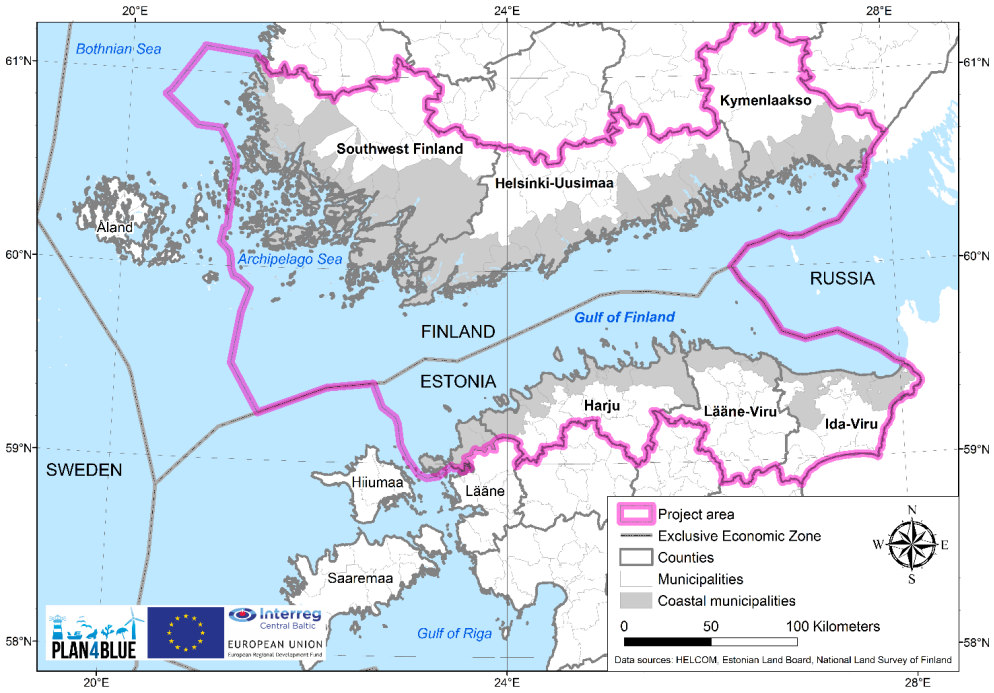
PLAN4BLUE newsletter

NEWSLETTER 1, JUNE 2017 MARITIME SPATIAL PLANNING FOR SUSTAINABLE BLUE ECONOMIES

Towards more sustainable marine spatial planning

Riku Varjopuro, Plan4Blue project coordinator, Finnish Environment Institute SYKE
riku.varjopuro@ymparisto.fi

Economy is growing on both sides of the Gulf of Finland and in South West Finland. The respective sea areas have important role in this. Goods are transported on the seas, increasing incomes support sea-based tourism and consumers are interested in local food resources. Maritime industry is an important source of the economic growth in the region.



Basemap of the Plan4Blue project area

The Plan4Blue project enhances our understanding of the drivers and potential of 'blue economy' sectors – the sectors that rely on the use of marine and coastal resources and the marine space as an asset. In particular, the Plan4Blue project develops practices of maritime spatial planning in order to support the growth of blue economy in a sustainable way.

The key objective of maritime spatial planning (MSP) is to promote the growth of blue economy in a way that ensures sustainable use of the marine resources and marine space. This challenging and multi-faceted objective can be achieved through coordination of the use of sea areas for different purposes. The allocation of space is based on an analysis of alternative scenarios as well as assessment of impacts and identification of conflicts pertaining to the scenarios.

Blue growth brings different marine actors together

The Plan4Blue project operates in the marine areas of Estonia and Finland. Both countries have started their national processes to deliver maritime spatial plans in a few years' time. The Plan4Blue project brings together key blue economy and MSP actors from Estonia and Finland to inform the national processes how sustainable use of marine resources and space can be achieved via cross-border collaboration in MSP.

In the first half of this three-year project (2016-2019) we develop blue economy scenarios for Gulf of Finland and Archipelago Sea areas. The focus is on cross-border activities such as shipping, energy, fishing, tourism and nature conservation. The second half of the project works on alternative MSP options and fosters cross-border collaboration in MSP.

The project aims to bring together a large group of actors from public and private sectors and NGOs. We run workshops, conduct surveys and communicate actively.

This newsletter is one of the main channels to follow the progress of Plan4Blue!

SYKE

UNIVERSITY OF TARTU

Turun yliopisto
University of Turku

Helsinki-Uusimaa
Regional Council

VARSINAIS-SUOMEN LIITTO
EGENTLIGA FINLANDS FÖRBUND
REGIONAL COUNCIL OF SOUTHWEST FINLAND

BEF
ESTONIA

Project coordinator Riku Varjopuro, Finnish Environment Institute SYKE, phone +358 295 251 725, firstname.surname@ymparisto.fi

Producing scenarios for blue economy

Riitta Pöntynen, leader of WP1, University of Turku, Centre for Maritime Studies
riitta.pontynen@utu.fi

One task that Plan4Blue has is to analyse the potential for blue economy in the Gulf of Finland, Archipelago Sea and their coastal areas. In the project, scenarios for selected blue economy sectors will be produced by June 2018.

Scenarios usually look at probabilities (i.e. what will happen), possibilities (i.e. what could happen) or preferred futures (i.e. what should happen). Making of the scenarios combines quantitative and qualitative approaches: the scenarios will be based on social, economic and environmental analysis, as well as the use of an expert panel complemented by workshops and interviews.

Expert opinions as a source

A Delphi-method uses an expert panel as a source of topical expertise and views. The aim is to collect views extensively from different blue economy sectors, representing both private and public organisations. The Delphi-method is a tool for encouraging stakeholder participation, as well as to accommodate their expertise in constructing the scenarios.

In Plan4Blue, a multi-sectoral and cross-border Delphi-panel was formed in spring 2017 as a first phase of producing blue growth scenarios. The panel consists of 57 members from Estonia and Finland.

The first results from Delphi-panel were be used in the first workshop of Plan4Blue that took place in Helsinki on 15th and 16th of June.

Plan4Blue workshop **"Scenarios for Blue Economy"** in Helsinki, 15th-16th of June, 2017

Plan4Blue organised the first of four stakeholder workshops in mid-June in Helsinki. The focus of the first workshop was on future scenarios of blue economy in the project area. The workshop was participated by 40 persons from Estonia and Finland representing different expertise from private and public sectors.

During the first day insights and inputs of the participants were collected in different work groups that addressed:

- economic potential of the blue economic sectors by 2050

- main political, economic, social, technological, environmental and legal drivers – PESTEL drivers – that influence development of blue economy
- conflicts and synergies between blue economy sectors

The working in the groups was based on the results of the Delphi-expertise panel and on the economic analysis that have been carried out prior to the workshop. These results were presented as impetus for lively discussions.

The first day ended with a dinner cruise in the Helsinki sea area. During the cruise we also visited the island of Vallisaari that is a former military island recently opened for public.

During the second day the participants were made to think the previous day's results spatially. There were three separate groups that worked on the maps to identify what changes are likely to take place in the use of coastal and marine areas by 2050 - and what activities will remain in the present areas. The discussion revisited also the previous day's discussions on drivers, conflicts and synergies.

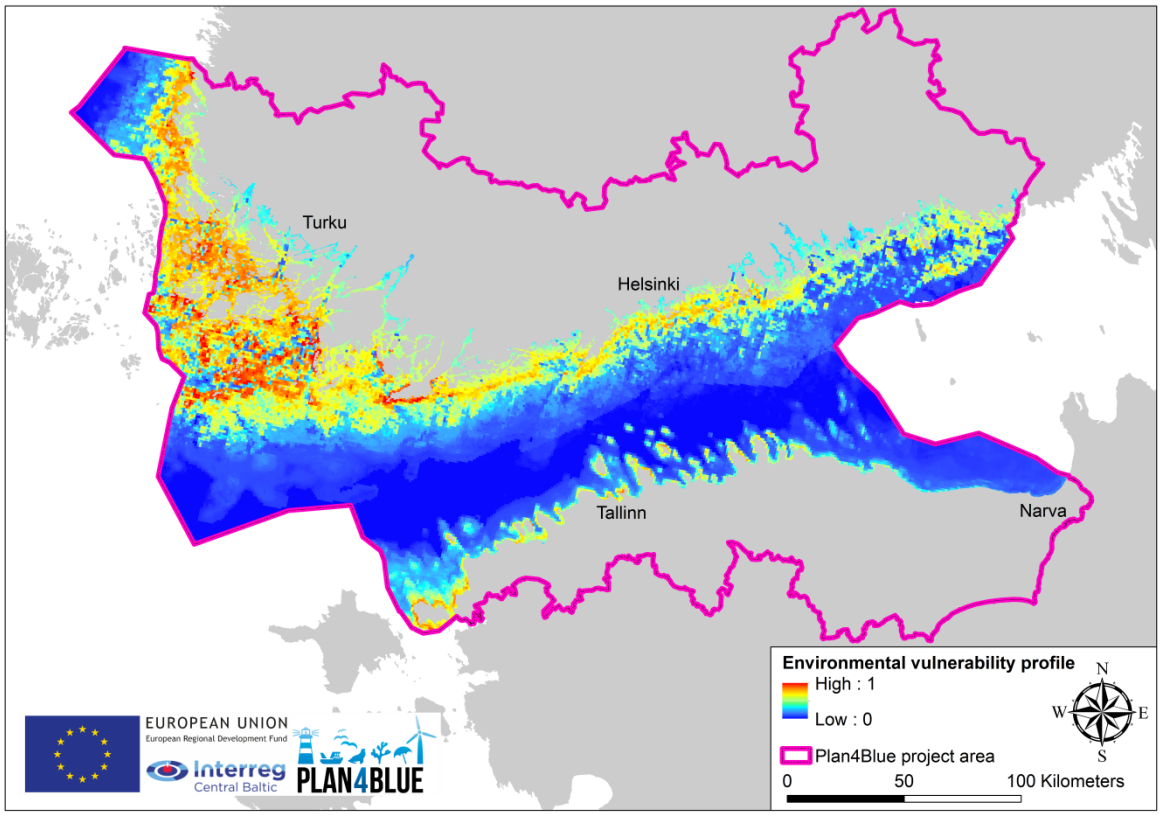
Project coordinator Riku Varjopuro, Finnish Environment Institute SYKE, phone +358 295 251 725, firstname.surname@ymparisto.fi

Mapping marine and coastal environmental vulnerabilities and risks

Robert Aps, Leader of WP2, University of Tartu, Estonian Marine Institute
robert.aps@ut.ee

The EU Maritime Spatial Planning (MSP) Directive establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime blue economies, the sustainable development of marine areas and the sustainable use of marine resources. The marine environment is heavily impacted by human activities and especially in intensively used sea areas such as the Baltic Sea where the assessments of environmental vulnerabilities and cumulative risks are increasingly demanded in environmental decision and policymaking. In this study we developed the Gulf of Finland marine and coastal sea environmental vulnerability profile as a spatial data layer that incorporates the distribution of nature values and their sensitivities to disturbances.

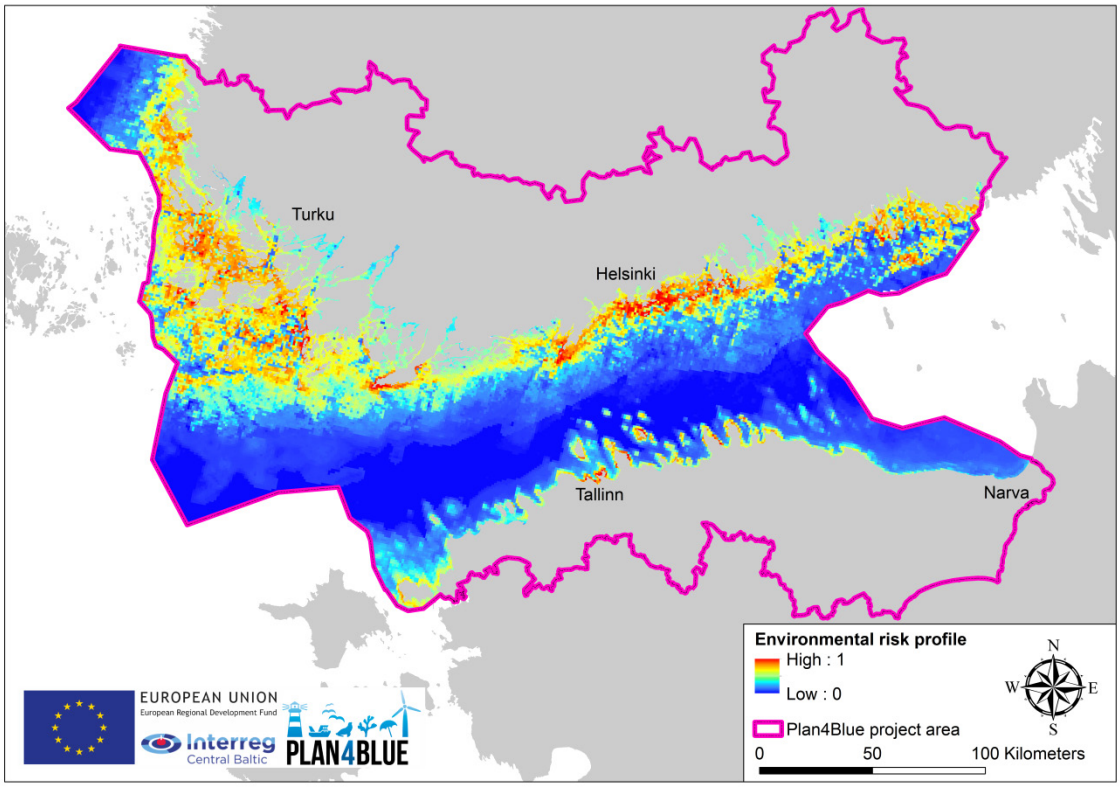
As an example we present here the results gained on environmental vulnerabilities and environmental risks.



Environmental vulnerability profile (EVP-B for benthos data)

The highest values of environmental vulnerability of sea bottom environments (benthos) were found near Hanko peninsula and Kemiönsaari and Houtskari in the Archipelago Sea in the Finnish part of the project area. In the Estonian area, larger areas of high vulnerability were situated in western study area (around Vormsi and Pakri islands) and around the peninsulas of the central area of the Gulf of Finland

The HELCOM Baltic Sea Pressure Index as a measure of cumulative spatial human pressures and the Gulf of Finland marine environmental vulnerability profile were used to identify the likelihood and magnitude of potential environmental effects under multiple human pressures and to develop the Gulf of Finland marine and coastal sea environmental cumulative risk profile to be used in the ecosystem-based adaptive MSP processes in Estonia and Finland.



Environmental risk profile (ERP-B for benthos data)

Generally, the central and eastern parts of the study area were characterized by higher marine and coastal sea environmental risk values. This pattern was stronger at the northern coast of the Gulf of Finland compared to the southern coast. The overall highest environmental risk values were located in sea areas near Tallinn, Hanko peninsula, and in the outer archipelago south of Helsinki.

Based on the advanced Bow-tie methodology the cumulative environmental risk assessment of potential planning options will be performed and the appropriate risk management options for achieving ecosystem objectives within MSP context will be evaluated.

Project coordinator Riku Varjopuro, Finnish Environment Institute SYKE, phone +358 295 251 725, firstname.surname@ymparisto.fi

Project area takes shape on maps

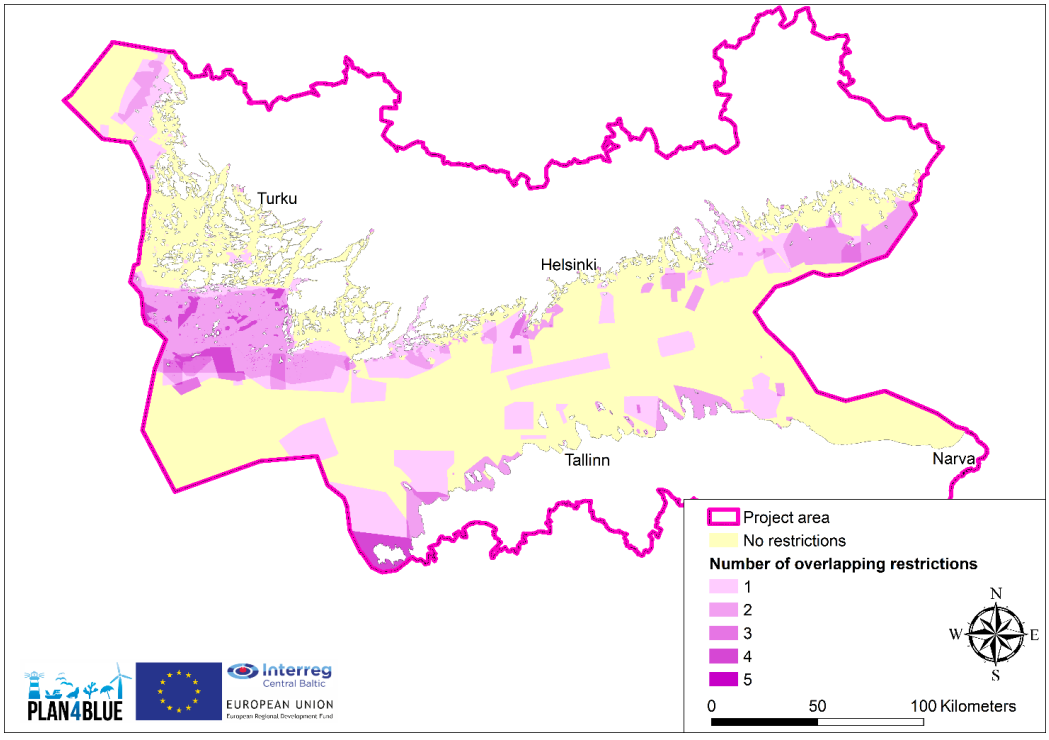
Tua Nylén, Researcher in WP3, University of Turku, Department of Geography and Geology, tua.nylen@utu.fi

Maps are a natural way of visualising spatial information. They are often self-explanatory, and, when good cartographic decisions are made, can efficiently present large amounts of information. The Plan4Blue project area takes shape on maps presenting the current conditions of the Gulf of Finland. The maps will help focusing project analysis and activities to specific marine areas and topics. Furthermore, as the Plan4Blue project aims to inform official MSP processes in Estonia and Finland, the maps produced during the project present typical preconditions and challenges for spatial planning.

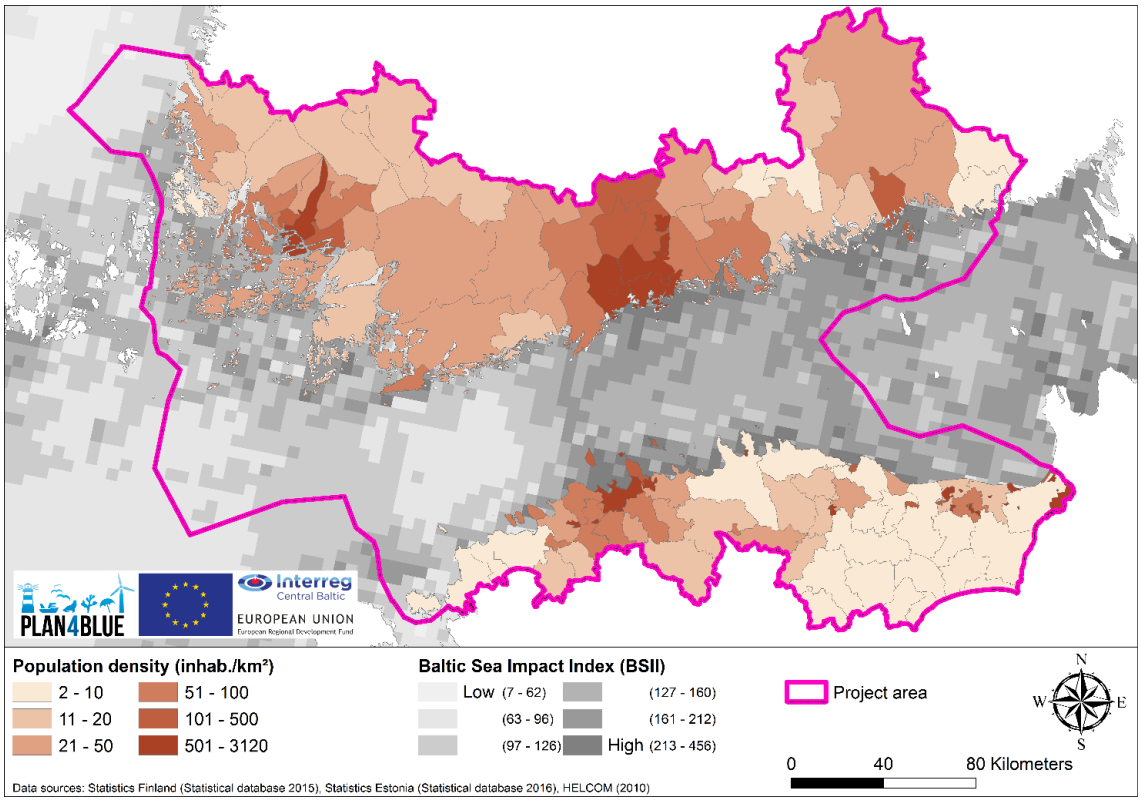
In the Plan4Blue project, the maps present, for instance:

- The location of the area and its immediate surroundings (Basemap presented above)
- Restrictions, including nature conservation, military areas and areas designated to deep water navigation, and analysis of how these restrictions overlap
- Population density and human impact on the sea
- Marine traffic
- Distribution of "Blue business" (e.g. turnover of companies and numbers of employees)
- Nature values on the sea (e.g. key habitats and species)

Maps are used in the internal communication of the project, and to facilitate stakeholder involvement. Plan4Blue utilised these maps in the first expert Delphi panel (April-May 2017), and they will be used in the first stakeholder workshop (June 15th–16th 2017).



Overlap of restrictions, considering military areas, deep water navigation areas, national nature conservation areas, Natura 2000 sites and UNESCO world heritage sites



Population density and human impact on the sea. More information on BSII in HELCOM *report* (opens a pdf document)

Socio-economic network analysis of Plan4Blue

Annika Jaansoo, School of Economics and Business Administration, University of Tartu, a.jaansoo@utwente.nl

We kindly invite you to participate in an online survey concerning the project area, Gulf of Finland and Archipelago Sea. The aim of this analysis is to define the key actors and network characteristics in inter-state as well as intra-state maritime connected social-economical public and private networks in Gulf of Finland and Archipelago Sea area, in particular connected to maritime spatial planning (MSP).

Your contribution is highly appreciated. Please fill the survey on the provided links

- In Estonian: https://survey.ut.ee/index.php/634524?lang=et
- In Finnish: https://survey.ut.ee/index.php/634524?lang=fi
- In English: https://survey.ut.ee/index.php/634524?lang=en

If you have any further questions about this survey, please do not hesitate to contact (in Estonian, Finnish or English): Annika Jaansoo, University of Tartu, School of Economics and Business Administration, Estonia