



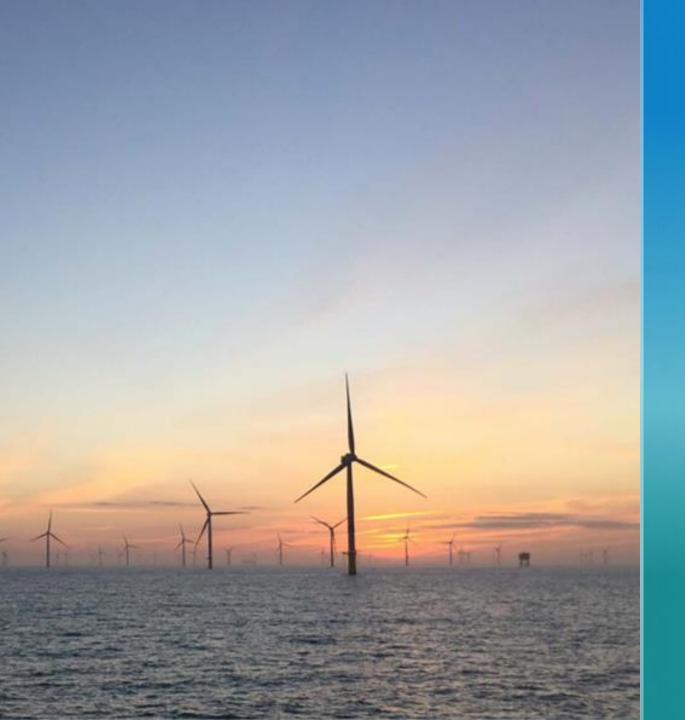
We acknowledge the Gunaikurnai people as the traditional custodians of the land and pay respect to their elders past and present



Agenda

- 1. Welcome
- 2. Standing items and actions
 - Apologies
 - Minutes and action items
 - Declaration of potential conflicts
- Focus topic: VicGrid Gippsland offshore wind transmission study area announced,
 March 2024
- 4. Break (10 min)

- 5. What's happening on the project
- 6. What's happening in the community
- 7. Australia-Germany Energy Partnership
- 8. Other business
 - Other questions or feedback
 - Key messages
 - Suggestions for future agenda items
 - Next meeting 23 May 2024 (*Flexible pending FL announcements)
- 9. Meeting close





Focus topic: VicGrid – Gippsland offshore wind transmission study area announced, 22 March 2024

Offshore Wind Energy Transmission in Gippsland

Star of the South, Community Advisory Group meeting, 17 April 2024

Danny Benjamin

Executive Director, Delivery





Who are we?





Policy

We provide advice to Government to develop policies that apply to how electricity is transmitted in Victoria.



Planning

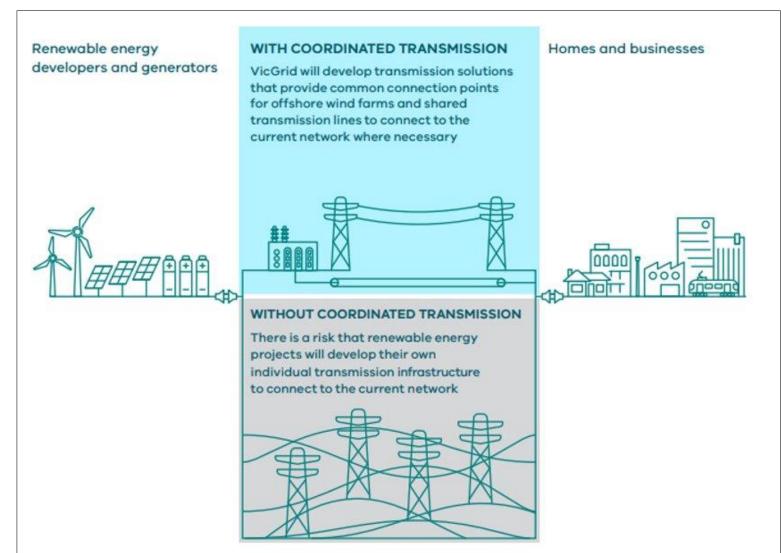
We plan for Victoria's future energy needs through modelling, and detailed engagement with Victorian communities.



Projects

We oversee the procurement of new transmission projects required for the energy transition (wiring, substations, and batteries).

Offshore wind energy transmission





The 'spaghetti effect' is where offshore wind energy developers would develop multiple, private transmission lines.

This increases impacts on local communities and the environment and drives up power bills.

What we've done to date

- We engaged through 2023 on the Assessment Method to identify potential study areas and suitable technologies for offshore wind transmission.
- Community, landholder and First Peoples feedback has informed our decision-making by incorporating local knowledge in the criteria we used to assess a wide range of different project options.
- We've now identified a preferred study area and connection hub area for the project.

Phase 1

Sharing information and refining our engagement approach

Early – mid 2023

Phase 2

Developing our Options
Assessment Method
through consultation

Mid 2023

Phase 3

Assessing options using published Options
Assessment Method

Mid - late 2023

Phase 4

Confirming preferred options and next steps

early 2024







Preferred study area and connection hub area

- Avoids major townships
- Includes a lower proportion of agricultural and private land than most other options
- Provides opportunities to explore alignment with existing infrastructure
- Requires further investigation to help reduce impacts on agricultural land and important environmental and cultural sites.

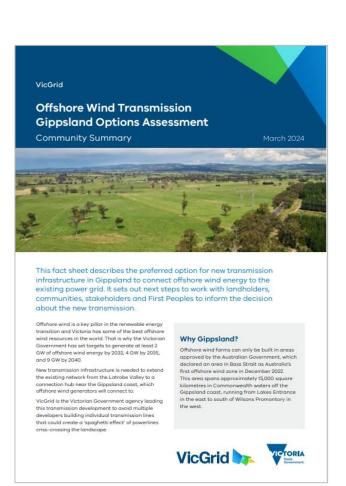
Proposed technology type

 Double circuit 330 kilovolts (kV) or 500 kV overhead transmission line (high voltage alternating current – HVAC).

Supporting landholders

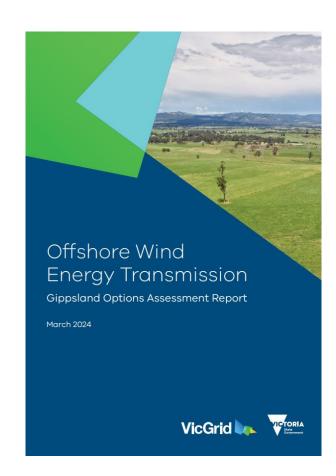
VicGrid invites landholders in the study area to meet our team.

- Dedicated landholder engagement team to work directly with potentially impacted landholders.
- Offering in-person meetings at location of choice.
- Dedicated landholder hotline and email address available.
- Hosting landholder roundtables.
- Appointed an Independent Facilitator.



Supporting the community

- Gippsland Options Assessment Report offering transparency in our decision-making.
- Pop-ups and drop-in sessions across the region.
- Dedicated community hotline.
- Engage Victoria and VicGrid website, including an online interactive map and Q&A function where you can ask questions and get answers.
- Fact sheets about key topics of interest.

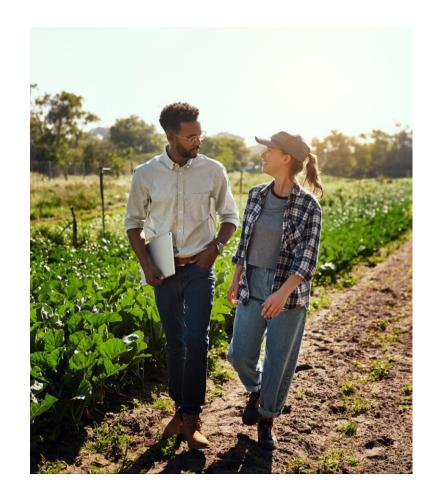






Next steps

- We'll work closely with the landholders and communities in this study area to progressively refine the area to a preferred corridor, and then ultimately a route and easement.
- We're also working closely with the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) to understand cultural values.
- There will be multiple opportunities for involvement in this process and we will strongly encourage communities and landholders to actively participate.



Questions









How we got here and what's next

- VicGrid developed a **long list of 12 transmission corridor options** by mapping existing land uses, features, values, and areas of sensitivity to identify potential pathways.
- VicGrid developed a **long list of 8 transmission technology options** using technical specialists, industry-specific planning and technical information, and transmission planning criteria.
- The five best-performing options were shortlisted for detailed assessment using the Options Assessment Method. This assessment identified a **preferred option and study area.**
- We have released a **Gippsland Options Assessment Report** offering transparency in our decision-making.
- Further engagement and **environment**, **heritage and planning investigations** are needed to refine study area and determine corridor and connection point locations.





Indicative project timeline

2024	2025	2026 - 2027	2027 - 2030
In depth engagement and approvals	Delivery and commissioning		
Refine Study Area to identify preferred corridor	Refine corridor to identify preferred route	Refine route to confirm transmission easement	Construction of new transmission ready for at least 2 GW by 2032 offshore wind target

Community and landholder engagement
Traditional Owner/First Peoples engagement and partnership approach

Note: This timeline and associated activities are indicative and subject to change





Break



What's been happening on the project

Events:

Toora Town Triathlon and Family Day,

Foster Show,

Latrobe City Jobs Expo,

Tarra Festival – Lions Club Monday Market,

Presentations:

Gippsland Southern Health Service Board,
Wantirna South Probus Association,
Maffra Secondary College,
Getting Involved in the New Energy Supply Chain,

- Planet Wind at the Yarram Regent Theatre.
- Gippsland Women in New Energy launched at Carrajung Estate on International Women's Day.
- Boat ramp surveys at Port Albert and Port Welshpool.
- Clean Economy Workforce Transition Framework for Gippsland launched in Morwell.
- Bambach Wires and Cables site visit.











What's coming up

Events and presentations:

- Catholic College Sale Yr.11 Students,
- The Trade & Tech Fit Career Expo,
- Fish Creek Tea Cosy Festival Market Day,
- VIC State Budget Address,
- South East Australian Transport Strategy,

Minister may publicly declare feasibility licence holders in April - May



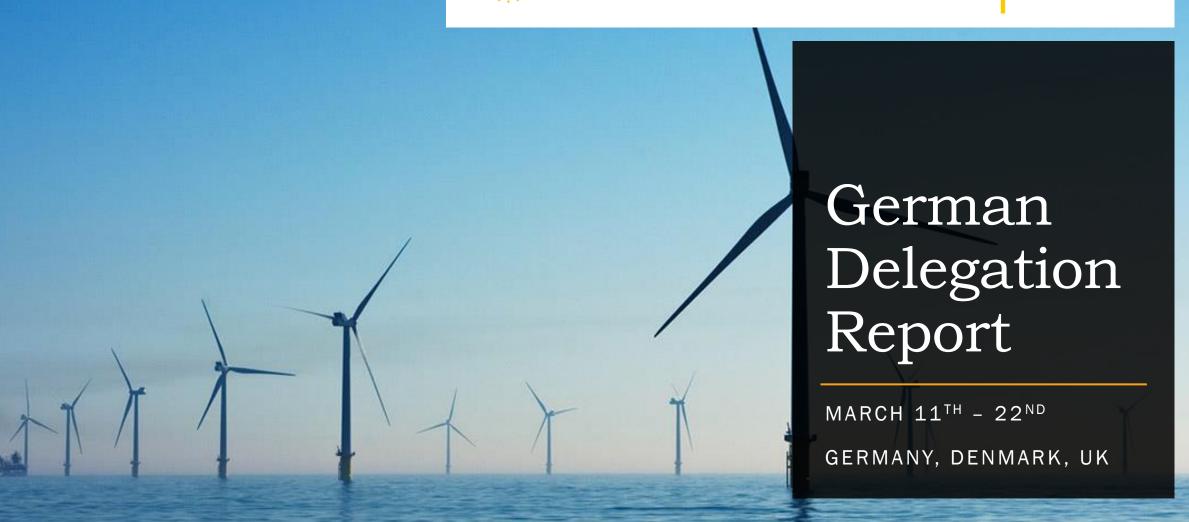


What's happening in the community

- Community updates
 - How do you want this format to run?
 - Nominated speakers?
- 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?





Itinerary

DATE	EVENT	PARTICIPANTS
March 11 th – March 14th	Delegation on Offshore Wind Deployment in Australia and Germany Berlin – Hamburg – Cuxhaven - Hamburg	Dan Clancey Nanoo Nanoo, Joe Harber, Clean Energy Finance Corporation (CEFC), Llewelyn Hughes Australian National University, Professor Syed Islam, Centre for New Energy Transition Research, Federation University Australia, Susie Kropman Manager, Offshore Renewables Strategy and Partnerships (DCCEEW), Josh Liew Manager, Offshore Wind Supply Chain and Workforce, (DEECA), Glen McColl Latrobe City Council, Morgan Rossiter Director – Offshore Wind, Clean Energy Council (CEC), John Whittington CEO, Blue Economy CRC. Ms. Cecilia Strandberg, Project Director Energy Cooperations, Renewables Academy (RENAC), Ms. Jana Detmering, Project Assistant
March 18 th	Port of Esbjerg, Denmark	Michael Hannibal Copenhagen Infrastructure Partners, Dennis Jul Pedersen: CEO Port of Esbjerg
March 19 th	Copenhagen, Denmark	Maja Østergaard: Head of Partnerships. State of Green
March 22 nd	London, UK	Chris Jenner: Development Director at Corio Generation

German Context



Heavily industrialised nation with advanced manufacturing base

European Green Deal. Carbon neutral by 2050.

Working together with Dutch, Belgium and Scandinavian Governments

First offshore wind turbine in 1991. Currently 8GW. 380,000 people employed in renewables.

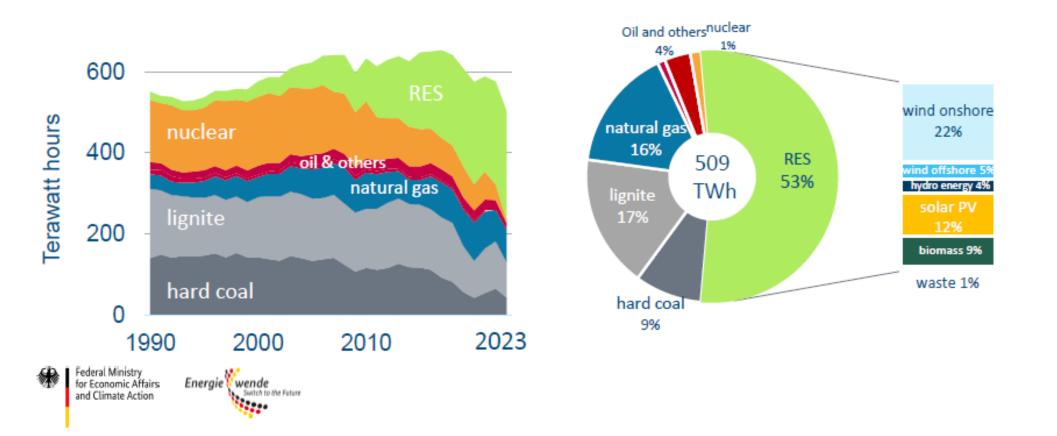
Ambitious renewable targets. 51% currently with totally renewable by 2045 with 30GW OSW.

War in Ukraine causing gas shortages

Source: Guidehouse, January 2024 based on Agora Energiewende 2024, UBA 2023 & BDEW 2023

Renewables have become Germany's No. 1 source of electricity

Development and status quo of gross electricity generation by sources in Germany in 2023





Delegates Report

Germany – Denmark – UK March 2024



Prof. Dr. Martin Skiba

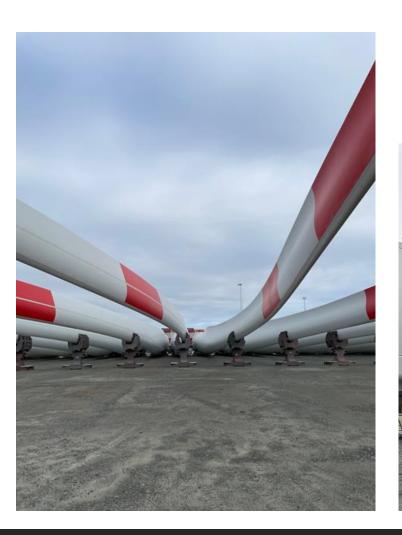
Vice Chairman of World Forum Offshore Wind (WFO), board member of German Offshore Wind Energy Foundation,

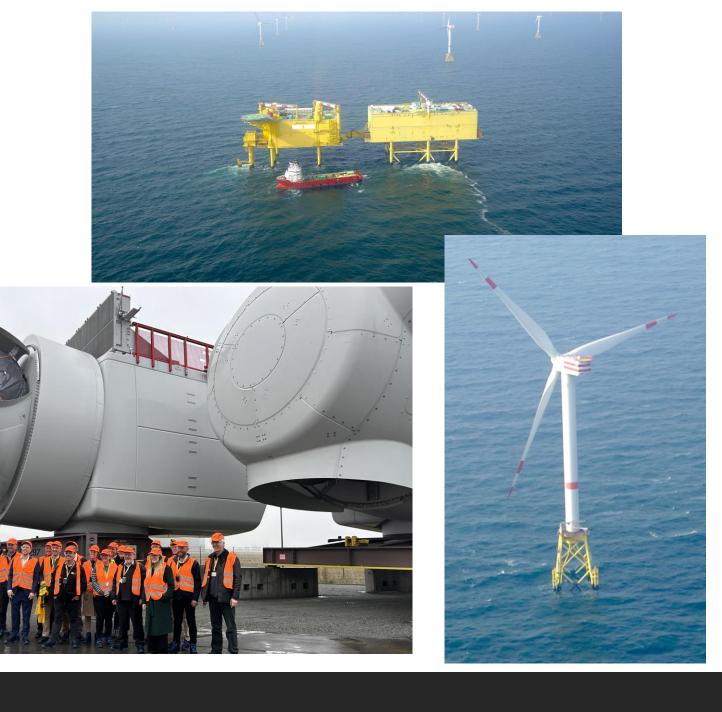


"You need to consider three things.

Developing an Offshore Wind industry will be more expensive than you have anticipated, it will take longer than you planned and you should give consideration to early adopters so you can learn from your mistakes"

Wind Turbines are extremely big and very expensive





- Closest wind zone is 30km from shore. Most new zones are 100km 200km
- Transmission ownership up to the convertor station.
- Active Monitoring and Maintenance.
- Warning systems for migratory birds or whales (AI).
- Sovereign risk.
- Security/cyber.
- Should environmental assessment be done by Government or by proponents?
- HVDC or HVAC?
- No effects on fish stocks.
 Commercials excluded from zone





"Offshore wind is about 5 times more expensive than onshore. We need to find ways to develop more onshore wind"

Dr. Falk Bömeke, German Federal Ministry for Economic Affairs and Climate Action (BMWK)

"Offshore wind is easier because fish don't vote"

Dr Dirk Biermann, CEO 50Hertz



"The Port of Esbjerg installs 1GW of offshore Wind each season"

Ports

CUXHAVEN - GERMANY

PORT AREA: 230 HA, CARGO 2.5 MILLION TONNES,



ESBJERG – DENMARK

Dennis Jul Pedersen: CEO Port of Esbjerg

PORT AREA: 350 HA, CARGO; 4 MILLION TONNES

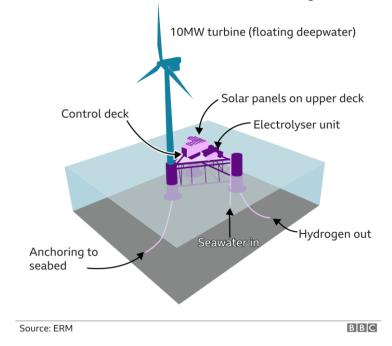


Hydrogen

Hydrogen Islands

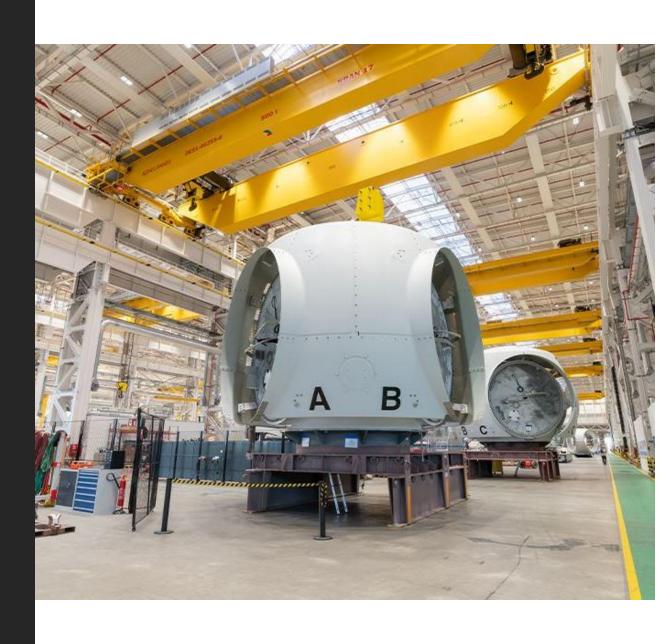


Turbines with electrolysers



Supply Chain

- Very doubtful we would have an assembly plant under current politics.
- Supply chains already developed for overseas assembly plants. (more needed to handle demand 6X). Danger of Fire hydrants and ladders
- Many people employed downstream of supply. Service industries.
- Find funding channels for supply chains
- "Find something you are world champions of"
- Jackets and Towers
- Mandated local content



Chris Jenner

Development Director at Corio Generation on 1.5GW Outer Dowsling OSWF, off Hull in the UK



"At peak construction we expect about 1500 jobs with about 200 – 300 jobs ongoing during operation"

"A 2GW wind farm will need 10 supply vessels each with a crew of 8 – 10"

Michael Hannibal – Partner, Copenhagen Infrastructure Partners



CREATE ARCHITECTURE BUFFER

MEGATRON GREEN ENERGY PARK, DENMARK

T- PYLONS

NATIONAL GRID, UK





Maja Østergaard

Head of Partnerships State of Green



"When you compensate people you buy into their victim mentality. Better to provide heavily subsidised shares in the process then people consider the infrastructure an asset"



Summing up

Key takeaways

Llewelyn Hughes

Australian National University Professor at the Crawford School of Public Policy

- 1. The scale of the industry is completely different from other renewables technologies. This is not plug-and-play, but requires careful planning for the long-term.
- 2. There are real opportunities for industry development for Australia, but this will require a national industry policy for offshore wind, including port and workforce planning, and a careful assessment of value-added opportunities.
- 3. A national capacity target will help provide certainty to developers and OEMs. That requires an assessment of the role offshore wind is going to play in the Australian energy system going forward.



Key takeaways



OFFSHORE WIND IS BIG AND EXPENSIVE



WE CAN DELIVER TRAINING



GIPPSLAND NEEDS TO BE IN THE ROOM



"SEIZE THE DAY"
GIPPSLAND AS A
RENEWABLE HUB.



DEVELOP HYDROGEN PRODUCTION



CREATE SUPPLY
CHAINS
OPPORTUNITIES



URGENTLY BUILD PORT INFRASTRUCTURE



SET RENEWABLE TARGETS

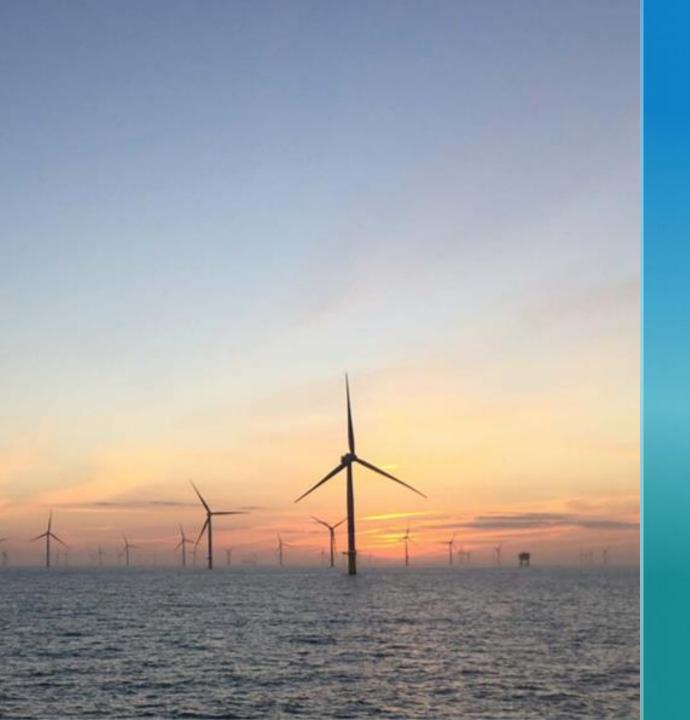


CONFIRM COMMUNITY BENEFIT MODELS











Other business



Other business

- Other questions and feedback?
- Suggestions for future agenda items?
 - List on the CAG Member Teams Page 'files'
 - Email/call Jason
- Next meeting 4 April 2024 in Sale

Forward meeting schedule

Date	Location	Topic (tentative, subject to change)
23 May	Yarram (Venue TBC)	(TBC)
4 July	South Gippsland	(TBC)