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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!

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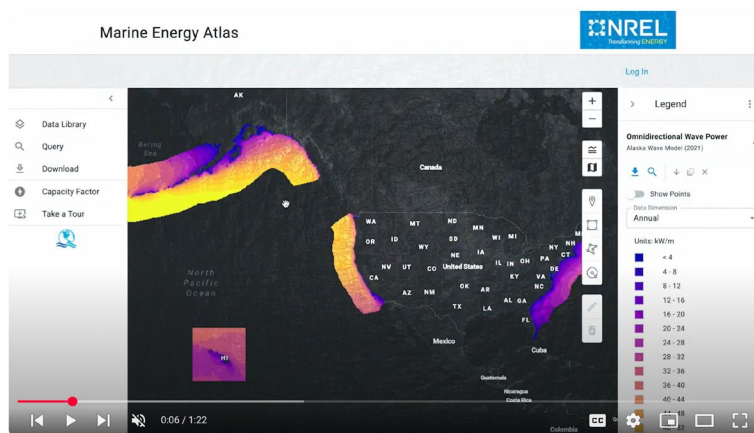
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Announcements

New Marine Energy Atlas Video

The PRIMRE team has released a new [2-minute video](#) on the [Marine Energy Atlas](#) that highlights the Knowledge Hub's key features and uses. Dive in to learn more!



Call for Abstracts

The Call for Abstracts deadline for the [12th Partnership for Research in Marine Renewable Energy \(PRIMaRE\) Conference](#) has been extended through 17 April 2025. The conference will take place on 2-3 July 2025 at the University of Bristol in Bristol, England.

Funding & Testing Opportunities

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 \(RFTS\) 16](#) applications through 6 June 2025 to support marine energy testing and development projects. Open Water Support applications can be submitted any time. TEAMER also offers [Results Dissemination Support](#) (e.g., travel support).

Career Opportunities

The Crown Estate has opened applications for the [Marine Futures internship programme](#), which provides full time, paid opportunities for interns to develop skills in specialist areas including, marine conservation, fisheries, renewable energy development, marine policy, and community engagement. Applications are due 11 April 2025.

University of Hawai'i at Manoa is looking for an [Assistant Professor or Associate Professor of Marine Energy](#) to support the Department of Ocean and Resources Engineering and Hawai'i Natural Energy Institute, whose mission is to research, develop, test, demonstrate, and validate cost effective and practical solutions to deliver renewable energy and energy efficiency.

Upcoming Events

Upcoming Webinars

The University of Washington Puget Sound Institute and Pacific Marine Energy Center at Oregon State University are hosting a roundtable webinar, "[Offshore Renewable Energy in the Pacific & Potential Benthic Impacts](#)", on 8 April 2025 from 12:30-1:30pm PDT (7:30-8:30pm UTC). [Register here.](#)

The Supergen Offshore Renewable Energy (ORE) Hub is hosting a webinar, "[Community Perspectives of Wave Energy and Open-Water Testing at PacWave, Oregon](#)", on 29 April 2025 from 4:00-5:00pm UTC. This session will explore the factors that influence public responses to new developments and help us to understand what may slow or hinder the planning and consenting processes. [Register here.](#)

TEAMER is hosting a webinar, "[How to Write a Good Test Plan](#)", on 30 April 2025 from 11:00am-12:00pm PDT (6:00-7:00pm UTC). The webinar will focus on what makes up a good scientific test plan, including info specific to marine energy research and the TEAMER program. [Register here.](#)

Upcoming Conferences

The [Offshore Technology Conference \(OTC 2025\)](#) will take place on 5-8 May 2025 in Houston, Texas, USA.

The [44th International Conference on Ocean, Offshore and Arctic Engineering \(OMAE 2025\)](#) will take place on 22-27 June 2025 in Vancouver, British Columbia, Canada.

The [Ocean Renewable Energy Conference \(OREC\)](#) will now partner with the [2025 University Marine Energy Research Community \(UMERC\) Conference](#), which will take place on 12-14 August 2025 at Oregon State University in Corvallis, Oregon, USA.

Upcoming INORE Symposia

The International Network on Offshore Renewable Energy (INORE) is hosting a [North American Symposium](#) in Boston, Massachusetts, USA, on 9-13 June 2025 and a [European Symposium](#) in Aalborg, Denmark, on 15-20 September 2025. Graduate students, early-stage researchers, or young professionals can apply to attend the events for free by 7 April 2025.

Upcoming Masterclasses

The Supergen ORE Hub is hosting a series of [masterclasses](#), including a [Masterclass on Virtual Prototyping of Offshore Renewable Energy Technologies](#) on 30 April and 1 May 2025 at the National Decommissioning Centre in Aberdeen, Scotland; a [Masterclass on Environmental Contours and Extreme Value Analysis](#) on 15-16 May 2025 at the University of Exeter in Exeter, England; and a [Masterclass on Offshore Geotechnics](#) on 27-28 May 2025 at the University of Southampton in Southampton, England.

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.

[Efficiency Analysis of the Wave-to-Grid Energy Conversion of the UniWave200 Wave Energy Converter](#) – Ticona Rollano et al. 2025

A new wave energy technology has been developed by an Australian company, Wave Swell Energy Ltd., consisting of a unique unidirectional axial turbine version of the well-established oscillating water column (OWC) concept. A full-scale prototype of the technology, the UniWave200, was deployed for grid-connected testing near the coastline of King Island, Tasmania, from 2021 to 2022. Data collected during the pilot project were analyzed by the US Department of Energy's Pacific Northwest National Laboratory. The results of this analysis indicate the full-process wave-to-grid energy conversion efficiency, based on the combined capture width ratio and power take-off efficiency, to be on the order of 45% for significant wave heights above 1 m.

[In-situ blade strain measurements and fatigue analysis of a cross-flow turbine operating in a tidal flow](#) – Bichanich et al. 2025

Cross-flow turbines (CFTs) are inherently unsteady devices with regards to operating principle and loading. By improving our understanding of the dynamic loading on these turbines, we hope to better inform CFT design, improve survivability, and reduce overall costs. The University of New Hampshire (UNH) and the National Renewable Energy Laboratory (NREL) collaborated on a project to instrument and test a four-bladed New Energy Corp. vertical axis cross-flow turbine in a real tidal flow. One blade from the 3.2 m diameter x 1.7 m height turbine was instrumented with eight full-bridge strain gauges along the span of the blade. The turbine was then deployed at the UNH-Atlantic Marine Energy Center (AMEC) Tidal Energy Test Site in Portsmouth, NH.

[Extreme wave analysis for marine renewable energies in Ireland](#) – Martinez-Iturricastillo et al. 2025

The characterization of extreme wave climates and future projection analyses are essential for offshore renewable energy planning and coastal protection. This study examines the maximum individual wave height (H_{\max}) around Ireland, using ERA5 reanalysis data from 1991 to 2020, validated against H_{\max} observations from Irish moored buoys. Extreme wave climate regions are defined, employing a model-based clustering technique, which relies on the wave height distribution of each area. The probability of rogue waves – defined as waves where the maximum wave height is at least twice the significant wave height – is assessed for each region. The results suggest that, while extreme waves are more likely to occur far offshore on the west coast of Ireland, the likelihood of rogue waves is higher on the east coast and closer to shore.

Marine Energy Projects Database Update

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

[Renewables for Subsea Power \(RSP\) Project](#) – Mocean Energy & Verlume

Renewables for Subsea Power (RSP) is an offshore wave energy project that was completed after over 12 months of at-sea testing of a wave energy converter (WEC) 5 km off the east coast of Orkney, Scotland. For this project, Mocean Energy's Blue X device was connected to Halo, a seabed battery storage system developed by Verlume. The goal of the project was to demonstrate the effectiveness of the combined system to supply power and communication to subsea equipment. The European Marine Energy Centre (EMEC) supplied instrumentation to measure the speed and direction of currents during the deployment.

[Naru Strait - Goto Islands](#) – Kyuden Mirai Energy Company Inc.

The Naru Strait is a tidal energy project in the waters of Goto City, Nagasaki Prefecture, Japan. The successful pilot phase of this project with the SAE AR500 turbine wrapped up in December 2021. In February 2025, Proteus Marine Renewables successfully installed

their 1.1 MW, AR1100 turbine in Naru Strait. After commissioning, the AR1100 turbine will be Japan's first ever MW-scale grid-connected tidal system, undergo subsequent testing and accreditation phases, and provide power to the Goto Islands.

Modular RivGen Test in Millinocket Maine – Ocean Renewable Power Company (ORPC)

In January 2023, ORPC deployed its new low-flow Modular RivGen hydrokinetic power system in Maine's Millinocket Stream followed by a second device in May 2023. These devices were deployed at One North, a renewable energy hub and industrial park located at a former paper mill site and managed by local nonprofit Our Katahdin. The project goal was to demonstrate the system's potential to provide resilient baseload power for uses like electrical vehicle (EV) charging and critical infrastructure. The project has provided an opportunity for teams at top U.S. research universities and national labs, including University of Washington and Sandia National Laboratories, to conduct research through the U.S. Department of Energy's TEAMER program.

MHKDR Highlight

The Marine Hydrokinetic Data Repository ([MHKDR](#)) is the repository for all data collected using funds from the U.S. Department of Energy's Water Power Technologies Office, including results from tank tests and open sea trials.

PacWave Site Observations – Oregon State University 2020 (updated 2025)

This data submission contains raw and near-real-time updated data from FLOATr (Fixed Location Ocean and Atmosphere Tracking) buoys and Sofar Spotter wave buoys at sites in the PacWave open-ocean testing facility operated by Oregon State University, located off the coast of Newport, Oregon. The FLOATr buoys provide meteorological measurements of wind speed and direction, air temperature and pressure, shortwave radiation (light). An onboard CTD (conductivity-temperature-depth) sensor provides measurements of water temperature, salinity, and dissolved oxygen. Down-looking ADCPs (acoustic doppler current profilers) installed on the FLOATr buoys provide observations of water velocity.

Drifting Acoustic Measurements around C-Power's SeaRay WEC – University of Washington 2024 (updated 2025)

The repository contains underwater noise measurements and associated metadata collected around C-Power's SeaRay wave energy converter on July 15, 2024 and July 16, 2024 while it was deployed at the U.S. Navy's Wave Energy Test Site (WETS) in Kaneohe, Hawaii. Measurements were obtained using Drifting Acoustic Instrumentation SYstems (DAISYs). DAISYs consist of a surface expression connected to a hydrophone recording package by a tether. Both elements are instrumented to provide metadata (e.g., position, orientation, and depth). Information about how to build DAISYs is available at <https://www.pmec.us/research-projects/daisy>.

[UNH TDP - Concurrent Measurements of Inflow, Power Performance, and Loads for a Grid-Synchronized Vertical Axis Cross-Flow Turbine Operating in a Tidal Estuary – National Renewable Energy Laboratory 2021 \(updated 2023\)](#)

This data was collected between October 12 and December 15 of 2021 at the University of New Hampshire (UNH) and Atlantic Marine Energy Center (AMEC) turbine deployment platform (TDP). This data set includes over 29 days of grid connected turbine operation during this 65-day time frame. The priority for this measurement campaign was to collect data while the turbine was electrically connected to the grid by means of a rectifier and inverter. The [Fall_2021_UNH_Measurement_Timeline.png](#) highlights when each instrument was functioning and the [Fall_2021_UNH_Test_Log.jpg](#) indicates the four main regions for analysis available from this measurement campaign.

News & Press Releases

[IECRE Feasibility Statement issued to Orbital Marine Power for pioneering O2-X Tidal Energy Converter – Llyod's Register](#)

Lloyd's Register (LR) has awarded an International Electrotechnical Commission for Renewable Energy (IECRE) Feasibility Statement to Orbital Marine Power for its O2-X Tidal Energy Converter (TEC). The IECRE is a global renewable energy conformity assessment system and a part of the International Electrotechnical Commission (IEC). It provides a globally recognised framework for certifying marine energy technologies, ensuring transparency and credibility for investors, regulators, and industry stakeholders. As an evolution of the company's existing O2 turbine, currently deployed in the Fall of Warness, Scotland, the O2-X is expected to generate 2.4MW of predictable, renewable energy from tidal flows.

[Eco Wave Power Secures Final Permit for Pioneering Wave Energy Project in the Port of Los Angeles – Eco Wave Power](#)

Eco Wave Power recently announced that it has been granted Revocable Permit 25-05 by the Port of Los Angeles for the construction and demonstration of its innovative wave energy technology at Berth 70 in San Pedro, California. This permit is the final approval required for Eco Wave Power to commence construction of its pilot project, following it receiving a federal Nationwide Permit (NWP) 52 for Water-Based Renewable Energy Generation Pilot Projects granted by the U.S. Army Corps of Engineers in November 2024. With all necessary permits secured, the Company is set to move forward with implementation, which is expected to be completed within 2-3 months.

[A space program that never leaves Earth – SKF](#)

One of the largest bearing manufacturers SKF, and ocean energy developer Minesto are launching a space program to harness the Moon's energy by leveraging the power of the tides. This space program aims to utilize the resources we already have right here on

Earth. Over the past year, SKF and Minesto have been pioneering tidal energy using tidal kites in the Atlantic Sea outside the Faroe Islands. The mission is to harness the Moon's power for predictable and renewable energy. After its successful launch into the ocean, the tidal kite called LUNA is flying underwater, invisibly and silently harvesting energy from the Moon – no matter the weather.

CorPower Ocean signs development agreement with Equipmake. – CorPower Ocean

CorPower Ocean has signed a development agreement with Equipmake, a market leader in electrification technologies for the automotive, truck, bus and specialty vehicle industries. Under the agreement, Equipmake will develop a bespoke generator and SiC (Silicon Carbide) inverter system, tailored to CorPower Ocean's advanced wave energy system. It marks the first phase of a multi-year programme designed to accelerate commercialisation of CorPower Ocean's wave energy technology. CorPower Ocean's CorPack wave energy clusters are used as building blocks to form larger wave farms from hundreds of megawatts to gigawatt in scale. CorPacks come in 10-30MW size, where electricity is harvested from an array of wave energy converters into a collection hub.

Tidal Currents Study Underway by ASL in Rigolet, Newfoundland and Labrador – ASL Environmental Sciences

ASL Environmental Sciences Inc. recently announced the successful completion of an initial multi-week study to measure tidal currents in collaboration with the Nunatsiavut Government and Oceans North. This initiative aligns with the Nunatsiavut Energy Security Plan to explore renewable energy solutions for coastal communities and reduce dependence on diesel-generated electricity. The processed tidal current datasets from Phases 1 and 2 will provide valuable insights for assessing tidal energy potential, addressing operational challenges, and determining optimal placements for potential future in-water tidal turbines.