



BENTHOSCOPE

PASSIVE ACOUSTIC MONITORING OF THE IMPACT OF WIND TURBINES ON THE BENTHOS

The aim of the BENTHOSCOPE project is to carry out a diagnostic to establish the baseline and evolution of benthic populations in a rocky marine habitat by listening to the sounds they produce.

The benthos, which refers to the whole community of seabed organisms, is an essential zone for the functioning of coastal environment ecosystems. It also raises economic, heritage and emblematic issues within these environments, which otherwise offer particularly advantageous conditions for deploying MRE plant and equipment.

The BENTHOSCOPE project is aimed at developing innovative methods of environmental monitoring of the potential impact of wind turbines on the benthic zone of hard substrates, where traditional methods have failed.

The biotic richness of the benthos will, in effect, be described using hydrophones. This monitoring tool offers several advantages: access to indicators from living organisms (their sound production), non-invasive equipment, high temporal resolution and affordability.

With the help of this operational method and using a population-based scale, the following transfer functions will be measured:

- Variability in relation to environmental factors,
- Spatial variability,
- Temporal variability.

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Partners

Companies

Quiet Oceans
RTSys, Caudan
TBM

Research centers

France Energies Marines / Institut
Polytechnique de Grenoble [[Project
Developer](#)]
IUEM LEMAR, Laboratoire des sciences de
l'Environnement MARin (LEMAR), Brest

Other partner

Océanopolis

Funders

Agence Nationale de la Recherche
France Energies Marines

Labelisation

23/05/2014

Overall budget

353 K€