

# TETHYS BLAST

1 August 2025

[Tethys](#) is a knowledge hub with information and resources on the environmental effects of wind and marine energy. The bi-weekly [Tethys Blast](#) highlights announcements and upcoming events; new documents in the [Knowledge Base](#); and international energy news. [ORJIP Ocean Energy](#) has partnered with [OES-Environmental](#) to provide additional content. [Email us](#) to contribute!

---

[Announcements](#)  
[Upcoming Events](#)

[Marine Energy Documents](#)  
[Wind Energy Documents](#)

[Marine Energy News](#)  
[Wind Energy News](#)

---

## Announcements

### New Triton Animation

Triton's Acoustic Particle Motion project is studying how fish and invertebrates respond to acoustic particle motion and substrate vibration to increase understanding of acoustic effects from marine energy noise emissions. The team recently published a new [Acoustic Particle Motion and Ocean Energy Animation](#). For more information on acoustic particle motion and Triton's research, read the latest [Triton Explains: Acoustic Particle Motion and Marine Energy](#).



## SULI/CCI Applications Open

The U.S. Department of Energy's (DOE) Office of Science is now accepting applications for the Spring 2026 term for the [Science Undergraduate Laboratory Internships \(SULI\) program](#) and the [Community College Internships \(CCI\) program](#). Join the [CCI Applicant Support Workshop](#) on 6 August 2025 and the [SULI Applicant Support Workshop](#) on 14 August 2025. Applications are due 1 October 2025.

## Scottish Consultation

The Scottish Government recently launched a consultation on the [Strategic Compensation Policy for Offshore Wind](#), which closes on 1 September 2025. The proposals aim to provide new opportunities for investment to conserve Scotland's marine environment by enabling a more flexible approach to compensation requirements.

## UK Consultation

The Department for Environment, Food and Rural Affairs is seeking views on its proposed [Offshore Wind Environmental Compensatory Measures Reforms](#) through 2 September 2025. The reforms are intended to provide more clarity on requirements for environmental compensation when unavoidable damage to a Marine Protected Area occurs during offshore wind development.

## Request for Proposals

Battelle Memorial Institute, Management & Operating Contractor of the U.S. DOE's Pacific Northwest National Laboratory (PNNL), is [requesting proposals for a tidal turbine system](#). Interested parties are invited to submit a proposal by 5 September 2025.

## Calls for Abstracts

The [Call for Abstracts](#) for the [Ocean Sciences Meeting \(OSM\) 2026](#) is open until 20 August 2025. OSM 2026 will take place on 22-27 February 2026 in Glasgow, Scotland.

The Marine Alliance for Science and Technology for Scotland (MASTS) has opened the Call for Abstracts for the [15<sup>th</sup> MASTS Annual Science Meeting \(ASM\)](#) until 29 August 2025. The ASM will take place on 18-20 November 2025 at the University of Strathclyde in Glasgow, Scotland.

The [Call for Abstracts](#) for [Torque 2026](#) is open through 1 September 2025. Torque 2026 will take place on 3-5 June 2026 in Bruges, Belgium.

The [Call for Abstracts](#) for [WindEurope's Annual Event 2026](#) is open through 5 September 2025. WindEurope 2026 will take place on 21-23 April 2026 in Madrid, Spain.

The [Call for Proposals](#) for the [Offshore Technology Conference \(OTC\)](#) is open until 9 September 2025. OTC 2026 will take place on 4-7 May 2026 in Houston, Texas, USA.

The [Call for Abstracts](#) for the [Pan-American Marine Energy Conference \(PAMEC\)](#) is open until 15 September 2025. PAMEC will take place on 12-15 April 2026 in Rio de Janeiro, Brazil.

The [Call for Abstracts](#) for the [39<sup>th</sup> International Conference on Coastal Engineering \(ICCE\)](#) is open through 1 October 2025. ICCE 2026 will take place on 17-22 May 2026 in Galveston, Texas, USA.

The [Call for Abstracts](#) for the [European Energy Research \(EERA\) DeepWind Offshore Wind Research and Innovation Conference](#) is open through 15 October 2025. The conference will take place on 14-16 January 2026 in Trondheim, Norway.

### Funding & Testing Opportunities

Offshore Renewable Energy Catapult is accepting applications for the [Wales Innovation in Marine Monitoring Competition](#), which aims to provide targeted support and remove barriers to encourage UK marine monitoring businesses to enter the offshore wind supply chain, enabling the development of Irish and Celtic Sea projects. Applications are due 31 August 2025.

Supergen Offshore Renewable Energy (ORE) Hub has opened its [6th Flexible Funding Call](#) and is seeking research proposals from universities or other eligible institutions to facilitate a program of coordinated, UK-led ORE research projects in partnership with the Hub. Expressions of interest are due 1 September 2025, and full proposals are due 15 September 2025.

The Offshore Wind Growth Partnership has opened applications for the [Wind Expert Support Toolkit \(WEST\)](#) programme. WEST is a short-term intervention activity which aims to support growth of UK offshore wind supply chain companies through provision of specialist advice, market intelligence, and strategic insight into the sector. Applications are due 5 September 2025.

The Testing Expertise and Access for Marine Energy Research (TEAMER) program, sponsored by the U.S. Department of Energy and directed by the Pacific Ocean Energy Trust (POET), is accepting [Request for Technical Support \(RFTS\) 17](#) applications through 3 October 2025 to support marine energy testing and development projects.

### Career Opportunities

The University of Manchester is offering a funded PhD position (UK students only) focused on [Characterisation of Offshore Turbulent Conditions](#). This research aims to provide a comprehensive characterisation of offshore turbulent conditions that define the performance and siting of offshore renewable energy devices. Applications are due by 1 August 2025.

The International Council for the Exploration of the Sea (ICES) is seeking an experienced and strategic leader to serve as [Head of the Advice Department](#) and coordinate the development and delivery of impartial and transparent advice to governments and intergovernmental organizations. Applications are due by 17 August 2025.

Marine Energy Wales is hiring a [Membership Coordinator](#) to help keep their members informed, engaged, and excited to be part of Marine Energy Wales, as well as support event planning, business support, and development work. Applications are due by 21 August 2025.

University of Southampton is offering a funded PhD project focused on [Machine Learning for multi-channel underwater acoustic data](#). This project aims to develop machine learning techniques for processing data collected from an array of hydrophones sited off the Sussex coast. Applications are due by 31 August 2025.

The Fundy Ocean Research Centre for Energy (FORCE) is hiring a [Marine Optical and Acoustic Sensing Lead](#) to join the Ocean Sensors Innovation Platform project and be responsible for designing, executing, and refining monitoring programs focused on improving understanding of potential fish-turbine interactions in the dynamic environment of the Bay of Fundy, Canada.

---

## Upcoming Events

*The [Tethys Events Calendar](#) highlights key events from around the world related to wind and marine energy, including conferences, webinars, workshops, and more.*

### Upcoming Webinars

The Marine Environmental Data and Information Network (MEDIN) is hosting a webinar series to support better data stewardship and highlight emerging tools, standards, and approaches in marine data. The first webinar, “[Navigating Marine Data: Planning, Stewardship, and the value of MEDIN](#)”, will take place on 20 August 2025 from 2:00-3:00pm BST (1:00-2:00pm UTC).

PNNL, National Renewable Energy Laboratory (NREL), and Sandia National Laboratories have teamed up for an informational [Marine Energy Career Panel](#) on 17 September 2025 from 2:00-3:30pm PDT (9:00-10:30pm UTC). Staff across various research disciplines will discuss their marine energy careers (past, present, and future) including their background, education, career path, and current projects. [Register here](#).

### Upcoming Workshops

PNNL and OES–Environmental are hosting a workshop, “[Environmental Effects of Off-Grid Marine Energy](#)”, on 12 August 2025 from 10:00am-12:00pm PDT. The workshop is part of the [Ocean Renewable Energy Conference \(OREC\) and University Marine Energy Research Community \(UMERC\) Conference](#), which will take place 12-14 August 2025 in Corvallis, Oregon, USA.

The Portal and Repository for Marine Renewable Energy (PRIMRE) team is also hosting a workshop, “[PRIMRE Workshop: Choose Your Own Data Adventure](#)”, on 13 August 2025 from 3:00-5:00pm PDT, as part of [OREC+UMERC 2025](#).

## Upcoming Course

The Scottish Association for Marine Science (SAMS) is offering a 3-day [Environmental Monitoring Using Multi-Platform Technology Course](#) on 3-5 September 2025 in Oban, Scotland.

## Upcoming Conferences

Island Innovation is hosting the [Virtual Island Summit 2025](#) on 15-19 September 2025 online. Register for free.

The Global Wind Energy Council is hosting the [Asia Pacific Wind Energy Summit 2025](#) on 16-18 September 2025 in Melbourne, Australia. Early bird registration ends 15 August 2025.

Marine Technology Society is hosting a [Fisheries & Benthic Monitoring TechSurge](#) on 8-9 October 2025 in Narragansett, Rhode Island, USA. Early bird registration ends 8 August 2025.

Marine Renewables Canada is hosting the [Marine Renewables Canada 2025 Conference & Exhibition](#) on 12-14 November 2025 in Halifax, Nova Scotia. Early bird registration is available until 3 August 2025.

WavEC Offshore Renewables is hosting [WavEC Lisbon 2025](#), its annual international seminar, on 4 December 2025 in Lisbon, Portugal.

---

## **New Documents on Tethys**

*[Tethys](#) hosts thousands of documents on the environmental effects of marine and wind (land-based and offshore) energy, including journal articles, conference papers, and reports.*

## **Marine Energy**

### **[From subsea power cable to small-spotted catshark \*Scyliorhinus canicula\* - Behavioural effects of electromagnetic fields in tank experiments](#) – Hermans et al. 2025**

Subsea power cables are expanding in number and capacity due to increasing demand to transport offshore generated energy. Energy transported through a cable creates an electromagnetic field (EMF). Elasmobranchs are dependent on their perception of the earth's magnetic field and biologically induced electric fields, for orientation, navigation, locating conspecifics and detecting prey. EMF levels from subsea power cables will add to natural signals potentially disrupting elasmobranch perception, but the effects are not fully understood. Reported behavioural responses include attraction, disturbance, and indifference, varying with exposure type, level and experimental set-up. In this study, the effects of EMF on swimming behaviour of 14 individual small-spotted catshark *Scyliorhinus canicula* were studied.

## **Marine Renewable Energy Resources in Peru: A Sustainable Blue Energy for Explore and Develop – Cacciuttolo et al. 2025**

Marine renewable energy (MRE) in both offshore and coastal environments of Peru is, currently, a huge reserve of practically unused renewable energy, with inexhaustible potential. This article presents the enormous source of sustainable blue energy for generating electrical energy that exists in Peru from waves and tidal resource potential. In addition, this article presents the main opportunities, gaps, and key issues for the implementation of marine renewable energy (MRE), with emphasis on: (i) showing the available potential in the northern, central, and southern Pacific Ocean territories of Peru, (ii) characterizing the marine energy best available technologies to implement, (iii) the environmental and socio-economic impacts of marine renewable energy, and (iv) discussion of challenges, opportunities, and future directions for developments in the marine energy sector.

## **Evaluation of the Hydrodynamic Impacts of Tidal Turbine Arrays in Jiaozhou Bay – Zhang et al. 2025**

In this paper, a hydrodynamic model of Jiaozhou Bay was developed using the Regional Ocean Modeling System and validated against observed tidal levels and current data. The model accurately characterizes the tidal and current features of the region. Based on this model, the spatial and temporal distributions of flow fields and tidal energy resources were analyzed. A 100-turbine tidal power plant was simulated utilizing a momentum-based approach that accounts for resource distribution, bathymetry, topography, and turbine parameters. The resulting hydrodynamic changes, including velocity variations peaking at 0.5 m/s within the turbine deployment zone and tidal level shifts confined to the bay (maximum change in ~10 cm), emphasize the importance of localized environmental assessments.

## **Wind Energy**

### **Sound propagation analysis of a 10 MW wind turbine: Influence of the tower, operational states, and atmospheric conditions – Sun et al. 2025**

Accurate prediction of wind turbine noise propagation over long distances is critical to mitigate community impact but remains challenging due to complex interactions between wake and atmospheric conditions. This study investigates the sound propagation of a 10 MW wind turbine using a hybrid computational approach that combines high-fidelity flow simulations and parabolic equation (PE) modeling. Large-eddy simulations with actuator lines (for the rotating blade modeling) and immersed boundary methods (for the tower and nacelle modeling) resolve the turbulent wind turbine wake structure, including rotor, tower, and nacelle effects, under rated (11.4 m/s) and near cut-out (24 m/s) wind conditions, with constant inflow and neutral atmosphere boundary layer (ABL) inflows. Noise propagation is analyzed using a wide-angle Parabolic Equation (PE) solver, utilizing as base flow wake generated by the high fidelity large-eddy simulation solver.

## **[Case-dependent impacts of offshore wind farms on ecosystems: A systematic review and meta-analysis – Thomassen et al. 2025](#)**

The need for diversification of energy sources is driving the expansion of offshore wind farms, which is, in turn, amplifying their impact on marine ecosystems. Understanding the impact of different wind energy associated activities on ecosystems is crucial for developing effective management strategies that balance the benefits of offshore wind energy production with the risks to biodiversity and ecosystem functioning. The present work systematically reviews (PRISMA), critically assesses, and synthesizes in meta-analyses evidence of impacts from activities and associated pressures of offshore wind energy production. A total number of 129 scientific publications investigating the ecological impacts of offshore wind farms in the period from 2003 to 2024 were collated. Almost three-quarters (74 %) of the identified publications were focused on the northeast Atlantic, where installations are the most abundant.

## **[A wind farm siting framework that integrates vegetation carbon sequestration objectives: A case study in Inner Mongolia, China – Su et al. 2025](#)**

Compared with traditional fossil fuels, wind power, as a typical clean energy source, is capable of effectively reducing carbon emissions. However, recent studies have shown that wind farms (WFs) in some regions may suppress vegetation carbon sequestration (VCS), thereby reducing the regional carbon sink capacity and diminishing the associated life-cycle emission reduction benefits. Therefore, WF siting requires a trade-off between development potential and ecological impact to avoid negative consequences while promoting synergistic gains. This study presents a new WF siting framework that uses a random forest model to predict the impact of WF deployment on VCS, and integrates this analysis with a development potential map obtained from multi-criteria evaluation to generate a comprehensive siting map.

---

## **News & Press Releases**

### **Marine Energy**

#### **[CorPower Ocean secures EUR 40m for 10MW VianaWave project.](#) – CorPower Ocean**

CorPower Ocean has secured a EUR 40m grant from the EU Innovation Fund to support the development of VianaWave, a pre-commercial 10MW wave energy farm to be deployed off the coast of northern Portugal. The project represents a major step toward achieving Portugal's National Energy and Climate Plan (NECP) goal of 200MW of installed wave energy capacity by 2030. VianaWave will feature a CorPack consisting of 30 Wave Energy Converters (WECs), generating approximately 30GWh of clean, renewable electricity each year – enough to power 7,500 Portuguese homes, while significantly reducing greenhouse gas emissions. Set to commence operations in 2028/2029, VianaWave builds on CorPower's successful HiWave-5 demonstrator program, marking a shift from pilot-scale demonstrations to commercial rollout.

## **Development of 6 MW CETO Array in Basque Country: Carnegie and BiMEP sign MOU** **– Carnegie Clean Energy**

Carnegie Clean Energy recently announced that it has commenced development of a 6 MW CETO wave energy array in Europe and has signed a Memorandum of Understanding (MOU) with the Biscay Marine Energy Platform (BiMEP) as the potential site of the array project. This array would include 6 of the 1 MW commercial scale CETO units, all connected to the grid via BiMEP's existing offshore cable and grid connection. This 6 MW CETO array project is the next key step in CETO's commercialisation pathway, and the Company intends to progress early project development in parallel with the deployment and operation of the ACHIEVE CETO Unit at BiMEP. The decision to sign an MOU with BiMEP reflects Carnegie's plans to continue growing its presence in the Basque Country, where the team is already working towards the first deployment of CETO in Europe as part of the ACHIEVE Programme.

## **'Double-edged sword for marine energy sector': UK releases Allocation Round 7 notices** **– Offshore Energy**

The UK's Department for Energy Security and Net Zero has issued the statutory notices for Allocation Round 7 (AR7) and Allocation Round 7a (AR7a) on July 23, 2025, confirming changes to pricing and contract structure under the Contracts for Difference (CfD) scheme. For the first time, separate indicative timelines have been introduced to allow AR7 results to be announced as soon as possible. According to Marine Energy Wales, CfD prices have increased across key marine energy technologies. Tidal stream rises from £261 (approximately \$351) to £266 per MWh, or from £364 to £371 in 2024-adjusted terms. Wave energy increases from £257 to £277 per MWh, or from £358 to £386 in 2024 prices. AR7 also extends the CfD contract length from 15 to 20 years for solar, onshore wind, offshore wind, and floating offshore wind.

## **Eco Wave Power Hits Major U.S. Milestone as Floaters Installation Concludes Ahead of September 9 Project Unveiling** **– Eco Wave Power**

Eco Wave Power, a leading onshore wave energy technology company, recently announced the successful completion of floaters installation for its first U.S. wave energy project at the Port of Los Angeles. With this critical milestone achieved, the Company is moving full speed ahead toward the official unveiling on September 9, 2025, as planned. The Los Angeles project is a demonstration pilot, designed to validate Eco Wave Power's patented wave energy technology in real-world marine conditions. The pilot plays a strategic role in advancing Eco Wave Power's U.S. market entry-with key goals including: 1) Environmental impact studies in collaboration with relevant stakeholders; 2) Material and floater durability testing to enhance long-term performance; and 3) Gaining experience in U.S. licensing and permitting process, including engagement with the U.S. Army Corps of Engineers and local port authorities.

## **Breaking new ground for clean energy in North Wales – infrastructure project gets underway – Morlais Energy**

The Cydnerth project, which will support the expansion of the Morlais tidal energy scheme, has now moved into its construction phase, marking a major milestone for the North Wales low-carbon economy. Work has begun on-site at Parc Cybi, Holyhead to strengthen the grid infrastructure for Morlais, a flagship tidal energy project run by local social enterprise, Menter Môn Morlais Ltd. Backed by the North Wales Growth Deal and funding from both the Welsh and UK Governments, the £16 million Cydnerth project will futureproof Morlais by increasing its grid capacity from 18MW to an eventual 240MW. Initial construction will involve the installation of underground cables to transmit clean electricity from the Morlais substation from the coast at Ynys Lawd (South Stack) to the national grid.

## **Wind Energy**

### **Green light for Berwick Bank paves way for world's largest offshore wind farm – SSE Renewables**

SSE welcomes the Scottish Government's decision to grant consent for the pivotal 4.1GW Berwick Bank offshore wind farm, located around 38km east of the Scottish Borders coastline, boosting Scotland's net zero ambitions and the UK's clean power mission. The Section 36 consent determination by Scottish ministers approves the project's main offshore wind farm array in the outer Firth of Forth off the East Lothian coast. The decision represents the last major consent necessary for the project to proceed and is the culmination of more than a decade of meticulous development work by SSE Renewables on the project's design. Delivery of the project will now be subject to SSE securing a contract for new low-carbon offshore wind power under the UK's Contracts for Difference (CfD) scheme, as well as reaching a final investment decision.

### **RWE and The Oyster Restoration Company complete feasibility project for large-scale native oyster restoration – RWE**

RWE, one of the world's leading offshore wind companies, and The Oyster Restoration Company (TORC) have successfully completed a feasibility project that proves large-scale native oyster reef restoration can be executed at offshore wind farms in the North Sea. This is an important achievement for RWE and a pathfinder for the wider offshore wind industry, to identify credible biodiversity solutions that are scalable and verifiable, in line with efforts to positively impact on the marine environments around its offshore projects. Throughout the feasibility testing, RWE and The Oyster Restoration Company jointly developed a series of technical assessment, evaluations and solutions from engineering and deployment to verification frameworks (1).

## **Canada's First Offshore Wind Energy Areas Designated – Government of Nova Scotia**

Canada's first four offshore wind energy areas have been designated on Nova Scotia's offshore. The Province of Nova Scotia and the Government of Canada jointly designated the areas – French Bank, Middle Bank and Sable Island Bank off mainland Nova Scotia and Sydney Bight off Cape Breton – on July 29. It is a key step to develop the offshore wind industry that will provide long-term energy security and generational economic benefits for Nova Scotians. The designation comes after the public was asked for feedback on five proposed areas in the spring. The input contributed to the decisions to designate four areas and make the French Bank and Sydney Bight areas slightly smaller. The next step in developing offshore wind energy is identifying the parcels within the designated areas that will be included in the first call for bids later this year.

## **First Floating Wind Turbine Successfully Installed at Sea for the EFGL Project off Occitanie, France – Ocean Winds**

Ocean Winds (OW), the international company dedicated to offshore wind energy and a joint venture between EDP Renewables and ENGIE, recently announced the successful installation of the first floating wind turbine of its Éoliennes Flottantes du Golfe du Lion (EFGL) project, developed in partnership with Banque des Territoires. This achievement reinforces Ocean Winds' long-standing leadership in floating offshore wind and marks a pivotal step toward operational deployment in the Occitanie region, in French Mediterranean. Assembled at the port of Port-La Nouvelle in Occitanie, the first of three 10 MW turbines, each towering 186 m at blade tip, was towed 16 km offshore by a dedicated maritime convoy and safely installed at its final location. The operation is the first of three such installations scheduled for this summer, with the full pilot wind farm set to be completed by the end of August.

## **Ørsted achieves first power at Greater Changhua 2b and 4 – Ørsted**

Ørsted recently announced that the first turbine from the 920 MW Greater Changhua 2b and 4 offshore wind farms has successfully delivered first power to the national grid of Taiwan. This marks a major milestone on the path to commercial operation and establishes the project as the world's first offshore wind farm to supply renewable energy to Taiwan Semiconductor Manufacturing Company Limited (TSMC) under a corporate power purchase agreement. Located 35-60 kilometres off the coast of Changhua County, the offshore wind farms consist of 66 Siemens Gamesa 14-236 14 MW wind turbines. Once fully operational, the wind farms will supply substantial renewable electricity to the corporate offtaker, accelerating Taiwan's offshore wind capacity expansion and supporting the island's transition to net-zero.