

Workshop Report: Climate-smart MSP for Future Uses/Needs of the Seas

Date: 27 March 2025

Organised by: European Commission DG MARE and the MSP Assistance Mechanism

1. Opening Remarks

The workshop began with welcoming statements from **DG MARE** and **Patrycja Enet**, the North Sea basin Geographical Expert of the MSP Assistance Mechanism and author of the study [*Future uses/needs of the seas: Integration of climate-smart trends and new technologies in maritime spatial planning*](#). Patrycja set the scene by highlighting the increasing urgency of addressing climate change impacts through maritime spatial planning. She stressed the need to adapt MSP to evolving uses and pressures in marine spaces, with particular emphasis on offshore renewable energy, nature-based solutions, and cumulative climate impacts. The goal was to explore how planning can become more climate-resilient and forward-looking.

2. Introduction to Climate-smart MSP: Recent Developments

**This session included PowerPoint presentations, which are published on the European MSP Platform [here](#).*

This session set the foundation for the workshop by providing insights into current efforts to incorporate climate-smart thinking into MSP at an international, regional, and national level. Speakers outlined key frameworks, challenges, and emerging practices for addressing climate-related uncertainty and adaptation needs in Maritime Spatial Planning (MSP).

- **Catarina Fonseca (MSPglobal, IOC-UNESCO)** introduced global-level efforts to integrate climate considerations into MSP. She emphasised the need to work across scales and promote capacity-building in climate data integration. She highlighted examples of transboundary MSP applications where climate risk assessments are built into long-term planning. Her presentation outlined the development of guidelines for the integration of climate action into MSP, also promoting a climate-smart approach that supports mitigation, adaptation, and long-term ocean sustainability. The speaker also provided practical recommendations for each phase of MSP from planning to implementation and monitoring, emphasising ecosystem-based and inclusive governance, integration of climate data, and adaptive management. Key challenges include fragmented governance and limited resources. The overall aim is to ensure MSP contributes effectively to climate resilience and sustainable marine development.
- **Kira Gee (BSH/ICES)**, co-chair of the ICES Working Group on Marine Planning and Coastal Zone Management (WGMPCZM), presented the group's work on climate-smart MSP, representing the German Federal Maritime and Hydrographic Agency and Helmholtz Zentrum Hereon. She outlined the group's cross-border, interdisciplinary composition and

emphasised its priority on implementing climate-smart MSP, highlighting key challenges such as balancing adaptation and mitigation, aligning policy and user timeframes, ensuring planning flexibility, and translating strategies into action. The speaker reiterated MSP's role in climate action through space allocation, protection of natural capital, and support for ecosystem services, citing examples like offshore renewable energy, optimised shipping routes, and climate adaptation measures. She stressed the need for policy integration, especially at the land-sea interface, better access to data, and stronger science-policy collaboration. Decision-support tools like the UK's MSPACE were recommended to aid planners. She concluded by calling for early integration of climate evidence in MSP, balanced sectoral-climate objectives, and recognition of MSP's legal and political limits in ensuring a just transition.

- **Lotta Ruokanen (HELCOM-VASAB)** presented the organisation's evolving work on MSP in the Baltic Sea, with a strong focus on climate change mitigation, adaptation, and resilience. She outlined HELCOM's role in addressing the triple planetary crisis—climate change, pollution, and biodiversity loss—within the Baltic Sea Action Plan (BSAP), which guides regional efforts through structured objectives and action segments. The speaker highlighted the joint HELCOM-VASAB MSP Working Group's function as a key platform for cross-border coordination and implementation of an ecosystem-based MSP approach. The revised MSP Roadmap 2021–2030 emphasises transitioning from plan drafting to implementation and monitoring, with specific actions supporting climate goals. She emphasised ongoing collaboration with scientific bodies like EN CLIME and projects such as MSP-GREEN and MSP4BIO, aiming to improve climate-smart planning by integrating climate data, developing future scenarios, and exploring the role of MSP in adaptive conservation. Tools like BASEMAPS support data access and coherence across the region. The speaker concluded by underlining HELCOM's efforts to align MSP with EU and global climate ambitions while enhancing regional governance and scientific-policy integration.

3. Panel Session: Integrating Climate Action into MSP – Experiences and Best Practices

**This session included PowerPoint presentations, which are published on the European MSP Platform and can be read [here](#).*

This session brought together diverse public authorities, research, and industry perspectives to examine practical approaches to integrate climate adaptation and mitigation into MSP. Speakers reflected on lessons learned, institutional challenges, and opportunities for innovation.

- **Mari Pohja-Mykrä (Ministry of the Environment, Finland)** presented the country's approach to climate-smart MSP, grounded in 11 thematic areas including energy, marine nature, tourism, and the extractive sector. She outlined three main goals of Finland's MSP: promoting a sustainable blue economy, safeguarding marine natural resources, and

ensuring the good environmental status of marine waters. The planning process is structured across three regions with responsibilities shared among eight regional councils and the national ministry. Pohja-Mykrä emphasised four overarching priorities guiding the current planning cycle—alignment with the European Green Deal, climate-informed MSP, marine multi-use, and security. She stressed that climate-informed MSP in Finland addresses both mitigation and adaptation while integrating biodiversity protection, sustainable marine food systems, circular economy principles, and zero pollution objectives. Highlighting the ecosystem-based approach, she noted that cumulative impacts and ecological carrying capacity are key considerations. Scenario planning, developed in MSP 1.0 (2017–2021) and expanded in MSP 2.0 (2022–2027), supports long-term adaptability in the face of climate risks. She also acknowledged ongoing challenges such as limited data and resource demands, underscoring the need for future-oriented planning and active stakeholder engagement.

- **Michelle Borg (Planning Authority, Malta)** presented Malta’s approach to climate-smart MSP, shaped by its insular geography, high sea-to-land ratio, dense population, and reliance on tourism. She contextualised Malta’s planning within environmental pressures such as reduced precipitation, storm intensification, and rising sea levels. The speaker introduced the Strategic Plan for Environment and Development (SPED), Malta’s overarching spatial strategy that integrates MSP and pursues a low-carbon, zero-waste green economy while safeguarding biodiversity and water resources. She highlighted SPED’s dual climate strategy encompassing both mitigation and adaptation, with a strong focus on coastal resilience. Malta’s Marine Strategic Objectives were outlined, covering baseline conditions, environmental goals, and designated maritime uses. Drawing from implementation experience, the speaker stressed the importance of strategic clarity, strong governance, sustained investment, and inter-agency cooperation to reduce conflicts and ensure continuity. She acknowledged ongoing challenges in balancing long-term planning with immediate needs, addressing spatial constraints for infrastructure, and managing cumulative environmental impacts. The speaker concluded by underscoring the need to align economic decisions with technological solutions and a deeper collective understanding of the sea’s role in sustaining livelihoods.
- **Andrea Morf (Institute for Marine Environment, Sweden)** presented the role of multi-level governance in enabling climate-smart MSP, using Sweden as a key example. She argued that effective MSP must integrate climate mitigation and adaptation through coordinated governance across national, regional, and local levels. Drawing on European case studies and policy briefs, she highlighted that offshore wind and coastal defence are widely addressed, but challenges remain in spatial planning knowledge, incorporating social values, and ensuring political prioritisation of climate goals. In Sweden, overlapping planning responsibilities complicate integration, with inconsistencies in how climate change is weighted across planning levels. The speaker emphasised that MSP alone cannot

deliver climate goals without linking to broader policy and permitting systems. She called for adaptive, ecosystem-based planning, stronger institutional coordination, and systems that can respond to fixed, non-mobile sea uses, all while navigating political shifts and contested knowledge.

- **Mattia Cecchinato (Wind Europe)** provided an industry perspective, presenting the critical role of MSP in supporting the rapid expansion of offshore wind energy across Europe. He highlighted that offshore wind capacity currently stands at over 36 GW across 13 countries, with expectations to reach 90 GW by 2030. This steep growth requires effective, early site allocation through MSP, which ensures visibility and de-risking of projects via inter-ministerial coordination and stakeholder engagement. The speaker stressed that climate-smart MSP must integrate large-scale offshore wind in suitable areas, given wind energy's central role in climate mitigation due to its efficiency, low emissions, and spatial economy. He underscored the importance of Strategic Environmental Assessments (SEA) in anticipating and mitigating cumulative and sectoral impacts, while fostering nature-inclusive design. He further elaborated on the evolving relationship between offshore wind and fisheries, proposing MSP as a platform to balance coexistence and support a transition to sustainable fishing. Looking forward, the speaker emphasised technological innovations such as multi-use platforms (e.g., combining offshore wind with aquaculture or seaweed cultivation), floating wind farms, hybrid grids, and offshore hydrogen production. These developments, he argued, must be proactively integrated into MSP to maximise spatial efficiency and long-term sustainability.
- **Emiliano Ramieri (CNR - ISMAR - Istituto di Scienze Marine del CNR)** presented the country's progress towards climate-smart MSP, focusing on three legally binding, strategic, and coherent MSPs adopted in September 2024. These plans apply a multi-scalar approach across 3 areas, 27 subareas, and 326 planning units, each with defined priority uses. He discussed the MSP-GREEN project, which aims to align MSP with the European Green Deal by analysing existing practices, designing new ones, and co-developing recommendations across Green Deal topics. The speaker stressed that adaptation and mitigation must be integrated into climate-smart MSP and that ecosystem-based planning is essential. Although some climate risks like erosion and flooding are addressed, he noted that adaptation is often treated in a fragmented way and is not yet a core priority. He outlined key adaptation themes in Italy's plans, such as integrated coastal zone management (ICZM), environmental protection, restoration, and blue carbon strategies. Specific actions include updating instruments for coastal protection, designating sustainable sand extraction zones, strengthening marine protected area networks, and restoring marine habitats. The speaker concluded that climate-smart MSP must be an iterative, evidence-based process, firmly tied to advancing the European Green Deal.

4. Discussion and Q&A

Although the Q&A session was brief due to time constraints, it offered a meaningful reflection on the strategic and operational challenges of implementing climate-smart MSP. Moderator Patrycja Enet invited panellists to respond to a final, thought-provoking question:

"How can we transform ambition into concrete action to accelerate climate-smart MSP and elevate the ocean-climate nexus in implementation?"

Several panellists shared concise but impactful responses that collectively emphasised the importance of communication, integration, political continuity, and science-policy coherence.

- **Catarina Fonseca (MSPglobal, IOC-UNESCO)** stressed that achieving real change requires significant efforts in awareness, communication, and education. She underlined the importance of embedding the ocean-climate nexus into public discourse and policy systems, recognising that while the benefits may not be immediate, they are essential for long-term transformation.
- **Emiliano Ramieri (CNR - ISMAR - Istituto di Scienze Marine del CNR)** highlighted a critical gap between data and practice. While climate data is abundant, its usability by planners remains limited. He called for actionable, practitioner-friendly knowledge tools and argued that MSP should also push for the integration of marine concerns in national climate adaptation plans, noting that terrestrial systems often dominate such discussions.
- **Andrea Morf (Institute for Marine Environment, Sweden)** reflected on multi-level governance and political continuity. He emphasised the importance of including both majority and minority political actors in planning processes to ensure long-term stability and cross-border cooperation, referencing initiatives like the Greater North Sea Basin Initiative.
- **Kira Gee (BSH/ICES)** addressed the balance between national and regional approaches, suggesting that a “both-and” strategy is essential. She emphasised the need to understand and communicate the sectoral and community-level impacts of MSP decisions to ensure broader societal engagement in climate adaptation.
- **Lotta Ruokanen (HELCOM-VASAB)** echoed previous points, supporting a regional perspective that complements national initiatives. She emphasised the value of coordinated action across sea basins and the importance of maintaining dialogue between different governance levels and sectors.

The session ended with a commitment to continue the dialogue through the European MSP Platform and the European Blue Forum, recognising that sustained collaboration is key to effective implementation.

5. Closing Remarks

The event concluded with remarks from DG MARE, who thanked all participants and reaffirmed the EU's commitment to embedding climate action across marine policies. The European Commission encouraged the EU Member States and stakeholders to continue collaborating through knowledge exchange, capacity building, and practical implementation to ensure that MSP contributes effectively to climate adaptation and long-term resilience of European seas.