


European Wind Energy
Technology Platform

Monthly TPWind Newsletter,
September 2010

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Produced for TPWind by the European Wind Energy Association

If you have any **feedback or questions** about the newsletter, or to **unsubscribe**, please contact Filippo Gagliardi (filippo.gagliardi@ewea.org, +32 2 2131813).



Section 1 – Funding opportunities

Entrepreneurship and Innovation Programme – eco-innovation

Call deadline: 9 September 2010

The 2010 “Entrepreneurship and Innovation Programme” (EIP) call for proposal focusing on eco-innovation is open. The EIP is one of the strands of the “Competitiveness and Innovation Programme” (CIP). Approximately €35 m will be made available through this call, supporting up to 50% of the eligible project costs. This call is addressed mainly to organisations that have developed an environmental product, service, management practice or process which has a proven track record, yet is not fully marketed due to residual risks. The Eco-innovation initiative is intended to overcome those barriers to further market penetration and turn these products and processes into Europe's future eco-innovation successes. Applications from SMEs are particularly encouraged.

The objectives of the 2010 eco-innovation call for proposals are the following:

- Promote the adoption of new and integrated approaches to eco-innovation in fields such as environmental management and more environmentally friendly products, processes and services.
- Encourage the uptake of environmental solutions by increasing the market and by removing the barriers to market penetration. Solutions are understood to include products, processes, technologies or services.
- Increase innovation capacities of SMEs.

Successful projects will have to:

- Have an innovative character and substantial positive impacts on the environment;
- Provide significant replication, wider application and broader marketability;
- Be relevant for and show clear and substantial benefits in support of Europe's environmental policy objectives;
- Demonstrate a European added value and an international project dimension;
- Be well thought through from a technical and project management perspective;
- Be cost-effective delivering higher quality through appropriate effort levels.

More information is available [here](#).

7th Framework Programme for Research and Development

The new FP7 Energy calls for proposals (belonging to the 2011 Work Programme) were published on 20 July, 2010. The topics outlined below are relevant to wind energy operators.

For a full description of these topics and more information on the application procedure, please visit the following webpage: <http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7CallsPage>.

Call deadline: 16 November 2010 (pre-proposals only – this topic follows a two-stage evaluation procedure)

Topic ENERGY.2011.2.3-2: Development of design tools for Offshore Wind farm clusters

Open in call: FP7-ENERGY-2011-1

Content/scope: The expected growth of offshore wind energy is enormous and many new wind parks are planned for the coming years. Experience from the existing wind farms shows the importance of a proper distribution of the wind turbines as well their efficient interconnection within the farm. In addition, bringing wind farms together into clusters towards a wind power plant concept may induce long distance negative interaction between the farms, reducing their expected efficiency.

The objective of this topic is to develop new design tools to optimise the exploitation of individual wind farms as well as wind farm clusters, in view of transforming them into virtual power plants.

Such design tools should integrate:

- Spatial modelling: medium (within wind farms) to long distance (between wind farms) wake effects
- Interconnection optimisation: to satisfy grid connection requirements and provide power plant system service.
- Precise energy yield prediction: to ease investment decisions based on accurate simulations

The project should focus on offshore wind power systems and make optimal use of previously developed models. Validation should be carried out within existing wind farms, but could include advantageous plans for measurement and testing in relation to future large scale offshore wind installations.

This topic contributes to realising the Implementation Plan (2010-2012) and the Technology Roadmap (2010-2020) of the European Wind Industrial Initiative and the resulting project(s) will form part of the EII.

Call deadline: 18 January 2011

OCEAN.2011-1: Multi-use offshore platforms

Call: FP7-OCEAN-2011

Increasingly, energy, fisheries and transport infrastructures are being established offshore.

Facilities such as offshore wind farms may occupy large areas and compete with other users of the maritime space. Offshore platforms that can combine many functions within the same infrastructure could offer significant benefits in terms of economics, optimising spatial planning and minimising the impact on the environment.

This topic aims to develop novel innovative designs for multi-use offshore platforms and assess the technical, economical and environmental feasibility of constructing, installing, operating, servicing, maintaining and decommissioning together with the related transport aspects. The platforms shall target ocean renewable energy and in particular offshore wind, aquaculture and the related transport maritime services.

The work shall determine the optimal locations for multi-use offshore platforms taking into account renewable (in particular wind) energy resources, appropriate aquaculture, transport issues, and other platform-related activities including accessibility and possible use as offshore terminals. Model validations should be employed on several sites using field measurements.

Innovative designs for multi-use offshore platforms shall be developed that allow optimal coupling of the various activities and services. Research shall include safe, efficient installation, operation maintenance and monitoring (including possibly remotely) together with specialised transportation to optimise efficiency, operation and installation.

Designs of large structures shall be developed that allow coupling of ocean renewable energy with aquaculture, off shore transport facilities, environmental monitoring and other relevant activities. These should lead to optimised spatial use and improved economic viability. "Offshore" is considered to be "out of sight" from the coast.

Physical modelling shall be employed at an appropriate scale for experimental validation of the proposed platforms.

Research into relations between the combined activities shall in particular address the interaction between wind energy and other platform users, innovative containment systems and related technology for optimal aquaculture operation, the development of transport solutions for optimised installation, maintenance, operation and services to shipping (breakwater, terminals etc). Compatibility of current aquaculture equipment and techniques (handling, husbandry, feeding, etc) with establishment on a multi use platform and possible innovations should also be considered.

An assessment of the economic viability and value to the various stakeholders shall be undertaken. This shall include consideration of costs for construction, operation, servicing and decommissioning. This assessment should include a comparison to non multi-use platforms.

The project shall include a comprehensive environmental impact methodology and assessment, including a comparison to non multi-use solutions.

When appropriate, knowledge shall be drawn from pre-existing research and data.

OCEAN.2011-4: Knowledge-base and tools for regional networks of MPAs, integrated management of activities together with assessment of wind energy potential in the Mediterranean and the Black Sea

Call: FP7-OCEAN-2011

Due to the specific nature of the Mediterranean and Black Sea and the rapid expansion of seabased activities, there is a need to create new knowledge to support the development of decision maker's tools for optimising the management of human activities, within an integrated coastal and marine space system.

The objective of the project is to build up scientific basis firstly for establishing regional or sub-regional wide networks of marine protected areas (MPAs) for conservation and better management of marine living resources,

secondly for assessing offshore wind energy potential while evaluating possible synergies and conflicts of use with other marine activities.

Research on MPAs will concern the establishment of scientific guidelines, criteria, models and tools for the design, mapping, management, monitoring and control of regional or subregional networks of MPAs including deep-sea habitats and areas beyond national jurisdictions. These networks of MPAs should respond to clearly established objectives, from protecting biodiversity (strict reserves) to achieving a sustainable exploitation of aquatic living resources by preserving nursery grounds and juveniles (restricted areas).

The focus will be on the identification of priority areas in both basins through a hierarchical approach based on ecological and socio-economic criteria in underrepresented or poorly studied areas and ecosystems (e.g. the high seas and the deep seas). Sizing, spacing and ecological connectivity and interdependency between sites will be studied for optimal maintenance of species populations and biodiversity (spill over effect), considering possible genetic exchange, larval behaviour patterns and larval dispersal and making the best use of molecular science and multidisciplinary approaches between marine genomics and ecosystem science. Habitat discontinuity and fragmentation, physical oceanography should also be considered. The development of management strategies for implementing the regional networks such as regulation measures to limit and ban certain practices, dynamic closures, legal issues for managing trans-boundary areas and high seas MPAs are key elements of the project. The project should also promote innovative communication strategies between scientists, managers, fishermen, shippers, NGOs, potential users and public at large.

Research on wind energy will provide a scientific basis for assessing off-shore wind potential in the Mediterranean and the Black Sea, focusing on areas already identified as promising with respect to wind regimes. The project should assess the potential for offshore wind power production based on the use of existing models. It will also evaluate potential conflicts with other uses of the space (MPAs, maritime transport, on shore large desalination plants, dredging, fishing, aquaculture, sub-sea cables, pipelines, tourism, etc). The project should deliver scientific guidelines for an enriched "wind atlas" for decision-makers and planners.

Moreover the project shall launch two pilot studies, at least one in the Mediterranean and one in the Black Sea, addressing the establishment of regional networks of MPAs, also combining if possible wind energy development, and considering all the possible conflicts from other maritime activities. The pilot studies should address selected areas within regions or subregions of the Mediterranean Sea and the Black Sea as defined in the Marine Strategy Framework Directive.

The project should reinforce capacity building in support to international cooperation by transferring and making compatible methods across the two basins and by promoting common rules and practices in particular with non EU countries from the Balkans, Southern Mediterranean and Eastern Europe bordering the two seas.

Call deadline: 7 April 2011

Topic ENERGY.2011.2.3-1: Demonstration of innovative off-shore wind electricity generation structure

Open in call: FP7-ENERGY-2011-2

Contents/scope: A strategic objective of the industrial initiative of the SET Plan on wind energy is to enable the exploitation of offshore resources, including in deep water environments, and to facilitate the grid integration of wind power. Beside the development of the new generation of highly reliable large scale turbines, demonstration of cost competitive concepts for floating structures distant from shore in deep water (> 60 meters) is needed to extend the exploitation of deep offshore wind resources and to bring costs for far offshore wind electricity generation down to a competitive level.

Deep offshore floating structures hosting multi-MW wind energy converters shall be demonstrated. The projects shall address integrated concepts including large cost-efficient floating structures, multi-MW wind energy converters and related equipment designed for wind farms management and for compliance with easy connectivity to the offshore grid.

Demonstration should include access systems and safety aspects, logistics, operation and maintenance issues, installation methods and concepts, environmental impacts, reliability at wind turbine and wind farm level, and cost analysis based on market projections.

This topic contributes to realising the Implementation Plan (2010-2012) and the Technology Roadmap (2010-2020) of the European Wind Industrial Initiative and the resulting project(s) will form part of the EII.

Topic ENERGY.2011.7.3-2: Storage and balancing variable electricity supply and demand

Open in call: FP7-ENERGY-2011-2

Contents/scope: Flexible, reliable and low cost energy balancing continues to be a barrier to deployment of most renewable energy technologies. The projects shall demonstrate advanced and cost effective systems which would bridge the source availability and the power demand.

The projects should be based on storage devices, flexible generation from renewable sources, ICT tools or grid management systems, alone or in combination. The innovative aspects may be on the technology, the tools or

system integration. The projects should improve the energy management addressing several functions to broaden the use of renewable power generation plants also in terms of power quality (security, improved grid interface, etc).

The projects should also assess environmental aspects in relation to their proposed solutions. Storage systems (ideal range of GWh) may address large scale centralised renewable energy systems (e.g. large wind parks, etc) or larger systems based on distributed energy supply coupled with many smaller storage systems.

The projects will notably contribute to better transmit and control large amount of powers over long distances, generated from various sources (especially the variable renewable energy sources), with new monitoring and control systems in order to ensure power quality and voltage.

This topic contributes to realising the Implementation Plan (2010-2012) and the Technology Roadmap (2010-2020) of the European Electricity Grids Industrial Initiative and the resulting project(s) will form part of the EII.

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Section 2 – Secretariat news

New TPWind call for expression of interest: online submission tool now available

On 26 July TPWind published a "call for expression of interest" to select new Working Group members and renew its membership base. The text and guidelines of the call are available here: <http://www.windplatform.eu/118.0.html>.

This call follows the first one launched in 2007 and concerns Working Groups only. The Steering Committee and the Member States Mirror Group of the Platform will not be modified.

As from 23 August, the tool for submitting applications is available online. Candidates willing to join a TPWind Working Group should therefore fill in the online application form published here: <http://www.windplatform.eu/119.0.html>.

Current TPWind Working Groups members are invited to participate in this call in order to remain within the Platform. Their contribution and commitment allowed the Platform to reach key goals over the past three years, such as the publication of the Strategic Research Agenda in 2008 and the launch of the European Wind Initiative – EWI - in 2010.

Their continuous participation in TPWind would therefore be extremely valuable not only for the Platform itself, but also for the entire EU wind energy sector.

Candidates cannot submit more than one application: every submission after the first one will not be taken into consideration.

Further to that, new TPWind Working Group members will be selected by the Steering Committee according to the modalities outlined in the call: the final decision of the Steering Committee will be irrevocable.

The deadline of the call is 25 September, 2010, at midnight (Brussels time). Any application received after the deadline will be disregarded.

Developing the 2011 EWI Work Programme: the next Wind EII Team meeting

The first version of the 2011 EWI Work Programme has been recently finalized by TPWind and will be presented and discussed at the next Wind European Industrial Initiative (EII) Team meeting on 13 September (the first one was held on 19 May).

As already outlined in previous issues of this newsletter, the Wind EII Team is composed of EU, national and TPWind representatives and represents the main implementing body of the European Wind Initiative.

Its conclusions have to be approved by the SET-Plan High Level Steering Group (SG) before being put into action. The SG does not include TPWind members and involves high level EU and national representatives, with the authority required to ensure an official commitment of relevant Institutions.

Every year, the Wind EII Team will translate the EWI into an annual Work Programme, composed of a list of calls for proposals and budget allocations to be implemented by relevant EU and national authorities. In comparison to previous EWI documents, which have a clear strategic dimension, yearly Work Programmes will be operational papers.

Following the meeting on 13 September, the Wind EII Team will revise the 2011 EWI Work Programme in order to submit its final version to the SET-Plan High Level Steering Group by November, for the final review and approval.

Additional information on the 2011 EWI Work Programme will be provided in the upcoming issues of this newsletter.

TWENTIES side event at GRIDS 2010

The €32 m the European Commission has allocated to developing the management of electricity grids under the TWENTIES project will contribute greatly to the achievement of the EU's 2020 renewable energy targets.

The TWENTIES project, which falls under the EU's 7th research framework programme, will see the creation of six demonstration projects over the next three years developing and demonstrating technologies for integrating increasing amounts of onshore and offshore wind energy. The demonstration project results will be integrated into a Europe-wide impact analysis showing the benefits of the projects in a pan-European transmission network and the EU electricity market.

With a total budget of €60 m, and a consortium of 26 companies and institutions, including EWEA, in the electricity sector in 10 Member States and one associated country, TWENTIES is the largest renewable energy research project ever funded by the EU. Spanish system operator Red Electrica is the project coordinator.

A side-event focusing on TWENTIES will be organised at the EWEA's GRIDS 2010 conference in Berlin (23 – 24 November). This side event, which will take place on Tuesday 23 November from 2 to 4 pm, will discuss the various demonstration projects that will be run as part of TWENTIES.

Visit the event website: www.ewea.org.grids2010.

Research will aim to show the impact of climate change on wind energy

An upcoming piece of research for the European Commission will aim to show the impact of climate change on power generating technologies such as onshore and offshore wind.

A group, led by analysts ECN, has launched a survey to try and gather information for the study, whose results are expected to be used in the Commission's 2050 Roadmap.

“We believe the potential impacts are very uncertain”, said Glória Rodrigues, EWEA's Head of Policy Analysis. “There is, however, a growing debate on the potential impacts on the geographic distribution and the variability of the wind resource, as well on the impacts of extreme weather events on wind turbine and design”.

Accordingly, EWEA's members are invited to share their point of views on if and how these potential impacts are expected to affect their work.

Those interested in replying to the ECN survey should contact Glória Rodrigues at gr@ewea.org.

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Section 3 – Members’ news

Offshore wind heads for record year

118 new offshore wind turbines were fully connected to the grid in the first half of 2010 according to new statistics released by the European Wind Energy Association (EWEA). Those 118 turbines have a capacity of 333 MW – well over half the 577 MW installed offshore last year - showing continuing strong growth in offshore wind power despite the financial crisis. In addition, 151 turbines (440 MW) were installed but not yet connected to the grid, EWEA revealed on 20 July.

Overall 16 offshore wind farms totaling 3,972 MW were under construction. Of these, four became fully operational: Poseidon in Denmark, Alpha Ventus in Germany, Gunfleet Sands and Robin Rigg in the UK.

To date in Europe there are 948 offshore wind turbines in 43 fully operational offshore wind farms, with a total capacity of 2,396 MW.

Among the developers, E.ON Climate and Renewables developed 64% of the offshore capacity grid connected during the first half of 2010, followed by DONG (21%) and Vattenfall (11%). Among the manufacturers, Siemens accounted for 55% of the offshore capacity grid connected during the first half of 2010, Vestas 36% and REpower 9%.

"Despite the financial crisis, offshore wind continues to be a major growth industry", said Justin Wilkes, Director of Policy at EWEA. "The number of offshore wind turbines connected to the grid in the first half of this year is well over half the total amount installed all last year and I am confident we are heading for a record year.

There is no doubt this burgeoning industry is being held back by a lack of finance. Projects led by utilities are less affected thanks to their ability to fund investments from their balance sheets, but independent developers are severely constrained. Loans from public institutions such as the European Investment Bank are crucial and have already helped a number of projects, and this support must be extended further."

Europe is a world leader in offshore wind energy, and continuing growth – and the availability of finance - is essential for European jobs and competitiveness as well as for reducing CO₂ emissions."

Find the new statistics [here](#).

*In this section of the newsletter **articles produced directly by TPWind members are published**, providing members with the opportunity to inform the Platform of their most recent achievements, plans, products, studies or R&D efforts.*

Every month, two to four short articles (maximum 250 words) will be selected by the Executive Committee or the Secretariat and will be included in this section of the newsletter, along with the contact details of the person or company publishing the article.

The Secretariat invites all TPWind members who would like to publish an article in the next issue of this newsletter to contact Filippo Gagliardi and send him their contribution by 24 September at the latest (filippo.gagliardi@ewea.org; +32 2 2131813).

The Secretariat would like to remind all readers that this newsletter is sent to all TPWind members, to those included in the reserve lists of the Platform as well as to selected EC and EWEA representatives (approximately 300 people in total).

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Section 4 – Events

September

Hard Rain Photo Exhibition

13 – 25 September 2010 – Brussels, Belgium

EWEA will bring its Hard Rain Photo Exhibition to Brussels in September as part of the 2010 “Breath of fresh air” campaign (<http://freshair.ewea.org>).

The Hard Rain Photo Exhibition is based on the lyrics of Bob Dylan's “Hard Rain” with over 40 photos that have moved spectators in over 50 cities all over the world. Visit this visual feast at Place du Luxembourg in front of the European Parliament in Brussels.

The Hard Rain Project was established as a charity in 2009 to support educational programmes for schools, universities and colleges, and public exhibitions that campaign for realistic solutions to the interlinked problems of climate change, poverty, the wasteful use of resources, population expansion, habitat destruction and species loss. Full information: <http://www.hardrainproject.com>

WindBarriers workshops

The WINDBARRIERS project aims at gathering up to date and comprehensive information on the administrative and grid access barriers that obstruct the development of wind energy in Europe. The following workshops will disseminate the project recommendations and define the actions that will ease the implementation of the recommendations of sharing knowledge regarding consenting and connecting wind farms across developers, DSO's, TSO's and public authorities.

WindBarriers workshop - Denmark

17 September 2010 – Copenhagen, Denmark

Organised by the **Danish Wind Industry Association**

Registration and full information: www.windbarriers.eu/index.php?id=22

WindBarriers workshop - Spain

7 October 2010 - Madrid, Spain

Organised by the **Spanish Wind Industry Association**

Registration and full information: www.windbarriers.eu/index.php?id=22

October

EWEA Policy Debate: “Wind of Change – how Europe can benefit from reducing emissions by 30%”

13 October 2010 – Brussels, Belgium

The second in a series of EWEA debates held on the eve of the environment council that will discuss moving beyond existing emissions reduction targets.

With European Commissioner for Climate Change, Connie Hedegaard, MEP Jo Leinen, Nick Campbell, BUSINESSEUROPE (t.b.c.) and Arthouros Zervos, President of EWEA. Moderated by the Financial Times Environment Correspondent, Fiona Harvey.

Attendance free of charge, registration required:

Registration and full information: www.ewea.org/events

November

ORECCA 1st workshop: The potential for Energy Conversion Platforms in Europe – resources, technologies and state of the market. (wave, tidal and wind energy)

ORECCA: Offshore Renewable Energy Conversion Platforms Coordination Action (FP7)

4-5 November 2010 - The Hague, The Netherlands

Registration and full information: www.orecca.eu

GRIDS 2010: essential debate for Europe's energy future coming up by EWEA

23-24 November 2010 - Berlin, Germany

The GRIDS 2010 event, which will be held in Berlin from 23-24 November, will discuss questions such as: who should pay for Europe's new power grid for Europe, how to plan a North Sea supergrid and how best to connect Europe's electricity grids.

The main sessions will be accompanied by various side events, one of which will be based on the largest renewable energy research projects ever funded by the EU.

Conference: Time is running out to book an early bird place. The 15% discount on registration fees is only available until 10 September.

[Register at early bird rates before 10 September](#)

[Full programme](#)

Exhibition: Some spots are still available on this [highly targeted exhibition floor](#)

For more information, contact: Sanna Heinonen at sh@ewea.org

Sponsorship: If not already an exhibitor, but want your company to stand out, check out the [exclusive packages of sponsorship opportunities for exhibitors](#)

For more information, contact Christi Newman at: cn@ewea.org

Full information: www.ewea.org/grids2010

2011

EWEA 2011 (formerly known as EWEC): Europe's premier wind energy event

14-17 March 2011 - Brussels, Belgium

Organised by EWEA for the past 25 years, the EWEA Annual Event is the annual flag-ship event offers a unique opportunity to generate new business leads. Year after year, the EWEA Annual Event (formerly known as "EWEC") keeps on growing.

Europe's leading wind energy conference and exhibition offers a comprehensive overview of the latest developments and vibrant networking opportunities.

Conference: Scientific call for abstracts closes on 12 September 2010.

General call for abstracts deadline: 17 October 2010

[Call for abstracts guidelines, topics and submission](#)

Exhibition: The exhibition at EWEA 2011 will be the biggest ever. Covering a total of almost 13,000m², it will feature key players in wind power from Europe, North America and Asia – the world’s foremost manufacturers, developers, engineering and construction companies, power generators and utilities.

85% of space already sold! [Book your exhibition space now](#) to ensure the best visibility for your organisation.

For more information, contact: Sanna Heinonen at sh@ewea.org

Full information: www.ewea.org/annual2011

OFFSHORE 2011: The world's largest offshore wind event

29 November – 1 December 2011 - Amsterdam, The Netherlands

EWEA holds its offshore wind conference and exhibition once every two years. OFFSHORE 2011 in Amsterdam will build on the huge success of the previous edition that took place in Stockholm, Sweden, in 2009 and attracted over 4,850 people coming to see over 260 exhibitors and participate in the 23 conference sessions and numerous side events.

The call for abstracts for OFFSHORE 2011 will be launched by the end of 2010.

[Exhibition and sponsorship opportunities](#)

Full information: www.ewea.org/offshore2011

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**All EWEA events are organised by the industry for the industry and represent real value for money:
EVERY EURO SPENT ON THESE EVENTS IS PUT TO WORK PROMOTING WIND ENERGY.**