TETHYS BLAST

3 July 2026

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. Email us to contribute!

Announcements

DMEC Offshore Renewables Unplugged Video

The Dutch Marine Energy Centre (DMEC) recently released an Offshore Renewables Unplugged episode that introduces environmental monitoring for offshore renewable energy, why it's required, what the data already tell us, and the gaps we still need to close.

Survey on Marine Energy in Tropical & Subtropical Countries

OES-Environmental is conducting a short survey to collect information about the potential environmental effects of marine energy development in tropical and subtropical countries. We are looking for information on any active or planned marine energy projects in these regions; any research, monitoring, or modeling efforts; and any relevant literature or other resources. We are also looking for contacts and/or organizations with experience and interest in these areas.

ORISE Applications Open

Applications for the U.S Department of Energy (DOE) Oak Ridge Institute for Science and Education (ORISE) Science and Technology Fellowship are now open! ORISE offers early-career professionals the opportunity to contribute their expertise to energy research by guiding strategy, designing funding programs, and managing projects. Apply by 31 July 2026.

NSF Request for Information

The U.S. National Science Foundation Directorate for Technology, Innovation and Partnerships (NSF TIP) recently introduced the NSF Tech Accelerators initiative to enhance the process of transforming research outputs from basic research into scalable, market-ready technologies that strengthen the U.S. economy and enhance national security. NSF has released a Request for Information on the NSF Tech Accelerator program model, organizational structures, and suitable deep-tech areas (including ocean technologies). Respond by 14 July 2026.

Calls for Abstracts & Papers

The Call for Town Halls and Panel Sessions for OCEANS 2026 Monterey is open until 20 July 2026. OCEANS 2026 Monterey will take place on 21–24 September 2026 in Monterey, California, USA.

The Call for Abstracts for the American Geophysical Union (AGU) 2026 Annual Meeting is open until 5 August 2026. Submissions are open for the oral and poster sessions, "Marine Energy Technologies & Resource Characterization". AGU 2026 will take place on 7–11 December 2026 in San Francisco, CA, USA.

The Association of Fish and Wildlife Agencies (AFWA) has opened the Call for Workshop & Related Meeting Requests for the 116th Annual AWFA Meeting until 14 August 2026. The meeting will take place on 14–18 September 2026 in Lancaster, Pennsylvania, USA.

The Call for Abstracts for the 12th International Ocean Thermal Energy Conversion (OTEC) Symposium is open until 15 September 2026. The symposium will take place from 30 November to 4 December 2026 in Bora Bora, French Polynesia.

The Call for Abstracts for the European Energy Research Alliance (EERA) DeepWind 2026 Conference is open until 14 October 2026. The EERA DeepWind conference will take place on 13–15 January 2027 in Trondheim, Norway.

Funding & Testing Opportunities

Interreg North Sea has launched the 4th Support Call for the OASIS Accelerator Programme, which supports start-ups and SMEs from the North Sea region with technical and commercial trainings, networking opportunities, and a dedicated Pressure Cooker event on 21–24 September 2026 in Hamburg, Germany, hosted by The German Aerospace Center. Apply by 6 July 2026.

VentureWell has opened applications for Stages 0 and 1 of its Ocean Enterprise Accelerator, which supports U.S. innovators with the development, commercialization, and adoption of new ocean data technologies and services. The Stage 1 Fall 2026 application deadline is July 7. The Stage 0 Fall 2026 application deadline is August 25. A Stage 0 informational session will take place on 10 August 2026 from 4:00–5:00pm EDT (8:00–9:00pm UTC).

Fondation OPEN-C has opened the OPEN SEA Demo call for offshore technology developers to test their technologies in real sea conditions at the grid-connected SEM-REV offshore test site. Apply by 10 July 2026.

UK Research and Innovation (UKRI) has opened applications for the Clean Maritime Demonstration Competition 7: Deployment trials, which will fund real world demonstrations of innovative clean maritime technologies in an operational setting. UK organizations and collaborators can apply by 15 July 2026.

The Offshore Wind Innovation Hub Innovator Program, which supports the advancement of offshore wind in New York and across the U.S. by accelerating impactful and scalable innovations, has opened its 2026 Call for Innovators. The program is seeking offshore wind technologies that can maximize the performance and value of existing and near-term projects, including environmental monitoring and coexistence technologies. Apply by 27 July 2026.

Ocean Exchange, in partnership with the Marine Environmental Observation, Prediction and Response Network (MEOPAR), has launched a new Call for Solutions focused on advancing ocean, Great Lakes, and St. Lawrence River sustainability through the innovative use of artificial intelligence and ocean data. One Canadian startup, nonprofit, researcher, or organization will receive a CAD $100,000 Ocean Exchange Neptune Award. Apply by 25 August 2026.

The U.S. Testing Expertise and Access for Marine Energy Research (TEAMER) program, which supports marine energy testing and development projects, is accepting Request for Technical Support (RFTS) 19 applications until 2 October 2026. TEAMER now provides expertise, non-open water, and open water support, as well as commercialization support.

Career & Internship Opportunities

France Energies Marines is seeking a Head of Wildlife & Interactions Department, which is structured around three main areas: studying interactions between offshore wind energy and wildlife, implementing measures for anticipating, avoiding, and reducing impacts, and supporting and advising the various stakeholders in the sector. Apply by 5 July 2026.

Ørsted is hiring a Senior Onshore Permit Manager who will be involved in leading a range of environmental and permitting topics to support both renewable energy permitting and development. Apply by 8 July 2026.

The University of Western Australia and Blue Economy Cooperative Research Centre are offering two PhD scholarships focused on Advancing electrical knowledge to scale and predict wave energy and Field-data-informed hydrodynamics optimisation of self-reacting, weathervaning wave energy converters. The projects will integrate unique field data from the M4 deployment alongside advanced numerical modelling to unlock the knowledge necessary for reliable scale-up to commercial systems. Apply by 10 July 2026.

Oregon Sea Grant, based at Oregon State University, is seeking a Strategic Communications Lead to enhance the awareness of, access to, engagement with, and support of Oregon Sea Grant and its programs for internal and external audiences. Apply by 13 July 2026.

The University of Campania *Luigi Vanvitelli* has opened its call for applications for its PhD program in Science and Engineering for the Environment and Sustainability. Attention will be given to research topics related to innovative harbor breakwaters for wave-energy conversion, with reference to field experiments on the Overtopping Breakwater for Energy Conversion (OBREC) at the Marine Renewable Energy Laboratory in Naples, Italy. Apply by 17 July 2026.

Ecodetect, which designs and deploys advanced seabed- and surface-mounted monitoring and communications systems that provide continuous, high-resolution detection of marine wildlife and man-made objects around offshore infrastructure, is hiring a part-time Business Development Associate to help grow the business. Apply by 24 July 2026.

The Hawai‘i Natural Energy Institute (HNEI) and the Department of Ocean and Resources Engineering at the University of Hawai‘i at Mānoa are recruiting an Assistant Professor or Associate Professor in Marine Energy. Application review begins on 1 August 2026 and will continue until the position is filled.

SMRU (Sea Mammal Research Unit) Instrumentation, which designs, builds, and sells advanced biologging and telemetry systems, is hiring a Research Scientist & Technical Support Specialist and an Instrumentation Technician. These positions are open until filled.

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 New York State Energy Research and Development Authority’s (NYSERDA) Offshore Wind Team is hosting a *Learning from the Experts* webinar, “Protected Species Observers for Offshore Wind”, on 15 July 2026 from 12:00–1:00pm EDT (4:00–5:00pm UTC). In this

webinar, Sarah Fortuna with A.I.S. Inc. will discuss the work of protected species observers in infrastructure development in the marine environment, including offshore wind development.

NetZero Atlantic is hosting a webinar, "Onshore Wind Digital Awareness & Education Campaign: Insights from Nova Scotia," on 23 July 2026 from 1:00–2:00pm ADT (4:00–5:00pm UTC). The webinar will provide a high-level summary of the research approach, the campaign strategy and targeting it informed, the messaging decisions behind it, the performance results, and practical takeaways for designing evidence-based awareness campaigns.

The National Laboratory of the Rockies (NLR) is hosting the next webinar its *Marine Energy Microgrid and Power Electronics Webinar Series*, "Advancing Power Electronics for Wave Energy Converters", on 9 July 2026 at 12:00pm MDT (6:00pm UTC). Participants will gain a deeper understanding of advanced power electronic solutions to unique challenges in wave energy that improve the efficiency and performance of wave energy converters.

NLR is also hosting "Microgrid Power Hardware-in-the-Loop Modeling" on 10 August 2026 at 12:00pm MDT (6:00pm UTC). The webinar will demonstrate NLR's power hardware-in-the-loop (HIL) microgrid model for marine energy integration with microgrid testing. This demonstration will feature a repurposed tidal energy generator mounted on NLR's 20-kW test bench connected to a bidirectional grid emulator and an HIL device.

The Portal and Repository for Information on Marine Renewable Energy (PRIMRE) is hosting a webinar, "From Design to Ocean Deployment: Lessons Learned from the SURF-WEC Project in Hawaii," on 11 August 2026 from 1:00–2:00pm MDT (7:00–8:00pm UTC). Join for an in-depth overview of the Small Underwater Research Flap Wave Energy Converter (SURF-WEC), a 1m x 1m oscillating surge device developed by NLR in partnership with the Hawai'i Marine Energy Center (HMEC), which has been successfully deployed off the coast of Oahu, Hawaii.

Upcoming Conferences

The 2026 University Marine Energy Research Community (UMERC) Conference and Marine Energy Technology Symposium (METS) will take place on 4–6 August 2026 at the Stevens Institute of Technology in Hoboken, New Jersey, USA. Early bird registration is now available through 3 July 2026.

The North American Wind Energy Academy (NAWEA) / WindTech 2026 Conference will take place on 21–23 September 2026 at Portland State University in Portland, OR, USA. Regular pricing is available until 31 July 2026.

Ocean Energy Europe (OEE) and the Dutch Energy from Water Association (EWA) are co-hosting the 2026 International Conference on Ocean Energy (ICOE) and OEE Conference on 5–7 October 2026 in The Hague, Netherlands. Early bird registration has been extended until 31 July 2026.

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

A Co-Benefits Analytical Framework: Overlap in Protection for People and Ecosystems from Power-Generating Tidal Range Infrastructure – Gray et al. 2026

> Tidal range power plants (TPPs) are reliable electricity generators with the la Rance TPP in France serving as an example of long-term (60+ years) success. Despite their potential for energy delivery, the challenges surrounding TPP development remain substantial. High initial investment and concerns about environmental impacts on marine ecosystems have made it difficult to progress major proposals. With rising sea levels and more frequent, intense storm surges expected to lead to greater inundation of key coastal zones, co-benefits to ecosystems and infrastructure that TPPs may offer are being reconsidered. Using the UK as a case study, we map appropriate tidal resource (>5 m tidal range), 2050 1:25 flood risk areas (1 m rise), coastal zones with conservation specification and areas of high human density.

Development and application of an environmental risk register for marine energy device and project developers – Freeman et al. 2026

> The marine energy industry is steadily advancing as more devices are deployed worldwide. However, several challenges and barriers remain, such as lingering uncertainty regarding the potential environmental effects of marine energy devices on marine animals, habitats, and ecosystems. Concerns have led to difficulty navigating permitting and consenting processes and receiving authorization to deploy devices in the marine environment, including extended timelines and costs. Based on existing risk registers, a novel marine energy environmental risk register was created to help the marine energy industry move beyond these barriers. This risk register aims to aid marine energy device and project developers identify and assess potential environmental risks early in device design or project planning, document and track potential environmental interactions, prioritize risks and determine risk responses, and make decisions throughout device or project development.

How can an ecosystem approach support integrated management of marine renewable energy? An initial assessment from an environmental point of view – Le Marchand et al. 2026

> With the increasing installation of marine renewable energy (MRE) devices in areas already subject to multiple anthropogenic activities and environmental changes, it is necessary to develop tools and methods for the integrated management of marine ecosystems. The ecosystem approach is a holistic environmental management method that considers all components of an ecosystem. The ecosystem approach has

demonstrated utility in the application to various anthropogenic activities and is relevant for consideration within the context of MRE. Indeed, many of the effects observed on marine ecosystems from those other activities are also applicable to MRE development. This review is an initial assessment where we summarize the potential effects of MRE development on marine ecosystems and propose schematic frameworks for applying the ecosystem approach to MRE. We also provide a non-exhaustive list of commonly used models pertinent to the ecosystem approach and associated with several reference studies.

Wind Energy

Effects of Offshore Wind Farms on the Behaviour, Energetics and Habitat Use of Red-throated Divers – Burger et al. 2026

Red-throated divers (*Gavia stellata*) are among the species most susceptible to anthropogenic disturbance from shipping traffic and offshore wind farms (OWFs). The species' preferred wintering and staging areas are relatively shallow coastal waters where such activities are widespread. Divers maintain large avoidance distances from OWFs, resulting in substantial habitat loss and conflicts under species protection legislation. To enable the continued expansion of offshore wind energy in line with the objectives of the German government, it is essential to improve our understanding of how red-throated divers respond to OWFs and associated maintenance vessel traffic. The current study assesses whether the displacement of divers from areas surrounding OWFs in the German and Danish North Sea has led to changes in foraging behaviour, activity budgets, and energy expenditure.

Assessing the Underwater Impact of Aerodynamic Noise From Offshore Wind Turbines – Botero-Bolívar et al. 2026

The growing demand for offshore wind energy has led to a significant increase in wind turbine size and to the development of large-scale wind farms, often comprising 100–150 turbines. However, the environmental impact of underwater noise emissions remains largely unaddressed. This paper quantifies, for the first time, the underwater aerodynamic noise footprint of three large offshore turbines (5, 10, and 22 MW) and wind farms composed of these turbines. We propose a novel methodology that integrates validated wind turbine noise generation (i.e., blade element momentum theory and Amiet) with plane wave propagation theory in different media, enabling turbine designers to predict underwater noise emissions. Our results indicate that the three turbines generate underwater noise levels that exceed the hearing thresholds of the low-frequency hearing group in the range of 0.1–1 kHz.

Community benefit agreement preferences for energy development offshore California, Oregon, and Washington: Insights from a choice-based conjoint experiment – Taufiq et al. 2026

Energy development projects can bring both opportunities and challenges to local host communities. Legal agreements between developers and communities – often referred to

as Community Benefit Agreements (CBAs) – can facilitate social acceptance, address distributive justice, and mitigate local impacts. While prior studies highlight the risks of poor CBA design and the importance of distributive and procedural fairness, we know little about public preferences regarding CBA design. This study addresses this gap in understanding public preferences for CBAs related to ocean-based renewable energy development. Using a choice-based conjoint survey experiment with West Coast respondents (California, Oregon, and Washington; n = 2999), we evaluate preferences across three key CBA attributes: benefit size, primary recipient, and fund management.

News & Press Releases

Marine Energy

Community co-designed wave energy prototypes demonstrated in Lake Michigan - University of Michigan

The crystal-clear waters of Lake Michigan lapped against the rocky shore of Whiskey Point, Beaver Island, as twenty or so locals gathered near Central Michigan University's boathouse, with cookies from the nearby farmers market in hand. The group centered around four wader-clad researchers standing about knee-deep in the lake. One man stood near a floating device that looked like a three-foot catamaran built around a PVC frame. An inflatable buoy sporting the Michigan block M was tied to a dock further from shore. The researchers from University of Michigan Engineering had come to demo prototype wave energy converters during the Island's 11th annual sustainability fair Saturday, June 20. But this wasn't a generic technology demonstration—the U-M team had designed their prototypes based on use cases envisioned by Beaver Island residents.

PTO module assembly starts for BiMEP-destined wave energy unit ahead of October deployment – Offshore Energy

The first of three power take-off (PTO) modules for Carnegie Clean Energy's CETO wave energy converter (WEC) has been delivered to SKF's manufacturing facility in Germany, where final PTO assembly works are being carried out, before ocean deployment set for October. CETO is a fully submerged, point absorber-type wave energy technology device. A submerged buoy sits a few meters below the surface and moves with the ocean's waves. This orbital motion drives a PTO system that converts this motion into electricity. The first of three power take-off (PTO) modules for Carnegie Clean Energy's CETO wave energy converter (WEC) has been delivered to SKF's manufacturing facility in Germany, where final PTO assembly works are being carried out, before ocean deployment set for October. CETO is a fully submerged, point absorber-type wave energy technology device.

Ocean Power Technologies Announces Deployment of PowerBuoy® System for Rutgers University and New Maritime Drone Order from Stevens Institute of Technology – Ocean Power Technologies

Ocean Power Technologies recently announced the successful deployment and commissioning of a PowerBuoy® system off the coast of New Jersey in support of Rutgers, The State University of New Jersey. The Company also announced it has received a purchase order from Stevens Institute of Technology for one of its maritime drones, the WAM-V® unmanned surface vehicle. The Rutgers project, supported by the New Jersey Economic Development Authority, is now fully installed and operational. The PowerBuoy® replaces a legacy ocean monitoring system that relied on fixed seabed cables, providing continuous offshore power and communications without permanent infrastructure. The system will support ongoing ocean research, environmental monitoring, and integration of surface and subsea sensors.

Wave Swell Energy to deploy its wave energy technology at Spain's landmark Mutriku plant – Wave Swell Energy

Wave Swell Energy (WSE), the Australian developer of patented wave energy conversion technology, and the Biscay Marine Energy Platform (BIMEP), the owner and operator of the Mutriku wave energy plant in Spain's Basque Country, have entered into a contract under which WSE will install and operate its unique, patented power take-off (PTO) technology at the world's most established coastal structure integrated wave energy facility. The Mutriku wave power plant stands out globally, not only for its fifteen uninterrupted years of operation, but also for hosting the most relevant OWC turbine testing developments in recent years. The contract is WSE's first step into the European market and the first time its PTO will operate inside a working breakwater-integrated wave energy plant.

Seatrec Wins $75,000 from DOE to Advance Thermal-Powered Profiling Float to Measure Zooplankton – Seatrec

Seatrec, a leader in thermal-powered profiling floats, has been selected as a winner of the DEVELOP Phase of the U.S. DOE's Powering the Blue Economy™: Power at Sea Prize, earning a $75,000 award. The company is integrating ASL Environmental Sciences' Acoustic Zooplankton Fish Profiler (AZFP-pico) onto the infiniTE™ float powered by ocean thermal energy with a goal to measure vertical profiles of zooplankton and mesopelagic biomass. Seatrec previously won the CONCEPT Phase of the same competition in November 2024 with a $10,000 award. Seatrec's infiniTE™ float converts ocean temperature gradients into electricity using phase-change materials, enabling long-endurance missions with profiling as frequently as every few hours. That sampling frequency is critical for capturing the diurnal behavior of zooplankton and mesopelagic organisms central to the biological carbon pump.

Wind Energy

Canada's first offshore wind farms move closer to reality as regulator clears bidders – CBC

> Development of Canada's first offshore wind farms took a significant step forward recently when Nova Scotia's offshore energy regulator released the names of companies qualified to bid on seabed licences. The Canada-Nova Scotia Offshore Energy Regulator identified five companies and two groups of companies that won approval after taking part in a review process between October 2025 and January of this year. The eligible companies were required to meet certain financial, technical, legal and social criteria to prove they are capable of completing offshore wind projects. Meanwhile, the federal-provincial agency confirmed a formal call for bids will be issued sometime later this year. And those bids will be subject to ministerial reviews at the federal and provincial levels.

China Deploys First 16MW Floating Offshore Wind Tension-Leg Platform – The Maritime Executive

> China continues its developments, placing it at the forefront of the offshore wind energy sector. In the latest development, officials reported deploying the largest tension-leg floating offshore wind platform designed to hold a 16 MW turbine. The platform was assembled at the Gaolan Port in Zhuhai, south China, and departed on June 28 for its deployment in the South China Sea. The structure stands more than 307 meters (1,007 feet) and weighs almost 8,000 tonnes. It is the largest of its kind, designed to support a single turbine. Once it is operational, it will generate around 54 million kWh annually. Officials said the deployment is part of China's accelerated efforts to scale up and commercialize deep-sea floating offshore wind technology. The industry has already conducted several demonstrations, and it is ready to move forward with commercial deployments.

2026 H1 Offshore Wind Bidding Results: 5 Projects Selected, 1,786 MW Awarded – Korean Ministry of Climate, Energy and Environment

> As a result of the competitive bidding for fixed-price contracts for offshore wind power in the first half of 2026, a total of 9 projects totaling 3,656 MW submitted bids, and 5 projects totaling 1,786 MW were ultimately selected. The Ministry of Climate, Energy and Environment (MCEE, Minister Kim Sungwhan) said on June 30 that the Korea Energy Agency finalized the results of the first-half 2026 offshore wind fixed-price contract competitive bidding and individually notified the bidders. This bidding round achieved a competition ratio* exceeding 2:1 between the bid volume and the selected capacity for the first time since offshore wind competitive bidding was introduced in 2022, confirming the industry's strong interest in domestic offshore wind project development and investment.

EIA Scoping Report submitted for proposed Gwynt Glas Offshore Wind Farm – Gwynt Glas

Gwynt Glas Offshore Wind Farm, a pioneering project in the Celtic Sea, has submitted its Environmental Impact Assessment (EIA) Scoping Report to the Planning Inspectorate (PINS) Natural Resources Wales and the Marine Management Organisation. The submission formally requests an opinion from stakeholders on the outline of the topics and methodologies proposed for inclusion in the Environmental Impact Assessment. This marks a significant milestone in the project's development and start of formal engagement, inviting invaluable feedback to help shape the design and assessment. Gwynt Glas represents a transformative investment opportunity for Wales. With the potential installed generating capacity of up to 1.5GW, it is considered a Nationally Significant Infrastructure Project.

Amazon and Skyborn Renewables sign Germany's largest Power Purchase Agreement for the Gennaker offshore wind farm – Skyborn Renewables

Amazon and Skyborn Renewables today announced the signing of a 600 megawatts (MW) Power Purchase Agreement (PPA) for carbon-free electricity from the Gennaker offshore wind farm in the German Baltic Sea. It is the largest single PPA ever signed in Germany. Amazon's long-term commitment to buy Gennaker's power gives Skyborn the financial certainty to move forward with construction. Gennaker will add up to 976.5 MW of new offshore wind capacity to Germany's electricity system, accelerating Germany's energy transition and strengthening the country's supply of domestically produced carbon-free electricity. With a total capacity of up to 976.5 MW, Gennaker is set to become the largest offshore wind farm in the German Baltic Sea. The project will be located approximately 15 kilometres north of the Fischland-Darß-Zingst peninsula in Mecklenburg-Western Pomerania.