5 June 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

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.

FERN Tidal Energy Webinar Recording

Fundy Energy Research Network (FERN) recently hosted its first webinar, "The Power of Environmental Data: Advancing Tidal Energy Responsibly", featuring speaker Dr. Andrea Copping from Pacific Northwest National Laboratory (PNNL). Dr. Copping discussed advances in approaches to environmental effects monitoring, and highlighted tools and frameworks such as risk retirement and data transferability to streamline permitting and reduce uncertainty in tidal energy deployment. Don't miss out on future FERN events. Become a member today!

Public Notice: Invitation to Comment on OSIP

The Fundy Ocean Research Centre for Energy (FORCE) has submitted an application to Transport Canada's Navigation Protection Program for scientific monitoring equipment as part of the Ocean Sensor Innovation Platforms (OSIP) project. OSIP is a collaborative research project with Acadia University, Ocean Tracking Network, the Confederacy of Mainland

Mi'kmaq and other partners designed to improve how we monitor fish and marine life in high-flow tidal environments like Minas Passage. Submit comments by 20 June 2026.

Calls for Abstracts & Proposals

Renewable Energy Wildlife Institute (REWI) has extended the Call for Abstracts for the 16th biennial Wind Wildlife Research Meeting (WWRM 2026) through 5 June 2026. WWRM will take place on 27-30 October 2026 in Albuquerque, New Mexico, USA.

Marine Technology Society (MTS) has extended the Call for Abstracts for the 2026 Global eDNA Conference until 12 June 2026. The conference will take place 28–30 October 2026 in Seattle, Washington, USA.

The Call for Abstracts for the 3rd Australian Ocean Renewable Energy Symposium (AORES) has been extended until 15 June 2026. AORES will take place 9–11 November 2026 in Adelaide, Australia.

The Call for Town Halls and Panel Sessions for OCEANS 2026 Monterey is open until 20 July 2026. OCEANS 2026 Monterey will take place on 21–24 September 2026 in Monterey, California, USA.

Funding & Testing Opportunities

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) 18 applications until 5 June 2026. TEAMER now provides expertise, non-open water, and open water support, as well as commercialization support.

University of California San Diego has opened applications for the StartBlue Ocean Enterprise Accelerator, which is an intensive immersive program designed to help ocean intelligence startups launch and scale to support the ocean enterprise. An information session will take place on 12 June 2026. Apply by 21 June 2026.

Oregon State University (OSU) is seeking Proposals from qualified Marine Operations Consultants to provide advisory services to the PacWave wave energy test site by performing technical reviews, operational assessments, risk-based evaluations, and other activities. Proposals are due 24 June 2026.

Interreg North Sea has launched the 4th Support Call for the OASIS Accelerator Programme, which supports start-ups and SMEs from the North Sea region with technical and commercial trainings, networking opportunities, and a dedicated Pressure Cooker event on 21–24 September 2026 in Hamburg, Germany, hosted by The German Aerospace Center. Apply by 6 July 2026.

VentureWell has opened applications for Stage 1 of its Ocean Enterprise Accelerator, which supports U.S. innovators with the development, commercialization, and adoption of new ocean data technologies and services. Apply by 7 July 2026.

Fondation OPEN-C has opened the OPEN SEA Demo call for offshore technology developers to test their technologies in real sea conditions at the grid-connected SEM-REV offshore test site. Apply by 10 July 2026.

UK Research and Innovation (UKRI) has opened applications for the Clean Maritime Demonstration Competition 7: Deployment trials, which will fund real world demonstrations of innovative clean maritime technologies in an operational setting. UK organizations and collaborators can apply by 15 July 2026.

Career & Internship Opportunities

Intertek Metoc is seeking Graduate Consultants with a degree in a science or engineering discipline and interest in marine, coastal, or riverine environments to help provide innovative sustainable solutions to clients across a range of sectors and countries. Apply by 10 June 2026.

NatureScot is hiring two Marine Ecology Advisers to provide specialist advice in respect of marine mammal ecology to its marine energy team and other NatureScot staff on the marine mammal impacts from marine and coastal industries, including marine energy, cables, ports and harbours and aquaculture. Apply by 15 June 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 National Laboratory of the Rockies (NLR) is hosting the next webinar in its *Marine Energy Microgrid and Power Electronics Webinar Series*, "Advancing Power Electronics for Wave Energy Converters," on 8 June 2026 at 12:00pm MDT (6:00pm UTC). The webinar will explore how rapidly fluctuating wave conditions create unique power conversion challenges and highlight results from full-WEC simulations, power-hardware-in-the-loop testing, and physical prototypes evaluating approaches to improve WEC efficiency and performance.

The Ocean Thermal Energy Association (OTEA) is hosting a webinar, "First National Prospective Analysis of Ocean Thermal Gradient Energy in Costa Rica," on 9 June 2026 at 8:00am CST (2:00pm UTC). Speakers include Lic. Pablo Mora (University of Costa Rica) and Dr. Rodrigo Rojas (National University of Costa Rica).

Cal Poly Hubmboldt's Schatz Energy Research Center is hosting a webinar, "Understanding opportunities to detect ghost gear and secondary entanglements in the context of California floating offshore wind", on 17 June 2026 at 12:00pm PDT (7:00pm UTC). The webinar will explore the findings from the Mooring Sensors for Environmental Awareness (MoorSEA) project's Environmental Data Memo. Register here.

Interreg North Sea's Anemoi project is hosting the 2nd Anemoi Stakeholder Event on 20 June 2026 at 2:00pm CEST (12:00pm UTC). The event will feature presentations on the project and its next steps, chemical emissions from offshore wind to the marine environment, differences in offshore regulations, and potential effects from offshore wind leachates.

Renewable Energy Wildlife Institute (REWI) is continuing its *Technology Catalog webinar series* with a new topic: Wings Unharmed: Global Approaches to Mitigating Wildlife Collisions, which will feature risk minimization technologies from the REWI Technology Catalog.

- Part 1 will take place on 22 June 2026 at 1:00pm EDT (5:00pm UTC) and will feature Turbine Integrated Mortality Reduction (TIMR) and ThruTracker.
- Part 2 will take place on 23 June 2026 at 12:00pm EDT (4:00pm UTC) and will feature Optimized Smart Curtailment™ (OSC™) and Thermal Tracker 3D.
- Part 3 will take place on 25 September 2026 at 12:00pm EDT (4:00pm UTC) and will feature Song Meter® with Analysis and Remote Transfer (SMART™) and Acoustic and Thermographic Offshore Monitoring (ATOM).

Renewables Grid Initiative (RGI) and Med OCEaN (Offshore Coalition for Energy and Nature) are hosting a webinar, "Sustainable Seas, Safer Skies: Lessons from MIGRALION in the Mediterranean", on 25 June 2026 from 2:30–3:30pm CEST (12:30–1:30pm UTC). The webinar will dive into the French research programme MIGRALION, which focuses on the Gulf of Lion in France, a critical hotspot for seabirds, migratory birds, and bat species.

REWI is also hosting a webinar, "Advancing Bat Compensatory Mitigation: From Research Pathways to Innovative Solutions", on 1 July 2026 at 12:00pm EDT (4:00pm UTC). This webinar will explore approaches to bat compensatory mitigation, featuring an overview of White-Nose Syndrome and conservation actions implemented through the national response plan, including updates on innovative research efforts designed to improve survival and recovery of WNS-impacted bat species.

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.

Upcoming Short Course

HMEC is offering a one-week Introductory Short Course on Marine Energy from 17–21 August 2026 at University of Hawai‘i Mānoa in Oahu, Hawai‘i. The course is designed for individuals with little or no prior experience, including advanced high school students, college students, and professionals interested in marine energy in Pacific Island contexts. The application deadline has been extended to 15 June 2026.

Upcoming Conferences

The University Marine Energy Research Community (UMERC) Annual Conference will take place in partnership with the Marine Energy Technology Symposium (METS) on 4–6 August 2026 at the Stevens Institute of Technology in Hoboken, New Jersey, USA.

RGI, TB Raab, and 50Hertz are hosting Wingspan 2026: From Partnerships to Practice: Accelerating Nature-Positive Energy Infrastructure on 3-5 November 2026 in Berlin, Germany.

WavEC Offshore Renewables is hosting WavEC Lisbon 2026, its flagship annual seminar dedicated to offshore renewable energy, on 2 December 2026 in Lisbon, Portugal.

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

Identifying materials in tidal energy technology and their effects to human health, ecosystems, and resources: A life cycle assessment perspective – Rueda-Bayona et al. 2026

> Tidal energy is an abundant and predictable renewable energy source that represents a promising alternative for reducing greenhouse gas (GHG) emissions. To promote the sustainable development of tidal energy technologies (TETs), Life Cycle Assessment (LCA) is a key method for evaluating the environmental impacts associated with materials and technological processes. Although LCA has been widely applied to other renewable technologies, available data for TETs remain limited and scarce. This research conducts a systematic review (PRISMA protocol) and data mining of LCA studies using the ReCiPe method to identify the main impacts generated by TETs and their materials. The results show significant variability among technologies, with tidal stream turbines exhibiting the highest GHG emissions (69.97 g CO_2/kWh) and bulb turbines the lowest (3.9 g CO_2/kWh).

Just Transition and Coastal Communities: Case studies of Orkney, North East Scotland and the Humber Estuary – McCarron et al. 2026

> Marine Energy Transitions (METs) are reshaping coastal regions across the UK, offering opportunities for decarbonisation and economic renewal but also risking the reinforcement of long-standing inequalities. This Rapid Evidence Assessment (REA) synthesises 181 sources to examine how the concept of just transition has been and is framed, governed, and experienced in three coastal case studies: Orkney, North East Scotland, and the Humber Estuary. Across all regions, communities encounter METs not as isolated moments of change but as cumulative transitions shaped by the legacies of

earlier maritime and energy industries. These legacies influence current vulnerabilities, patterns of economic dependency, and the distribution of burdens and benefits.

Analysis and control of acoustic emissions from marine energy converters – He et al. 2026

Environmental licensing related to underwater acoustic emissions represents a critical bottleneck for the commercial deployment of marine renewable energy. This study presents a control engineering framework to mitigate acoustic risks from tidal current converters (TCCs) without compromising project viability. A MATLAB/Simulink model of a TCC was utilized to evaluate two distinct mitigation tiers: (i) architectural modification, comparing a geared induction generator against a direct-drive permanent magnet synchronous generator (PMSG) and (ii) operational control, analysing the impact of switching frequencies and maximum power point tracking coefficient (Kopt) tuning. Results indicate that lowering switching frequencies (Fs) is ineffective, increasing power electronic losses by over 2000% with negligible acoustic benefit.

Wind Energy

Mooring Sensors for Environmental Awareness (MoorSEA)—Environmental Data Memo – H. T. Harvey & Associates and Schatz Energy Research Center 2026

The Mooring Sensors for Environmental Awareness Project (MoorSEA), funded by the California Energy Commission and led by the Schatz Energy Research Center at Cal Poly Humboldt, is developing an innovative monitoring system to detect collisions and entanglements with mooring cables associated with floating offshore wind platforms in the and Morro Bay Wind Energy Areas (WEAs). This technical memorandum provides the physiological and morphological traits of key marine species, the meteorological and oceanographic characteristics of the WEAs, and physical parameters of fishing gear to inform the Project's modeling and simulation efforts.

3rd Edition: Summary of Bat Fatality Monitoring Data Contained in AWWIC Land-based Wind Energy Monitoring Database – Renewable Energy Wildlife Institute (REWI) 2026

This report provides the most up-to-date snapshot of the patterns and variability in species composition, timing, and magnitude of bat collisions with land-based wind energy turbines. Findings are useful in checking assumptions and setting expectations about collision risks at wind energy facilities, as well as generating testable hypotheses and assessing monitoring designs. This report summarizes data from 338 postconstruction mortality monitoring studies conducted over 22 years and across 256 land-based wind energy projects in the United States. Data are summarized by U.S. Fish and Wildlife Service regions and states that contain data from at least five different wind projects.

Seabirds in 3D: A framework to evaluate collision vulnerability with future offshore wind developments in the California current system – Schneider et al. 2026

> Since the 1970s, numerous vessel and aerial surveys of marine birds, covering many thousands of square kilometers, have been conducted in the California Current System (CCS), providing insights into seabirds' horizontal (2D) diversity and abundance, including the identification of "hotspots." Addressing knowledge gaps regarding seabird distribution patterns from a 3D (vertical) perspective, however, will be required if California (CA) is to use offshore wind (OSW) facilities to assist in reaching the state's 2045 renewable energy goals. Such an analysis will allow seabirds' vertical distribution to be considered when assessing potential OSW impacts, as collision vulnerability is greatest for birds flying at heights overlapping turbine rotor-swept zones (RSZ).

News & Press Releases

Marine Energy

New Wave Energy Testing Site Planned for Cuttyhunk – Vineyard Gazette

> A new project off the coast of Cuttyhunk aims to test out how well prototype technology can harness the power of waves for electricity. The Marine Renewable Energy Collaborative (MRECo), a Massachusetts-based nonprofit, is in the process of installing a testing site to the south side of the island, where developers could measure the efficacy of hydroenergy devices in open ocean conditions before they go to market. The site, which is being supported by a $1.9 million grant from Massachusetts Clean Energy Center and is expected to be in the water by September, is a critical step to harness the power of waves through tidal turbines, according to MRECo executive director John Miller. The site will include permanent moorings, power access and monitoring equipment to help the developers understand how their technologies work.

Eco Wave Power Featured for Second Time in NVIDIA Founder and CEO Jensen Huang's GTC Keynote, as Company Advances Taiwan Wave Energy Project – Eco Wave Power

> Eco Wave Power Global, a leading onshore wave energy technology company, recently announced that its technology was featured for the second time in an NVIDIA GTC keynote presentation, this time during NVIDIA Founder and CEO Jensen Huang's GTC Taipei 2026 keynote, highlighting the growing role of digital twins and simulation technologies in the optimization of real-world infrastructure. The appearance comes as Eco Wave Power continues to advance the development of its wave energy project in Taiwan. Earlier this year, the Company's local partner, I-Ke International Ocean Energy Co., secured the land use agreement for Eco Wave Power's planned pilot installation at Suao Port, Taiwan, representing a key milestone toward deployment of the Company's technology in one of Asia's most important technology and industrial markets.

Oxford spinout Caudal Energy raises £4.3m in funding to scale predictable tidal power technology – The Oxford Magazine

> Oxford-based Caudal Energy has secured £4.3 million in funding to accelerate development of its next-generation tidal energy platform designed to deliver predictable renewable power at scale. Founded in 2024 as Porpoise Power and spun out of the University of Oxford, Caudal Energy is developing a new class of tidal generation technology inspired by the movement and efficiency of marine mammal tails. The company's proprietary oscillating foil system uses fin-based hydrodynamics rather than conventional underwater turbines, allowing energy to be generated efficiently in a wider range of tidal environments. Already operating at Technology Readiness Level 5 (TRL5), the company said the funding will support full-scale testing of the technology at Strangford Lough in Northern Ireland, with the first commercial deployment targeted for 2028 as it progresses toward TRL8.

EMEC wins Supply Chain Development Award – European Marine Energy Centre (EMEC)

> EMEC has been recognised for its role in strengthening Scotland's renewable energy supply chain, winning the Supply Chain Development Award at the Scottish Green Energy Supply Chain Awards in Aberdeen. Organised by Scottish Renewables, the awards celebrate the organisations driving innovation, collaboration and growth across Scotland's world-leading clean energy sector. EMEC was honoured alongside seven other winners for its contribution to developing a robust and forward-looking supply chain that supports the transition to net zero. The awards brought together industry leaders from across the country with winners selected by a panel of experts, recognising organisations driving Scotland's clean energy future through leadership, innovation and delivery.

Wind Energy

Finland's first bird radar study on offshore wind power: Tahkoluoto results suggest birds are adapting – Hyötytuuli

> A study examining the effects of the Tahkoluoto offshore wind farm on bird flight volumes and routes suggests that birds are adapting to offshore wind power. This is Finland's first study based on bird radar data to examine bird behaviour before and after the construction of offshore wind turbines. The study, published recently, is the result of collaboration between Suomen Hyötytuuli and One Planet. In addition to analysing bird flight volumes and routes, the project has compiled best practices and recommendations for the use of bird radar. "The data from the bird radar show that birds are capable of altering their flight routes in the vicinity of the turbines, keeping the risk of collision low," says Petteri Mäkelä, Environmental Manager at Suomen Hyötytuuli and an avid birdwatcher.

TouchWind installs floating wind turbine prototype – TouchWind

TouchWind has successfully installed its floating wind turbine prototype at Fieldlab Green Economy Westvoorne in the Netherlands. Following the installation, the POWER project has now entered the in-water field testing phase, marking the next step in the demonstration programme. The POWER project – 'POsitive Wake Effects of turbines with tilted Rotors' – investigates how turbines with tilted rotors can deflect wakes and draw higher-energy wind from upper air layers. Combining these effects could enable wind farms with significantly higher power density. The floating turbine is moored using steel and polyester lines connected to concrete deadweight anchors, which are outfitted with 3D printed reefs of Coastruction, to stimulate ecology in the lake. During the testing programme which will run throughout 2026, the POWER project consortium will collect operational data on turbine performance, platform behaviour and mooring loads.

Making space offshore: what Project Anemone means for the UK's energy future – The Crown Estate

The seabed around the UK is under increasing pressure. It plays a critical role in delivering the country's climate ambitions, strengthening energy security, and supporting economic growth. From offshore wind to carbon capture and established oil and gas activity, more sectors than ever rely on this shared space - and must learn to operate effectively alongside one another. That is the challenge at the heart of Project Anemone. Established through the Offshore Wind and Carbon Capture and Storage (CCS) Co-location Forum in partnership with Offshore Energies UK (OEUK) and supported by industry, Project Anemone set out to better understand how offshore wind, carbon storage and oil and gas projects can successfully coexist in an increasingly busy marine environment.

Fugro to deliver multi-year marine mammal monitoring supporting Ireland's offshore wind ambitions – Fugro

Fugro has secured a two year environmental services contract with EirGrid, Ireland's state owned electricity transmission operator, to deliver long term marine mammal monitoring along Ireland's south coast. The work will support EirGrid's Powering Up Offshore – South Coast programme, which is delivering the electricity infrastructure needed to connect future offshore wind farms to the national grid, and marks the first commercial deployment of Fugro's purpose built mooring system. Once complete, the Powering Up Offshore – South Coast programme is expected to connect approximately 900 MW of renewable electricity, enough to power almost one million homes, making a significant contribution to Ireland's energy security and climate ambitions. Fugro will install and maintain a network of eight static, silent seabed moorings.