



SHARING THE SEA

The role of multi-use in
offshore windfarms

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Main messages

- The core principle of multi-use should be to optimise the use of marine space without leading to additional harm to marine ecosystems. It must not serve as a means to increase the overall pressure on the marine environment.
- The success of multi-use hinges on offshore windfarms being located in areas of low ecological sensitivity, where accommodating activities such as fishing does not compromise ecosystem integrity.
- The ecological benefits of multi-use depend on broader marine protection and restoration efforts. Multi-use must be aligned with and pursued as part of broader strategies to reduce pressure on marine ecosystems, including the transition to low-impact fisheries. Ultimately, the success of multi-use relies on a political commitment to delivering meaningful marine protection and restoration.
- If properly designed, multi-use can support marine protection efforts, contribute to low-impact fisheries, and help address current fragmentation in ocean governance.

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Context

The marine environment harbours a uniquely rich diversity of habitats and species whose health and integrity are vital for delivering fundamental ecosystem services such as fisheries, coastal protection, recreation, tourism, and carbon sequestration. The conservation of healthy marine ecosystems is therefore an essential condition for the development of any maritime activity, as the economic and social benefits they provide are inherently tied to the resilience of these ecosystems. Only by aligning human use of the marine space with ecological boundaries can we secure the long-term viability of our activities at sea. As such, the conservation and restoration needs of marine ecosystems should determine the boundaries within which these must take place.

The existential and interconnected nature of the climate and nature crisis demands that we treat climate change and biodiversity collapse hand in hand, and with absolute priority. This requires a focused effort to address their root causes by tackling the primary drivers of environmental degradation, while simultaneously preparing to adapt to their unavoidable impacts. It also necessitates allocating sufficient space and resources to mitigation solutions.

The rapid expansion of renewable energy in Europe, particularly offshore wind, has demonstrated a growing recognition of the climate emergency. However, the energy transition brings significant challenges for nature. Offshore wind energy has introduced a new player and a new impact into an already crowded, pressurised maritime space. While emancipation from fossil fuels is key and the **increased generation of renewable energy is critical** in this respect, it **must be carried out in a coherent way with the achievement of the 30x30 nature protection targets and with environmental legislation**. Offshore wind development should consistently be led by ecosystem-based marine spatial planning, informed by sensitivity mapping and a quantitative and spatially explicit assessment of cumulative impacts that takes into account all marine activities, to ensure that it takes place within the boundaries of marine ecosystems' carrying capacity.

At the same time, European seas urgently need relief from mounting pressures such as climate change, overexploitation, and pollution, to rebuild their resilience and continue providing us with essential services. This **requires protecting the most valuable places for nature and ensuring that they are connected by an**

ecologically coherent network, by restoring endangered ecosystems at sea-basin level and ensuring their effective protection, so that they may recover and flourish. This also calls for the **restriction of harmful activities and pressures that drive biodiversity loss and exacerbate climate change**, particularly by reducing the impacts of fisheries, which should involve both a reduced fishing effort and a transition to lower impact fishing methods. This must be done following the principles of a **just transition**, meaning in a way that is "as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind"¹.

In recent years, the growing demand for space at sea has given a lot of traction to the concept of **multi-use** in European seas. The idea of sharing the same space for different activities, going beyond single-sector approaches, is being pushed forward as a "win-win solution" to optimise sea space allocation in a context of growing abundance of maritime uses and spatial competition. This narrative however requires thorough

examination, as rapid expansion of the maritime sector and increasing spatial use intensity are exerting continuously greater strain on coastal seas and marine ecosystems. **If not applied under strict ecological conditions, multi-use risks becoming a justification for intensifying marine activities**, rather than contributing to efforts to **keep overall sea use within the boundaries of ecosystem carrying capacity** – an objective that ultimately requires a reduction in current activity levels at sea. As a complex issue with options that vary between countries, multi-use should also be considered in light of each specific legislative and political context.

Given that fishing is currently the human activity with the largest impact on marine ecosystems, driving marine biodiversity loss (IPBES, 2019), and that there are growing spatial concerns between fishing and offshore wind development, the following briefing will particularly refer to multi-use between offshore wind farms and fisheries. Similar principles could however apply for other types of multi-use.

¹ International Labour Organisation, 2015. [Guidelines for a just transition towards environmentally sustainable economies and societies for all](#). BirdLife Europe and Central Asia is currently developing a position on fisheries which will further delve into what a just transition in the fisheries sector should take into account.

Multi-use: challenges and opportunities



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In the context of Marine Spatial Planning, multi-use is an umbrella term that refers to “the joint use of resources in close geographic proximity” (Schupp et al. 2019). It covers a multitude of combinations of uses and users (see table 1), implying a shift from the concept of exclusive resource rights to a more inclusive perspective based on the sharing of resources by one or more users.

Table 1: Typology of ocean multi-use. Adapted from Schupp et al. (2019). Types are ordered by decreasing degree of connectivity between uses and users.

Type	Description	Examples
1 Multipurpose/ multi-functional	Takes place in the same area, at the same time, with shared services and core infrastructure	Marine renewable energy and desalination
2 Symbiotic use	Takes place in the same area, at the same time, and peripheral infrastructure or services are shared	Aquaculture in offshore wind farms
3 Coexistence/ colocation	Takes place in the same area, at the same time	Fisheries in offshore wind farms
4 Subsequent use/ repurposing	Takes place in the same ocean space but subsequently	Repurposing offshore structures for new uses (e.g., tourism, aquaculture, conservation)

Multi-use in the form of **coexistence or colocation between offshore windfarms and fisheries** (type 3), whereby both fishing and offshore wind production activities would take place in the same area at the same time, is often framed as a potentially useful response to key ocean management challenges. However, the feasibility and ecological implications of such multi-use arrangements **are highly context-specific** and require careful, case-by-case consideration.

Colocating offshore windfarms and fisheries poses a **risk of increased cumulative impacts** in an already saturated environment. The ocean is under immense pressure, and rebuilding marine ecosystem resilience is critical for safeguarding its services and mitigating the impacts of offshore renewable energy development, which plays a vital role in the fight against climate change.

The viability of multi-use opportunities within offshore windfarms is **inherently dependent on the windfarms being appropriately sited** – that is, in locations where they cause least environmental harm. Such locations should be **determined through robust and strategic ecological evidence**, including sensitivity mapping and cumulative impact assessments, and **informed by ecosystem-based maritime spatial planning**, to ensure that any additional pressures remain within the ecological limits of marine ecosystems (BirdLife, 2023). **Only offshore windfarm sites located outside ecologically valuable or sensitive areas, and where accommodating an activity such as fishing would not compromise ecosystem integrity, may offer scope for multi-use without exacerbating environmental risks.** Coastal areas, for instance, require rigorous case-by-case assessments, given their high vulnerability and the intense cumulative pressures they already face from multiple overlapping and concentrated human activities (EEA, 2020).

Where these conditions are met, combining spatially extensive activities such as fishing and renewable energy production could, in theory, help **alleviate pressure on ecologically sensitive and valuable areas by enabling more efficient use of sea space.** This, in turn, may **allow for the redirection of pressure away from these areas and thereby facilitate their designation as areas free from human activity.** Any ecological benefits would however depend on **the implementation of concrete and effective protection and restoration measures in those areas.** Without this second step, overall pressure will not be reduced. This underscores the urgent need to substantially increase and properly manage Marine Protected Areas (MPAs) to meet the 30 by 30 target. Expanding the MPA network so that it effectively protects the most valuable areas and mosaics of interconnected habitats and species, ensuring connectivity

between these areas, and strengthening it with highly protected zones free from human pressures is essential to rebuild the resilience of our seas and achieve a healthy ocean (BirdLife, 2021).

Such outcomes, however, are contingent on **rigorous planning** and a **political context that is genuinely committed to effective marine protection and restoration.** Multi-use arrangements such as colocation must be **integrated within a broader strategy to reduce overall pressure on the marine environment.** This includes phasing out harmful activities and reducing overall fishing efforts while facilitating the transition to low-impact fishing². Only under these conditions could multi-use meaningfully contribute to improved sea space allocation, reduced spatial conflicts, and stronger ecosystem protection.

Commitment to a just transition is central as it underpins the social acceptability of both multi-use initiatives and new protection and restoration measures. **There may be opportunities to align colocation with the transition toward low-impact fisheries, which warrant further exploration.** For instance, access to fishing grounds within offshore windfarm sites could be limited to gear types selected on the basis of social and environmental criteria. In this way, **the development of offshore windfarms could open up new opportunities for small-scale, low-impact fishers from local communities,** thereby supporting local economies and helping to rectify the current imbalance in the distribution of fishing opportunities, while advancing ecological, social and economic goals. Additionally, alongside colocation, offshore wind operators could provide alternative revenue streams for struggling fishers, such as opportunities for environmental data collection, or incentives like discounted electricity for decarbonising fishing fleets.

Finally, multi-use could foster the **development of marine spatial planning** and of a more **coherent and integrated regulatory framework for activities at sea** as, to ensure successful implementation, it will need to go beyond current sectoral regulations, which create inconsistencies and complexity in licensing (European Commission, 2021). This integrated framework may in turn help the process of cumulative impact assessments.

In sum, the deployment of multi-use must be approached with caution and grounded in a broader strategy for reducing human pressure on the ocean. The following section outlines key considerations that should guide any decision to pursue multi-use, to ensure that it truly contributes to tackling the nature and climate crisis.

² There are multiple understandings of what low-impact fishing is. For the purpose of this position, we refer to low-impact fishing as fishing methods that cause minimal damage to habitats and non-target species, and that typically involves small-scale vessels operated by fishers with deep local ecological knowledge who fish responsibly by respecting ecological limits, targeting species during suitable seasons, and avoiding destructive gear types. This is based on the main elements outlined by the [Low Impact Fishers of Europe platform](#) and by article 4 of the EU Common Fisheries Policy (Regulation 1380/2013).

Key considerations

- **Based on ecosystem-based marine spatial planning:** Multi-use must be integrated in ecosystem-based marine spatial planning, relying on pre-identified areas of highest and least environmental constraint, namely through sensitivity mapping and cumulative impact assessments. Multi-use's added value ultimately depends on offshore windfarms being sited in areas where they cause least environmental harm, to ensure that the collective pressure of all activities is kept within levels compatible with the achievement of Good Environmental Status and within planetary boundaries. The conservation and restoration of marine ecosystems should, as such, determine the boundaries within which any activity must take place, and not be treated as a sectoral interest.
- **Diverts pressures from ecologically sensitive and valuable areas:** within Marine Spatial Planning, the underlying principle for multi-use should be nature protection and restoration, ensuring that multi-use contributes to building the resilience of our seas by directing activities away from highly ecologically vulnerable and valuable areas, so that these may in turn be restored and effectively protected.
- **Reduces pressures from human activities:** within Marine Spatial Planning, multi-use should be set under certain conditions to ensure that it promotes low-impact activities and sustainable practices within windfarms, thereby contributing to the reduction of human activities' impacts on marine ecosystems overall. Activities should remain within ecological boundaries and avoid increasing cumulative pressures on the marine environment. Thorough and scientifically sound data-driven analyses of the environmental impacts of collocated activities should be completed at project, sea basin and ecosystem level, and environmental monitoring, conducted by an independent third-party, should systematically be included in projects. Should negative ecological effects be observed, solutions should be promptly identified and implemented to minimise further harm to the greatest extent possible.
- **Actively involves stakeholders:** all relevant stakeholders should be involved in the setting of principles and conditions for multi-use at the level of Marine Spatial Planning, including offshore wind developers, fishers, environmental organisations, and scientists, so as to ensure transparency, collaboration and social acceptability of the measure.



References

BirdLife Europe and Central Asia, 2021, How to apply the ecosystem-based approach in Marine Spatial Planning, Position Paper.

BirdLife Europe and Central Asia, 2021, EU Targets for Protected Areas and Restoration at Sea, Position Paper.

BirdLife Europe and Central Asia, 2023, Winds of Change: Powering Healthy Seas through a Nature Positive Energy Transition, Position Paper.

EEA, 2020, Marine Messages II, EEA report.

European Commission, 2021, 'Best Practice Guidance in Multi-Use Issues and Licensing Procedures'.

International Labour Organisation, 2015. Guidelines for a just transition towards environmentally sustainable economies and societies for all.

IPBES, 2018, Regional assessment report on Biodiversity and Ecosystem Services for Europe and Central Asia.

Text Box 2, TextboxA blue flag with yellow stars in the center

Schupp et al., 2019, 'Toward a Common Understanding of Ocean Multi-Use', Frontiers Marine Science.



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