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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 wind and marine 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 wind and marine renewable energy development.

New Documents on Tethys

A total of 15 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 wind and marine renewable energy. The listings below are short introductions to several new or popular documents that can be accessed through the accompanying Tethys links:

[NERC Knowledge Exchange: An Autonomous Device to Track Porpoise Movements in Tidal Rapids](#) - Macaulay et al. 2015

One newly developing marine renewable sector is tidal energy and in the UK and elsewhere there is interest in utilising strong tidal currents to power underwater turbines. The majority of these devices extract energy using large, un-protected, freely rotating blades, which pose a potential collision hazard for larger marine animals.

[Bats in Dutch Offshore Wind Farms in Autumn 2012](#) - Lagerveld et al. 2014

In the autumn of 2012, we conducted a pilot study with ultrasonic recorders to assess the occurrence of bats over the North Sea. At Offshore Wind Farm Egmond aan Zee (OWEZ) a recorder was installed at the meteorological mast and at Princess Amalia Wind Farm (PAWP) a recorder was attached to the entrance platform of an offshore wind turbine. There were 189 recordings of bat echolocation calls at OWEZ and 25 at PAWP.

Wales' Marine Evidence Report - Welsh Government 2015

The purpose of marine planning under the Marine and Coastal Access Act 2009 (MCAA) is to help achieve sustainable development of the marine area. UK Administrations published the UK Marine Policy Statement (MPS) in March 2011 as part of a new system of marine planning being introduced across UK seas. The MPS will ensure an appropriate and consistent approach to marine planning across UK waters with the purpose of achieving the sustainable development of our seas by guiding marine licensing and other decisions. In Wales, marine planning is being taken forward by the Welsh Government.

Environmental Monitoring of the Paimpol-Brehat Tidal Project - Barillier and Carlier 2016

Paimpol-Brehat Tidal Farm is being constructed off the coast of Paimpol-Brehat in North Brittany, France. It is set to become the largest tidal array in the world once all its four turbines are operational. The power generated from the farm will be capable of serving 4,000 households. The idea to build the facility was first brought up by Electricite de France (EDF) in 2004, after France formally banned coal mining. Construction work at the tidal farm began in 2008. Sea testing of the first turbine has been completed and construction of the other three turbines is in progress.

Developing an Avian Collision Risk Model to Incorporate Variability and Uncertainty - Masden 2015

As wind energy developments increase globally the potential associated environmental impacts are receiving considerable attention, particularly avian impacts. These potential impacts on bird populations can be grouped into three main types: direct mortality due to collision with turbines/infrastructure; physical habitat modification and/or loss; and behavioural responses of birds to turbines (Fox et al. 2006; Langston 2013).

Current News

Current news articles of international interest on wind and marine renewable energy include:

Gathering data for floating tidal energy platforms at Bay of Fundy

The EcoSPRAY platform tidal energy assessment tool was deployed earlier this year in the Outer Bay of Fundy, in the Grand Passage, Nova Scotia. It is part of a Natural Resource Canada ecoEnergy Innovation Initiative-funded project and will simulate how a moored floating tidal energy platform behaves in a highly turbulent marine environment. EcoSPRAY is equipped with a drag plate intended to simulate the thrust created by an underwater turbine. It uses software and equipment to measure motion, mooring line loads, wind speeds, tidal currents and wave conditions.

ABB wins \$250 million order to link offshore wind farm to UK grid

Swiss technology group ABB (ABBN.S) has won an order worth more than \$250 million from Danish energy company DONG Energy to deliver a high-voltage cable system connecting the Hornsea Project One offshore wind farm in the North Sea to Britain's mainland grid.

Protean begins deployment of 30 wave energy devices near Bunbury

Aspiring Australian wave energy technology developer Protean Technologies is about to begin installation of up to 30 of its wave energy converters at the Port of Bunbury in Western Australia, in the first commercial deployment of its technology. The company, recently listed on the ASX through a reverse takeover of a small uranium explorer called Stonehenge Metals, expects to have the demonstration farm operating with a month for a trial period of six months under a contract with the Southern Ports Authority.

Nation's Next Offshore Wind Farm Eyed For Virginia Coast

America's next experiment in offshore wind energy has been given the green light in Virginia, and in just a few years, wind turbines could be twirling in two places in the open waters of the U.S. East Coast. The federal government last week approved a research project off the coast of Virginia that is expected to help demonstrate the viability of offshore wind energy in the U.S. The nation's first offshore wind farm, off the coast of Rhode Island, is already under construction and could begin operating within the next year.

Managing the Environmental Impacts of UK Infrastructure Development 2016

This brand new conference, Managing the Environmental Impacts of UK Infrastructure Development, produced jointly by Environment Analyst and Environment OnSite, provides an ideal opportunity for environmental consultants to come together with their contractors and clients and share best practice examples of what can be achieved when environmental impacts are considered early in the design and development process.