



Baltic Stakeholder Conference 2022 Climate Change in the Baltic Sea **26-27 September 2022, online**

Outcome

Baltic Stakeholder Conference 2022 Climate change in the Baltic Sea

Day 2 workshop

Online on 27 September 2022

Background

Centred around the theme of climate change in the Baltic Sea, the Baltic Stakeholder Conference – Climate Change in the Baltic Sea (BSC2022) was part of the effort to disseminate knowledge on the regional effects of climate change. The BSC2022 was organized for gathering fresh views on climate change mitigation and adaptation from policymakers and all other stakeholders in the Baltic Sea region.

The BSC2022 was held online on 26-27 September 2022, hosted by Germany (German Environment Agency (UBA) and the Federal Agency for Nature Conservation in Germany (BfN)) and Baltic Earth. The webinar on Day 1 was open to all, and the workshop on Day 2 was by invitation only. The invitation to participate in the Day 2 workshop was distributed via the HELCOM channels to members of HELCOM groups and bodies. Additional invitations were sent to other relevant stakeholders by Baltic Earth and UBA.

The Stakeholder Conference was moderated by Ms. Jannica Haldin, Deputy Executive Secretary of HELCOM.

The Stakeholder Conference, an annual tradition of the Baltic Marine Environment Protection Commission (HELCOM), had to be postponed from 9-10 March 2022 due to the political situation and the following [strategic pause of HELCOM](#).

Including the organizers, around 40 people took part in the Day 2 workshop representing governments of the Baltic Sea countries, academia, research institutions, Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs).

The programme of the Day 2 of the BSC2022 is available in **Annex 1**. During coffee and lunch breaks, a social platform at Wonder.me was available for all participants.

Orientation

The moderator summarized the outcome of the Day 1 webinar of the BSC 2022 and stressed the importance of a regional perspective. The moderator further outlined the climate change related actions in the 2021 HELCOM Baltic Sea Action Plan (BSAP), which defines the current mandate of HELCOM on climate changes issues. The moderator pointed out that the aim of the workshop was to identify concrete next steps, across science, management and policy levels.

The workshop was organized in three sessions. The participants were split into three smaller and more manageable groups (A, B and C) for the sessions, which in turn contributed to the three stations, namely science, policy and management. The digital whiteboards (Miro boards) containing the participants' views and contributions are appended to this document as **Annex 2**.

Please note: The summary of responses collected in this document reflects the comments from all the different groups voiced in the different BSC2022 workshop stations, pooled together under major topic areas. The content does not necessarily reflect the opinion of station hosts.

Science station

The science station was moderated by Mr. Markus Meier and Mr. Marcus Reckermann representing Baltic Earth.

The session topics for the science station were: What are the knowledge gaps we still have on climate change? What are the future science needs? What is needed for improving the science? Is the science sufficiently taken up by policy?

1. State of play

The future water cycle and salinity response to climate change is rather uncertain.

As the Baltic Sea response to external changes such as climate change is slow, past and present actions (e.g. nutrient load reductions) will only be visible in the future. A big question is when the effects of actions will be visible.

The response of ecosystem functioning and species interactions to climate change, ecosystem health and biodiversity is rather unknown.

Our knowledge about tipping points is limited. Crossing of tipping points might result in environmental conditions when mitigation and adaptation efforts become ineffective.

The interaction of climate change with other (human) stressors (fisheries and others), which can lead to natural hazards under certain circumstances, is not thoroughly studied.

The effectiveness of blue carbon measures is unknown.

2. Ideal situation

Funding for policy-driven, transdisciplinary, and long-term research and increased and improved monitoring would be ideal. Data and models needed for the attribution of detected changes to climate change and the development of mitigation actions should be available.

A good collaboration between scientists and the media and between scientists and stakeholders is needed. A good and accessible assessment of the state of science is essential and a regularly updated climate change fact sheet with currently missing parameters added would be ideal.

Holistic management strategies, action plans, checklists for action steps and impact assessments including climate change would be ideal. For instance, environmental targets should include the impact of projected climate change.

Environmental education programmes such as summer schools, courses, etc. at all levels should be available.

3. Action recommendations

- Downscaling of global mitigation scenarios to the Baltic Sea region scale.
- Reinforced research on knowledge gaps identified by the Baltic Earth Assessment Reports (BEAR) and other assessment reports, in particular increased research on blue carbon. Joint science/industry projects should be developed. For the BSAP (HELCOM) and for sustainable fishery management (ICES), a multi-stressor approach including climate change should be developed. An overall climate change science agenda including for instance the BSAP with short-term and long-term milestones should be developed and approved by all Baltic Sea countries.
- The environmental monitoring should be improved and increased to detect the impact of climate change and mitigation measures.
- More communication, outreach, and visualization of the effects of climate change should be promoted.



- An assessment of ecosystem services in monetary terms under natural and polluted conditions should be performed. For instance, the costs of not acting should be calculated.

The complete contribution by the stakeholder conference participants to the science station topics is included in Annex 2.

Policy station

The policy station was moderated by Ms. Jannica Haldin, HELCOM.

In the policy station, the participants considered climate change in relation to policy in the Baltic Sea region. The moderator clarified the meaning of *policy* as being a format of established and structured cooperation, where common direction or rules of play are identified and agreed. Policy often focuses on establishing the why, how and who of taking action, whereas management focuses on implementation. The aim of the station was to establish a baseline for policy (i.e. current situation, looking at both opportunities and challenges), a target (the ideal situation) and then jointly scope concrete proposals for how the region can minimize the gap between the current situation and the ideal scenario. Subsequently the participants focused on answering the following questions:

1. State of play

1. In regard to climate change and policy, frameworks and institutions, what are the core issues, current challenges and opportunities?

While a number of issues were highlighted (please see Annex 2) most of them could be grouped under the following topics: legislative challenges, need for a change of mindset, inertia, effects of instability (e.g. political or financial), mismatch of timescales, sectoral silos, and trade-offs.

Of these the participants particularly emphasised the need to change society's mindset in order to effectively tackle climate change. Closely connected to this, the participants also highlighted the slow process of decision making and the focus on short-sighted, often urgency driven, actions.

The participants also identified opportunities associated with the current policy landscape and climate change. The more prominent climate change becomes, the stronger the incentive for change and can function as a catalyst for discarding ineffective policies. The participants also emphasized the potential to prioritise actions which synergistically address both climate change and the biodiversity crisis. The urgency of the impacts of climate change can also function as a driver of technological innovation

2. Ideal situation

1. What would be the ideal policy landscape needed for effectively addressing the effects of climate change? How far are we from it?
2. What specific areas/topics should be prioritized?
3. What stakeholders should be involved, and at what stages of the policy development and implementation processes?
4. What is the specific role of HELCOM regarding climate change action?

In discussing the ideal situation (2.1), the group participants produced content under the following topics: functioning communication, close and dynamic cooperation, including cross-sectoral aspects, long term planning, adaptive policy processes, including tracking progress and active stakeholder involvement, as well as sufficient and consistent financing.

Participants were of the view that the aspects outlined above, considered as pillars of the ideal policy landscape, need to be viewed as a package, where each aspect is needed and strengthens the other pillars. Participants also highlighted the need to be able to jointly prioritise different actions and topics, as the reality is that there are resource limitations in policy making and were of the view that fisheries management (due

to its co-benefits for climate, food, ecosystems, society etc.) as well as the spatial aspects due to limitations in the marine space, should be topics to prioritise.

All participants expressed that, with climate change being a horizontal topic affecting all sectors and all parts of society, all possible stakeholders should be involved in the climate change policy development and implementation processes. That said, the participants recognised that, realistically, there is a need to take a focused approach to stakeholder involvement in climate change policy processes.

The participants identified the role of HELCOM regarding climate change (2.4) as functioning as a platform for coordination, tracking progress, facilitating cooperation, knowledge transfer and governance. It was raised that HELCOM's role can extend to framing regional governance in a way that moves the regional climate policies to the right direction. When considering knowledge transfer, the moderator clarified that the aim is for the HELCOM-Baltic Earth Climate Change Fact Sheet will be updated every seven years to ensure up to date knowledge on climate change impacts on key parameters in the Baltic Sea.

The participants emphasised that future climate related scoping in HELCOM would benefit from the contribution of industry representatives.

3. Action recommendations

1. What needs to be done in order to improve climate change policies and their implementation?
2. Actors: Who should implement what?
3. What would be some of the concrete next steps?
4. Prioritize amongst the recommended actions through voting.

A number of actionable recommendations and concrete next steps were suggested including focusing on nature-based MSP, working towards climate impact assessments of all industries and human activities in the Baltic Sea, in order to be able to prioritize management action where it will be the most effective. Inventory of all plans/programmes related to the climate change including identifying non-implemented, but already agreed, climate policies and campaign to get them up and running.

Several suggestions of CO₂ taxation were also lifted, as well as sanctions for actors who do not implement, but also presenting incentives and stronger lobbying for positive alternatives. The conference also emphasised that there is a need to present success stories and positive progress in relation to climate change mitigation and adaptation, to share best practices and present inspiration.

The following recommendations receiving the most votes:

- Produce sectors specific plans and targets for emissions reductions
- Sector workshops to target sector-wise emissions reductions
- All HELCOM working groups to consider their own input to emissions reductions and adaptation on working group level.
- Identify sector-wise harmful subsidies and start removing them.

The complete contribution by the stakeholder conference participants to the policy station topics is included in Annex 2.

Management station

The management session was moderated by Mr. Ulrich Claussen (UBA), Ms. Manuela Krakau (UBA) Mr. Jochen Krause (BfN), and Ms. Claudia Morys (BfN).

In the management station, the workshop participants were asked to discuss climate change management in the Baltic Sea. In addition to a collection of already existing measures, management problems were to be uncovered, the ideal situation described, and stakeholder roles identified.

1. State of play

1. What are the existing measures for climate change adaptation and mitigation (in the Baltic Sea)?
2. Where do we currently stand in terms of management of climate change and its effects in the Baltic Sea region? Opportunities? Challenges?
3. Adaptation and mitigation: What are the regional and global best practices?

- In general, there is too little climate action.
- We have the opportunity to get started but we are too slow. This can be seen, for example, in support for industries that harm the climate. There is also a lack of long-term perspective in planning for the C.C.
- Most actions about adaptation and mitigation are neglected.
- There is no coherent approach but only bits and pieces. Another problem is the top-down approach to developing and implementing solutions. Also, the room for correction of targets and proper monitoring is missing.
- Sustainability as a management paradigm has failed.
- There are many main problems. These include fisheries and agriculture. Stricter criteria for nutrients and toxins are missing. There is too little action in the agriculture sector. One example for this is shown in CAP strategic plans. Also, eutrophication hampers nature-based solutions to capture and store carbon. Next, the reduction of carbon emissions at source is also missing and the sea level is rising. Furthermore, financial resources need to increase.
- Nature-based solutions can support carbon reduction but cannot solve it.

2. Ideal situation

1. What structures and processes should be in place to enable or improve climate action?
 2. What particular management options (both adaptation and mitigation) would be well suited for the Baltic Sea context?
 3. What kind of measures could be possible due to regional similarities? Which differences should be considered due to regional disparities?
- Sustainability as a management paradigm has changed. That is why a new one is needed, for example rights of nature because nature and ecosystem health need to come first.
 - There should be "Climate assessment" before it comes to management decisions.
 - Fishing (involve knowledge by ICES) > improve management opinions (improve health status of fish stocks rather than reducing the stocks to be fished)
 - Land based measures > improve sea-based measures
 - Improved management outside MPA's
 - Holistic management: do not build up something at one site and destroy it at another site..
 - We need to have a good understanding of situations where Baltic Sea acts as carbon sink or source.
 - Cumulative effects of human activities are considered.
 - Regional differences are considered, area-specific measures.

- Implementation plan of all CPs for C reduction, environmental improvement and nature conservation (burden sharing)

3. Action recommendations

1. Regarding implementation, what is the role of the various stakeholders?
 2. Who needs to be involved in order to improve mitigation and adaption action?
 3. What would be some of the concrete next steps? Which actions should be prioritized?
- Climate impact assessments across the Baltic
 - Include climate change into HELCOM and ICES assessments
 - Identify and motivate relevant sectors
 - Approach financial partners which invest in sustainable funds, e.g. pension funds, EU green taxonomy
 - Environmental management requires political decision. Political decision requires public approval and scientific advice. Therefore, political lobbying/ advocating must happen, otherwise information gets lost.
 - Stop subsidizing fossil fuels.
 - Knowledge base for all stakeholders and relevant sectors has to be improved.
 - Educational campaigns should be intensified, e.g. concerted action supported by HELCOM such as former HELCOM Youth Forum
 - Public participation, if possible with support for civil society to participate (e.g. funding, but also structures)

4. Bottom line for next steps

- Initiate and promote inclusion of climate impact assessments into HELCOM and ICES assessments
- Baltic wide cooperation/ coordination is (further) needed – also in management!
- Getting started based on already existing knowledge on and enhanced public participation in management measures will be a necessary challenge to face.
- Approaching stakeholders actively may also widen the opportunities for financial support.

The complete contribution by the stakeholder conference participants to the management station topics is included in Annex 2.

Overall take-aways from the BSC2022 – Day 2 workshop

Utilising the contribution by the stakeholder conference further in HELCOM work

HELCOM will consider the outputs of the conference, especially as regards to policy and management, with the science station primarily providing input for consideration under Baltic Earth. The input provided regarding HELCOMs role in relation to combating climate change will function as the basis for further discussions within HELCOM and HELCOM groups will review the recommendations to identify which are possible to translate into concrete action directly under HELCOM and which can be more relevant for other fora. With the ongoing update of the Terms of Reference and Workplans of the HELCOM Working Groups, the intention is to distribute climate change actions and considerations across all HELCOM structures.

Annexes

- [Annex 1: Programme of Day 2](#)

- Annex 2: Miro boards for Science, Policy and Management stations



Baltic Stakeholder Conference 2022 Climate Change in the Baltic Sea 26–27 September 2022, online

Day 2: Workshop (on Zoom) – 27 Sep 2022, 10:00–16:00 EEST

Schedule, Day 2

Moderator: Jannica Haldin, HELCOM

10:00–10:10	Welcome remarks
10:10–10:30	Plenary 1: Orientation
10:30–11:40	Session 1 - three breakout groups
11:40–12:00	Break
12:00–13:00	Session 2 - three breakout groups
13:00–14:00	Lunch break
14:00–15:00	Session 3 - three breakout groups
15:00–15:20	Break
15:20–16:00	Recap and closing remarks

Session topics

- **Science station (Baltic Earth):** What are the knowledge gaps we still have on climate change? What are the future science needs? What is needed for improving the science? Is the science sufficiently taken up by policy?
- **Policy station (HELCOM):** What is the specific role of HELCOM regarding climate change action? What policies need to be in place to guarantee an adequate climate action? What areas should be prioritized? What stakeholders should be involved, and at what stages of the policy implementation processes? What needs to be done to implement the measures on climate change contained in the BSAP?
- **Management station (UBA/BfN):** What are some of the concrete measures – both existing and potential – for climate change adaptation and mitigation? What are the regional and global best practices? How can these measures efficiently be implemented in the Baltic Sea region? Regarding implementation, what is the role of the various stakeholders?

Link to the workshop

NB: You will need only one Zoom link for the entire workshop:

[Access workshop here](#)

Link to lunch & coffee breaks

Join others for some virtual socializing during breaks

[Wonder.me](#)

Practicalities

- The participants will be shuffled into three random breakout groups, A, B and C, which will remain the same the whole day. The stations (science, policy and management) will rotate.
- The organizers will make sure, that you will always find back into your own session, should you drop out for some reason.
- Miro boards will be used in each station. Instructions and orientation will take place at the beginning of the first session.

About the BSC2022

In a bid to better understand the effects of climate change on the Baltic Sea and to chart a way forward for addressing the issue, Germany (BfN and UBA), in conjunction with Baltic Earth, will co-host the "Baltic **Stakeholder Conference 2022 - Climate Change in the Baltic Sea**" (BSC2022) on 26-27 September 2022.

BSC2022 seeks to disseminate our **knowledge about the regional effects of climate change**, while, at the same time, allowing for gathering **fresh views on climate change mitigation and adaptation** from all stakeholders in the Baltic Sea region.

More info: helcom.fi/bsc2022



#BSC2022climate
#BalticClimate



Science station

The ideal situation

1. What structures and processes should be in place to improve climate science?
2. Stakeholder knowledge: who should know what, in order to take what actions?



Sticky notes:
use your group colour

-

- For sticky notes, press **"N"** on your keyboard or add them to the board from the main menu to your left.
- When adding content to a sticky note, the **text will automatically shrink** as you type along. You do not need to increase the size of your note.
- Clicking on a sticky note will make its contextual menu pop up. You can change the note's properties such as colour from there.

**Voting stickers
(one per participant)**

- to A.2. Funding / financial support for the studies, research, pilot projects, political will support...**
 implies that CC needs to be & stay high on the agenda)

prioritize research on knowledge gaps of marine environment to work with
 as one of the biggest environmental problems in the Baltic sea is eutrophication, the ESPAT project will try to cope with CC and to take uncertainty estimates into account (e.g., by ensemble modeling)

more research on Blue Carbon ecosystems, how much carbon they can store, how permanent...
 Could indicators have a dual TVI? One more precautionary one set based on best knowledge on CC - if evaluation fails or drifts over time in the area between achieve and the more precautionary CC TVI then maybe more action needed. Similar info achieved with following trends:

1. Increased and improved env monitoring with long term data series.

1/2. Science towards actions, and preferably in collaboration with authorities, enterprises, NGOs

1/2. Improved scenario capacity

2. Science based research on knowledge gaps of marine environment to work with
 as one of the biggest environmental problems in the Baltic sea is eutrophication, the ESPAT project will try to cope with CC and to take uncertainty estimates into account (e.g., by ensemble modeling)

More events like this, where scientists and policy makers meet and exchange

condense the knowledge in a way that policy makers and the public can digest the information

more communicate results of studies and projects and assessment reports

The IPCC report suggests actions and next steps.
 Can these be transferred to the EU?

1. First of all, inventory of what has been done so far and prioritisation of most "burning" issues for the future

2. The climate is on top of the environmental policies; because of that other areas/topics do not get sufficient attention

3. Assessment of ecosystem services and showing in monetary terms what does the nature gives to us and what we are losing when polluting etc... could help a lot to a society to better understand climate change issues.

3. Use our existing systems to incorporate decision into decision making and management decisions e.g. for fisheries, sea ICES to provide data, and then require ministers to take into account

Climate science packaging in "bite-size", sector-relevant pieces that facilitate action

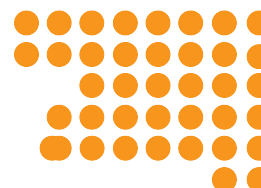
Most of the sticky notes from section 2 - the ideal situation - is relevant also here.

Talk about money! Policy makers need to see the costs and benefits

Making funding available for science/industry joint projects to combine research and innovation

Making a short-term and long-term climate science agenda - what do we need to learn/observe in the coming 2 - 5 years, where do we need to be in 10 years, etc., then find regional solutions for this.

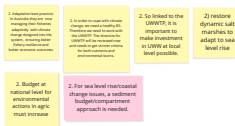
Visualizing the impacts of climate change (cartoons, maps, movies) - science needs to be packaged in an understandable way





What are existing measures for climate change adaptation and mitigation (in the Baltic Sea)?

1. Where do we currently stand in terms of management of climate change and its effects in the Baltic Sea region? Opportunities? Challenges?
2. Adaptation and mitigation:
What are the regional and global best practices?



What structures and processes should be in place to enable or improve climate action?

1. What particular management options (both adaptation and mitigation) would be well suited for the Baltic Sea context?
2. What kind of measures could be possible due to regional similarities? Which differences should be considered due to regional disparities?



- The **main menu** to access the functionalities should be to your left. An additional menu will pop-up when selecting an item from the main menu.
- Press **"space"** or **right-click** on the board to move it around
- To **zoom**, either use the scrolling wheel of your mouse, press the "+" or "-" keys, or use the navigation menu.
- The **navigation menu** should be to your bottom right. There, you can adjust the zoom, jump to a specific section etc.
- To select multiple elements, press "shift".
- To **group elements**, select multiple items, then "group objects" in the pop-up menu
- Cancel your last move? You can **undo** your actions with **Ctrl+Z** or using the arrows at the top of the window.

Regarding implementation, what is the role of the various stakeholders?

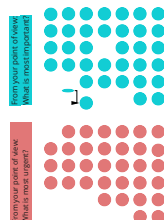
1. Who needs to be involved in order to improve mitigation and adaption action?
2. What would be some of the concrete next steps? Which actions should be prioritized?
3. Note/prioritize



Group A Group B Group C

- For sticky notes, press **"N"** on your keyboard or add them to the board from the main menu to your left.
- When adding content to a sticky note, the **text will automatically shrink** as you type along. You do not need to increase the size of your note.
- Clicking on a sticky note will make its contextual menu pop up. You can change the note's properties, such as colour from there.

From your point of view, what is most important?



businesses and the industry could be involved if there are some incentives for them to get active

transfer of
knowledge to
investment
people

.....





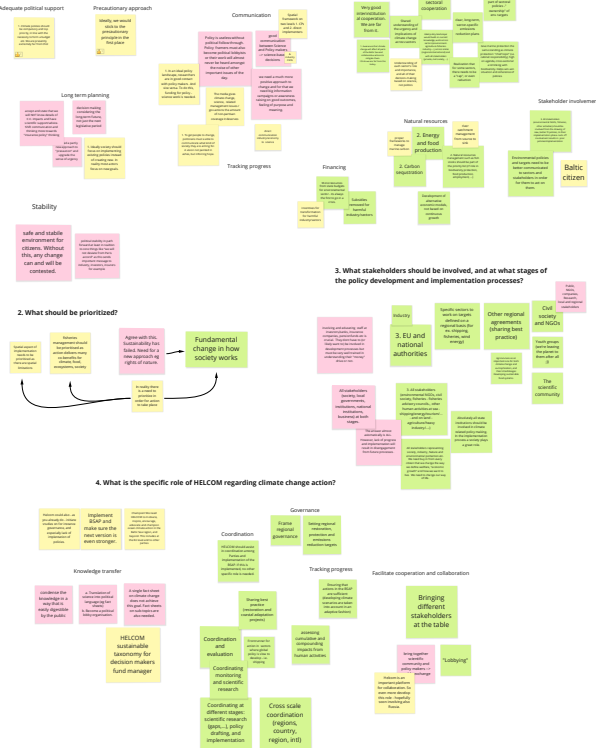
State of play

In regard to climate change policies, frameworks and institutions, what are the:
1. core issues,
2. current challenges,
3. and opportunities?



The ideal situation

1. What would be the ideal policy landscape needed for effectively addressing the effects of climate change? How far are we from it?



Action recommendations

1. What needs to be done in order to improve climate change policies and their implementation?
2. Actors: Who should implement what?
3. What would be some of the concrete next steps? Which actions should be prioritized?
4. Voice/priorities

