



## PYWEC

### PIEZOELECTRIC GENERATOR FOR RENEWABLE ENERGY CONVERSION

The PyWEC project is concerned with developing an innovative piezoelectric generator, adapted to slow and variable motion, for converting renewable energy. With 15 kW of nominal power, the generator will be initially tested and characterised in the lab on a test bench and then at sea, before being integrated into a wave turbine generator already on-stream at the SEM-REV site at Le Croisic. This facility will allow comparison of the prototype during the initial test phase with conventional generators pre-installed on the wave turbine float. The generator will be connected to an electronic setup for grid emulation/dissipation to characterise the electrical behaviour downstream as far as the grid supply.

Adapted to the slow, variable motion characteristic of renewable energy, the generator will offer applications in several fields, particularly those of the wind, tidal, hydroelectric and wave power industries.

**The PyWEC project is also recognised by the clusters Pôle Mer Méditerranée and Pôle EMC2.**

#### Partners

##### Companies

Pytheas Technology, Meyreuil [[Project Developer](#)]  
Geps Techno, Saint-Nazaire  
Naval Group, Brest

##### Research centers

CEA  
École Centrale de Nantes, Laboratoire de recherche en Hydrodynamique, Énergétique et en Environnement Atmosphérique (LHEEA), Nantes  
ENSTA Bretagne, Brest

#### Funder

Fonds Unique Interministériel

#### Labelisation

22/04/2016

#### Overall budget

2 850 K€