Cultural Capital

Cultural capital refers to underlying factors that provide human societies with the means and adapt to their environment (Cochrane, 2006). It includes the way people know and understand their place within the world. It may also refer to the extent to which the local culture, traditions, or language, may promote or hinder wellbeing, social inclusion, and development (IAIA, 2015). This section provides a summary of the key characteristics of the social locality from a cultural capital perspective (refer to **Table 2.5**).

The Project Area is located within the traditional lands of the Gunaikurnai people.

The Gunaikurnai people are recognised by the Federal Court and the State of Victoria as the Traditional Owners of a large area of Gippsland spanning from Warragul in the west to the Snowy River in the east, and from the Great Divide in the north to the coast in the south, constituting approximately 10% of the state.

The Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) was established in 2007 as the Registered Aboriginal Party that represents the Gunaikurnai people, the Traditional Owners of our Country, as determined by the Victorian Aboriginal Heritage Council under the *Aboriginal Heritage Act 2006*.

The Gunaikurnai Traditional Owner Land Management Board works with Aboriginal people and the Victorian Government to set and guide the partnership for joint management of ten parks and reserves that have been granted as Aboriginal Title to the Gunaikurnai people.

Table 2.5 Cultural capital key characteristics.

Area	Description
High proportion of individuals born in Australia	**Wellington LGA** 80.6% of people were born in Australia. The most common countries of birth (other than Australia) are England 3.0%, New Zealand 1.2%, Netherlands 0.7%, Philippines 0.5% and India 0.4%. **Latrobe LGA** 85.9% of people were born in Australia. The most common countries of birth (other than Australia) are England 3.0%, New Zealand 0.8%, Netherlands 0.4%, Philippines 0.4% and Iraq 0.2%.
Low percentage of languages other than English spoken at home	**Wellington LGA** 86.9% of people only spoke English at home. Other languages spoken at home included Italian 0.3%, Mandarin 0.3%, Dutch 0.2%, Tagalog 0.2% and German 0.2%. **Latrobe LGA** 91.3% of people only spoke English at home. Other languages spoken at home included Arabic 0.3%, Spanish 0.3%, German 0.2%, Samoan 0.2% and Non-verbal, so described 0.1%.

3.0 Stakeholder Identification

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

- live, work, or recreate near the Project
- have an interest in the proposed action or change
- use or value a resource associated with the Project
- are affected by the Project.

Key stakeholder groups that should be consulted or engaged during the scoping and subsequent phases of the SIA are outlined in **Figure 3.1.**

Figure 3.1 Key Stakeholder Groups

Source: Umwelt, 2022

Preliminary stakeholder analysis has identified the following groups to be engaged in subsequent phases of the assessment (refer to **Table 3.1**), noting that the proponents will continue to engage with relevant State Government and industry bodies.

Table 3.1 Potential Stakeholders for SIA Engagement

Stakeholder Group	Potential Stakeholders
Host landholders	• Landholders that will host project infrastructure onshore
Proximal landholders/communities (onshore)	• Private landholders neighbouring/proximate to the transmission line • Seaspray, Giffard, Stradbroke, and Woodside communities
Broader community	• Residents in Wellington and Latrobe LGAs
Ocean users	• Ferry operators, fishing charter boats, whale watching and marine observation cruises.
Aboriginal / heritage stakeholders	• Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) • Brayakaulung Advisory Committee (Latrobe City Council) • First Peoples – State Relations • Heritage Victoria
Commonwealth, State and local government	• DCCEEW • DELWP Impact Assessment Unit, Environment and Planning • Wellington Shire Council • Latrobe City Council • Latrobe Valley Authority • Regional Development Victoria • Parks Victoria • Department of Transport • Southern Rural Water • West Gippsland Catchment Management Authority • Country Fire Authority
Local business and service providers	• AusNet • Destination Gippsland • TAFE Gippsland • Federation University • Tourism operators
Community and development groups	• One Gippsland • Re-Alliance • Startup Gippsland • Voices of the Valley • Wellington Renewable Energy Forum Group
Environmental groups	• Gippsland Environment Group • Coastcare • Fishcare • Birdlife Australia • Waterwatch Victoria • Latrobe Landcare Network • Local conservation groups – Seaspray, Woodside etc.

Source: Umwelt 2022

4.0 Potential Impacts

Potential social impacts have been identified with consideration of the Project design, construction, operation, and decommissioning activities associated with the Project.

According to the *Ministerial guidelines for assessment of Environmental Effects under the Environment Effects Act 1978* (Victoria Department of Sustainability and Environment, 2006), the *Environment Effects Act 1978* (the Act) provides for the assessment of proposed projects that can have a significant effect on the environment. The 'environment' includes the physical, biological, heritage, cultural, social, health, safety, and economic aspects of human surroundings, including the wider ecological and physical systems within which humans live. Social effects may include:

- Potential changes to local population and demographic profiles.
- Social structure and networks.
- Residential amenity and social well-being.
- Social vulnerability and differential effects on parts of the community.
- Housing and social infrastructure needs.
- Perceptions of aesthetic, recreational and other social values of landscape or locality.
- Attitudes to proposed development (Victoria Department of Sustainability and Environment, 2006).

When considering potential impacts, this report groups social impacts according to the following categories, as shown in **Figure 4.1**. Such impacts include changes to people's way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision-making systems.

Figure 4.1 Social Impact Categories

© Umwelt, 2021 (Derived from: DPE, 2021)

An overview of potential impacts associated with the project and the corresponding Risk ID is identified in the preliminary impact identification in **Table 4.1**. Where cumulative impacts may also be experienced, this is also indicated in the table.

Table 4.1 Potential Social Impacts

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Surroundings	Disruption to onshore ecological values and processes, including impacts on key habitats, birds, animals, plants, pests and weeds	Negative	Onshore: Transmission line	Construction and operation	Broader community Environmental groups	✓
Surroundings	Disruption to offshore ecological values and processes, including impacts on habitats, animals, birds, and migration patterns	Negative	Offshore: Turbines Substations Subsea cables	Construction and operation	Local businesses and service providers Environmental groups Ocean users	✓
Surroundings	Impacts to visual amenity associated with the construction and operational presence of the wind turbines and the potential overhead transmission line infrastructure	Negative	Onshore and Offshore: Turbines Transmission line	Construction and Operation	Broader community Visitors/tourists to the area	✓
Surroundings	Concerns around underground cabling, including impacts to housing and water bodies associated with subsidence	Negative	Onshore: Transmission line	Construction and operation	Host/Proximal landholders Broader community	✓

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Surroundings Way of Life	Aesthetic changes to the coastline may not 'fit' with the ascribed characteristics and values of the coastal landscape	Negative	Offshore: Turbines Substations	Planning, Construction and operation	Broader community Local businesses and service providers Visitors/tourists to the area	✓
Surroundings	Construction impacts due to project-related traffic (inaccessibility, road closures, increased travel time, road deterioration causing public safety risk)	Negative	Whole of Project	Construction	Broader community Local Government Local businesses and service providers	✓
Surroundings	Social amenity issues associated with construction of onshore substation and transmission line e.g., noise and lighting	Negative	Onshore: Transmission line Substation	Construction and operation	Broader community Host and proximal landholders	✓
Surroundings Livelihoods	Disruption and / or displacement of current land uses due to construction and operation of onshore Project infrastructure	Negative	Transmission line	Construction and operation	Host and proximal landholders	

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Livelihoods	Disruptions to local tourism due to perceived industrialisation of the landscape reducing visitor experience	Negative	Whole of Project	Operation	Broader community Local businesses and service providers Local Government Visitors/tourists to the area	✓
Livelihoods Way of life	Local employment generation and procurement of local businesses/services resulting in decreased unemployment rates and local economic benefits	Positive	Whole of Project	Construction and operation	Broader community Local businesses and service providers Local Government	✓
Livelihoods Way of life	Impacts to maritime industries (e.g., local fisheries) due to clearing or disruption of critical habitats or other temporary or permanent ecological change/ exclusion zones or reduced access	Negative	Offshore: Turbines Substations	Construction and operation	Broader community Local businesses and service providers Ocean users	✓

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Surroundings	Impacts to maritime recreational activities due to clearing or disruption of critical habitats or other temporary or permanent ecological change/ exclusion zones or reduced access	Negative	Offshore: Turbines Substations	Construction and operation	Broader community Local businesses and service providers Ocean users	✓
Surroundings	Impacts to onshore recreation activities due to clearing of critical habitats or other temporary or permanent ecological change/ exclusion zones or reduced access	Negative	Onshore: Transmission line	Construction and operation	Broader community Local businesses and service providers	✓
Accessibility	Impacts on availability and affordability of short-term accommodation in construction phases, particularly in areas with high levels of tourism	Negative	Whole of Project	Construction	Broader community Local businesses and service providers	✓
Accessibility	Increased energy security and reliability for the future	Positive	Whole of Project	Operation	Broader community	✓

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Surroundings Decision making	Reduced reliance on carbon emitting industries	Positive	Whole of Project	Operations	Broader community	
Culture	Impacts on Traditional Owners and Aboriginal communities including impacts on connection to Country	Negative	Whole of Project	Planning, construction and operation	Aboriginal stakeholders	✓
Community	Reduction in levels of social cohesion resulting from differing levels of support for the Project	Negative	Whole of Project	Planning	Broader community	✓
Community	Changes to sense of place for coastal communities and/or location of onshore facilities	Negative	Whole of Project	Operations	Proximal communities	✓
Decision making	Opposition to the project due to concerns about energy transition and reliance on existing extractive industries	Negative	Whole of Project	Planning	Broader community	

SIA Category	Impact	Positive / Negative	Project Component	Phase	Stakeholder Group	Cumulative impact
Decision making	Low community acceptance based on limited understanding of Project design (unfamiliarity with offshore wind)	Negative	Whole of Project	Planning	Broader community Community and special interest groups Environmental groups	
Decision making	Perceived lack of fairness and quality of decision-making processes	Negative	Whole of Project	Planning	Broader community	
Surroundings Livelihoods Way of life Community Decision making	Cumulative impacts from high volume of existing onshore and committed offshore large-scale wind farms across the region	Negative	Whole of Project	Planning, construction and operation	Broader community Local Government Local businesses and service providers Community and special interest groups	✓

5.0 Recommendations

Based on the outcomes of the impact screening undertaken to identify potential social impacts, recommendations have been made to minimise potential social impacts. A summary of the potential impacts identified (grouped by social impact categories) and the recommended actions to minimise these impacts is provided in **Table 5.1**.

No specific design constraints relating to social impacts have been identified that have potential to affect the suitability of the Project site. However, it will be important for a comprehensive social and economic impact assessment to be undertaken to assess key social impacts relating to the Project and to develop appropriate management and enhancement strategies

Table 5.1 Potential Social Impacts and Recommendations

Identified Social Impacts	Recommended Actions
Impacts on surroundings both onshore and offshore - Ecological / marine impacts	Integrate refinements to layout based on community values and key landscape or natural features of concern, in consultation with affected or interested parties. Identify ecological concerns and communicate agreed management/ interventions. Avoid sensitive ecological sites and biosecurity management planning. Further ecological studies to assess potential impacts to migratory birds and provide design response where possible. Community values mapping in consultation with community groups to inform Project design as part of the SIA and Community Engagement Program.
Changing coastal vista and sense of place	Project layout and design to consider proximity to residential properties and dwellings and direct consideration of visual impact. Values mapping to understand community values associated with the offshore environment and key uses and aspirations. Proactive, comprehensive and transparent consultation process throughout Project planning, assessment, and development. Develop a shared benefit strategy in consultation with the community, informed through community engagement.
Disruptions to agricultural activities	Consultation with affected landholders to inform personal property plans, giving flexibility around individual property features and circumstances if the onshore route impacts agricultural land. Considerate design to utilise existing cleared land or service corridors where possible and limit impact to productive agricultural land.
Construction impacts	Proactive community consultation process throughout Project planning, assessment, and development. Construction Environment Management Plan to include traffic and local road changes. Route selection based on efforts to minimise adverse effect on private land and alternate land uses, case-by-case and in consultation with affected parties. Construction activities limited to specific times of the day to reduce impacts on community. Use of workforce shuttle buses to reduce traffic impacts. Construction Communications Plan including mechanism for feedback. Develop Workforce Accommodation Plan with engagement of local housing/accommodation providers.

Identified Social Impacts	Recommended Actions
Tourism	Proactive collaboration with local tourism providers and community groups to understand concerns and priorities. Collaborate with local tourism providers to integrate Project development phases with local visitation trends and attractions. Consultation with community groups and service providers in design and development of community enhancement program. Construction activities limited to specific times of the day to reduce impacts on tourism activities.
Traditional Owners	Work collaboratively and closely with Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) in planning, pre-construction and construction phases to build trust in a long-term partnership. Co-design of Cultural Heritage Management Plans. Develop an Aboriginal Partnership Plan. Undertake Cultural Values Assessment.
Cumulative impacts from multiple offshore projects	Consider the cumulative impacts of workforce accommodation associated with other users, sectors/industries or development projects in the area. Clear communication to community about scope of onshore development and impacts/opportunities.
Accommodation	Development of Workforce Accommodation Plan. Staging of construction works to avoid or minimise activity during peak tourism seasons. Consideration of the generation of additional housing to support the influx of construction workers, for example through a temporary workers village or through collaboration with local housing providers and local government.
Maritime industries e.g., commercial and recreational fishing, boating	Proactive community consultation process to ensure concerns and potential impacts are understood. Clear information/communication about potential impacts on local industry and management.
Perceived lack of fairness (e.g., neighbour inequity)	Design in response to identified impacts and priorities as identified through consultation with those affected by the project i.e., the neighbouring families/property owners. Participation and input from neighbours to the project in identifying what is important and of value.
Employment and procurement opportunities	Provision of training and upskilling for local people and local employment and procurement opportunities resulting in enhanced human and economic capital. Local Participation and Social Procurement Strategy to be in place prior to construction.

6.0 Conclusion

The preliminary social risks and opportunities analysis has been undertaken to inform and support the refinement of Project design. A detailed assessment of social impacts is required as part of the EES and EIS and should be informed by an ongoing process of community consultation. As part of the EES and EIS, future stages of the SIA for this Project should include a comprehensive prediction and assessment of social impacts and development of relevant strategies to mitigate the negative and enhance the positive impacts associated with the Project. Further SIA and technical environmental impact studies should address perceptions of impacts raised by key stakeholders during this phase.

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

- A detailed baseline social profile so that any further baseline data relevant to the social impacts identified is obtained.
- Further validation of the area of social influence and identification of affected communities and vulnerable groups.
- A comprehensive community engagement program to involve key stakeholders in the identification of social impacts and assessment process
- Further social studies as outlined in **Table 5.1**.
- A comprehensive assessment and evaluation of social impacts against existing baseline conditions.

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