

# TETHYS BLAST

**28 March 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!

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## Announcements

### New Tethys Video

The Tethys team recently released a [2-minute video](#) on Tethys that highlights the Knowledge Hub's key features and uses. Dive in to explore 10,000+ documents on environmental effects!



### Calls for Abstracts

The Call for Abstracts for the [12th Partnership for Research in Marine Renewable Energy \(PRIMaRE\) Conference](#) is open through 30 March 2025. The conference will take place on 2-3 July 2025 at the University of Bristol in Bristol, England.

The American Fisheries Society (AFS) has opened the [Call for Abstracts](#) for the [155<sup>th</sup> AFS Annual Meeting](#) through 15 April 2025. The meeting will take place 10-14 August 2025 in San Antonio, Texas, USA.

The [Call for Abstracts](#) for the 2025 North American Wind Energy Academy (NAWEA) / WindTech Conference is open through 17 May 2025. [NAWEA/WindTech 2025](#) will take place 14-17 October 2025 in Dallas, Texas, USA.

### BOEM Seeking Public Comment

The U.S. Bureau of Ocean Energy Management (BOEM) has released a Draft Finding of no historic properties affected for passive acoustic monitoring (PAM) activities on the Atlantic Outer Continental Shelf. [Public comments on the draft findings](#) are due 26 April 2025.

### Funding & Testing Opportunities

The Regional Wildlife Science Collaborative for Offshore Wind (RWSC) recently issued a [Request for Proposals](#) to identify and fund data collection and research that increases understanding of the potential regional scale effects of offshore wind energy development on wildlife and marine ecosystems. Concept papers are due 1 April 2025.

The Scottish Offshore Wind Directorate is [looking for a service provider to carry out eDNA analysis](#), metabarcoding, and bioinformatics of water and sediment samples collected from the marine environment. This work will feed into a project assessing the effectiveness of eDNA-based sampling for environmental assessments for marine renewable energy developments and propose guidelines for standardised sampling strategies. Applications are due 2 April 2025.

RWSC also released a [Request for Proposals](#) that will allocate \$1.2 million for PAM for marine mammals along the U.S. East Coast, in support of the Partnership for an Offshore Wind Energy Regional Observation Network (POWERON). Proposals are due 7 April 2025.

The Offshore Wind Research & Innovation Programme, run by the European Marine Energy Centre (EMEC) and sponsored by the West of Orkney Windfarm, has launched its [Innovation Call 2](#), which is looking for weather forecasting solutions and service operation vessel designs for turbine access. Proposals are due 9 April 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 \(RFTS\) 16](#) applications through 6 June 2025 to support marine energy testing and development projects. Open Water Support applications can be submitted any time. TEAMER also offers [Results Dissemination Support](#) (e.g., travel support).

### Career Opportunities

The Crown Estate has opened applications for the [Marine Futures internship programme](#), which provides full time, paid opportunities for interns to develop skills in specialist areas including,

marine conservation, sustainable fisheries, renewable energy development, marine policy, and community engagement. Applications are due 11 April 2025.

Aqualicense, an Irish marine consultancy that offers services within renewable energy and aquaculture, is seeking a [Senior Ecologist/Environmental Scientist](#) who will be responsible for managing the preparation, review, and delivery of ecology and environmental reports.

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## Upcoming Events

### Upcoming Webinars

France Energies Marines is hosting a webinar, “[Monitoring fish in a context of offshore wind farm development](#)”, on 4 April 2025 from 12:00-1:00pm UTC. This webinar will present key results of the FISHOWF project and demonstrate how acoustic telemetry can be used for long-term monitoring of the effects of wind farms on fish. [Register here.](#)

The University of Washington Puget Sound Institute and Pacific Marine Energy Center at Oregon State University are hosting a roundtable webinar, “[Offshore Renewable Energy in the Pacific & Potential Benthic Impacts](#)”, on 8 April 2025 from 12:30-1:30pm PDT (7:30-8:30pm UTC). [Register here.](#)

The Supergen Offshore Renewable Energy (ORE) Hub is hosting a webinar, “[Community Perspectives of Wave Energy and Open-Water Testing at PacWave, Oregon](#)”, on 29 April 2025 from 4:00-5:00pm UTC. This session will explore the factors that influence public responses to new developments and help us to understand what may slow or hinder the planning and consenting processes. [Register here.](#)

### Upcoming Conferences

The Supergen ORE Hub is hosting its [Early Career Researcher Forum](#) on 14 April 2025 and its [Annual Assembly](#) on 15 April 2025 at the University of Manchester in Manchester, England. Registration for both events is free.

Marine Energy Wales is hosting the [Marine Energy Wales Annual Conference](#) on 7-8 May 2025 at the All Nations Centre in Cardiff, Wales.

The [Ocean Renewable Energy Conference \(OREC\)](#) will now partner with the [2025 University Marine Energy Research Community \(UMERC\) Conference](#), which will take place on 12-14 August 2025 at Oregon State University in Corvallis, Oregon, USA.

### Upcoming INORE Symposia

The International Network on Offshore Renewable Energy (INORE) is hosting a [North American Symposium](#) in Boston, Massachusetts, USA on 9-13 June 2025 and a [European](#)

[Symposium](#) in Aalborg, Denmark on 15-20 September 2025. Graduate students, early-stage researchers, or young professionals can apply to attend the events for free by 4 April 2025.

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## **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**

### **[Annual Report: An Overview of Ocean Energy Activities in 2024 – IEA-OES 2025](#)**

IEA-OES is a Technology Collaboration Programme (TCP) on Ocean Energy Systems (OES) within a framework created by the International Energy Agency (IEA). The TCP mechanism is a flexible and effective means created by the IEA to research breakthrough technologies, to fill existing research gaps, and to carry out deployment or demonstration programmes. This Annual Report showcases the collaborative work of IEA-OES, emphasizing key achievements and recent global developments. It also offers insights into ocean energy policies, research advancements, and deployment progress across member countries, highlighting the collective impact and progress of this international cooperation.

### **[Marine Fish Passage: Underappreciated Threats to Connectivity Within the Marine Environment](#) – Lennox et al. 2025**

Habitat fragmentation is a major threat to aquatic biodiversity loss. However, much of the focus is on the connectivity of freshwaters, with much less attention given to marine ecosystems. We contend that coastal infrastructure including bridges, causeways, tidal turbines, land infilling and harbours, wharfs, quays, piers and docks have resulted in underappreciated impacts on the connectivity of fish movements resulting in passage challenges at sea. For each type of marine infrastructure, we synthesised the present status of knowledge to characterise the problems and future challenges and also identify mitigation options and passage solutions to restore connectivity for fishes.

### **[Future Economic Potential of Tidal Stream & Wave Energy in Scotland](#) – Noble et al. 2025**

Scotland is at the forefront of the global development and deployment of tidal stream and wave energy devices. In addition to significant resource in Scottish seas, Scotland is also home to several leading tidal stream and wave energy device developers and possesses the underpinnings of a suitably equipped supply chain to support them. Commercial domestic tidal stream and wave energy sectors have the potential to provide a meaningful contribution to Net Zero, the Just Transition, energy security and economic growth commitments and ambitions, both in Scotland and the rest of the UK. To achieve these step-changes in supply chain capabilities and deliver the GVA and jobs potential for both sectors, this summary report provides the following set of policy recommendations.

## Wind Energy

### [A flexible framework for species based regional cumulative effects assessments to support offshore wind energy planning and management](#) – Ferguson et al. 2025

Cumulative effects assessments (CEAs) are vital for informed planning and management of offshore wind energy development (OWED) activities during regional assessment, site selection, and site evaluation phases. To reduce impacts on wildlife, OWEDs should be sited in areas that avoid or minimize CE. We present a flexible, species-based framework to assess CE from OWED activities and other pressures, supporting decision-making in early planning phases. The framework uses a species-based approach, applicable to various wildlife receptors (i.e., species or populations), and adapts to available information on ecology, socioeconomics, and pressures. The analytical strategy uses a CE metric to indicate the presence or magnitude of effects from all pressures on receptors.

### [Summary of Bird Monitoring Reports from Operational Wind Energy Facilities in South Africa](#) – BirdLife South Africa 2025

This report provides an overview of the outcome of operational-phase monitoring and mitigation of wind energy's impacts on birds in South Africa, covering the period from 2015 to 2023. Drawing on available reports and data, it summarises recorded fatality rates and provides an overview of the species affected and possible risk factors, building on BirdLife South Africa's first review of this kind, published in 2017 ([Ralston-Paton et al. 2017](#)). Using case studies, it also presents the array of mitigation measures currently employed at South African wind farms and offer practical recommendations to address challenges encountered.

### [Coupling metal concentrations and drift simulations for tracing emissions from offshore wind farms](#) – Ebeling et al. 2025

To ensure safe operation during the lifetime of an offshore wind turbine, the steel structures need to be protected against corrosion. This work evaluates potential metal emissions and environmental impacts from galvanic anodes used for corrosion protection of offshore wind farms (OWFs) by applying a novel multi-tracer approach. A total of 235 surface water samples from different German North Sea OWFs were taken between 2016 and 2022 and analyzed for their concentration of 32 metals via online preconcentration/matrix removal ICP-MS/MS. The concentrations were assessed for temporal and spatial trends with an emphasis on the previously proposed OWF tracers Al, Cd, Pb, Zn, Ga and In.

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## News & Press Releases

### Marine Energy

## **ORPC Files FERC Draft Pilot License Application for Cook Inlet, Alaska, Project Site – Ocean Renewable Power Company (ORPC)**

ORPC, an internationally recognized developer of marine energy solutions that harness the power of free-flowing rivers and tides, announced its filing of a draft pilot license application with the Federal Energy Regulatory Commission (FERC) to develop the East Foreland Tidal Energy Project in Cook Inlet, Alaska. The East Foreland site has the highest potential for tidal energy development in the United States, and ORPC has chosen it specifically to accelerate the commercial growth of the industry. Through the American Tidal Energy Project, the U.S. Department of Energy Water Power Technologies Office is supporting this effort. The submittal also sets off a 30-to-60-day FERC review process and public comment period. The draft license application can be found [here](#).

## **Global OTEC Announces World’s Largest Onshore OTEC Demonstration Plant to Date – Global OTEC**

British climate-tech innovator Global OTEC has announced its next major step in revolutionising tropical energy access. The deployment of its first energy-generating onshore pilot, the OTEC Power Module®— a compact, modular power plant that turns the ocean’s natural temperature gradient into continuous, renewable electricity. Unlike previous Ocean Thermal Energy Conversion (OTEC) projects that were primarily research-based, this pilot will demonstrate real-world scalability and readiness for mass production across more than 100 tropical and subtropical regions where the technology can thrive. Global OTEC expects to finalise a location this year.

## **The Mutriku wave power plant hosts the tests of the new IDOM turbine – BiMEP**

The development of marine renewables in the Basque Country is taking a step further with the new technical tests that the Basque technology company IDOM begins at the Mutriku plant. The work aims to analyze a new air turbine design in the experimental area of the Mutriku power plant, as part of the activities of the EuropeWave European project. These trials aim to evaluate and validate the effectiveness of this innovative turbine, and demonstrate the strong position of the Basque Country as a reference in the research and development of ocean energies. The Mutriku power plant, operated by BiMEP (Biscay Marine Energy Platform), is a unique and world leader in marine renewable energy generation, with over 3.2 GWh produced to date.

## **Winner of the European Union Innovation Fund, the NH1 hydroelectric project will benefit from funding of 31.3 million euros. – Normandie Hydroliennes**

Normandie Hydroliennes is pleased to announce that its NH1 tidal project has been selected as a winner of the European Union’s 2023 Innovation Fund. With this distinction, they will benefit from €31.3 million in funding to accelerate the development and deployment of their innovative system. This marks an important milestone for marine tidal energy in France. This funding will support the deployment of one of the country’s first commercial-scale tidal energy pilot projects, reinforcing the role of tidal energy in

the transition to renewable energy. The European Commission's €4.8 billion Innovation Fund 2023 supports innovative low-carbon technologies.

### **[ACHIEVE Project Achieves Key Milestones in Preparation for BiMEP Deployment](#) – EuropeWave**

The ACHIEVE team is focused on the procurement and manufacture of the ACHIEVE CETO wave energy prototype in advance of deployment at the Biscay Marine Energy Platform (BiMEP). Recent achievements include the procurement of core drivetrain components, including generators and gearboxes, and progressing the fabrication of components such as the tensioner and tensioner limiter/clutch. The team continues to actively engage with the project's supply chain partners including local manufacturers for the buoyant actuator (BA), the CETO system's prime mover. The system's performance and reliability will be evaluated through a series of upcoming tests. Electrical bring-up testing in Bilbao will focus on confirming the correct operation of the electrical systems and connections.

### **Wind Energy**

#### **[Vattenfall builds Germany's largest offshore wind farm](#) – Vattenfall**

Vattenfall has made the final investment decision on the Nordlicht 1 and 2 offshore wind farms. BASF secured access to long-term supply of renewable electricity. Construction of the Nordlicht 1 and 2 wind farms is planned to begin in 2026, and Nordlicht 1 is set to become Germany's largest offshore wind project. The wind farms are expected to be operational in 2028. Vattenfall will repurchase the shares in the Nordlicht cluster that BASF acquired in 2024. At the same time, BASF secured access to long-term supply of renewable electricity, continuing the collaboration. This agreement will secure renewable power for BASF's chemical production in Europe at a time when such additional supply will be needed.

#### **[RWE marks major construction milestones at Sofia offshore wind farm](#) – RWE**

RWE, one of the world's leading offshore wind companies, is celebrating significant progress in the construction of its 1.4 gigawatts (GW) Sofia offshore wind farm located on the Dogger Bank off the UK east coast. The project has already achieved several major milestones in the construction of foundations, onshore and offshore electrical systems over the past months. It is now preparing for the first turbine installation expected in the coming weeks, and first generation of electricity and feed into the grid later this year. Last week saw the arrival of the brand-new, state-of-the-art Wind Peak turbine installation vessel from Cadeler, which will carry the first of the 14 megawatts (MW) turbine components to the project located 195km offshore, for installation.

#### **[Miliband approves Hornsea 4 kittiwake plan](#) – ReNews**

UK energy secretary Ed Miliband has given the thumbs-up to a kittiwake compensation implementation and monitoring plan for Ørsted's 2.6 GW Hornsea 4 wind farm off east England. The Kittiwake Compensation Implementation and Monitoring Plan (KCIMP) commits the developer to providing an artificial nesting structure at Hartlepool for two full breeding seasons before any turbines can be operated at the North Sea array. The decision ends a long-running saga in which Ørsted had initially pursued plans for an offshore ANS to be built for the 2023-consented project. Miliband said he agreed with Ørsted the amended proposals for an onshore ANS – which will be shared with the neighbouring 2.9GW Hornsea 3 – can fulfil kittiwake compensation requirements for 750 nest spaces.

### **EWE, RWE: 'Alpha Ventus Is Not a Regular Offshore Wind Farm; Project Has More than Fulfilled Its Purpose' – Offshore Wind**

Following news about the potential decommissioning of the 15-year-old Alpha Ventus, the consortium behind the first German offshore wind farm – comprising EWE (47.5 per cent), RWE (26.25 per cent) and Vattenfall (26.25 per cent) – pointed out that the 60 MW project should not be considered in the context of typical offshore wind farms today and that Alpha Ventus already served its intended role. Commissioned on 27 April 2010, Alpha Ventus is Germany's first and oldest operating offshore wind project. The offshore wind farm is located 45 kilometres north of the island of Borkum in the North Sea, where six Adwen M5000 and six Senvion 5M wind turbines are installed on two different types of foundations.

### **Feasibility Licence Management Plan approved – Ørsted**

Ørsted is delighted to have our feasibility stage management plan now approved for the Gippsland Offshore Wind Farms 1 and 2 by the Offshore Infrastructure Regulator (OIR). The management plan details how activities our activities will be safely carried out in compliance with the Offshore Electricity Infrastructure Act (OEI Act) and allows us to begin feasibility activities, including our wind measurement campaign and geotechnical investigations, within our feasibility licence area in the Bass Strait, approximately 56km off the Gippsland coast. These activities will cover geotechnical testing and sampling of the seabed, collecting essential data to help us understand the composition of the seafloor, to inform the overall design of our proposed offshore wind farm.