



Marine energy and mining resources

## EOLINK

### STUDY OF A NEW FLOATING WIND TURBINE DESIGN

The EOLINK project intends to demonstrate the suitability of a floating wind turbine design. The Levelized Cost of Electricity (LCOE) anticipated is linked to the turbine's pioneering patented architecture.

Unlike conventional fixed or floating wind turbines, the whole (pyramidal) structure rotates around a fixed point to ensure the turbine faces into the wind.

The concept will be tried and tested in tanks where wind will be generated to measure the dynamic behaviour of the turbine and numerically model it to correlate the experimental tests with simulations.

The project will also produce structural dimensions for the turbine. The diameters and thicknesses of the beams will be optimised to reduce the mass while respecting the criteria for avoiding fatigue damage.

The research will validate the design and demonstrate that this technological breakthrough can significantly reduce the LCOE.

#### Partners

##### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ENTREPRISES

Eolink, Plouzané / France Energies Marines [[Project Developer](#)]

##### Research center

Ifremer, Brest

#### Funders

Agence Nationale de la Recherche  
France Energies Marines

#### Labelisation

10/03/2017

#### Overall budget

209 K€