

# TETHYS BLAST

20 June 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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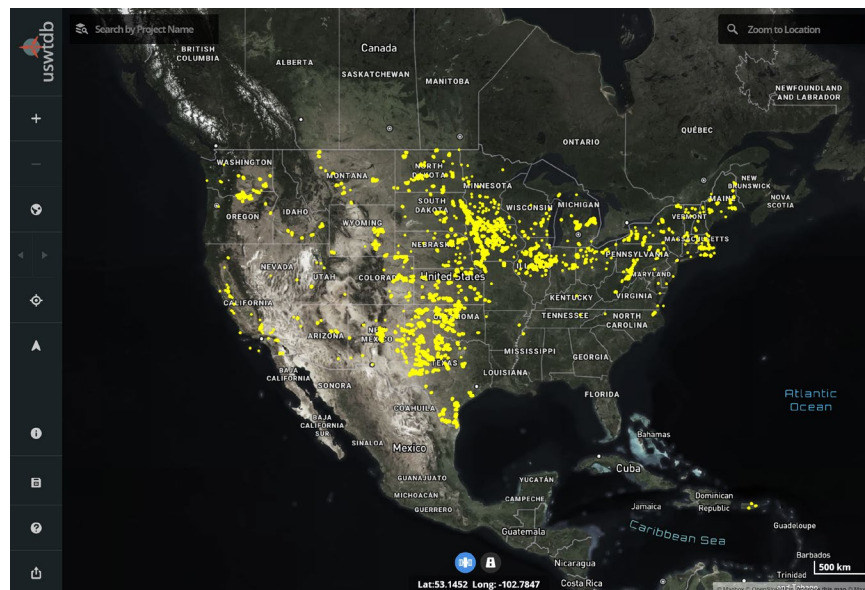
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## Announcements

### [U.S. Wind Turbine Database Update](#)

The U.S. Geological Survey, Lawrence Berkeley National Laboratory, and American Clean Power Association recently released a new version of the [U.S. Wind Turbine Database](#), which provides the locations of land-based and offshore wind turbines in the United States, corresponding wind project information, and turbine technical specifications.



## Request for Proposals

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

## Call for Abstracts

Marine Technology Society opened the Call for Abstracts for its [Fisheries & Benthic Monitoring TechSurge](#) through 20 June 2025. The TechSurge will take place on 8-9 October 2025 in Narragansett, Rhode Island (USA) and convene experts from across sectors to explore advancements in monitoring technologies that support responsible offshore development.

## Funding & Testing Opportunities

The U.S. Department of Energy's [Energy Technology Innovation Partnership Project \(ETIPP\)](#), which helps U.S. coastal, remote, and island communities become more energy resilient, has opened applications for new communities to join. Applications are due 27 June 2025.

The Crown Estate has launched a second round of its [Supply Chain Accelerator](#) to catalyze the capacity and capability of the UK supply chain by providing early-stage development funding for offshore wind supply chain projects. Applications are due 27 June 2025.

The Renewable Energy Wildlife Research Fund, administered by the Renewable Energy Wildlife Institute, recently announced its biennial project solicitation. The [2025 Requests for Proposals](#) for wind- and solar-wildlife research projects are open through 11 July 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.

University of California San Diego is accepting applications for its [StartBlue Ocean Enterprise Accelerator](#) program, which is a four-month program designed to help ocean intelligence startups launch and scale to support the ocean enterprise and grow the blue economy. StartBlue is hosting an [information session](#) on 26 June 2025 from 12:00-1:00pm PST (7:00-8:00pm UTC) and applications are due 31 July 2025.

## Career Opportunities

The University of Plymouth is seeking a [Postdoctoral Research Fellow](#) focusing on ocean dynamics and floating offshore wind (FLOW) consequences on key ecosystem drivers in the Celtic Sea. Applications are due 22 June 2025.

The University of Hawai'i at Manoa, School of Ocean and Earth Science and Technology is seeking an [Assistant Professor or Associate Professor in Marine Energy](#). The position is full-time

and is part of the Department of Ocean and Resources Engineering (ORE) and the Hawai'i Natural Energy Institute (HNEI). Application reviews begin 23 June 2025.

Environmental Research Institute at the University of the Highlands and Islands (ERI-UHI) and European Marine Energy Centre (EMEC) are looking for a [3-year Knowledge Transfer Partnership \(KTP\) Associate](#) to develop environmental monitoring technologies, data management, and analysis methods to investigate animal interactions with marine energy devices. Applications are due 23 June 2025.

University College Cork has an opening for [Postdoctoral Researchers/Senior Postdoctoral Researchers in Offshore Renewable Energy](#) at the Lir National Ocean Test Facility (Lir-NOTF). Applications are due 26 June 2025.

Natural Power is seeking a [Senior Environmental Consultant](#) specializing in marine ecology survey management and delivery to join one of its UK or Irish office locations. Applications are due 29 June 2025.

ERI-UHI is also looking for an [Energy Innovation Coordinator](#) to lead their energy industry engagement, knowledge exchange, business development and innovation activities. Applications are due 30 June 2025.

Joint Nature Conservation Committee (JNCC) is seeking a [Marine Support Officer](#) to work in the Marine Evidence team and also provide support to the Marine Monitoring team. Applications are due 26 June 2025.

JNCC is also seeking a [Marine Ornithologist](#) to provide evidence and advice on marine birds (seabirds and non-breeding marine waterbirds). Applications are due 30 June 2025.

France Energies Marines is hiring a [European Project Management Officer](#) to help increase collaborations with different stakeholders to advance the European offshore wind sector and support a new Horizon Europe project. Applications are due 6 July 2025.

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

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## Upcoming Events

### Upcoming Webinars

Blue Economy Cooperative Research Centre is hosting a webinar, "[Integrated Planning in Australia's Marine Estate: A pressing need? How Marine Spatial Planning can support it.](#)", on 26 June 2025 from 4:00-5:00pm AEST (6:00am UTC). The webinar will highlight some of the regulatory challenges for industry, Australian approaches that undertake integrated governance

and international approaches focused on Marine Spatial Planning and how they can lead to improved and sustainable outcomes for management of the marine sector. [Register here.](#)

OCTO (Open Communications for the Ocean) is hosting a webinar, “[Recent developments in the sustainable management of marine resources](#)”, on 8 July 2025 at 11:00am EDT (3:00pm UTC). This webinar will present and explain cause-consequence-response frameworks and the way these relate to managing marine, coastal and estuarine areas. [Register here.](#)

NYSERDA (New York State Research and Development Authority) is hosting a [Learning from the Experts](#) webinar, “Adopting New Technologies – Offshore Wind Around the World”, on 9 July 2025 at 12:00pm EDT (4:00pm UTC). Rebecca Williams with the Global Wind Energy Council (GWEC) will discuss observed timelines for adoption of offshore wind technology around the world and the external forces that have shaped periods of advancement and setbacks in energy development. [Register here.](#)

### Upcoming Workshop

Supergen ORE (Offshore Renewable Energy) Hub is hosting the “[Flexible Funding Brokerage Workshop](#)” in order to share call details and facilitate UK industry-academia collaborations. The workshop will take place on 9 July 2025 from 2:00-3:30pm BST (1:00-2:30pm UTC).

### Upcoming Conferences

The University of Bristol is hosting the [12th PRIMaRE \(Partnership for Research In Marine Renewable Energy\) Conference](#) on 2-3 July 2025 in Bristol, England. [Register here](#) by 20 June 2025.

The University of Liverpool is hosting the [11th Congress on Tidal Dynamics and Sedimentology \(TIDALITES\)](#) on 9-11 September 2025 in Liverpool, England.

Ocean Energy Europe is hosting the [Ocean Energy Europe Conference & Exhibition \(OEE 2025\)](#) on 4-5 November 2025 in Brussels, Belgium. [Early bird registration](#) ends 31 July 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**

**[Wave energy in season: a comparative approach to feasibility of seasonal deployments for remote coastal communities](#) – Trueworthy et al. 2025**

Remote coastal communities, which could be early adopters of wave energy projects, have concerns over costs, conflicts, and potential risks of development. Designers and

developers are challenged to address these community concerns as they continue to develop wave energy technologies. One potential means of reducing costs, conflicts, and risks, especially for demonstration and pilot-scale projects, could be planning a deployment that operates for only a portion of the year—a seasonal deployment. In this paper we examine the impacts of a seasonal deployment in terms of cost, electricity production, operations and maintenance, environmental impacts, and community benefits. We take a holistic, comparative approach to feasibility that can be replicated for other comparative studies. We estimate electricity production using a point absorber WEC modeled near Sitka, AK, USA and optimized for the given sea conditions.

**Impacts of nitrogen-to-phosphorus imbalance from hybrid ocean thermal energy conversion operations on benthic communities and coastal ecosystem management – Leng et al. 2025**

Hybrid ocean thermal energy conversion (H-OTEC) power plants are an emerging source of renewable energy, necessitating research on their environmental impact to support their wider implementation. Benthic communities are highly sensitive to ammonia–nitrogen ( $\text{NH}_4\text{-N}$ ) stress; however, studies on the effects of  $\text{NH}_4\text{-N}$  from OTEC operations on coastal ecosystems remain limited. This study evaluated the influence of  $\text{NH}_4\text{-N}$  stress on benthic communities by analysing seasonal variations in water and sediment parameters alongside macrobenthic and meiobenthic organism surveys. A control site in an undisturbed area was included to assess the anthropogenic impacts of H-OTEC operations and effluents from ornamental fish farms. The results indicate that  $\text{NH}_4\text{-N}$  stress significantly alters macrobenthic community structure, with *U. vestiarium* being the primary contributor to intergroup variation, while meiobenthic communities remain unaffected.

**Enhancing marine wildlife observations: the application of tethered balloon systems and advanced imaging sensors for sustainable marine energy development – Amerson & Dexheimer 2025**

The Triton Initiative has evaluated environmental technologies and methodologies, focusing on the detection and tracking of marine wildlife, since 2018. This study builds upon an initial flight trial of a tethered balloon system (TBS) and sensor package conducted on behalf of the Triton Initiative in 2022, and further investigates the capabilities of a tethered balloon system (TBS) for detecting and monitoring marine wildlife, primarily focusing on gray whales (*Eschrichtius robustus*) and various avian species. Over 55.7 h of aerial and surface footage were collected, yielding significant findings regarding the detection rates of marine mammals and seabirds. A total of 59 Gy whale, 100 avian, and 6 indistinguishable marine mammal targets were identified by the airborne TBS, while surface-based observations recorded 1,409 Gy whales, 1,342 avian targets, and several other marine mammals.

## **Wind Energy**

## **Shutdown on Demand for the mitigation of bird collision risk at onshore wind farms in South Africa – Smallie et al. 2025**

This handbook aims to guide practitioners on the implementation of effective Shutdown on Demand (SDoD) at onshore wind farms in South Africa, with extended applicability to elsewhere in Africa and beyond. The intended audience of this handbook is Avifaunal Specialists, Environmental Assessment Practitioners (EAPs), government officials, wind farm developers and operators, and other industry stakeholders. To this end, the report considers available local and international SDoD research and experience in the context of South African wind farms and bird species. Interviews were conducted with representatives from local wind farms already employing SDoD to identify common challenges that arise in situ, as well as representatives of automated SDoD system suppliers to gain insights into the present capabilities of these technologies. A workshop with the South African target audience was also held to obtain collaborative input from across the intended readership of this handbook.

## **Offshore Wind Impact on Oceanographic Processes: North Carolina to New York, Volume 1 – RPS – Georgas et al. 2025**

Proposed development of offshore wind energy areas in the Mid-Atlantic Bight has raised concerns among stakeholders about potential changes to coastal and oceanic environmental conditions. To build on two previous BOEM studies, this project developed a validated modeling system that incorporates individual wind turbines and wind energy resource facilities for the U.S. North Atlantic Ocean from North Carolina to New York and used it to generate detailed simulations that enable more accurate assessments of possible impacts of proposed wind energy facilities. The objective of the study was to determine the effects of offshore wind energy facilities on coastal and oceanic environmental conditions and habitat by examining how oceanic characteristics will change after turbine installation, particularly for bottom stress, turbulent mixing, along and cross-shelf currents, wind wave interactions, and larval transport.

## **Vibrations from Wind Turbines Increased Self-Pollination of Native Forbs, and White Bases Attracted Pollinators: Evidence Along a 28 km Gradient in a Natural Area – Tronstad et al. 2025**

Knowledge of how wind turbines interact with vertebrate animals is growing rapidly; however, less is known about plants and insects. Turbines produce infrasound ( $\leq 20$  Hz), and these vibrations decrease with distance from turbines. We measured seed set and pollinators at six sites 0 to 28 km from turbines. We measured the number and mass of seeds produced by self-pollination, insect pollination, and when pollen was not limiting for nine native plants. We assessed pollinators by target netting bees and butterflies during transects, and by using blue vane traps (bees only). Infrasound produced by the turbines appeared to enhance self-pollination, and the turbine bases attracted pollinators. We provide data on a seldom studied yet critical topic to inform land management and agricultural decisions, and to promote new strategies as wind energy development grows.

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## News & Press Releases

### Marine Energy

#### [New Marine Energy Taskforce launched with backing from The Crown Estate and Crown Estate Scotland – The Crown Estate](#)

The Marine Energy Taskforce (MET) launched this week, tasked with developing a roadmap to realise the UK's marine energy potential. The Energy Minister Michael Shanks MP was joined by members of the MET Core Group, including The Crown Estate and Crown Estate Scotland who confirmed funding for this critical 12-month project. The UK has over 25GW and 11GW of accessible wave and tidal stream energy capacity respectively and projects are currently being deployed with over 80% UK supply chain content. The MET is a 12-month initiative that will explore what actions are required to realise the UK's potential in a manner that maintains high levels of UK content. The MET will focus on four themes which are key to supporting marine energy sector development in the UK, namely: site development, financing, innovation, and supply chain growth.

#### [First full-scale wave-powered breakwater underway in France – Offshore Energy](#)

UK-based Legendre Group has started constructing the first full-scale demonstrator for the Dikwe project in Boulogne-sur-Mer, northern France, in collaboration with France-based GEPS Techno. Supported by ADEME and the Région Hauts-de-France, the initiative aims to integrate wave energy generation into coastal protection infrastructure using oscillating panels, or “flaps,” mounted on breakwaters. These flaps are driven by the power of waves and are designed to convert their power into low-carbon electricity. The demonstrator is scheduled for completion by the end of 2025. After recognizing the potential of this technology, Legendre and GEPS Techno have decided to form a joint venture, Wave-Op, to develop port infrastructure that can produce energy from wave activity. The Dikwe project is being developed by a consortium of French companies, including Legendre Group, GEPS Techno, and Ifremer.

#### [Mapping UK marine energy resources: latest Renewables Atlas update – ABPmer](#)

For over 20 years, the UK Atlas of Marine Renewable Energy has informed decision-making in UK marine renewable energy development. Originally published in 2004 under funding from the Department of Trade and Industry's Strategic Environmental Assessment programme for Offshore Energy, today it is the most recognised source of publicly available data for waves, tides and winds in UK waters. The Atlas is widely used for development planning through initial appraisal of metocean conditions, and its outputs frequently appear in baseline characterisation studies including sections of Environment Impact Assessment (EIA) reports. In 2024, ABPmer made a number of major updates to the Atlas to reflect the evolving needs of the industry. In addition to usability improvements, a series of new layers were introduced.

## **Wave energy desalination pilot gets green light in Fort Bragg – Offshore Energy**

Canadian Wave-powered desalination innovator Oneka Technologies has secured regulatory approval to move forward with its wave-powered desalination pilot project off the coast of Fort Bragg, California. According to Oneka Technologies, the Fort Bragg Planning Commission unanimously approved the initiative on May 28, 2025, following the completion of the environmental review process. The review included a 30-day public consultation. The project, partly funded by the California Department of Water Resources (DWR), is now advancing to the deployment phase. This is said to be the first seawater desalination pilot to complete the CEQA process since California updated its regulations in 2015. The system is designed to produce freshwater using wave energy, operating off-grid and without greenhouse gas emissions.

## **MeyGen sees results and commits to three years cable condition monitoring – Indeximate**

Indeximate Ltd, announces the continuation of cloud-based cable condition monitoring with SAE Renewables MeyGen tidal-stream energy plant in Caithness, Scotland. The contract covers three years of annual subscription to Indeximate's Scattersphere for cable and environment condition monitoring across all of MeyGen's four turbines which in addition incorporates the storage of all of MeyGen's DAS data throughout the monitoring period. MeyGen have long understood the value of fibre optic sensing, deploying both DTS and DAS to ensure they know as much as possible about the health of their cables – cables that are deployed in the most challenging of conditions: tidal races, surface deployed on a rocky seabed. The insight Indeximate provided has enabled MeyGen to optimise their inspection strategy focussing on locations that are the highest risk.

## **Wind Energy**

### **BeWild achieves world's first remote ecology survey at CrossWind offshore wind farm – Fugro**

The BeWild project, led by Fugro, has successfully completed the world's first fully remote ecology survey at CrossWind's Hollandse Kust Noord offshore wind farm, marking a significant shift in marine ecosystem monitoring. This innovative approach enables more efficient and less disruptive monitoring, which is crucial for protecting marine life and the sustainable growth of offshore wind energy. Together, the BeWild partners integrated computer vision and environmental DNA (eDNA) sampling into Fugro's Blue Volta® electric remotely operated vehicle (eROV). This system was deployed from its Blue Essence® uncrewed surface vessel (USV), with both USV and eROV controlled from Fugro's remote operations centre in Aberdeen. This survey marks the first of four research and development assessments at CrossWind under the BeWild project, supported by a Mission-driven Research, Development and Innovation (MOOI) subsidy from the Dutch Enterprise Agency (RVO).

### **New frontier for UK offshore wind with leading developers set to deliver new generation of floating windfarms – The Crown Estate**

The Crown Estate set to partner with Equinor and Gwynt Glas – a joint venture between EDF Renewables UK and ESB – to drive the creation of new jobs and economic growth through new floating windfarms off the coasts of Wales and South West England. The news follows a process to award rights to deliver up to 4.5 gigawatts of secure, renewable energy – enough to power more than four million homes. The Crown Estate will ensure the delivery of the full potential capacity through the deployment of a third site. Work is underway on a range of options to deliver this, and The Crown Estate expects to set out next steps by the end of September 2025. The news also follows details from The Crown Estate – which manages the seabed around England, Wales and Northern Ireland – of a £400 million investment in the UK’s offshore wind supply chain, with a particular focus on enabling infrastructure.

### **AI sheds light on bird collisions at offshore wind farms – Vattenfall**

Offshore wind power is one of the most promising ways to produce the fossil-free electricity needed for the energy transition, and in the North Sea area, there are major plans for expansion. At the same time, there are growing concerns about how offshore wind turbines affect bird populations. While the visual impact of towering turbines is obvious, the invisible toll on birds flying through offshore wind farms has remained largely speculative. Now, with AI and other advanced technologies, an answer could be within reach. A first step on this path was a tech test conducted in Aberdeen Bay together with Spoor, a Norwegian company that has developed ground-breaking AI technology to track a bird’s flight path in 3D in the immediate vicinity of turbine blades. This could allow wind farm operators to document ‘micro-avoidance behaviour’—the last-minute flight adjustments birds make to avoid colliding with the rotor blades.

### **Successful Aquawind prototype Launch After an Intense Development Process – Aquawind**

On 2 June, after months of meticulous planning, rigorous development, and securing all necessary permits, the AquaWind project reached a key milestone with the successful launch of its Multi-Use prototype at ASTICAN shipyards facilities in the harbour of Las Palmas de Gran Canaria, Spain. This marks the beginning of the final testing phase while awaiting a suitable maritime weather window for its offshore deployment at the Canary Islands Oceanic Platform (PLOCAN). W2Power is a proven floating wind technology which by its design is particularly well suited for multi-use. The prototype platform has been retrofitted to accommodate the aquaculture components. For the first time, this project conducts Multi-Use proof-of-concept trials combining marine energy production with live fish aquaculture in the Atlantic region.

### **Underwater Noise Project to Support Sustainable Offshore Wind Energy – MaREI**

The Irish Marine Acoustics Platform (IMAP) research project will establish Ireland’s first systematic underwater acoustic monitoring programme. This noise monitoring programme will help to protect marine life by identifying, managing and mitigating the underwater radiated noise (URN) pollution which may occur during the building of

offshore wind farms. Launched in April of this year, the project will run until December 2028, and is funded by the Sustainable Energy Authority of Ireland (SEAI) and the Marine Institute (MI) with the MaREI Centre in University College Cork (UCC) and Wind Energy Ireland as project partners. The project will record annual and seasonal variations in ambient sound levels throughout Irish coastal waters using hydrophones. These devices will be strategically placed around the entire Irish coastline, in line with proposed locations for offshore developments.