

TETHYS BLAST

4 July 2025

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

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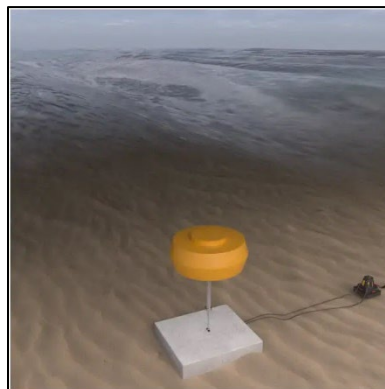
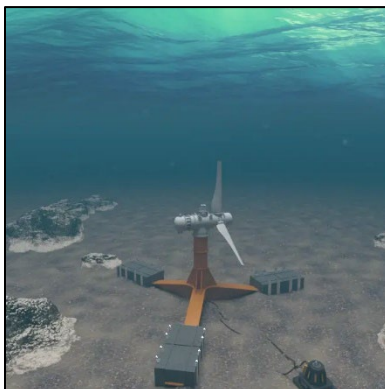
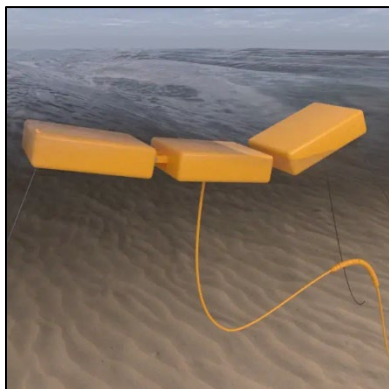
[Marine Energy Documents](#)
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Announcements

New Marine Energy Animations/GIFs

PRIMRE recently released a new set of marine energy animations/GIFs on its [Marine Energy Basics](#) pages, including several [wave energy device GIFs](#) and [current energy device GIFs](#).



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.

Calls for Abstracts

Net Zero Atlantic has opened the Call for Abstracts for the [Nova Scotia Offshore Wind Research & Development Forum 2025](#) until 24 July 2025. The forum will take place on 24 September 2025 in Halifax, Nova Scotia, Canada.

The Call for Abstracts for the [4th Australia and New Zealand Wind Waves Symposium](#) is open through 1 August 2025. The Symposium will take place 17-18 November 2025 at The University of Western Australia in Perth, Western Australia.

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

Funding & Testing Opportunities

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.

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. Applications are due 31 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.

Career Opportunities

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 by 6 July 2025.

The University of Porto is offering a [Postdoctoral Research Grant](#) within the European project, TAILWIND - Sustainable station-keeping systems for floating wind. The researcher will work on a case study on the Portuguese coast. Applications are due by 7 July 2025.

National Grid is hiring a [Lead Marine Consents Officer](#) to obtain consents for projects and enable it to be developed to programme and cost. Applications are due by 10 July 2025.

Oregon State University is seeking a [PacWave Commercial Manager](#) who will be responsible for developing and leading PacWave's commercial team, and identifying, securing, and managing commercial opportunities to support its long-term growth. Applications are due by 26 July 2025.

West Coast Ocean Alliance (WCOA) is currently hiring a [Project Manager](#) to join its core contract staff team and support all project activities, government member engagement, and the tracking of current and future WCOA funding implementation. Applications will be reviewed on a rolling basis beginning on 28 July 2025.

Ocean Renewable Power Company (ORPC) Ireland is looking for a highly motivated and resourceful [Project Developer](#) to join its team in Dublin and support its market, business, and project development activities across Europe.

Ocean Winds is hiring an [Onshore Consenting Manager](#) to lead all the onshore consenting activities on the Caledonia Offshore Wind Farm (UK) and a [Stakeholder and Consent Manager](#) to support the development of the Hanbando Offshore Wind project (South Korea).

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

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.

The Pacific Offshore Wind Consortium is hosting a webinar, “[Permitting for Offshore Wind Port Infrastructure Projects](#)”, on 10 July 2025 at 2:30pm PDT (9:30pm UTC). This webinar will include the key findings from a recently published report, followed by a panel discussion with staff from the California State Lands Commission and California Coastal Commission to discuss each agency's role in permitting these types of projects.

The Consulate General of the Netherlands in New York City is hosting a webinar, “[Energy Innovation: Examples from the Netherlands and USA Ecosystems](#)”, on 15 July 2025 from 12:00-1:00pm EDT (4:00-5:00pm UTC). This webinar will highlight some current initiatives and programs in the USA and the Netherlands.

Upcoming Workshops

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).

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

Upcoming Course

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

Upcoming Conferences

The Dutch Marine Energy Centre (DMEC) is hosting the [DMEC Nature+ Conference](#) on 30 September 2025 in The Hague, Netherlands and online.

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

RenewableUK and Scottish Renewables are hosting [Floating Offshore Wind 2025](#) on 12-13 November 2025 in Aberdeen, Scotland.

Marine Renewables Canada is hosting the [Marine Renewables Canada 2025 Conference & Exhibition](#) on 12-14 November 2025 in Halifax, Nova Scotia, Canada.

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

[ITSASDRONE, an autonomous marine surface drone for fish monitoring around wave energy devices](#) – Uriarte et al. 2025

One of the primary foundations of the EU Blue Growth policy is the development of ocean energy. While the technological development of devices is advancing quickly, little is known about their possible environmental implications. The SafeWAVE initiative aims to increase understanding of potential environmental effects from wave energy projects in

the coastal waters of Portugal, Spain, and France. The aim of this work was to monitor the interaction between the WEC and the fish community in the Spanish study area (BiMEP). However, the device to be monitored had to be replaced by a floating laboratory (HarshLab) in the same area, since the WEC suffered a series of unforeseen events that made its use impossible. The monitoring was carried out using an autonomous vehicle (ITSASDRONE) equipped with a scientific echosounder, which recorded acoustic data that provided information on the abundance of fish in the area.

Collaboratively Advancing our Understanding of Electromagnetic Fields – what do you need to know? – Hutchison and Gill 2025

Electromagnetic fields (EMFs) are emitted from subsea power cables associated with offshore renewable energy (ORE, which may include wind, wave and tidal energy) and general electricity transmission. With the anticipation of large-scale ORE deployment and need for more robust evidence-based assessment of environmental and cumulative impacts, a cross-sectoral knowledge exchange initiative was deemed to be timely. The intended outcome was to establish a common understanding of current knowledge regarding the EMF topic (EMF emissions, species effects and potential impacts) and focus on strategically improving the evidence base where needed. The overarching goal was to improve the understanding of the current evidence base for use in the environmental impact assessments, for developers, regulators and advisors.

Exploring Salinity Gradient Power in Sweden: Key Factors, Machine Learning Predictive Modeling, and Life Cycle Assessment – Mohammadi et al. 2025

This study explores strategies to maximize salinity gradient power (SGP) generation using reverse electrodialysis (RED), focusing on key operating parameters under Swedish environmental conditions. Herein, using a full-factorial experimental design, seawater salinity, flow velocities, and water temperature is varied across three levels to assess their impact on SGP output. machine learning methods predict power density (PD), including 1) ensemble learning with decision tree (DT), 2) gaussian process regression (GPR), and 3) artificial neural network (ANN). Complementing this, a life cycle assessment examines the environmental impact of RED systems, identifying the Seawater River RED and brine-wastewater treatment plant RED systems as having environmental effects, particularly on ozone layer depletion and freshwater toxicity.

Wind Energy

Life-cycle impact assessment of offshore wind energy development on migrating bird diversity in the North Sea – Critchley et al. 2025

As offshore wind energy development increases, it is vital to rapidly assess the cumulative impacts to biodiversity, particularly for migratory species that could be impacted across multiple sites. Life-cycle assessments (LCAs) are a useful tool for assessing and comparing cumulative effects over a large scale and are frequently used for decision-making in industry. We have adapted the LCA methodology to assess collision,

disturbance and barrier impacts of offshore wind energy developments in the North Sea on migrating birds from Norway by 2030. The potentially disappeared fraction of species (PDF)—a measure of the potential loss of species richness in an area—for collision, disturbance and barrier impacts was calculated for birds on migration within migration groups, relative to wind farm energy production in GWh.

[Spatiotemporal patterns in sex ratios of bat fatalities at wind energy facilities in the United States](#) – Weaver et al. 2025

A challenge facing bat conservation and wind energy development is how to maximize renewable energy production while minimizing impacts to bat populations. Reproductive-aged females are particularly important to dynamics and stability of bat populations due to their life history characteristics, but morphological sex identification methods have resulted in inaccurate reporting of sex ratios of fatalities at wind energy facilities. Our goal was to assess overall species-specific sex ratios of fatalities, and how those ratios varied by time and location. We used molecular techniques to determine the sex of 4445 carcasses of Brazilian free-tailed (*Tadarida brasiliensis*), evening (*Nycticeius humeralis*), hoary (*Lasiurus cinereus*), eastern red (*Lasiurus borealis*), northern yellow (*Lasiurus intermedius*), silver-haired (*Lasionycteris noctivagans*), and southern yellow (*Lasiurus ega*) bats found during turbine searches at 20 wind energy facilities in ten states in the United States between 2009 and 2022.

[Expected occurrence of wildlife in US Atlantic offshore wind areas](#) – Brill et al. 2025

Offshore wind energy has entered a pivotal phase of development for the U.S. Atlantic Outer Continental Shelf (OCS), a region that supports critical habitats, migratory corridors and flyways for many marine species. Assessing where and when marine wildlife occurs is a crucial first step in developing a risk assessment framework to evaluate potential risks and impacts of offshore wind development. In this study, we perform this initial assessment by evaluating the expected occurrence of marine mammal, seabird and sea turtle taxa in areas of interest to identify patterns and potential areas of concern. Specifically, this work depicts the expected monthly density of 84 marine species and taxa within each of the 29 active wind energy lease areas plus a 10 km buffer to account for nearby activity.

News & Press Releases

Marine Energy

[Renewable energy market set for major boost as SKF announces tidal stream breakthrough](#) – SKF

Global engineering leader SKF has joined forces with Proteus Marine Renewables to deliver cutting-edge technology for MeyGen. Operated by SAE Renewables, the world's largest tidal stream array is located in Scotland's Pentland Firth. SKF recently announced

a major breakthrough by setting a new world record for tidal turbine performance and reliability. Its systems have operated continuously for over 6 years at 1.5MW without the need for unplanned or disruptive maintenance, marking a new era for the technology being tested by governments around the world. Helping to redefine the capability of renewable ocean energy systems, SKF will help provide a further minimum 59MW addition to the current 6MW pilot array at MeyGen, with ambitions to scale significantly in line with further investment and innovation through 2025 and beyond.

[Ocean Power Technologies Awarded Patent for System and Method for Vehicle Charging](#) – Ocean Power Technologies

Ocean Power Technologies, Inc. (OPT), a leader in innovative and sustainable marine energy and data solutions, recently announced that the United States Patent and Trademark Office has issued a Notice of Allowance for its U.S. patent application titled “System and Method for Vehicle Charging.” The newly allowed patent (Application No. 18/936,528) protects OPT’s breakthrough system for an autonomous, floating marine charging solution. Designed to address the increasing demand for clean maritime operations, the invention enables electric vessels—including uncrewed surface vehicles—to safely locate, dock with, and recharge from a floating energy platform while at sea. The floating charging station will integrate seamlessly with the PowerBuoy® platform, allowing it to serve as both a power generation node and a recharging hub.

[Minesto-led consortium awarded 25 MSEK grant to build a tidal energy power plant for baseload electricity production to microgrids](#) – Minesto

Minesto, leading ocean energy developer, is heading a consortium of four that has been awarded a total of 25 MSEK grant funding from Swedish Energy Agency to build a complete microgrid installation in the Faroe Islands. Minesto collaborates with microgrid technology provider Capture Energy, Faroese utility company Sev and IVL Swedish Environmental Research Institute to demonstrate a unique tidal-based microgrid solution that provides baseload power. The project will deliver a complete product offer for a microgrid installation with integrated battery storage to offer a stand-alone base-load power plant to an island mode user. The microgrid system will be built, commissioned and operated at Minesto’s current production site in Vestmanna based-on existing infrastructure and environmental permits. The project starts in August and will deliver a complete microgrid in 2026.

[Eco Wave Power and AltaSea Align on Official Launch Date for First-Ever U.S. Wave Energy Project at the Port of Los Angeles](#) – Eco Wave Power

Eco Wave Power, an onshore wave energy developer, recently announced that Inna Braverman, Founder and CEO of Eco Wave Power, and Ran Atias, VP of Engineering, held a strategic meeting with Terry Tamminen, CEO of AltaSea at the Port of Los Angeles, to officially agree upon the launch date and public unveiling of the first-ever onshore U.S. wave energy pilot project. The historic launch event is scheduled to take place on Tuesday, September 9, 2025, on-site at AltaSea, and will mark a historic

milestone in renewable energy innovation for the United States. The event is expected to draw key stakeholders from the clean energy sector, government, academia, and media, and will showcase the real-world implementation of Eco Wave Power's patented wave energy technology.

Weco's improved wave energy converter taking shape (Video) – Offshore Energy

The Hague-based Wave Energy Collective (Weco) has entered the building phase of its upgraded wave energy converter (WEC), Kaizen 2.0, together with Holland Shipyards Group. The project is said to build on a longstanding collaboration between Weco and the Dutch shipyard, which supported the developer's initial prototype. The ongoing partnership also extends to Weco's offshore charging initiative, E-Sea Charging, designed to provide autonomous vessels with access to clean power at sea. The Kaizen 2.0 device will follow the company's earlier prototype and is expected to incorporate multiple design improvements. Weco has not disclosed when the new device will move to testing at sea. In December 2024, Weco reached a milestone in the development of its Kaizen WEC, as the device had generated its first power. [View the video here.](#)

Wind Energy

25-Year-Old Danish Offshore Wind Farm Gets Approval to Operate for 25 More Years – Offshore Wind

After approving the production permit extension for the Samsø offshore wind farm earlier this month, the Danish Energy Agency (DEA) has now granted extended permits to two more of Denmark's oldest offshore wind farms, Middelgrunden and Nysted. To support its decisions, the DEA has requested that the applicants for the production permit extensions deliver an impartial analysis of the remaining lifetime. After receiving the extensions, the owners are now obliged to carry out comprehensive annual service inspections. The Middelgrunden offshore wind farm was built in 2000 and received its electricity production permit the same year, before full commissioning in March 2001. The DEA has now approved Middelgrunden to operate for 25 more years. The Nysted offshore wind farm (also known as Rødsand I) went into operation in 2003 and has now obtained approval to run for ten more years.

The Official Kickoff of the RECORD15 Project – Ocergy

Ocergy, Inc. recently announced the official start of the Reduced Commercial Risks with Demo of 15+ MW (RECORD15) Joint Industry project, which aims to install a latest generation turbine with rated power over 15 MW on an OCG-Wind™ floater in 2028. The FEED contract for this pilot project was recently signed between Ocergy and three offshore wind developers of international reach: EnBW Energie Baden-Württemberg AG, Kyuden Mirai Energy Company and TEPCO Renewable Power. Ocergy's platform, the turbine agnostic OCG-Wind, is an innovative modular design supporting an optimized assembly process from pre-fabricated steel sub-assemblies, allowing serial production using today's existing supply chain and infrastructure. The tower will be designed using a

stiff-stiff approach, effectively addressing one of the foremost technical challenges in deploying next-generation large turbines on floating foundations.

[A Transformative Dawn: South Fork Wind Leads America's Offshore Reboot](#) – POWER Magazine

Winning POWER's highest honor, South Fork Wind—the first commercial-scale offshore wind farm in U.S. federal waters—stands as a beacon for the power sector's ambition to forge new industries in the face of adversity. Commissioned in July 2024 as offshore wind projects faltered nationwide, South Fork proved that labor, permitting, engineering, and grid integration can align to deliver complex infrastructure at scale. While the project lays out new bedrock for the nation's carbon-free prospects, it offers the entire industry a proof point for resilience, technical rigor, and what it takes to build the next generation of power. South Fork Wind, a 132-MW offshore wind farm anchored 35 miles east of Montauk Point, New York, developed by Danish energy giant Ørsted and utility Eversource under a joint venture (with infrastructure investor Global Infrastructure Partners acquiring Eversource's stake in September 2024).

[Work Starts on Brazil's First Offshore Wind Project, Pilot Expected to Come Online in 3 Years](#) – Offshore Wind

Brazil's SENAI Institute of Innovation in Renewable Energy (ISI-ER) and SENAI's Rio Grande do Norte branch, SENAI-RN, expect to receive the installation permit for their pilot project, the country's first offshore wind project to be granted a preliminary licence, within 12 to 18 months and to have it operational within 36 months. Following the award of the preliminary licence by the Institute for the Environment and Natural Resources (IBAMA) on 24 June, SENAI ISI-ER and SENAI-RN told *offshoreWIND.biz* that work will now commence on detailed design and gathering Joint Industry Project (JIP) partners and that these activities will run in parallel with the work on obtaining the installation licence. This August, the developers will launch a public call inviting investors and partners who want to join the 24.5 MW, two-turbine pilot project.

[Oceans of Energy offshore solar farm "Nymphaea Aurora" ready for tow out to Hollandse Kust Noord offshore wind farm](#) – Oceans of Energy

A major milestone has been reached in the development of the world's first offshore solar farm integrated within an offshore wind farm. The assembly of the offshore solar farm has been successfully completed at the Port of Amsterdam, and the system is ready for offshore installation. The system, supplied and built by Oceans of Energy, is larger than a football field and is set to integrate power supply at the Hollandse Kust Noord offshore wind farm in Summer 2025. The wind farm, operated by Crosswind, a Joint Venture by Shell and Eneco, is located 18.5km offshore in the North Sea. The port assembly of the pre-fabricated floating solar units was completed within 3 days and sets the scene for scaling the technology towards large scale projects.