PRIMRE BLAST

28 November 2025

The Portal and Repository for Information on Marine Renewable Energy (PRIMRE) provides access to marine energy data, information, and resources in the U.S. and internationally. The bi-weekly PRIMRE Blast highlights relevant announcements and upcoming events; new content in the Knowledge Hubs; and international marine energy news. Email us to contribute!

Announcements | Tethys Eng. Documents | Projects Highlight
Upcoming Events | Marine Atlas Update | News & Press Releases

---

Announcements

TEAMER Commercialization Support

The U.S. Testing Expertise and Access for Marine Energy Research (TEAMER) program, which supports marine energy testing and development projects, recently added Commercialization Support to all future Request for Technical Support (RFTS) rounds. This new category includes capabilities like Business Development and Financial Management to help organizations advance from device testing, refinement, and validation all the way through market entry. Apply for RFTS 17 by 6 February 2026. Open water support requests are accepted on a rolling basis.

Supergen ORE Early Career Committee Call

The Supergen Offshore Renewable Energy (ORE) Hub is looking to expand its Early Career Committee, which plays a vital role in shaping the direction of its Early Career Network, with a new Deputy, Engagement Coordinator, and Industry Representative. These are 12-month, voluntary positions. Apply by 1 December 2025.

UMERC Call for Nominations

The University Marine Energy Research Community (UMERC) is now accepting nominations to fill upcoming vacant seats on their Board of Directors, which sets UMERC's primary direction, such as the structure and timing of conferences and workshops. These are 2-year, voluntary positions. Nominate yourself or a colleague by 7 December 2025.

ORISE Applications Open

The Oak Ridge Institute for Science and Education (ORISE) Marine Energy Fellowship Program, which offers graduate students and postgraduates the opportunity to engage in marine energy research while embedded at selected host facilities for up to 12 months, is now accepting applications for its Summer Cohort through 12 December 2025.

Calls for Abstracts

The Call for Abstracts for the 2nd Institute of Electrical and Electronics Engineers (IEEE) Subsea Innovation Technologies Workshop is open until 1 December 2025. The workshop will take place on 23-24 January 2026 in Aberdeen, Scotland.

The Call for Abstracts for the Environmental Interactions of Marine Renewables Conference (EIMR 2026) has been extended through 12 December 2025. EIMR 2026 will take place on 13-17 April 2026 at the Scottish Association for Marine Science in Oban, Scotland.

The Call for Abstracts for the Young Coastal Scientists and Engineers Conference (YCSEC 2026) is open until 19 December 2025. The conference will take place 13-14 April 2026 in Nottingham, England. Early bird registration is available through 16 January 2026.

The Call for Abstracts for OCEANS 2026 Sanya is open until 22 December 2025. OCEANS 2026 Sanya will take place 25-28 May 2026 in Sanya, China.

The Call for Speakers for All-Energy 2025 Exhibition and Conference show floor theatres is now open until 23 January 2026. All-Energy will take place 13-14 May 2025 in Glasgow, Scotland.

The Call for Abstracts for the 8th Asian Offshore Wind, Wave and Tidal Energy Conference (AWTEC 2026) is now open until 6 March 2026. AWTEC will take place on 6-10 September 2026 in Kaohsiung, Taiwan.

Funding & Testing Opportunity

The Offshore Renewable Energy Sustainability Alliance (ORESA) has launched its first Accelerator Programme Innovation Call for small and medium enterprises across the North-West Europe region. The programme is seeking cutting-edge technologies that advance the field of offshore renewable energy, including wave, tidal, and other emerging innovations. Apply by 30 November 2025.

Career & Internship Opportunities

The InDustrial Centre for Doctoral Training for Offshore Renewable Energy (IDCORE) has opened applications for its four-year, full-time, Engineering Doctorate, which involves 1 year of teaching after which students are physically based with their UK sponsoring company for 3 years. Apply by 30 November 2025.

The University of Delaware (UD) is inviting applications for a full-time, tenure-track faculty position within the School of Marine Science and Policy (SMSP) at its Newark campus focused on the Blue Economy and Policy. Review of applications will begin on 1 December 2025 and continue until the position is filled.

The University of Oxford is offering a PhD Research Studentship in Tidal Stream Energy to work within the CoTide (Co-design to deliver Scalable Tidal Stream Energy) team using a range of numerical modelling and optimisation techniques supported by high performance computing and experimental facilities including a current and wave flume. Apply by 2 December 2025.

Ecodetect, an advanced marine science and technology company specializing in the development of end-to-end, AI-driven, marine monitoring systems, is recruiting a Machine Learning Data Engineer and a Marine Systems Engineer. Apply by 19 December 2025.

The University of Manchester is offering a funded PhD position for UK students focused on modelling wave transformation over tidal turbine wakes: developing tools for array design, loading, and survivability. Apply by 27 February 2026.

Upcoming Events

The PRIMRE Events Calendar highlights key events from around the world related to marine energy, including conferences, webinars, workshops, and more.

Upcoming Webinars

Dutch Marine Energy Centre (DMEC) is hosting a Deep Dive webinar, "Offshore Charging", on 2 December 2025 from 10:00-11:00am CET (9:00-10:00am UTC). Led by DMEC, a panel of international experts will dive into real-world offshore charging use cases.

Pacific Marine Energy Center (PMEC) is hosting a Marine Energy Fall Seminar Series for industry trailblazers to share stories from their journeys into marine energy and ocean engineering. The second seminar, on 10 December 2025 from 1:00-2:00pm PST (9:00-10:00pm UTC), will feature Grace Chang, Director of Research & Development at Integral Consulting.

Marine Environmental Data & Information Network (MEDIN) is hosting the next webinar in its MEDIN 2025 webinar series, "Ocean Data at Scale: Autonomous Data Management and High-Volume Archiving at the British Oceanographic Data Centre (BODC)", on 10 December 2025 from 2:00-3:00pm UTC. MEDIN is also hosting, "Unlocking Ocean Knowledge: The Global Push for Better Data Sharing", on 21 January 2026 from 2:00-3:00pm UTC.

Upcoming Workshop

Join Sandia National Laboratories, the National Renewable Energy Laboratory, PNNL, Montana State University, Florida Atlantic University, and the Department of Energy's Water Power Technologies Office for a free virtual Synthetic Mooring Lines Workshop on 11 December 2025 from 8:30am-12:20pm PST (4:30pm-8:20pm UTC). This workshop will review and discuss the latest technological challenges in manufacturing, testing, characterization, and prediction of performance for synthetic mooring lines within marine energy applications, as well as identify key focus areas for future research, development, and collaboration.

Upcoming Conferences

The 11th International OTEC Symposium 2025 (IOS2025) will take place from 2-4 December 2025 in Kuala Lumpur, Malaysia and online.

The inaugural 2026 Institute of Electrical and Electronics Engineers (IEEE) Power & Energy Society (PES) International Meeting will take place from 18-21 January 2026 in Hong Kong, China.

New Documents on Tethys Engineering

Tethys Engineering hosts thousands of documents on the technical aspects of marine energy research and development, including journal articles, conference papers, and reports.

A comparative study on the dynamic performance of floating and submerged wave energy converter arrays – Zhu et al. 2026

> A mathematical model has been formulated to evaluate the dynamic performance of floating buoy (FB) and full-submerged (CETO) wave energy converters (WZXECs) array. In the process, the boundary value problem is solved by applying the matching-method of eigenfunctions and multi-body Graf's addition to solve the velocity potential that can be decomposed into radiation and diffraction problems. To evaluate the motion and wave energy capture response of WECs, coupled equations of motion are considered, including the PTO damping system, stiffness system, and mooring lines. After running

the convergence analysis and model validation, the present model is employed to perform a multimode impact analysis of FB and CETO systems.

White Paper on OTEC 2.0: Advancing Deployment and Innovation – Brito e Melo et al. 2025

This white paper aims to provide a strategic and technical overview of OTEC, highlighting its potential, challenges, and pathways for large-scale deployment. Building on the 2024 White Paper OTEC, which provided a broad analysis of economic considerations, scalability challenges, key components, and mitigation strategies, this document goes deeper into the specific requirements for commercial implementation. Given the unique energy needs of Small Island Developing States (SIDS) and tropical coastal regions, it serves as a practical guide for decision-makers looking to integrate OTEC into national and regional energy strategies.

Blade shape evaluation for cross-flow tidal turbines—A fast and automated assessment tool for early design stage based on power and load coefficients – Ruiz-Hussmann et al. 2025

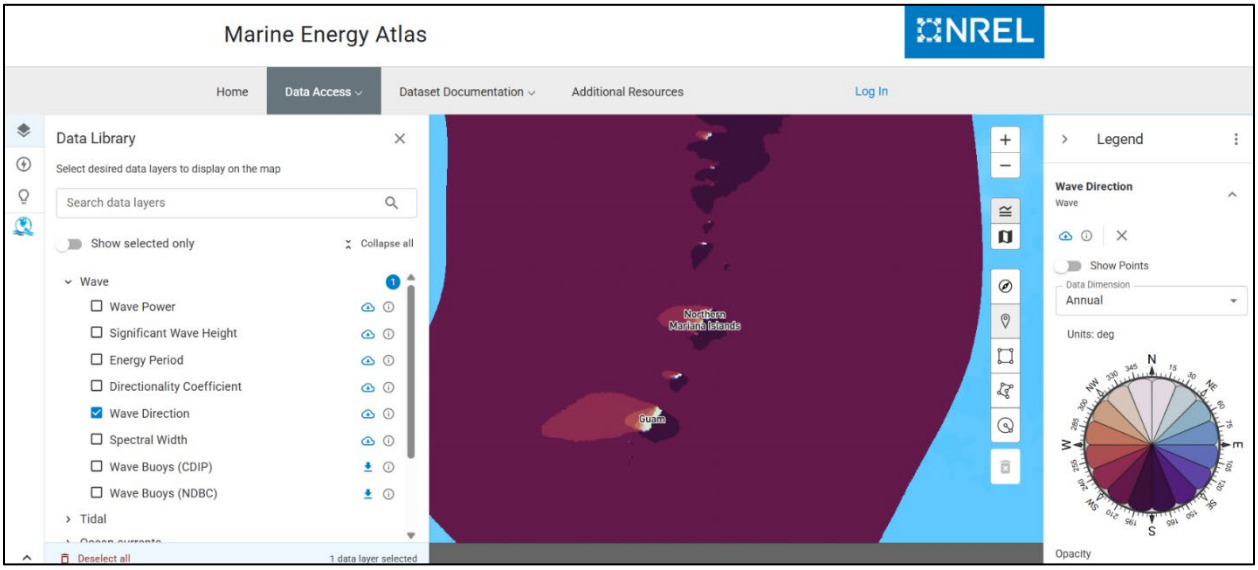
Cross-flow tidal turbines (CFTT) are a promising technology for tidal energy exploitation. They are omni-directional, feature high area-based power density and a simple design. However, due to their rotation around the vertical axis, the blades undergo a continuous change in their angle of attack, leading to alternating loads, which can cause fatigue failure. For this reason, blade loads should already be taken into account in the early design phase. This study presents a standardized and automated method for evaluating the influence of blade profile shapes on power and load coefficients. Fully automated computational fluid dynamics simulations are coupled with an analytical mechanical model, treating blades as a clamped beam.

Marine Energy Atlas Update

The Marine Energy Atlas is an interactive mapping tool that maps high-resolution, spatially comprehensive wave, tidal, and riverine, ocean current and ocean thermal resources.

New Data on the Marine Energy Atlas

New data, covering Guam and the Northern Commonwealth of the Mariana Islands (CNMI) from 1979-2020, is now available! Data includes wave power, peak period, significant wave height, and directionality coefficient, and more! Head over to the Marine Energy Atlas to explore and download resource summaries, or find higher-resolution data on Amazon Web Service (AWS)!



Marine Energy Projects Database Highlights

The Marine Energy Projects Database provides up-to-date information on marine energy projects, test sites, devices, organizations, and technologies around the world.

Normandie Hydroliennes NH1 Tidal Energy Project – Normandie Hydroliennes

The NH1 pilot tidal farm was selected by the European Commission as part of the Innovation Fund and was awarded €31.3 million in funding from the European Union's 2023 Innovation Fund. Once commissioned at the end of 2027 in the Alderney Race, the NH1 pilot farm will produce approximately 33.9 GWh per year of sustainable energy for the French national grid, supplying power to around 15,000 inhabitants. This project will also be one of France's first commercial-scale tidal pilot farms. NH1 is part of the broader TIGER demonstration program, which aims to advance tidal energy technologies and reduce costs.

Canadian Hydrokinetic Turbine Test Centre (CHTTC) – University of Manitoba

The Canadian Hydrokinetic Turbine Test Centre (CHTTC) which began testing in 2014 is located on the Winnipeg River in Seven Sisters Falls, Manitoba is a national centre focused on the testing of hydrokinetic turbines. Deployments at the site may select between three berths which collectively offer submerged and dry shoreline mooring points. The centre offers a commercial, real-world setting, with regulatory approval for turbine deployment and retrieval, connection to the electrical grid using CSA standards for testing new power converters and measurement instruments to perform studies on the impacts of flows on turbines and the impact of turbines on the environment.

Dikwe Breakwater WEC – Wave Op

DIKWE is a harbor breakwater that incorporates a wave energy recovery system. The system generates electricity while protecting the harbor and coastline. Wave Op, the project is being developed in collaboration with Ifremer. Installed on the exposed face of the dikes, these flaps act as shock absorbers: they reduce the force of the waves, extend the lifespan of the structures. The 1/4 scale prototype measures almost 4.5m high and wide, and 6m deep. This prototype was tested at the IFREMER Testing Station at Sainte-Anne-du-Portzic in 2022.

News & Press Releases

Can Your Wave Energy Technology Survive the Ocean? – National Renewable Energy Laboratory

Can your technology triumph in the ocean? Ask SEA-Stack. True to its name, this one-of-a-kind, free, open-source tool combines (or stacks) multiple wave energy modeling capabilities into one user-friendly package. With SEA-Stack, wave energy companies—or any developers working on water-based tech, like ships, underwater drones, or even space shuttle crew modules—will be able to quickly vet new technology designs and potentially save significant time and money. Those savings could help accelerate technology development and enable wave energy devices to fulfill their promise: to deliver reliable energy to populated coastal cities, rural and remote communities, or even offshore data centers and military bases.

Canada's First Tidal Energy Array Authorized Using Adaptive Regulatory Framework – FORCE

Fisheries and Oceans Canada (DFO) has issued a Fisheries Act Authorization to Eauclaire Tidal Ltd. (Eauclaire) to deploy up to three Orbital Marine Power Ltd (Orbital) O2-X tidal energy devices at the Fundy Ocean Research Centre for Energy (FORCE). This marks the first project to proceed under Canada's revised, staged approach for tidal stream energy development – an adaptive regulatory framework designed to ensure both environmental protection and investor clarity. DFO's Staged Approach – resulting from the federal Tidal Task Force on Sustainable Tidal Energy Development led by DFO and Natural Resources Canada – enables projects to begin with a single device and monitoring, followed by additional deployments informed by ongoing environmental data collection, interpretation and analysis.

PacWave deal signals next step for US wave energy – Offshore Energy

Wave energy test site PacWave and the Bonneville Power Administration (BPA) have signed a power purchase agreement (PPA) that will enable the first delivery of wave-generated electricity to the U.S. main grid, with CalWave preparing to deploy its xWave device at the PacWave South site operated by Oregon State University (OSU). According

to CalWave, the project marks its shift from research and development (R&D) toward commercial activity after its 2021-22 San Diego deployment, which validated performance but supplied power only to a local microgrid. Under the agreement, which runs from 2026 to 2030, BPA will purchase up to 20 MWh of energy per hour from OSU, reflecting PacWave's variable output as a test site. Central Lincoln PUD will handle the grid connection through the Utility Connection & Monitoring Facility (UCMF) between Seal Rock and Waldport.

Dieseko Group and CorPower Ocean Join Forces on VibroDrive+ – CorPower Ocean

Dieseko Group and CorPower Ocean have entered into a strategic consortium agreement to launch VibroDrive+, a joint research project aimed at improving offshore anchor design and installation efficiency. The project, supported by €400,000 Eureka Eurostars funding, will combine advanced vibro hammer technology with next-generation anchor concepts to drive smarter and more sustainable offshore solutions. The project is essential for the future rollout of CorPower Ocean's wave energy arrays with the CorPower UMACK anchors providing the foundation for large scale electricity generation from ocean waves. The novel anchoring solution and installation via vibro hammer represents a step change in Levelized Cost of Energy (LCoE) for offshore foundations for wave, floating offshore wind and other floating structures projects around the globe.

National Taiwan Ocean University Sign Landmark Memorandum of Understanding to Advance Wave Energy Solutions – Wave Swell Energy

Wave Swell Energy Limited recently announced the execution of a Memorandum of Understanding (MOU) with the National Taiwan Ocean University (NTOU), marking a significant milestone in the development of its cutting-edge wave energy technology in Taiwan. This MOU sets the stage for a groundbreaking collaboration focused on the deployment of a wave energy converter at the NTOU's facility in Keelung, Taiwan. This initiative represents a major step towards advancing Taiwan's renewable energy capabilities, with the goal of establishing a state-of-the-art wave energy converter that will harness the power of ocean waves to generate clean electricity and demonstrate the durability and commercial viability of Wave Swell Energy's technology in Taiwan's weather conditions.