



PRESS RELEASE

PROMOTioN – NEW EU PROJECT TO BOOST THE DEVELOPMENT OF MESHED HVDC OFFSHORE GRIDS IN EUROPE

Berlin, 14 March 2016. A meshed offshore transmission grid connecting offshore wind farms to land could provide significant financial, technical and environmental benefits to the European electricity market. Launched this January, the project 'PROgress on Meshed HVDC Offshore Transmission Networks' (PROMOTioN) aims to investigate these benefits during the next four years. Currently it is the biggest energy project in the EU's Horizon 2020 Research Program.

The goal is to develop and demonstrate three key technologies: diode rectifier offshore converters, multi-vendor HVDC (high-voltage direct current) grid protection system, and the full power testing of HVDC circuit breakers. Furthermore, a regulatory and financial framework will be developed for the coordinated planning, construction and operation of integrated offshore infrastructures, including an offshore grid deployment plan (roadmap) for the future offshore grid system in Europe.

Currently, the high cost of converter technology, a lack of experience with protection systems and fault clearance components hamper the deployment of meshed HVDC offshore grids. In addition the deployment is hindered by limitations inherent to existing European regulations for the purpose of developing cross border offshore infrastructures, national legal and regulatory barriers and financing issues.

Marie Donnelly, Director Renewables, Research and Innovation, Energy Efficiency – DG ENER, said: "There is great potential in the Northern Seas to deliver significant quantities of clean energy, helping us both to decarbonise our economy and to increase the security of our energy supply. The Northern Seas offer unique opportunities for cooperation and to deliver cost-reduction to the offshore energy systems. We think that an offshore grid in the North Sea could become a flagship project for regional cooperation as foreseen by the Energy Union."

Press contact

Stiftung OFFSHORE-WINDENERGIE
Sebastian Sahn
Fon: +49 30 275 95 198
Mail: presse@offshore-stiftung.de
Internet: www.offshore-stiftung.de



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691714.

PROMOTioN – Progress on Meshed HVDC Offshore Transmission Networks

Elisabeth Harstad, CEO DNV GL – Energy, explained:

“Combining new HVDC technologies within present systems is instrumental in bringing large scale renewables into the grid and to ensure a future-proof grid which is affordable, reliable and sustainable. By bringing in our 90 years of expertise in power systems, renewable technologies and experience in leading many joint industry projects I am confident DNV GL can guide the consortium in realizing this important project.”

PROMOTioN is funded under the EU Horizon2020 research programme (H2020) from January 2016 until December 2019. The project consortium which is coordinated by DNV GL includes 34 partners from 11 countries - all major HVDC manufacturers, TSO's linked to the North Sea, several wind turbine suppliers, offshore wind developers, leading academics, and consulting companies. A series of stakeholder workshops and events will be organised during the project phase to discuss the various technological and regulatory approaches.

List of Participants

SHORT NAME	LEGAL NAME	COUNTRY
DNV GL	Kema Nederland BV	Netherlands
ABB	ABB AB	Sweden
KU Leuven	Katholieke Universiteit Leuven	Belgium
KTH	KTH Royal Institute of Technology	Sweden
EIRGRID	EirGrid plc	Ireland
SGI	SuperGrid Institute	France
DWG	Deutsche WindGuard GmbH	Germany
MEU	Mitsubishi Electric Europe B.V.	Netherlands
Svk	Affärsverket Svenska kraftnät	Sweden
GE	Alstom Grid UK Ltd (Trading as GE Grid Solutions)	United Kingdom
UniAbdn	The University Court of the University of Aberdeen	United Kingdom
RTE	Réseau de Transport d'Électricité	France
TU Delft	Technische Universiteit Delft	Netherlands
STATOIL	Statoil ASA	Norway
TENNET	TenneT TSO B.V.	Netherlands

SOW	Stiftung OFFSHORE-WINDENERGIE	Germany
SIEMENS	Siemens AG	Germany
DTU	Danmarks Tekniske Universitet	Denmark
RWTH AACHEN	Rheinisch-Westfälische Technische Hochschule Aachen	Germany
UPV	Universitat Politècnica de València	Spain
FGH	Forschungsgemeinschaft für. Elektrische Anlagen und Stromwirtschaft e.V.	Germany
DONG ENERGY	Dong Energy Wind Power A/S	Denmark
CARBON TRUST	The Carbon Trust	United Kingdom
TRACTEBEL	Tractebel Engineering S.A.	Belgium
EUI	European University Institute	Italy
Iberdrola	Iberdrola Renovables Energía, S.A.	Spain
T&D Europe	European Association of the Electricity Transmission & Distribution Equipment and Services Industry	Belgium
USTRAT	University of Strathclyde	United Kingdom
ADWEN	ADWEN Offshore, S.L.	Spain
PRYSMIAN	Prysmian	Italy
RUG	Rijksuniversiteit Groningen	Netherlands
MVOW	MHI Vestas Offshore Wind AS	Denmark
Energinet	Energinet.dk	Denmark
SHE Transmission	Scottish Hydro Electric Transmission plc	United Kingdom