

Multi-Use in the South Baltic: Exploring Opportunities on Offshore Wind Farms

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Theme: MSP & Multi-Use

Summary

The session explored the concept of multi-use of Offshore Wind Farms (OWFs), focusing on active synergies between offshore energy production, aquaculture, marine biodiversity restoration and other uses of marine space. The highlighted innovative approaches, lessons learned from ongoing projects and the potential for implementing multi-use solutions in the South Baltic region. The panel discussion at the end of the session emphasised practical steps for policymakers, industry and researchers to support the integration of multi-use concepts into marine planning, management and governance.

The session opened with the presentation of the [ULTFARMS](#) project by **Alex Ziemba**, Advisor and Researcher at [Deltares](#). ULTFARMS aims to expand sustainable aquaculture in the Baltic and North Seas by integrating the cultivation of low-trophic species like seaweed, blue mussels and oysters into offshore wind farms. Alex explained that the project is not just about mitigation, it aims to create positive environmental impacts while also supporting food production and clean energy. The project focuses on six pilots located in Belgium, the Netherlands, Germany, and Denmark to test resilient cultivation structures, monitoring technologies, and eco-friendly designs tailored to harsh offshore conditions. Recently, a few associated regions have joined the project to explore if similar solutions could work in their waters. With the help of mapping tools and digital models, these regions will identify the best sites for the integration of low-trophic aquaculture within offshore wind farms. Alex emphasised that the goal is to make multi-use solutions easier to adopt across Europe and beyond.

Next, **Angela Schultz-Zehden**, Managing Director at [s.Pro](#), shared insights from a recently completed study commissioned by the German government, exploring how multi-use activities can be introduced within Germany's Exclusive Economic Zone (EEZ) in the Baltic and North Seas. Angela explained that Germany is facing a rapid expansion of offshore wind energy, with targets to grow from 7 GW today to 70 GW by 2045. This expansion is driving urgency to explore how certain marine activities can be combined with offshore

wind to make efficient use of the limited sea space. Angela noted that while the concept of multi-use is widely discussed in the EU, very few offshore projects have been tested in real-world conditions, especially in deep, distant waters far from shore. She highlighted that the biggest barriers are technical and economic, not legal. Offshore aquaculture is still labour-intensive, costly, and dependent on long ship trips, making it hard to scale. To succeed, she stressed the need to start developing automated systems and specialised vessels, as these are essential to reduce costs and make offshore multi-use viable in the next 10–15 years.

Marjoleine Nascimento da Silva-Karper, Senior Advisor for Blue Economy at the [Netherlands Enterprise Agency \(RVO\)](#), introduced the concept of the MariPark. Developed through the [eMSP NBSR](#) project and now being further refined under the [Northern European Sea Basins \(NESBp\)](#) project, MariPark is an ecosystem-based model for developing offshore areas to accommodate several business activities in a way that reduces environmental pressure and economic risks. The model promotes shared infrastructure, making it more cost-effective and less risky for private companies to operate offshore. It also proposes a more efficient, centralised permitting and licensing system to simplify currently lengthy processes. At its core, MariPark embraces an ecosystem-based approach, using ecological criteria for site selection and integrating digital twins and remote monitoring to assess cumulative impacts. To explore what MariPark could look like in practice, NESBp will develop several scenarios to identify how different governance structures, infrastructure options and synergies between uses could be successfully implemented in the North Sea and beyond.

During the panel discussion moderated by **Magdalena Matczak**, Head of Spatial Policy Unit at [Maritime Institute in Gdańsk](#), and **Jacek Zaucha**, Professor of Economics at the [University of Gdańsk](#), practitioners from Poland reflected on the presentations and the issues related to multi-use of offshore space in the South Baltic. **Anna Barcikowska**, Managing Director at [BaltiConnect](#), reflected on early offshore wind projects in Poland that failed due to regulatory gaps and community opposition. She highlighted the importance of aligning investor readiness with community buy-in. She noted that while Poland has gained momentum, past experiences show the risks of moving too early without legal and social preparedness. **Michał Tomczyk**, Senior Specialist at [Maritime Office in Gdynia](#), noted that while aquaculture is legally permitted as a secondary use, most offshore wind developers are still cautious. Investors often prefer to limit third-party access to their wind farm zones due to liability and operational concerns. **Tomasz Laskowicz**, PhD Student at the University of Gdańsk, highlighted the need to revise spatial planning frameworks to

enable innovative forms of aquaculture and secondary uses. He pointed out promising investor interest in multi-use beyond aquaculture, such as hydrogen production.

A key recommendation was to expand the number of publicly funded pilot projects to demonstrate feasibility, especially in areas where private investors remain risk-averse. These pilots help build the evidence base needed to convince regulators, insurers, and wind operators of the benefits of multi-use solutions. The use of shared infrastructure, from vessels and underwater monitoring to digital twins and logistics, was highlighted as essential for reducing costs and de-risking operations. Participants also discussed the role of non-price criteria in public auctions, such as requiring sustainability or local benefits in addition to the lowest price, which could drive innovation in multi-use solutions. Finally, panellists called for regionally tailored strategies, recognising that what works in the North Sea may not be optimal in the Baltic. Cross-border planning and stakeholder dialogue will be vital for future progress.