



**eMSP  
NBSR**

Emerging Ecosystem-based  
Maritime Spatial Planning  
Topics in the North and Baltic  
Sea Regions



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# Ecosystem based approach

**- a vital instrument to  
maintain delicate balance  
with nature**



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# Outline

- Establish the setting
- The role of MSP in EBA
- Some hypotheses on ecosystem-based management
- Some examples of development points
- Some wishes

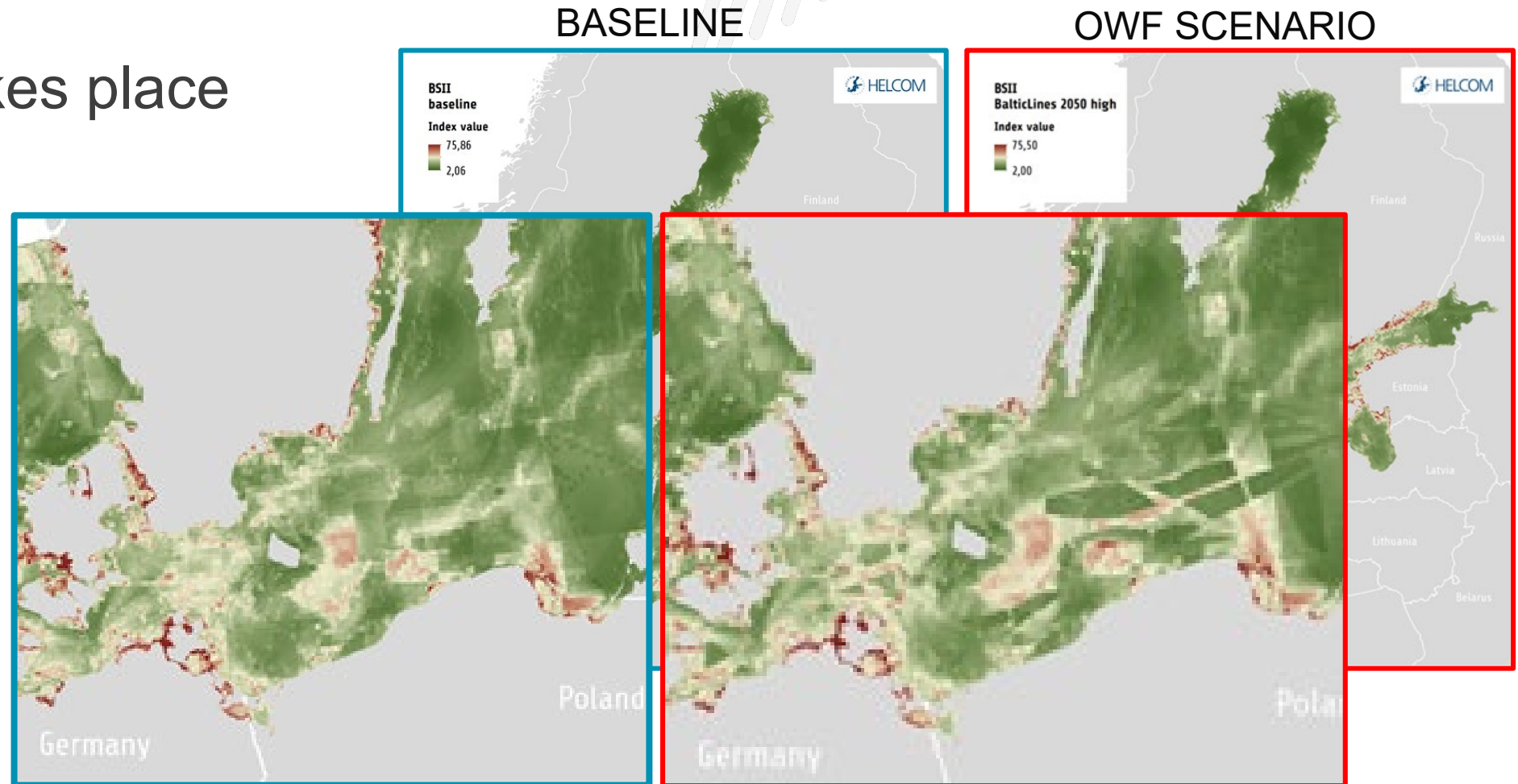
## The delicate balance with nature



- Terrestrial, aquatic and marine ecosystems are delicate today. Globally, they require sensitive or careful handling
- Poor ecosystem health erodes the fundamentals for our well-being as humans
- Climate change accelerates the need
- The biodiversity & pollution status of the Baltic and North Seas is not good enough

# What's MSP got to do with it?

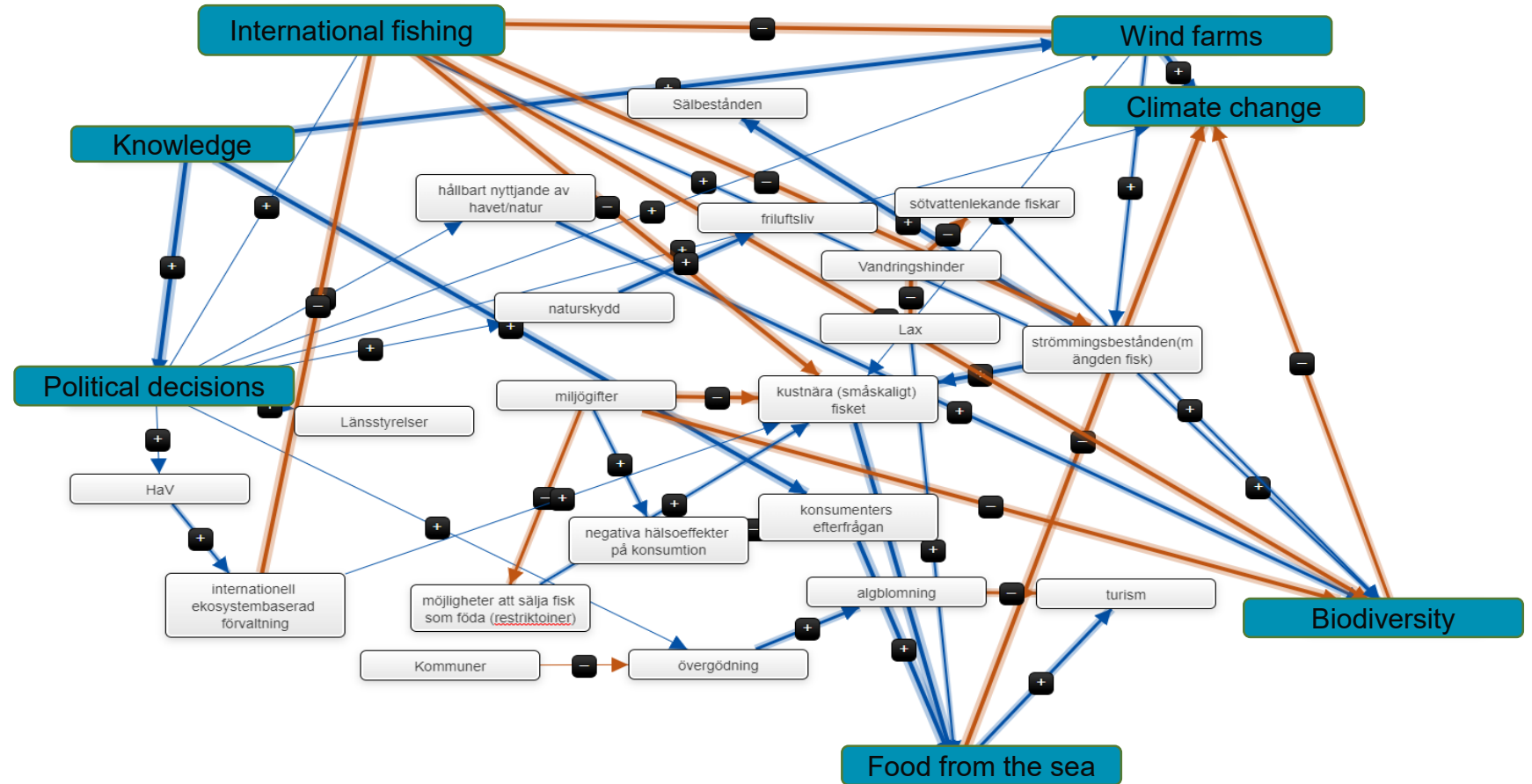
Everything takes place somewhere



# What's MSP got to do with it? (2)

Everything is connected

MSP affects people and people's actions







# How can MSP help the ecosystem

Support key objectives for a sustainable marine future:

- Enable a sufficiently scaled, coherent and functional MPA network
- Safeguard marine ecosystem services
- Enable transition to sustainable human activities
- Wise location decisions

MSP is an increasingly important instrument for the **development of ecosystem-based management**



# Strong expectations on EBM to deliver

- Promote conservation along with sustainable marine activities
- Promote the integrated implementation of marine policies & reaching objectives
- **Secure lasting outcomes**

*In practise, this may mean for example:*

- Connect ecological & societal aspects
- Provide perspectives that are sufficiently broad to capture different spatial and temporal scales, as well as different sectors
- Enable analyses and evaluations of trade-offs



*Source: E.g. CBD 2004, Murawski 2007, Holland et al. 2012, Link & Browman 2017, Levin et al. 2009, Tallis et al. 2010, Long et al. 2015, Holsman et al. 2017*

## What is EBA - actually

CBD definition

Malawi  
principles

EU policies

more

Ecosystem-based management is a **process** that supports the **integrated** management of human activities in a long-term **sustainable** way.

Management following the ecosystem-based approach recognizes that the health of the ecosystem is fundamental for our societal and economic well-being, and ensures the necessary steps to secure resilient, productive and diverse ecosystems.

HELCOM &  
OSPAR  
definitions

What happens at  
implementation level?

Ownership



## Some general EBM tips

- Understand the links and dependencies among different policies and disciplines, and how you can contribute in your field
- Choose the right tools for the task
- Be prepared to learn from each other
- Take initiatives and take part!



# Core elements of EBA in MSP

1. Best available Knowledge and Practice
2. Precaution
3. Alternative development
4. Identification of ecosystem services
5. Mitigation
6. Relational understanding
7. Participation and communication
8. Subsidiarity and coherence
9. Adaptation

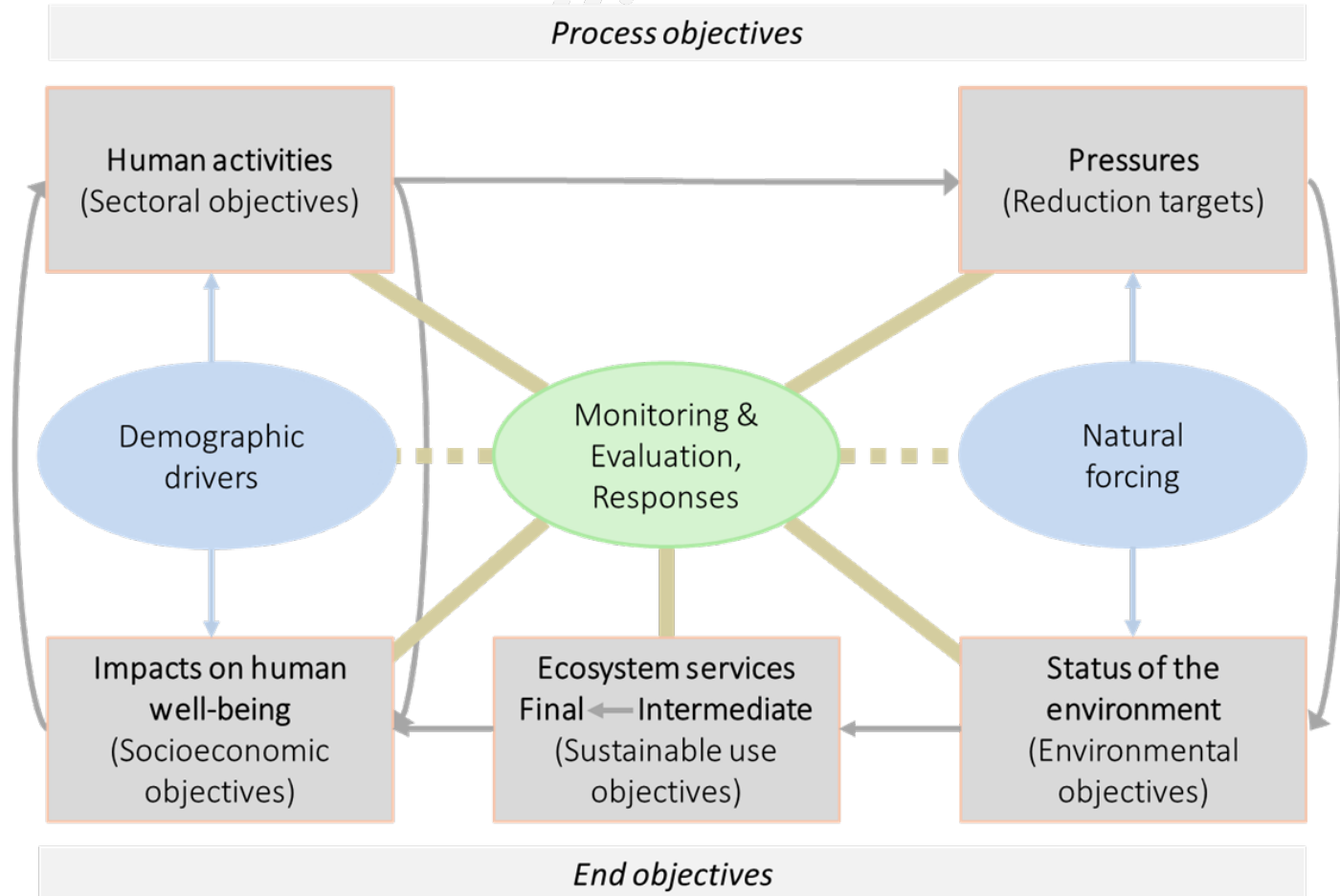


## 2. Precaution & dealing with uncertainty

- Precautionary Principle applied when data is missing or insufficient
- What does it mean to “avoid any human activities in areas where they can threaten biodiversity or ecosystem services”
- What is the risk under the alternative scenario?
- Risk to a species<sup>1</sup> = the sensitivity of the species \* the probability that it is exposed to the stressor \* the species’ vulnerability
- Risk is dependent on spatial and temporal perspective
- A common understanding of the application of the precautionary principle in MSP would be beneficial

## 4. Identification of ecosystem services

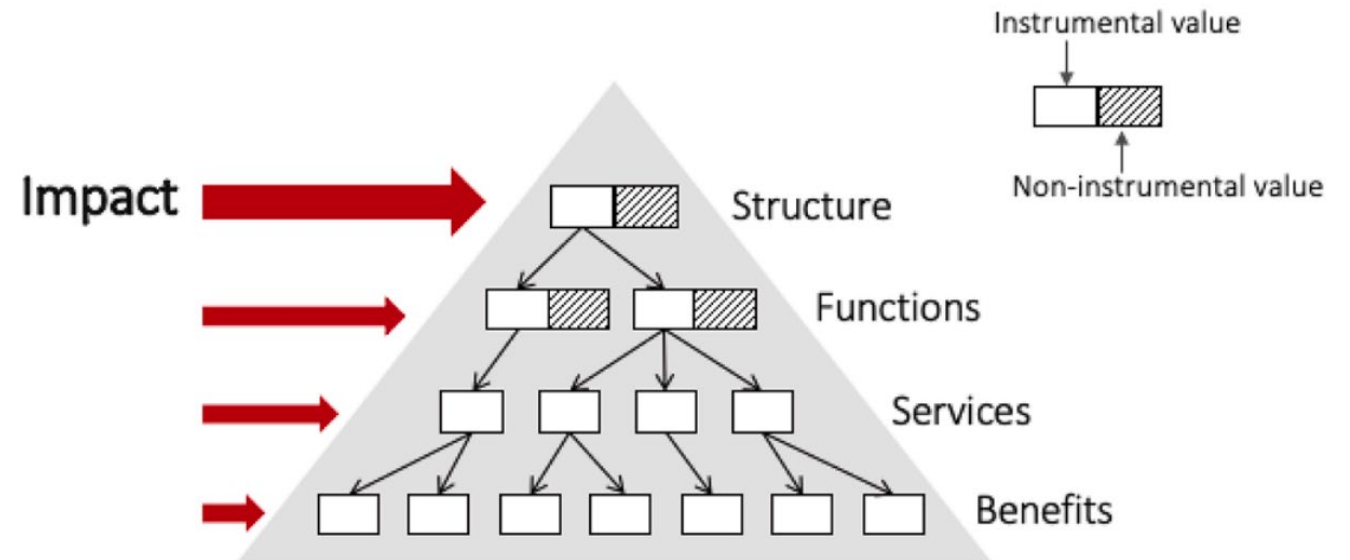
- Conceptual link between the natural ecosystem and societal aspects
- Also an operational link? Can be a connector in mapping and impact assessments





## Identification of ecosystem services (2)

- Ecosystem services are produced through functions in the ecosystem & provide benefits that are consumed or enjoyed by people
- Ecosystem services benefit human well-being directly or indirectly
- The ES concept can support the development of restoration and offsetting practises, for example under renewable energy development
- Non-instrumental values in the ecosystem can not be replaced



*Overview of compensable and non-compensable values in the ecosystem. Source: Cole et al 2021*



## How to strengthen EBA in MSP?

- ✓ **Cumulative impact assessment** (stay within the bearing capacity of nature, solve challenges with scale, make it possible to prevent-reduce-offset?)
- ✓ **Exchange of data and knowledge** (across sectors, national borders, parts of society, roadmap, knowledge platforms)
- ✓ **Actions for biodiversity** (MPAs, areas for nature restoration, wise locations- what can we do more or better?)
- ✓ **Actions for climate mitigation** (support biodiversity, strengthen ecosystem services, renewable energy – what can we do faster?)



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# Thank you!

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