

# Community Advisory Group

Meeting #21 – 24 August 2023

We acknowledge the Gunaikurnai people as the traditional custodians of the land and pay respect to their elders past and present

# Agenda

1. Welcome
2. Standing items and actions
  - Apologies
  - Minutes and action items
  - Declaration of potential conflicts
3. What's happening on the project
4. What's happening in the community
  - All (15 min)
5. Break (10 min)
6. Focus Topic: Offshore Wind Supplier Showcase
7. Focus Topic: Ports Assessment
8. Other business
  - Other questions or feedback
  - Suggestions for future agenda items
  - Next meeting – Yarram, Thursday 5 October.
9. Meeting close

# What's been happening

- **Events:**
  - Sale Catholic College – Pathways Expo,
  - BBLLLEN – Job Skills Expo,
  - Warrigunya – Information session and BBQ,
  - Federation University Australia's Open Day,
  - Gippsland Tech School – Science Week
- **Presentations:**
  - 3<sup>rd</sup> Australian Offshore Wind Conference,
  - SEC Energy Jobs and Skills Forum,
  - Australian Clean Energy Summit,
  - Gippsland Tech School – Teacher presentation,
  - Yarram Secondary College – Broadening Horizons,
  - Australian Wind Energy 2023,
  - Institute of Surveyors Victoria – Surveying Expo,
  - Yarram 1<sup>st</sup> Scouts Victoria,
  - Rotary Club of Mont Albert & Surrey Hills
- **'Making the move to offshore wind'** launched at the SEC Energy Jobs and Skills Forum, highlighting how workers' current skills and experience match with offshore wind roles
- Paul visited the Rampion Wind Farm in southern England



# What's coming up

- **Launching our** Offshore Wind Supplier Showcase
- **Events and presentations:**
  - Manns Beach Improvement Committee
  - Gippy Youth New Energy Jobs Summit
  - Gippsland New Energy Conference 2023
  - Gippsland eV Expo and Community Day – Port of Sale
  - ISCA CONNECT Leadership Breakfast
  - ER Law Annual Conference 2023
  - Gippsland Regional Executive Forum



# What's happening in the community

- **Community updates**
  - Wendy Farmer
  - Julianne Peavey
- **Everyone**
  - What are you hearing?
  - What are the hot topics in your local area?

**Would you like to give an update at the next meeting?**



## OFFSHORE WIND PROJECTS

Concern about Ramsar site <sup>in Section</sup> and fishermen, <sup>visual amenity</sup>

What will happen with the fish?

What commercial fishing exclusion zones will be?

How long will it take to have everything set?

How many developers and projects will be?

How <sup>many</sup> GW will be generated in this round?

Migratory bird pathways -

### Drone fishing

~~RAAF~~ RAAF Base practise area 90 mile beach to beach sport.

Scallops - Port Albert.  
Lakes Entrance Coop

Bait fishing

Prawning - Lakes

Is the pace knee jerk? Could it collapse?

Decommissioning - what does it look like?

Maintenance costs

## DRAFT OPTIONS ASSESSMENT METHOD

- COMMUNITY WANT UNDERGROUND TO BE PRIORITY!
- SOTS - v. little restriction on farming practice
- EMPLOYMENT OPPORTUNITIES - ARE THEY REALLY LOCAL?
- HOUSING - LIMITED HOUSING FOR LOCALS - IMPACTS TO AVAILABILITY
- ARE WE FACTORING IN O&M INTO ECONOMICS - YES
- TIMELINE - 2032 = 2GW - AMBITIOUS
- PORT OF HASTINGS - TIMING DOES NOT ALLOW FOR 2028
- CONCERN ABOUT # OF SHORE CROSSING
- POPN #'s DON'T ALLOW FOR LANDOWNERS TO HAVE PROPER REPRESENTATION
- IMPACT OVER 24RS NOW - COMMUNITY STRUGGLING
- CONCERNS ABOUT THE WEIGHTING ON PRINCIPALS
- HOW MANY TERMINAL STATIONS?
- DOES MORE OSW MEAN MORE EASEMENTS?
- MAKE SURE TALK TO LANDOWNERS ABOUT PREFERENCES
- CAN TERMINAL SIN GO IN PINE FARM ~~DATE~~ RATHER THAN FARM LAND
- HOW MUCH INFLUENCE DO NEIGHBOURS HAVE?
- BASSLINK - WHY NOT USE THAT?
- WILL GENERATORS NEED TO NEGOTIATE W/ LANDOWNERS TO CONNECT
- BIOSECURITY ISSUES!

# VicGrid - Giffard Hall

## TECHNICAL OPTIONS

- Q Why aren't we considering Underground? because that is what the Community want when private company's are?
- A. Options being considered are overhead and underground. HVAC and HVDC
- Q Is the cable coming in underground from offshore wind AC or DC?
- A. ~~Can't say~~ export cables there normal AC
- Q Are the offshore cables to be underground?
- A. Cables lay on ocean floor
- Q How many miles between reactor stations?
- A. Different Vol 300kV under Latrobe Valley - The higher Voltage the more reactive compensation station. 300kV circuit 300k: 100km length.
- Q Do you need a converter station? what size are they?
- A. Yes. for HVDC. Varies on technology of VSC or LCC (VSC is new technology) also Bipole vs Symmetrical monopole. Eg. Marinus Link is roughly 100m x 100m
- Q How much noise will stations make?
- A. A number of equipments make noise. Transformers, Diesel generators do make noise. During design noise studies are undertaken to check noise levels in relation to sensitive receptors. Where noise enclosures/barriers are required to comply with noise limits these would be installed.
- Q What are we doing with the Costing and will the Costing being released?
- A. on notice
- Q Why is marinus Link underground?
- A. why couldn't we use that ~~technology~~ here
- A. it is part of the optional assessment method.

## TECHNICAL OPTIONS

- Q using BassLink
  - A. yes part of the optional assessment.
  - Q How big an Easement HVDC underground.
  - A. offshore wind target is 2GW - ~~1000m~~ Cable 4-5 metres Construction 10metres
  - Q How far apart do the cables need to be?
  - A. on notice.
  - Q What is the life<sup>span</sup> of the overhead vs underground.
  - A. 100 years overhead - Stations 50 ~~years~~ - underground cables 50 years. offshore cable 50 years - Turbines 25 years.
  - Q Can we ~~traverse~~ undersea through Wilson prom to Hastings?
  - A. Yes it has been discussed ~~am~~ - Question Notice.
  - Q How big would the reactor station be?
  - A. 150 x 300m. Typical Substation in Profile. Apiaries?
  - Q Effect of EMF from transmission infrastructure on ~~Animals?~~
  - A. On notice. but EMF values must adhere to microbes Intl standards
  - Q What are the impacts on U/G nature from U/G cables?
  - A. On notice. Note differences between AC and DC technology
  - Q What height would the towers be?
  - A. Depending on technology ~~AE~~ HVDC - 75 metres.
- Comment - Link on Webber didn't work.

## BUSHFIRE RISK

- 1) Terminal Station location in the pine plantation rather than ~~in the~~ impacts
- Q No decision of lines has been made yet. Technically possible to locate it in the plantation area - a managed area
- Q Royal Commission Rec<sup>A</sup> → undergrounding of power lines
- Q Royal commission rec that distribution lines be put underground rather than High Voltage lines. Because Transmission does not have a history of starting fires of Easements. Ongoing maintenance required for above ground rather than underground lines.
- Q Basslink easement use?
- A. Ask Technical table...
- Q Fire Risk from Solar Farms? And batteries lithium based, rails
- A. Active suppression + monitoring systems. Design of farms/batteries manage risk as part of Planning process. EPA, CFA, Energy Safe Vic are working together to look @ batteries safety (and fire risk, pollution)
- Q Overhead Power lines - who is held to account? if a fire is started?
- A. The transmission line company is responsible for maintenance.
- Q In the 'rules' for the new transmission lines put in compensation if a bushfire starts because farms have a ↑ fire risk
- A. Something for consideration in policy development.
- Q Substation risk of starting bushfires
- A. There are risks due to combustible materials. Clearance around areas for Aust Govt.

# VicGrid – Giffard Hall

## COMMUNITY BENEFITS & COMPENSATION

Q Don't know what's happening. Lots of different stories  
- misinformation about which landowners have signed up.

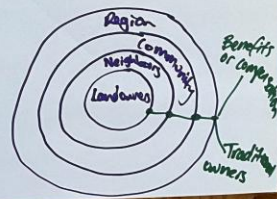
Q No one sees benefits from overhead transmissions.  
- towns people will say renewables are good, but they're not involved/affected.

A VicGrid's framework will be designed to make sure benefits are experienced inside communities hosting infrastructure (renewables + transmission)

- State govt - payments to landowners
- payments to neighbours that are significantly impacted.
- Community fund for each Renewable Energy Zone - so developers contribute money into a fund that can support projects in the community with decision-making in communities
- Benefits for Traditional Owners

Q Can govt. compulsory acquire?

A Yes, but as a last resort. VicGrid is trying to coordinate the best options, and to avoid this.



## COMMUNITY BENEFITS + COMPENSATION

Q Will developers put into a fund once, or each year?

A plan is it would be an annual contributions by developer each year over a longer term.

Q Where would money come from? Profit from companies?

A Transmission will be identified by State Govt as a priority with a private company tendering.

Different to offshore wind which is private development.

Private developers who connect to transmission would pay into the community benefit fund.

Q Who would own the lines?

A Different models in place at present. Status quo is company privately owns it. This hasn't been determined for the VicGrid project planning.

Q Our neighbours are slightly affected by transmission. Is there a certain distance/set rate for neighbours?

A no set rate. Property by property consideration.

- VicGrid will be publishing draft guidelines e.g. what does significantly impacted mean + what sort of compensation is appropriate.



# Focus topic: Offshore Wind Supplier Showcase



- Highlights local supply opportunities
- Gives global offshore wind supply chain a glimpse of what local businesses have to offer

### Offshore wind supply opportunities

		Capability		
		Existing	Leverage	New
Development	Environment and planning services	✓		
	Engineering design services	✓		
	Energy and grid services	✓		
	Surveys	✓		
	Floating LiDAR services	✓		
Offshore wind turbines	Nacelle			✓
	Blades			✓
	Tower - steel plate (no joins)			✓
	Tower - fabrication >10 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		✓	

# Aboriginal businesses

## First Nations Traffic Management

First Nations Traffic Management was engaged by the VicConnect Consortium to provide traffic management services for the Victorian Government's Gippsland Line Upgrade project.

First Nations Traffic Management partnered with GLaWAC to identify and provide employment for local members of the community on the project.



Photo courtesy of First Nations Traffic Management

Supplier	First Nations Traffic Management
Location	Nunawading, Victoria
Website	www.fnmtm.com.au / www.fnlh.com.au
Categories	Traffic management, Labour hire
Contract capacity	\$10,000,000 to \$20,000,000
Overview	<p>First Nations Traffic Management is an Aboriginal-owned company employing 300 staff, of which 70 employees are Aboriginal or Torres Strait Islander. Its motto is <i>Changing Lives Through Employment</i>.</p> <p>In addition to supplying major projects with First Nations labour, First Nations Traffic Management purchases PPE and other goods and services from Aboriginal and Torres Strait Islander suppliers and social enterprises.</p>
Key clients	VicConnect Alliance (Decmil, UGL, Arup)
Relevant experience	First Nations Traffic Management has supported the VicConnect Alliance, providing the Victorian Government's Gippsland Line Upgrade project with traffic management and labour services. It worked closely with Latrobe City Council's Indigenous Employment program to source local Aboriginal and Torres Strait Islander suppliers for the project.

- Gunaikurnai businesses and partners
- Other Victorian Aboriginal businesses



## ABORIGINAL BUSINESSES

### Other Victorian Aboriginal businesses

The Kinaway Chamber of Commerce is the leading Victorian organisation dedicated to supporting Victorian Aboriginal and Torres Strait Islander business owners.



Kinaway is focussed on changing Aboriginal and Torres Strait Islander people's lives through a strength-based model of business ownership and participation in the Victorian economy.

Kinaway works closely with businesses by providing:

- Support
- Networking
- Advocacy
- Partnerships.

These services provide an essential framework to promote and support the ongoing operation of Aboriginal and Torres Strait Islander businesses.

Supplier	Native Oz Group
Location	Somerville, VIC
Website	www.nativeozgroup.com.au
Categories	Civil works, electrical, plumbing, labour hire, traffic management
Contract capacity	\$1,000,000 to \$2,000,000
Overview	<p>Native Oz Group is an Australian Indigenous-owned company providing quality services, including:</p> <ul style="list-style-type: none"> <li>• Civil construction</li> <li>• Drilling</li> <li>• Telecommunication pits and pipes</li> <li>• Service relocation</li> <li>• Roadworks</li> <li>• General maintenance</li> <li>• Electrical services</li> <li>• Cleaning services.</li> </ul>
Key clients	Acciona, Laing O'Rourke
Relevant experience	NativeOz Group has supported several Victorian Government projects, including the Mont Albert Level Crossing Removal. The work delivered included asset location services, non-destructive digging, and electrical spotting.

# Gippsland businesses



Above L-R: Tony and deckhand Wayne from Far Out Charters; Belinda and owner Brian from Port Albert Fishin' Charters

## Gippsland vessels

Local fishers can play a role during the development, construction and operations phases of an offshore wind project.

Local businesses could provide vessel services for marine survey campaigns and to maintain a safe work zone during construction. Businesses with the capability to support offshore wind are listed below.

Company/Name	Vessel Location	Contact
AB Hunter Fishing	Lakes Entrance	0428 524 357
Anastos Fishing	Port Welshpool	0427 871 080
Andrew Zapantis	Port Welshpool	0429 866 509
Atoll Offshore	Lakes Entrance	www.atolloffshore.com.au
Australian Oceanographic Services	Lakes Entrance	0401 843 338
Australian Wildcatch Fishing	Lakes Entrance	www.australianwildcatchfishing.com
Challenge Marine Services	Lakes Entrance	0413 759 757
Corner Inlet Barge	Port Franklin	0437 662 352
Far Out Charters	Lakes Entrance	0428 401 819 / www.faroutcharters.com.au
Fishermen Direct	Port Welshpool	0497 169 550 / grantleeworthy@gmail.com
JK Marine Services	Port Franklin	0448 403 176 / www.jkmarineservices.com.au
JM and G Barrett	Lakes Entrance	0427 358 091
Port Albert Fishin' Charters	Port Albert	0409 793 714
Pescari Industries	Lakes Entrance / San Remo	dredgewa@gmail.com / 0409 950 497
Prom Coast Seafoods	Port Franklin	ema_leigh32@hotmail.com
Seapride Charters	Port Albert	gmconachy20@outlook.com
Strauss Wilderness Coast Charters	Mallacoota	wildcoast@bigpond.com
The Local Catch	San Remo	0422 444 806
Trinsand Fisheries	Lakes Entrance / Port Welshpool	0418 520 118 / admin@trinsand.com.au
Undersea Marine	Lakes Entrance	www.underseamarine.com

Supplier	Boom Logistics
Location	Morwell, VIC
Website	www.boomlogistics.com.au
Categories	Cranes
Contract capacity	\$50,000,000+
Overview	<p>Boom Logistics has 14 crane depots nationally, including in Morwell, Gippsland. It has over 260 cranes ranging from five to 800 tonnes. The fleet includes mobile hydraulic cranes ranging from 15 to 800 tonnes and crawler/lattice cranes ranging from 50 to 750 tonnes, available for either wet hire, dry hire or contracted project delivery.</p> <p>Boom Logistics has a team of experienced crane operators, riggers and wind technicians; supported by qualified lift engineers and supervision. Through a strong capability in project execution and contracting model, it provides services-based solutions to markets including the energy, infrastructure, resources and industrial sectors.</p> <p>Boom Logistics also has a fleet of over 120 travel towers, access equipment, boom lifts and scissor lifts, available for either wet or dry hire.</p>
Key clients	Goldwind, GE, Acciona Energia, Siemens Gamesa, Vestas, Exxon Mobil, AGL, AusNet, Energy Australia, UGL, Downer, Opal Australian Paper
Relevant experience	<p>Reference Projects include:</p> <ul style="list-style-type: none"> <li>Onshore wind farm Wind Turbine Generators (WTG) construction and installation including Goldwind, Acciona Energia, GE and Vestas</li> <li>Transmission line tower construction</li> <li>Crane services for industrial construction projects including infrastructure, mine sites, manufacturers, and power stations</li> <li>Crane services for major shut down maintenance on industrial and resource sites including Engie, AGL and Energy Australia, FMG and BHP</li> <li>Team of technicians and trades have completed maintenance and service work on offshore oil and gas rigs in Gippsland</li> <li>Industrial crane maintenance in Bass Straight, with ExxonMobil.</li> </ul>

Supplier	TOP Welding & Construction
Location	Morwell, VIC
Website	www.topwelding.com.au
Categories	Fabrication and welding of piping and structural steel components
Contract capacity	\$2,000,000 to \$10,000,000
Overview	<p>TOP Welding &amp; Construction (TOP) specialises in the fabrication and welding of piping and structural steel components, tanks/vessels in stainless steel and carbon steel.</p> <p>It can carry out weld procedures which are covered under ASMEB31.3, AS4041 and AS1554 Part 1, using various welding techniques and processes with TIG, MIG, STT, Flux Core and Sub Arc capabilities.</p> <p>TOP has a Quality Management System fully accredited to AS/NZS ISO 9001-2008 which provides 100% traceability of all materials and welding, together with vendor documentation.</p> <p>TOP also offers a full dimensional survey service on critical dimensional spooling to guarantee 100% fit-up in critical areas and shutdown periods.</p>
Key clients	Alinta Energy, Beach Energy, Exxon Mobil, Gasco, WOOD Group, Worley Parsons
Relevant experience	Over 45 years' experience with Exxon Mobil/Esso onshore and offshore, Bass Strait process plants at Long Island Point and Longford Gas Plant.

## Drakeford Studios

Established in 2018 in Yarram by locals Holly and Steph, Drakeford Studios provides graphic design and specialist printing services including:

- Wall stickers
- Small format printing
- Large-scale signage
- Metal signage
- Corflute signage
- Temporary stickers
- Car signage
- Logo stickers.

Drakeford Studios puts creative design at the forefront of everything they do and understand how to make a business stand out.

They have supplied Star of the South with office signage, small and large-scale printing, and workwear.

*"This new offshore wind industry will be a great asset to Gippsland businesses, providing more jobs for our community and a cleaner future."*



Photos courtesy of Drakeford Studios

Phone: 0477 716 568  
Website: www.drakefordstudios.com.au

# Victorian businesses



Photo courtesy of Keppel Prince Engineering

<b>Supplier</b>	<b>Keppel Prince Engineering</b>
<b>Location</b>	Portland, VIC
<b>Website</b>	<a href="http://www.keppelprince.com.au">www.keppelprince.com.au</a>
<b>Categories</b>	Steel fabrication, wind tower manufacturing, wind tower fit-out
<b>Contract capacity</b>	\$50,000,000+
<b>Overview</b>	<p>Keppel Prince Engineering specialises in the construction, fabrication and maintenance of industrial structures and equipment.</p> <p>From wind farms to bridges, the team of 300 professionals has the experience and resources to deliver projects on brief, on time and on budget.</p> <p>Keppel Prince offer new solutions to build and maintain a sustainable future for customers, the environment and the community.</p>
<b>Key clients</b>	Acciona, Goldwind, Siemens, Alcoa, Telstra
<b>Relevant experience</b>	Keppel Prince has worked on some of the largest onshore wind farms in Australia. Keppel Prince's world-class facility is designed to fabricate, blast and paint, fit-out and store onshore wind towers, without double-handling. It also supplies and installs complex internal components such as platforms, ladders, electrical cables, lights and fall arrest systems.

<b>Supplier</b>	<b>Wilson Transformers</b>
<b>Location</b>	Glen Waverley, VIC
<b>Website</b>	<a href="http://www.wtc.com.au">www.wtc.com.au</a>
<b>Categories</b>	Electrical infrastructure
<b>Contract capacity</b>	\$50,000,000+
<b>Overview</b>	<p>Wilson Transformers (WTC) is the largest Australian owned and based manufacturer of power and distribution transformers. WTC operates two Victorian manufacturing facilities in Glen Waverley and Wodonga.</p> <p>For more than 80 years, WTC has been designing and building transformer products and providing life-time management services. It is committed to supporting local and global customers by delivering reliable and high-quality products that meet customers' requirements. Its products range from 16kVA single-phase pole mount transformers and three-phase 100 kVA compact MV substations, right up to three-phase 550MVA 400kV transmission transformers.</p> <p>Through collaboration with international organisations combined with its ongoing focus on innovation, WTC has pioneered a range of alternative solutions that are commercially and technically attractive, for different sectors. Its ideas, experience and commitment to continuous improvement enable it to provide products that minimise the customer's whole-of-life cost and operational risks.</p> <p>Hundreds of thousands of WTC's transformers are in service around Australia and other parts of the world.</p>
<b>Key clients</b>	Ausnet, Goldwind, UGL, Acciona, Downer EDI
<b>Relevant experience</b>	<p>Wilson Transformers has provided products and services to a wide range of renewable energy projects, including:</p> <ul style="list-style-type: none"> <li>• Portland Windfarm</li> <li>• Waubra Windfarm</li> <li>• Ararat Windfarm</li> <li>• One Sun Capital Solar Farm.</li> </ul>

# Australian businesses

Supplier	Garde Services
Location	Silverwater, NSW
Website	www.garde.com.au
Categories	Underground cable installation
Contract capacity	\$50,000,000+
Overview	<p>Garde Services is Australia's leader in underground infrastructure services to the electricity industry, and a NSW Level 1 Accredited Service Provider (ASP).</p> <p>Garde Services is a specialist supplier to the electrical construction industry, focussed on civil construction, that supports the installation, maintenance and protection of high voltage underground electricity cables and assets. Garde has been responsible for the design, construction, and installation of transmission cables for numerous electricity authorities, including Ausgrid, TransGrid, and Endeavour Energy, over the past 40 years.</p> <p>Garde Services supports the installation, maintenance, and protection of high voltage underground electricity cables and assets.</p> <p>Various cable installation methodologies are utilised, including open trench excavations, ducted excavations, tunnels, submarine cables and underground tunnels and chambers. The scope of installations ranges from urban streets to rural areas and includes switch stations, substations and power stations.</p>
Key clients	TransGrid, Ausgrid, Endeavour Energy
Relevant experience	As part of the 330kV Powering Sydney's Future project, Garde was awarded the contract for the installation of 20km of 330kV underground transmission feeder cables from Transgrid's Rookwood Road Substation to Alexandria Substation. Garde were also heavily involved in the circuit design and



Photo courtesy of Incat

Supplier	Incat
Location	Hobart, TAS
Website	www.incat.com.au
Categories	Boat builder, Crew Transfer Vessels, Service Operation Vessels
Contract capacity	\$50,000,000+
Overview	<p>With a workforce of over 400, Incat is a builder of large (100+ metre) and small (24 metre) ropax/pax only ferries and offshore support vessels.</p> <p>Incat has been in continuous operation for 50 years. It has 77,000m<sup>2</sup> of covered construction halls, two covered drydocks, two slipways and over 180m of wharf space.</p>
Key clients	<ul style="list-style-type: none"> <li>• Port Authority of Trinidad and Tobago</li> <li>• Transport for NSW</li> <li>• Armas</li> <li>• Molslinein</li> <li>• Caspian Marine Services</li> <li>• Buquebus</li> <li>• Virtu Ferries.</li> </ul>
Relevant experience	<p>Incat is a world leader in design and construction of lightweight aluminium transport solutions and is currently building the world's largest zero emission ferry.</p> <p>It has delivered over 80 vessels, including 52 vessels in excess of 70 metres length overall (LOA).</p>

# Australian businesses



## AUSTRALIAN BUSINESSES

### Thank you to all suppliers registered on the ICN Gateway

1300 4 Flit	ARC Helicopters	Blastone International (Australia)	CNC Project Management	Eae Group Australia
29 On Wharf	Arcelormittal Projects Australia	Bloore & Piller	Cnood Australia	Eagle Eye Innovations Australia
2H Offshore Engineering	Arcflash Electrical Consultants	BLTR Integrity	Coastal Steelfixing Australia	Ealwin Operations
360Protect	Ares Project Services	Blue Ocean Marine Services	Comacon	Eastern Generator Hire
3B Survey	Armorgalv (Australia)	Blue Planet Marine	Commnet Network Solutions	Eastern Power Services
3D Concrete And Construction	Arrow Electronics Australia	Blue Water Shipping	Compressed Air Australia	Eaton Electrical (Australia)
3D Engineering Global	Arrow Pipes & Fittings Fzco	Blue Whale Steel	Concept Fibres	Eclipse Aeronautical
A. Noble & Son	Asia Pacific Steel	Bluecoast Consulting Engineers	Consolidated Plant Services	Ecology And Heritage Partners
A.C. Hargreaves	Asiaworld Shipping Services	Bluemont	Construction Time Lapse	ECS Project Logistics
A.M.C. Search Limited	ASP Ship Management	Bluescope Distribution	Contract Resources	Edcorp Project Solutions
A2B Trailers	Assembled Threads	Bluezone Group	COOE	EDG Australia
AAM	Atlas Copco Australia	BMC HV Electrical & Instrumentation	Coopers Timber & Hardware	Edward James Landwehr
Abbott Risk Consulting	Atlas Engineering Australia	BMC Welding & Construction	Core Contracting Group	Eftech International
Abco Security Services	Atlas Programmed Marine	BMT Commercial Australia	Corefleet	Egis Oceania
Aberlay Transport	Atos (Australia)	Boat Harbour Jetty B&B	Corestaff Vic	Eifer'S Group
Abratech	ATS Enterprises	Bollore Logistics Australia	Coreworx Group	Eilbeck Cranes
Accelerated Concrete Sawing	Attention To Detail Painting Services	Boltco	Cortexia	Electric Motor Power
Accent Environmental	Atteris	Boom Logistics	Cozalive Media	Electro 80
Access Safety Services	Aurecon Australasia	Boskalis Australia	CPB Contractors	Empire Cranes
Ace Aquatec	Aus Instrelec	Bouygues Construction Australia	CQMS Castings	Employment Group
Acmena	Aus Iron Industries Vic	Brady's Truck & Automotive	Craig Terrance Hooper	Eneraque
ACR Complete Hire	Aus Wide Chauffeur Services	Brenniston First Aid And Workplace Safety	Cranes Asphaltting & Bitumen Sealing	Energy Group Consult
Adapt Australia	Ausco Modular	Brooks Hire Service	CRE Civil Group	Energy Power Systems Australia
Adra Group	AUSREO	BT Transport & Logistics	CRINNAC	Enermech
Advanced Composite Structures Australia	Austfluid Link Asia Pacific	Build Enviro Consulting Group	Cromarty	Engage Marine
Advanced Cranes & Rigging Australia	Australian Electrical Industries	Bullivants	Crowley Australia	Enpower Australia
Advanced Technology Products	Australian Maritime Systems Limited	Bunbara	CSA Specialised Services	Envirogain
Aerologix	Australian Offshore Solutions	Bunji Hire	CSE Crosscom	Environmental Projects
Afi Telecommunications Australia	Australian UAV	Bunzl Brands & Operations	CSE-Uniserve	Enviropacific Services Limited
Aggreko	Ausworkwear & Safety	Bureau Veritas Australia	Customs Agency Services	EPI Group Australia
AJP Consult	Auxilium One	BWH Hotel Group	Cyberloop Australia	Epic Environmental
Aker Solutions	Axess Offshore Australia	C.J.A. Lee & Associates	CYLAD Australia	Epsilon Instrumentation
	Azure Integrity		Daly'S Constructions (Australia)	ERGT Australia
				Erntec (Victoria)

# Focus topic: Ports Assessment



# Construction Ports

Multiple ports are expected to be needed during construction.

## Key requirements

- Up to 25 ha available land for turbines
- Up to 7.5 ha available land for foundations
- 12 m water depth
- Dedicated berth

We would use construction ports during Star of the South's construction phase, and from time-to-time during operations to support major maintenance activities, if required.



# Gippsland Operations Base

Day-to-day construction management, operations and maintenance activities.

## Key requirements

- Up to 1.5 ha available land for warehousing, and office, staff facilities and parking.
- 6 m water depth
- Dedicated berths for crew transfer or service operations vessels

Operates throughout construction, operations and decommissioning.



# Shortlisted port options

The Victorian Renewable Energy Terminal proposed at the **Port of Hastings** is our preferred primary construction port.

The **Geelong Port** and **Port of Bell Bay** are good secondary construction port options. Both are existing deep-water ports with suitable facilities and available land.

**Barry Beach Marine Terminal** and **Port Anthony** are good options for the long-term Gippsland Operations Base. These already established commercial ports are close to the proposed wind farm site.



# Preferred Primary Construction Port

## PORT OF HASTINGS

- Victorian Renewable Energy Terminal (VRET)
- Ideal location
- Dedicated berth
- Bespoke offshore wind layout proposed ensures adequate storage space
- Well suited to service turbine components



# Secondary Construction Port

## GEELONG PORT

- Potential option in multi-port solution for secondary, contingency or overflow of components
- Up to 20.7 ha of freehold land could be made ready in time



# Secondary Construction Port

## PORT OF BELL BAY

- Existing Berth
- 'Ready to go' facilities, minimal improvements needed
- Limited storage space for turbine components
- Sufficient laydown for foundation components
- Full services readily available
- Accessible and navigable



# Gippsland Operations Base



## **BARRY BEACH MARINE TERMINAL OR PORT ANTHONY**

- Close proximity to project
- Proposed multi-user facility for offshore wind
- Local employment and industry opportunities
- Harnesses oil and gas experience
- Shallow waters within Corner Inlet



# Other business

# Other business

- CAG End of year Break-up
- Other questions and feedback?
- Suggestions for future agenda items?
  - List on the CAG Member Teams Page 'files'
  - Email/call Jason
- Next meeting – 5 October 2023

## Forward meeting schedule

Date	Location	Topic (tentative, subject to change)
5 October	Yarram	Marine environmental assessment update (including birds, marine mammals, seafloor ecology)
15 November	Foster / South Gippsland	Potential for a Barry Beach site visit.
December (TBC)	TBC	Xmas breakup

Thank you for your participation