



25 September 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!

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Announcements

Triton Explains: Marine Energy

Marine Energy Explained is a new series of 101 explainer stories around marine energy topics—what it is, how it works, environmental and technological considerations, and more! Take a deeper dive into types of marine energy, potential environmental effects, and the research at Pacific Northwest National Laboratory (PNNL) working to address these effects in the latest [Triton Explains: Marine Energy 101](#).

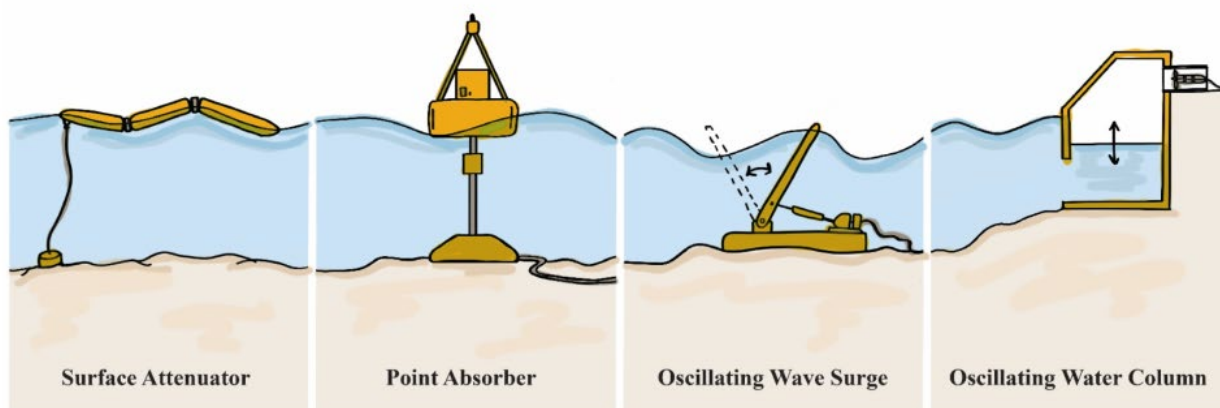


Illustration by Cailene Gunn | PNNL

Call for MECC Mentors

The National Laboratory of the Rockies (NLR) is seeking energy professionals from industry, government, and academia to mentor student teams participating in the [2027 Marine Energy Collegiate Competition \(MECC\)](#). Mentors provide approximately 15–24 hours of guidance between October 2026 and May 2027, helping students strengthen their projects, explore career pathways, and better understand real-world industry challenges. Professionals at all career stages are encouraged to apply, including young professionals. To give back to the energy community and help develop its future workforce, please [submit the short interest form](#) by 5 October 2026.

T-ReX Collegiate Competition

The U.S. Department of Energy (DOE) has opened applications for the inaugural [Technology Recycling and Repurposing \(T-ReX\) Competition](#), which challenges students to find creative yet practical ways to recycle or repurpose retired energy components and materials. Student teams from a variety of disciplines and institutions across the United States are invited to participate in either the Recycling Track or the Repurposing Track. Apply by 30 September 2026.

NSF Request for Input

The U.S. National Science Foundation (NSF) has announced its intent to continue operations and maintenance of the NSF Ocean Observatories Initiative (OOI) and released a [Request for Input](#) on priorities, strategies, and technologies for future NSF ocean observing systems to effectively support scientific and societal needs. Submit your responses by 30 September 2026.

LEEP Fellowship

The U.S. DOE Office of Technology Commercialization (OTC) recently announced that applications are open for the 2027 cohort of the [Lab-Embedded Entrepreneurship Program \(LEEP\)](#), which provides innovators who have early-stage energy startups and/or emerging technologies with a two-year funded fellowship in one of four National Laboratories, supporting them as they develop and transition their ideas into the market. The 2027 program includes a *Water Power and Energy-Water Technologies* topic area. Apply by 30 October 2026.

ETIPP Applications Open

The U.S. DOE recently opened applications for the [Energy Technology Innovation Partnership Project \(ETIPP\)](#), which helps coastal, remote, and island communities develop more affordable, reliable, and secure energy systems through strategic energy planning support and deep-dive technical assistance. [Register to join an informational webinar](#) on 30 September 2026 at 1:00pm MDT (7:00pm UTC) to learn more. Apply by 18 November 2026.

Calls for Abstracts

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.

The [Call for Abstracts](#) for the [12th International Ocean Thermal Energy Conversion \(OTEC\) Symposium](#) has been extended to 15 October 2026. The symposium will take place from 30 November to 4 December 2026 in Bora Bora, French Polynesia.

The [Call for Abstracts](#) for the [13th International Conference on Scour and Erosion \(ICSE\)](#) has been extended to 31 October 2026. ICSE will take place from 31 August to 3 September 2027 in Porto, Portugal.

Funding & Testing Opportunities

The Nova Scotia Department of Energy is inviting applications from tidal energy developers seeking to test innovative in-stream tidal energy technologies in the Bay of Fundy as part of the [Demonstration Permit Program](#). Up to 7.7 MW of demonstration capacity is available under the program's 10 MW cap, with individual projects limited to less than 2 MW. The program offers permit terms of up to five years, with opportunities for renewal, and successful projects will enter into a prescribed power purchase agreement with Nova Scotia Power. Apply by 30 September 2026.

The California Ocean Protection Council and California Sea Grant College Program have released a [Request for Proposals for Monitoring and Synthesis to Inform Offshore Development and Marine Ecosystem Management in California](#). This solicitation supports two complementary tracks to assess baseline conditions for current and/or future offshore development in California, including offshore energy. Letters of intent are due by 9 October 2026, and full proposals are due 17 November 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 16 October 2026. TEAMER now provides [expertise, non-open water, and open water support](#), as well as [commercialization support](#).

Career & Internship Opportunities

University of Southampton is offering a funded PhD project (for UK students only), [An ocean in balance: delivering a model of civic participation for just decision making in offshore energy](#). This PhD questions whether existing stakeholder engagement processes are fit for purpose to deliver just decision making in offshore energy development. Apply by 30 September 2026.

The Centre for Ocean Energy Research (COER) at Maynooth University is recruiting a [PhD Researcher in Ocean Energy](#) to work on control co-design for marine renewable energy systems. The PhD student must be able to start by January 2027.

Ocean Renewable Power Company (ORPC) is seeking a [Regulatory Affairs Manager](#) who bridges the gap between complex science, engineering, and public policy to lead the permitting, licensing, and compliance strategies for its global portfolio.

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

Renewables Grid Initiative (RGI) and Offshore Coalition for Energy and Nature (OCEaN) are hosting a webinar, “[Shared Sea, Shared Decisions: Stakeholder Engagement in Offshore Wind and Grid Planning](#),” on 29 September 2026 from 11:00am–12:15pm CEST (9:00–10:15am UTC), to launch a new report diving into exploring stakeholder engagement approaches related to offshore wind and grid development in the North and Baltic Seas.

Fundy Energy Research Network (FERN) is hosting a webinar, “[The Future of Tidal Power in Canada](#),” on 29 September 2026 at 12:00pm ADT (3:00pm UTC). This webinar will provide an overview of the Orbital Marine Power’s tidal energy technology and ongoing projects in the UK, sharing key lessons and insights from the deployment and operation of their floating tidal energy turbines. The webinar is presented in partnership with Acadia University, Fundy Ocean Research Centre for Energy (FORCE), and the Government of Canada.

The New York State Energy Research and Development Authority (NYSERDA) is hosting its next *Learning from the Experts* webinars, “[Understanding the Bridge between Existing and New Energy Sources](#),” on 30 September 2026 from 11:00am–12:00pm EDT (3:00–4:00pm UTC), and “[Offshore Construction: Foundation Installation](#),” on 8 October 2026 from 10:00–11:00am EDT (2:00–3:00pm UTC).

Renewable Energy Wildlife Institute (REWI) is hosting a webinar, “[Publication Deep Dive: AWWIC Technical Reports](#),” on 30 September 2026 at 12:00pm EDT (4:00pm UTC). Join for a look into updated key publications from the American Wind Wildlife Information Center (AWWIC), including the 3rd Edition Bat and Bird Technical Reports.

The [PrePARED](#) (Predators and Prey Around Renewable Energy Developments) project is hosting a webinar, “[PrePARED Offshore Wind Farm CEAs](#),” on 7 October 2026 at 12:00pm BST (11:00am UTC). During the webinar, Rachael Sinclair will present key findings from PrePARED Reports 009 and 013 on offshore wind farm cumulative effects assessments (CEAs) from two case studies.

[OES-Environmental](#) is hosting a public webinar, “[Navigating Consenting Processes for Environmental Effects of Marine Renewable Energy: Regulatory and Industry Perspectives](#)” on 13 October 2026 from 8:00–9:30am PDT (3:00–4:30pm UTC). The webinar will include

presentations from OES-Environmental on ongoing research and coordination efforts, CorPower Ocean on their current projects and future developments in Portugal and Scotland, and FORCE on its work to advance next generation monitoring tools and approaches in Minas Passage.

Discovery of Sound in the Sea (DOSITS) is hosting the last webinar in its *2026 DOSITS Webinar Series*, “[Acoustic Sensing on Autonomous Underwater Platforms](#),” on 14 October 2026 at 12:00pm EDT (4:00pm UTC). Join the webinar for a discussion of the use of autonomous underwater technologies for acoustic sensing of marine mammals.

Upcoming Deep Dive

The Dutch Marine Energy Centre (DMEC) is hosting a [Deep Dive: Specialised Markets of Offshore Renewable Energy - Turning Needs into Opportunities](#) on 29 September 2026 from 5:00-7:00pm CET at the DMEC Hub in The Hague, Netherlands. Andrew Smith from Deja Blue Consulting will speak about offshore data centers and Kristina Burke from the European Marine Energy Centre (EMEC) will share her experience and perspective on islands.

Upcoming Conferences

The Marine Alliance for Science and Technology for Scotland (MASTS) is hosting the [MASTS Annual Science Meeting 2026](#) on 10–12 November 2026 in Glasgow, Scotland. Registration is now open and early bird rates are available until 27 September 2026.

The Renewables Grid Initiative (RGI), the International Union for the Conservation of Nature (IUCN), and the Global Initiative for Nature, Grids and Renewables (GINGR) are hosting the [POWER & NATURE: A Conference on Accelerating Electrification, Offshore Wind and Grids with Nature and People as Allies](#) on 30 November 2026 in Brussels, Belgium.

WavEC Offshore Renewables is hosting the [WavEC Lisbon Floating Offshore Wind Seminar](#) on 2 December 2026 in Lisbon, Portugal. Registration is now open and reduced rates are available until 30 September 2026.

DMEC and WavEC Offshore Renewables are also hosting the [Nature+ 2026 Conference](#) on 3 December 2026 in Lisbon, Portugal and online. [Register here](#).

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

[Linking blue economy sectors to ecosystem services and socio-economic priorities: a framework for integrated maritime spatial planning](#) – Pegorelli et al. 2026

This study advances the integration of ecosystem services (ES) into maritime spatial planning and management by developing a structured framework that links blue economy sectors with their associated pressures and potential impacts on ecosystem services and socio-economic values. By doing so, it addresses a key gap in current practice: the fragmented treatment of ecological, sectoral and social priorities in isolation. The framework was built by adapting the DAPSI(W)R(M) approach—Drivers, Activities, Pressures, State changes, Impacts (on human Welfare) and Responses (as management Measures)—and integrating insights from ecosystem services literature, sector-specific analysis and socio-economic criteria.

The Importance of Empirical Particle Motion Measurements for Monitoring Underwater Noise from Wave Energy Converters – Chicco et al. 2026

Underwater noise from Marine Energy Converters (MECs), including Wave Energy Converters (WECs), is a recognized stressor for marine organisms. Current monitoring guidelines focus on scalar pressure, but particle motion is equally important, especially in complex shallow-water environments where WEC systems can affect the soundscape. Many marine species detect sound primarily through particle motion, highlighting the need to include it in monitoring frameworks. This work underscores the importance and role of sound in marine habitats. Using a 3D accelerometer and hydrophone, we collected acoustic data near an Inertial Sea Wave Energy Converter (ISWEC) off Pantelleria, Sicily.

Barriers and drivers for tidal energy development: A case study of Ireland – Ayoub et al. 2026

European states have set ambitious targets to meet their climate goals and decarbonize their energy sector. These included development plans for the marine environment, knowing its potential in harnessing Offshore Renewable Energy (ORE) through wind, wave and tidal resources. The latter is becoming highly attractive due to its predictability, reliability and potential to answer communities' energy needs, but it is still associated with several challenges that are often overlooked. This paper aims to identify the barriers and drivers for tidal energy development in Ireland following the recent policy changes. This is done through semi-structured interviews with key local and regional stakeholders in the ORE field, which are analysed following Braun and Clarke's Thematic Analysis approach.

Wind Energy

Physical and Biogeochemical Ocean Response to Potential Offshore Wind Development Along the U.S. West Coast – Jacox et al. 2026

Planning for floating offshore wind development along the U.S. west coast has prompted questions about how this new ocean use may impact marine ecosystems. Previous research suggests that offshore wind farms will alter wind dynamics and upwelling in this region, but impacts on biogeochemistry have not yet been explored. Here, we employ a

regional atmosphere-ocean-biogeochemistry modeling framework to evaluate the ocean response to simulated wind energy development off Oregon and California. The largest impacts occur during peak upwelling season off central California. Wind stress curl changes at the edges of the wind wake lead to an onshore/offshore dipole of decreased/increased upwelling and associated nitrate supply.

Optimising bat-friendly curtailment algorithms for wind turbines – Barre et al. 2026

Wind turbines worldwide cause high mortality in long-lived bats through collisions. To mitigate these impacts, operators commonly apply blanket curtailment by stopping turbine blades under low wind speed and mild temperature, when bat activity is often high and energy production is low. Nevertheless, this approach shows highly variable effectiveness. More advanced curtailment tools exist, but evidence for their efficiency and practical implementation remains limited. Using acoustic monitoring data collected over 25,588 nights at 123 wind turbine nacelles in France, we trained algorithms to predict bat presence probability from weather conditions, the time of year and time of night.

Passive acoustic monitoring as a tool for offshore wind farm biodiversity assessments: a pilot study – De Clippele et al. 2026

Passive Acoustic Monitoring (PAM) has been used to monitor marine mammal species in Scottish waters over the past 10 years. A question remains over whether recordings collected within the scope of marine mammal monitoring can be used to monitor the presence and changes in the communities of species, such as benthic invertebrates and fish. This study aimed to investigate whether bio-and eco-acoustical measurements can be used to assess changes in benthic biodiversity through unlocking PAM data from eight locations along the east coast of Scotland (UK). The focus of this study was to assess fish's and crustacean's active (i.e. intentionally produced sounds for communication) and passive (i.e. unintentionally non-communicative produced sounds) sounds.

News & Press Releases

Marine Energy

ACHIEVE Update: Fabrication, Assembly and Deployment Prep – Carnegie Clean Energy

Carnegie Clean Energy is pleased to provide an update on the recent fabrication, assembly and deployment preparation activities undertaken on the Company's leading wave energy technology, CETO, under the ACHIEVE Programme, which is funding CETO's grid connected build and installation at the Biscay Marine Energy Platform (BiMEP). Recent ACHIEVE activities include the foundation structures have had the finishing touches completed in preparation for deployment. - Fabrication and assembly of the PTO modules have continued with supply chain partners. Challenges with interfaces between suppliers have been encountered but thoughtfully addressed by the technical

team, delivering valuable learnings from the first ever CETO rotary electric power take-off system built.

Can Surge Wave Tech Survive the Open Ocean? – NLR

For a West Coast kid who fears ocean waves, marine energy would seem like an odd path to pursue—and the mountains a strange place to start. But Brittany Lydon did both. “I grew up like an hour from Seattle, so I love the water. I love the Sound. I love the lakes,” she said. “And I’m actually very, very scared of ocean waves. I find them so terrifying.” Yet, when she first encountered marine energy as a floundering University of Washington (UW) undergrad, she was hooked. “I was in civil and environmental engineering, and they had us do a seminar where [people from] all the subsections of civil give a talk to help you learn more about each field,” she said. “And I hated all of them.” Until one person gave a presentation on marine energy. It was a pivotal event that set her on the path toward a career in the emerging field. And that path eventually led to the Sea Wave Environmental Lab (SWEL) at the National Laboratory of the Rockies (NLR).

Islands Tap Energy From Oceans’ Thermal Layers: Lakshadweep, the Canaries, others test ocean thermal energy conversion – IEEE Spectrum

Construction underway on a remote island nearly 400 kilometers west of India’s mainland could demonstrate, for the first time, the commercial viability of a vast, untapped renewable resource: the ocean’s thermal layers. Here, on the Lakshadweep Archipelago, surface waters are more than 20 °C warmer than the depths below, and with the right equipment that temperature differential can be exploited to generate electricity. Known as ocean thermal energy conversion, or OTEC, such power plants can deliver renewable power around the clock. India’s project will tap 1,000-meter-deep seawater to generate 65 kilowatts of electricity and produce 100,000 liters of potable water per day. Developed by India’s NIOT, it’s a small project, but a big step toward a commercial breakthrough for OTEC.

Bringing a human-centered approach to marine energy research – University of Washington (UW) Human Centered Design & Engineering

Just after the end of the school year, four UW Human Centered Design & Engineering students traveled to Alaska to spend a week alongside engineers researching the future of marine energy. Based at a remote field station, they traveled out on the water and helped researchers count fish as part of a study examining the environmental interactions of a river turbine. It was hands-on fieldwork in a domain far outside the typical HCDE classroom. The group spent the 2025-26 year exploring how human-centered methods could help marine energy researchers better understand and engage the communities their technologies may affect. The team created a publicly available [Toolkit for Community Engaged Research](#), which gathers research, examples, and engagement methods in one place for marine energy researchers and engineers.

Off Jeju's coast, waves power a test of hydrogen's future – The Korea Herald

After 15 minutes of sailing through rolling waves, the boat approached a lone box-shaped platform standing in the sea off Jeju Island's west coast. Measuring 32 meters long and 23 meters wide, the concrete structure is anchored in water about 15 meters deep. It is the core of a wave energy test site operated by the Korea Research Institute of Ships and Ocean Engineering. Researchers here are testing whether electricity generated at sea can be converted into hydrogen, providing a way to store renewable energy for longer periods without transmitting all of it to land. The boat rocked so heavily during a media tour Monday that standing without holding onto something was difficult. Those waves, however, are precisely what make the area suitable for testing wave power.

Wind Energy

[New smart tech to capture large scale marine mammal behaviour in the Celtic Sea – Offshore Renewable Energy \(ORE\) Catapult](#)

An innovative new £2.7 million project deploying state of the art listening equipment in the Celtic Sea, to create an interactive map of marine mammal behaviour, has been launched by ORE Catapult, in partnership with Celtic Sea Power and the University of Exeter. The three-year SubSea Soundscape project, funded by The Crown Estate's Offshore Wind Evidence and Change (OWEC) programme, aims to strengthen understanding around potential environmental interactions with future floating offshore wind turbines. The OWEC programme funds a range of research projects to de-risk and accelerate the delivery of offshore wind infrastructure, while enabling marine and coastal ecosystems to thrive. Last October, researchers at ORE Catapult deployed 21 marine acoustic recorders at key locations, around 20km apart, across the Celtic Sea.

[A groundbreaking experimentation on the biofouling of offshore systems](#) – France Énergies Marine

Understanding and managing biofouling remains a major challenge for the offshore renewable energy sector. Progress in this area is often hampered by a lack of offshore data collected over a long period. As part of the BIODHYL joint industry project, a multi-year monitoring programme was carried out at various sites in the Atlantic and the Mediterranean, at different depths. This experiment is remarkable for its nature and duration. It enabled the collection of previously unrecorded data and led to major findings for industry. The BIODHYL R&D project (2022–2026), which concluded on 28 April this year, led to the development of an innovative protocol for measuring biofouling on synthetic mooring lines and dynamic cables. A multi-year monitoring programme of biofouling was carried out at different sites in the Atlantic and the Mediterranean. This at-sea experiment is remarkable for its nature and duration.

[Ørsted and Nuveen inaugurate Borkum Riffgrund 3, one of Germany's largest offshore wind farms](#) – Ørsted

Ørsted and its partner Nuveen inaugurated Borkum Riffgrund 3, recently marked the official opening of the company's largest offshore wind farm in Germany and one of the

country's first offshore wind farms on the scale of a conventional power plant. With an installed capacity of 913 MW, Borkum Riffgrund 3 can generate enough renewable electricity annually to cover the consumption of close to one million German households. Borkum Riffgrund 3 is located around 72 kilometres off the German North Sea coast and is owned 50/50 by Ørsted and Nuveen Infrastructure. As a core part of its contribution to German energy security, Borkum Riffgrund 3 helps cover the growing demand for renewable electricity from companies at the centre of Germany's industrial and digital economy, including Amazon, Google, EHA/REWE Group, Covestro, and BASF.

HUB Ocean and Ecowende unlock first offshore wind farm data to accelerate knowledge sharing on North Sea ecology – Ecowende

Ecowende is making the first ecological data from its Hollandse Kust West offshore wind farm publicly accessible, giving researchers, offshore wind developers and other expert users new insight into the marine environment in and around the wind farm. The data is being shared through HUB Ocean's Ocean Data Platform as part of the organisations' joint commitment to make ecological data from offshore wind more accessible and reusable. The first datasets include measurements from the multi-parameter probes (MPPs) installed on Waterproof's Passive Acoustic Monitoring (PAM) frames in the wind farm, and vertical profiles with the same MPPs taken during the different visits to the wind farm since the start of monitoring. The data provides insight into underwater abiotic conditions.

Star of the South Data Boosts Bass Strait Marine Research – Southerly Ten

One of the largest marine environmental datasets collected in Bass Strait is now helping scientists better understand the region's marine life. Australia's most advanced offshore wind project, Star of the South, is sharing data from years of environmental studies with research organisations including CSIRO, Geoscience Australia and Deakin University. Between 2020 and 2024, Star of the South undertook one of the biggest research programs of its kind in Bass Strait to understand the local environment and inform the design and assessment of the proposed offshore wind project. More than 50,000 observations were recorded across more than 13,000 survey hours, building a detailed picture of fish, birds, whales, seabed habitats and coastal processes in the area.