

Workshop Report – Session: Upscaling Ocean Multi-Uses through Co-management and operational alignment in LTA and OWE

Date: Wednesday, 27 November 2024

Theme: Offshore Wind & Multi-Use

Part 1 – Welcome

Jan Peter Oelen (CoP Nordzee) & Laura Willemsens (RVO) - Community of Practice (COP) Framework

The concept of COPs was introduced as a platform to address complex marine issues that no single sector or organization can resolve independently. COPs provide a space for stakeholders with shared interests to:

- Exchange best practices and experiences.
- Foster synergies and co-create solutions.
- Share ownership and make collective decisions.

Key characteristics of COPs include regular meetings, thematic subgroups, and a focus on cross-sectoral collaboration. The eMSP project successfully established **six COPs**, including one for leaders of regional COPs. Findings from the project highlighted the importance of allowing COPs to set their own agendas while providing external support through resources, mandates, and strategic planning.

A specific example, the **Dutch COP Noordzee**, focuses on balancing nature, energy, and food production in the North Sea. Since 2018, membership has grown significantly, demonstrating the success of networking, knowledge-sharing events, and strategic workshops. Effective communication, including online platforms, social media, and podcasts, remains essential to COP longevity.

Nancy Nevejan (Shells and Valves) - Aquaculture in Offshore Wind Farms

The potential for integrating aquaculture within offshore wind farms was explored, particularly in Belgian waters. While aquaculture can align with regenerative and nature-inclusive goals, challenges include:

- **Tendering processes:** Aquaculture integration depends on whether it is included in OWP tenders, as operators typically prioritize cost-efficiency.
- **Insurance barriers:** The lack of data for risk assessments hinders financial support for aquaculture projects.
- **Feasibility:** Feasible approaches within existing OWPs include bottom cultures, mussel harvesting, and sea ranching, whereas other approaches, such as floating cages require co-design with tender procedures.

The session called for European-level tender rules, financial support for nature restoration, and research into technologies such as AI and modular vessels to improve aquaculture integration.

Elisabete Pinto da Silva (Parkwind) - Synergy Effects in Offshore Wind Parks

Parkwind, a major OWP developer, presented examples of synergy effects between wind farms and other marine activities:

- **Positive outcomes:**
 - Oyster restoration and seaweed growth.
 - Energy from offshore substations used for vessels and monitoring.
 - Shared data and vessels for multiple operations.
- **Challenges:**
 - Safety and asset integrity concerns.
 - High costs and logistical constraints of offshore operations.

The speaker emphasized the need for co-management and cross-sectoral synergies to optimize resource use and address overlapping interests effectively.

Panel Discussion

The panel explored the integration of aquaculture within OWPs on a European scale, emphasizing the need for unified policies that align nature restoration, food production, and energy goals. Participants highlighted discrepancies in tender rules, noting that the Netherlands includes nature enhancement in its procedures, while Belgium does not, creating inconsistent progress. They advocated for EU-wide tender rules to standardize approaches and incorporate food production into OWP development, addressing Europe's declining aquaculture production and broader food security goals.

Challenges discussed included ensuring food safety, with findings from the Edulis project showing no significant pollutant risks in mussels harvested near OWPs, and technical considerations like turbine coatings to enable mussel harvesting. Participants also noted that while aquaculture may not always be profitable as a standalone activity, its benefits—such as spillover effects on fisheries and ecosystem health—justify integration. The panel called for stronger collaboration between sectors, more research on technical feasibility, and unified European policies to fully unlock aquaculture's potential in OWPs while advancing sustainability and food security.

Part 2 – Breakout Session

The breakout session focused on addressing the complexities and opportunities of multi-use integration in OWPs, with particular attention to co-creation, collaboration, and the role of Communities of Practice. Discussions revealed key challenges, highlighted the importance of synergies, and explored actionable solutions.

Key Themes and Issues

1) Co-Creation and Collaboration

- Effective **co-creation** and **collaboration** are essential for integrating Low Trophic Aquaculture (LTA) and nature-inclusive designs into OWPs.
- **Communities of Practice:**
 - COPs foster shared learning and relationships, offering more than just tangible outputs.
 - Collaboration requires a bottom-up approach that respects local knowledge while aligning with broader socio-economic and policy planning.

2) Barriers to Integration

- **Regulatory Variations:** Regulations differ significantly between countries, complicating MU implementation.
- **Profitability and Investment:**
 - LTA's profitability remains uncertain; tender procedures may not incentivize investment without broader company commitments.
 - A shift away from profit optimization alone is needed to focus on societal and ecological benefits.
- **Insurance Challenges:**
 - Lack of data for risk assessment limits insurance availability.
 - Centralized data collection and open databases are crucial to support financial evaluations and de-risk investment.

3) Synergies and Conflicts

- **Synergies:**
 - Shared resources like vessels can optimize MU operations.
 - Nature-inclusive designs can enhance ecosystem services, benefiting fisheries and biodiversity.
- **Conflicts:**
 - Mismatched schedules between OWPs and LTA create operational inefficiencies.
 - Insurance and food safety concerns, such as potential leaching effects, must be addressed.

Opportunities and Solutions

- **Data and Monitoring:**
 - Establish centralized databases to quantify ecosystem services and assess impacts.
 - Standardize monitoring systems and certification processes to ensure food safety and compliance.
- **Technology and Innovation:**
 - Develop modular vessels, integrate technologies, and continue gathering data to enhance scalability.
- **Nature-Inclusive Design:**
 - Include nature restoration in tender requirements to create a top-down effect.
 - Quantify and communicate the non-economic value of these designs to policymakers and the public.

Conclusions and Action Points

- **Enhancing Co-Management:** Cooperation and shared responsibilities between stakeholders are essential for addressing space constraints and ensuring MU viability.
- **Policy and Coordination:** Advocate for EU-wide frameworks and COPs to harmonize efforts across countries, possibly led by DG Mare and DG Energy.
- **Focus on Synergies:** Prioritize integrated approaches that maximize shared resources while minimizing conflicts.
- **Upscaling Efforts:** Beyond financial support, human capital and knowledge-sharing through regional and global COPs are vital for sustainable growth.