

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

The <u>35th International Conference on Ocean, Offshore & Arctic Engineering (OMAE)</u> will be held in Busan, Korean on June 19 - 24, 2016. OMAE is a forum to exchange ideas on ocean, offshore and arctic engineering among researchers, engineers, etc. OMAE has been held every year in various cities all over the world. There will be a session entitled "*Environmental Assessment for Marine Renewable Energy*." Please consider submitting an abstract by December 14, 2015.

New Documents on Tethys

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:

ORJIP Ocean Energy: The Forward Look; An Ocean Energy Environmental Research <u>Strategy for the UK</u> - 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.

<u>Identifying Information Needs and Approaches for Assessing Potential Impacts of Offshore</u> <u>Wind Farm Development on Fisheries Resources in the Northeast Region</u> - Petruny-Parker et al. 2015

The following report summarizes the findings of a project centered on gathering input on the potential impacts to fisheries resources from offshore wind energy development in three Wind Energy Areas as defined in Table 1 off the coasts of Rhode Island, Massachusetts, New York and New Jersey, and the best methods for evaluating potential impacts.

<u>A Scenario-Based Approach to Evaluating Potential Environmental Impacts Following a</u> <u>Tidal Barrage Installation - Kidd et al. 2015</u>

Total exclusion barrages have a high impact on estuarine systems as they are permanent barriers to tidal flow. The environmental impacts of five putative barrages in various locations within the Tamar River estuary in northern Tasmania, Australia were assessed by considering likely hydrological, morphological and ecological outcomes.

<u>From NIMBY to Acceptance: Toward a Novel Framework - VESPA - For Organizing and</u> <u>Interpreting Community Concerns</u> - Petrova 2016

Despite the prevailing national support for renewable energy development, the installation of wind energy turbines at the local level is often met with resistance. Opposition is commonly attributed to NIMBYism (Not-In-My-Back-Yard), which implies selfishness, ignorance, and irrationality on behalf of residents. This article examines the factors that lead to community support and opposition.

<u>A Review of the Potential Impacts of Wave and Tidal Energy Development on Scotland's</u> <u>Marine Environment</u> - Aquatera 2014

The Scottish Government has set a target for meeting 100% of Scottish demand for electricity from renewable energy sources by 2020. Plans are developing to ensure that marine renewable energy sources, including wave, tidal current and offshore wind, will make a full contribution to meeting this target.

Current News

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

Scotland is about to become home to the world's largest floating wind farm

The Scottish government has approved the construction of the UK's first ever floating wind farm, planned for the country's northeastern coastline. A 30-megawatt (MW) pilot wind farm will be made up of five 6-MW turbines, which could power up to 20,000 homes. Because they are not attached to the sea bed itself, they are cheaper to make than traditional ocean-based turbines, reducing the cost of renewable energy.

Tide and wave energy may yet live up to their potential

In the Pentland Firth, a strait that separates the Orkney Islands from Northern Scotland, strong tidal currents have challenged sailors for centuries. But some of that marine energy is now being captured through a project known as MeyGen. This summer, the Atlantis group began construction on a submerged tidal turbine array consisting of four, three-bladed, seabed-mounted turbines, enough to deliver 6 megawatts to the grid by 2016 and power approximately 3,000 Scottish homes.

California's First Offshore Wind Farm Proposed

The small coastal city of Morro Bay is considering a proposal that would put California's first offshore wind farm about 15 miles from the city's coast. The project would likely take years to pass the state's permitting process, but the project is already raising concerns about its environmental impact.

Wave and Tidal Energy Market to Reach US\$10.1 bn by 2020 owing to Large Investments from Various Industries: Transparency Market Research

Transparency Market Research has published a new market report, titled 'Wave and Tidal Energy Market - Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2014 - 2020', which includes predictions for the global wave and tidal energy market based on in-depth primary and secondary research.