



Tethys Blast

November 27, 2015

Welcome to the latest bi-weekly Tethys Blast, which will update you with new information available on Tethys, new features of Tethys, and current news articles of international interest on offshore renewable energy. We hope that this becomes a valuable tool to help you stay connected to your colleagues and to introduce you to new research, new contacts, and ongoing milestones in renewable ocean energy development.

Upcoming Event

WREN is hosting the next quarterly environmental webinar on **Wildlife Monitoring and Wind Energy**. The webinar will be held on December 2nd, 2015 from 16:00-17:30 UTC (11:00am-12:30pm EST) and is freely available to the public. [More information and login details are available on Tethys.](#)

New Documents on Tethys

A total of 25 new documents have been added to Tethys in the last two weeks! These documents have been hand-selected for their relevance to the environmental effects of offshore renewable energy. The listings below are short introductions to several new or popular documents that can be accessed through the accompanying Tethys links:

[**Tests of Acoustic Signals for Aversive Sound Mitigation with Harbour Seals**](#) - Gordon et al. 2015

Some anthropogenic activities that produce intense sound in the marine environment present a risk of causing injury to the body tissues and auditory systems of sensitive marine life. It is an offence to kill or injure a seal under the Marine (Scotland) Act 2010 and in addition both grey and harbour seals are on Annex II of the Habitats Directive and are qualifying features for Special Areas of Conservation set up to promote their conservation.

Current State of Knowledge of the Effects of Offshore Renewable Energy Generation Devices on Marine Mammals and Research Requirements: Update, September 2014 - Thompson et al. 2015

A total of 28 specific research gaps were identified in the previous report. Of these, 16 were at that time already under investigation to some extent with either active research projects or planned and funded future projects. The 12 remaining projects were yet to secure funding. Of these, funding has been secured for two (AVOID and ARRY) and discussions are underway in relation to funding for a further two (TAG and MECH). The remainders remain unfunded.

Offshore Observations of Eastern Red Bats (*Lasiurus borealis*) in the Mid-Atlantic United States Using Multiple Survey Methods - Hatch et al. 2013

Little is known about the migration and movements of migratory tree-roosting bat species in North America, though anecdotal observations of migrating bats over the Atlantic Ocean have been reported since at least the 1890s. Aerial surveys and boat-based surveys of wildlife off the Atlantic Seaboard detected a possible diurnal migration event of eastern red bats (*Lasiurus borealis*) in September 2012.

Underwater Hearing Sensitivity of the Leatherback Sea Turtle (*Dermochelys coriacea*): Assessing the Potential Effect of Anthropogenic Noise - Piniak et al. 2012

Rising levels of anthropogenic noise throughout the world's oceans have created growing concern about the impact of sound on many marine species. Sea turtles do not appear to vocalize or use sound for communication, but may use sound for navigation, locating prey, avoiding predators, and general environmental awareness. Endangered leatherback sea turtles (*Dermochelys coriacea*) have the largest latitudinal distribution of all sea turtles, foraging in high-latitude sub-polar waters and nesting on low-latitude tropical beaches.

The Density and Behaviour of Marine Mammals in Tidal Rapids - Macaulay et al. 2015

Harbour porpoises (*Phocoena phocoena*) are one of Europe's most common cetaceans and they are protected under European law. The current expansion of the tidal energy industry has highlighted concerns about anthropogenic activity in tidal habitats, particularly whether deployed turbines may pose a collision risk to animals. However, the ecological significance of tidal habitats for harbour porpoise is poorly understood and little data exists to inform on the potential risk that tidal turbines may pose.

Current News

Current news articles of international interest on offshore renewable energy include:

[Seattle company unveils offshore wind farm plans](#)

Seattle-based Trident Winds recently unveiled plans for an offshore wind farm. It'd be the first off the California coast. "We have not yet talked about offshore wind on the West Coast, because it is very new," said Alla Weinstein, founder of Trident Winds. The company filed paperwork with Morro Bay, Calif., to put a wind farm of 100 deepwater, floating turbines 20 miles from shore. At their highest point, these wind turbines reach up to 636 feet tall.

[Carnegie Wave Energy receives \\$21 million loan facility for technology development](#)

Carnegie Wave Energy Limited and Commonwealth Bank of Australia have completed a financing deal for a five-year \$20 million loan facility. This is part of the financing required for the next stage of CETO technology development and commercialization, the CETO 6 project, according to Carnegie. The goal is to develop an export-ready wave technology for global application. The CETO system operates under water, where it converts ocean wave energy into electricity and desalinated water. The CETO 6 unit has a targeted, nominal 1 MW power capacity.

[New offshore wind farm to bring in 4,800 construction jobs](#)

ScottishPower Renewables has confirmed that its plans for a 172-turbine wind farm off the coast of East Anglia could provide 4,800 construction jobs. The plans will be considered by the National Infrastructure team and if the new wind farm is given the go ahead, it could mean plenty of new jobs when construction begins in 2021.

[Jobs lost as wave energy firm Aquamarine Power folds](#)

Wave energy company Aquamarine Power has been forced to stop trading after it failed to find a buyer. The Edinburgh-based company called in administrators at the end of October, saying the economic climate had "significantly affected" its business. A total of 14 jobs have been lost, 13 in Edinburgh and one in Belfast.