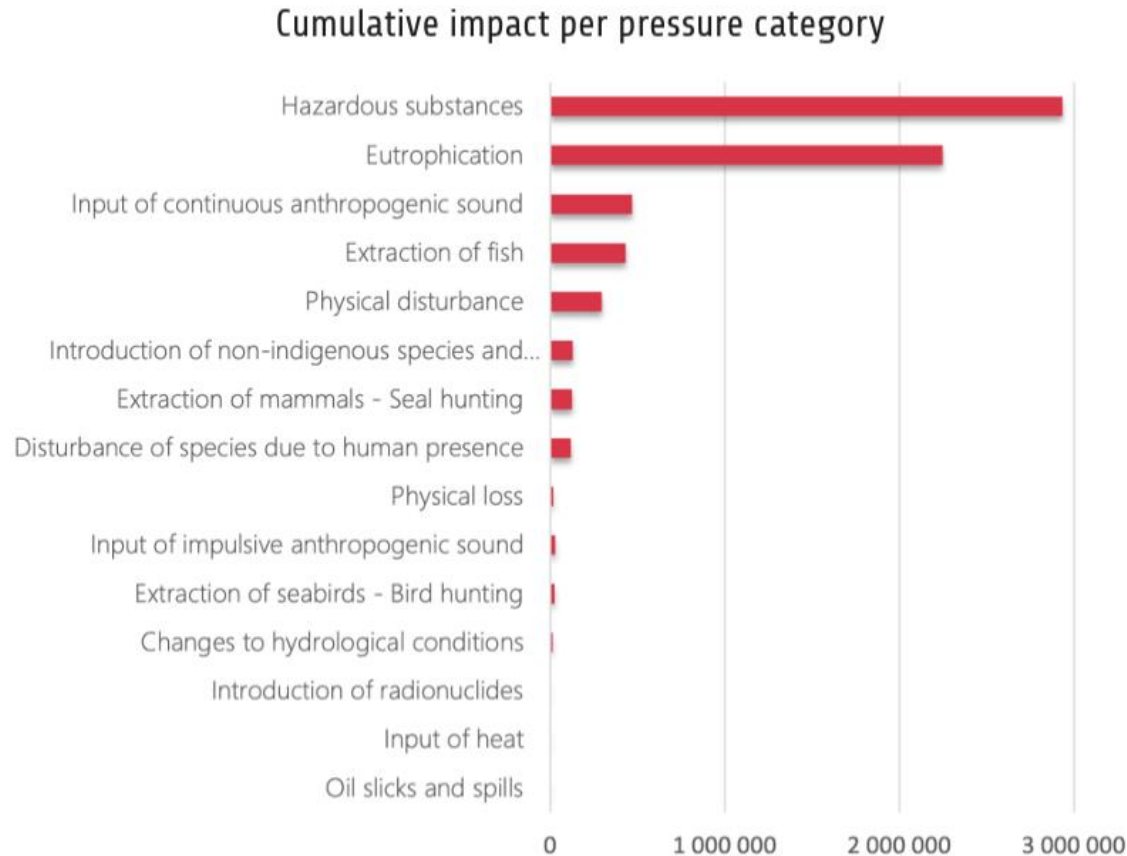




# *BALTIC CHEMICAL TANKER PROJECT*

Juulia Suikula  
John Nurminen Foundation

# WHY IS THE BALTIC SEA SUFFERING?



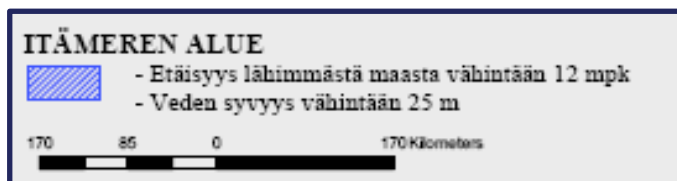
## Biggest environmental threats of the Baltic Sea

1. Hazardous substances
2. Eutrophication
3. Climate change

**Figure 5.3.** Ranking of pressures based on their potential cumulative impact measured by the Baltic Sea Impact Index. The values in the figure represent the sum of the impact index values for the whole assessment area. For details, see HELCOM (2023e).

## ***WHY IS TANK WASHING A RISK IN THE BALTIC SEA?***

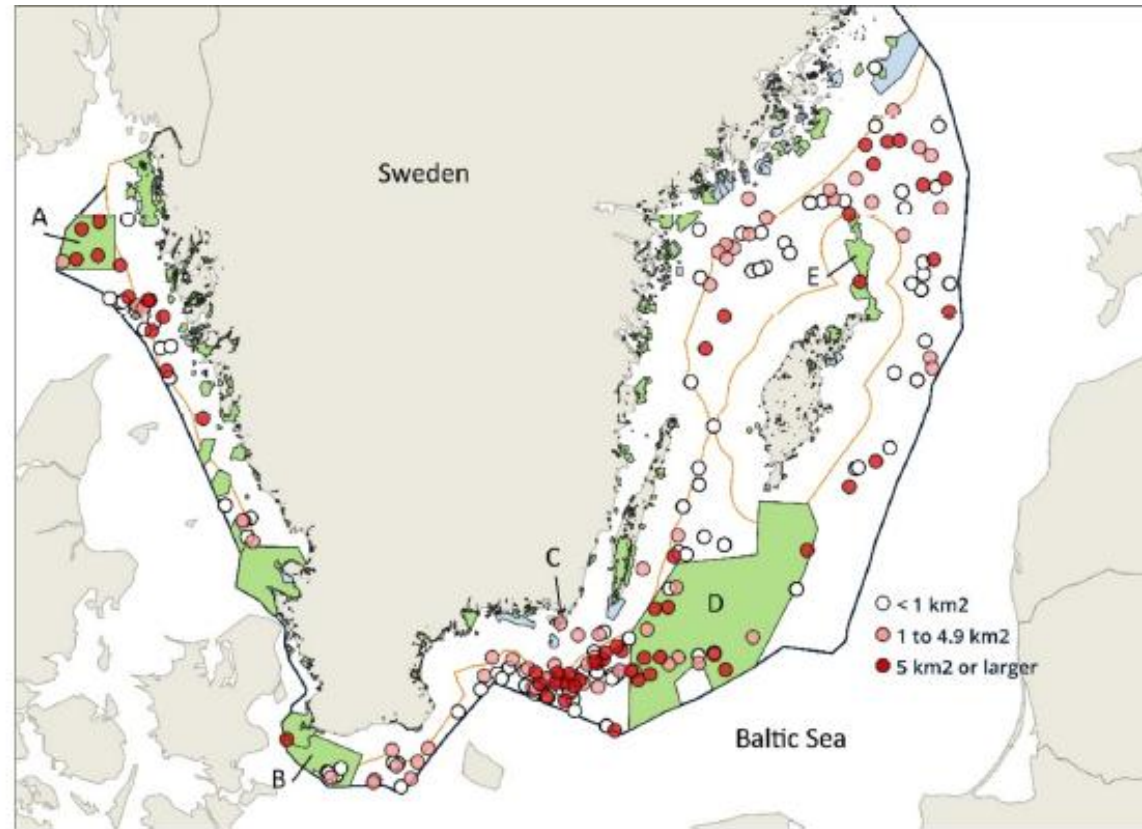
- The Baltic Sea is sensitive, shallow, and has slow water exchange.
- It is one of the busiest maritime areas in the world.
- Pollution is concentrated in specific sea areas along busy shipping routes.
- The combined effects of chemicals are not well understood, and the total amounts are unknown.



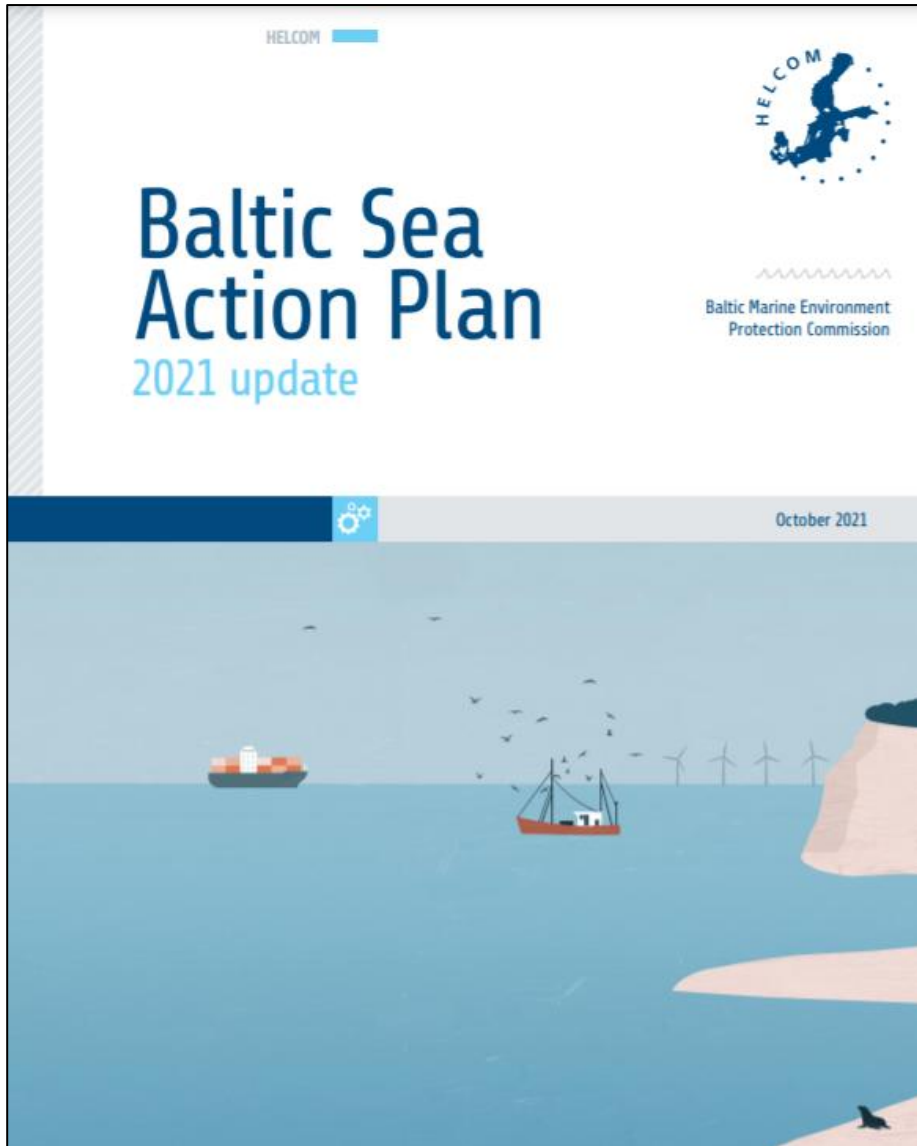
# Discharge regulations, MARPOL Annex II

Category	"BCH Ships" constructed before 31/7/1986	"IBC Ships" constructed from 31/7/1986 but before 1/1/2007	"New" buildings from 1/1/2007
<b>X</b>	<i>strip 0.3 m<sup>3</sup></i> <b>prewash</b> <b>max 0,1%</b> 12 mile 25 m 7 knots	<i>strip 0.1 m<sup>3</sup></i> <b>prewash</b> <b>max 0,1%</b> 12 mile 25 m 7 knots	<i>strip 75 l</i> <b>prewash</b> <b>max 0,1%</b> 12 mile 25 m 7 knots
<b>Y</b> High viscosity or solidifying substances and persistent floaters vegetable oils	<i>strip 0.3 m<sup>3</sup></i> <b>prewash</b> 12 mile 25 m 7 knots	<i>strip 0.1 m<sup>3</sup></i> <b>prewash</b> 12 mile 25 m 7 knots	<i>strip 75 l</i> <b>prewash</b> 12 mile 25 m 7 knots
<b>Y</b>	<i>strip 0.3 m<sup>3</sup></i> 12 mile 25 m 7 knots	<i>strip 0.1 m<sup>3</sup></i> 12 mile 25 m 7 knots	<i>strip 75 l</i> 12 mile 25 m 7 knots
<b>Z</b>	<i>strip 0.9 m<sup>3</sup></i> 12 mile 25 m 7 knots	<i>strip 0.3 m<sup>3</sup></i> 12 mile 25 m 7 knots	<i>strip 75 l</i> 12 mile 25 m 7 knots
<b>OS</b>	<b>No carriage requirements</b>		

# TANK CLEANING IS ALLOWED EVEN IN PROTECTED AREAS



**Fig. 1** Location of detected discharges of non-petroleum substances in the northern part (above) and southern part (below) of the Swedish territorial sea and Swedish EEZ between 2020 and 2023. Size of discharges are indicated by the colour of dots. Green areas show coastal and marine Natura 2000 sites. Blue areas show coastal and marine nature reserves outside Natura 2000 sites. Yellow and black lines show the borders of the Swedish territorial sea and the Swedish EEZ, respectively. Note the different scales of the two maps. Borders of Natura 2000 sites and nature reserves were obtained from Swedish Environmental Protection Agency (2024). Letters A to E refer to the Natura 2000 sites Bratten, Sydvästskånes utsjövatten, Torhamn-Hästholmen, Hoburgs bank och Midsjöbankarna, and Gotska Sandön-Salvorev, respectively



## Reducing discharges of harmful substances from tank washing on chemical tankers

### HELCOM BSAP ACTION S16

1. **Carry out a study and impact assessment** by 2026 to estimate and evaluate the volumes and impact of discharges of residues of noxious liquid substances contained in cargo tank washing waters.
2. **Take relevant action** by 2028 on whether and how to further limit discharges of residues of noxious liquid substances.

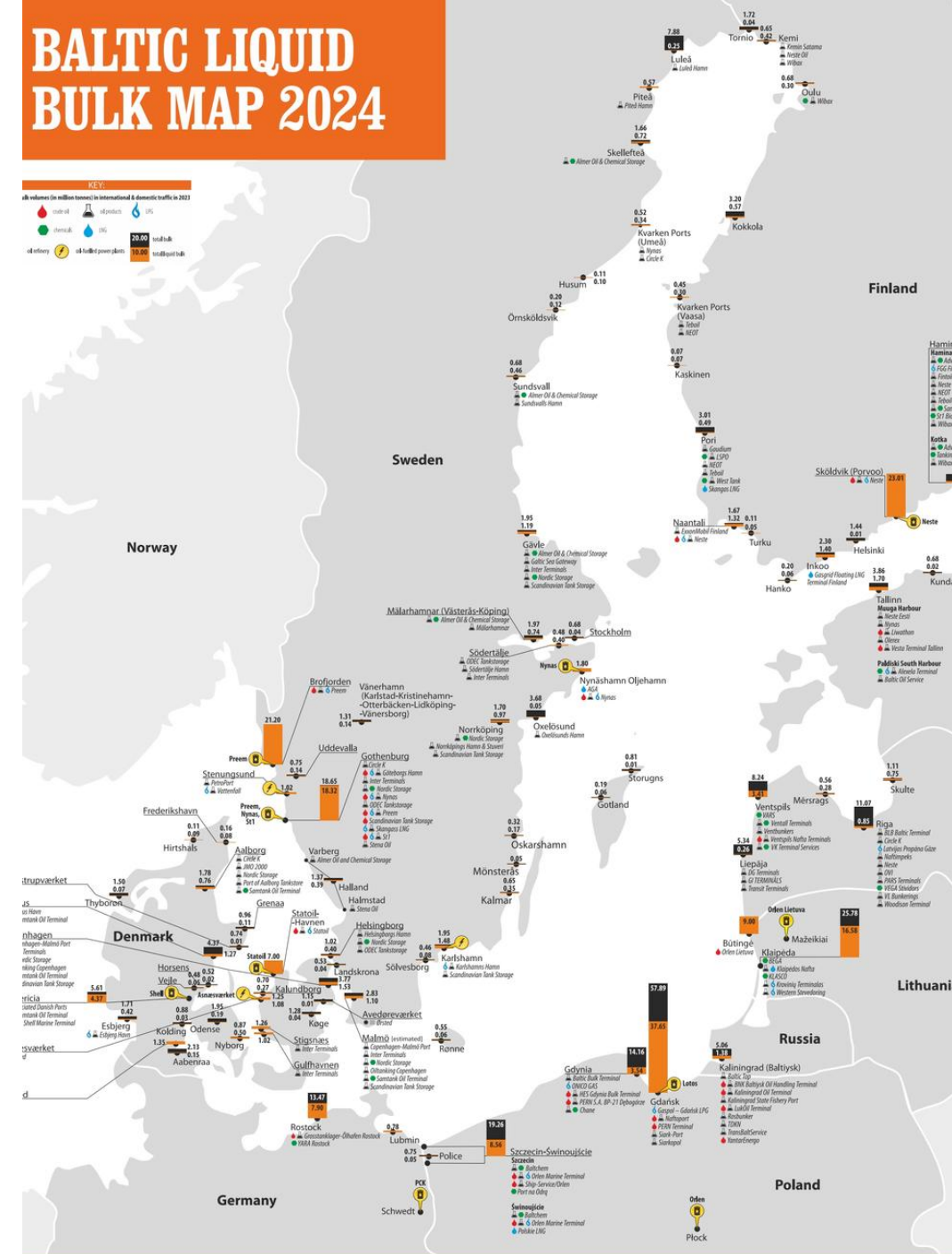
# BALTIC CHEMICAL TANKER PROJECT 2025-2027

## Objective:

- Reduce discharges of the most hazardous chemical tank washing waters in the Baltic Sea by 50 %
- Full implementation of HELCOM Baltic Sea Action Plan Action S16
- **Project partner:** Coalition Clean Baltic (CCB)
- **Budget:** €300,000 (NEFCO funding 50%)
- **Target area:** Baltic Sea coastal states (excluding Russia)

**Stakeholders:** Authorities from all Baltic Sea countries, HELCOM, WWF, PA Ship (EU Strategy for the Baltic Sea Region).

## BALTIC LIQUID BULK MAP 2024



# MEASURES

## WP1 Risk Assessment

Identify the chemicals that pose the most significant risk to the Baltic Sea through tank washing by conducting country-specific risk assessments.

**KPI:** Number of completed risk assessments (6)

## WP2 Cooperation with the Chemical Industry

Reduce emissions by implementing best practices in ports and chemical industry companies.

**KPI:** Reduction in the volume of chemicals discharged through company cooperation (50%).

## WP3 Communication & Policy Advocacy

Achieve the complete elimination of discharges by influencing the tightening of tank washing regulations in the Baltic Sea.

**KPI:** Initiation of regulatory tightening at EU, HELCOM, and IMO levels.

# ***BEST SOLUTIONS ARE DIFFERENT FOR THE VARIOUS CHEMICALS***

- Depends on the chemical properties of the substance
- Simpler, when the substance can be easily separated from water
  - Crude tall oil, styrene, butyl acrylate

**Aim:**

**Circular economy  
solutions!**



# SOLUTIONS TO ELIMINATE TANK WASHING DISCHARGES



## 1. Tank washing at berth and collection of wash water by vacuum truck for further treatment:

- Recovery at own production facility
- Cooperation with another industrial facility (e.g. tall oil waters to pulp mill)
- Treatment at own wastewater treatment plant
- Delivery to external waste treatment

## 2. If wash water is generated regularly: Permanent reception facilities in ports

## 3. Voyage planning to avoid intermediate tank washing ("load on top")

# THANK YOU!

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SAVE THE  
PIECE OF THE  
BALTIC SEA



RA/2021/1341

Photo: Pekka Tuuri

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