16 January 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. ORJIP Ocean Energy has partnered with OES-Environmental to provide additional content. Email us to contribute!

Announcements

New Tethys Story

Understanding Environmental Effects of Small-Scale Tidal Turbines: Insights from Sequim Bay by Pacific Northwest National Laboratory

A recent environmental monitoring study investigated interactions between a small-scale tidal turbine and marine animals in Sequim Bay, Washington, USA over a 141-day deployment. Notably, the study captured some of the first optical observations of seabirds and seals around a tidal turbine, offering valuable contributions to future research. Key insights and lessons learned are synthesized in Cotter et al. 2026 to support future turbine monitoring efforts and collision risk assessments. Read more in the latest Tethys Story here.

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 accepting applications for its Fall 2026 Cohort (August – October 2026) through 27 March 2026.

Calls for Abstracts

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 Speakers for Marine Technology Society's 16th Buoy Workshop is open through 23 January 2026. The workshop will take place on 23-26 March 2026 in St. Petersburg, Florida, USA.

The Call for Abstracts for the 22nd Physics of Estuaries and Coastal Seas (PECS 2026) is open until 30 January 2026. PECS will take place on 9-14 August 2026 in Portland, Maine, USA.

The International Council for the Exploration of the Sea (ICES) has opened the Call for Abstracts for the ICES Annual Science Conference (ASC) through 25 February 2026. ASC 2026 will take place on 15-18 September 2026 in Brest, France.

The Call for Abstracts/Papers for the 7th International Conference on Renewable Energies Offshore (RENEW 2026) is open through 28 February 2026. RENEW will take place on 20-22 October 2026 in Lisbon, Portugal.

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 Opportunities

Fundy Ocean Research Centre for Energy (FORCE) has released a Request for Proposals for its Ocean Sensor Innovation Platforms (OSIP) project. FORCE is seeking proposals to design, procure, and install an offshore platform hybrid power system to power the OSIP floating sensor platform in the Minas Passage (Canada). Proposals are due by 16 January 2026.

The Long-Term Joint EU-AU Research and Innovation Partnership on Sustainable Energy (LEAP-SE) program, co-funded by the European Commission under Horizon Europe, aims to develop a long-term partnership between Europe and Africa in Research and Innovation on sustainable energy. Pre-proposals are due by 5 February 2026.

The U.S. Testing Expertise and Access for Marine Energy Research (TEAMER) program, which supports marine energy testing and development projects, has extended the deadline for Request for Technical Support (RFTS) 17 applications until 6 February 2026. TEAMER recently added Commercialization Support to all future RFTS rounds as well.

Horizon Europe has several open Calls for Proposals, including 1) Understand and minimise the environmental impacts of offshore wind energy, 2) De-risking wave energy technology development through transnational pre-commercial procurement of wave energy research and development, and 3) Improved reliability and optimised operations and maintenance for wind energy systems. Proposals are due by 17 February 2026.

In preparation for the upcoming European tender for bird detection systems in the North Sea, Rijkswaterstaat Central Information Services (Netherlands) is organizing a market consultation to gather early input. Submissions are due by 31 March 2026.

BlueActionBANOS (Baltic and North Sea) has launched a Community-Led Actions Open Call, which is designed for multi-partner projects that will scale up and deploy established solutions, and its 1st Transition Agendas Open Call, which is for foundational planning and strategic development at the local level. Apply by 29 May 2026.

Career & Internship Opportunities

The University of Minnesota is hiring a Marine Technology Extension Associate for a one-year position with the Minnesota Sea Grant College Program to integrate marine technology with workforce training and community outreach to address local and regional needs.

The University of Minnesota is also hiring a Research Program Manager for Marine Science and Technology to lead program development, coordination, and implementation of a diverse portfolio focused on marine and large-lake systems science, marine engineering, underwater acoustics, underwater technology innovation, and sustainable maritime operations.

Heriot-Watt University is offering a funded PhD project (for UK students) that aims to enhance open-source modelling of a floating tidal turbine reference model. Apply by 18 January 2026.

New Zealand's Applied Doctorate Scheme is inviting applications from prospective students, domestic and international, to be a part of its inaugural cohort. The University of Canterbury and Azura Wave Power are offering a project that will explore the development of offshore desalination systems powered by ocean wave energy. Apply by 19 January 2026.

Dalhousie University is recruiting for Canada's Global Impact+ Research Talent Initiative, which seeks scholars ready to build transformational research programs and partnerships that improve lives in Nova Scotia, Canada, and around the world. Apply 23 January 2026.

France Energies Marines is hiring a Head of Biodiversity and Interactions Department, which studies physical and chemical changes in the marine environment related to offshore wind farms, habitat changes, and interactions with marine fauna. Apply 31 January 2026.

Dr. Linda D'Anna and Dr. Eric Wade are recruiting a PhD student to study the social dimensions of ocean energy. The student will be based at North Carolina State University and participate in Atlantic Marine Energy Center (AMEC) activities. Apply 31 January 2026.

The Centre for Ocean Energy Research (COER) at Maynooth University, Ireland is recruiting a Senior Postdoctoral Researcher to work on a the SHY (Seawater HYdraulic PTO using dynamic passive controller for wave energy converters) project. Apply by 1 February 2026.

Oregon State University (OSU) is inviting applications for a combined position as Pacific Marine Energy Center (PMEC) Director and Associate or Full Professor. The PMEC Director at OSU will work with the other PMEC co-Directors and the Directors of other labs and test sites to lead the program. Apply by 4 February 2026.

The University of Manchester is offering a funded PhD position for UK students which aims to provide a comprehensive characterization of offshore turbulent conditions that define the performance and siting of offshore renewable energy devices. Apply by 28 February 2026.

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 Maine Offshore Wind Research Consortium Advisory Board is hosting its Round 2 Project Update Webinar on 20 January 2026 from 3:00-4:15pm EST (8:00-9:15pm UTC). The webinar will include updates from the Gulf of Maine Research Institute, Biodiversity Research Institute, and University of Maine on current projects funded through the Research Consortium.

Marine Environmental Data & Information Network (MEDIN) is hosting the next webinar in its MEDIN 2025 webinar series, "Unlocking Ocean Knowledge: The Global Push for Better Data Sharing", on 21 January 2026 from 2:00-3:00pm UTC.

Pacific Marine Energy Center (PMEC) is hosting the next webinar in its 2026 winter seminar series on deployments, "PMEC Seminar: Turbine Lander with Dr. Chris Bassett", on 21 January 2026 at 2:00pm PST (10:00pm UTC). This webinar will discuss the first prolonged deployment and testing of a tidal turbine on the seafloor in the Pacific Northwest.

Oregon Sea Grant and California Sea Grant are hosting a panel event, "Port Development in Practice: Virtual Follow-Up with Rob Holmlund", on 22 January 2026 at 10:00am PST (6:00pm UTC). This is a follow-up session to the Sea Grant panel event, "Port Development in Practice: Insights from Humboldt Bay", hosted in Coos Bay, Oregon, USA on 14 November 2025.

Supergen Offshore Renewable Energy (ORE) is hosting two upcoming webinars, "Co-Locating Wave and Offshore Wind: Synergies and Opportunities", on 29 January 2026 from 1:00-2:00pm UTC, and "Future Horizons for Marine Energy: Leveraging Research to Scale and Sustain", on 24 February 2026 from 1:00-2:00pm UTC.

INSITE North Sea is hosting a webinar, "Introducing INSITE Phase 3", on 5 February 2026 from 1:00-2:30pm UTC to introduce the next phase of the INSITE Programme, an independent science programme examining the environmental and social impacts of Marine Artificial Structures in the North Sea.

The National Laboratory of the Rockies (NLR) is hosting the first webinar in its Marine Energy Microgrid and Power Electronics Webinar Series, "Introduction to Microgrid Research and Marine Energy Technology Integration", on 9 February 2026 at 12:00pm MST (7:00pm UTC).

TEAMER is hosting a webinar, "Quality Management Systems and TEAMER", on 11 February 2026 from 11:00am-12:30pm PST (7:00-8:30pm UTC). This webinar will provide a review of international Quality Management Standards and their use in Quality Management Systems, including the ISO 9000 and ISO/IEC 17000 series of standards.

Upcoming Short Courses

Atlantic Marine Energy Center (AMEC) is hosting a marine energy short course, Introduction to Marine Energy, from 31 May to 6 June 2026 at the Coastal Studies Institute in Wanchese, North Carolina, USA. This course is designed for undergraduate and early graduate students from a range of backgrounds. It covers the fundamentals of marine energy through lectures, lab work, projects, and field trips. Apply by 31 January 2026.

AMEC is also offering two graduate-level courses that require knowledge in marine energy, engineering, and other technical skills. Marine Energy Structures, Materials, and Foundation Systems will be held on 22-26 June 2026 at Stony Brook University in Long Island, New York, USA. Tidal & Water Current Energy Conversion will close out the series on 10-14 August 2026 at the University of New Hampshire, Durham, New Hampshire, USA. Application forthcoming.

Upcoming Conferences

The 3rd Annual European Blue Economy Conference will take place on 3 February 2026 in Brussels, Belgium.

Supergen ORE is hosting its 2026 Early Career Form on 21 April 2026 and 2026 Annual Assembly on 22 April 2026. Registration is now available.

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

Observations of marine animal interactions with a small tidal turbine – Cotter et al. 2026

> The risk of collisions between animals and operating tidal turbines remains a concern in the scientific and regulatory communities. A sensor package including optical cameras was deployed to monitor animal interactions with a small-scale (1 m2) cross-flow tidal turbine. The turbine was deployed in Washington State, USA for 141 days at a site with peak flow speeds of 2.5 m/s. We analyze optical camera imagery spanning 109 days of turbine operation. The analyzed images contain 1044 observations of fish, fish schools, seabirds, or seals in the vicinity of the turbine. No instances of collision with seabirds or seals were observed. Seabirds were only observed during daylight hours and while the turbine was stationary. Both seals and fish were observed during both day and night and

while the turbine was stationary and rotating. Four fish were observed colliding with the moving turbine and in all but one case the animals swam away following the collision.

Life Cycle Assessment of a Wave Cycloidal Rotor: Environmental Performance and Improvement Pathways – Bastos et al. 2025

Wave energy technology needs to be reliable, efficient, and environmentally sustainable. Therefore, life cycle assessment (LCA) is a critical tool in the design of marine renewable energy devices. However, LCA studies of floating type wave cycloidal rotors remain limited. This study builds on previous work by assessing the cradle-to-grave environmental impacts of a cycloidal rotor wave farm, incorporating updated material inventories, site-dependent energy production, and lifetime extension scenarios. The farm with the steel cyclorotor configuration exhibits a carbon intensity of 21.4 g CO_2 eq/kWh and an energy intensity of 344 kJ/kWh, which makes it a competitive technology compared to other wave energy converters.

Renewable Energy Deployments at Sea: Innovative Pathways and Challenges for Marine Renewable Energy in the Global Transition – Xicotencatl-Pérez et al. 2026

This chapter per the authors examines the implementation of renewable energy in the marine environment as a critical dimension of the global energy transition. It highlights the consolidation of offshore wind, both fixed-bottom and floating, as a mature technology, while also addressing the potential of emerging resources such as wave and tidal energy, Ocean Thermal Energy Conversion (OTEC), and salinity gradient power. The chapter reviews recent pilot projects in Europe, North America, and Asia, discussing their technical feasibility, cost challenges, and environmental implications. Particular attention is given to hybrid models that combine marine renewables with solar, aquaculture, desalination, and hydrogen production, as well as to policy instruments, marine spatial planning, and community engagement.

Wind Energy

Floating Offshore Wind Dynamic Cable EMF Environmental Review – ORE Catapult, Evolv Energies, & St Abbs Marine Station 2025

This report aims to provide an overview of the current knowledge regarding electromagnetic fields from dynamic cables and their potential environmental implications. The findings are presented in two distinct sections. The first section focuses on the technological characteristics of dynamic cable design, exploring the generation and behaviour of electromagnetic fields (EMFs) in the marine environment, as well as mitigation and attenuation strategies. The second section reviews existing literature on the environmental impacts of EMFs, with a particular focus on pelagic species – those that inhabit the open water column at varying depths, away from the sea floor – and broader ecological considerations.

Mapping avian sensitivity to support onshore wind energy development and bird conservation in two European countries – Biasotto et al. 2026

> Sensitivity mapping provides a robust way to choose candidate sites for development at a landscape scale, which complements but should not replace site-specific environmental impact assessments. Here, we mapped avian sensitivity to onshore wind energy development that prioritises species based on risk of collision with wind turbines and displacement, and conservation status. Our method then integrates species' ranges, area of habitat maps, national bird surveys and citizen science data to estimate species distributions. We applied this approach to Italy and Poland, two European countries with different biodiversity, habitats and avian communities that have committed to targets on renewable energy production and biodiversity conservation.

Current knowledge and key gaps in understanding of offshore wind farm impacts on the physical marine environment – Renner 2025

> Offshore wind energy production is on the rise globally, projected to occupy significant areas in shallow shelf seas and moving into deeper waters as floating turbine technology is becoming more mature. However, knowledge about the potential impact of wind farms on the physical oceanography and lower trophic organisms is still severely limited. In this review, we assess the current state of knowledge on the effects and impacts of offshore wind farms on regional and local hydrography and circulation, nutrient distribution, phytoplankton and primary production, and sediment load in the water column during the operational phase of the wind farms and identify critical knowledge gaps.

News & Press Releases

Marine Energy

Eco Wave Power Advances 1 MW Wave Energy Project in Porto, Portugal; Completes Ocean Wave Assessment with MetOcean Consult and Submits Full Execution Plan to APDL – Eco Wave Power

> Eco Wave Power recently announced key progress in the development of its 1 MW wave energy project in Porto, Portugal, including the completion of a wave and loads assessment conducted in co-operation with MetOcean Consult and the submission of the full execution plan to Administração dos Portos do Douro, Leixões e Viana do Castelo, S.A. (APDL). To support engineering and design optimization for the Porto project - the first megawatt-scale implementation under the Company's 20 MW concession agreement with APDL - Eco Wave Power retained the services of MetOcean Consult, a Netherlands-based consultancy specializing in independent metocean analysis, environmental data services, and numerical wave- and flow modeling for offshore, coastal, and port developments.

Offshore works completed at MeyGen site – Proteus Marine Renewables

Ampeak Energy and Proteus Marine Renewables have successfully completed works at the world-leading MeyGen tidal stream project in Scotland's Pentland Firth. The offshore works involved three of the four turbines, and a series of inspection, maintenance and redeployment operations were successfully completed. Two of the three turbines (TTG 2 and TTG 4) were serviced offshore and returned to operation, whilst the third (TTG 1) was returned to Nigg for servicing and will be redeployed at a future date. No intervention was required on TTG 3, which has now accumulated seven years of operation, maintenance-free. MeyGen is the largest tidal stream site in the world and has produced over 84 GWh of tidal energy, reinforcing its position as the world's number one tidal stream site and the home of the technology.

CETO Wave Energy Ireland passes halfway mark on EuropeWave payment – Offshore Energy

Carnegie Clean Energy's wholly owned subsidiary, CETO Wave Energy Ireland, has received two EuropeWave payments totaling €350,643, unlocked by completing several manufacturing deliverables for the ACHIEVE Programme. The payments were received under the EuropeWave Phase 3 Contract, which supports the first deployment of Carnegie's CETO wave energy converter (WEC) technology in Europe at the Biscay Marine Energy Platform (BiMEP) site, located in the Basque Country. This follows the completion of deliverables related to fabrication of the buoyant actuator, mooring connectors and foundation structures. The unit will operate at BiMEP for two years, gathering data to validate CETO technology and advance commercialization.

AMEC Stakeholder Engagement Team Launches Marine Planning Board Game Efforts – AMEC

Wave and tidal marine energy technologies have vast potential to generate electricity in coastal areas. They are currently being developed and explored for uses such as desalinating seawater, powering scientific research equipment, supporting aquaculture operations, and supplying energy to remote communities. AMEC is advancing wave and tidal marine energy for powering the blue economy by connecting with stakeholders interested in the use, management, and conservation of coastal and marine environments. However, involving stakeholders in marine energy topics is complicated by the emerging nature of wave and tidal energy and the range of stakeholders' understanding, from those who have never heard of it to experts in the field. To address this, the AMEC Stakeholder Engagement Team is utilizing a marine spatial planning board game to introduce participants to marine energy.

Wind Energy

UK Awards Europe's Largest Offshore Wind Energy Allocation for 8.4 GW – The Maritime Executive

The UK government is hailing what it calls a “monumental step” in energy independence as it awarded 8.4 GW in a total of 12 offshore wind energy projects. The results are the biggest single procurement of offshore wind energy in British and European history, and are seen as a significant validation for the industry. The government is highlighting the turnaround it was able to achieve with the seventh round of Contracts for Difference Allocation. Round 5 closed in September 2023 with no offshore wind energy projects secured. The government enhanced the subsidies and pricing for Round 6, which awarded nearly 5 GW off fixed bottom offshore wind, although some was a reworking of prior awards, and 400 MW of floating offshore wind.

World’s first 20-megawatt offshore wind turbine installed in waters near Fujian Province – Global Times

The world's first 20-megawatt offshore wind turbine was successfully installed in waters off East China's Fujian Province on Tuesday, marking a major breakthrough in the country's offshore wind power development. It is the first time a 20-megawatt class offshore wind turbine independently developed by China was successfully installed, China Central Television Station News reported, citing project developer China Three Gorges Corp. The turbine is part of a national key research and development program, with major components independently developed and produced in China. Significant advances have also been made in overall lightweight design work.

Goto Offshore Wind Farm Begins Commercial Operation - Japan’s First Commercial Floating Wind Power Project – Toda Corporation

Goto Floating Wind Farm recently announced that commercial operation of Goto Offshore Wind Farm, Japan’s first commercial floating offshore wind farm, began on January 5, 2026. The wind farm is the first facility of its kind in Japan to be certified by Japan’s Minister of Economy, Trade and Industry and Minister of Land, Infrastructure, Transport and Tourism under the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities (Marine Renewable Energy Sea-Area Utilization Act). It is also Japan’s first commercial floating offshore wind farm. The wind farm employs a hybrid spar-type floater featuring a steel upper section and a concrete lower section.

World's First Fully Recyclable Carbon Fiber Wind Turbine Blade. – Ming Yang Smart Energy

Ming Yang Smart Energy has officially rolled out the MySE23X, the world's first fully recyclable carbon fiber wind turbine blade. It not only achieves a breakthrough in size (exceeding 110 meters), but also optimizes degradation conditions and expands the recyclable material system. Leveraging unique ambient temperature and pressure degradation technology, the MySE23X recyclable carbon fiber blade enables efficient chemical separation of composite materials under mild conditions using a specific degradation solution. The recyclable carbon fiber pultruded panel provides high-strength, lightweight support for the blade while ensuring complete recycling of the carbon fiber.