BLUE MISSION BANOS

Supporting the Mission Ocean Lighthouse in the Baltic and North Sea Basins



Programme



2nd MISSION ARENA 25-26 April 2024 Riga, Latvia

REGIONAL FOCUS ARENA 2

ESTONIA
LATVIA
LITHUANIA
FINLAND I SOUTH
SWEDEN I SOUTH-EAST



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THURSDAY, APRIL 25, 2024:

Time	Location	Title	Topic
9:00-10:45	Hall 1	Opening of the 2nd Mission Arena: Status Quo - Actions Suggested - Actors Involved	Mission Ocean & Waters
11:00-12:45	Hall 1	Marine Protection in the Eastern Baltic: What is the status quo? Good practices, ongoing challenges, and possible solutions	MPAs & Ocean Policies
11:00-12:45	Hall 2	Sustainable Products from the Ocean: Companies/Product samples from the region	Business Support
11:00-12:45	Hall 3	Solutions for circulation of nutrients : Sea and Land. Reducing nutrients in the Baltic Sea and inlands waters?	Resource Circulation
13:00-13:45		Lunch Break	
14:00-15:45	Hall 1	Low-Trophic Cultivation: How much can it contribute to freshwater and ocean regeneration?	Ocean Regeneration
14:00-15:45	Hall 2	New jobs in coastal communities: What are the new services and skills required in light of a changing blue economy? Is the educational landscape appropriate to cater for these new needs?	Business Support
14:00-15:45	Hall 3	Baltic Island and Coastal Communities and Economies: What are their specifities? How to foster sustainability through innovative solutions?	Mission Ocean & Waters
16:00-17:45	Hall 1	Viable business models for a sustainable blue economy: How can we improve interaction between research, public sector and the business community?	Business Support
16:00-17:45	Hall 2	Innovative Strategies for Restoring Lakes and Rivers: Aligning with EU Mission "Restore Our Ocean and Waters"	Mission Ocean & Waters
16:00-17:45	Hall 3	Concrete actions towards a more sustainable fisheries management in the Baltic Sea	Sustainable Fishery
17:45-20:00		Reception	



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FRIDAY, APRIL 26, 2024:

Time	Location	Title	Topic
09:00-10:45	Hall 1	Policy coherence as a platform for better integration of marine conservation in MSP and sectoral policies: Regional pilots and examples	MPAs & Ocean Policies
09:00-10:45	Hall 2	Nurturing the regional innovation ecosystem: What is on offer for companies? What are easy ways to improve existing support measures and increase their uptake?	Business Support
09:00-10:45	Hall 3	Green Shipping Corridors of the Baltic Sea: Navigating Towards Carbon-Neutral Shipping in the Baltic Sea 2030	Green Shipping
11:00-12:45	Hall 1	Towards the coherent planning and management of nature-based solutions for the effective protection and restoration of Baltic Sea ecosystems	MPAs & Ocean Policies
11:00-12:45	Hall 2	Financing instruments supporting the voyage towards carbon neutral shipping	Green Shipping
11:00-12:45	Hall 3	What do marinas and leisure boating bring to the region? Sustainable tourism and blue economy in the Baltic sea area	Resource Circulation
11:00-12:45	TBC	Navigating Security Challenges: The Future of marine infrastructure in European Seas (Please note: This roundtable is by invitation only)	Security
13:00-13:30		Lunch Break	
13:30-15:00	Hall 1	2nd Mission Arena Assembly Vote on the Arena 2 Region Mission Roadmap	Mission Ocean & Waters





Projects in the Arena 2 region



The analysis provides an overview of projects that align with the objectives of the EU Mission "Restore our Ocean and Waters by 2030" (the Mission Ocean) and have been implemented across countries of the 2nd Mission Arena. The analysis by country includes projects implemented in Estonia, Finland, Latvia and Lithuania but does not include projects implemented in Sweden, since the similar analysis for the 1st Mission Arena already includes projects from all regions of Sweden. The analysis by country provides information on projects across each country, without a focus on specific region (e.g. the South of Finland).

The analysis includes **179 projects** with starting dates between January 2007 and November 2023. The information on projects was sourced from the EC Portfolio Analysis of the Mission Ocean, the Mission Charter Actions, and stakeholder websites. The present overview of projects is not exhaustive. Please visit BlueMissionBANOS or SUBMARINER stands during the events of the 2nd Mission Arena to have your project or you as individual registered for:



the Mission Charter, an opportunity to showcase your engagement in the Mission Ocean;



WaveLinks, an interactive dashboard mapping projects relevant for the Mission Ocean;



BlueBioMatch, a match-making platform for all engaged in blue bioeconomy activities.

MISSION CHARTER ACTIONS

The Mission Charter Actions include policies, programmes, projects and initiatives that contribute to the Mission Ocean. It lists 66 actions taking place in Estonia, Finland, Latvia and Lithuania (Fig.1). Overall budget allocated for these actions is approximated to 402 million euros (Fig.2). The analysed projects include 35 projects listed under 66 actions in the BANOS region.

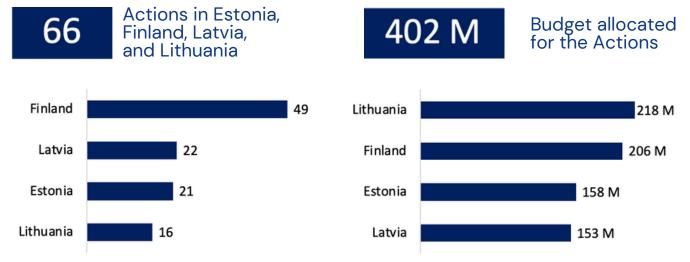


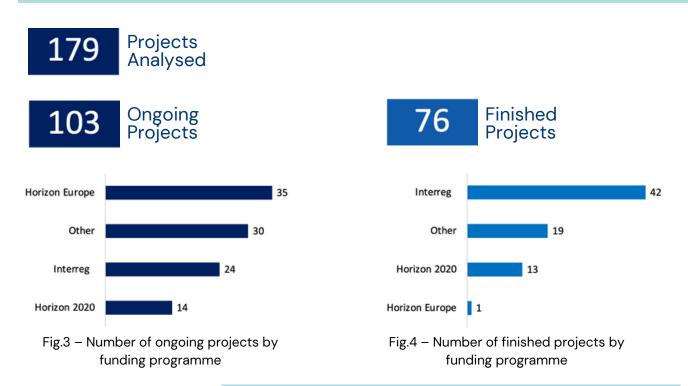
Fig.1 – Number of actions by country

Fig.2 - Budget of actions by country



PROJECTS

The analysed projects have been supported by the EU funding programmes, such as Horizon 2020, Horizon Europe and Interreg, as well as other funding programmes provided by various institutions in the BANOS regions (Fig.3, Fig.4).



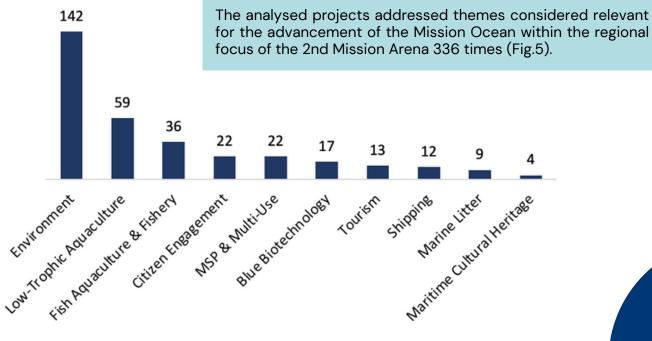


Fig.5 - Number of ongoing projects by theme



BUDGETS

The budget of the analysed projects is approximated to 1 billion euros (Fig.6, Fig.7). Some funding programmes, especially many national and regional programmes, are not reflected in the analysis, meaning that the real budget is even higher than reflected here.

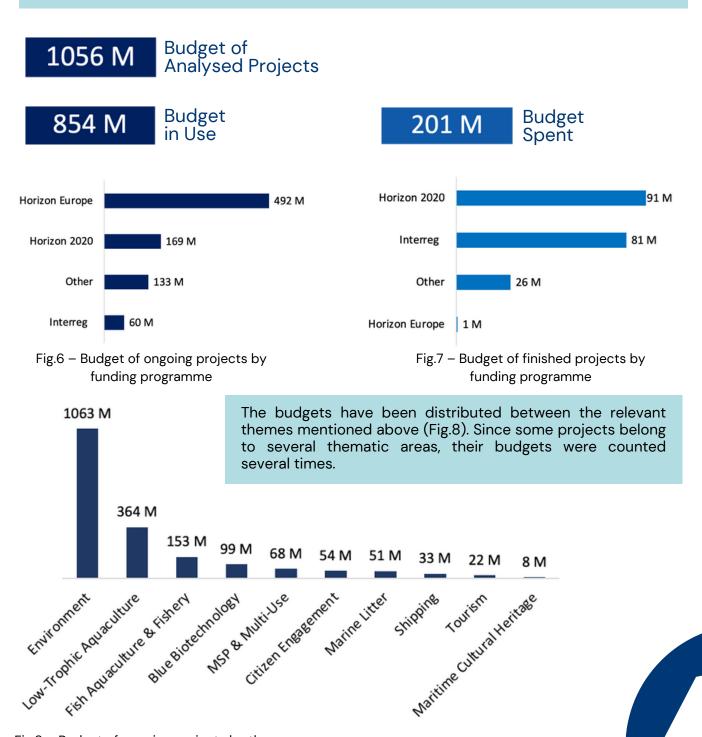


Fig.8 - Budget of ongoing projects by theme

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ACTORS

Actors from Estonia, Finland, Latvia, Lithuania

The analysed projects involved 273 actors from Estonia, Finland, Latvia, and Lithuania (Fig.9). The actors represent various sectors and include public authorities, municipalities, research institutions, universities, small and medium-sized enterprises, and NGOs. The top 10 actors participating in the analysed projects are shown in Figure 10.

112 actors from Finland participate in **120 projects**

63 actors from Estonia participate in **88 projects**

65 actors from Lithuania participate in **51 projects**

33 actors from Estonia participate in **68 projects**

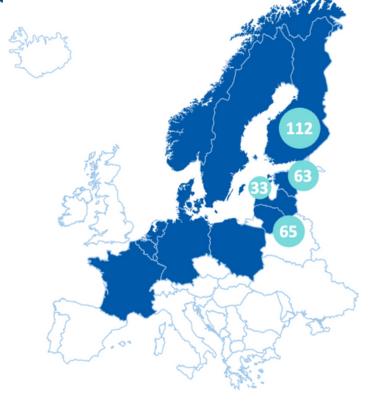


Fig.9 – Amount of actors by country

Finnish Environment Institute (SYKE)	46
University of Tartu (UT)	40
Latvian Institute of Aquatic Ecology (LHEI)	22
Klaipeda University	18
Baltic Marine Environment Protection Commission (HELCOM)	18
Tallinn University of Technology (TalTech)	14
Natural Resources Institute of Finland (LUKE)	13
University of Helsinki	13
Åbo Akademi University	10
Metsähallitus	10

Fig.10 - Top 10 actors by amount of projects





Shipping/Ports

The Baltic Sea is one of the most heavily trafficked maritime areas in the world, and for many years, shipping has steadily been increasing. These waterborne transports put combined pressure on the ecosystem in the sensitive Baltic Sea. At the same time, the transition to more sustainable waterborne transport with new and innovative products, services, methods, and practices is creating prosperous opportunities for blue growth in the Baltic Sea region (BSR).

- 1) Take a holistic approach. Give preference to solutions that leverage and reduce both greenhouse gas and pollutant emissions, aligning with broader sustainability goals and wider transition aims related to climate, air quality, biodiversity, and ecosystems while also providing good jobs and promoting local and regional development.
- 2) **Green Shipping Corridors** should be applied within the EU to accelerate the shipping transformation and improve the effect of decided regulation.
- 3) Provide incentives for new **collaborative approaches between stakeholders**, beyond today's market forces to establish green shipping corridors.
- 4) The common EU incentives, such as supportive policies, funding opportunities, regulatory frameworks, and policy instruments should be used more effectively in the region to introduce and upscale new solutions.
- 5) Improve monitoring and develop **Key Performance Indicators** to assess progress towards achieving sustainable, carbon-neutral waterborne transport.
- 6) Support research to address emerging challenges.





Sustainable Fishery

Baltic Sea fish stocks are at alarming low levels with huge negative impacts on the delicate ecosystem. In the case of herring, only one of seven commercially exploited stocks is in good shape. Fishery management is complex, with fishing quotas being decided at the EU level, but each country also plays its part in fisheries management, plagued by short-sightedness and steered by political and economic interests. To avoid a scenario like the one in the North Sea, where we saw the herring population completely collapse, we propose the following action points:

- 1) Fisheries management should be based on science, built on solid data from regional and transnational cooperation, rather than political and economic interests.
- 2) Present the science in a clear way that cannot be distorted to fit individual countries' fisheries policies and the economic interests tied to these policies.
- 3) Focus more on small-scale and local coastal fisheries, limiting multinational large-scale industrial fishing in the Baltic Sea. Here it is important to include sub-regional, but transnational incentives for local FLAGs, SME's and authorities to look beyond traditional fisheries to include new species and fishing methods.
- 4) Fishing should focus more on human consumption and less on supplying industrial fishmeal producers. Not only does vast quantities of fish currently caught in the Baltic Sea supply fish meal factories, but coastal fisheries also cannot supply the large quantities of fish needed at the current low price for it to be commercially viable to fish sustainably.
- **5) Promote economic opportunities for coastal fisheries** to fish invasive species such as Round Goby. Specifically, we should provide funding for fisheries to invest in adapted fishing fleets and gear and to test more sustainable fishing methods.
- 6) **Promote new fish products** as an alternative to traditional fish species such as cod and herring. There are fish that can be sustainably fished and processed in the Baltic Sea, but we need to develop new products that fit consumer preferences and simultaneously raise consumers awareness.





Freshwater and ocean regeneration

The continuing problem of eutrophication is one of the most serious and difficult environmental challenges facing the Baltic Sea. Excessive nutrient loads through agricultural run-off, inadequately treated sewage, airborne emissions, and internal fluxes are the main causes of eutrophication. According to the latest HELCOM assessment, total normalised nitrogen and phosphorus inputs to the Baltic Sea have decreased by 12% and 25% respectively between the reference periods (1997-2003) and 2015. However, further and continued action is needed not only to reduce runoffs from land but also to implement innovative actions to deal with the internal nutrient load.

- 1) Dominate the narrative: After all, what alternatives are there for nature-based solutions? Is 'doing' nothing an alternative?
- 2) Devolve management of freshwater, coastal & marine water bodies to include more stakeholders (co-management) and provide entry-level training opportunities.
- Raise awareness and educate municipalities, nature conservation institutions and other stakeholders on regenerative business opportunities.
- Collaborate with relevant stakeholders to ensure alignment with community needs and environmental objectives.
- Mobilise citizens by lowering barriers to participation (community-led projects, entry-level marine stewardship training & jobs).
 Work through participatory democracy & citizens' assemblies rather than formal
- public consultations.
- 3) Create an enabling environment for commercialisation:
- Review requirements for the testing of raw materials (e.g. mussel meat) for food and feed. Establish more local labs and review the requirements for periodicity and treatment of samples.
- Allocate more testbeds for experimentation, method and product development, synergies, and side streams. Sharing facilities, efficiently utilising investments, and knowledge transfer are key.
- 4) Improve Harvesting Practices: Develop and implement standardised procedures for cost-efficient harvesting and collection, improve the economic viability of technologies, address logistical challenges, and optimise resource utilisation.
- 5) Establish Monitoring Protocols: Implement monitoring systems to evaluate nutrient removal effectiveness and ecosystem impact, informing adaptive management strategies.
- 6) Advocate for Supportive Policies: Lobby for policy measures that incentivise and support regeneration initiatives, i.e. include environmental benefits in impact assessments and the potential of mussel cultivation as a conservation measure to create incentives for low-trophic aquaculture.
- 7) Streamline Permitting Practices: Engage with regulatory authorities to simplify permitting procedures, facilitating approvals for harvesting and utilisation activities.
- 8) Reduce nutrient loading risk: To reduce nutrient loading in inland aquatic ecosystems from point and diffuse sources, implement the polluter pays principle by offering polluters the choice of either paying fines for the nutrients released by their activities OR harvesting a certain amount of excess macroalgal biomass.





Marine Protection, Planning, Policy

As of Dec 2022 the Baltic Marine Protected Areas (MPA) Network covers approximately 16.5% of the Baltic Sea. Hence a lot of work is still needed in the next couple of years to achieve effectively implemented and managed MPAs to reach the new European targets of protecting 30% of our seas and 10% of strictly protected areas by 2030. One of the important steps to be taken to reach this goal is to improve the alignment between Maritime Spatial Planning and MPA management but also other EU Green Deal and sectoral policies. Several barriers, including sector-specific legislative gaps that inadequately define biodiversity protection and an incomplete understanding of the pressures faced by biodiversity prevent the effective mainstreaming of biodiversity in the Baltic Sea region. Resource limitations and a lack of knowledge and comprehensive data may block effective policy formulation and execution. However, regional cooperation, the implementation of BSAP actions, and the application of the outcomes of strategic regional projects are critical to mainstreaming biodiversity into policies. The poor coordination between actions at local and regional scales and between land and marine realms also jeopardises the successful implementation of protection and restoration actions. Conceptual and operational frameworks developed around the Nature-based Solutions (NbS) concept can provide a fresh perspective on the way in which we address biodiversity conservation in the Baltic Sea and help to effectively achieve the ambitious targets set for the end of the decade.

- 1) Include all stakeholders in MPA processes, in particular from currently underrepresented sectors such as industry/business (e.g. extractive sector), local communities and fisheries.
- 2) Provide more **funding for stakeholder involvement** in MPA establishment and management.
- 3) Empower the local communities through **co-management schemes** on the establishment, management, and monitoring of MPAs.
- 4) Coordinate the design of local and regional conservation and restoration actions to guarantee their successful implementation.
- 5) Ensure sustainable funding for better integration of MSP/EU Green Deal/MPAs/sectoral policies and **better cross-sectoral cooperation** (i.e. MSP authorities to be involved in MPA designation process; better integration of CFP requirements in MSP and marine conservation).
- 6) Ensure translation of broad conservation goals (global/EU) into local (region/country) conservation goals.
- 7) Ensure harmonisation of data portals and knowledge in the various policy processes.
- 8) Integrate policy and research efforts across land and marine realms to effectively tackle pervasive environmental issues in the Baltic Sea.





Business support

The Arena 2 region faces several challenges in the blue economy, including regulatory complexities, inadequate infrastructure, inefficient processing technology, a shortage of skilled labour and limited access to funding. This leads to overregulation, low profitability, and ultimately, environmental degradation, which hinder the development of aquaculture, fisheries, and the renewable energy sectors. Furthermore, there is a lack of consumer awareness about blue products. There is a clear need for coordinated efforts to address these issues and unlock the region's blue development potential.

- 1) **Establish a unified regulatory framework**: Streamline permitting processes, harmonise standards across sectors, and promote cooperation between agriculture, forestry, and blue economy authorities.
- 2) **Invest in infrastructure**: Upgrade port facilities, enhance power transmission capacity, and develop storage solutions to support the growth of renewable energy, shipping and other blue industries.
- 3) **Foster innovation and research**: Allocate funding for technology development, research on low-trophic aquaculture, side-stream valorisation, and incentivise collaboration between academia, industry, and government.
- 4) Enhance education and training: Develop maritime education curricula, improve working conditions in traditional maritime industries, and offer competitive salaries to attract and retain skilled labour in rural areas while creating poles of excellence for highly educated blue professionals and promoting entrepreneurial skills development amongst young graduates.
- 5) **Promote stakeholder collaboration**: Facilitate communication and cooperation among industry, scientific communities, and government agencies to address misinformation, enhance market uptake, and foster sustainable practices.
- 6) Increase consumer awareness: Launch comprehensive marketing campaigns to educate consumers about blue foods' nutritional and environmental benefits, highlight specific aspects of local species and sustainable production methods (aquaculture, local fisheries), stress the safety of Baltic Sea food products (in regards to cyanobacteria, toxicity, dioxins).
- 7) **Support small and medium-sized enterprises (SMEs)**: Provide financial assistance, mentorship programmes, and market access to help startups and SMEs overcome barriers to growth and innovation.
- 8) **Strengthen regional cooperation**: Establish cross-border partnerships and knowledge-sharing platforms (e.g., BlueBioMatch) to address common challenges, promote best practices, and drive sustainable development in the Baltic macroregion.





Coastal Communities, Islands and Tourism

The Baltic Sea, with its over 1,000 marinas, picturesque islands, and rich cultural heritage, holds immense untapped potential as a tourist destination. However, the region faces pressing challenges, including water scarcity, environmental degradation, and climate change impacts. These issues threaten both coastal communities and island ecosystems, necessitating a coordinated and sustainable approach to tourism development.

- 1) Enhance Marinas' Role in Community Development: Recognise marinas as vital contributors to local economies and community vitality. Collaborate with local stakeholders to tailor strategies addressing marinas' unique needs, fostering job creation and sustainable growth.
- 2) Strengthen Data Collection and Analysis: Support comprehensive studies to understand marinas' economic, social, and environmental impacts. Use this data to inform policy decisions and prioritise funding for sustainable tourism initiatives.
- 3) Develop Marinas as Business Hubs and Promote Sustainable Boating Practices: Utilise marinas as hubs for economic activity, attracting SMEs and providing opportunities for youth engagement in maritime professions and recreational activities geared towards sustainability. Encourage sustainable leisure boating practices (including infrastructure for alternative fuels and charging) to minimise environmental impacts.
- 4) Facilitate Stakeholder Collaboration to Empower Communities and Promote Circular Business Models: Foster collaboration among local stakeholders to develop circular business models for fishing, farming, boating and tourism, including networks of marinas. Empower communities and businesses to drive sustainable development initiatives. Encourage collaboration with authorities, NGOs, and tourism actors to achieve common goals.
- 5) Diversify Tourism Seasons and Activities and Expand Boating Seasons: Encourage the development of off-season tourism by promoting local culture, restoring natural reserves, and integrating farming and fishing experiences to alleviate peak season pressures and sustain economic activity year-round. Explore opportunities to extend the boating season through winter services, enhancing regional travel possibilities and supporting local economies.
- 6) Acknowledge Nautical Tourism's Economic Linkages: Recognise the close connection between nautical tourism and the boating industry, leveraging the region's manufacturing strengths to create high-quality employment and skill development opportunities.
- 7) Implement Climate Resilience and Biodiversity Conservation Measures on Coastlines and Islands: Address environmental stresses such as sea-level rise and water runoff by restoring biodiversity and financing conservation efforts through sustainable tourism initiatives. Combine economic development with environmental conservation to ensure long-term resilience and prosperity.









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