Overview of the ECOWindS Project

European Clusters for Offshore Wind Servicing (ECOWindS) is a FP7 funded collaborative project between the Offshore Wind Servicing regions of South Denmark, North-West Germany, East of England and the Region of Møre in Norway.

Project duration: November 2012 – October 2015

Project Vision
To pave the way for new research and for understanding of how the costs of offshore wind servicing can be driven down through research, innovation and cross-regional cooperation.

Objectives of ECOWindS

- To increase the capacity for innovation in the ECOWindS research driven clusters (RDC).
- Through intelligent specialisation, to develop regional strategies for Offshore Wind Servicing (OWS) which are integrated into an inter-regional Joint Action Plan.
- To develop an international cooperation strategy for innovative OWS clusters to internationalise and exploit new business opportunities.
- To increase innovation driven cooperation between stakeholders (administrative authorities, research entities and local business communities) in the participating clusters by means of regional research agendas and a Joint Action Plan.
- To improve job qualification capacities in the RDCs in order to secure a capable workforce and researchers who respond to the needs of the OWS sector across Europe and around the globe.

Developing a Catalogue of Research and Innovation Concepts

A core focus of ECOWindS was the improvement of the innovation capacities in the four RDCs within the project consortium, and as a result strengthen the OWS sector within them.

To achieve this, the demand for research and innovation within the OWS sector was mapped and areas where the needs of sector are not met were highlighted. This gap analysis and technology needs assessment coupled with stakeholder engagement workshops lead to the development of a detailed catalogue of research and innovation concepts.

The catalogue was assessed and reviewed by a Technical Advisory Group of industry experts to ensure that concepts remained in line with the needs of the OWS sector. The catalogue details the innovation concepts, matched to potential sources of funding as well as a broad overview of which organisations are best suited to progress the ideas and develop them into full projects or future innovations.

ECOWindS Consortium

Visit our website for further information and to view project results and deliverables:

www.ecowinds.eu | info@ecowinds.eu
ECOWindS focuses on the processes of assembly and installation as well as the operation and maintenance of offshore wind facilities. This subsector of the offshore wind value chain is defined as Offshore Wind Servicing (OWS). Innovation in OWS represents a significant opportunity for cost reduction with studies indicating the activities of installation and ongoing operation and maintenance can be up to 46% of the lifecycle costs of the farm.

The below figure illustrates the sequence of the proposed actions and their relations to the goals of the industry. Each work stream contributes to one or more sub goals set for the JAP, which together take OWS and offshore wind closer to the overall target of lowering LCoE 40% by 2020.

The JAP is designed to help support a successful future for OWS. The intent is for the JAP to be a living document that will be continually reviewed and revised after the project is finished based on the needs of the OWS sector.

The vision of the JAP is that OWS is a recognized industry by 2020, with strong networks around the globe enabling cross-border collaboration particularly around the North Sea, and extend networks overseas as the standardisation and harmonisation of OWS, and offshore wind closer to the overall target of lowering LCoE.

The ECOWindS Joint Action Plan (JAP) is an international roadmap for research, development, and innovation (RDI) specifically for the OWS industry.

The JAP was developed in conjunction with and, and reviewed by Offshore Wind stakeholders. It outlines eight key actions identified for supporting the development of the OWS sector. Through these actions, OWS enterprises can gain complementary capabilities and become able to deliver new and improved services.

An International Cooperation Strategy was also proposed to clearly identify relevant clusters from third countries and highlight business as well as research and innovation opportunities. These reports are available on the ECOWindS website along with the Smart Specialisation Strategy Setting Toolkit documenting the process and tools used in the strategy setting exercise.

ECOWindS project has laid the foundations for the creation of a learning platform that is based on a virtual simulation training tool.

The second stage of the work was to elaborate on and describe the training platform, including the mapping of core characteristics.

Industry, educators and training providers can harvest experience gained in offshore oil and gas production in the North Sea and transfer some elements to the offshore wind industry, in its work on cross-cluster workforce competencies and capacities, the ECOWindS project has laid the foundations for the creation of a learning platform that is based on a virtual simulation training tool.

The sub-goals include:

1. Establishing a joint initiative for knowledge sharing and innovation between regions
2. Develop OWS specific skills and training programs across regions
3. Develop OWS specific mission-oriented research, development and innovation programs
4. Drive for international OWS specific standards
5. Drive for international OWS specific standards
6. Develop an OWS Industry Database
7. Establish OWS specific test sites and research infrastructure
8. Drive for international occupational health and safety standards

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