

## A great leap forward towards a 20 MW floating wind turbine: EOLINK winner of the DEMO TASE Call for Projects initiated by ADEME

EOLINK and its partners - Everaxis Industries, France Energies Marines, Ifremer, Université Gustave Eiffel and Windglaz - have been designated winners of the call for projects "Technological bricks and pre-industrial demonstrators" initiated by ADEME in February 2022 ("AAP DEMO TASE"). The HT-20MW project is supported by the Pôle Mer Bretagne Atlantique and led by EOLINK. The project is about the engineering, manufacturing, demonstration and certification of a high-voltage (66 kV) watertight rotating mechanical and electrical connection fully immersed under 30 meters and maintenance-free for 10 years. The project will start in early 2023 and will last for 3 years.

HT-20MW is the first program of its kind to integrate an electrical collector manufacturer, Everaxis Industries. This is a real asset that will enable the development of a solution suitable for floating wind turbines to ensure the export of electricity produced by the turbine. The demonstration will be applied to a 20 MW floating wind turbine developed according to the EOLINK pyramid concept and lab tank tests will be carried out in Ifremer's facilities at its Brest site. France Energies Marines will identify the failure modes of the dynamic electrical cables and propose a suitable in-service monitoring solution. The robustness of the latter will then be tested experimentally on specific aspects. Windglaz will be responsible for the definition of the global numerical model of the 20 MW wind turbine. The Université Gustave Eiffel will oversee the design and execution of the fatigue tests of the synthetic mooring line and the dynamic cables.

## Alain Morry, EOLINK Chief Commercial Officer

We woud like to thank the Pôle Mer Bretagne Atlantique, the CORIMER and the ADEME for their support. We are delighted to join forces with Everaxis Industries, Windglaz, Ifremer, Université Gustave Eiffel and France Energies Marines to carry out this project, which is fully in line with our technological roadmap aimed at demonstrating the reliability and competitiveness of our patented pyramidal floating wind turbine concept. This project marks an important step in the design of a 20 MW EOLINK wind turbine.

## About EOLINK

Founded in 2015, the engineering company EOLINK is based in Brest and is developing an innovative floating wind turbine that aims to reduce the cost of energy and facilitate its industrialisation for large-scale deployment. The EOLINK concept consists of developing a solution dedicated to floating wind power; the wind turbine is supported by a pyramidal metal structure with 4 masts to better withstand the environmental conditions at sea compared to conventional single-tower solutions; consequently, the mass of the structure is reduced by more than 30% compared to current standards. The pyramidal concept for floating offshore wind unit has been patented by EOLINK.

In April 2018, EOLINK tested the first floating wind turbine in Brest at the IFREMER test site. This 22-metre-high turbine was designed as 1/10th scale model of a commercial 12 MW wind turbine. In 2019, EOLINK received support from ADEME for the detailed design of a 5 MW wind turbine. In 2020, EOLINK and Ecole Centrale de Nantes signed an agreement for the installation of a 5 MW floating wind turbine on the SEM-REV offshore test site. Acciona Energia acquired 24% of the capital of EOLINK.