Ministry of Infrastructure and Water Management

Natural capital accounting

Policy applications for the North Sea and North East Atlantic Ocean

Wesley van Veggel, 14-12-2022

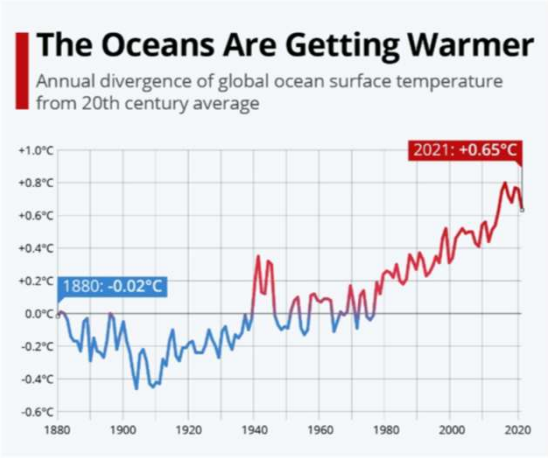
Importance of marine ecosystems

State of marine environment has been deteriorating over the past decades, also the case for the North Sea and North-East Atlantic

Human pressures: pollution, overfishing and climate change

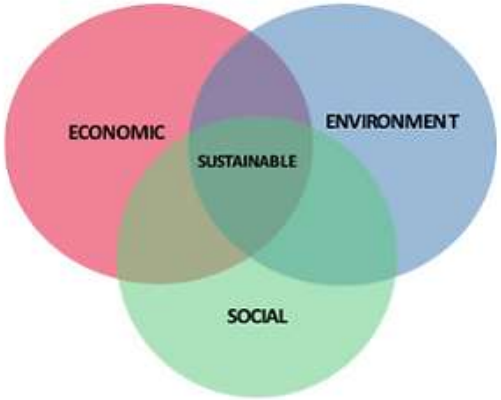
Marine ecosystems benefit human well-being through the services provide

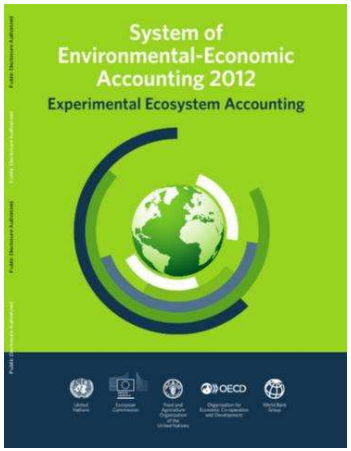
But value often underestimated/ignored in national accounts..



The need for an integrated statistical economic-environmental framework

- Countries are currently facing issues that provide social, economic and environmental challenges
- Problems and stakeholders are often interconnected over multiple levels of scale
- The complex integrated policy context requires integrated statistics and data!
- Natural capital accounting (NCA), System of Environmental-Economic Accounting – Ecosystem Accounting (SEEA-EA)





Interest in Natural capital accounting (NCA)

- SEEA Ecosystem accounting accepted as international accounting standard during the 52nd session of the UN statistical division in March, 2021

- 11th of July 2022 a proposal was made for mandatory provision of natural capital accounts by, EU member states

- Interest of OSPAR (North East Atlantic) strategic objective of North-East Atlantic Environment Strategy[1]:

S7.O3 By 2025 OSPAR will start accounting for ecosystem services and natural capital by making maximum use of existing frameworks in order to recognise, assess and consistently account for human activities and their consequences in the implementation of ecosystem-based management.

Source: https://www.ospar.org/documents?v=46337

Many international projects:

- **MAIA**: Mapping and Assessment for Integrated ecosystem Accounting, SEEA-EA being implemented in 11 (EU) countries

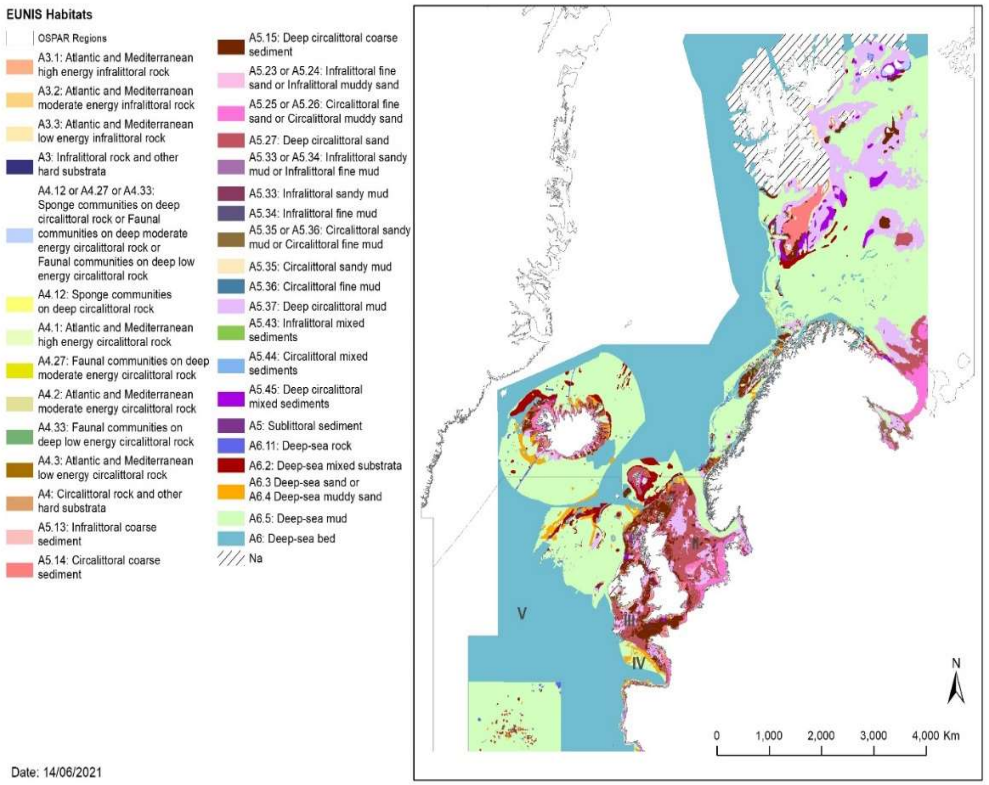
- **GOAP**: Global Ocean Accounts Partnership, Ocean accounting

- **MAREA** project : Marine Ecosystem Accounting project, Baltic sea area

- **NCAVES**: Natural Capital Accounting and Valuation of Ecosystem Services Project (NCAVES), EU funded

Natural capital accounts for OSPAR

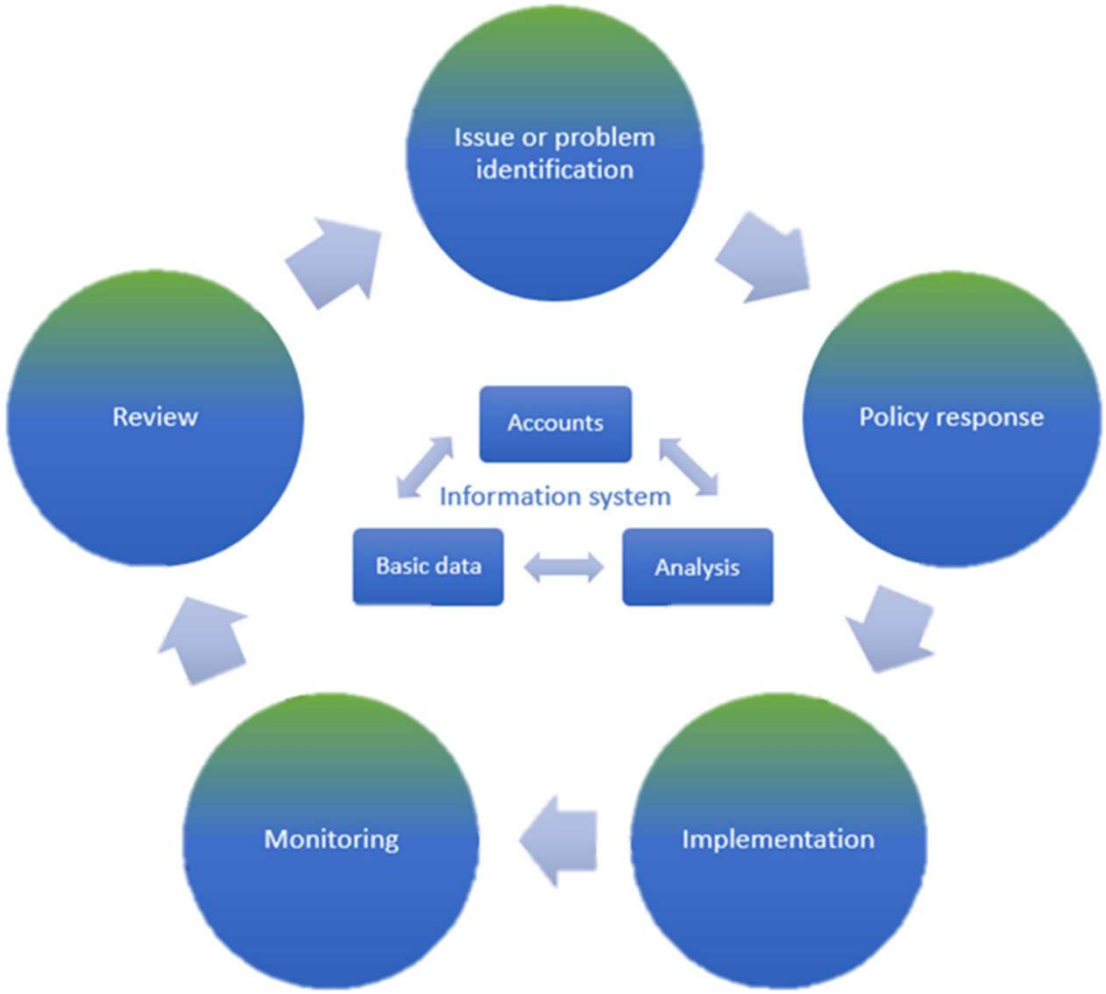
- Preliminary results and first estimates presented by Maria Blazquez
- Currently being updated by Martha Stofmeel
- (Draft for 2nd version for Dutch part of the North Sea in development)



Natural capital accounting & Policy

- Currently the accounts are mainly supply driven
- Information from the accounts can be complex for policy makers
- *How can we apply NCA for decision-making for the North Sea (and North East Atlantic)?*
- What kind of tools do policy makers need?

NCA & the policy cycle



Source: Ruijs et al., (2019)

- Hard to directly couple evidence and direct policy decision
- Especially with relatively new and incomplete framework such as NCA
- Currently, mainly used for problem identification or monitoring
- What is needed to integrate it throughout the policy cycle?

Outcome literature study policy uses for NCA …

- Issue identification and monitoring the state of the marine environment
- Establish insights on trade-offs and interactions between marine ecosystems and economy
- Provide communication tool for policy makers to establish the importance of the marine environment and blue economy
- Support multidisciplinary communication and cooperation between various stakeholders within (and outside) the government
- Combine with other methods such as scenario analysis to provide integrated insight in cost and benefits for environmental decisions
- Serve as data input for other statistical methods that include economic-environmental evaluation

Policy applications of NCA for the North Sea

- How can we use NCA for The European Marine Strategy Framework Directive (MSFD) & Various North Sea Projects?

- Consists of 3 parts:
  - Part 1: A description of the current state of the environment, environmental objectives and indicators for the North Sea
  - Part 2: Monitoring program
  - Part 3: The Program of Measures to ensure the sustainable use of the North Sea : 11 elements

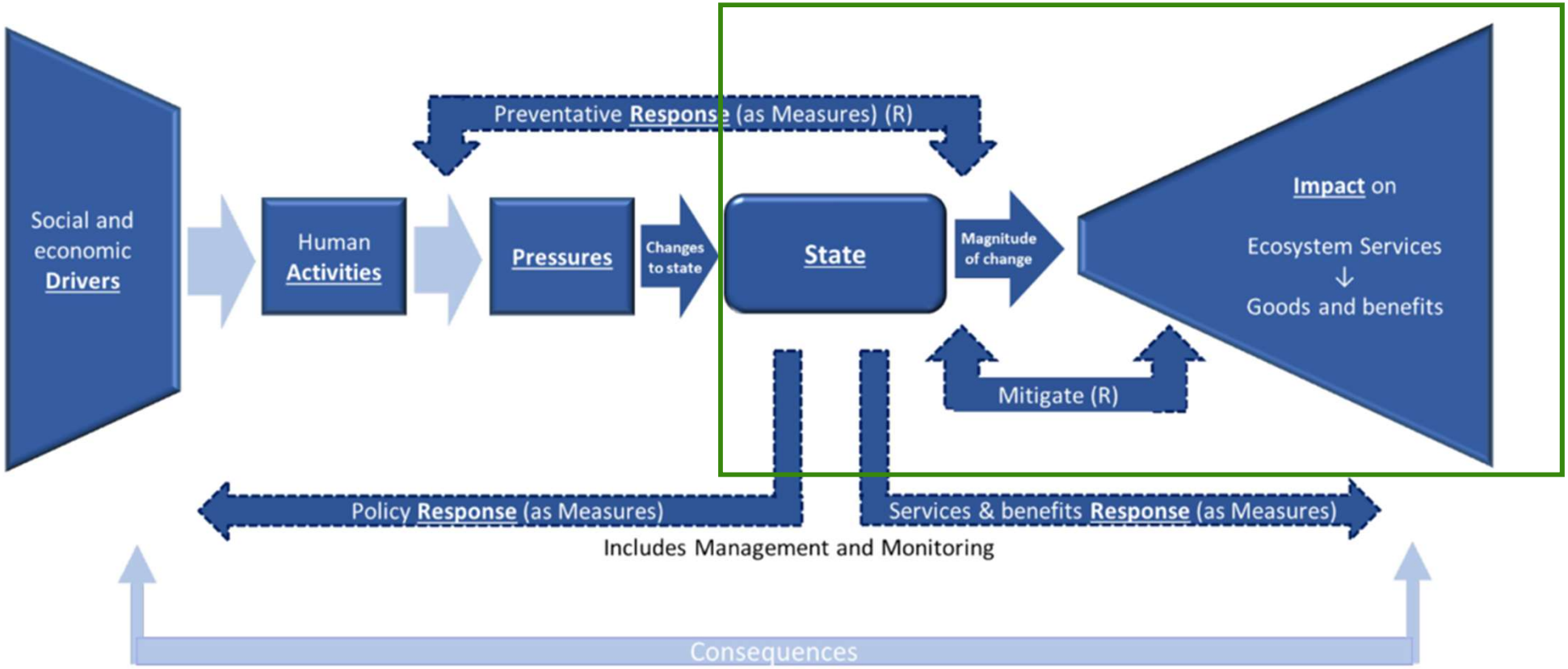
- NCA can monitor state of the marine environment of the North-East Atlantic ocean

- Evaluate policy responses of MSFD

Policy applications of NCA for OSPAR:

- Provide synergies with Drivers-Activities-Pressures-State-Impact Response (DAPSIR) framework
- Add quantitative economic perspective
- Track changes over time
- Increase integrations of topics and improve overview on interactions between different pressures

Potential synergies DAPSIR framework - NCA



Challenges

- Data

- How to keep policy makers engaged while accounts are being improved

- Need for more case study examples to show the possibilities of NCA

- Make the accounts more demand driven

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Discussion

Questions:

- What are some of the main challenges to be able to use NCA for marine policy?
- What is needed to keep policy-makers engaged while the accounts are being developed?
- How can NCA address issues that North-East Atlantic ocean are currently struggling with (Marine litter, eutrophication etc.) ?
- What are NCA and the SEEA-Ecosystem accounting lacking to be able to use it in (marine) policy ?

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Thank you for your attention!

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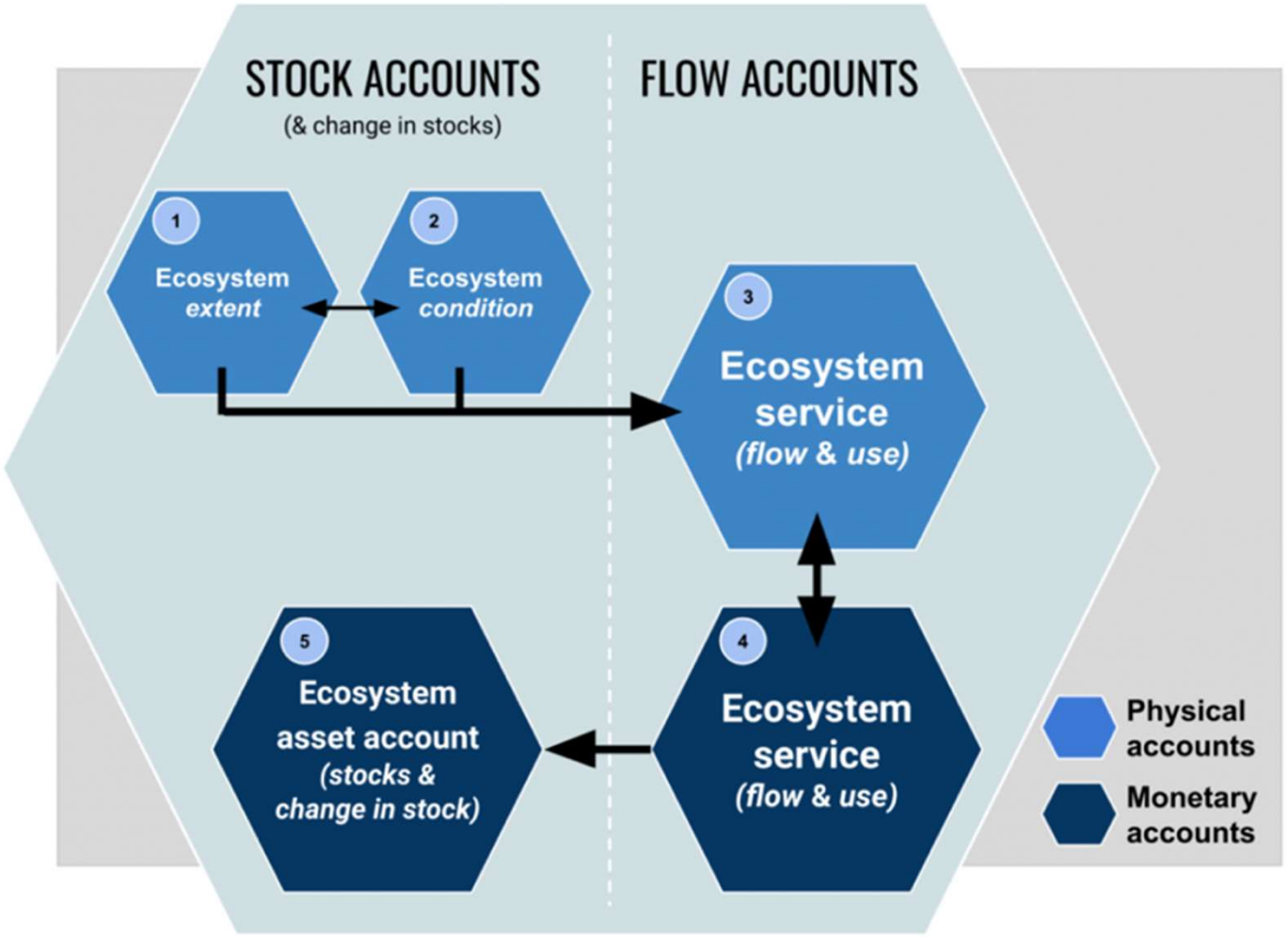
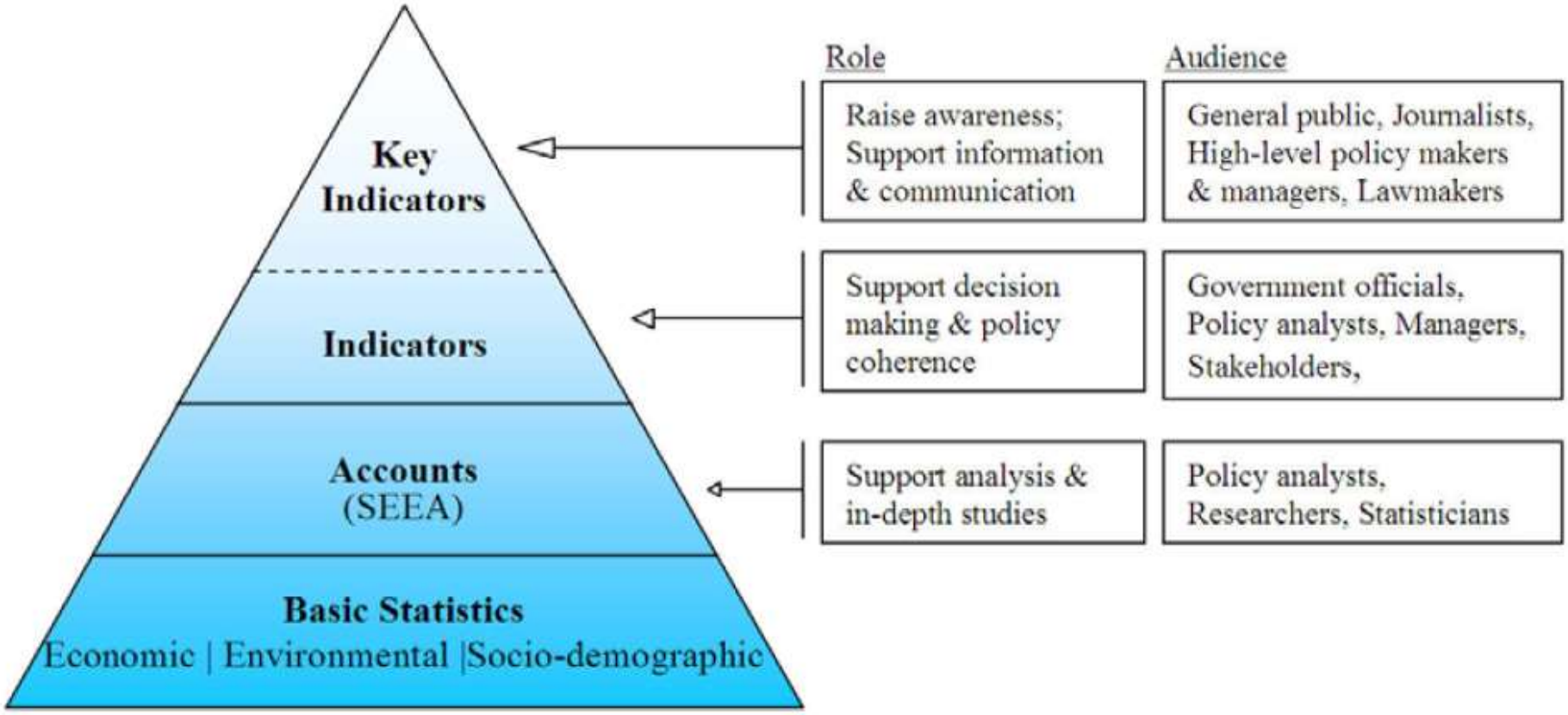
Extra questions:

- What kind of (visualization) tools or examples would be needed from Natural Capital Accounting (NCA)?
- What is the advantage of placing existing data into a framework like Ecosystem Accounting of the SEEA?
- How can NCA address issues that North-East Atlantic ocean are currently struggling with (Marine litter, eutrophication etc.) ?
- How can NCA support Marine Spatial Planning?

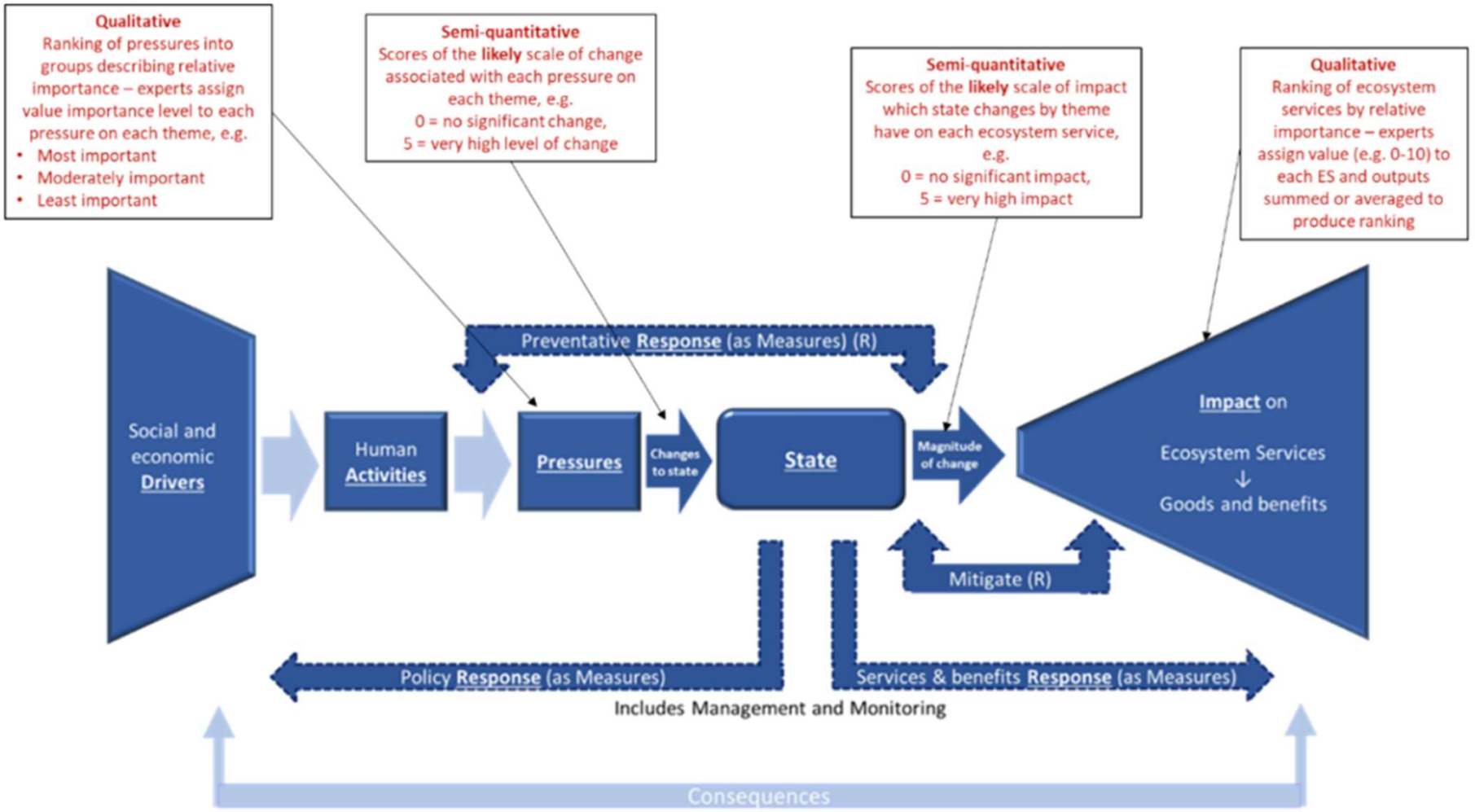
Extra slides: SEEA-EA



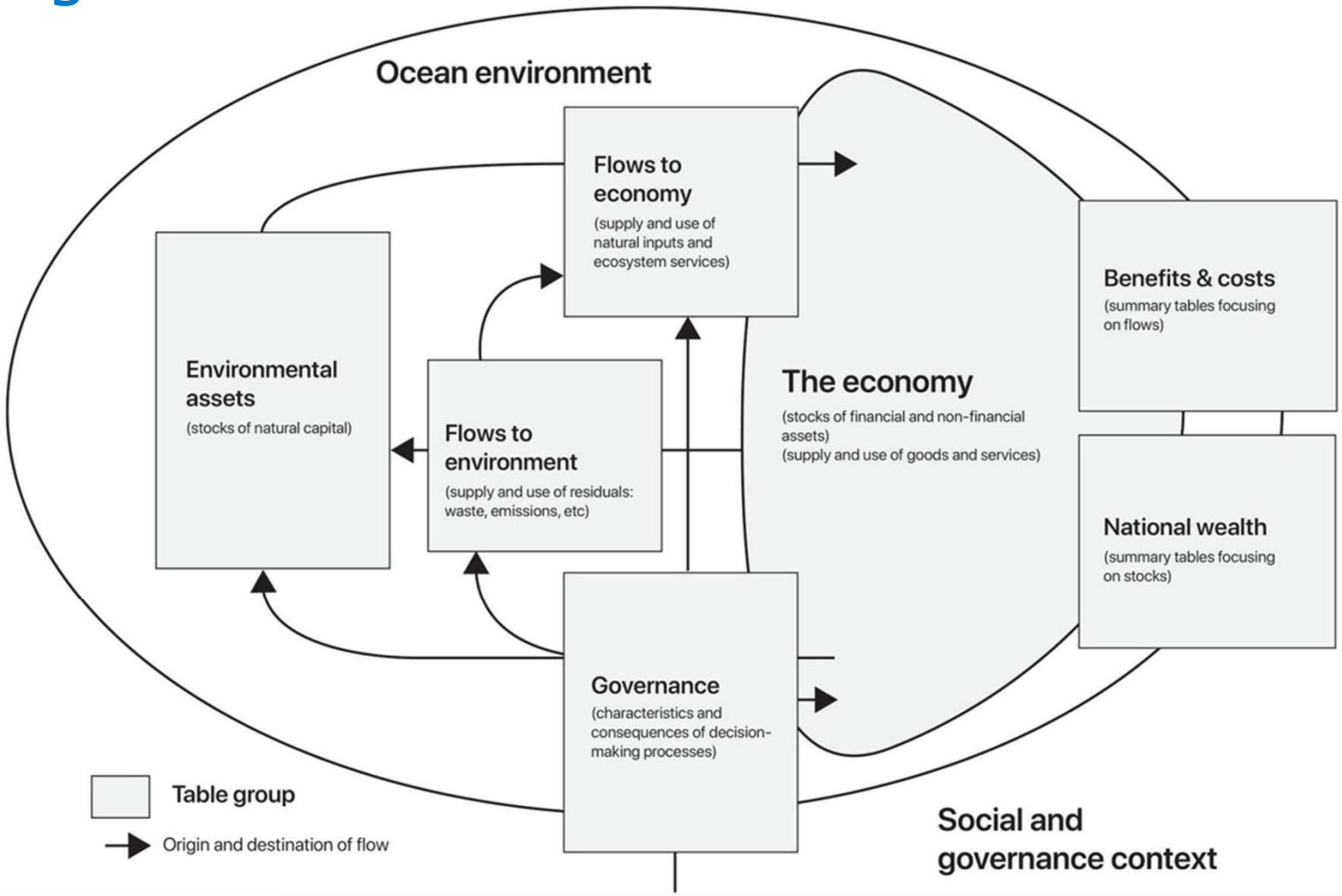
Extra slide: Using NCA in policy making



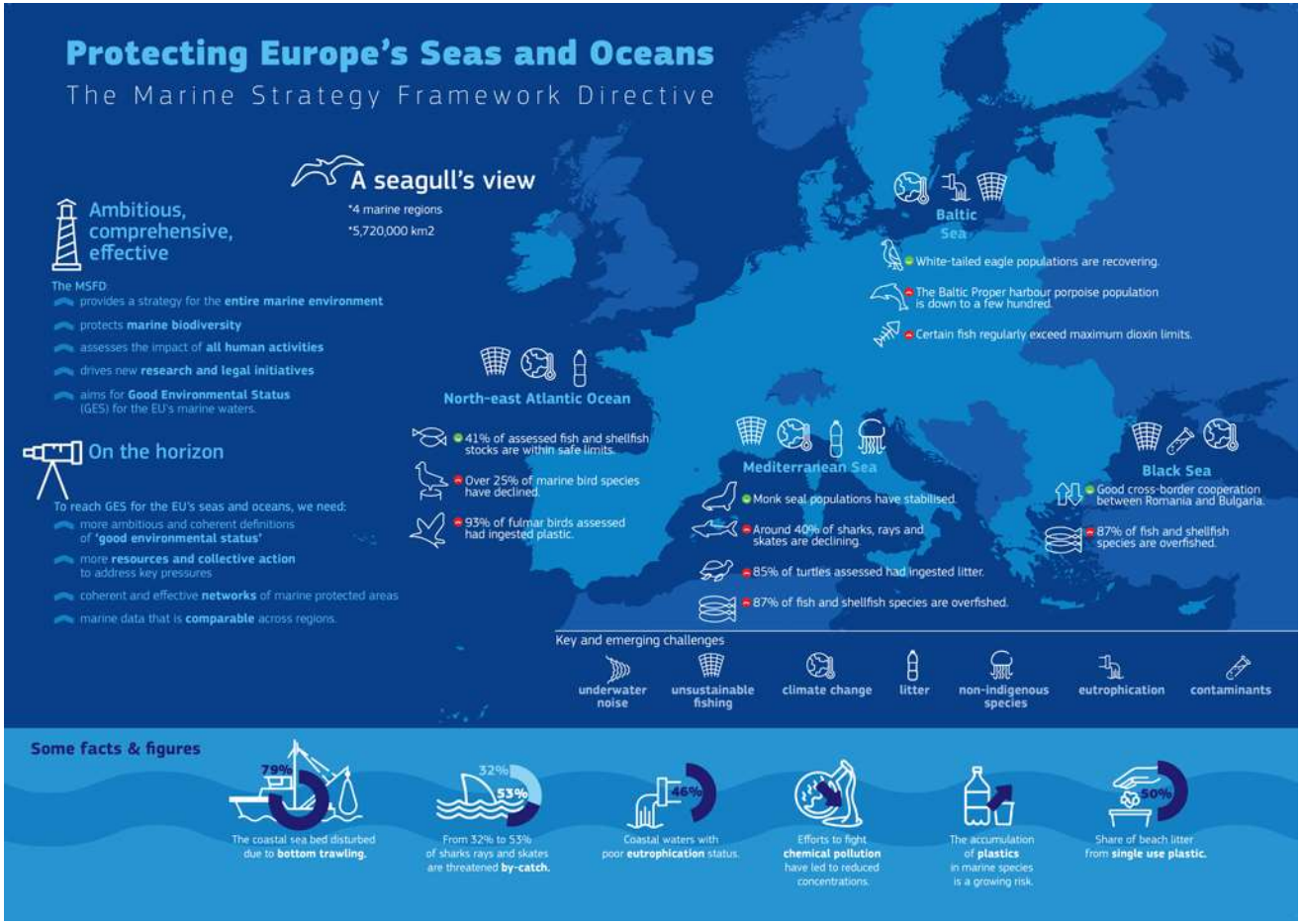
Extra slide: DAPSIR



Extra slide: Ocean accounting framework



Extra slide: MFSD



Extra slide: NCA & SDG's

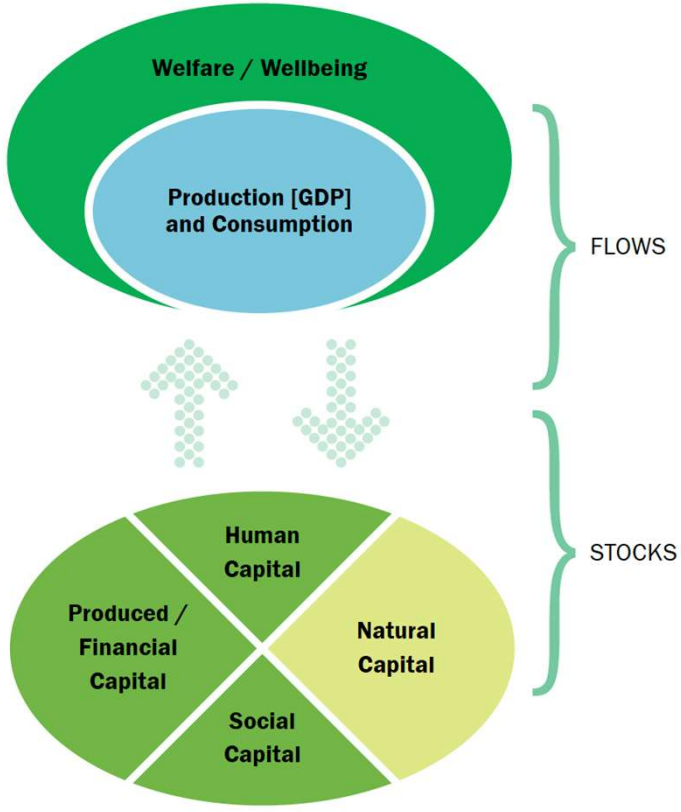
The SEEA supports the SDGs

The SEEA provides information for 40 indicators for 9 SDGs

GOAL 2: Zero Hunger
GOAL 6: Clean Water and Sanitation
GOAL 7: Affordable and Clean Energy
GOAL 8: Decent Work and Economic Growth
GOAL 9: Industry, Innovation and Infrastructure
GOAL 11: Sustainable Cities and Communities
GOAL 12: Responsible Consumption and Production
GOAL 14: Life Below Water
GOAL 15: Life on Land

Policy applications of NCA for the North Sea:

- The Netherlands want to measure welfare beyond GDP: *Wellbeing Economy*
- Natural capital data can serve as <u>data input</u> for North Sea
- NCA does not include social capital and ”future generations”



Source: Author, adapted from UNECE et al. (2014)