



Tethys Blast

October 3, 2014

Welcome to the first October edition of the Tethys Blast! A new Tethys Blast will be sent to you every 2 weeks, unless you choose to unsubscribe; instructions to unsubscribe are at the bottom of this email.

Tethys Blast will keep you updated with new information available on Tethys, new features on 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.

Most Recent Blog Article

A new blog post will be available on *Tethys* every 2-4 weeks, so please rate and comment on the blog to engage with your colleagues. If you are interested in submitting a blog article, reply to tethys@pnnl.gov. Check out our most recent article:

[INORE: Sharing is Knowing](#)

The International Network on Offshore Renewable Energy (INORE) is an association of postgraduate students, postdoctoral researchers, and other professionals at early stages of their careers, working in the fields of offshore wind, wave, tidal and ocean thermal energy conversion. We call ourselves INOREans. INORE's organization, administration, fundraising, etc. is done through the voluntary hard-work of dedicated INOREans elected by their peers to the steering committee.

New Articles on Tethys

A total of 16 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 popular documents that can be accessed through the accompanying Tethys links:

[**A Review of Flight Heights and Avoidance Rate of Birds in Relation to Offshore Wind Farms – Cook et al**](#)

There have been considerable advances in the development of statistical techniques to estimate potential collision-related mortality. However, there are still significant gaps in knowledge regarding the flight heights and avoidance rates of seabirds in relation to offshore wind farms, two key parameters in collision risk modelling.

[**Characteristics of the Operational Noise from Full Scale Wave Energy Converters in the Lysekil Project: Estimation of Potential Environmental Impacts – Haikonen et al**](#)

The main purpose of this study was to examine the noise emitted by a full scale operating Wave Energy Converter (WEC) in the Lysekil project at Uppsala University in Sweden. A minor review of the hearing capabilities of fish and marine mammals is presented to aid in the conclusions of impact from anthropogenic sound.

[**Standard for Measurement and Monitoring of Underwater Noise, Part II: Procedures for Measuring Underwater Noise in Connection with Offshore Wind Farm Licensing – de Jong et al**](#)

To date, the licensing requirements for offshore wind farms in the European nations are very diverse. Noise monitoring requirements are generally project specific, with a large influence of the national licensing authorities. The approach adopted in this report is to compare existing monitoring approaches and to identify common ground.

[**Waterborne Noise Due to Ocean Thermal Energy Conversion Plants – Janota and Thompson**](#)

The sources of noise from an OTEC plant are analyzed in the context of four configurations, two of which were built and tested, and two which are concepts for future full-scale moored facilities. The analysis indicates that the noise resulting from the interaction of turbulence with the seawater pumps is expected to dominate in the frequency range 10 Hz to 1 kHz.

Knowledge Brokerage Context Factors - What Matters in Knowledge Exchange in Impact Assessment? – Saarela et al

The success of an impact assessment (IA) can mean both instrumental success of applying IA results directly in decision-making, and conceptual success linked to learning about policy problems more generally. Both instrumental and conceptual success can be claimed to be reliant on the knowledge exchange context of the IA, shaped by factors such as the complexity of the policy problem, type of policy area, organisational norms, actor constellations and continuance and openness of information sharing.

Current News

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

Snohomish County PUD Drops Tidal-Energy Project

Plans for what would have been the West Coast's first tidal-energy project will likely be scrapped after the Snohomish County Public Utility District (PUD) invested eight years and at least \$3.5 million developing it.

India to Build First Offshore Wind Farm

The Indian Government has announced that it has signed an agreement to build the country's first offshore wind power project off the coast of Gujarat. The 100 MW project will act as a demonstration for possible further expansion of offshore wind capacity in India.

New Company Eyes North Wales for Tidal Energy Project

A new company in St Asaph is eyeing potential sites along the coast of North Wales to construct a major tidal energy project, similar to plans taking shape in Swansea Bay, it has emerged.

Use the FORCE: Cost of Offshore Wind Energy Really Could Drop 40%

That magic number of 40 percent is also perceived by the industry as the point at which offshore wind will compete in the global marketplace. To get there, DNV GL delivered a manifesto at WindEnergy Hamburg aptly titled "Offshore wind: a manifesto for cost reduction."