



Monthly TPWind Newsletter
March 2011

Contents

Section 1 – Funding opportunities

Section 2 – Secretariat news

TPWind Advisory Board established

TPWind future activities

EU Environmental Technology Verification (ETV) scheme

Section 3 – Members' news

EWEA 2010 statistics: Offshore and Eastern Europe new growth drivers for wind power in Europe

CENER, new Ambassador Platform of ESA's IAP Programme

Section 4 – Events

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

7th Framework Programme for Research and Development

More information on FP7 calls is available here: <http://cordis.europa.eu/fp7/dc/index.cfm>.

Call deadline: 7 April 2011

Topic ENERGY.2011.2.3-1: Demonstration of innovative offshore 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. Besides 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 farm 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 transmission 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.

Intelligent Energy Europe

Call deadline: 12 May 2011 (except for “Building Workforce Training” and “Qualification Initiative” actions, whose deadline is 15 June 2011)

The 2011 call for proposals of the Intelligent Energy Europe Programme (IEE) was published in January 2011 and will close on 15 June 2011.

The objective of IEE is to contribute to secure, sustainable and competitively priced energy for Europe, by:

- Fostering energy efficiency and the rational use of energy resources;

- Promoting new and renewable energy sources and to support energy diversification;
- Promoting energy efficiency and the use of new and renewable energy sources in transport.

The programme in particular contributes to the EU Energy 2020 Strategy and facilitates the implementation of the EU action plan for energy efficiency and of the Directive on the promotion of the use of energy from renewable sources.

The IEE programme covers action in the following fields:

- Energy efficiency and rational use of energy resources (SAVE strand);
- New and renewable energy resources (ALTENER strand);
- Energy in transport (STEER strand) to promote energy efficiency and the use of new and renewable energies;
- Integrated initiatives combining several of the specific fields referred to SAVE, ALTENER and STEER or where related to certain EU priorities.

The total budget of this call for proposals is € 67 m.

It should be noted that from this year onwards ALTENER, which is the most relevant strand of the programme for wind energy operators, will focus on actions contributing to the implementation of the new RES Directive and on accelerating the growth of renewable energy markets to meet the EU 2020 target.

In greater details, ALTENER aims at:

- Promoting new and renewable energy sources for centralised and decentralised production of electricity, heat and cooling, and thus supporting the diversification of energy sources;
- Integrating new and renewable energy sources into the local environment and the energy systems;
- Supporting the preparation and application of legislative measures.

In 2011, ALTENER projects should focus on one or more of the following priorities:

- Electricity from renewable energy sources (RES-e): for actions to increase the share of renewable electricity in Europe's final energy consumption;
- Renewable heating/cooling (RES-H/C): for actions promoting use of RES for heating and cooling applications;
- Bioenergy: for actions promoting increased production and use of biomass, bio-liquids and biogas in energy markets.

More information is available here: http://ec.europa.eu/energy/intelligent/call_for_proposals/index_en.htm.

European Metrology Research Programme (EMRP)

Call deadline: 20 March 2011 (for PRTs) and 3 October 2011 (for JRPs)

EURAMET e.V. has launched a Call within the EMRP (European Metrology Research Programme) addressing the topic areas 'Metrology for Health', 'SI Broader Scope' and 'Metrology for New Technologies' on 4 February 2011.

Stage 1 of the Call for proposals for Potential metrology Research Topics (PRTs) is open from 4 February 2011 to 20 March 2011.

Stage 2 of the Call for proposals for Joint Research Projects (JRPs) and associated EMRP Researcher Grants is open from 20 June 2011 to 3 October 2011.

The JRPs are supported by a number of EMRP Researcher Grants (see details below). Whilst the EMRP is executed primarily by the national metrology institutes and designated institutes of the participating countries, all interested parties are invited to submit potential topics in Stage 1. Opportunities for wider participation also exist at later stages.

The Call encompasses a two-stage process and includes three grant schemes:

A. The core activity is multi-partner trans-national projects.

Stage 1 – Call for PRTs:

- Identifying the challenge, problem or opportunity for potential research topics;
- Offering the chance for all stakeholders from any country worldwide to influence the R&D undertaken by the European metrology community.

Stage 2 – Call for JRPs:

- The basis will be provided by the highest priority ideas for research from Stage 1, accompanied by a EURAMET-owned supporting document;
- A competitive European-wide independently refereed evaluation will result in a list of collaborative JRPs, executed primarily by the NMIs and DIs of the participating countries;
- Possibility to include proposals for Researcher Excellence Grants within the JRP proposals;
- Opportunity for organisations to participate with their own resources;
- Opportunity for organisations with an interest in the research area to collaborate with their own resources.

B. The JRPs are accompanied by the following EMRP Researcher Grant schemes, which are available:

At Stage 2:

- Researcher Excellence Grants (REG) – provided to increase the number of organisations with capacities closely related to metrology and to open metrology research to the best science. They will be made available to eligible European organisations and/or individuals capable of making a substantial contribution to the research activities of the JRP, and must form an integral part of the JRP.

At Stage 3:

- Researcher Excellence Grants (REG) – provided to increase the number of organisations with capacities closely related to metrology and to open metrology research to the best science. They will be made available to eligible European organisations and/or individuals capable of making a substantial contribution to the research activities of the JRP. They allow individuals capable of scientific excellence to add additional value to the research objectives of the JRP.
- Researcher Mobility Grants (RMG) – provided to develop the capability of the European metrology researcher community through mobility. They will be made available to eligible researchers.

C. In addition, an Open Call for Early-Stage Researcher Mobility Grants (ESRMG):

- Provided to ensure sustainability in the cooperation between NMIs and DIs of the participating States in the EMRP and to prepare the next generation of metrology researchers. They will be made available to eligible researchers.

Details can be found on the dedicated call webpage: www.emrponline.eu/call2011

Research Fund for Coal and Steel (RFCS)

Call deadline: 15 September 2011

The Research Fund for Coal and Steel (RFCS) finances research projects in the areas of coal and steel. Its annual budget is about € 60 m, of which 72,8% is earmarked for steel-related and 27,2% for coal-related projects.

The RFCS has its origin in the former European Coal and Steel Community (ECSC). The ECSC is seen as the foundation of today's European Union. Established by the Treaty of Paris, it expired after 50 years in 2002.

The European Commission manages its residual assets and uses the interests generated yearly to finance research projects in the areas of coal and steel.

These projects cover several areas including steel applications within the renewable energy sector.

The main features of the RFCS scheme are the following:

- NO BUDGET LIMIT FOR PROJECTS - Typically in the range of 1-2 million €
- ORGANISATIONS WORLDWIDE CAN PARTICIPATE - Only consortium partners from the EU receive funding.
- ANY CONSORTIUM SIZE IS WELCOME
- NO SET PROJECT DURATION - Typical research projects last 3-4 years.
- USE THE EXPERIENCE OF PREVIOUS PROJECTS - Programme synopsis are available on http://cordis.europa.eu/coal-steel-rtd/synopsis_en.html
- GET FULL INFORMATION ON THE PROGRAMME - Please refer to the Information Packages (Infopacks) available on http://cordis.europa.eu/coal-steel-rtd/submit_en.html

[Back to top](#)

Section 2 – Secretariat news

TPWind Advisory Board established

The new TPWind Advisory Board was established in January 2011 and will hold its first meeting on 1 March, prior to the Platform's next General Assembly (on 3 March).

The Advisory Board is composed of external stakeholders (i.e. non-Platform members) who will help TPWind to enhance its network and effectiveness by providing advice and contacts. They will represent an essential link between the Platform and other relevant sectors and stakeholders.

Advisory Board members will also act as a quick access point to the expertise and know-how developed by other sectors, which is essential to reduce fragmentation of R&D activities and enhance cooperation between wind energy operators and other relevant stakeholders.

The Advisory Board is not a decision-making body of the Platform, but will have a consultative role.

It will be managed by the Secretariat under the supervision of the Steering Committee. Its members were selected by the Steering Committee and invited in December 2010: additional ones might be added in the future depending on the needs of the Platform.

To list of Advisory Board members is available on the Platform's website: <http://www.windplatform.eu/123.0.html>.

TPWind future activities

Following the renewal of its structure in 2010, when new Working Groups were established and new members were selected (click here for more information: <http://www.windplatform.eu/8.0.html>), TPWind recently launched the TOP Wind project.

TOP Wind (Technology platform Operational Programme Wind) is a project funded by the European Commission through the 7th Framework Programme that will cover the costs of the TPWind Secretariat for the next three years. In greater detail, TOP Wind will be operational from 1 February 2011 to 31 January 2014 and will ensure the growth of the Platform and its proper functioning in the year to come.

TOP Wind will be implemented by a consortium composed of the European Wind Energy Association (EWEA - which is the project leader and will keep hosting the TPWind Secretariat), Garrad Hassan and Risoe/DTU.

The future objectives of TPWind, as indicated in the TOP Wind project, are the following:

- Improve the internal communication and the external representation of the wind energy sector;
- Disseminate information on wind power R&D;
- Draft strategic plans for the development of wind energy in Europe (e.g. EWI and SRA/MDS);
- Contribute to the development and implementation of relevant EU energy policies;
- Provide members with a permanent forum focused on wind energy research.

As for the future activities of TPWind, its members will focus on the following main issues in the coming years:

- In 2011: Development of the 2013 – 2015 EWI Implementation Plan, which will replace the current one covering the 2010 – 2012 period and published by the European Commission in 2010: http://ec.europa.eu/energy/technology/initiatives/doc/implementation_plan_2010_2012_eii_wind.pdf. Further to that, Working Group 3 will develop a new Grid Integration strand for the European Wind Initiative (EWI), in order to avoid overlaps with the European Electricity Grid Initiative (EEGI), developed by TSOs and managed by ENTSO-E;
- In 2012: Update the Strategic Research Agenda / Market Deployment Strategy (SRA/MDS), which was originally published in 2008 (<http://www.windplatform.eu/92.0.html>). The new version, which will include an annex on R&D issues shared by wind energy and other operators, will be published in 2013 at the latest;
- In 2013: Development of the 2016 – 2018 EWI Implementation Plan, on the basis of the new SRA/MDS.

TPWind members are also expected to work on additional items on the basis of their specific needs and requirements: Working Groups Chairs and Secretaries will be in charge of meeting the demands of their members and ensure that they will deliver and contribute to the ultimate success of the Platform.

EU Environmental Technology Verification (ETV) scheme

GHK, a UK based consultancy (www.ghkint.com), has been contracted by DG Environment to assess the market potential and demand for an EU ETV scheme across all the major environmental markets, including energy technologies.

The ETV scheme aims to generate independent and credible information on new environmental technologies, by verifying that environmental performance claims put forward by technology developers and vendors are complete, fair and based on reliable test results. Building on the success of similar schemes established in the United States and Canada, the objectives of the EU ETV are threefold:

1. To help developers and vendors, especially SMEs, provide objective and reliable evidence on the environmental performance of new environmental technologies arriving on the market, in order to convince first investors and customers on the merits of these technologies;
2. To support technology purchasers (public or private) in basing their decisions on sound information, widely recognised as scientifically valid and acceptable as proof of evidence in tendering and purchasing procedures;
3. To facilitate the implementation of public policies and regulations by providing citizens, regulators and decision-makers with solid information on the level of performance achievable by new environmental technologies ready for the market.

More information on the EU ETV pre-programme, launched in November 2010, can be found here: <http://ec.europa.eu/environment/etv/pdf/ETV%20pre-programme%20presentation.pdf>.

The study performed by GHK will help to focus the scheme on those environmental product applications that would benefit most from such a performance verification process.

Organisations willing to participate in GHK's study are invited to get in touch with Mr. Jonathan Lonsdale (Jonathan.Lonsdale@ghkint.com), who can provide further information as well as a questionnaire that interested parties can fill in to give inputs on the EU ETV scheme.

The deadline for being involved in the study is 1 April 2011.

[Back to top](#)

Section 3 – Members' news

EWEA 2010 statistics: Offshore and Eastern Europe new growth drivers for wind power in Europe

9.3 gigawatt (GW) of new wind power capacity was installed in the EU during 2010, reaching a total of 84 GW by the end of 2010, according to figures released on 31 January by EWEA and coinciding with the publication by the European Commission on financing renewable energy.

While offshore wind power installations grew 51% from 582 MW in 2009 to 883 MW last year, onshore wind power installations (8.4 GW) were down 13.9% compared to 2009 (9.7 GW).

"These figures are a warning that we cannot take for granted the continued financing of renewable energy" said Christian Kjaer, Chief Executive Officer of EWEA. "Better access to financing is urgently needed, and the European Union must act without delay to prevent Europe losing its leadership in wind power and other renewable technologies. Today's communication from the Commission on the financing of renewables is a start, as long as it is followed up quickly by the Commission putting its proposals into action".

Total investments in new wind power plant was unchanged at € 13 billion, compared to 2009, due to the larger share of offshore wind capacity.

Newly installed capacity in 2010 (9.3 GW) was 10% down on 2009 (10.3 GW).

"Remarkable growth in the onshore wind markets of Romania, Poland and Bulgaria could not make up for the decline in new onshore installations in Spain, Germany and the UK. Strong development of the offshore wind market was led by the UK, Denmark and Belgium," said Kjaer.

The overall market for renewable power capacity, including wind, solar, hydro and biomass, reached record levels in 2010, increasing 31% from 17.5 GW in 2009 to 22.6 GW in 2010. Renewable energy accounted for 41% of all new installations.

Wind power installations accounted for 17% of new electricity generating capacity in 2010, the first year since 2007 that the EU did not install more wind power than any other generating technology. The EU continues to move away from fuel oil and nuclear power for electricity production, decommissioning more old capacity than installing new capacity. However, for only the second time since 1998, the EU installed more coal power capacity than it decommissioned in 2010. 28 GW of new gas capacity was installed last year, compared to 6.6 GW in 2009. Gas represented 51% of all new power capacity in 2010.

The wind power capacity installed by the end of 2010 will, in a normal wind year, produce 181 TWh of electricity (up from 163 TWh), meeting 5.3% of overall EU electricity consumption (4.8% in 2009).

Please see "[Wind in power: 2010 European statistics](#)" for details.

CENER, new Ambassador Platform of ESA's IAP Programme

CENER (National Renewable Energy Centre of Spain) in the context of ESA's Integrated Applications Promotion (IAP) Programme will host the Ambassador Platform for European Adoption of Renewable Energy Sources (EARE). Ambassador Platforms help ESA's IAP Programme set up relationships with user communities to collect requirements for new services while uniting the demand towards sustainability.

In the framework of climate change mitigation and security of supply strategies, Renewable Energy Sources (RES) are becoming a priority worldwide. In this context, Europe has adopted ambitious objectives for the next decade (the so called '20 20 20 by 2020' objectives) and a Strategic Energy Technology Plan ('SET-Plan'). The challenges for RES to become major contributors to the energy mix include cost reduction, large-scale implementation and grid integration. Space technologies can play a fundamental role to make RES integration within electricity grids a reality and facilitate the large-scale development of renewables.

The objective of this Ambassador Platform, managed by CENER, is to assist the IAP programme in spreading awareness for stakeholders, along the value chain of potential services in the domain of Renewable Energy Sources (RES). With this purpose, CENER will organise jointly with ESA-IAP a series of workshops to bring together RES & space communities to discuss opportunities for new projects in the framework of IAP. The first workshop will be organised at CENER headquarters in Pamplona the 30th of March with the title "Renewables and space: finding the synergies".

For more information:

- Technical details: iapambassador@cener.com
- Press media: comunicacion@cener.com
- IAP Programme: iap@esa.int

- Ambassador Platform Website: iap.esa.int/c/eare
- www.cener.com
- iap.esa.int

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 18 March 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).

[Back to top](#)

Section 4 – Events

March 2011

TPWind 7th General Assembly

3 March, 2011 – Brussels, Belgium

The 7th General Assembly, entitled “Renovating the Platform”, will be a key event for TPWind, considering that it will be the first one since the selection of its new Working Groups’ members.

As always, TPWind members will have the opportunity to hold Working Groups meetings, where future projects and activities of the Platform will be discussed. Further to that, a plenary session will be organised to provide TPWind members with a comprehensive update on Platform’s plans and EU wind energy policies.

The 7th General Assembly will include a networking cocktail.

For more information on the event, which is **for TPWind members only**, please contact Filippo Gagliardi (filippo.gagliardi@ewea.org; +32 2 2131813).

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

14-17 March 2011 - Brussels, Belgium (Brussels Expo)

Less than 10 days left to register online

Europe's premier wind energy event, EWEC, having recently changed its name to become the EWEA Annual Event, will be delivering the same high quality business opportunities, networking and information exchange that it has done for the last 25 years:

- 2,600 participants already registered
- 400 leading companies confirmed on the exhibition floor
- 500 presentations from wind industry experts
- 40 sessions covering science, technology, finance, business and policy

EWEA 2011 is expected to attract over 10,000 key industry players in Brussels – including leading market players, technical experts and EU & national policy makers.

Senior industry and political figures to debate on all major issues affecting the wind industry

PANEL 1: EU energy policy: what happens after 2020? Hear from industry leaders and EU decision makers:

- Jens Peter Saul, CEO, Siemens Wind Power
- Jorge Calvet, CEO, GAMESA
- Anni Podimata, MEP, European Parliament
- Victor Abate, Vice President, GE Energy
- Christian Kjaer, CEO, European Wind Energy Association (EWEA)

Moderator: Nisha Pillai, BBC World

PANEL 2: Finance: Recovering, maturing and advancing

This panel of leading finance professionals will examine current wind financing trends, and peer over the horizon at future growth drivers.

Key-note speaker: Guenther Oettinger, European Energy Commissioner, European Commission

You will also hear from:

- Chris Hunt, Managing Director, Riverstone LLC
- David Jones, CEO, Allianz Private Equity
- Peter Roszbach, Managing Director, Impax New Energy Investors
- Dominik Thumfart, Head of Renewable Energy, Deutsche Bank
- Romain Talagrand, Head of Power Project Finance, BNP Paribas

Moderator: Michael Liebreich, CEO of Bloomberg New Energy Finance

PANEL 3: **Wind power technology 2020**

This panel session will examine how wind power technology will develop in the coming decade to make it the most cost-effective of all power technologies.

Hear from:

- Henning Kruse, Chairman, Wind Energy Technology Platform
- Stefann Tostmann, Head of Unit – Energy Technology & Research Co-ordination, European Commission
- Andrew Garrad, CEO, GL Garrad Hassan
- Peter Hjuler Jensen, R&D Manager Wind Energy, Risø DTU

PANEL 4: **100% renewable electricity in the EU by 2050?**

This panel will debate how wind power and the many other renewable energy technologies can meet the climate challenge in that timeframe, and also examine the consequences for energy policy and investments.

Key note speaker: Connie Hedegaard, European Commissioner for Climate Action, European Commission

You will also hear from:

- Steve Sawyer Secretary General, Global Wind Energy Council (GWEC)
- Josche Muth, Deputy Secretary General, European Renewable Energy Council (EREC)
- Jules Kortenhorst, CEO, European Climate Foundation

Moderator: Fiona Harvey, Financial Times

The exhibition at EWEA 2011 will be our largest ever.

Covering a total of 13,000m², it will feature over **400 key players** representing the wind power from Europe, North America and Asia – including the world's foremost manufacturers, developers, engineering and construction companies, power generators and utilities.

Key side events alongside the wide-ranging conference sessions

EWEA 2011 includes the following key side-events:

- The European Wind Initiative (EWI) and the European Wind Energy Technology Platform (TPWind), Monday 14 March 2011 from 16:00 to 17:30 – Room 1122;
- Grid integration of wind power: the TWENTIES project, Tuesday 15 March 2011 from 11:00 to 13:00 – Room 1101A;
- Offshore developments: Carbon Trust/EWEA event, Wednesday 16 March 2011 from 16:00 to 18:00 – Room 1121.

Full information: www.ewea.org/annual2011

May

EWEA Technology workshop: Resource Assessment - How to measure the wind resource?

10 and 11 May 2011 – Brussels, Belgium

The workshop will take place at SQUARE - BRUSSELS MEETING CENTRE (Glass Entrance, rue Mont des Arts, 1000 Brussels). It will cover the following topics, with ample time for discussion with participants:

- **Mesoscale modelling** – chaired by Andrea Hahmann, Wind Energy Division, Risø DTU
- **Remote sensing** – chaired by Oisín Brady, Natural Power
- **Advanced modelling** - chaired by Christiane Montavon, ANSYS Ltd
- **Wakes** - chaired by Andrew Tindal, GL Garrad Hassan
- **Concluding session: a comparison of resource assessment procedures** – chaired by Mike Anderson, RES - Renewable Energy Systems Ltd.

If your company carries out resource assessments you can find out by taking part in our anonymous assessment of the energy production of a wind farm.

The results from all participating organisations will be compared and contrasted anonymously as a novel and practical conclusion to the workshop: participants will gain an understanding of the differing approaches and how loss adjustment factors and levels of uncertainty are calculated.

Programme, registration and details of the resource assessment comparison: www.ewea.org/events

November 2011

OFFSHORE 2011: The world's largest offshore wind event

29 November – 1 December 2011 - Amsterdam, The Netherlands

The call for abstracts is now open for EWEA's upcoming offshore conference. OFFSHORE 2011 will be held in Amsterdam from 29 November to 1 December. If you would like to contribute and present a new project or research results with the over **4,000 expected participants**, you can submit an abstract in one of the following categories:

Topic themes include:

- Speaking from experience: wind energy lessons learned, availability and new ideas;
- The offshore sector - beyond technology: legal, finance, planning and environment, markets, policies, education and human resources;
- Hardware: turbines, support structures, components and floating concepts
- Grids and infrastructure: electricity markets, grid connection and operation technologies
- Logistics: O&M, health and safety, transportation and installation, supply chain and decommissioning
- Wind, waves, current and soil: measuring, forecasting and modelling the offshore resources

Check out all the details on www.ewea.org/offshore2011.

The call for abstracts will close on 4 May 2011.

Event website: www.ewea.org/offshore2011

[Back to top](#)



**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.**