

## **FLOATECH**

## The future of floating wind turbines

INCREASING THE TECHNICAL MATURITY AND THE COST COMPETITIVENESS OF FLOATING OFFSHORE WIND ENERGY





9 PARTNERS **4 COUNTRIES** 



DURATION 3 YEARS



START-END DATE 01.01.2021 31.12.2023



BUDGET 4M€



## **OBJECTIVES**



Get a better insight on the physical phenomena taking place in a floating turbine, both in terms of aerodynamics and hydrodynamics,



Model and reduce the uncertainties in the design process by means of proposed simulation approach,



Facilitate the assessment of new technological concepts, techniques and systems by high-computing resources and dedicated experiments,



Increase the future market value of offshore wind energy,



Reduce the Levelized cost of energy (LCOE) by 15% in comparison to present average values.

## INNOVATION



The development, implementation, and validation of QBlade-Ocean, a user-friendly and efficient design engineering tool performing simulations of floating offshore wind turbines with unseen aerodynamic and hydrodynamic fidelity.

The development of two innovative control techniques (i.e., Active Wavebased feed-forward Control and the Active Wake Mixing) for Floating Wind Turbines and floaters, combining wave prediction and anticipation of induced platform motions.























