



# Tethys Blast

December 11, 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.

## Tethys Updates

Just last night, a new Tethys redesign was deployed, with particular focus on the home page. These changes have been made to facilitate the addition of land-based wind content, while creating a more modern look that should be more intuitive. Tethys is still providing all the same features as before. We invite you to [visit Tethys](#) and explore the redesigned website.

## New Documents on Tethys

A total of 14 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 marine and wind renewable energy. The listings below are short introductions to several new or popular documents that can be accessed through the accompanying Tethys links:

**[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](#)**

An initial review of the current state of knowledge on the effects of offshore renewable energy generators on marine mammals was provided to the Scottish Government in August 2013. This report provides an update to the 2013 report highlighting

improvements to the current state of knowledge of effects of offshore renewable energy generators on marine mammals and provides an update on progress on the prioritised list of research gaps presented in the previous report.

**[Guidelines for Consideration of Bats in Wind Farm Projects Revision 2014](#) - Rodrigues et al. 2015**

Europe is faced with the need to tackle climate change and pollution and to find sustainable means to meet demands for energy generation. Thus the promotion of alternative methods for the production of energy such as wind power has been intensified. The low-emission production of wind energy brings benefits for the environment but on the other hand causes problems for wildlife, such as certain bat species. Therefore EUROBATS has developed guidelines for assessing potential impacts of wind turbines on bats and for planning, construction and operation of wind turbines in accordance with the ecological requirements of bat populations.

**[ORJIP Ocean Energy: The Forward Look; an Ocean Energy Environmental Research Strategy for the UK](#) - ORJIP 2015**

During 2013, there was an increasing recognition amongst many in the industry (developers, regulators, their advisors and the research community) that a coordinated, strategic approach would help de-risk and accelerate the consenting of wave and tidal projects in the UK. This is particularly the case for array projects yet to be consented, and those recently consented projects with consent conditions requiring technically challenging, costly and pioneering environmental monitoring programmes.

**[Framework for Assessing Ecological and Cumulative Effects of Offshore Wind Farms: Cumulative Effects of Impulsive Underwater Sound on Marine Mammals](#) - Heinis and de Jong 2015**

Piling work on foundations for wind turbines during the construction of wind farms in the North Sea generates high levels of underwater sound that can disturb harbour porpoises and seals. Given the expected developments in the Netherlands and other countries, it cannot be excluded that the accumulated effects of this impulsive sound as a result of multiple initiatives may impact entire populations.

**[Sound Science: Maintaining Numerical and Statistical Standards in the Pursuit of Noise Exposure Criteria for Marine Mammals](#) - Wright 2015**

Establishing noise exposure criteria for marine mammals has proven to be a difficult and contentious issue. Over the last decade, several attempts have been made to provide scientifically-based exposure criteria. While representing the "best available science" on the issue, these criteria, and the assumptions underpinning them, have led to considerable discussion among both scientists and policy-makers.

# Current News

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

## **[Eco Wave Power Receives EU Funding Approval for Wave Energy Power Plant in Gibraltar](#)**

According to the Power Purchase Agreement between EWP, Gibelec and the Ministry for the Environment, Energy and Climate Change in Gibraltar (led by Honorable Minister Dr. John Cortes) Eco Wave Power will construct a 5MW wave energy power station in two phases. During the first phase, Eco Wave Power will implement a 100KW power station on the Ammunition Jetty, and in the second phase the power plant will be expanded to a size of 5MW, which will provide up to 15% of Gibraltar's electricity needs. This percentage will enable Gibraltar to meet its renewable energy commitments to the EU by 2020.

## **[China starts building second biggest offshore wind farm](#)**

China's top wind power company has started building the country's second-largest offshore wind farm, state media said, as Beijing aims to boost the nation's clean power industry and cut dependence on fossil fuels that are contributing to smog. The plant on Nanri Island off the southeast coast of Fujian province will have installed capacity of 400 megawatts (MW) by 2018, state-run news agency Xinhua said on Friday.

## **[Mexico to get Wave Energy](#)**

AW-Energy, a wave energy technology developer, and ENAL, a Mexican renewable energy developer, have signed a memorandum of understanding to develop, design and deploy a 10MW wave farm off the Pacific coast of Mexico. This will make it one of the largest wave farms in the world. The information about the new joint development was made public on November in Finland, in conjunction with the inauguration of AW-Energy's worlds' largest wave energy converter test facility located in Järvenpää.

## **[Offshore wind farm project in Lake Erie lands European backer](#)**

A Norwegian wind farm developer has pledged to build the first United States offshore wind farm in Lake Erie, according to Ohio newspapers. Fred. Olsen Renewables, a European power producer, has agreed to back a nonprofit consortium in Ohio that's been trying for several years to develop a \$120 million pilot wind farm project northwest of Cleveland.