

# A Baltic Sea undisturbed by hazardous substances – How to reach a good environmental status of the sea?

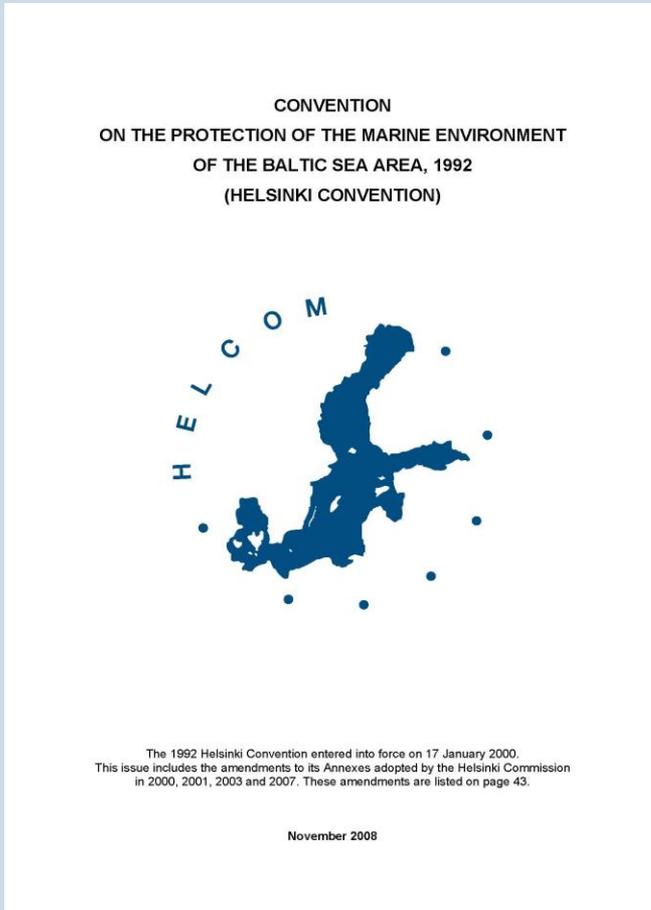
“Save the Baltic Sea for real”  
European Parliament  
5 September 2018

Monika Stankiewicz, HELCOM Executive Secretary



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# Convention on the Protection of the Marine Environment of the Baltic Sea Area



- International treaty law
- Signed originally 1974 (in force 1980), Revised 1992 (in force 2000)
- Ratified by all nine Baltic Sea coastal states and the EU
- HELCOM governing body
- Over 50 official HELCOM Observers

Life gets  
better  
after

4



# HELCOM Observers

Government of Belarus, Government of Ukraine, ASCOBANS, Baltic 21 (CBSS), Baltic Pilotage Authorities Commission, Baltic Sea Parliamentary Conference, Baltic Sea States Sub-Regional Cooperation (BSSSC), Black Sea Commission, Bonn Agreement, European Network of Freshwater Research Organizations (EurAqua), The Great Lakes Commission, Intergovernmental Oceanographic Commission of UNESCO, International Atomic Energy Agency, International Council for the Exploration of the Sea, International Maritime Organization, Paris and Oslo Commissions, United Nations Environment Programme, UNEP/AEWA, United Nations Economic Commission for Europe, World Health Organization Regional Office for Europe, World Meteorological Organization, Baltic Farmers' Forum on Environment, Baltic Operational Oceanographic System, Baltic Ports Organisation, Baltic Sea Forum, BirdLife International, John Nurminen Foundation, BONUS Baltic Organizations' Network for Funding Science (BONUS EEIG), Baltic Sea Advisory Council (BSAC), Baltic Sea States Sub-regional Cooperation, European Chemical Industry Council, Coalition Clean Baltic, Conference of Peripheral Maritime Regions of Europe - Baltic Sea Commission, European Boating Association, European Chlor-Alkali Industry, European Community Shipowners' Association,

Cruise Lines International Association Europe, Interferry, European Dredging Association, the Federation of European Aquaculture Producers (FEAP), Fertilizers Europe, European Sea Ports Organisation, The Coastal and Marine Union, European Federation of National Associations of Water and Wastewater Services, Federation of European Private Port Operators, Global Water Partnership Central and Eastern Europe, International Association of Oil and Gas Producers, International Chamber of Shipping, International Dialogue on Underwater Munitions, PlasticsEurope, Local Authorities International Environmental Organisation (KIMO International), Low Impact Fishers of Europe (LIFE), Marine Stewardship Council, Nordic Hunters' Cooperation, Oceana, Sea Alarm Foundation, Union of the Baltic Cities, World Wide Fund for Nature



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# HELCOM Baltic Sea Action Plan (2007-2021)



## Eutrophication

*“Baltic Sea unaffected by eutrophication”*



## Biodiversity

*“Favourable status of Baltic Sea biodiversity”*



## Hazardous substances

*“Baltic Sea undisturbed by hazardous substances”*



## Maritime activities

*“Environmentally friendly maritime activities”*



# STATE OF THE BAL TIC SEA

- HOLISTIC ASSESSMENT -



Co-funded by  
the European Union



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the European Union

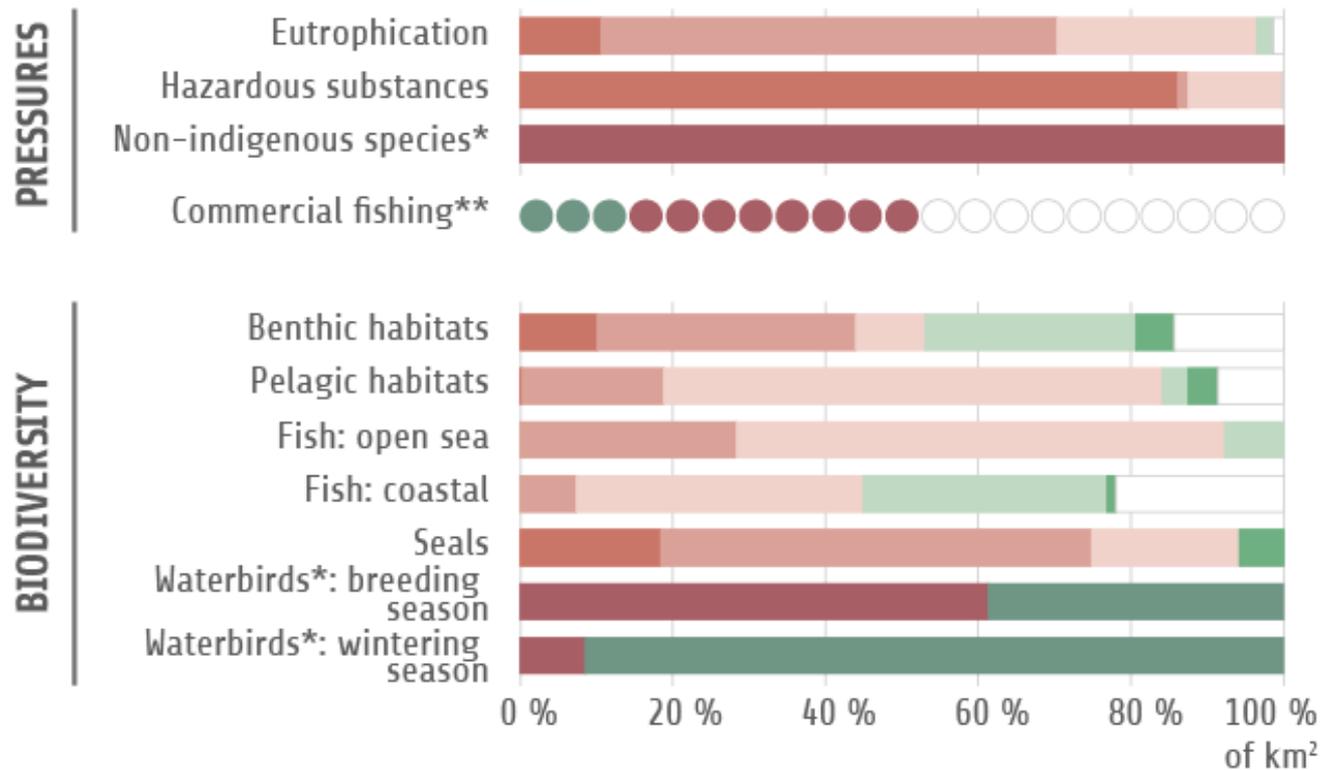


Co-funded by  
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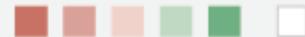
# Integrated assessments

## State of pressures and biodiversity in the Baltic Sea area 2011–2016



### INTEGRATED ASSESSMENTS

Not good    Good    Not assessed



### \*INDICATORS \*\*FISH STOCKS



The following pressures were assessed descriptively:

- Marine litter
- Underwater noise
- Seabed loss and disturbance
- Hunting of seals and waterbirds
- Pharmaceuticals
- Incidental bycatch in fishing gear

# HELCOM indicators on hazardous substances

- 12 indicators
- Regionally agreed thresholds
- Additional indicators are being developed

## Contaminants



- HBCDD.
- Metals (Mercury, Lead, Cadmium).
- PBDEs.
- PFOS.
- PAHs and their metabolites.
- PCBs, dioxins and furans.
- TBT and imposex.\*
- Radioactive substances.
- White tailed sea eagle productivity.
- Reproductive disorders: malformed embryos of amphipods.\*\*\*
- Diclofenac.\*
- Operational oil-spills from ships.

\*tested

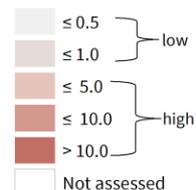
\*\*\*supplementary (certain countries only)

# Integrated assessment - hazardous substances

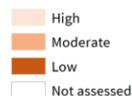
## Integrated Contamination Status Assessment



### Contamination score



### Confidence

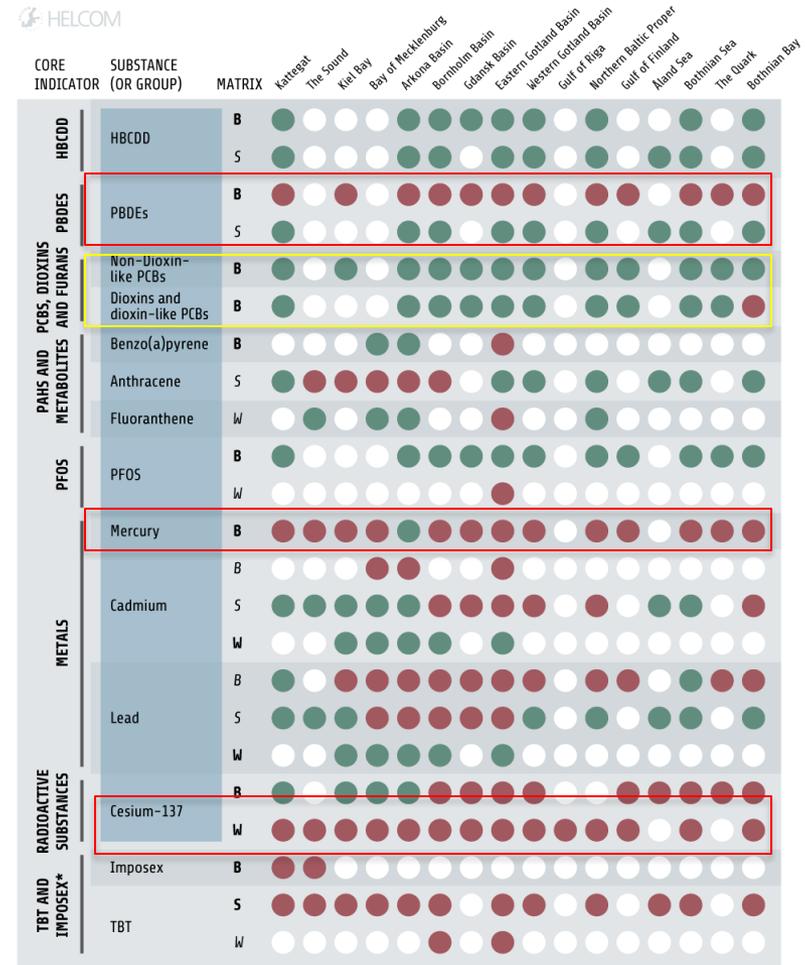


- 559 individual contaminant data series assessed for trends
  - 236 showed downward trends 😊
  - 311 series had no detectable trend ?
  - Only 12 showed upward trends 😞

# HELCOM indicators on hazardous substances

## - detailed results

- Not all open sea areas are assessed for all substances
- The impeded overall status is commonly driven by elevated levels of polybrominated diphenyl ethers (PBDE) and mercury in fish, and Cesium-137 in seawater.

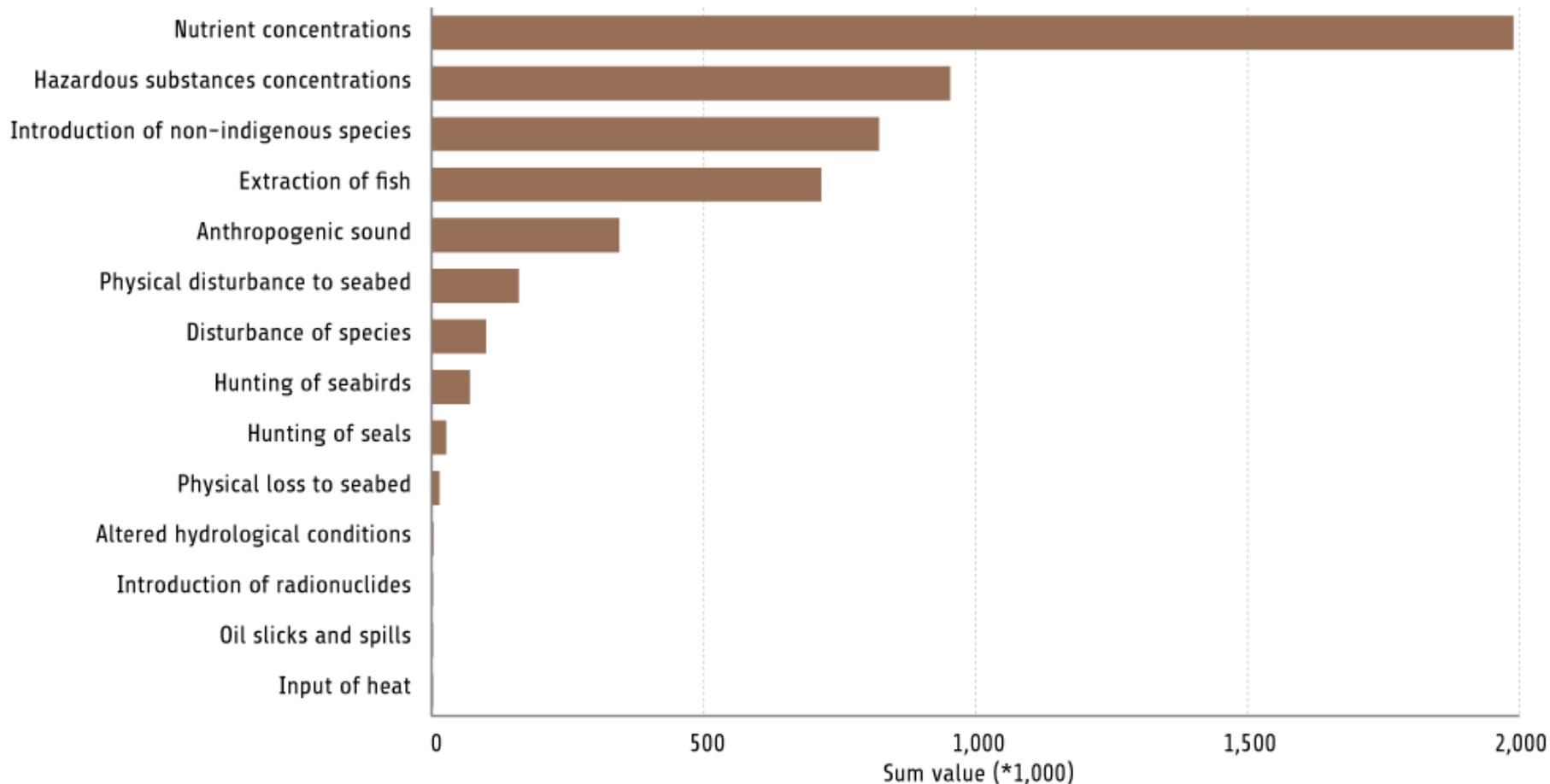


\* Included as test

# HELCOM Baltic Sea Impact Index (BSII)



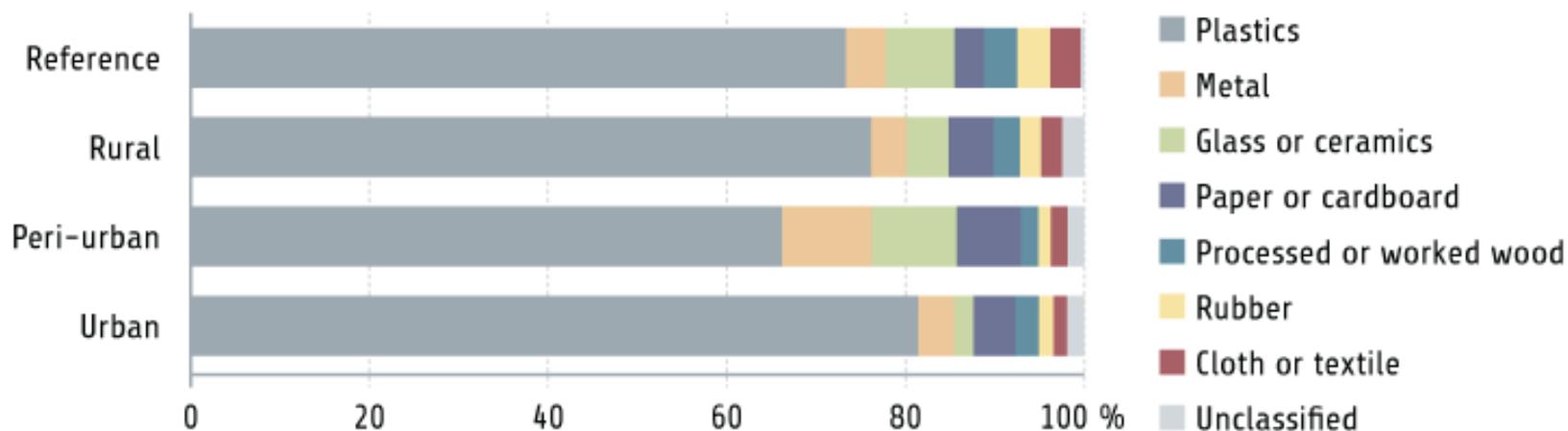
Pressure themes ranked by cumulative impact at regional scale



# Beach litter



## Litter material categories on different beach types



# Why Baltic Sea has not recovered yet?

Several **measures are operating...**

... but may not be **comprehensive enough** or have not  
been **in place long enough**

**New issues** are emerging + climate change

Baltic Sea Action Plan **not yet fully implemented**



# Implementation of the Baltic Sea Action Plan



## JOINT ACTIONS

## NATIONAL ACTIONS

Eutrophication



Hazardous substances



Marine litter



Underwater sound



Non-indigenous species



Fishing



Benthic disturbances



Maritime spatial planning



Each square represents one action in the BSAP:

Accomplished

Partly accomplished

Not accomplished

Future target year





BRUSSELS  
**MINISTERIAL  
MEETING 2018**  
HELCOM

1. Take new action to meet the Sustainable Development Goals in the Baltic Sea
2. Strengthen the implementation of the Baltic Sea Action Plan by 2021 - a top priority
3. Update the Baltic Sea Action Plan

[www.helcom.fi/ministerial2018](http://www.helcom.fi/ministerial2018)



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# Results of socio-economic analysis





**IN BRIEF**  
findings and basics

**HUMANS**  
& the ecosystem

**PRESSURES**  
& their status

**BIODIVERSITY**  
& its status

**CUMULATIVE**  
**IMPACTS**

**HELCOM ACTIONS**  
for improvement

**ABOUT HELCOM**  
& the assessment

*First version of the State of the Baltic sea report – June 2017 – to be updated in 2018*

## KEY FINDINGS



Nutrient inputs from land have decreased clearly, but effects are not yet reflected in the status of all sub-basins.

[Eutrophication status >](#)



The contamination status is elevated in all of the Baltic Sea, but some improving trends are seen.

[Hazardous substances >](#)



Biodiversity status is inadequate for most assessed species, and continued efforts to support biodiversity are of key importance.

[Biodiversity status >](#)

[Summary of findings >](#)

 [Download report as PDF \(19 MB\)](#)

<http://stateofthebalticsea.helcom.fi>

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