

European grid prepares for massive integration of renewables

October 31 2014

Today, the ancient city of Rome welcomed an important new initiative for the large-scale integration of grids and of renewables sources into Europe's energy mix, with nearly 40 leading organisations from research, industry, utilities, transmission systems operators announcing their united goal to find the BEST PATHS to deliver affordable, reliable power in Europe from "coast to coast".

An ambitious research project which will be funded by the European Commission, BEST PATHS, will focus on the development of high-capacity transmission networks needed to meet Europe's long-term energy goals and incorporation of [renewable energy sources](#).

The project unites expert partners around five large-scale demonstration areas focused on ensuring increased network capacity and system flexibility – incorporating innovative transmission systems and industrial solutions to link offshore wind farms and improve the interconnections of the entire [power grid](#).

Project coordinator, Mr. Vicente González López of Red Eléctrica de España (REE) addressed the opening of a new challenge for the European [power](#) industry: "It goes beyond the intrinsic complexity of the individual developments proposed, since the project is going to require an effort of coordination to jointly analyse the results of each individual demonstrations and evaluate their combined impact in the European power system of the future."

Describing the actors working to deliver this ambitious project, Mr. González López said:

"Thirty-nine key players have joined together to deliver a substantial change to the power grid's capacity and flexibility. They represent the entire chain of innovation in Europe, from universities and research centres generating new knowledge, the power industry developing new products, Transmission Systems Operators and utilities, specifying their needs of new industrial solutions to allow the grid to better serve society."

Bridging the gap from often remote renewable electricity production to high-load consumption centres, BEST PATHS will focus on developing inter-operable multi-terminal High Voltage Direct Current grids; innovative upgrading and repowering existing AC corridors; and superconducting high power links.

The experimental results of BEST PATHS will be integrated into European impact analyses to show the scalability of the solutions and will be made available as soon as 2018 to benefit replication across the pan-European transmission network and electricity market.

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Citation: European grid prepares for massive integration of renewables (2014, October 31) retrieved 27 April 2024 from

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