

## Workshop: Measuring the future success of sustainable blue economy in the Baltic and North Sea

**Date:** Thursday, November 16th, 2023

**Theme:** Monitoring and tech

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### Agenda:

1. Welcome, Karoliina Koho, BlueMissionBANOS CSA – Lead of Monitoring WP, Geological Survey of Finland.
2. Invited speakers: Messages from key stakeholders
  - Marie Hallberg, Analyst, Swedish Agency for Marine and Water Management
  - David Bassett, General Secretary at EATiP - European Aquaculture Technology & Innovation Platform
  - Mattia Cecchinato, Senior Advisor for Offshore Wind at WindEurope
3. Measuring Mission Ocean in the BANOS area, Liisi Lees, BlueMissionBANOS CSA, University of Tartu
4. Interactive Workshop with the participants
5. Summaries of the workshop discussions

### Session summary:

The workshop was well attended and over 50 participants gathered to discuss the monitoring of sustainable blue economy in BANOS area. Following the opening by Karoliina Koho, messages from the key stakeholder gave sector specific perspectives on the development of the low-trophic aquaculture (David Bassett) and offshore energy (Mattia Cecchinato) in the BANOS area, while introduction of Swedish maritime strategy and its follow up indicators by Marie Hallberg (SWAM) provided some excellent examples of key performance indicators relevant for four corners of the sustainability framework: environmental, social, governance and economy. The presentations were concluded by Liisi Lees, highlighting the Mission relevant objectives, and definitions and requirements for the measuring of the Mission ocean in the BANOS area.



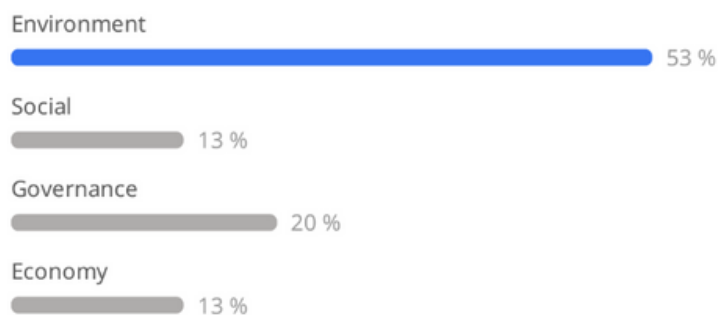
During the presentations, Slido online platform was used to interact with the audience. Two questions were addressed:

- Which sustainability aspect is most important to focus on right now for developing monitoring framework of sustainable blue economy?
- What is the most crucial sector for achieving the mission objective "Decarbonizing the blue economy" currently?

The polls indicated clearly that the environment should not pay the price for the development of the blue economy, while renewable energy sector was seen as the most potential sector contributing the Mission objective in the BANOS area.

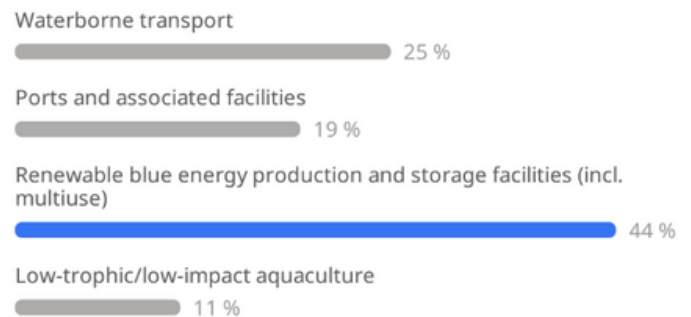
**Which sustainability aspect is most important to focus on right now for developing monitoring framework of sustainable blue economy?**

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**The most crucial sector for achieving the mission objective "Decarbonizing the blue economy" is currently:**

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For the interactive workshop the participants gathered around six tables of which two focused on low-trophic aquaculture, two on ocean energy and two on multiuse (i.e. Mission relevant sectors). The participants were able to pick a table/sector they most identified with. Initially a table had also been set up for ports and shipping sector, but there were no participants interested in it, so it was not included in the end. Each table had a designated rapporteur that took notes, guided the discussion and took care of the reporting. The workshop was divided into two tasks both addressing the sustainability framework of the blue economy sectors. In task 1 the participants were asked to identify what does each dimension (i.e. environmental, social, governance, economy) of sustainability framework mean for the specific sector? In task 2, the participants were asked to expand on this by identifying means of measuring these dimensions i.e. what could be potential key performance indicators (KPIs)? For both tasks the participants were first given 5 minutes of individual thinking time, followed by 15 minutes of group work, summarising and identifying the most important discussion points. Highly interesting discussions and outcomes materialised from each table. Key outcomes and discussion points for each sector are summarised below.

### Low-trophic aquaculture

- To ensure environmental sound practises, the emphasis should lie on efficient, consolidated ocean farm scales, standardized harvesting techniques, and the adoption of multi-use products, with artificial reefs proposed for ecological enhancement. Yet, the development of low-trophic aquaculture should be evaluated considering both their potential foot (negative) and handprints (positive) on the environment.
- The relative benefits of low-trophic aquaculture to the aquatic environment and the associated nature-based solutions, e.g., as internal measures to mitigate eutrophication in coastal environments, need to be still fully recognised by the society. Thus, efforts to better communicate and educate about low-trophic aquaculture's environmental and social benefits are needed.
- Economically, stability is sought through consistent demand, and financial support is deemed necessary for ecosystem services. The need for re-evaluating subsidy systems, recognizing the role of entry-level jobs, and acknowledging the economic creativity within this emerging model are highlighted.
- Governance is viewed as complicated, calling for supportive rather than complicating regulations. Licencing practises should be simplified and made shorter, and reconsidered including aspects of environmental impacts, including positive ones e.g related to nutrient uptake.
- Socially, a holistic perspective is advocated, emphasizing the potential for local community sustainability through additional income from aquaculture. Examples from Denmark demonstrate positive social impacts, including job creation through re-education and the promotion of diverse nature, underlining the multifaceted approach to sustainability in low-trophic aquaculture.

**Examples of suggested KPIs:** nutrient uptake, number of jobs created, market price of low-trophic aquaculture products, first sale value, size of harvest, overall economic value of the sector, number of conflicts, public perception polls, seasonal workers employed.



### Renewable ocean energy

- Seen as an important enabler of the sustainable blue economy in the BANOS area
- The sector should develop to support the nature with application of nature inclusive designs, providing new habitats and positive effects on the environment. Yet, simultaneously the environmental impacts of the sector need to be understood and monitored, also to provide advise for future development.
- The sector should not rely on subsidies but be economically viable. Economic links should be made with local communities to enable acceptance of the sector and to promote shared responsibility.
- Development of the sector was seen as important provider of new jobs, skills and education opportunities for communities, and it should be based on co-creation and involvement of society. Meanwhile, it was pointed out that the employment duration should be considered as at least construction phase is relatively short. Worries were expressed for responsibility of restoring after the use (decommission and post-restoration) as well as responsible sources of the materials used for infrastructure (human rights issues of the supply chain outside the EU).
- Development of the sector requires collection of new data, including its environmental impacts. Companies should be encouraged to make their data openly accessible, supporting governance and environmental protection.
- Current legal framework is complicated and variable making investments difficult. Stability is required and updated legislation would be an enabler for the development sector.

**Examples of suggested KPIs:** permitting time, revenue to local communities, amount/share of local tax paid by RE company to respective municipality, share of RE company's revenue allocated to projects of local municipality, years of environmental monitoring of RE site.

### Multiuse

- Multiuse should be based on ecosystem-based approach, with emphasises on efficient space utilization leaving space for nature.
- Depending on the sectors involved in implementation of multiuse, different sustainability aspects may be important. However, key advantage of multi-use over single use of space is that it is more beneficial and sustainable with respect to single sector dimension. Strong links were seen especially between economic and environmental sustainability and its significance for multi-use, for instance with possibilities of nutrient or CO2 uptake.
- Strong links were made between economic and social sustainability with emphasis on the role of multi-use on conflict resolution and support for coastal communities through new employment/ reskilling opportunities. More specifically multiuse was seen to promote communication by highlighting investment benefits, fostering connections, and building trust, while supporting collaborative, qualitative growth, cost efficiency, and circularity.
- Governance aspects highlight the need for inclusive, low-bureaucratic approaches and efficient cooperation between ministries.

Examples of suggested KPIs: number of jobs created, sustainable tenders, % of space saved from multiuse vs single use, Reduction of permitting process time, reskilling (education opportunities), space use (turnover) value in Euro/km2 compared to single use space use, economic gains for communities.

### Next steps

The workshop outcomes will be utilized and taken forward in the development of the sustainable blue economy key performance indicators for the BANOS area. The work will continue with expert working group over the coming six months. Additional stakeholder input will be gathered in the 2nd Mission Arena.