TETHYS BLAST

31 July 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!

Announcements

Wind Energy Monitoring and Mitigation Technologies Tool

Wind Energy-Environmental Research & Engagement Network (WREN) recently published an update to the Wind Energy Monitoring & Mitigation Technologies Tool on Tethys, which now features 124 technologies developed to assess and reduce potential wildlife impacts resulting from wind energy. Technologies are independently reviewed and the tool is continuously maintained and updated to ensure the international community has access to current, publicly available information on monitoring and mitigation solutions, their state of development, and related research. Complete this short survey to submit additional technologies for consideration.

Survey on Marine Energy in Tropical & Subtropical Countries

OES-Environmental is conducting a short survey to collect information about the potential environmental effects of marine energy development in tropical and subtropical countries. We are looking for information on any active or planned marine energy projects in these regions; any research, monitoring, or modeling efforts; and any relevant literature or other resources. We are also looking for contacts and/or organizations with experience and interest in these areas.

PMEC Toolkit

Pacific Marine Energy Center (PMEC) has released a Toolkit for Community Engaged Research, which is a new resource for marine energy researchers and engineers to help understand end-users and think more broadly about communities and different tools for engagement. Learn more about the toolkit in PMEC's project brief.

Calls for Abstracts & Papers

The Call for Abstracts for the American Geophysical Union (AGU) 2026 Annual Meeting is open until 5 August 2026. Submissions are open for the oral and poster sessions, "Marine Energy Technologies & Resource Characterization". AGU 2026 will take place on 7–11 December 2026 in San Francisco, California, USA.

Marine Technology Society (MTS) has opened the Call for Abstracts for its TechSurge on Next-Generation Maritime Autonomy: Uncrewed Maritime Systems Across Surface and Undersea Environments until 7 August 2026. The TechSurge will take place on 6–8 October 2026 in Arlington, Virginia, USA.

The Association of Fish and Wildlife Agencies (AFWA) has opened the Call for Workshop & Related Meeting Requests for the 116th Annual AWFA Meeting until 14 August 2026. The meeting will take place on 14–18 September 2026 in Lancaster, Pennsylvania, USA.

The Marine Alliance for Science and Technology for Scotland (MASTS) has opened the Call for Abstracts for the MASTS 2026 Annual Science Meeting until 31 August 2026. The meeting will take place on 10–12 November 2026 at the University of Strathclyde in Glasgow, Scotland.

The Call for Abstracts for the 12th International Ocean Thermal Energy Conversion (OTEC) Symposium is open until 15 September 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) is open through 15 September 2026. ICSE will take place from 31 August to 3 September 2027 at the University of Porto in Porto, Portugal.

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.

Ocean and Society is accepting abstract and manuscript submissions for its thematic issue, Co-Location and Co-Existence in Marine Governance, until 30 November 2026 and 30 April 2027, respectively.

The *Journal of Marine Science and Engineering* is accepting manuscript submissions for its Special Issue, Advanced Numerical Methods for Marine Renewable Energy: Resource Assessment, Hydrodynamics, Environmental Impact, and Optimization, through 20 December 2026.

Frontiers in Marine Science is accepting manuscript submissions for its Research Topic, Marine Autonomous Systems for Ocean Observation, Conservation, and Renewable Energy, until 4 February 2027.

Funding & Testing Opportunities

Scottish Marine Environmental Enhancement Fund (SMEEF) has launched the second round of open funding from the Seabirds Resilience Fund, Taking Flight, which is designed to accelerate progress against the Scottish Seabird Conservation Action Plan and its aim of building resilience in seabird populations. Submit Expressions of Interest by 21 August 2026. An applicant support webinar will take place on 5 August 2026 from 9:30–10:30am BST (8:30–9:30am UTC).

VentureWell has opened applications for Stages 0 and 1 of its Ocean Enterprise Accelerator, which supports U.S. innovators with the development, commercialization, and adoption of new ocean data technologies and services. The Stage 0 Fall 2026 application deadline is August 25. An informational session will take place on 10 August 2026 from 4:00–5:00pm EDT (8:00–9:00pm UTC).

Ocean Exchange, in partnership with the Marine Environmental Observation, Prediction and Response Network (MEOPAR), has launched a new Call for Solutions focused on advancing ocean, Great Lakes, and St. Lawrence River sustainability through the innovative use of artificial intelligence and ocean data. One Canadian startup, nonprofit, researcher, or organization will receive a CAD $100,000 Ocean Exchange Neptune Award. Apply by 25 August 2026.

Natural Resources Canada's Offshore Wind Predevelopment (OWP) Program has opened Round 2 of its Call for Proposals for Offshore Wind Indigenous and Coastal Communities Grant Funding. The OWP Program can provide grant funding up to $10,000 per fiscal year per applicant, until 31 March 2028, to support engagement activities related to offshore wind development. Apply by 31 August 2026.

The U.S. DOE Office of Technology Commercialization recently announced the opening of a new Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Phase I award opportunity focused on four Genesis Mission-focused topic areas. This initial release precedes a broader Phase I funding opportunity expected later this fall. Submit your pitches by 10 September 2026. Applications for FY25 SBIR/STTR Phase II funding opportunities are also open until 25 September 2026 (for eligible applicants).

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 2 October 2026. TEAMER now provides expertise, non-open water, and open water support, as well as commercialization support.

Career & Internship Opportunities

Scottish Association for Marine Science (SAMS) is hiring a PDRA in Active Acoustic Monitoring of Offshore Wind Ecosystem Effects. The position offers an exciting opportunity to integrate multi-modal active acoustic observations with physical oceanographic datasets to help maximize the benefits of offshore wind. Apply by 3 August 2026.

The Crown Estate is hiring a Marine Data Manager to lead and manage the delivery of the Marine Data Exchange, including system development, survey data management, and ensuring a seamless customer journey. Apply by 10 August 2026.

European Marine Energy Centre (EMEC) is seeking an Electrical Technician or Electrical Engineer to support the operation and development of EMEC's test and demonstration facilities and delivery of pioneering innovation projects. Apply by 20 August 2026.

Xodus Group is hiring an Environmental Specialist - Marine Mammal Specialist to take ownership of its technical offering, mentor and develop colleagues, and act as a trusted adviser to clients and project teams and help shape industry best practice. Apply by 23 August 2026.

The Alaska Center for Energy and Power (ACEP) at the University of Alaska Fairbanks (UAF) is seeking a Research Associate Professor of Marine Energy to contribute to research, teaching, mentorship, and service while expanding externally funded research opportunities, and to serve as the co-Director of the Pacific Marine Energy Center (PMEC). Apply by 24 August 2026.

The Supergen Offshore Renewable Energy (ORE) Hub is inviting applications for an Early Career Network Lead. This voluntary role offers an excellent opportunity to work closely with the Hub Directors and contribute to the strategic direction of the Hub. Apply by 1 September 2026.

Sandia National Laboratories is hiring a Postdoctoral Appointee - Hydrodynamic Energy Systems High Performance Computing and Postdoctoral Appointee - Hydrodynamic Energy Systems Laboratory Experiments.

The Department of Ocean and Resources Engineering and the Hawai'i Natural Energy Institute at the University of Hawai'i at Mānoa are inviting applications for a full-time, tenure-track, 11-month Assistant Professor or Associate Professor position in Ocean Engineering.

Inyanga Marine Energy Group is hiring a Chief Technology Officer to provide leadership across the HydroWing programme, ensuring the successful progression of technology from concept development through detailed engineering, manufacture, certification, commercial deployment and operational optimisation.

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 Institution of Environmental Sciences (IES) is hosting a webinar, "Designing renewable energy for nature," on 5 August 2026 from 11:30am–12:15pm UTC. In this webinar, Ben Jobson will examine how solar and wind energy developments can be developed in harmony with

nature, drawing on recent International Union for Conservation of Nature (IUCN) guidance and international case studies.

The National Laboratory of the Rockies (NLR) is hosting the final webinar in its *Marine Energy Microgrid and Power Electronics Webinar Series*, "Microgrid Power Hardware-in-the-Loop Modeling," on 10 August 2026 at 12:00pm MDT (6:00pm UTC). The webinar will demonstrate NLR's power hardware-in-the-loop (HIL) microgrid model for marine energy integration with microgrid testing. This demonstration will feature a repurposed tidal energy generator mounted on NLR's 20-kW test bench connected to a bidirectional grid emulator and an HIL device.

The Portal and Repository for Information on Marine Renewable Energy (PRIMRE) is hosting a webinar, "From Design to Ocean Deployment: Lessons Learned from the SURF-WEC Project in Hawaii," on 11 August 2026 from 1:00–2:00pm MDT (7:00–8:00pm UTC). Join for an in-depth overview of the Small Underwater Research Flap Wave Energy Converter (SURF-WEC), a 1m x 1m oscillating surge device developed by NLR in partnership with the Hawai'i Marine Energy Center (HMEC), which has been successfully deployed off the coast of Oahu, Hawaii.

Marine Energy Wales is hosting a webinar, "Marine Energy Wales State of the Sector Report," on 13 August 2026 from 1:00–2:00pm BST (12:00–1:00pm UTC). Panelists will delve further into the detail of this year's report, providing insight and further analysis on its findings.

Upcoming Workshop

OES-Environmental is hosting an interactive workshop, "Environmental Acceptability of Marine Energy Projects to Help Streamline Permitting Processes," on 4 August 2026 from 10:00am–12:00pm EDT (2:00–4:00pm UTC) as part of the 2026 University Marine Energy Research Community Annual Conference (UMERC) + Marine Energy Technology Symposium (METS).

Upcoming Conferences

The 8th Asian Offshore Wind, Wave, and Tidal Energy Conference (AWTEC 2026) will take place on 6–10 September 2026 in Kaohsiung, Taiwan. Regular registration is available until 31 July 2026.

NetZero Atlantic is hosting the Atlantic Canada Offshore Wind Readiness Forum 2026 on 16 September 2026 in Halifax, Nova Scotia, Canada.

The North American Wind Energy Academy (NAWEA) / WindTech 2026 Conference will take place on 21–23 September 2026 at Portland State University in Portland, Oregon, USA. Regular pricing is available until 31 July 2026.

Ocean Energy Europe (OEE) and the Dutch Energy from Water Association (EWA) are co-hosting the 2026 International Conference on Ocean Energy (ICOE) and OEE Conference on 5–7 October 2026 in The Hague, Netherlands. Early bird registration has been extended until 31 July 2026.

Renewable Energy Wildlife Institute (REWI) is hosting the 16th Wind-Wildlife Research Meeting (WWRM 2026) on 27–30 October 2026 in Albuquerque, New Mexico, USA. Early bird registration is available through 28 August 2026.

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

Supergen ORE Hub (2026) Strategic Research Agenda – Greaves et al. 2026

> At the European level, several Strategic Research and Innovation Agendas (SRIAs) provide long-term frameworks for coordinating research and innovation activities across key sectors, including offshore wind and ocean energy. However, while these frameworks provide valuable guidance on innovation requirements, there is currently no equivalent UK ORE sector-wide report dedicated to identifying and coordinating the underpinning research challenges that will shape the long-term development of the sector. The absence of such a report highlights a notable gap within the UK's innovation ecosystem. To address this gap, and support both innovation and accelerated sector growth, the Supergen ORE Hub SRA identifies the underpinning research priorities required to enable disruptive, crosscutting and long-term progress across the UK ORE sector.

A comprehensive review of floating renewable energy technologies – Baig et al. 2026

> This study provides a comprehensive comparative review of the main floating renewable energy (FRE) technologies floating photovoltaic (FPV), floating offshore wind turbines (FOWT), and floating hydropower, tidal, and wave energy systems. The analysis is based on a critical synthesis of recent research and industrial data, evaluating each technology in terms of efficiency, energy yield, levelized cost of energy (LCOE), technology readiness level (TRL), and operational challenges. The results show that FPV currently represents the most mature and cost-effective option, benefiting from high scalability and minimal environmental disturbance. Marine-based systems such as tidal and wave energy remain at an early stage, constrained by technological and economic limitations.

Achieving energy security in the Gulf of Guinea: harnessing ocean energy through regional cooperation – Mukwele and Tambo 2026

> Energy poverty remains a critical challenge in Africa, particularly in the Gulf of Guinea (GoG) subregion, where reliance on hydropower, fossil fuels, and limited solar photovoltaic capacity fails to meet the rapidly increasing energy demands of urban and industrial centers. This paper investigates the potential of marine renewable energy (MRE) as a sustainable approach to the GoG's energy deficit, emphasizing the

importance of transnational cooperation among the region's coastal states. Drawing on comparative and empirical methods, the study examines successful European models of MRE development, focusing on the North Sea and Baltic Sea macro-regions, to identify lessons that can be adapted to the GoG context.

Wind Energy

Climatic Impacts of Large-Scale Wind Farms in Arid and Semi-Arid Region in China: A Case Study of the Huitengxile Wind Farm in Inner Mongolia – Su et al. 2026

With the rapid expansion of China's wind power industry, the local climatic impacts of large-scale wind farms, particularly in arid and semi-arid regions, have attracted increasing attention. This study investigates the effects of the Huitengxile wind farm in Inner Mongolia, which hosts over 1,200 wind turbines, using high-resolution numerical simulations conducted with the Weather Research and Forecasting (WRF) model. The analysis quantitatively evaluates the effects of the wind farm's influence on surface temperature, surface relative humidity, turbulent kinetic energy (TKE), and wind speed at turbine height by comparing control and sensitivity simulations. The results indicate that the Huitengxile wind farm induces a decrease in surface temperature but an increase in surface relative humidity. At hub height, TKE increases, while wind speed decreases within the wind farm area.

Balancing marine species conservation with cost-effective renewable energy development – Ganley et al. 2026

Renewable energy may require anthropogenic activity and wildlife to co-occur. Here we develop a framework to identify trade-offs between financial costs to developers and conservation, considering the critically endangered North Atlantic right whale (*Eubalaena glacialis*) and offshore wind energy development. By coupling an offshore wind energy construction simulation with a density surface model to quantify the number of right whales exposed to pile-driving noise under ten mitigation scenarios, we highlight mitigation measures, notably seasonal restrictions and noise attenuating devices, that can yield conservation value with minimal financial burden. As societies continue to refine and determine suitable financial and ecological trade-offs for development, frameworks like ours can be useful for exploring conservation challenges to ensure co-benefits for climate and biodiversity.

Exploring perceived impacts of onshore wind farms and the link to public support and experience – Vedder et al. 2026

The perceptions of wind farm impacts play a key role in shaping local support for wind farms. However, previous research has not examined the prevalence of impacts most salient in public perceptions, and acceptance of impacts is often studied in isolation, focusing on single or limited types of impacts. To address this gap, we (1) reviewed the literature to identify commonly researched impacts, (2) conducted a multi-country European survey (n=356) to determine people's perceptions of the impacts and the

relevance of the impacts identified in multidisciplinary literature, and (3) examined how these perceptions relate to previous experiences with wind farms and level of support through logistic regression analysis. We identified sixteen impacts from the literature. Through a thematic analysis, 17 additional impacts emerged from participants' descriptions.

News & Press Releases

Marine Energy

CorPower Ocean secures world-first DNV certification for wave energy technology – CorPower Ocean

CorPower Ocean has been awarded the world's first DNV Prototype Certificate for a Wave Energy Converter (WEC), marking a major leap towards bankable, utility-scale wave energy. The CorPower C4 has been certified by DNV under DNV-SE-0120, Certification of Wave Energy Converters and Arrays, following independent verification. The certificate confirms the technology meets DNV's stringent requirements for structural strength, reliability and safety, establishing a new international benchmark for the wave energy industry. It also establishes a significantly reduced technology risk, unlocking the project finance, insurance and institutional investment in commercial deployment.

Mocean Advances Wave Energy Design with Key Engineering Milestones – EuropeWave

The Mocean project team has successfully completed testing of a scaled version of its innovative Power Take-Off (PTO) system, known as the Vernier Hybrid Machine (VHM), while continuing detailed engineering work on the Wave Energy Converter (WEC) and securing critical long-lead components required for the next phase of the programme. A scale version of the PTO, the Vernier Hybrid Machine ("VHM"), was successfully tested at the manufacturer's facility in Scotland. The testing programme was designed to validate the PTO numerical model while reducing technical and manufacturing risk ahead of full-scale production. The testing also verified assembly methods, component integration and material performance, providing increased confidence in the system's readiness for deployment.

Alaska-made prototype tidal turbine to be tested in Massachusetts – Offshore Energy

Alaska-based Sitkana is set to deploy its new prototype tidal turbine at the Marine Renewable Energy Collaborative's (MRECo) Bourne Tidal Test Site (BTTS) in Massachusetts, USA. At BTTS, located in the Cape Cod Canal, the turbine will operate in powerful tidal currents while engineers evaluate its performance, reliability, and durability in real ocean conditions, marking a step forward to commercial deployment. According to Sitkana, the technology uses smaller modular units that combine into larger arrays, allowing systems to scale without large-scale infrastructure or specialized

installation equipment. MRECo's recent upgrades to the BTTS include enhanced data systems, improved testing infrastructure, expanded prototype deployment capabilities, and preparations for future grid-connected tidal turbine testing, thanks to support from the Massachusetts Clean Energy Center's (MassCEC) Ocean Innovation Network.

CETO Project Moves Closer to Offshore Deployment at BiMEP – EuropeWave

Carnegie Clean Energy has advanced the assembly of its CETO wave energy device, bringing the grid-connected demonstration project a step closer to offshore deployment. The ACHIEVE CETO unit is to be deployed at Spain's Biscay Marine Energy Platform (BiMEP), one of Europe's leading open-sea test facilities for marine renewable energy. Fabrication of the three Power Take-Off (PTO) modules for the ACHIEVE project is nearing completion. The first module has been delivered to SKF's manufacturing facility in Germany, where final assembly is now underway. The milestone follows completion of the Electrical Module (EM), assembled in collaboration with Basque supplier SEI. As assembly of the PTO modules progresses, the integrated system will undergo testing to validate communication between the EM and PTO modules ahead of offshore installation.

Eco Wave Power Welcomes New Israeli Government Blue-Tech Energy Initiative to Advance Marine Renewable Energy Innovation – Eco Wave Power

Eco Wave Power Global, a leading developer of onshore wave energy technology, recently welcomed the joint initiative announced by Israel's Ministry of Energy and Infrastructure and the Israel Innovation Authority to invest NIS 6 million (approximately $2 million USD) in advancing next-generation Blue-Tech energy technologies. The new program is designed to support breakthrough marine renewable energy solutions, including wave energy generation, offshore energy systems, artificial intelligence-powered marine energy management, and related technologies. Eco Wave Power currently operates Israel's first – and to date only – grid-connected wave energy power station, located at Jaffa Port.

Wind Energy

The Crown Estate launches accelerated tender for Morgan offshore wind site – The Crown Estate

The Crown Estate has today launched a competitive tender process to secure a new developer to build and operate the up to 1.5GW Morgan wind farm in the Irish Sea. Following the previous developer's decision to discontinue development earlier this year, The Crown Estate has moved quickly to return the site to market and maintain momentum on one of the most advanced offshore wind opportunities available to developers. The streamlined process could see rights awarded by the end of 2026, helping to keep a significant renewable energy project on track. Once operational, Morgan could generate enough electricity to power up to 1.5 million homes, supporting the UK's energy security ambitions and economic growth.

Sweden Greenlights Two, Rejects 11 Offshore Wind Farms Over Defence Concerns; Vattenfall Halts Approved Project? – Offshore Wind

> The Swedish government has approved two offshore wind projects in the country's exclusive economic zone while rejecting eleven others, completing decisions on all offshore wind permit applications that had been under review. The approved projects are Fyrskeppet Offshore, located around 54 kilometres east of Söderhamn in the southern Gulf of Bothnia, and Vidar, planned around 35 kilometres southwest of Strömstad in the northern Skagerrak. Fyrskeppet Offshore, being developed by Skyborn Renewables, has been authorised to install up to 93 wind turbines and is expected to generate 8 TWh to 11 TWh of electricity annually, according to the government. According to earlier information about the project, it has been planned to comprise 187 turbines that would together have a generation capacity of around 2.8 GW.

URI Studying Jonah Crabs to Learn about Offshore Wind Turbines' Effect on Underwater Ecosystems – ecoRI

> Since the first offshore wind project was developed in Rhode Island in 2016, University of Rhode Island (URI) researchers have been attempting to understand their impacts on local marine ecosystems. That work is continuing with first-year URI Ph.D. student Emmanuel Oyewole's study of the artificial reefs that are often found at the base of turbines. It's been established through research surrounding offshore wind that the base of turbines serves as a foundation for algae and coral, which acts as a base for a booming ecosystem. In an attempt to find the cause of this blossoming of aquatic activity, Oyewole is studying the movement and dietary habits of one special creature found at the base of offshore wind turbines: Jonah crabs. He's working with his academic advisor, Kelton McMahon, an associate professor of oceanography.

Blue Mackerel gets Oz permitting nod – Renews

> The Victorian Minister for Planning has determined that the 1GW Blue Mackerel offshore wind project will not require an Environmental Effects Statement and will instead be assessed through a targeted Environment Report under the Environment Effects Act 1978. Blue Mackerel said the Environment Report must assess the predicted direct, indirect and cumulative impacts of the Victorian components of the project on biodiversity across terrestrial, coastal, estuarine and marine environments. Blue Mackerel is being developed by JERA Nex bp. The company added that the report must be prepared in consultation with the Department of Transport and Planning and the Department of Energy, Environment and Climate Action before being reviewed and approved by the Victorian Minister for Planning.

OW Extreme Challenge 2026: Six swimmers complete the first-ever open-water challenge from an offshore wind farm to the Portuguese coast – Ocean Winds

> Ocean Winds (OW)—a 50-50 joint venture between EDP Renewables and ENGIE and the developer, owner, and operator of the 25 MW WindFloat Atlantic project, the world's

first semi-submersible floating wind farm located approximately 20 kilometres off Viana do Castelo—has made history on Saturday, July 18th, with the completion of the "OW Extreme Challenge 2026", marking the first-ever open-water swim from an offshore wind farm to the Portuguese coast. The event featured an unprecedented 20-kilometre open-water swim from the WindFloat Atlantic offshore wind farm to the mainland in Viana do Castelo. The crossing was successfully completed by six professional open-water swimmers, led by Olympic open-water swimmer and President of the Portuguese Swimming Federation, Miguel Arrobas.