

# NESTORE

Nested modelling approach for ORE development and cumulative impact assessment considering local to regional environmental and socio-economic stakes

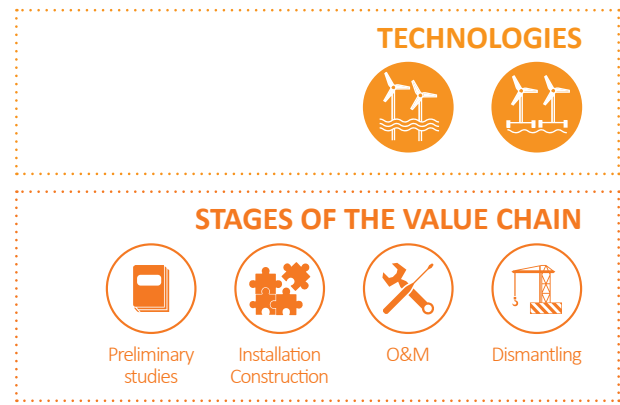


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**DURATION: 36 months | LAUNCH: 2022 | BUDGET: €3,374K**

## CONTEXT

With the fast increase of the offshore renewable energy (ORE) sector development in France, a growing concern is emerging on the potential cumulative impacts, at different spatial levels, of the ORE farms and other human activities on the functioning of marine ecosystems. In various legal documents, this concern compels ORE developers to include the cumulative impact assessment in their Environmental Impact Assessment (EIA). In this context, it is crucial to speed-up the development of adapted operational tools to optimally conduct this foreseen legal obligation. **In this process, a French national experts group has established an operational roadmap for conducting an assessment of cumulative impacts in ORE development context. Their recommendations highlight the need to adapt a modelling approach to integrate the cumulative impacts of ORE and other human activities on marine ecosystems functioning.**



## OBJECTIVE

To develop adapted tools to study the cumulated impacts of ORE farms and other human activities on the marine ecosystems functioning

## EXPECTED RESULTS

- Development of a nested series of tools at different spatial scales to address different local to regional stakes for all French maritime areas
- Increased understanding of the various levels of the local to regional stakes and their translation into operational scenarios to guide decision makers
- Guidance and operational protocols for French ORE sector to conduct cumulative impact assessment in near future

## SCIENTIFIC CONTENTS

- A comprehensive analysis of the French National Strategic Documents for marine ecosystems management and a nested mapping of their associated local to regional stakes
- Development of a set of nested trophic modelling tools at different spatial scales for the cumulative impact assessment of OREs and other human activities
- Improvement of uncertainty consideration in model predictions through coupling different models approach and data availability
- A production of different management scenarios integrating local to regional stakes including a mapping of the ecosystem services evolution related to ORE development

 This project receives French State funding of €954K managed by the National Research Agency under the France 2030 investment plan.

With the financial support of SUD Provence-Alpes-Côtes d'Azur, Brittany and Normandy regions.

## PARTNERS

