# The role of HELCOM in protecting the marine environment of the Baltic Sea

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Probalt journalist training

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# Helsinki Convention

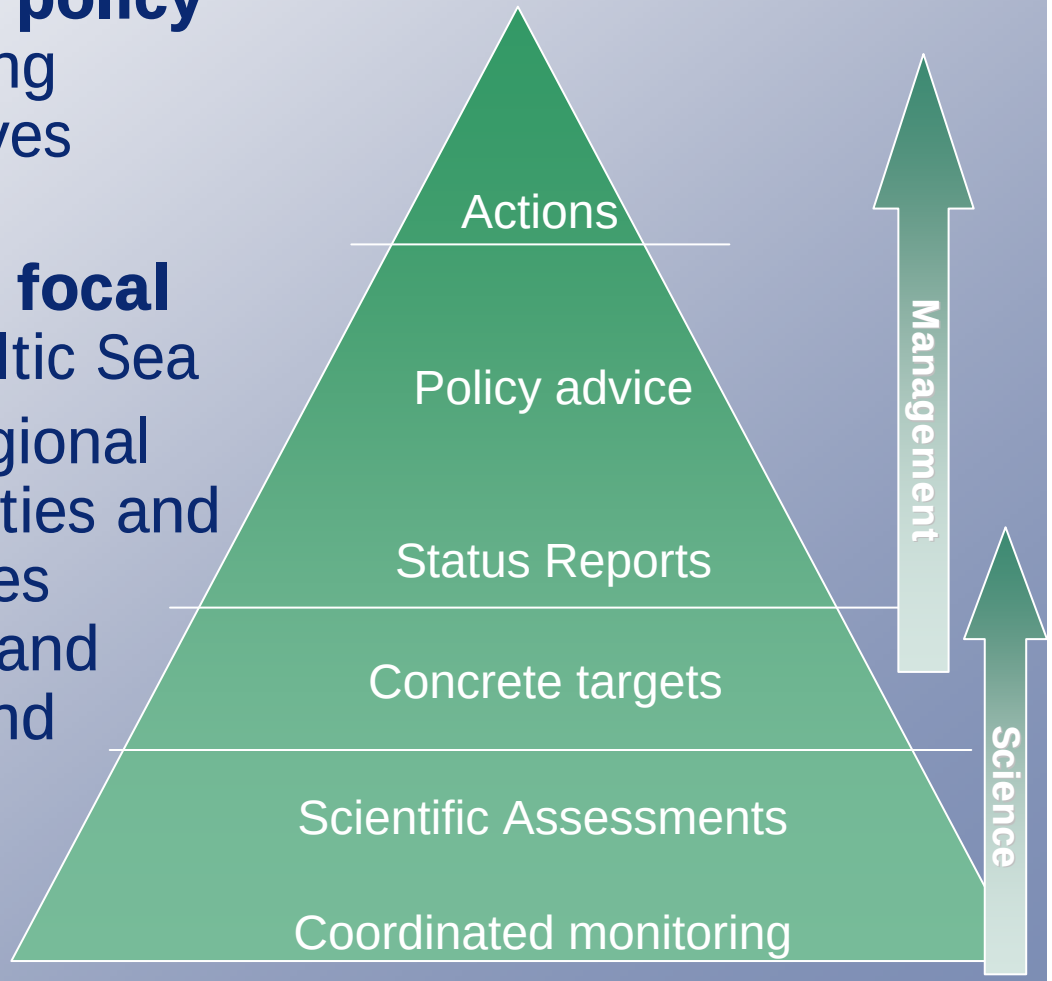
- 1974: signing of Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)
  - Response to worsening state of the Baltic marine environment
- 1992: new Convention signed in response to
  - change in the geo-political environment
  - new environmental principles
- Helsinki Commission (HELCOM) is the governing body of the Helsinki Convention: Denmark, Estonia, European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden

# HELCOM's role in the Baltic

- Works towards:
  - protection of the Baltic marine environment from all sources of pollution
  - implementation of the Helsinki Convention
- Priority issues:
  - Eutrophication
  - Hazardous substances
  - Biodiversity and nature protection
  - Shipping and maritime activities

# Linking science and policy

- **environmental policy maker** developing common objectives and actions
- **environmental focal point** for the Baltic Sea
- **coordinates** regional monitoring activities and regularly produces targeted, timely and scientifically sound assessments



# How do we do it?

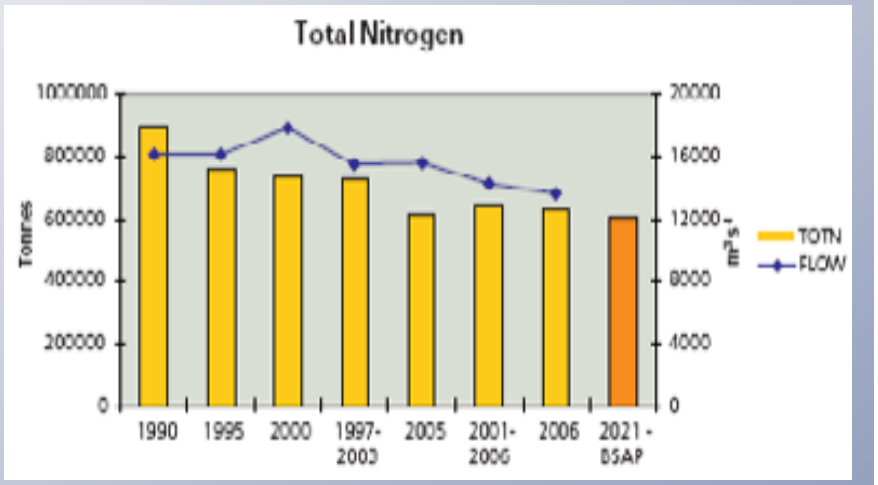
- Implement and update the Helsinki Convention
- Ministerial Declarations
- Regional implementation of other international agreements
- > 200 HELCOM Recommendations
- Joint input to international fora (EU, IMO, and other global organisations)
- Joint initiatives and projects
- Baltic Sea Action Plan (BSAP)

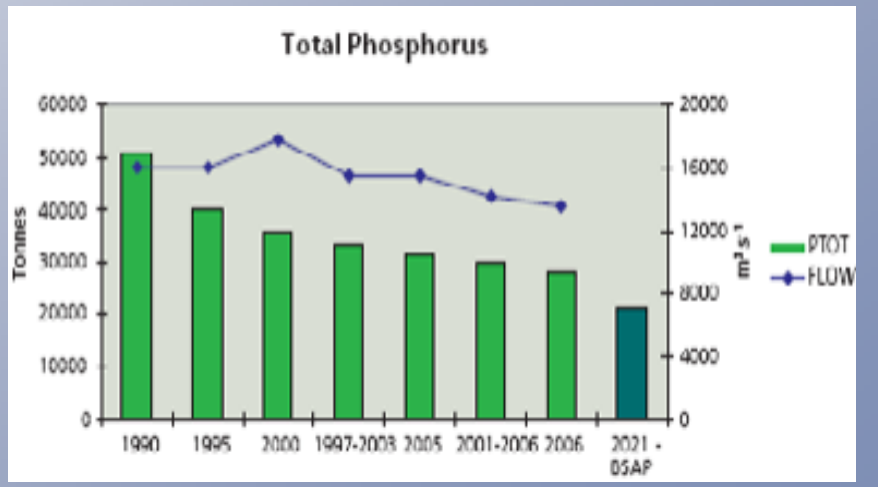
# Measures to combat eutrophication

- 1988 Ministerial Declaration: reduction targets of 50% for nitrogen and phosphorus
- 1992 Baltic Sea Joint Comprehensive Environmental Action Programme (JCP): identified 162 major pollution hot spots
- HELCOM Recommendations on e.g.:
  - wastewater treatment (municipal and single family homes)
  - Forestry and agricultural practices
  - Management of wetlands
  - substitution of polyphosphates in detergents
  - Emissions from shipping
- HELCOM Baltic Sea Action Plan (BSAP)

# Success stories

- Reductions in inputs of nutrients
- More than half of 162 hotspots in the catchment area have been ”cleaned up”



# 2007 HELCOM Baltic Sea Action Plan (BSAP)

- Aim: to radically reduce pollution to the Baltic Sea and reverse its degradation by 2021
- Ecosystem-based approach to management of human activities
- Specific environmental targets, actions and deadlines
- System of measureable parameters for assessing the effectiveness of measures and progress towards goals

# Starting point: Vision, Goals, Objectives

## VISION

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

## GOALS

**Baltic Sea unaffected by eutrophication**

**Baltic Sea life undisturbed by hazardous substances**

**Favourable conservation status of Baltic Sea biodiversity**

**Maritime activities in the Baltic Sea carried out in an environmentally friendly way**

## OBJECTIVES

**Concentrations of nutrients close to natural levels**

**Clear water**

**Natural level of algal blooms**

**Natural distribution and occurrence of plants and animals**

**Natural oxygen levels**

**Concentrations of hazardous substances close to natural levels**

**All fish safe to eat**

**Healthy wildlife**

**Radioactivity at pre-Chernobyl level**

**Natural marine and coastal landscapes**

**Thriving and balanced communities of plants and animals**

**Viable populations of species**

**Enforcement of international regulations -No illegal pollution**

**Safe maritime traffic without accidental pollution**

**Efficient emergency and response capability**

**Minimum sewage pollution from ships**

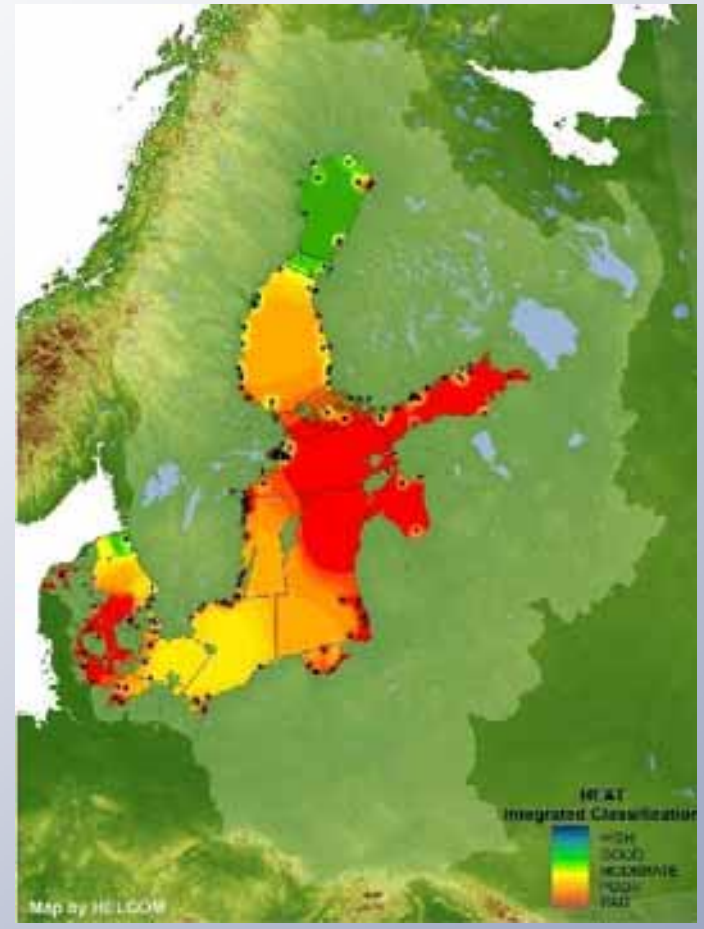
**No introductions of alien species from ships**

**Minimum air pollution from ships**

**Zero discharges from offshore platforms**

**Minimum threats from offshore installations**

# Eutrophication - example of science influencing policy




- HELCOM's integrated thematic assessment on eutrophication (2009) presents eutrophication status/classification for 189 areas in the Baltic
- Only 13 of the 189 areas where not eutrophied in 2001-2006
- The non-eutrophied areas were either in the Gulf of Bothnia or the Kattegat

# Eutrophication Objectives

## VISION

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## GOALS

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# Targets and indicators

**Non-eutrophicated water**

**Eutrophicated water**

# Setting quantitative environmental targets for “Clear water”


- Secchi depth used for describing water transparency and the quantity of planktonic algae in water
- Exact targets were set for each Baltic Sea sub-basin using data on historical levels of Secchi depth

# Targets as a basis for policy
## Secchi depth example

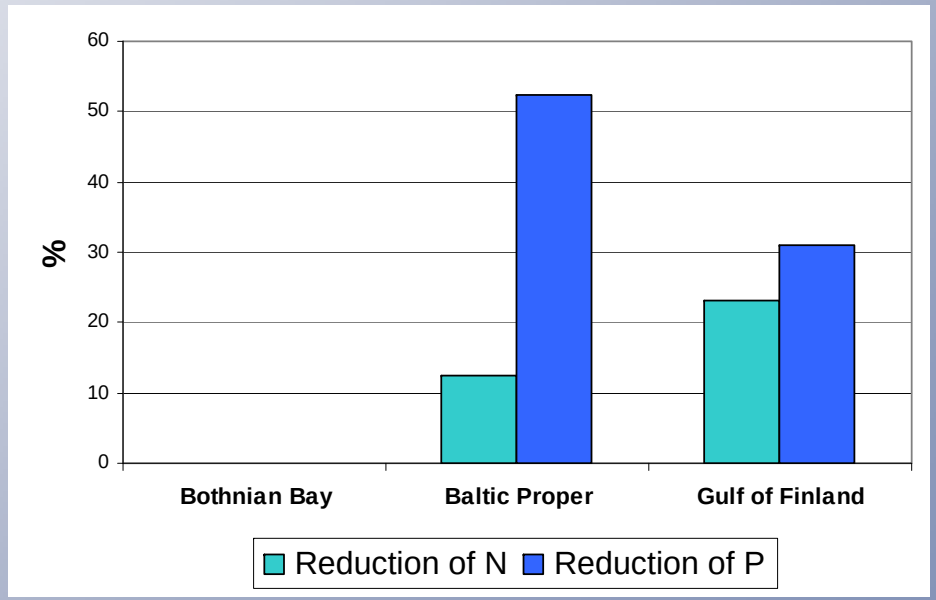
**Table 1.** The initial target and present levels for summertime water transparency in the different sub-regions

| Sub-basin (# of EUTRO assessment table)* | Transparency (summer-August) [m] | | |
|---|---|---|---|
| | Reference (EUTRO) | Target (25% deviation from reference) | Present situation (EUTRO) |
| Bothnian Bay (EUTRO 40) | 7.5 | Present situation | 5.8 |
| Bothnian Sea (EUTRO 38) | 9.0 | Present situation | 7.0 |
| Gulf of Finland (EUTRO 31) | 8.0 | 6.0 | 4.1 |
| Gulf of Riga (EUTRO 25) | 6.0 | 4.5 | 3.4 |
| Kattegat (EUTRO 1) | 10.5 | Present situation | 8.5 |
| Baltic Proper (mean calculated from EUTRO 30, 28 & 17) | 9.3 | 7.0 | 6.3 |

*Development of tools for assessment of eutrophication in the Baltic Sea (BSEP No. 104)

# How much does nutrient load need to be reduced to reach "Clear water"?

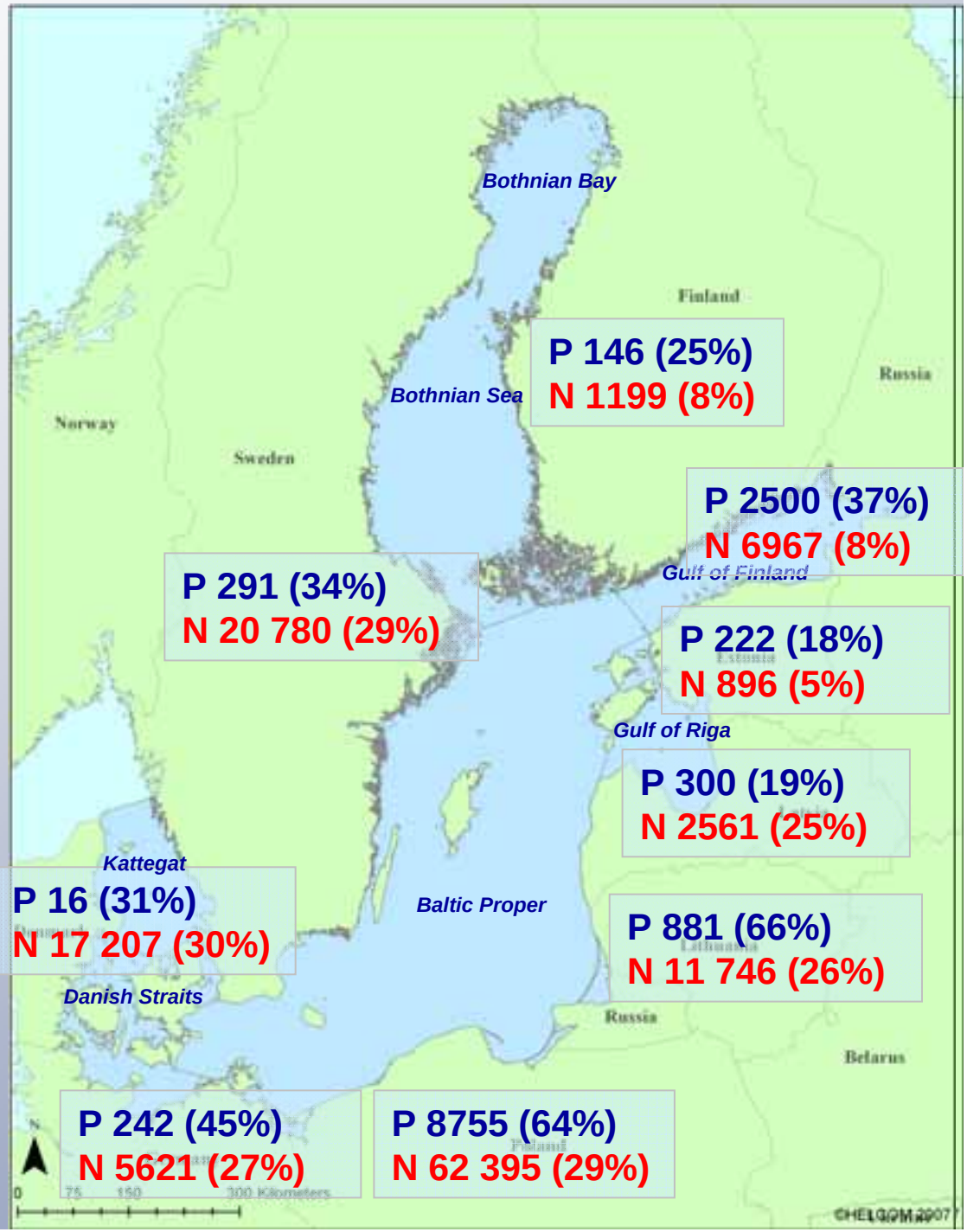
- MARE model suggests that reaching the water clarity target requires reduction of:
  - 42% total phosphorus input and
  - 18% total nitrogen input to the Baltic Sea
- Regional differences:



# Total reductions needed (tonnes/year)

## Reductions/ sub-basin (tonnes/year)

## Reductions/ country (tonnes/year)



# BSAP actions for eutrophication

- **Specific measures**
  - Efficient treatment of waste waters from municipalities, scattered settlements and single family homes (HELCOM Recommendations)
  - P-free detergents
  - Agriculture: requirements for animal farms, manure handling and fertilisation (revised Annex III of the Convention)
  - Curb emissions of nitrogen to air (e.g. shipping)
  - Lists of hotspots (animal rearing, waste water treatment) to facilitate establishment and funding of projects
- HELCOM countries to develop **national implementation programmes** by 2010
  - to reach the provisional nutrient reduction requirements
  - flexibility to include most suitable and cost-effective measures

# BSAP implementation

- Measures in non-Contracting Parties to address transboundary inputs
  - bi- and multilateral projects
  - involving also private initiatives
- Strong link to regional and global processes
  - e.g. EU Baltic Sea Strategy, EU Marine Strategy Framework Directive and Maritime Policy
  - joint input from HELCOM Contracting Parties to processes within international fora to reach Baltic environmental objectives, e.g. IMO, EU, UNECE CLRTAP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Thank you!