FISHOWF

Effective monitoring strategies to identify and evaluate effects of offshore wind farms and their export cables on fish communities

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CONTEXT

In France, the first offshore wind farm should be operational by 2022 and will require full-scale experimentation and monitoring of fish communities to detect and quantify the potential effects of such installations. Multi-gear experimental fishing, which is traditionally used in regulatory impact assessment of offshore wind farms on fish, is not sufficient to achieve this objective and address societal concerns. Site access regulations and offshore wind farm specificities will also limit the capacity to implement certain monitoring methods. **There is therefore a need for the development of effective methodological strategies to monitor fish populations. Advanced indirect approaches, such as acoustic telemetry, associated with robust sampling design, provide an alternative to traditional monitoring surveys for offshore wind farm projects.**

OBJECTIVE

To develop a long-term monitoring approach capable of detecting the effects of both fixed and floating offshore wind farms and their export cables on fish communities

EXPECTED RESULTS

- Acquiring baseline knowledge necessary to detect and evaluate effects of offshore wind farms and their export cables on fish communities, populations and individuals
- Recommendations on the most effective and practical methodological strategies to monitor fish at different temporal and spatial scales using acoustic telemetry
- Recommendations on developing an innovative combined methodology approach to best evaluate offshore wind farms' and export cables' effects on fish communities

TECHNOLOGIES

STAGES OF THE VALUE CHAIN

Preliminary studies

SCIENTIFIC CONTENTS

- Monitoring of occupancy patterns, habitat use and individual movements of fish using acoustic telemetry to identify effects of offshore wind farms at different spatial scales
- Proposal of methodological guidelines using acoustic telemetry to update regulatory environmental impact assessment methods
- Identifying an effective combined approach using complementary innovative methodologies to inform on offshore wind farms' and export cables' effects on fish communities

PARTNERS

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