

## Offshore electricity grids:

## SuperGrid Institute's OCTOPUS project is officially selected after the Sea-GRID Call for Expression of Interest

Octopus, or "Offshore electrical ConnecTiOns' hub: Paving the way towards Underwater Solutions" to give it its full name, is one of five innovative projects to be selected for further development following the Sea-GRID Call for Expression of Interest launched by Centrale Nantes, Enedis and RTE.

This call for expression of interest aimed to stimulate concrete, innovative solutions for the intelligent management and monitoring of marine renewable energy systems at the Centrale Nantes sea test site, the SEM-REV - the first European site for multi-technology offshore testing that is connected to the grid, located off the west coast of France.

In response to this call for expression of interest, SuperGrid Institute, in partnership with Naval Energies (FR) and Nexans (BE) developed the Octopus project which aims to demonstrate a new technology that can reduce the cost of electricity produced via renewable marine energy. The innovative power hub proposed will limit the impact of a failure on a dynamic cable in a floating offshore wind farm structure by making it possible to isolate the faulty line while maintaining power flow from the non-affected wind turbines.

"This technology is of particular interest for wind farm developers as it provides an important step for reducing the Levelized Cost of Energy (LCOE) which in turn reduces the cost of electricity for the consumer", explains Paul Vinson, Collaboration Project Developer at SuperGrid Institute.

SuperGrid Institute and its partners will pool their expertise to produce a demonstrator of their active subsea multi-port power hub which in the long term is planned to be installed at the SEM-REV test site. Having had their project selected, the consortium will also receive support from Sea-GRID partners S2E2, PMBA, SMILE, WEAMEC and Solutions&Co. in the aim of producing a concrete solution for future floating offshore wind farms.



## **ABOUT SUPERGRID INSTITUTE**

SuperGrid Institute was created in 2014 by a consortium of fourteen shareholders from the electrical industry in France (industrialists, institutional players and research & academic organisations). As a centre for research, testing and consulting services relating to technologies for future electricity transmission networks, SuperGrid Institute obtained financial support from the French government's "Investments for the future" programme, the Auvergne Rhône-Alpes region and Greater Lyon. A collaborative research platform that counts 174 people from 28 different countries as part of its team, SuperGrid Institute brings together the complementary skills of academic researchers and engineers from the world of industry. Their work revolves principally around high-voltage direct current and the large-scale integration of renewable energy in order to ensure the stability and security of tomorrow's electricity network.

## **Press Contact**