

Upcoming Events

- Project meeting in London
Third transnational meeting will be held on 28-29 June in London, at Embrace Cooperation headquarters.

- Pilot courses
They will be conducted in UK and Bulgaria this summer.

- Conference in Varna
3 & 4 October 2013 a specialized conference on electrical technologies will be held at Technical University of Varna. The TrainWind team will take part in a special session on "Vocational Education and Training in Wind Energy Technologies".

How to:

- Contact with us or,
- Participate in the project on-line courses or,
- Just to learn more about Wind energy and its opportunities:

⇒ <http://www.tu-varna.bg/trainwind/>

⇒ e-mail: trainwind@tu-varna.bg

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NEWSLETTER



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Wind News Spain

Spain: Wind power exceeds 5,000 GWh monthly power generation

In April wind energy broke its monthly generation record, producing for the first time in its history more than 5,000 GWh in one month. In total, it reached 5,362 GWh, according to provisional data from Red Eléctrica de España (REE), which is more than the total consumed by of those 17 million Spanish homes in April. In addition, wind energy covered 25.7% of demand and was the second technology in the system following nuclear, which produced only 62 GWh more.

Gamesa 5 MW offshore wind turbine

Gamesa is showcasing the development and evolution of its first offshore turbine platform: Gamesa 5.0 MW offshore, at the Offshore Wind 2013 trade fair, one of the industry's premier events, in Manchester, UK.

The company expects the turbine installed in Arinaga, Canary Islands, Spain, to begin operating in the third quarter of 2013 and the installation of the initial units in 2014.

Transfer of e-WindTech results

In the second year of the Train Wind project various actions will be carried out:

- implement the course in the e-learning platform,
- conduct the pilot courses and evaluate the results obtained,
- implement improvement actions

Prior to these actions it is necessary to conduct the transfer of the course developed in the e-WindTech project which serves as a starting point for the TrainWind project.

The e-WindTech project, also financed by the European Union within the Leonardo da Vinci programme, has the objective of developing an e-learning training tool to train technicians on the maintenance operations of wind turbines. The result was an e-learning course available in 6 languages (English, German, Greek, Lithuanian, Portuguese and Spanish), especially useful to be used as part of the training material in occupational and professional training courses.

The transfer of the results of a project to another allows them to be adapted to the needs of the country the transfer is being made to and the public it is directed at, in addition to updating and expanding its content. In the case of the TrainWind project, the transfer is made to Bulgaria, Great Britain and Belgium.

The first stage of the transfer consisted in identifying the professional profiles demanded in the wind energy sector of the said countries and determine the training needed. That is why the wind energy sector in the consortium countries (Belgium, Bulgaria, Spain and the UK) were studied in detail and a corporate

study was conducted. The result is a report on all the information compiled (Need Analysis Handbook). More information in Newsletter 2.

Once the target audience and its needs were clarified, the next step of the transfer consisted in the analysis of the materials developed in the e-WindTech project to determine the improvements which had to be made, both in relation with its contents and structure. After this stage the contents of the course were translated into the consortium languages: English, Spanish, Dutch and Bulgarian. All these activities were made during the first year of the project.

In the second year of the project, which began in October 2012, the contents of the course have been implemented in the e-learning platform selected, named eFront, and the competency profile of the Wind turbine service technicians and the indicators have been defined, allowing each technician to be evaluated individually.



Wind News UK

UK: Electricity production by the UK's offshore wind farms hit 7.5TWh in 2012.

The total offshore wind farm output of green electricity for 2012 was 7.5 terawatt hours. It's estimated that around 1,000 people are directly employed in operations and maintenance roles to keep the 20 existing completed wind farms running smoothly on sites around the UK. Since 2004, offshore wind energy has seen an annual growth rate of 54 per cent in generated electricity.



UK Business and Energy Minister, Michael Fallon has announced the creation of an Offshore Wind Investment Organisation (OWIO). Michael Fallon said: "Offshore wind is a major success story for the UK, and we want to boost levels of inward investment. This will be an important part of our industrial strategy for the sector later this year, and we are creating the Offshore Wind Investment Organisation to drive that activity."

Samsung to test 7MW offshore wind turbine at new £48m UK facility

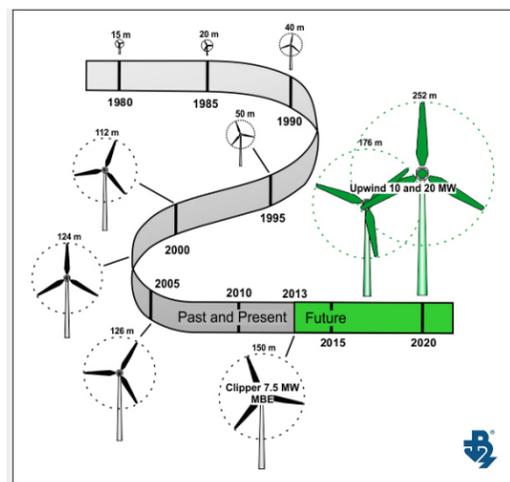
The world's biggest electronics maker, Samsung, will test a prototype of its new seven megawatt (MW) offshore wind turbine at a newly constructed test facility in UK, which has been built specifically to take the new wave of megasize offshore wind turbines.

The TrainWind e-learning platform

The TrainWind e-learning platform (<http://www.tu-varna.bg/TrainWind/>) already offers a pilot distance learning course on Wind Energy Technology operation and maintenance. The course is focused on the acquisition of basic acquaintance and mastering practical skills, demanded by the expanding job market in the EU Wind Energy Sector. The course is offered in four EU languages -- Bulgarian, Dutch, English, and Spanish.

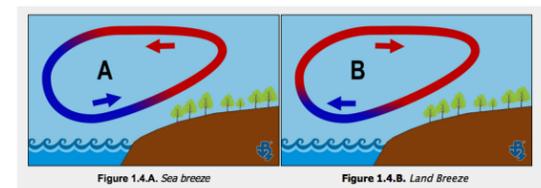


The trainees are able to select their preferred language in the beginning of the course, and afterwards to switch among the four available languages. Such flexibility facilitates the mastering of domain-specific terminology, international communication with EU companies in the WET sector, and latest but not least the use to foreign language literature and documentation for further self-instruction and professional development.



The TrainWind pilot course deployed on the e-learning platform incorporates five training modules. Each module consists of six themes

and one or more progress evaluation test. Once all tests for a given module are completed successfully, the trainee is granted access to the next module. The course modules are kept self-sufficient and include introductory section, comprehensive exposition on the topic, with sufficient mathematical support, tables, graphics, pictures, video-clips and animations. The key equations, calculators, tables and figures are animated, and the most important among them are made interactive, so that the trainee can enter own data and visualize graphically the representation of different dependences and physical laws.



In addition to the course modules, the working environment in the TrainWind e-learning platform incorporates a set of auxiliary tools, such as: a calendar, a search form, an internal messaging system etc, which allow for effective learning, planning and communication between trainees and between trainees and professors.

Wind News Belgium

Adoption of draft Marine Spatial Plan allows construction of energy islands off the coast. The Belgian Council of Ministers has approved the draft Marine Spatial Plan. This Plan includes, amongst others, two zones in which an energy atoll can be built. The first zone is located off the coast of Zeebrugge, a second of Blankenberge-De Haan. This new Marine Spatial Plan is a new step to an overall North Sea policy in Belgium.



North Sea countries convert wind into gas. Eleven companies in the countries around the North Sea will develop a system that can convert wind energy into gas. This means that the energy from wind turbines has to be used immediately. The system is interesting for the North Sea area since the natural gas infrastructure is well developed.

Start construction of the world's largest wind turbine in Ostend

Under the Belwind Demo Project work began on the construction of a test site at sea for the construction of the Haliade 150-6MW wind turbine produced by the French industrial company Alstom. With a rotor diameter of 150 meters, consisting of three blades of each 73.5 meters, the Haliade 150 is one of the largest offshore wind turbines in the world.

The User Interface

- As shown in Figure 1 below, the main panel of the user interface consists of three areas.
1. The content of the first module of the English Pilot course (cf. Figure 2),
 2. The section with auxiliary tools for planning, search and communication with trainees and professors (cf. Figure 3 & 4),
 3. The section for controlling the status and the preferences of the current user account.

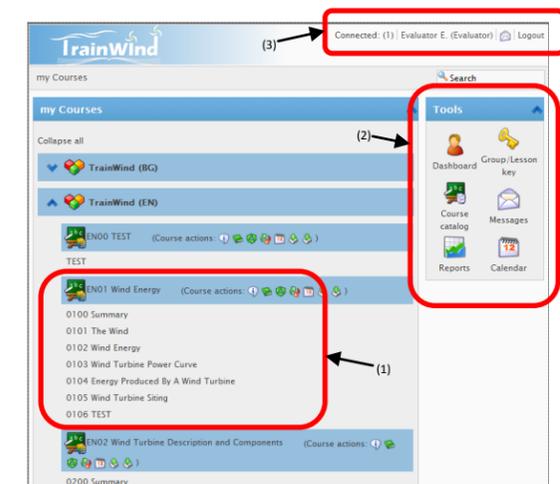


Figure 1. The main panel of the TrainWind Pilot course

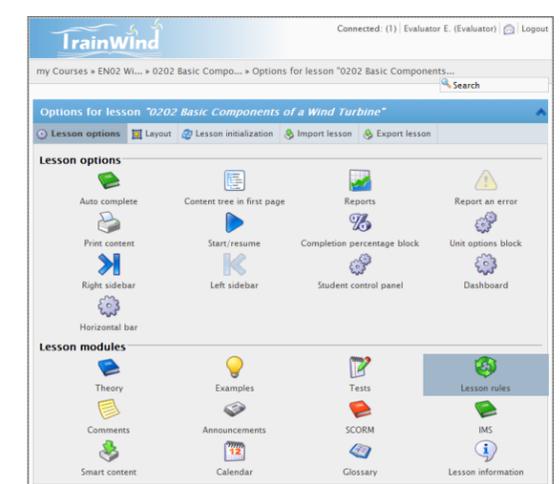


Figure 3. Tools for organizing, planning and evaluation of trainees

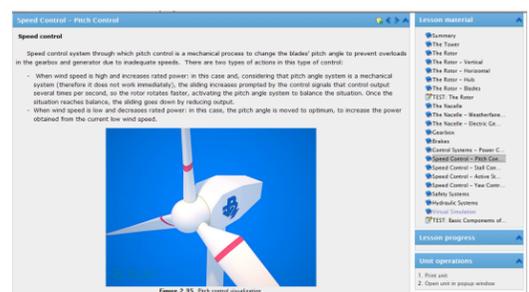


Figure 2. Sample screen illustrating the organization of content in the TrainWind Pilot course



Figure 4. Tools for planning, search and communication with trainees and professors