



## Beginning of campaigns at sea to study in an integrated way the impact of floating wind farms

A campaign at sea will take place from 17 to 30 August, 2018, as part of the APPEAL research project, coordinated by France Energies Marines and scientifically managed by the University of Western Brittany. This campaign will be conducted on the site of the future floating wind turbine pilot farm offshore the Groix and Belle-Île islands, a successful project supported by the ADEME (French environmental and energy agency) and developed by a consortium composed of EOLFI, CGN Europe Energy, La Caisse des Dépôts and Meridiam. The first week of scientific studies will include the collection of seabed fauna from the site.

APPEAL brings together 17 academic and private partners, as well as maritime professionals such as the CDPMEM du Morbihan. Through an integrated approach combining natural sciences and human and social sciences, the results from the field, coupled with numerical modelling work, will make it possible to measure the effects of floating wind farms on the functioning of coastal ecosystems and propose tools to support the integration of such offshore infrastructures.

### An integrated approach to the coastal ecosystem

In the coveted and complex environments of coastal marine ecosystems, there are many technical, legal, societal and environmental challenges to meet when planning future developments. The APPEAL collaborative research project aims to build an integrated approach at the ecosystem level. Natural sciences will thus be combined with human and social sciences to consider the human dimension of impacts through the analysis of activities such as fishing or maritime traffic. The goal? Measure the effects of floating wind farms on the functioning of coastal ecosystems as a whole and propose tools to assist in the integration of such infrastructures at sea.

### The need for campaigns at sea

As part of the APPEAL project, several measurement campaigns are scheduled for 2018 and 2019 at the Groix et Belle-Île site. The next campaign will be conducted from August 17 to 30, 2018. On the agenda: collection of seabed fauna in order to identify and quantify the animal communities present in the area and to study the food relationships between the different organisms. The objective? Identify changes in the ecosystem in recent decades, comparing the results obtained with those of scientific work carried out in the 1960s. These campaigns will also be used to establish the initial environmental and ecological state before the implementation of floating wind farms. Different scenarios of the evolution of this ecosystem, after the installation of wind turbines, will then be tested.

### Partners with complementary skills

For a period of 3 years, the APPEAL project will receive financial support from the French State, managed by the Agence Nationale de la Recherche (ANR) under the Investissements d'Avenir programme (ANR-10-IEED-0006-25), and from France Energies Marines, the national institute for MRE R&D. The project is scientifically managed by the University of Western Brittany (UBO) and coordinated by France Energies Marines. 17 academic, private and professional partners from the maritime sector form a consortium with complementary skills and contributions, ensuring quality scientific work.

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## Main information about the APPEAL project

**Subject:** Socio-ecosystem approach to understand the impacts of floating wind farms

**Duration:** 3 years (2018-2021)

**Financial support:** this project receives financial support from the State, managed by the National Research Agency (ANR) as part of the Big Investment Plan (ANR-10-IEED-0006-25), and from the Institute for Energy Transition, France Energies Marines

**Coordinator:** France Energies Marines

**Scientific pilot:** University of Western Brittany

**Consortium partners:**



## France Energies Marines in short



**Identity:** National reference institute for research on marine renewable energies

**Labelling:** Institute for Energy Transition (ITE) co-financed by the Big Investment Plan (IA), 26 projects accredited by the Bretagne Atlantique and Méditerranée competitiveness clusters

**4 scientific and technical programmes:**

- Tools and methods for site characterization
- Technology design tools for MRE applications
- Environmental and socio-economic impacts
- Farm architecture and network integration

**Number of employees:** 30 employees (25 FTEs)

**Annual budget:** €2 million

**Date of creation:** 15 March 2012

**Location:** Bâtiment Cap Océan - 525, avenue Alexis de Rochon - 29280 Plouzané - France

[www.france-energies-marines.org](http://www.france-energies-marines.org)