State of the Baltic Sea and new approaches to reduce eutrophication

Susanna Kaasinen

HELCOM Secretariat

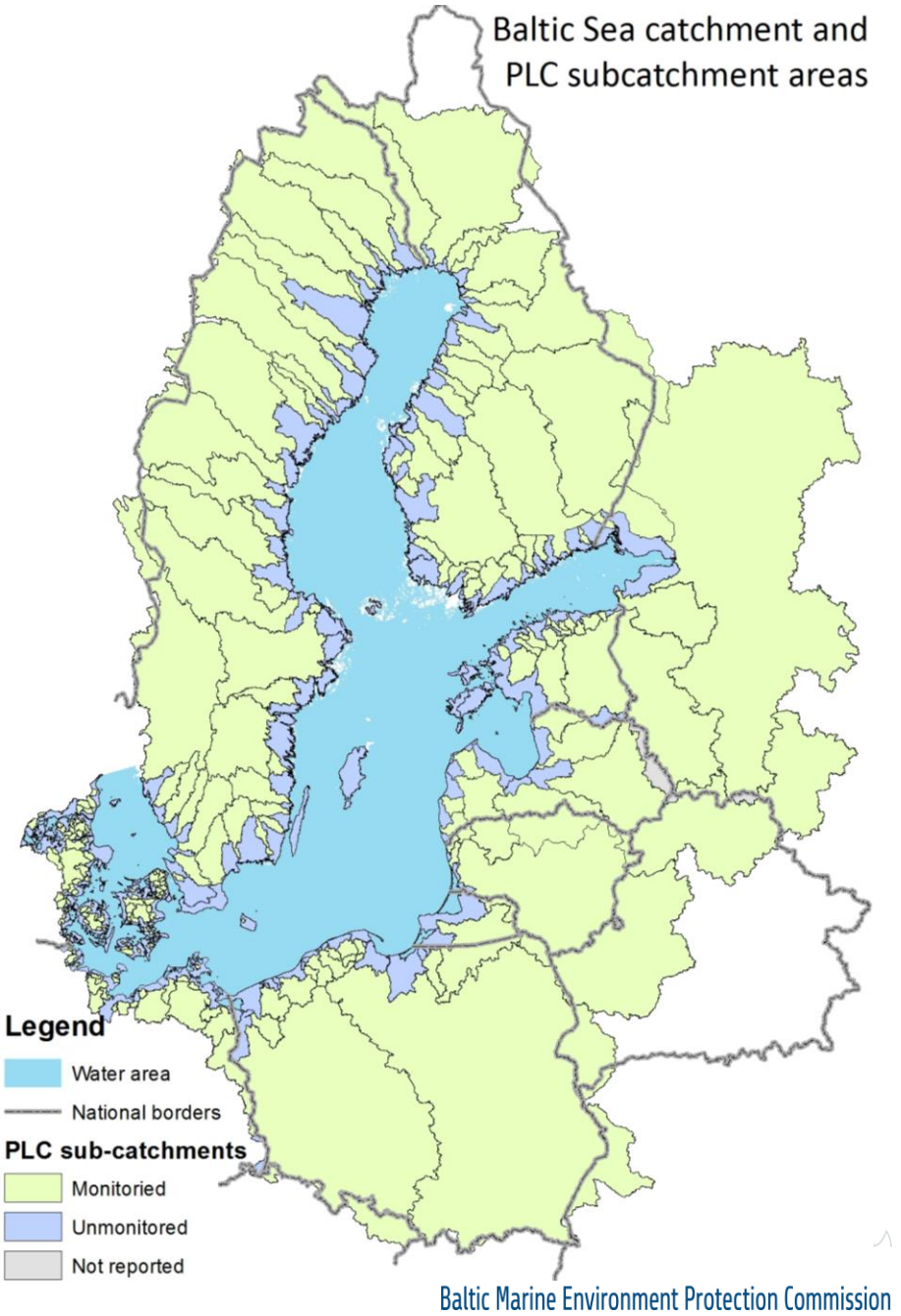
2nd Coastal Biogas Conference, 13 November 2019

Catchment area:
x4 of the sea

Population:
85M

Multitude of pressures

Unique but fragile ecosystem



1974 Helsinki Convention

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Helsinki Convention

Convention on the Protection of the Marine Environment Of The Baltic Sea Area

1974, 1992

Signatories: all Baltic Sea coastal countries and the EU

International treaty law

Helsinki Commission (HELCOM)

Baltic Marine Environment Protection Commission

1981

Governing body of the Helsinki Convention

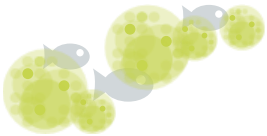
Contracting Parties

- Denmark
- Estonia
- European Union
- Finland
- Germany
- Latvia
- Lithuania
- Poland
- Russia
- Sweden

Baltic Sea Action Plan (BSAP)

HELCOM's programme of actions for Baltic Sea in good environmental state by 2021:

The four BSAP segments and objectives



Baltic Sea unaffected by ***eutrophication***

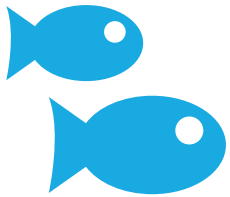
Baltic Sea undisturbed by ***hazardous substances***

Favourable status of Baltic Sea ***biodiversity***

Environmentally friendly ***maritime activities***

State of the Baltic Sea

Second HELCOM holistic assessment 2011-2016



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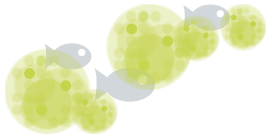
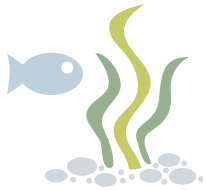
Key findings

The Baltic Sea is not in a good state:
BSAP goals unlikely to be reached by 2021



Eutrophication:
Still the major pressure despite trends of nutrient reduction

Current challenges:
- Littering & plastics
- Underwater sound
- Pharmaceuticals
- Seabed disturbance
- Climate change



Biodiversity:
Not in a good state overall

Eutrophication

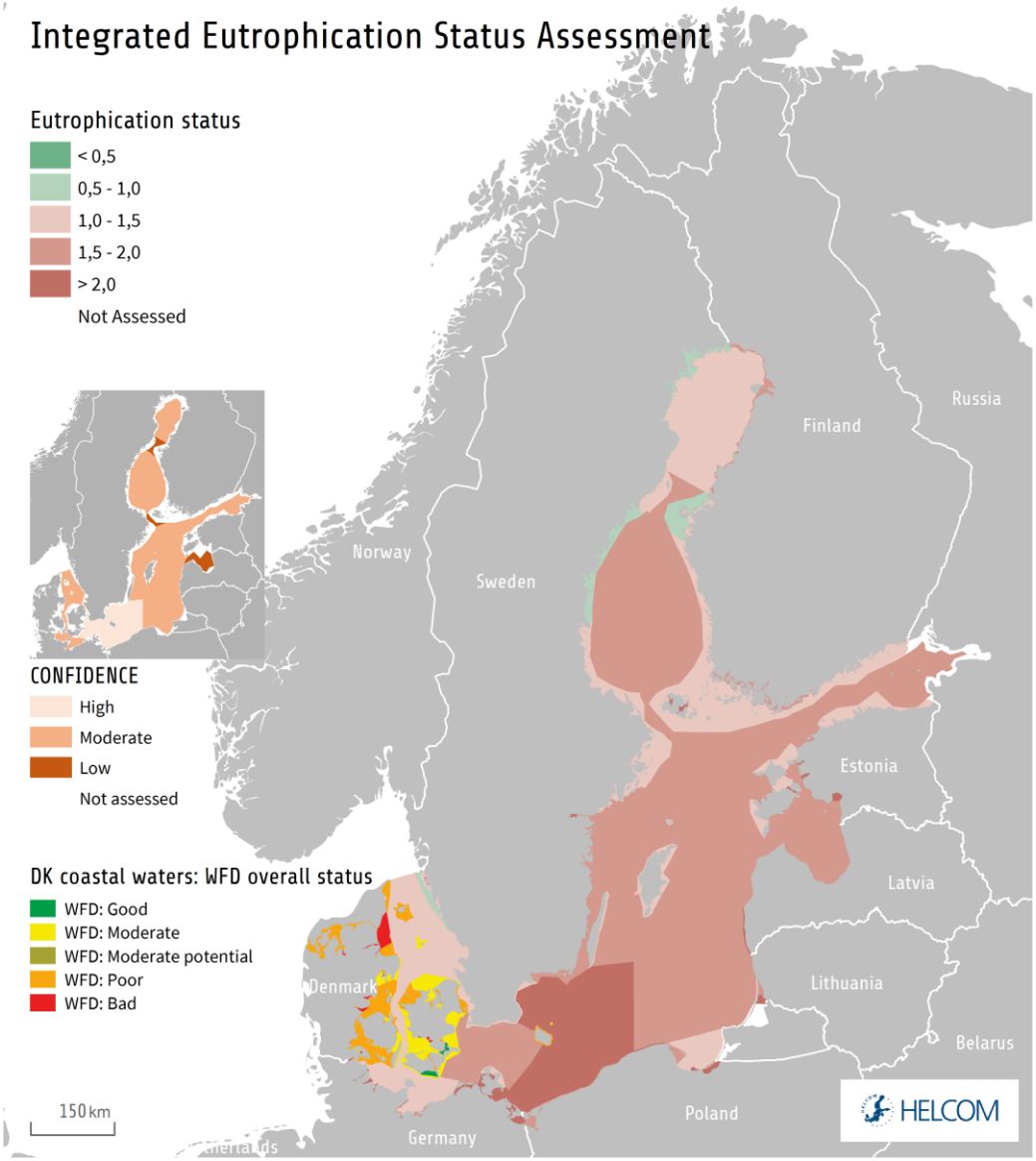
- Eutrophication remains the biggest pressure on the sea

97%

of the Baltic Sea is affected by eutrophication

Eutrophication

- Eutrophication remains the biggest pressure on the sea
- 97% of the Baltic Sea is affected by eutrophication
- Ecosystem lag: Inputs of nutrients from land have decreased, but past and current inputs still impact the overall status



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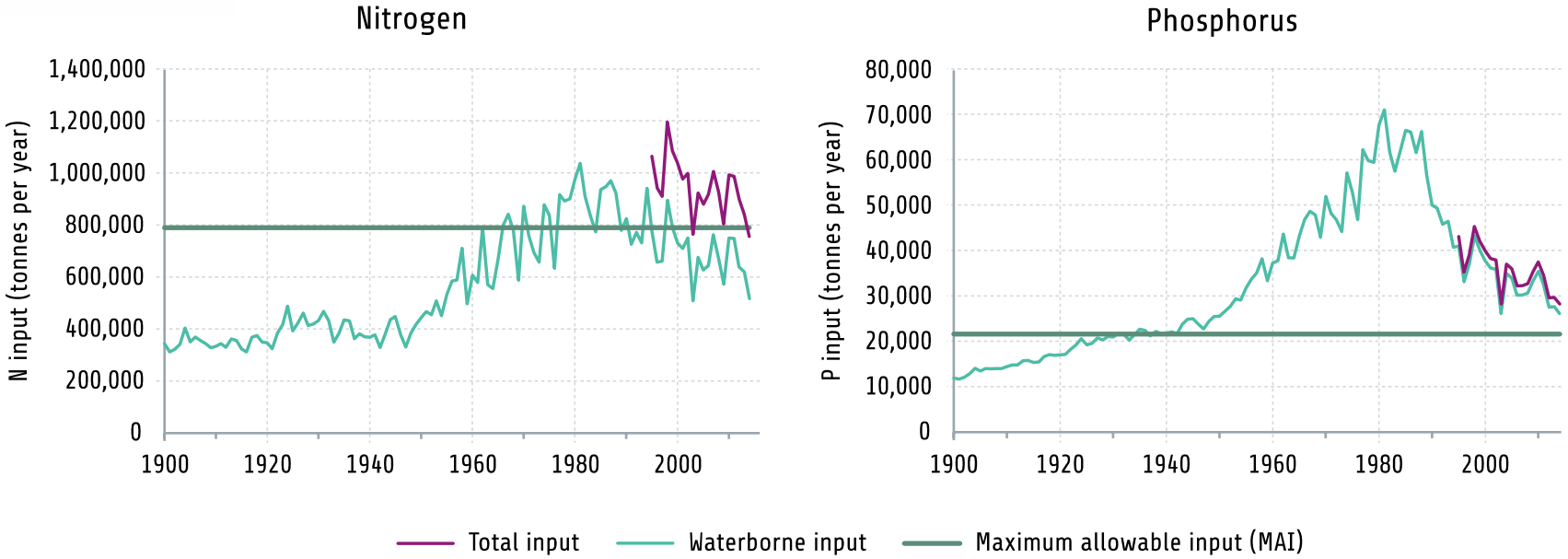
Waterborne and total nutrient inputs



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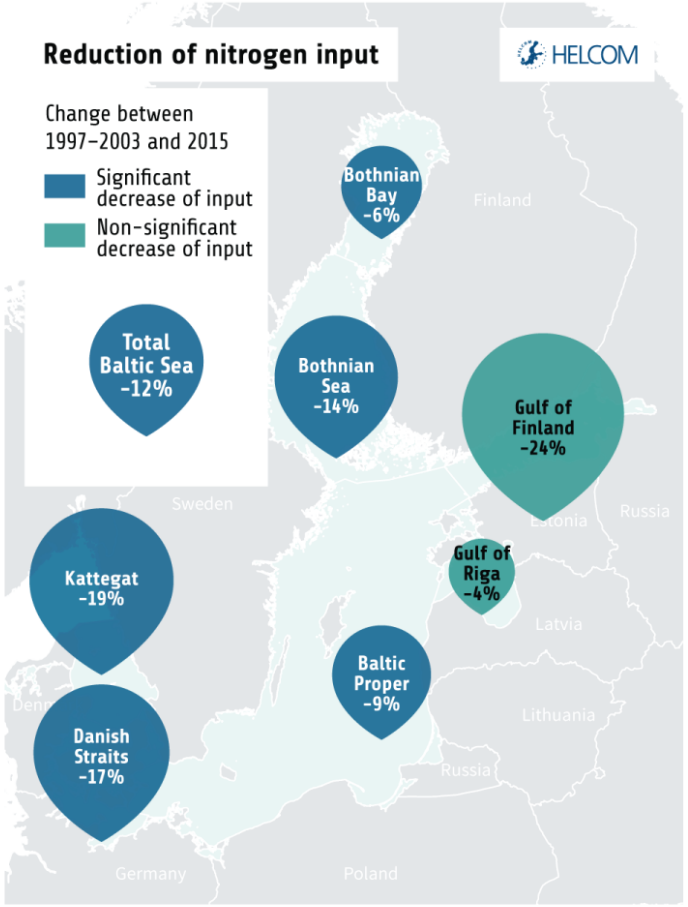
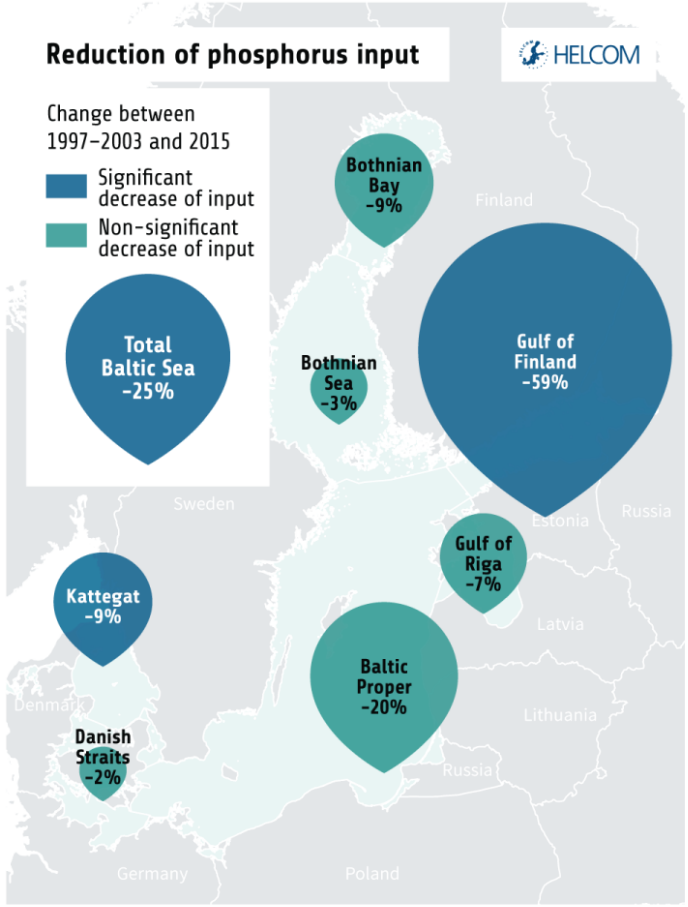
Reduction of nutrient inputs to the Baltic Sea





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Total load in 2014 to the Baltic Sea

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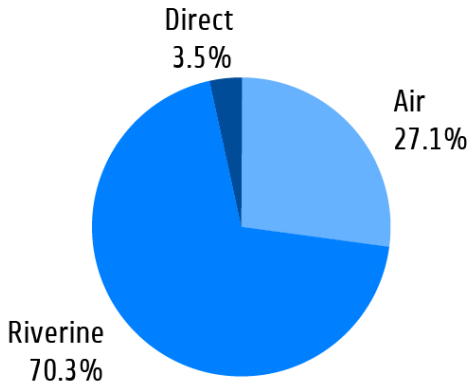
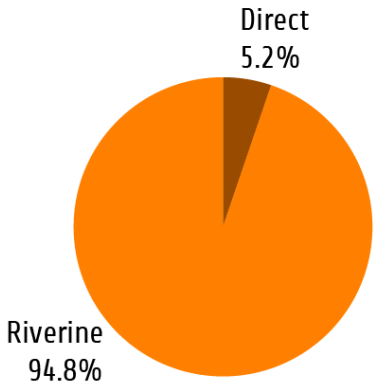
TN (825,825 tonnes)

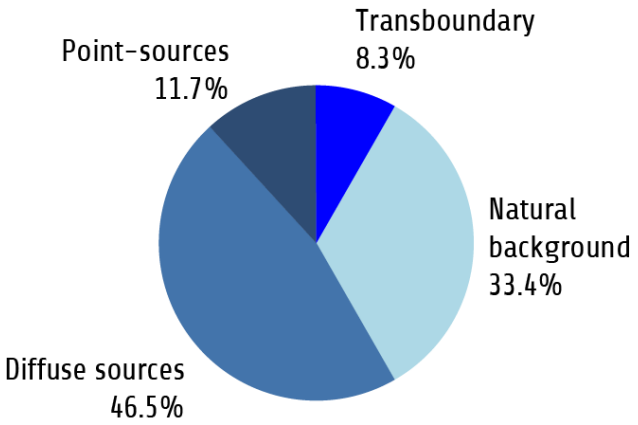


TP (30,949 tonnes)

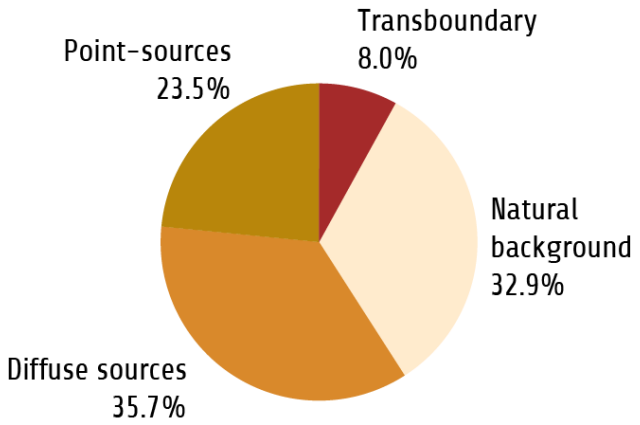


Riverine load in 2014 to the Baltic Sea

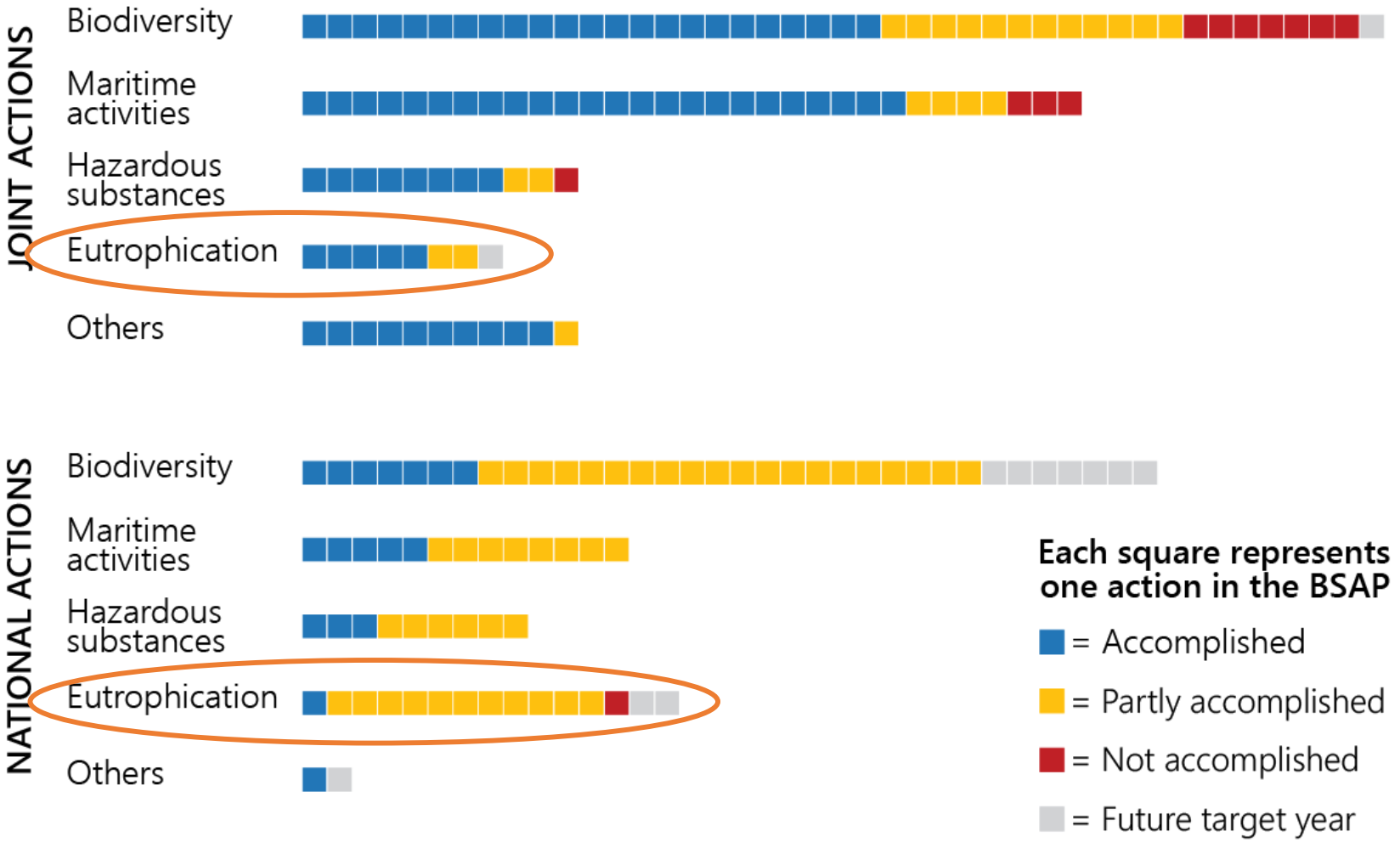
TN (529,583 tonnes)



TP (22,273 tonnes)



Implementation of the BSAP



Baltic Sea Action Plan (BSAP): update

Update by 2021

§

Based on a strong political mandate: Decision to update taken at Ministerial Meeting 2018

Evolution, not revolution: Update based on current plan

Sufficiency of measures: Update based on the analysis of what did work and what didn't

Ecosystem-based approach: Economic and social benefits of a healthy sea will be included

Global targets and committments: SDGs, Aichi targets, MSFD (EU) will be considered in the update


NUTRITIONALLY SPEAKING, IT'S NUTTY TO PUT NUTRIENTS IN THE SEA?
YEP! INSTEAD, WE NEED A STRATEGY TO RECYCLE THEM SAFELY.
HOORAY!
Seppo Leinonen 2018/seppo.net
HELCOM

Baltic Sea Regional Nutrient Recycling Strategy by 2020

- Aims for reduced nutrient inputs to and eutrophication of the Baltic Sea
- Focuses on measures at source rather than end-of-pipe solutions
- Nutrients especially from manure and sewage
- Possible nutrient recycling measures to be included in the updated Baltic Sea Action Plan

Vision

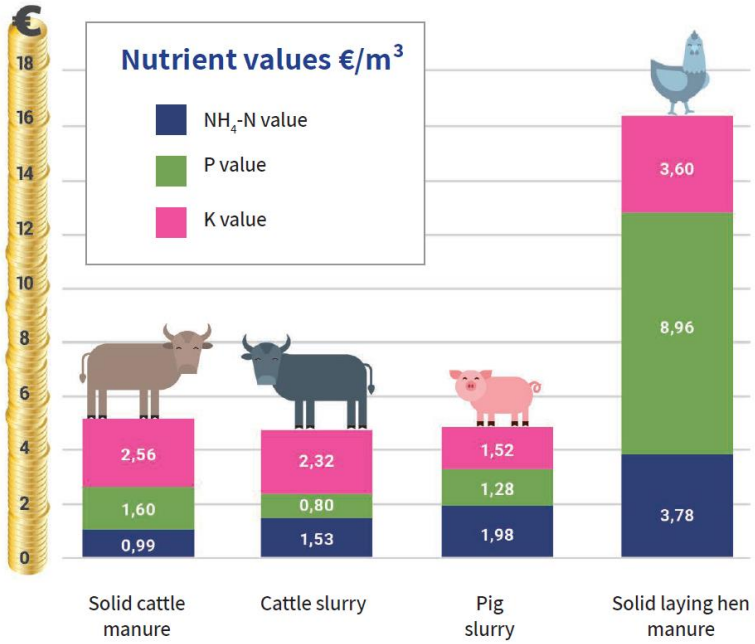
Nutrients are managed sustainably in all HELCOM countries, securing the productivity of agriculture and minimizing nutrient loss to the Baltic Sea environment through efficient use of nutrients and cost-effective nutrient recycling.

Objectives

- Baltic Sea region as a model area for nutrient recycling
- Reducing environmental impacts
- Safe nutrient recycling
- Knowledge exchange and awareness raising
- Creating business opportunities
- Improving policy coherence

Measures?

- Biogas and other processing technologies as part of the solution to distribute nutrients more evenly?



New measures for the updated BSAP

Call for synopses:

http://www.helcom.fi/baltic-sea-action-plan/bsap-2021-update/