Annual Report 2023

HELCOM activities report for the year 2023

Baltic Marine Environment Protection Commission

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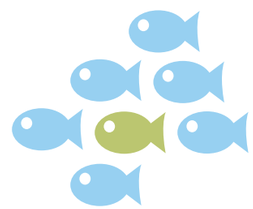


Foreword

EVERY YEAR IS A BUSY YEAR FOR HELCOM and 2023 was no exception to the rule. Small wonder, given the magnitude and severity of the challenges facing the Baltic Sea and the broad raft of measures deployed by HELCOM and its Contracting Parties to tackle them. And, in fact, the publication of HELCOM's Third Holistic Assessment of the Baltic Sea (HOLAS 3) in 2023 offered stark and startling new insights into what we are up against in seeking to protect our regional marine environment. A flagship product of our organization, each of these recurrent assessments of the ecosystem health of the Baltic Sea is a major achievement in itself and offers a "snapshot" of the state of our regional sea during a given period. And HOLAS 3, covering the years from 2016 to 2021, does not present a pretty picture. In a nutshell: there was little to no improvement of the Baltic Sea environment during the assessment period.

Yet HOLAS 3 is not all gloom and doom. While it underscores the urgency of transformative action in all socioeconomic sectors across the entire Baltic Sea region, it also shows that measures to reduce pressures on the Baltic Sea do have a beneficial effect, if duly implemented.

Which in turn testifies to the continued relevance of HELCOM's strategic programme of measures and actions for achieving good environmental status of the Sea, the 2021 Baltic Sea Action Plan (2021 BSAP). The implementation of the 199 Actions under its four thematic segments and one horizontal actions segment is in full swing. While the last of these Actions will need to be realized by 2030, many have earlier target years, and some have already been completed. 2023 was the first year in which this work was underpinned by an updated HELCOM working structure adopted following a deliberative process involving various HELCOM bodies. The first such update since 2013, it is intended to better adapt HELCOM to the demands of the coming years, notably the implementation of the 2021 BSAP.

Without being exhaustive, this report offers an overview of activities undertaken in the course of the past year by our organization as we continue to work towards achieving our ultimate aim of good environmental status of the Baltic Sea. And it documents that 2023 was indeed another busy year for HELCOM.

Mr. Rüdiger Strempel,
Executive Secretary of
HELCOM

1. About HELCOM and the Baltic Sea

The Baltic Sea is a semi-enclosed sea in the north of Europe. Overall, the sea is relatively shallow, with brackish waters low in oxygen. Surface water temperatures vary greatly depending on the season and the geography, with sea ice in the north during winter and warmer waters around 20°C in the south during summer.

Due to its peculiar biochemical properties, the Baltic Sea contains a unique mix of marine and freshwater species adapted to the brackish conditions, as well as a few true brackish-water species. Where salinity levels are low in the Baltic Sea's northern and eastern waters, fewer marine species thrive, and the communities of organisms are dominated by those adapted to freshwater, especially in estuaries and coastal waters. The limited number of about 3,000 macroscopic species implies that each individual species has an exceptionally high importance within the food web. The disappearance of a single key species could have dire consequences for the entire ecosystem, possibly leading to its collapse. For this reason, the Baltic Sea is considered particularly vulnerable to external disturbances.

The catchment area, which hosts about 85 million people, is four times larger than the sea itself. Human activities therefore abound in this busy region, and so do anthropogenic pressures. Agriculture, industry and urban development have taken a serious toll on the marine environment in the past. Despite considerable efforts by all HELCOM countries, the Baltic Sea has not fully recovered and is not showing good environmental status (GES) yet.

What we work for

"A healthy Baltic Sea environment, with diverse biological components functioning in balance, resulting in a good environmental and ecological status, and supporting a wide range of sustainable economic and social activities."

HELCOM activities report
for the year 2023

About HELCOM

The Baltic Marine Environment Protection Commission – also known as the Helsinki Commission (HELCOM) – is an intergovernmental organization (IGO) in the Baltic Sea area, consisting of ten Contracting Parties: the nine Baltic Sea countries Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden, plus the European Union. A platform for environmental policy-making at the regional level, HELCOM works for a healthy Baltic Sea. Its mandate stems from the Helsinki Convention, whose implementation it oversees. It maintains a Secretariat, which is located in Helsinki, Finland.

The Helsinki Convention

The Helsinki Convention is a regional sea convention originally signed in 1974 by the Baltic Sea coastal countries to address the increasing environmental challenges from industrialisation and other human activities that were having a severe impact on the marine environment. The Helsinki Convention aims to protect the Baltic Sea from all sources of pollution from land, air and sea. It also commits the signatories to taking measures to conserve habitats and biological diversity and to ensuring the sustainable use of marine resources. In 1992, the Helsinki Convention was updated to take into account the geopolitical changes and emerging environmental challenges in the region. The current version entered into force in 2000.

Our action areas

The HELCOM Area

The Helsinki Convention defines the "Baltic Sea Area" – the HELCOM area –as the Baltic Sea and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57° 44.43'N. The Baltic Sea Area also includes the internal waters.

2. Strategic pause of HELCOM

On 4 March 2022, against the background of the current geopolitical crisis, the then German Chairmanship of HELCOM issued a statement declaring that the European Union and the Contracting Parties to the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area that are Member States of the European Union (H 9) unanimously agreed that they could not currently engage in business as usual with the Russian Federation in the context of HELCOM and declared a so-called strategic pause in regular HELCOM operations.

In line with this, all official meetings of the Helsinki Commission and the Heads of Delegation have been postponed. Informal consultation sessions of the bodies concerned in an H 9 format are, however, taking place. Approval, adoption and decisions at the political level are taken through correspondence with the Secretariat as the intermediary, to maintain the integrity of HELCOM work processes. Official meetings of all HELCOM Groups (Working Groups and Expert Groups) are also postponed and replaced by informal consultation sessions hosted by Contracting Parties. The strategic pause remains in effect and the H9 have decided that it should be continued until further notice. However, the Russian Federation remains a Contracting Party to HELCOM.

Despite the challenges posed by the current mode of operations, HELCOM has remained operational, the implementation of the 2021 Baltic Sea Action Plan (2021 BSAP) and other HELCOM activities are on track.

Approval, adoption and decisions at the political level are taken through correspondence with the Secretariat as the intermediary, to maintain the integrity of HELCOM work processes

3. Third Holistic Assessment of the Baltic Sea (HOLAS 3)

To better understand the Baltic Sea environment and our relationship with it, HELCOM periodically produces holistic assessments of the state of the Baltic Sea, or HOLAS for short. The Holistic Assessment of the Status of the Baltic Sea (HOLAS) is a reoccurring, transboundary, cross-sectoral assessment which looks at the effect of our activities and measures on the status of the environment. Each holistic assessment captures a comprehensive snapshot of the state of the Baltic Sea environment at a given moment in the Sea's dynamic life history.

The assessment is holistic because it strives to provide insight into what **drives** change in the marine ecosystem, analyzes how and what **activities** put **pressures** on the ecosystem, how these pressures affect the **state** of the environment and cause **impacts** on biodiversity, the ecosystem and how it functions. Based on this information we then need to establish effective **measures** to minimize these negative impacts (see Figure 1).

The HOLAS assessment covers, or approaches, the main themes to be considered when taking an ecosystem approach to management and highlights a broad range of aspects under the overarching themes of the state of the ecosystem, environmental pressures and human well-being and contributes to a vast sharing and development of knowledge both within and across topics.

The focus of the assessment is to show results of relevance at the regional scale and large-scale patterns across and between geographic areas in the Baltic Sea. Each assessment provides a clearer picture of where we are, how things are connected, and what needs to be done. The holistic assessment specifically enables tracking progress towards the implementation of the 2021 Baltic Sea Action Plan goals and objectives and functions as a regional contribution to the reporting under the Marine Strategy Framework Directive (MSFD) for those HELCOM Contracting Parties that are also EU Member States. The results of the assessment of the European Union (EU) underpin HELCOM policy and the information from the assessment is incorporated in the ecosystem-based management of the Baltic Sea, as well as in measures nationally, regionally and globally.

The HELCOM holistic assessment is a multi-layered product (Figure 1). Within the assessment structure, highly detailed results are progressively aggregated, allowing anyone to explore the results at whatever scale is most relevant to them and culminating in the overall summary report on the State of the Baltic Sea.

The collection, reporting and collation of national monitoring data at the Baltic Sea level forms the basis of the assessment. The data is spatially presented using a defined assessment unit system dividing the Baltic Sea into assessment units representing different levels of detail, in a regionally agreed nested system.

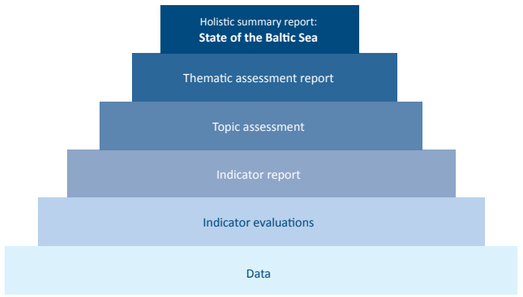


Figure 1. Assessment structure. The HELCOM holistic assessment is a multi-layered product. Within the assessment structure, highly detailed results are progressively aggregated, allowing anyone to explore the results at whatever scale is most relevant to them and culminating in the overall summary report on the State of the Baltic Sea.

The data then feed into regionally agreed evaluation and assessment methods. This allows us to explore trends over time, spatial aspects, as well as results, in order to indicate potential future developments and geographic areas of key importance for the assessed themes.

HELCOM core indicators have been developed to assess the status of selected elements of biodiversity and human-induced pressures on the Baltic Sea and thus support measuring progress towards regionally agreed targets and objectives. The core indicators are selected according to a set of principles including ecological and policy relevance, measurability with monitoring data and linkage to anthropogenic pressures (HELCOM 2020a). The observed status of HELCOM indicators is measured in relation to a regionally agreed threshold value specific to each indicator, and in many cases at the level of individual areas in the Baltic Sea. The majority of the indicators are evaluated using data from regionally coordinated monitoring under the auspices of HELCOM and reported by the Contracting Parties to the Convention. The status of an indicator is expressed as failing or achieving the threshold value. Hence, the results indicate whether status is good or not according to each of the core indicators. HELCOM core indicators make up the most detailed level of results, presented in the dedicated indicator reports (https://indicators.helcom.fi).

A basic criterion for HELCOM core indicators is that they are quantitative and that their underlying monitoring data and evaluation approaches are comparable across the Baltic Sea. This is to ensure that they are suited for integrated assessment. Integrated assessments are assessments where the quantitative information from indicator evaluations or other data, as well as qualitative information, is combined by topic, to produce a broader, more holistic overview of the situation for that specific topic and, subsequently, for the theme under which that topic is included. The integrated assessments are made using the BEAT (biodiversity), HEAT (eutrophication) and CHASE (hazardous substances) assessment tools, as well as the Spatial Pressures and Impacts Assessment tool, developed for this purpose by HELCOM. In addition to presenting whether status is good or not, the integrated assessment results also indicate the distance to good status. Distance to good status is shown by the use of five assessment result categories; out of which two represent different levels of good status and three different levels of not good status. Quantitative integrated results can then be further combined with qualitative assessment results (where quantifiable information is not available) and contextual information to form five thematic assessments, each with their own report (Biodiversity, Eutrophication, Hazardous substances, Marine litter, underwater noise and non-indigenous species, Spatial distribution of pressures and impacts, as well as Social and economic analyses). The overall aim of a thematic assessment is to present what the results of the various assessments related to the theme of economic and social analyses are, how they have been produced as well as their rationale, all within the relevant policy and scientific frameworks. Confidence in the assessments is presented together with the results to ensure transparency and facilitate their use. The thematic assessment reports are an integral part of the overall Status of the Baltic Sea assessment but also function as stand-alone reports. The reports are more technical in nature than the summary report, as they are intended to give details of the assessments, explaining underlying data and indicators to the extent that is needed to ensure that the HOLAS 3 assessment is transparent and repeatable.

The main aim, and the added value, of the Summary Report lies in the possibility to link together the information from the topical and thematic assessments and thus highlight the holistic aspects of the assessment for each topic. With this in mind, the Summary Report focuses on presenting the results and looking more in depth at why we are seeing these results, i.e., presenting the results of the thematic assessments by topic but linking and combining these topical results with the information and input from the other assessments/sources to provide context and analysis.

The Summary Report focuses on presenting the results and looking more in depth at why we are seeing these results

Related resources

State of the Baltic Sea 2023

HELCOM activities in 2023

Species & habitats

Spatial conservation and MPAs

Agriculture

Nutrients

Hazardous substances

Marine litter

Dredging & seabed

Underwater noise

Shipping

Response to spills

Submerged hazards

Fisheries

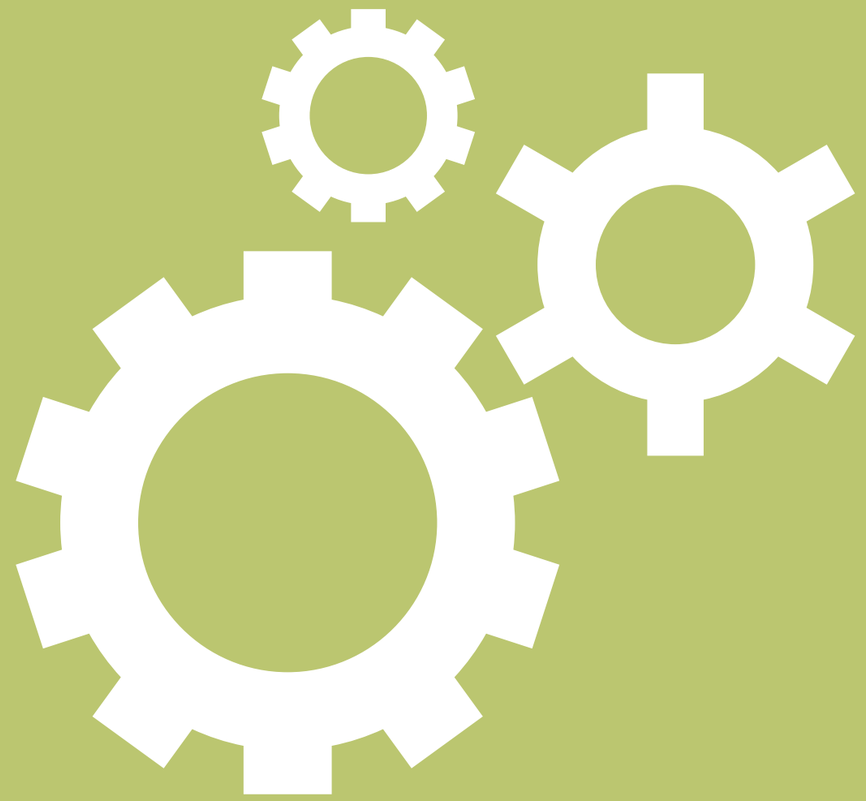
Maritime spatial planning

Climate change

Economy and society

Monitoring & assessment

International processes



4. Species and habitats

Although the overall diversity in terms of number of species is relatively low compared to other sea areas, the Baltic Sea is renowned for its unique biodiversity, featuring both freshwater and marine species that have adapted to the brackish environment. The prevalence of species and communities is largely governed by strong gradients in salinity from north-to-south, coastal-to-offshore, and surface-to-bottom. In addition, seasonal changes in temperature as well as temporary and permanent oxygen deficits influence the occurrence and composition of species. Benthic habitats and biotopes are also influenced by a multitude of factors, including substrate, exposure and depth. When combining these factors, the result is a mosaic of varied biotopes exhibiting great diversity in function and structure. The Baltic Sea's biodiversity is thus dynamic in time and variable in space, something which also needs to be taken into account in the management of human activities.

As part of the actions under the Baltic Sea Action Plan, HELCOM Contracting Parties have committed to several actions aimed at improving the status of biodiversity. These include the protection of fish, birds and mammals, specific habitats, as well as the development of indicators for biodiversity, to better keep track of the effect the actions have on the environment.

In 2023, in the context of HOLAS 3, HELCOM concluded the most comprehensive assessment ever of the status of Baltic Sea biodiversity, covering phyto- and zooplankton, coastal fish, waterbirds and marine mammals, as well as pelagic and benthic habitats, food webs and bycatch.

In addition to the status assessment, which examines the overall status of various components of the Baltic Sea food web, there is also a need to track changes in status for individual species, to understand which species may be under threat. This is done though the ongoing HELCOM RED LIST II project. In 2023 the project worked to collate data and information and establish the infrastructure needed to evaluate the threat status for both Baltic Sea species and biotopes, using the criteria and approach developed by IUCN.

Further, the Contracting Parties have recognized the need to increase efforts to restore biodiversity more concretely. Subsequently, the preparation of an Action Plan for Restoration started in 2023 and will be progressed through the PROTECT BALTIC project.

HOLAS 3

The Holistic Assessment of the Status of the Baltic Sea (HOLAS) is a recurrent, transboundary, cross-sectoral assessment looking at the effect of our activities and measures on the environment. The HOLAS assessment covers the main themes to be considered when taking an ecosystem approach to management. It provides regular updates on the environmental situation in the Baltic Sea. The results of the assessment underpin HELCOM policy and the information from the assessment is incorporated in the ecosystem-based management of the Baltic Sea, as well as guiding measures nationally, regionally and globally.

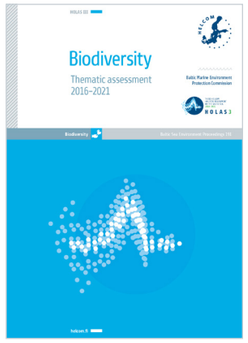
HELCOM Red List II

Regularly reviewing the status of Baltic Sea species and habitats/biotopes enables the tracking of long-term trends in the status of Baltic Sea biodiversity. This makes it possible to assess whether actions taken to halt the loss of biodiversity have been effective. Together with other HELCOM assessments, the HELCOM Red Lists represent an essential part of the HELCOM evaluation system, enabling responsive, dynamic and adaptive management and measures.

PROTECT BALTIC

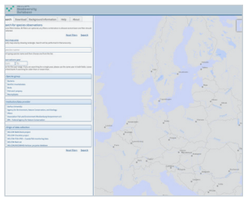
PROTECT BALTIC is a groundbreaking initiative under Horizon Europe and HELCOM which aims to address the challenges of expanding marine protected areas (MPAs) and ensuring their effectiveness in the Baltic Sea region.

Related resources



Biodiversity thematic assessment 2016–2021

HELCOM Checklist 2.0 of Baltic Sea Macrospecies



HELCOM Biodiversity Database

5. Spatial conservation & MPAs

The establishment of well-managed marine protected areas (MPAs) is one of the primary mechanisms for safeguarding biodiversity, ecosystem functions and natural resources. It also secures resilience in the face of a changing climate. MPAs are also essential to habitats and species beyond the protected zones. They provide refuge for mobile species such as seabirds and marine mammals, serve as spawning and nursery grounds for fish and also act as buffer zones between areas of intensive human use. The goal of HELCOM MPAs, which form the coastal and marine Baltic Sea protected area network, is to safeguard these marine and coastal habitats in the Baltic Sea by managing human activities within and around those areas.

As part of the initiatives outlined in the 2021 Baltic Sea Action Plan, the HELCOM Contracting Parties agreed to the ambitious targets of protecting 30% of the Baltic Sea area by 2030 ("30 by 30"). Notably, one-third of this, equivalent to 10% of the Baltic Sea area, should fall under strict protection by the same 2030 deadline. Alongside these spatial targets, the BSAP outlines how to improve MPA management efforts, thus increasing effectiveness of their protection.

In 2023, HELCOM secured resources and commenced dedicated implementation of many BSAP actions related to protection, primarily through the Horizon project PROTECT BALTIC, coordinated by HELCOM. In the framework of the project, work has started on establishing a shared vocabulary for protection terminology for the Baltic Sea and the development and initial proposals for commonly agreed regional goals, objectives and targets for protection. Moreover, comprehensive mapping of ecosystem components in the Baltic Sea has taken place. A dedicated workshop for MPA managers was held in Roskilde, Denmark and planning for a follow-up workshop is already ongoing.

PROTECT BALTIC

PROTECT BALTIC is a groundbreaking initiative under Horizon Europe and HELCOM which aims to address the challenges of expanding marine protected areas (MPAs) and ensuring their effectiveness in the Baltic Sea region.

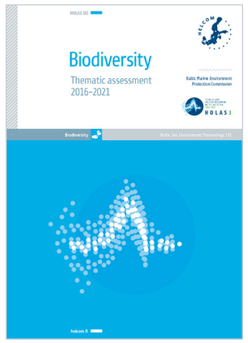
BLUE4ALL

BLUE4ALL proposes a new approach for marine protected areas (MPAs), aligning a bottom-up strategy with the top-down regulatory expectations defined by the EU Biodiversity Strategy 2030 and national initiatives. The project's mission is to address the challenges faced in marine conservation and restoration in Europe, including the social acceptability of MPAs. This will result in the development of robust and replicable tools based on science

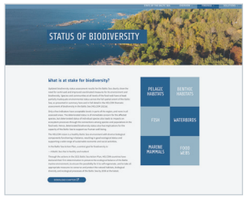
MSP4BIO

The main objective of MSP4BIO is to develop an integrated and modular Ecological-Socio-Economic (ESE) management framework for the protection and restoration of marine ecosystems. The solutions developed in the project will fill gaps on marine biodiversity and its management, by better linking spatial ecological features with socio-economic elements.

Related resources



Biodiversity thematic assessment 2016–2021



State of the Baltic Sea 2023 website

In 2023, HELCOM secured resources and commenced dedicated implementation of many BSAP actions related to protection, primarily through the Horizon project PROTECT BALTIC, coordinated by HELCOM

Surfacewater, Läntinen Suomenlahti, Hanko. 2010.
© Mats Westerbom (FINMARINET)

6. Agriculture

Agriculture remains a major source of nutrient loading to the Baltic Sea, leading to eutrophication - an excess of nutrients in the sea. In recent years, HELCOM has focused on promoting more efficient manure management and nutrient recycling. The aim is to close the nutrient loops and to reduce nutrient surpluses on the farm and regional levels, to avoid nutrient runoff to the sea.

The updated Baltic Sea Action Plan (BSAP) contains over 20 actions on agriculture and nutrient recycling to promote sustainable agriculture and reduce nutrient losses.

In 2023, implementation of the BSAP actions related to agriculture accelerated. The revision of HELCOM Recommendation 24/3 to put more emphasis on mitigating ammonia emissions from agriculture was nearly completed and the drafting of guidelines to support annual nutrient accounting at farm level was finalized. Work to compile regional best practices to improve soil structure on clay soils to reduce phosphorus losses kicked off. The development of Best Available Technology (BAT)/Best Environmental Practice (BEP) to reduce ammonia and greenhouse gas emissions from livestock housing, manure storage and spreading also started.

The revision of HELCOM Recommendation 24/3 to put more emphasis on mitigating ammonia emissions from agriculture was nearly completed and the drafting of guidelines to support annual nutrient accounting at farm level was finalized

HELCOM Projects

To support the implementation of the BSAP and HELCOM's Baltic Sea Regional Nutrient Recycling Strategy, a new international project "Circular Nutrients for a Sustainable Baltic Sea Region" (CiNURGi), funded by Interreg Baltic Sea Region, was launched in 2023. The new project with partners from eight Baltic Sea coastal countries, including HELCOM, will boost both national and joint HELCOM efforts to increase nutrient recycling and reduce nutrient losses to the Baltic Sea.

CiNURGi project: https://interreg-baltic.eu/project/cinurgi/

7. Nutrients

Eutrophication remains the major environmental threat to the Baltic Sea. It results in intense algal growth and depletion of oxygen on the bottom of the sea, further leading to vast areas with anoxic or hypoxic conditions and affecting the entire ecosystem. The riverine input of nutrients is the main source of both nitrogen and phosphorus, with diffuse sources such as losses from agricultural land to rivers making up a large share, while point sources such as wastewater treatment plants or industries contribute only a few percent of the total input. Airborne transport also plays a significant role for the input of nitrogen, adding up to more than a quarter of the total load.

The new HELCOM Working Group on Source to Sea Management of Nutrients and Hazardous Substances and Sustainable Agricultural Practices (WG Source to sea) started its work.

The HELCOM nutrient input reduction scheme is a regional approach to sharing the burden of nutrient reductions. The aim is to achieve the goal of a Baltic Sea unaffected by eutrophication, as agreed by the Contracting Parties of HELCOM. The scheme was first introduced and agreed on in 2007 as part of the HELCOM Baltic Sea Action Plan and revised in 2013 and 2021.

The regional input targets for reaching good environmental status of the Baltic Sea are the maximum allowable inputs of nutrients (MAI) – indicating the maximum level of inputs of water- and airborne nitrogen and phosphorus to the Baltic Sea sub-basins. Within this scheme, the maximum input to the Baltic Sea that can be allowed is 792,209 tonnes of nitrogen and 21,716 tonnes of phosphorus annually.

In the nutrient input reduction scheme of the 2021 Baltic Sea Action Plan, Nutrient Input Ceilings (NIC) define maximum inputs via water and air to achieve good status for each country with respect to eutrophication for the Baltic Sea sub-basins. The related key product, Progress towards nutrient input ceilings achieved by 2020 (NIC2020), was approved and published. The second part, a technical background report, was finalized for approval in autumn 2023.

The HOLAS3 work culminated in the publication of 12 nutrient and eutrophication-related indicator reports and the HELCOM Thematic assessment of eutrophication 2016-2021.

HELCOM Projects

In the 2021 BSAP there are 36 measures targeted at curbing eutrophication. They range from keeping track of the implementation of the nutrient input targets to measures concerning agriculture, the wastewater sector, atmospheric nitrogen emissions and nutrient recycling. The new HELCOM WG Source to sea started its work, and together with Expert Group RedCore and the PLC-8 project they support and coordinate implementation of those BSAP actions that are under their remit.

The PLC-8 project will run until the end of 2024. Six project activities were completed by the end of 2023: publication of the annual Baltic Sea Environment Fact Sheets on waterborne nutrient inputs 1995-2021 and atmospheric nitrogen deposition 1995-2021, compilation and reporting of quality assured national periodic data for 2021, preparing the update of the inputs of nutrients (MAI) indicator 1995-2021, publishing the first part of the NIC2020 assessment and preparing the technical NIC2020 report and the assessment of inputs of selected hazardous substances 1995-2021 for approval by the Heads of Delegation.

A proposal for a HELCOM Project for the Ninth Baltic Sea Pollution Load Compilation (PLC-9) for the period 2025-2028 was prepared for approval by the HOD.

Related resources

Progress towards nutrient input ceilings achieved by 2020 (NIC2020)

HELCOM core indicator on inputs of nutrients for the period 1995–2021

BSEFS Nitrogen emissions to the air in the Baltic Sea area

BSEFS Atmospheric nitrogen deposition to the Baltic Sea

BSEFS Waterborne nitrogen and phosphorus inputs and water flow to the Baltic Sea 1995–2021

BSEFS Cyanobacteria biomass 1990–2021

The maximum input to the Baltic Sea that can be allowed is 792,209 tonnes of nitrogen and 21,716 tonnes of phosphorus annually

8. Hazardous substances

The Baltic Sea remains heavily affected by hazardous substances. Due to a scarcity of data, it has thus far been impossible to obtain a comprehensive understanding of the extent of the contamination of the Sea. Hazardous substances originate from various human activities, both on land and at sea. Thousands of chemicals and synthetic materials are widely used in households, primarily entering the aquatic environment through sewage treatment systems. Urban storm water and agricultural run-off further contribute to diffuse loading. Industries utilize chemical compounds in technological processes or as a raw material, with emissions through air or water posing additional environmental risks. Examples of offshore sources of hazardous substances include the chemical leaching from antifouling paints, discharge of polluted water from ships, aquaculture and offshore installations, as well as accidental or intentional spills of oil or other harmful substances.

In 2023, the HELCOM Expert Group on Hazardous Substances (EG Haz) continued its work, with six sub-teams concentrating on strategic/holistic approach; priority substances, substances of emerging concern and screening; measures; monitoring, indicators and assessment; pharmaceuticals and biological effects.

The third holistic assessment of the Baltic Sea (HOLAS3) work culminated in publishing 14 hazardous substances-related indicator reports and the HELCOM Thematic assessment of hazardous substances, marine litter, underwater noise and non-indigenous species 2016-2021.

The HAPhazard project (2022-2024) works towards a regional strategic approach to strengthening the management cycle for hazardous substances and an action plan for hazardous substances (BSAP HL1, HL9 and HL10). The project made substantial progress, by developing and validating the selected approach, using a scoring method on three different concerns and launching the primary run of a new framework. The cluster on developing biological monitoring of contaminants with HAPhazard/H-BEC, BEACON (2022-24) and Detect2Protect (2023-25) projects (supporting implementation of BSAP HL13) also worked intensively and a data call on biological effects was carried out.

The Interreg Baltic Sea Region core project EMPEREST (2023-25) kicked off, targeting the management of per- and polyfluoroalkyl substances (PFAS). HELCOM's responsibilities in the project focus on drafting methodological recommendations for monitoring and assessment of PFAS in the aquatic environment. In 2023 a PFAS monitoring task force was established and a PFAS data call carried out.

The Pre-EMPT project was finalized in December 2023 and its final report was submitted. Using the results from wide-scope target screening for over 2 500 substances and suspect screening for more than 65 000 substances from approximately 100 mussel, fish, and sediment samples from around the Baltic Sea strongly supports the strategic approach test run under the HAPhazard project. Moreover, preparations for the further utilization of the results of the project for a BSEP publication commenced, developing a surveillance indicator and scientific publications. Cooperation continued with the OSPAR Convention for the North-East Atlantic, the Arctic Monitoring and Assessment Programme (AMAP) and the International Council for the Exploration of the Sea (ICES) on developing an assessment tool.

2023 also saw the kick-off of two new projects: HAZ-SHAP (Hazardous Substances Strategic Holistic Action Plan – improving management to reduce risk and impact, 2023-24) and PharmaSea (Pharmaceutical Substances in the Baltic Sea, 2023-24). HAZ-SHAP aims to establish a general framework to manage hazardous substances in the marine environment, collaborating also with HAPhazard. PharmaSea will support the BSAP actions related to pharmaceuticals (HL22 and HL23) and an occurrence data call was carried

out in 2023. Preparation for another data call on pharmaceuticals sales was started.

All data from data calls (HAPhazard biological effects, EMPEREST, PharmaSea) are also used in the HAPhazard project strategic framework test run.

The work of the sub-teams of EG HAZ as well as the projects aim to support implementing the hazardous substances segment of the 2021 BSAP that contains over 30 measures, from legacy pollutants to emerging substances and from management and policy development to awareness raising.

HELCOM projects

With co-funding by NEFCO, Germany and Sweden, the project Holistic Action Plan – Hazardous substances (HAPhazard) supports the implementation of the 2021 BSAP action HL1 and, within one work strand (HELCOM Biological Effects of Contaminants, H-BEC), also action HL13.

The Interreg BSR co-funded project Application of biological effects methods in monitoring and assessment of contaminants in the Baltic Sea (BEACON) also supports HL13 implementation.

Pre-empting pollution by screening for possible risks (Pre-EMPT) is co-funded by NEFCO.

Eliminating Micro-Pollutants from Effluents for Reuse Strategies (EMPEREST) supports local authorities, service providers and the policy-making community in addressing PFAS substances and other persistent organic pollutants in the water management cycle and is funded by Interreg BSR.

Hazardous Substances Strategic Holistic Action Plan – improving management to reduce risk and impact (HAZ-SHAP) aims to establish a general framework for managing hazardous substances in the marine environment and is funded by the Nordic Council of Ministers (Nordic Working Group for Chemicals, Environment and Health (NKE)).

The pharmaceutical Substances in the Baltic Sea (PharmaSea) project supports implementing the BSAP actions related to pharmaceuticals (HL22 and HL23).

Related resources

Hazardous substances, marine litter, underwater noise and non-indigenous species Thematic assessment 2016–2021

BSEFS

BSEFS on the airborne input of selected hazardous substances (lead, mercury) up to 2021

The work of the sub-teams of EG HAZ as well as the projects aim to support implementing the hazardous substances segment of the 2021 BSAP that contains over 30 measures

9. Marine litter

Marine litter, including microplastics, is globally acknowledged as an issue of concern, for several reasons. It has a significant impact on marine life through ingestion, entanglement, and as a vector of harmful chemicals and non-indigenous species. Additionally, it may pose a risk to human health and safety hazards (navigation, consumption of fish and seafood which may contain microplastics) and there are considerable economic costs associated with the presence of marine litter in the sea and related removal activities.

During 2023, substantial efforts were made globally to draft, by 2024, an international legally binding agreement to end plastic pollution. There is still a lot of work ahead, but advancements achieved seem promising. Moreover, the relevance of the Regional Seas Conventions for the implementation of such an agreement, once it has entered into force, is already pointed out in its zero draft.

The publication of the HELCOM thematic assessment of hazardous substances, marine litter, underwater noise and non-indigenous species 2016-2021 is, without any doubt, HELCOM's key achievement of the year in relation to marine litter. The status assessment of beach litter shows that eleven out of sixteen sub-basins are above the HELCOM threshold value of 20 litter items per 100 m beach. The most commonly found category of litter is various plastic items and fragments larger than 2.5 cm. Several of the items on the top-ten list are related to single use plastics and other types of plastic. Marine litter from sea-based sources is only contributing slightly to littering Baltic Sea beaches. Land-based sources are therefore more relevant. There is also additional information on seafloor litter, although due to the opportunistic character of the monitoring process (information is collected in trawls during fish stock surveys) these data are only available for certain areas in the region. Beach litter and seafloor litter monitoring data in the Baltic Sea have improved during the last decade, which supports the design of both national and regional actions to address sources and pathways of specific litter items to the Baltic Sea. In this regard, advancements in connection with the implementation of the HELCOM Regional Action Plan on Marine Litter include HELCOM joining the Global Ghost Gear Initiative, thus accomplishing action RS13, as well as the work conducted on balloons and confetti. An overview of the magnitude of the problem, a list of legislation or other approaches in the HELCOM countries and suggested options for phasing out intentional releases of balloons are available. The report is accompanied by a communication campaign, the "#CelebrateBetter campaign" which raises awareness of the environmental problems linked to balloon and confetti releases. A dedicated section of the HELCOM website contains this information.

Related resources

Hazardous substances, marine litter, underwater noise and non-indigenous species Thematic assessment 2016-2021

The intentional release of balloons and confetti in the Baltic Sea Area. HELCOM (2023)

Policy brief on EPS XPS in buoys, floats and docks

Policy brief on potential measures to prevent marine plastic pollution from balloons and confetti

The status assessment of beach litter shows that eleven out of sixteen sub-basins are above the HELCOM threshold value of 20 litter items per 100 m beach

WWF Poland
© Oskar Skumiał

10. Seabed

The dredging and deposition of dredged material at sea pose significant threats to seabed integrity. In addition to increasing levels of physical disturbance, these activities also introduce hazardous substances into the marine environment – either from the deposited material as such or through the related resuspension of substances.

There is a general prohibition of dumping in the Baltic Sea according to the Helsinki Convention, with the exception of dredged material. However, dumping of dredged material containing harmful substances is only allowed in accordance with the HELCOM Guidelines for the Management of Dredged Material at Sea.

Recommendation 36/2 and the Guidelines for Management of Dredged Material at Sea contain a requirement for consolidated reporting to the London Protocol on the deposition of dredged material at sea and identify the reporting procedure. The Contracting Parties are required to annually regulate and report on the material deposited in the Baltic Sea Area. Data on depositing of dredged material in 2021 were reported by the end of September 2021, and verified by the national experts in early 2023.

The 2021 data were reported in the summer of 2023.

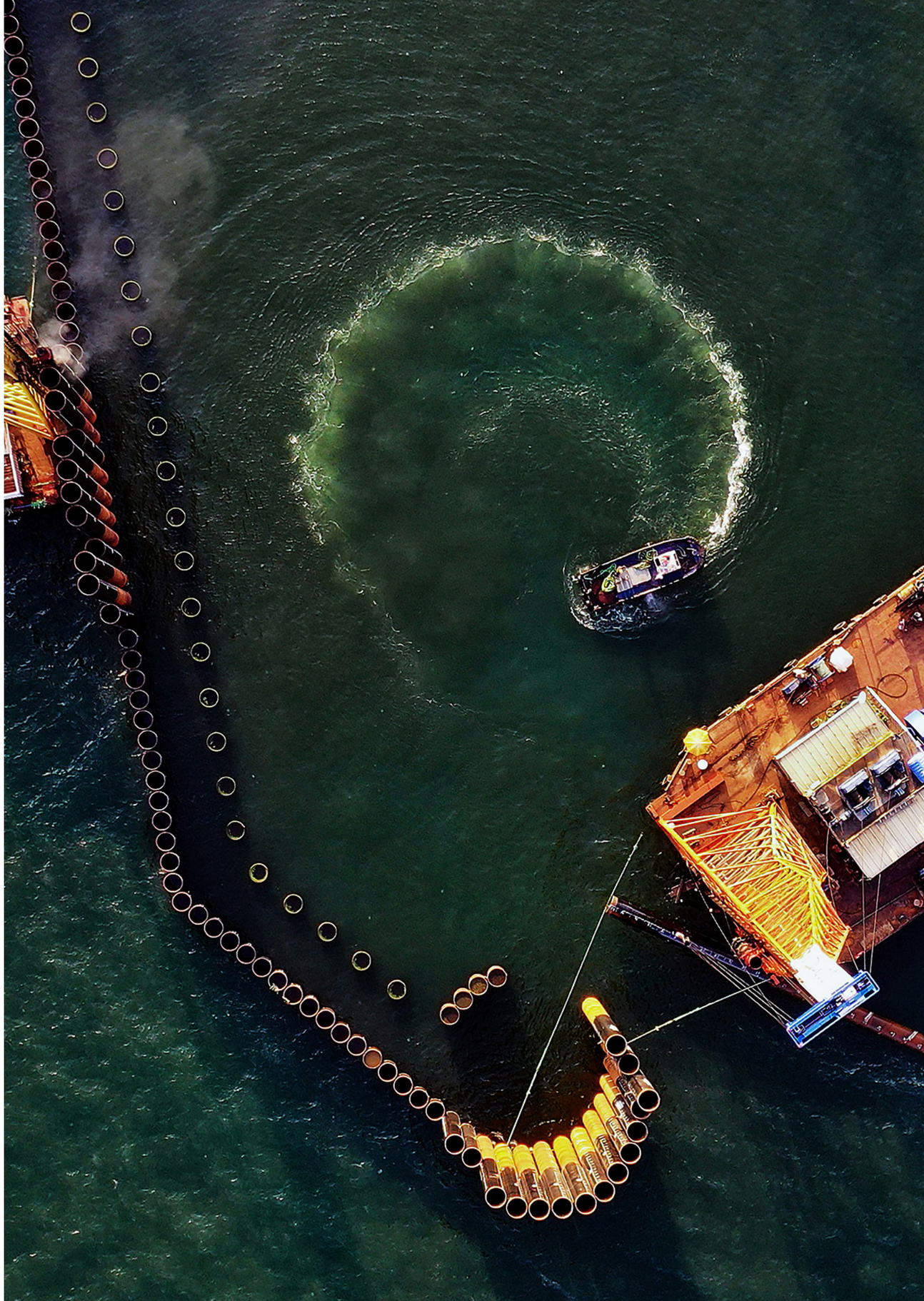
HELCOM projects

HELCOM Expert Group on Dredging/Depositing Operations at Sea (EG DreDS) continued and finalized the review process of the HELCOM Guidelines for Management of Dredged Material at Sea with organizing six separate drafting sessions in February, March, May and September 2023. Attachments to the Guidelines include the reporting format for data on handling dredged material at sea and, a new reporting format for reporting all other dredging events that are not connected to disposal events. The review was done in cooperation with the OSPAR Guideline review process, which took place simultaneously with the HELCOM review. The final version of the revised Guidelines was approved by the WG Sea-based pressures in December 2023.

Related resources

BSEFS on depositing of dredged material 2021

HELCOM Expert Group on Dredging/Depositing Operations at Sea (EG DreDS) continued and finalized the review process of the HELCOM Guidelines for Management of Dredged Material at Sea with organizing six separate drafting sessions



11. Underwater noise and energy

Sound plays a crucial role in the functioning of the aquatic ecosystems. Human-generated impulsive and continuous underwater noise can significantly impact noise-sensitive aquatic species and may lead to population degradation. Sources of impulsive noise with the highest intensity include explosions, pile driving, seismic explorations and low frequency sonars. Meanwhile, anthropogenic noise of a more continuous nature stems from sources such as pipelines, oil platforms, dredging, shipping, and offshore windfarms, among others.

The main focus of HELCOM underwater noise activities in 2023 was on the conclusion of the HELCOM thematic assessment of hazardous substances, marine litter, underwater noise and non-indigenous species 2016-2021, as a part of HOLAS 3. This first-time quantitative assessment of continuous underwater noise shows substantial inputs of ship noise, with considerable variations in space (shipping lanes much more affected than elsewhere) and time (ship noise being more widespread in winter than summer).

In relation to impulsive noise, based on available data on the occurrences of impulsive noise-producing maritime activities reported by Contracting Parties to the regional HELCOM/OSPAR noise registry, a broad range of impulsive sound events occurred in the region during 2016-2021.

It should be noted that both assessments come with significant uncertainties. Slowly but steadily, work also continues on the implementation of the HELCOM Regional Action Plan on Underwater Noise, and thus the plans for each of the actions in the Action Plan have been drafted, and are pending finalization.

Related resources

Hazardous substances, marine litter, underwater noise and non-indigenous species Thematic assessment 2016-2021

HELCOM Recommendation 42-43/1 on the Regional Action Plan on Underwater Noise

This first-time quantitative assessment of continuous underwater noise shows substantial inputs of ship noise, with considerable variations in space

12. Shipping

The HELCOM Contracting Parties cooperate to fulfil commitments established under global sectorial bodies dealing with maritime affairs. In doing so, they actively contribute to advancements on maritime transport issues, particularly crucial for the Baltic Sea in terms of its extensively used shipping lanes.

In alignment with the provisions of Annex IV of the Helsinki Convention, the Contracting Parties cooperate within the International Maritime Organization (IMO). This cooperation focuses on promoting the development of international regulations, and regionally to foster the harmonized implementation of said regulations.

In 2023, Heads of Delegation adopted the *Roadmap to strengthen the implementation and enforcement of the Baltic Sea NOx Emission Control Area* (NECA), as developed and approved by the Maritime Working Group. With the adoption of the Roadmap the criteria for achieving BSAP action S23 were fulfilled.

Other activities in 2023 included *inter alia* the approval of the reports "Emissions from Baltic Sea shipping," "Discharges from Baltic Sea shipping" and "Underwater noise emissions from Baltic Sea shipping" for publication as Baltic Sea Environment Fact Sheets (BSEFS), recommended initiating the revision of Recommendation 20/4 on Antifouling paints containing organotin compounds.

HELCOM projects

Work continued in the EMERGE project (2020-2024) on shipping emissions in EU marine waters. Coordinated by the Finnish Meteorological Institute, the project will quantify and evaluate the effects of potential emission reduction solutions for shipping in Europe. Furthermore, it will develop effective strategies and measures to reduce the environmental impacts of shipping.

Related resources

Roadmap to strengthen the implementation and enforcement of the Baltic Sea NECA

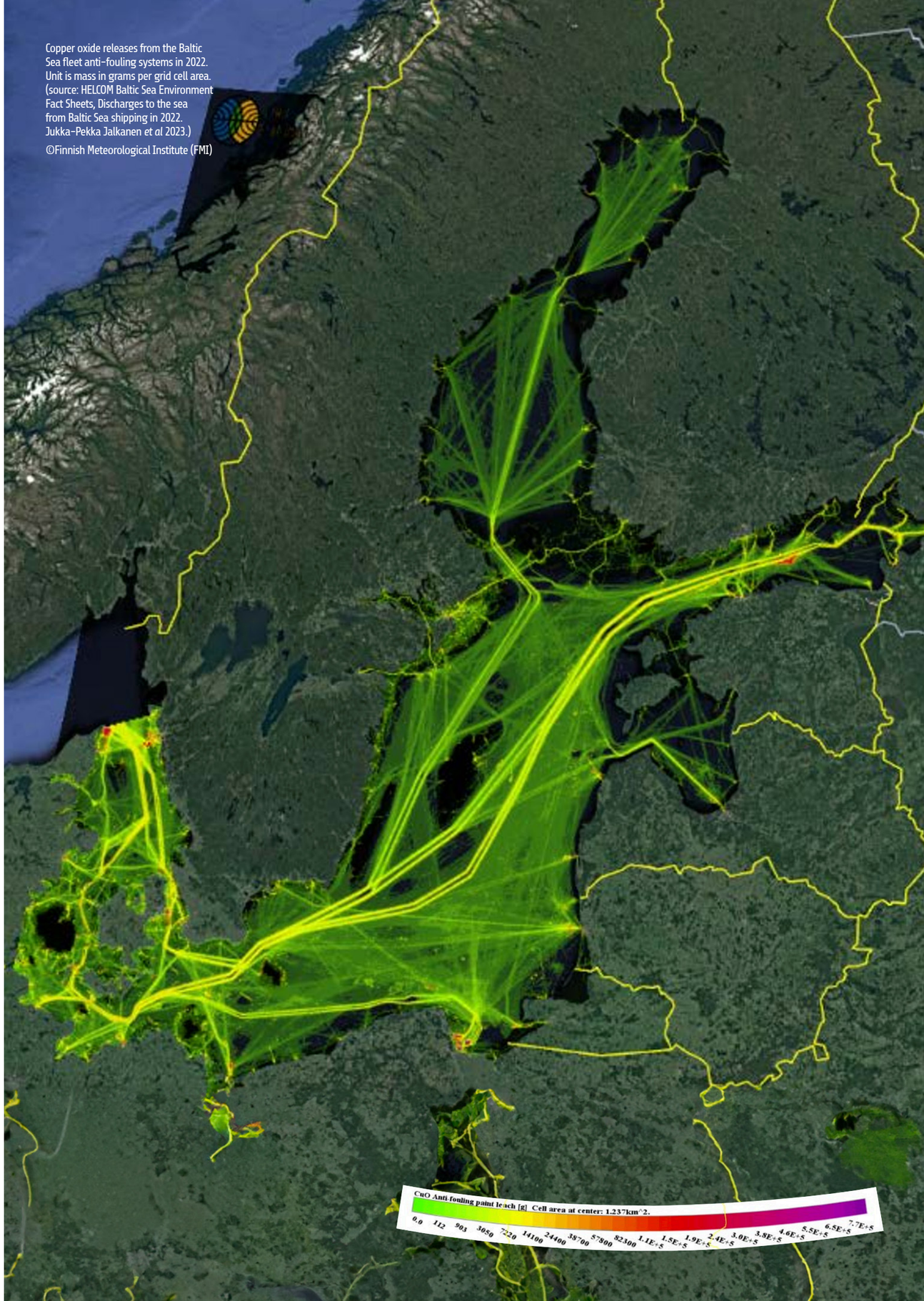
Underwater noise emissions from Baltic Sea shipping in 2006–2022 (2023)

Discharges to the sea from Baltic Sea shipping in 2022 (2023)

Emissions from Baltic Sea Shipping in 2022 (2023)

Baltic Sea Port Reception Facilities 2006–2022

HELCOM data analysis dashboard on shipping accidents in the Baltic Sea region 2004–2022



Copper oxide releases from the Baltic Sea fleet anti-fouling systems in 2022. Unit is mass in grams per grid cell area. (source: HELCOM Baltic Sea Environment Fact Sheets, Discharges to the sea from Baltic Sea shipping in 2022. Jukka-Pekka Jalkanen *et al* 2023.)

13. Response to spills

HELCOM has an extensive history of cooperation and coordination regarding pollution events associated with oil and hazardous or noxious substances, as per Annex VII of the Helsinki Convention. The cooperation framework is further outlined in the HELCOM Response Manual and a number of HELCOM Recommendations. Among other things, it involves mutual assistance in response operations, where vessels and equipment are deployed by other Contracting Parties, notification of suspected incidents, information sharing, aerial surveillance and regular exercises (including the annual BALEX exercise, which is one of the world's largest response exercises). The Response Manual is continuously updated by all Contracting Parties through the HELCOM Response Working Group in order to ensure the best possible joint response capacities in the Baltic Sea.

The HELCOM Response Working Group continued the planning of a long-term risk analysis for pollution of the Baltic Sea by oil and hazardous and noxious substances (HNS), in line with BSAP Action S31.

Other efforts in 2023 related to response activities include inter alia the approval of the Report on wildlife response activities and preparedness and, approval of the HELCOM Annual report on discharges observed during aerial surveillance in the Baltic Sea 2022.

The annual HELCOM BALEX exercise for ensuring good cooperation in case of a pollution incident was successfully organized by Latvia from 30 August to 1 September 2023 north-east of the port of Riga in the Gulf of Riga. The shore response part of BALEX 2023 was held on the coastline near Riga.

Related resources

HELCOM Annual Report on discharges observed during aerial surveillance in the Baltic Sea 2022

Report on wildlife response activities and preparedness

HELCOM Response activities involve mutual assistance in response operations, where vessels and equipment are deployed by other Contracting Parties, notification of suspected incidents, information sharing, aerial surveillance and regular exercises

Response to a chemical spill and incident during the BALEX DELTA 2022 exercise
© Havariekommando

14. Submerged hazards

Numerous hazardous objects and remnants of warfare material rest on the seabed of the Baltic Sea. These objects pose a potential or current threat not only to the marine environment, but also to human health and safety. While the location of certain types of objects, such as mines, chemical munitions and wrecks, are reasonably well-documented, significant uncertainties persist regarding the quantities and types of submerged hazardous objects in the Baltic Sea and their degree of corrosion.

In 2023, new datasets on hazardous submerged objects in the Baltic Sea were approved and published in the HELCOM Map and Data Service (MADS), in support of the HELCOM Submerged Assessment on Warfare Materials in the Baltic Sea.

Work on the HELCOM Submerged Assessment on Wrecks in the Baltic Sea commenced and planning continued regarding actions needed to address the issue and mitigate the risk associated in particular with submerged warfare materials in the Baltic Sea.

HELCOM projects

HELCOM organized a workshop on hazardous submerged objects during the European Maritime Day in May 2023 together with the Polish Naval Academy.

In 2023, HELCOM continued to take the lead on the topic of submerged munitions by being a part of three consortia applying for project funding. The Baltic Sea Munitions Remediation Roadmap (MUNIMAP) project was approved by Interreg Baltic Sea Region in late 2023, while the other two applications are still pending at the time of writing.

Related resources

Chemical weapons dumpsites in the Baltic Sea

Thematic assessment on Hazardous Submerged Objects in the Baltic Sea Warfare Materials in the Baltic Sea

New datasets on hazardous submerged objects in the Baltic Sea were approved and published in the HELCOM Map and Data Service (MADS), in support of the HELCOM Submerged Assessment on Warfare Materials in the Baltic Sea

15. Fisheries

Fisheries contribute significantly to the economy and are integral components of the cultural heritage of the Baltic Sea region. Despite their importance, Baltic fisheries have not achieved full environmental sustainability and fish stocks in the Baltic Sea are declining.

The Working Group on Ecosystem-based Sustainable Fisheries (WG Fish) at HELCOM focusses on addressing fisheries in relation to implementing the ecosystem-based approach. In addition, the Working Group seeks solutions on how the sector can further contribute to achieving Good Environmental Status of the Baltic Sea.

In 2023, the Best Available Technologies (BAT) and Best Environmental Practices (BEP) for sustainable aquaculture in the Baltic Sea region were approved and made publicly available, the development of which was led by the Correspondence Group on Aquaculture, until its mandate came to an end in December 2022. The BAT/BEP for sustainable aquaculture in the Baltic Sea provide thorough and concrete guidance for both marine and freshwater aquaculture, as called for by HELCOM Recommendation 37/3.

In addition to working on sustainable aquaculture the organization increased its focus on migratory fish species, particularly salmon and eel in 2023. This work included the drafting of a new HELCOM Recommendation on managing large and medium rivers to ensure river connectivity for fish migration. The status assessment of commercial fish, as well as indicator reports on fisheries and the assessment of human activities and pressures, was finalized and published in 2023. HELCOM cooperated with other international organizations such as the Baltic Sea regional fisheries body BALTFISH and the Baltic Sea Advisory Council (BSAC).

Related resources

Biodiversity thematic assessment 2016–2021

Spatial distribution of pressures and impacts thematic assessment 2016–2021

Best Available Technologies (BAT) and Best Environmental Practices (BEP) for sustainable aquaculture in the Baltic Sea region

HELCOM core indicator on fishery operations

HELCOM core indicator on total allowable catch

The BAT/BEP for sustainable aquaculture in the Baltic Sea provide thorough and concrete guidance for both marine and freshwater aquaculture, as called for by HELCOM Recommendation 37/3

© Juuso Haapaniemi

16. Maritime Spatial Planning

Maritime spatial planning (MSP) serves as the marine counterpart to terrestrial spatial planning, aimed at the rational development of, for example, urban areas, as well as the safeguarding of environmental and cultural values. Whereas terrestrial spatial planning has long been an integrated part of national law in many European countries, MSP-related regulations represent a relatively novel form of legislation. MSP also offers the opportunity to widen the horizon beyond purely sectorial policy measures towards an integrated spatial approach within the Baltic marine areas.

The Baltic Sea region is a global front-runner on MSP, particularly with respect to transboundary planning. All HELCOM countries have either already developed national maritime spatial plans or are actively engaged in the process of doing so.

The Joint HELCOM-VASAB MSP Working Group leads the implementation of the Regional MSP Roadmap for 2021-2030, which is focused on:

- strengthening the collective effort and coherence throughout the region to implement Maritime Spatial Plans;
- aiming for sustainable development of the Baltic Sea region;
- establishing a sound foundation for an adaptive Maritime Spatial Planning process applying the ecosystem-based approach.

In line with the MSP Roadmap and the HELCOM-VASAB MSP WG workplan 2022-24, e.g. support for the BASEMAPS service was continued, Planner's Forums were organized, collaboration with other HELCOM groups was planned, country fiche templates were updated and the ecosystem-based approach Guidelines revision process was launched.

HELCOM projects

HELCOM is involved in several international projects related to MSP.

In the Emerging ecosystem-based Maritime Spatial Planning topics in the North and Baltic Seas Region (eMSP NBSR) project, co-financed by the European Maritime and Fisheries Fund (EMFF). HELCOM together with the Swedish Agency for Marine and Water Management (SwAM) co-led the work on the Ecosystem-based Approach (EBA). Among other things, the process for revising the ecosystem-based approach Guidelines started with support of the project and a joint Workshop with MSP4BIO and PASPS projects on the matter was organized in Helsinki on 13-14 June 2023.

PASPS, co-funded by Interreg BSR, supports the coordination of the Policy Area (PA) Spatial Planning of the EU Strategy for the Baltic Sea Region. The Joint HELCOM-VASAB Maritime Spatial Planning Working Group is the Steering Group of the PA in MSP related matters.

The MSP4BIO project (Improved science-based maritime spatial planning to safeguard and restore biodiversity in a coherent European MPA network), funded by HORIZON Europe, proceeded in developing an integrated and modular Ecological-Socio-Economic (ESE) management framework for the protection and restoration of marine ecosystems. The Baltic Sea is one of the six European test sites of the project and the HELCOM Secretariat leads the work package on policy coherence and co-production of solutions that aim to establish a joint understanding of and improve coherence between the key EU policies. One key deliverable on policy barriers and levers was finalized in 2023 and will be further used for preparing future directions and policy solutions.

The project Reviewing and evaluating the monitoring and assessment of maritime spatial planning (ReMAP) develops approaches to reviewing maritime spatial plans, concentrating on development of data tools, models and reuse of operational data infrastructure by 2025. A project workshop on designing online tools to support MSP in Baltic Sea was organized at the HELCOM Secretariat in December 2023.

The Baltic Sea is one of the six European test sites of the project and the HELCOM Secretariat leads the work package on policy coherence and co-production of solutions that aim to establish a joint understanding of and improve coherence between the key EU policies

17. Climate change

Climate change impacts are evident in the Baltic Sea: the water temperature is rising, ice cover is decreasing, and annual mean precipitation is increasing over the northern part of the region. All these changes affect the sea, its ecosystems, their function and subsequent ecosystem services, as well as the human activities depending on the sea.

Climate change is adding more pressure to a fragile ecosystem already affected by a wide variety of anthropogenic impacts. The aim of HELCOM work regarding climate change is to increase the resilience of the Baltic Sea ecosystem – its capacity to recover from stress and disturbance resulting from climate change impacts.

A prerequisite for informed decisions is understanding what changes have already occurred and what further changes and impacts are to be expected in the future. To this end, in 2023 HELCOM, together with Baltic Earth, has worked to further expand the topics included in the HELCOM Baltic Sea Climate Change Fact Sheet.

HELCOM strives to ensure that climate change is duly accounted for in marine policy-making and in the day-to-day work of HELCOM. In 2023, HELCOM worked to better account for the effects and impacts of climate change by commencing work on implementation of Baltic Sea Action Plan (BSAP) Action HT2, aimed at establishing a process to account for climate change when reviewing HELCOM policies, expected to be ready in 2024. Moreover, work on Action HT5 on developing an approach for ocean acidification for the Baltic Sea also progressed.

For the first time, climate change was also included in all topics and all levels of the Holistic Assessment of the Baltic Sea, the summary report of which was published in October 2023, providing valuable contextual information to support the results of the assessment.

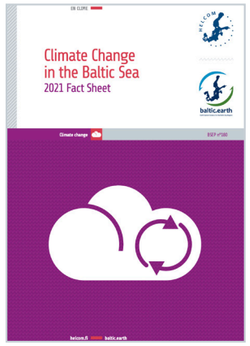
Moreover, to ensure that climate change becomes an integral part of HELCOM's work across all work strands, climate change-related tasks have now been incorporated into the Terms of Reference of all the HELCOM working groups.

HELCOM projects

BSAP Actions HT2 and HT5.

Related resources

State of the Baltic Sea 2023
Climate change



Baltic Sea Climate Change Fact Sheet
2021

Baltic Sea Action Plan (BSAP)
2021 updated

For the first time, climate change was also included in all topics and all levels of the Holistic Assessment of the Baltic Sea

18. Economy and society

The Baltic Sea countries benefit considerably from their utilization of the Baltic Sea, both economically and socially. Benefits derived include jobs, income, natural resources, and various other contributions to economic growth and personal well-being. However, in doing so we often cause negative impacts on the environment, ultimately reducing its ability to produce many of those same benefits. A key challenge for society is to find the appropriate balance between exploitation and environmental protection. There is no single correct solution to this dilemma. Economic and social analyses can help make informed choices, for instance through the identification of cost-effective environmental measures and the estimation of economic value gained from the marine environment.

In 2023, HELCOM published the latest results of the Thematic Assessment of Economic and Social Analyses. The report includes analyses of the use of marine waters, cost of degradation, the costs and benefits of measures, and for the first time, also ecosystem services. Additionally, HELCOM had never previously explored the possibility of including information on drivers of change for the Baltic Sea region into the holistic assessment of the Baltic Sea.

These results deepen our understanding of the relationship between society and the environment and how to manage impact. The work builds on previous HELCOM efforts to advance our appreciation for the interconnectedness of society and the marine environment and to improve our efforts to manage our activities to ensure they are within the tolerance of the ecosystem. The results also highlight the cost of inaction, illustrating the financial losses resulting from the degradation of the environment, as well as the potential benefits of improved status.

HOLAS 3

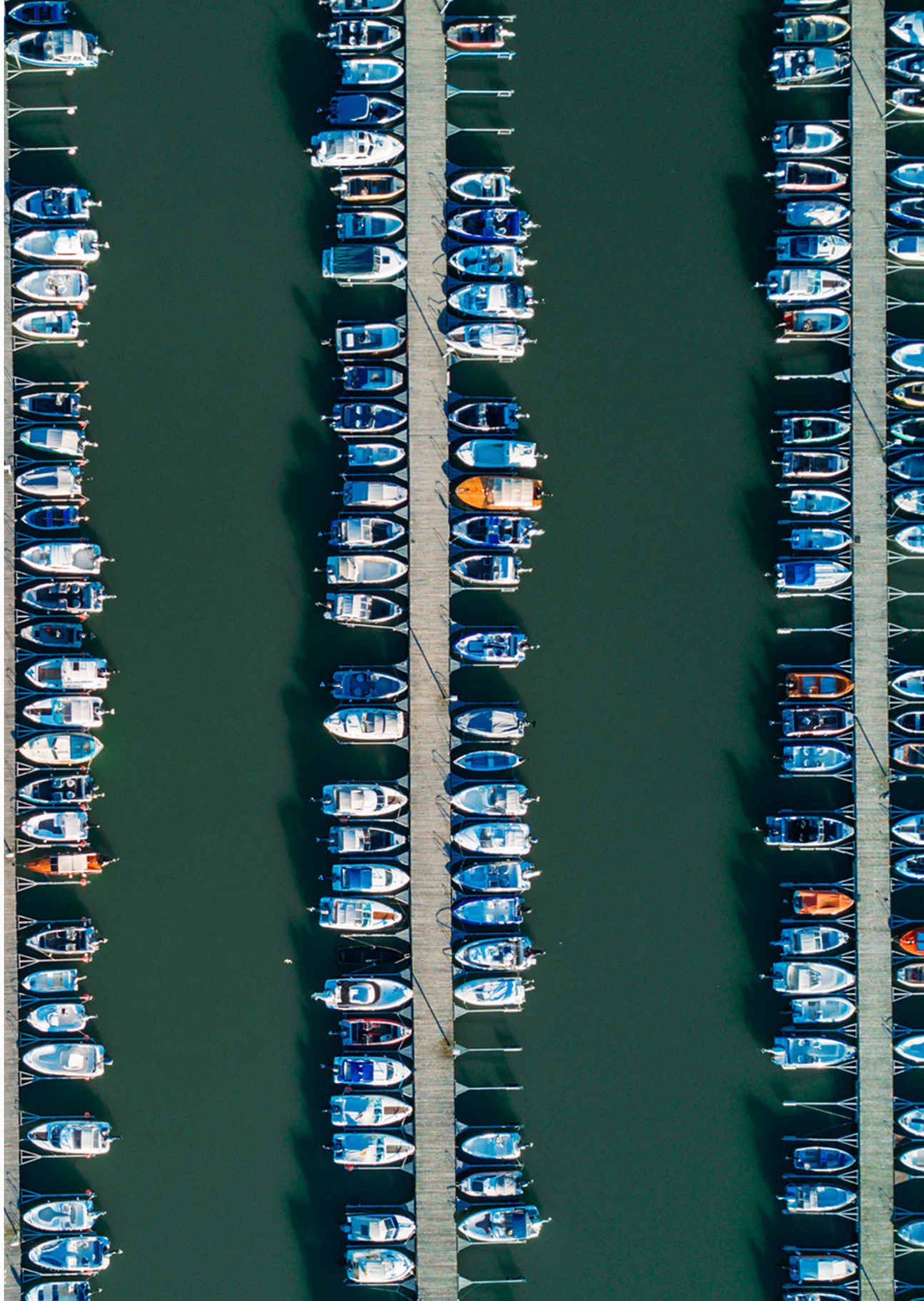
The Holistic Assessment of the Status of the Baltic Sea (HOLAS) is a reoccurring, transboundary, cross-sectoral assessment looking at the effect of our activities and measures on the environment. The HOLAS assessment covers the main themes to be considered when taking an ecosystem approach to management. It provides regular updates on the environmental situation in the Baltic Sea. The results of the assessment underpin HELCOM policy and the information from the assessment is incorporated in the ecosystem-based management of the Baltic Sea, as well as guiding measures nationally, regionally and globally.

Related resources

Social and Economic Analysis thematic assessment 2016–2021

State of the Baltic Sea 2023 Economic impacts

A key challenge for society is to find the appropriate balance between exploitation and environmental protection. There is no single correct solution to this dilemma



19. Monitoring and assessment

In order to assess progress towards objectives and targets set, we need to understand the actual effects that measures have on the marine environment. This in turn requires access to extensive temporal and spatial monitoring data, collected in a comparative fashion for the entire region.

Monitoring in the Baltic Sea region is supported by commonly agreed monitoring approaches, based on HELCOM Monitoring and Assessment Guidelines. The guidelines form the basis of common data collection which, in turn, constitutes the foundation for regional and harmonized assessments.

HELCOM carries out major assessments at regular intervals, underpinned by the monitoring data collected through the national and regional monitoring programmes. The third holistic assessment of the Baltic Sea was finalized in 2023 and utilized over 2,000,000 datapoints to support the assessment efforts. In addition, a major data call for species and habitats to support the upcoming Red List assessment was concluded and the data processed for assessment.

To ensure that monitoring becomes an integral part of HELCOM's work across all work strands and is located where the topical expertise is available, monitoring-related duties have now been incorporated into the Terms of Reference and workplans of all the HELCOM Working Groups, with the overall tracking of monitoring work established with the GEAR Working Group.

In 2023, HELCOM worked on the implementation of several actions related to monitoring as part of the 2021 BSAP. These include the finalisation of the review of the HELCOM Monitoring and Assessment Strategy and Data and Information Strategy, thus meeting the agreed target year of the BSAP. Active planning and preparation for the upcoming review of the HELCOM monitoring programmes has also taken place.

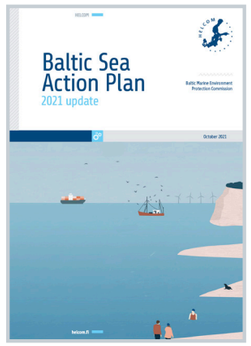
HOLAS 3

The Holistic Assessment of the Status of the Baltic Sea (HOLAS) is a reccurrent, transboundary, cross-sectoral assessment looking at the effect of our activities and measures on the environment. The results of the assessment underpin HELCOM policy and the information from the assessment is incorporated in the ecosystem-based management of the Baltic Sea, as well as guiding measures nationally, regionally and globally.

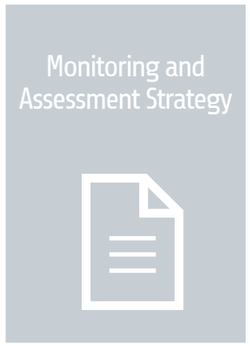
HELCOM RED LIST II

The aim of the HELCOM RED LIST II project is to review the status of species and habitats/biotopes in the Baltic Sea and identify those under threat of extinction. The work is done based on the outcomes and lessons learned by the previous HELCOM Red List project finalized in 2013 and utilizing the updated HELCOM Checklist of Baltic Sea macro species 2.0.

Related resources



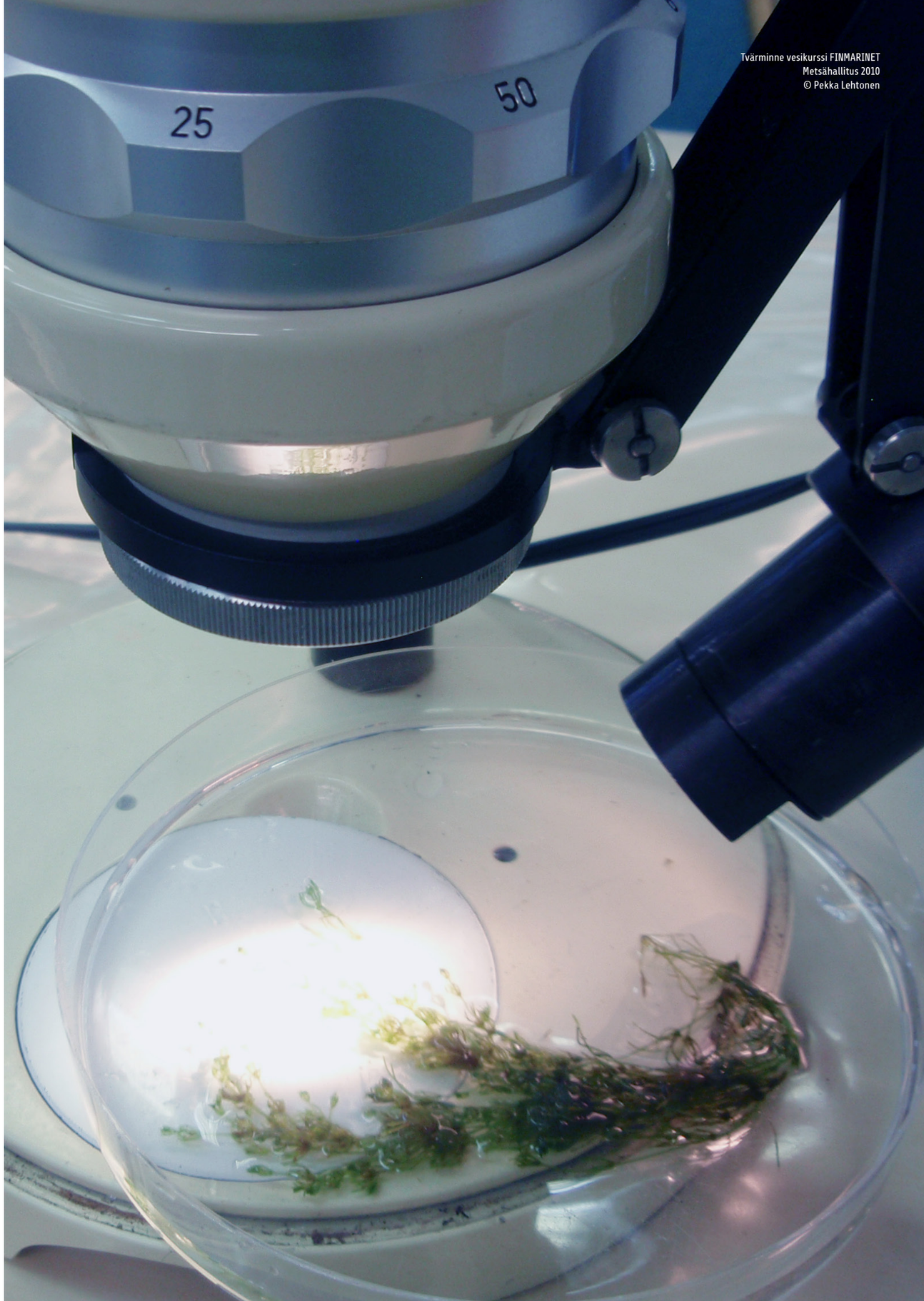
Baltic Sea Action Plan (BSAP) 2021 updated



HELCOM Monitoring and Assessment Strategy

HELCOM Map and Data Service (MADS)

HELCOM Monitoring Manual



Tvärminne vesikurssi FINMARINET
Metsähallitus 2010
© Pekka Lehtonen

20. Beyond the Baltic Sea

The Baltic Sea and its environment are part of a greater whole and HELCOM cooperates with or contributes to a broad range of global and international organizations, frameworks and processes. Among these are various relevant United Nations (UN) conventions and agreements, the International Maritime Organization (IMO), the UN Economic Commission for Europe (UNECE), other Regional Sea Conventions (RSCs) or the International Union for Conservation of Nature (IUCN). The relevance of HELCOM's work to frameworks and processes such as the UN's 2030 Agenda for Sustainable Development Goals or the Kunming-Montreal Global Biodiversity Framework established by the UN Convention on Biological Diversity (CBD) is well-documented.

In addition to the examples of HELCOM's involvement in global or international endeavours over the course of the year 2023, outlined in the thematic chapters above, a number of other activities are worthy of mention.

On a global scale, HELCOM was represented at the Fifth International Marine Protected Areas Congress (IMPAC5), held in Vancouver, Canada, in February 2023. Our organization also participated in the 2023 UN Water Conference in New York, USA, in March 2023 and submitted three voluntary commitments for the Water Action Agenda, one of the main outcomes of the conference. HELCOM work on non-indigenous species (NIS) was presented at the International Symposium on Ballast Water and Biofouling Management in IAS Prevention and Control organized by the United Nations Development Programme (UNDP) in Türkiye and the MARIAS project, which took place in Antalya, Türkiye, in September 2023. Moreover, two visits by delegates from the Intergovernmental Authority on Development (IGAD), facilitated by the Martti Ahtisaari Peace Foundation (CMI), enabled us to continue our long-standing dialogue with representatives of the Red Sea region. Existing connections to the Great Lakes area in North America were also reaffirmed through a shipping-related exchange of information with the Great Lakes St. Lawrence Governors and Premiers.

Closer to home, HELCOM joined other European RSCs in contributing to the JPI Oceans workshop "Science to Policy: Appraising Concepts for the Marine Good Environmental Status" in Malta in June 2023. Moreover, HELCOM organized or co-organized a number of meetings dedicated to cooperation with other European regional seas in Helsinki, Finland. The 9th Meeting of European RSCs on the Implementation of Regional Action Plans on marine litter and the annual Meeting of the Secretariats of the European RSCs and the European Water Commissions took place at the HELCOM premises in Helsinki, Finland, while an expert seminar entitled "Biodiversity: commonalities between the Mediterranean and the Baltic Seas" was co-organized with the Embassy of Spain in November 2023, in the context of the Spanish Presidency of the EU.

These additional activities exemplify HELCOM's long-standing role as a regional organization that is well integrated with other relevant international processes and the global multilateral policy agenda.

The relevance of HELCOM's work to frameworks and processes such as the UN's 2030 Agenda for Sustainable Development Goals or the Kunming-Montreal Global Biodiversity Framework established by the UN Convention on Biological Diversity (CBD) is well-documented

Contracting Parties and Heads of Delegation (2023)

Denmark
Ms. Tone Madsen
Ministry of Environment

Estonia
Ms. Liis Kikas
Ministry of Climate

European Union
Mr. Michel Sponar
DG Environment
European Commission

Finland
Ms. Sara Viljanen
Ministry of the Environment

Germany
Ms. Meike Gierk
Federal Ministry for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

Latvia
Ms. Baiba Zasa
Ministry of Environmental Protection and Regional Development

Lithuania
Mr. Tomas Želvys
Ministry of Environment

Poland
Ms. Natalia Zając
Vice-Director of Department of Maritime Economy and Inland Navigation
Ministry of Infrastructure

Russia
Ms. Natalia Tretiakova
Ministry of Natural Resources and Environment
of the Russian Federation

Sweden
Mr. Jacob Hagberg
Ministry of Climate and Enterprise

Baltic Marine Environment
Protection Commission

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