From MARine Ecosystem Accounting to integrated governance for sustainable planning of marine and coastal areas (MAREA)



Programme Priority: P2 Sustainable use of common resources

Programme Specific Objective: 2.2. Sustainably planned and managed marine and coastal areas

Sub-programme: Central Baltic

Duration: 01.06.2020 - 31.12.2022

Total funding: 1.515.601 EUR

ERDF funding: 1.202.609 EUR ERDF

Project Summary:

The ecosystem-based approach is a strategy for the integrated management of land, water and living resources that promotes their conservation and sustainable use in an equitable way. EBA is a cornerstone of many EU directives but to date there is no clear guidance on how to implement it in practice for instance, in maritime spatial planning processes.

Ecosystems are linked to human well-being through the flow of ecosystem services, i.e., the benefits the marine environment and its resources deliver to society such as, the production of economically exploitable biomasses (e.g. fish.). A weak integration of ecology and economy results in a disconnection of economic analysis from the functioning of ecosystems. Current evaluation approaches hardly capture the cumulative impact of different human activities on ecosystems, thereby failing in the achievement of a sustainable use of natural resources. To sustain climate and seawater quality these benefits have to be regulated. Therefore, novel assessment methodologies, which are more adequate to reflect the complexity of natural and human systems interactions, are needed to further develop joint and integrated governance among MSP, MSFD and other integral regional strategies concerning the Baltic Sea.

The main result of the MAREA will be (1) the realisation of a system of accounting of marine environment and the benefits these deliver, also in terms of regulating services for climate and ecosystems' sustainability, and (2) a connected model of integrated sustainable governance for use of natural resources and marine space. An important aspect of the project is the involvement of key stakeholders in the Central Baltic region. The ecosystem accounting models as well as a Sustainability Compass are generated and updated through participatory learning including key stakeholders: authorities responsible for MSP and marine management planning, environmental experts and general public.

Map of Partners

Partners

Lead Partner

Suomen ympäristökeskus

Country: FI

www.syke.fi [1]

Partner budget: 473.435 EUR

Amount of ERDF funding: 355.076 EUR ERDF

Project Partners

Pellervon taloustutkimus PTT

Country: FI

www.ptt.fi [2]

Partner budget: 383.090 EUR

Amount of ERDF funding: 287.318 EUR ERDF

Tartu Ülikool

Country: EE

www.ut.ee [3]

Partner budget: 439.250 EUR

Amount of ERDF funding: 373.363 EUR ERDF

Baltijas Vides Forums

Country: LV

www.bef.lv [4]

Partner budget: 219.827 EUR

Amount of ERDF funding: 186.853 EUR ERDF

Associated Partners

Ympäristöministeriö

Country: FI

Ministry of Environmental Protection and Regional Development of the Republic of Latvia

Country: LV

Estonian Ministry of Finance

Country: EE

Results

Expected results

Achieved results

Project result in category - Marine/coastal area with improved management

MAREA developed a framework for mapping of marine ecosystem services

The MAREA project developed a framework for mapping of marine ecosystem services. Ecosystem services were modelled using a set of methodologies depending on the data availability and the service in question.

Ecosystem accounting models were further developed and applied in the project. This was a response to the need to develop ecosystem accounting both globally and on Europe's level. Ecosystem accounting integrates economic sectors to the benefits that ecosystems provide.

A sustainability compass was developed during the project. It is a method and a tool for bottom-up social learning on sustainable practices in pursuit of prosperity and human well-being within ecosystems boundaries. The compass is targeted to companies operating in marine areas.

The project also developed subsections of the Geoportal (PlanWise4Blue): cumulative impact assessment tool, Sustainability compass tool and tools for customized socio-economic models. These are tailored to the Baltic Sea region's key actors/stakeholders. The geospatial portal is a user-friendly communication tool for decision-makers, allowing participation and continuous update of knowledge, data and analyses. The portal provides an indication of the best practices for improvement and alternative scenarios in support of joint decision-making.

Project page in database

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At a glance

- Ecosystem service mapping framework
- Bottom-up social learning tool for companies
- · Geospatial portal

Files

Conceptual model of Natural Capital Accounting [6]

Explore the relations between cultural services and environmental condition [7]

Infographic about MAREA results [8]

High-resolution maps on the intensity and extent of ecosystem services supply in the transnational pilot area [9]

MAREA POLICY BRIEF I / 2022 [10]

MAREA POLICY BRIEF II / 2022 [11]

User guide for the social-economic models implemented in the geoportal [12]

Tags

Coastal management and maritime issues [13]

Regional planning and development [14]

Project Visibility

Other media visibility

SYKE (LP) webpage [15]

Baltic Environmental Forum Latvia (PP) webpage [16]

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MAREA [16] https://www.bef.lv/projekti/marea/