

## Case Study

### *Marine environmental data monitoring for nature-friendly offshore wind*

The Maritime Spatial Planning (MSP) process allocates space for traditional and emerging human activities at sea. Data forms the foundation of Maritime Spatial Plans (MSPs) and is crucial for their revision and adaptation based on new scientific knowledge. Since MSP is key to identify areas for offshore renewable energy (ORE) and the connecting electricity grid, marine environmental data is essential for a nature-friendly deployment and to achieve conservation and restoration targets as well as Good Environmental Status in all European seas.

Member States (MS) utilise different environmental data collection and management schemes. In the MSP context, they are responsible for using the best available data and deciding how to share necessary information across marine regions. The Offshore Coalition for Energy and Nature (OCEaN) identifies innovative models and initiatives which allow for better environmental data collection and management for ORE, with the aim of inspiring their replication by MS. One such positive example is the Belgian Offshore Wind Monitoring Programme, [WinMon.be](https://winmon.be). This post-decision monitoring programme for the construction and operation phases of ORE projects after the permit-granting, has been running since 2005, coordinated and executed by the Royal Belgian Institute of Natural Sciences (RBINS) and commissioned by the Belgian Federal Government.

The following selected aspects of this programme can benefit nature-friendly ORE expansion:

- **It simplifies project developers' work and enables needed funds.** All Belgian offshore wind farm concession holders contribute on a yearly basis to the funding of this monitoring programme as part of their environmental license conditions. In exchange, environmental monitoring is conducted centrally and independently by advising authorities, RBINS and other partners, for all ORE projects.
- **It enables systematic and long-term data collection.** The programme creates a solid framework for the systematic collection of marine environmental data. RBINS and partners conducting the monitoring ensure that environmental data is continuously collected and streamlined through standardised protocols and harmonised monitoring as per latest scientific knowledge. Long-term (min. 5-10 years) and continuous monitoring provide reliable environmental data and allow for adaptive processes.
- **It allows better understanding of ORE impacts.** Through an observation phase, it is possible to assess and anticipate impacts of ORE in marine

ecosystems, revealing processes (cause-effect) behind these impacts, and thus enabling a better understanding. In addition, it provides the necessary data to measure the potential combined effects of all ORE projects at the national level and has the potential to do this across all marine users and across the sea basin.

- **It allows open access to marine data and contributes to data sharing at international level.** All environmental data is made available through a data-platform, the [Belgian Marine Data Centre](#) and contributes to international databases such as EMODnet, which ensures coherent and coordinated data collection across sea basins at the EU level.

OCEaN recognises the advantages of this programme and the contribution it can make to the data debate, but also that it is based on existing and specific national conditions, premises, and structures. OCEaN will follow its progress and will continue to create opportunities for exchange with other initiatives for better data collection and management in other countries.

*The Offshore Coalition for Energy and Nature (OCEaN) brings together NGOs, TSOs and wind industry organisations from across Europe. Together we work towards a sustainable deployment of offshore energy and grid infrastructure, while ensuring alignment with nature protection and healthy marine ecosystems.*

*OCEaN is funded, convened and moderated by the Renewables Grid Initiative. Members of OCEaN are **TSOs** (50Hertz, Amprion, Elia, EirGrid, National Grid Ventures, Le réseau de transport d'électricité - RTE, TenneT), **NGOs** (BirdLife International, Climate Action Network Europe - CAN Europe, Germanwatch, Naturschutzbund - NABU, Natuur&Milieu, the North Sea Foundation - Stichting De Noordzee, the Royal Society for the Protection of Birds - RSPB, the Wildlife Trusts, the World Wide Fund for Nature - European Policy Office - WWF EPO) and **wind industry organisations** (Iberdrola, Ørsted, Seawind Ocean Technology, Siemens Gamesa, Vattenfall, WindEurope, Wind Energy Ireland, the German Network for Wind Energy - WAB, the German Federal Association of Offshore Wind Farm Operators BWO). The Ocean Institute is a supporting organisation.*