

Gippsland Offshore Wind Geophysical Survey Proposal

Energise Renewables & XOCEAN

Executive Summary

XOCEAN bring extensive knowledge and experience from their global survey operations across a range of markets. Energise Renewables (Energise) contribute global and Australian offshore wind experience and insight into the Australian marine and regulatory regime.

Together, XOCEAN and Energise are proposing a **regional geophysical survey campaign** which present a significant opportunity for interested parties to gain early insight into marine seabed conditions with minimal risk and a cost-efficient approach.

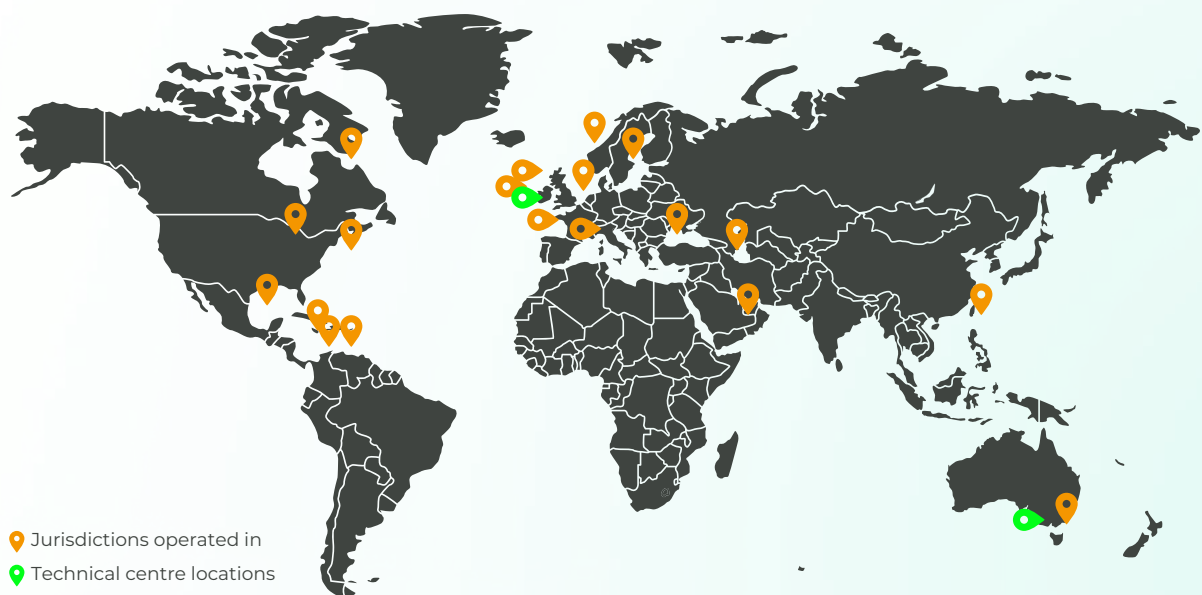
An opportunity for industry collaboration and significant commercial benefits presents itself in Gippsland as several proponents seek to understand existing seabed conditions in the marine environment adjacent to potential landfall sites. This paper outlines the benefits to developers and local stakeholders of joining the regional geophysical survey campaign.

XOCEAN specializes in providing geophysical survey data to offshore developers, in a safe, efficient, and sustainable way.

XOCEAN use carbon-neutral, low-impact Uncrewed Surface Vessels (USVs) to collect large volumes of ocean data to the highest industry standards. Our innovative technology and working practices are delivering trusted, actionable data to the world’s largest renewable energy companies. To date we have supported the development of 45GW of new offshore wind.

During H1 2024, we successfully completed 225 offshore windfarm missions, travelling 159,300km and avoiding 35,910 tonnes of CO2 emissions. To date, we have operated in 22 jurisdictions, harvesting over four million gigabytes of high-quality data. We continue to expand our global footprint, bringing our expertise to the emerging Australian market where we have recently established a state-of-the-art technical centre in Springvale, Melbourne.

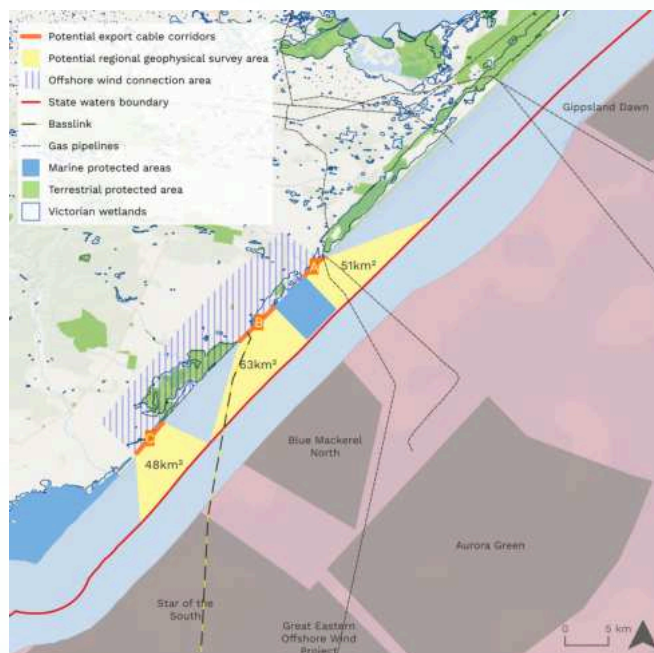
Energise Renewables are leading experts in early phase development as an expert boutique clean energy consultancy with deep expertise in the offshore wind sector locally and globally. Energise consists of a strong and diverse team with skills and experience across the development, commercial and technical disciplines focused on supporting the early-stage development of offshore wind in Australia. The team has 35 years of collective experience of offshore wind in Australia. Drawing on our team members with global experience and those with local Australian experience we bridge the gap between global offshore wind best practices with the local understanding of regulations, supply chain, local stakeholders and operational conditions/constraints. The team has delivered offshore site investigation scopes in the Bass Strait for offshore wind, transmission infrastructure and oil and gas operators so have the practical experience required to deliver efficient and high-quality site investigation campaigns.



XOCEAN has operated in 22 jurisdictions around the world including the Bass Strait, Victoria

Context

Following the recent award of 12 Offshore Wind Feasibility Licences in the Gippsland offshore wind zone, a number of licence holders are seeking to progress early phase feasibility activities, including geophysical investigations as part of commencing their development. VicGrid, the State Governments transmission planner, is developing shared transmission to connect offshore wind energy generated off the Gippsland coast to the grid. This includes identifying a Connection Hub in Giffard and a 'connection area' along the coast of 90-mile beach between Woodside Beach and Seaspray.



Note: Potential regional geophysical survey area presented here is preliminary for discussion and refinement with interested parties

Nominating a single connection hub into the shared network and in an area with limited suitable landfall to bring in export cables presents challenges and opportunities for licence awardees which are set out further below.

The Challenge

Conducting multiple geophysical surveys over the same areas is a fundamentally inefficient use of resources and creates needless project risk through increased offshore activities and has the potential to negatively impact the environment and communities.

- **Stakeholder Engagement:**

Ensuring all parties are informed and involved in the process can be complex and time-consuming. A single survey campaign would minimise the visible footprint of operations and reduce multiple points of engagement for relevant stakeholders.

- **Operator SIMOPS (Simultaneous Operations):**

Coordinating multiple operations at the same time can lead to logistical difficulties. Progressing a single campaign would minimise capacity and logistical issues.

- **Economic inefficiency:**

The current approach to surveying and data collection can be costly and time-consuming. A single campaign maximising data collection to serve multiple clients brings with it inherent efficiency.

- **High risk collected data will not be used:**

Early geophysical data may prove an area to be unsuitable for development. Lowering costs during early phases of development enables a wider area to be surveyed and minimises risk for the project.

Opportunity

Conducting a regional geophysical survey campaign utilising a team with global and local experience will reduce costs as well as project and environmental risk significantly.

- **Expanded survey to capture areas of interest for all developers:**

By broadening the survey area, valuable data will be provided to all interested parties including potential alternative areas of interest.

- **Low impact solution:**

This approach reduces environmental impact compared to having multiple vessels survey the same area.

- **Economically efficient/ lower cost:**

By streamlining operations and leveraging existing resources, mobilisation and demobilisation costs will be significantly reduced, reducing the overall cost of the campaign

- **Data available in Q4 – Ahead of the curve:**

Efficient data processing will assure that MBES and SBP data sets will be available in Q4 2024, giving developers an opportunity to accelerate design and development.

- **XOCEAN asset inspection survey contracted within the area of interest for grid connection already:**

This existing surveying operation can be exploited to cover a wider scope with minimal operational overheads.

- **Consents and approvals managed:**

All required consents will be managed by Energise's experienced approvals team with targeted scope specific controls in place.

- **Regulator engagement:**

An early opportunity to demonstrate industry collaboration and reduce the administrative burden on relevant regulators and community engagement stakeholders.

- **Low impact on key endangered species**

Utilising XOCEAN USVs ensures there is an inherently low potential collision and noise impact on local endangered whales such as the Southern right whale and Pygmy blue whale. In-depth understanding of technology and Australian under water noise requirements enables targeted and fit for purpose controls to be implemented from the outset.

- **Safe offshore operations supported by local companies:**

By removing personnel from the offshore operation, the risk to personnel is reduced. Continuous monitoring and remote operations ensures the safety of other marine users in the area. Launch, recovery and emergency response are supported by local marine service companies.

Proposal

XOCEAN and Energise Renewables are set to undertake focused geophysical data collection in potential grid connection zones for Gippsland region offshore wind development projects. This collaborative effort will enable cost-sharing among participants, ensuring efficient data acquisition in areas of mutual interest, and consolidation of stakeholder engagement to minimise footprint and touch points.

- **Proportion of cost paid upfront by all participating developers:**

This shared cost model ensures all parties have a stake in the project.

- **Specification signed off by Energise Renewables**

This ensures all data collected meets the highest industry standards.

- **Developer oversight welcome to participate:**

Developers are invited to be involved in the process, ensuring transparency and collaboration.

- **Clear division of responsibilities:**

XOCEAN execute data acquisition, Energise provide quality assurance of data collected against the specification. XOCEAN, Energise and Client remain informed throughout. XOCEAN to process the data and licence use of the data and deliverables to participants. This clear division of responsibilities ensures efficiency and accountability.

- **Delivery of data early and to required specifications at a reduced cost to all, a truly win-win scenario.**

Proposal Worked Example

The specific survey areas are still to be defined with consultation with interested proponents, however the principle that will be applied is:

The price of surveying the whole area is shared between the number of firm proponents committed by an agreed date. The more parties involved, the lower the fee. An additional gap fee to bring the proponents' individual contribution up to a cap of 70% of the total area price is due upon the earlier of successful Victorian Government Contract for Difference (CfD) or grid connection agreement.

	N	4 Proponents	5 Proponents
Total survey area price	A	\$1,200k	\$1,200k
Proponent initial fee (payable on receipt of data)	$B = A/N$	\$300k	\$250k
When proponent successful with CfD or grid connection	$C = Ax70\% - B$	\$540k	\$590k
Total Paid if successful	$T = B+C$	\$840k	\$840k
Saving if successful	$A-T$	\$360k	\$360k
Total paid if project does not proceed to CfD or grid connection	B	\$300k	\$250k
Saving if unsuccessful	$A-B$	\$900k	\$950k

Numbers are illustrative only, final values will be presented as part of commercial proposal.

This clearly demonstrates a low risk solution for early data and delayed DEVEX spend to when the project is more certain and maintain a discount in all cases for the developer.