HYD2M

HYDRODYNAMIC MEASURING AND MODELLING OF THE RAZ BLANCHARD (ALDERNEY RACE)

The aim of HYD2M is to assist the development of the industrial tidal turbine industry, particularly at the Raz Blanchard site which represents the second biggest tidal energy resource in the world with the potential to generate an estimated 5 GW. Extreme ocean weather conditions complicate the acquisition of long-term hydrodynamic measurements and are an obstacle to the development of sustainable tidal turbine activity.

The project exploits a non-invasive (HF radar) measuring system to capture the data in real time over the long term with the aim of creating a database for use by industrials and of estimating the energy capacity to within 10% for different hydrodynamic scenarios that take account of hazards such as sea state and storm conditions.

The scientific advances made could be used in any similar hydrodynamic environment, such as sites at Fromveur and Bay of Fundy. They will provide solid knowledge on which to base the development of the tidal turbine industry in France and abroad.

Partners

Companies

DCNS Open Hydro, Brest
EDF, Chatou

Research centers

France Energies Marines / Université de Caen [Project Developer]
CNRS, Caen
Ifremer, Brest
SHOM, Brest
Université de Caen, Caen
Université du littoral, Dunkerque
University of Hawaii (USA)
University of Plymouth (UK)
University of Sheffield (UK)

Funder

- Agence Nationale de la Recherche

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22/04/2016

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