

Research for PECH Committee – Workshop on the European Green Deal – Challenges and opportunities for EU fisheries and aquaculture – Part II: Marine biodiversity aspects



This study aims to provide an **overview of the impacts, challenges and opportunities** for the European Union (EU) fisheries and aquaculture sectors created by the **European Green Deal** (EGD) regarding **marine biodiversity**. The main EGD policy initiatives impacting aspects of marine biodiversity are presented. The research analyses the overall challenges, opportunities and solutions for EU fisheries and aquaculture about marine biodiversity aspects of the EGD. It also

illustrates best practices and lessons learnt for implementing core objectives of the EU Biodiversity Strategy for 2030. Finally, the report provides policy recommendations to the European Parliament centred on measures for effectively implementing the EU's biodiversity framework for fisheries and aquaculture sectors.

The main European Green Deal policy initiatives as regards marine biodiversity aspects

The **EGD** is a group of policies aiming to **reduce the European economy's fossil fuel dependency**, with the target of carbon neutrality by 2050. Several strategies presented in the Green Deal are expected to have strong implications regarding **marine spatial planning**, as they call for the development of new activities in already busy coastal areas: an improved network of marine protected areas, offshore wind farms and aquaculture developments.

The **reinforcement of the Natura 2000 network** is a critical element of the European Green Deal, with an objective of 30% of the EU's sea waters protected by 2030, the implementation of strict protections for at least a third of the areas, and the definition of fisheries management measures in

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Policy Department for Structural and Cohesion Policies Directorate-General for Internal Policies Authors: Sébastien METZ (Sakana Consultants); Joachim CLAUDET PE 747.295 - October 2023 all areas. Currently covering close to 450 000 square kilometres, the network of marine protected areas (MPAs) has to be tripled to reach the 30% objective.

Another important element of the EGD package is the the **EU Strategy on offshore renewable energy.** Its objective of **increasing the EU offshore wind capacity** to 60 GW by 2030 and 300 GW by **2050** will have major implications both for marine spatial planning (MSP) requirements and the marine environment. The footprint of future developments is expected to require close to 50 000 to 60 000 square kilometres of offshore wind farms at the European level, without counting the security buffer area surrounding each wind farm and the corridors needed to connect these wind farms to the electric grid.

Reducing the bycatch of species threatened with extinction to a level that allows full recovery is a challenging objective, notably due to the development of specific plans tackling the bycatch of protected species in a short timeframe.

Challenges, opportunities and solutions for EU fisheries and aquaculture as regards marine biodiversity aspects of the European Green Deal

The continuous release of human-produced greenhouse gas emissions directly affects the ocean: warming, acidification and deoxygenation. Human-induced climate change is significantly modifying the ecosystems' structure and the distribution of marine species, with most species shifting poleward. An important share of the coastal waters is in less than good status, despite the implementation of the Marine Strategy Framework Directive. Developing an Ecosystem Approach to Fisheries Management (EAFM) is essential for better integrating all new usages in management advices.

Offshore wind farm installations, spatial protection measures and fishing activities

The **extent of offshore wind farms** of area-based conservation will **increase dramatically** in European waters in the coming decade, with a necessity to develop plans of **co-existence with fishing**. The impact pathways of **offshore wind farms** on marine biodiversity are complex and often **incompatible with conservation objectives**. Offshore wind energy production and multi-use fishing could become the European Union's new standard. While co-locating offshore wind farms and fishing would imply some local adaptations of the fishing sector and revised policies by insurance companies, this would align with the EU Biodiversity Strategy for 2030 and EGD. To effectively integrate spatial protection with multi-use fishing and offshore wind farms, systematic and participatory planning approaches exist and should be mobilised.

Minimising the interactions with marine protected species

Several cetacean subpopulations are considered threatened or near threatened in European waters. Global warming is inducing a poleward shift in the distribution of most species, accompanied by habitat reduction for some species and increased competition for prey. Two species, the harbour porpoise (*Phocoena phocoena*) and the common dolphin (*Delphinus delphis*), are subject to an important level of bycatch in the EU, threatening the sustainability of their populations. Spatial measures designed to avoid the overlap of fisheries and cetaceans are the only measures able to eliminate the problem of bycatch. Technical measures designed to limit accidental catch (acoustic deterrent, escape panels) are most of the time species-specific and do not avoid all bycatch.

Recommendations

Regarding the development of offshore wind farms and spatial protection measures:

- 1) Reinforcing the **coordination between Member States** to develop coherent **marine spatial plans**, avoiding discontinuity between Member States. This is notably important for the development of a coherent network of **marine protected areas** (MPAs).
- 2) Recognising that industrial activities are not compatible with marine biodiversity conservation.
- 3) Supporting research activities to elicit the preferences in the use of marine space, to better define the place of each industry. This could be achieved at sea basin level also to reinforce coordination between Member States.
- 4) Developing research to assess the cumulative effects due to multiple offshore wind farms on marine biodiversity: disruption of migration corridors, effect on local atmospheric conditions (wind, temperature), but also on the fishing industry: fishing assemblages, target species, fishing behaviour, the characteristics of the lost fishing opportunities and the varying characteristics of the different offshore.
- 5) Supporting **research** to identify key features at the sea basin level to avoid disruptions between **marine protected areas** due to **offshore developments** (wind energy notably).
- 6) Embracing systematic and **participatory planning** approaches for effectively **integrating** spatial protection with multi-use fishing, aquaculture and offshore wind farms.
- 7) Developing **support measures** for the fishing industry to be able to access **insurance policies** allowing them to **fish inside offshore wind farms** under conditions.

Regarding the interactions of fishing activities and protected species:

- 8) Reinforcing all **direct observation programmes** that are essential to estimate the cetacean populations, to allow population evaluations on a more frequent basis.
- 9) Improving the **EU-DCMAP** (Data collection multi-annual plans) to impose better sampling of segments at **risk of bycatch of protected species** (cetaceans, turtles and sea birds).
- 10) Supporting **research activities** in remote **electronic monitoring systems** to improve the information about **bycatch of protected species**.
- 11) Supporting **research activities** in identifying **new deterrent and avoidance techniques**, as most of them are species and gear specific.
- 12) Raising awareness of the importance for fishers to report bycatch of protected species for improving the quality of the data available to assess scientifically the population levels and for helping to understand the factors explaining these bycatch.
- 13) Providing **adequate training** to fishers for:
 - a) using all **mitigation measures** that can be deployed on their gear **for minimising the bycatch of protected species**;
 - b) handling **properly protected species in the eventuality of a bycatch**, to maximise the chances of survival after release.

Further information

This executive summary is available in the following languages: English, French, German, Italian and Spanish. The study, which is available in English, and the summaries can be downloaded at: https://bit.ly/3Q1uGjo

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