



Framtids- trender i Östersjön

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Umeå



WWF Baltic Ecoregion Programme

WWF Denmark

WWF Finland

WWF Germany

WWF Poland

WWF Sweden

Baltic Fund for Nature (Russia)

Estonian Fund for Nature

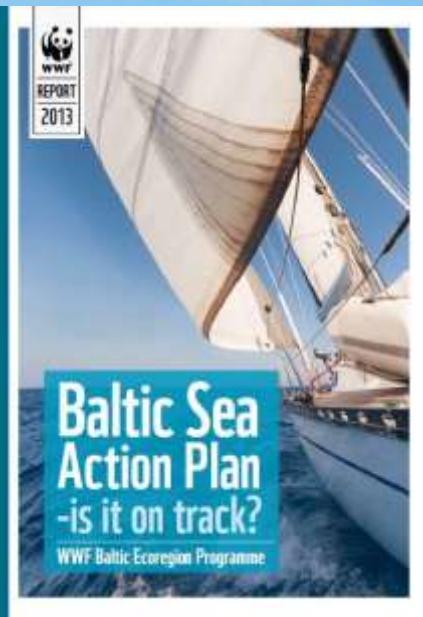
Lithuanian Fund for Nature

Pasaules Dabas Fonds (Latvia)

The Baltic Sea

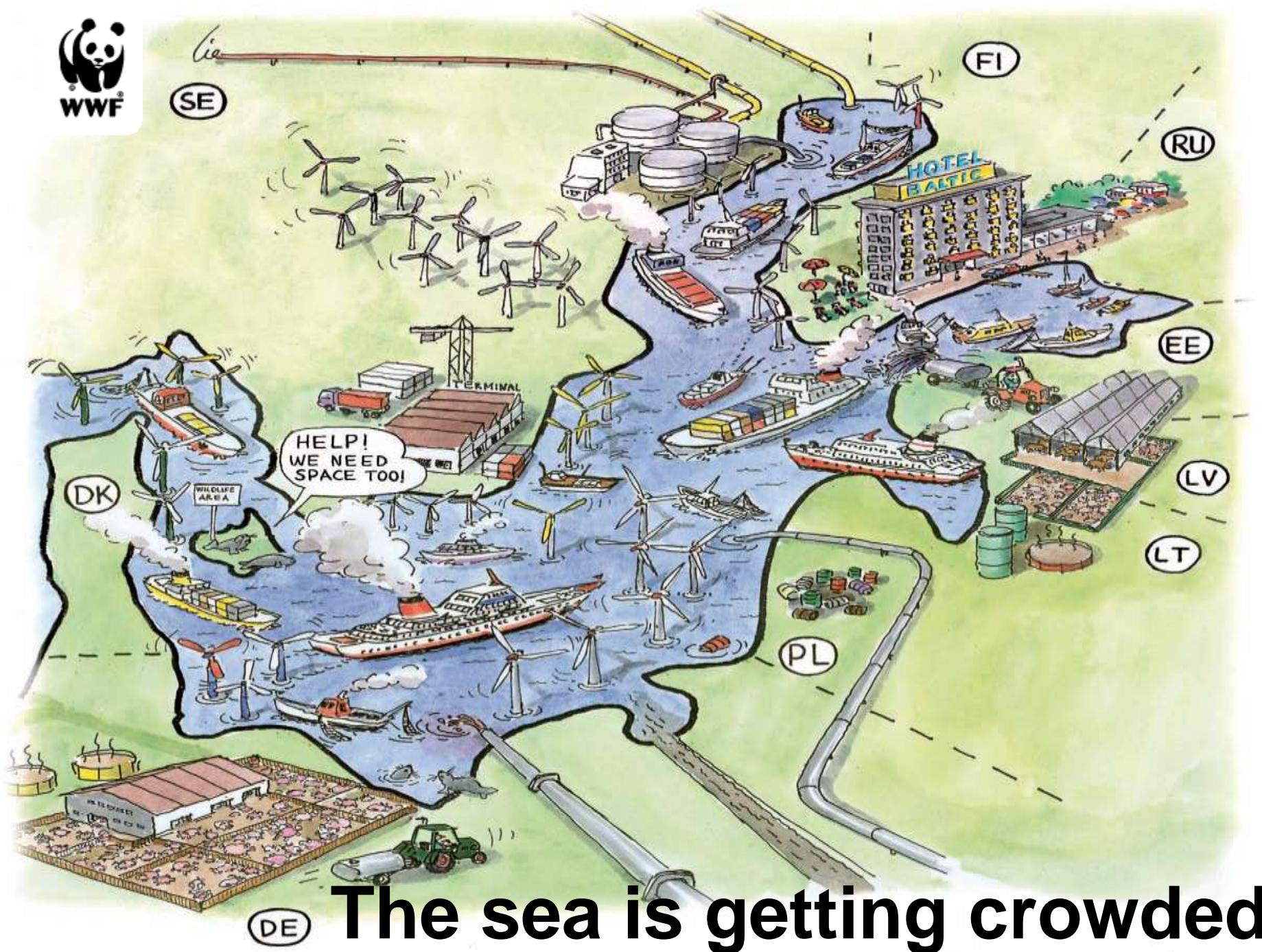


Lack of implementation



BSAP segment	DE	DK	EE	FIN	LT	LV	PL	RU	SE
Eutrophication	0	-8	-3	0	-11	-5	-6	-8	-2
Hazardous substances	-4	-9	-13	-2	-8	-11	-13	-11	-2
Biodiversity	-22	-15	-13	-15	-24	-18	-18	-28	-28
Maritime activities	-7	-7	-8	-8	-7	-6	-7	-4	-5
Total score, all segments	-33	-39	-37	-25	-50	-40	-44	-51	-37

Colour	Interpretation	Grade
Green	Ahead of schedule	“Good”
Yellow	On schedule	“Acceptable”
Red	Behind schedule	“Not acceptable”



DE The sea is getting crowded!

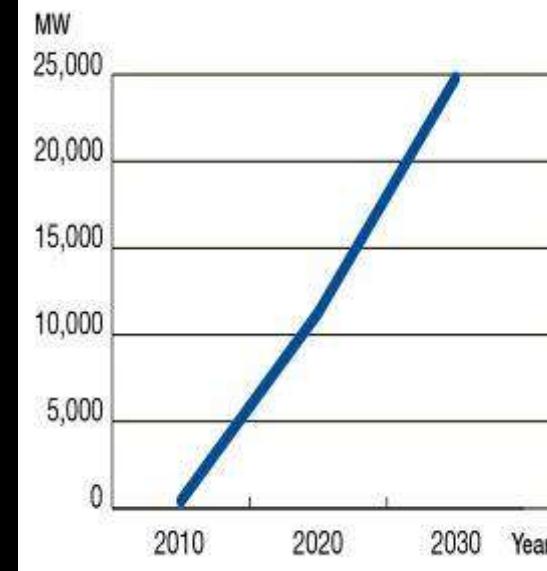
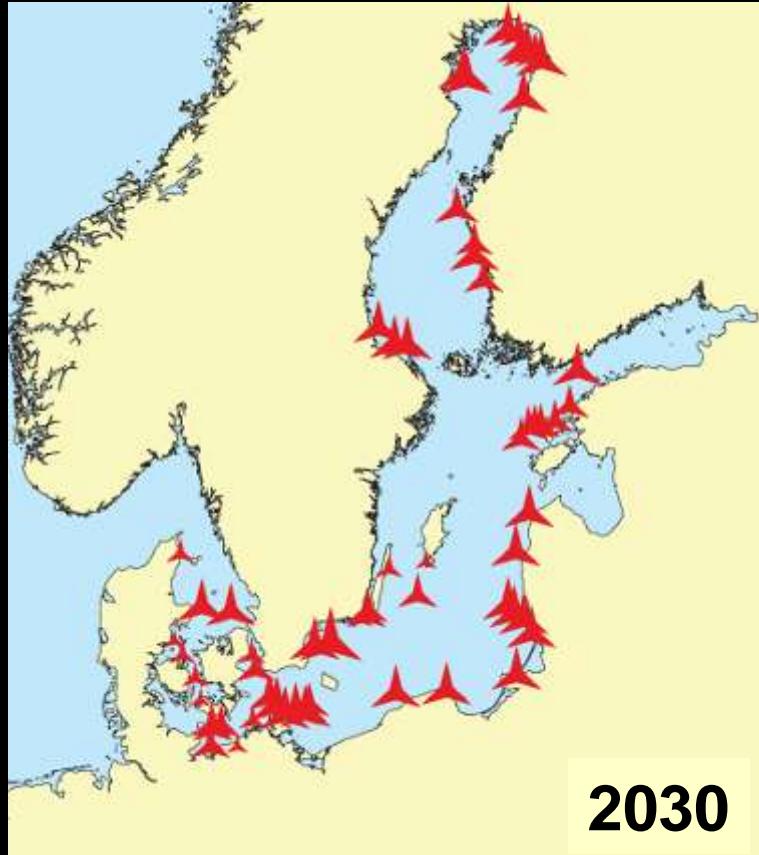


Why aren't we progressing?

Future trends over the next 20 years

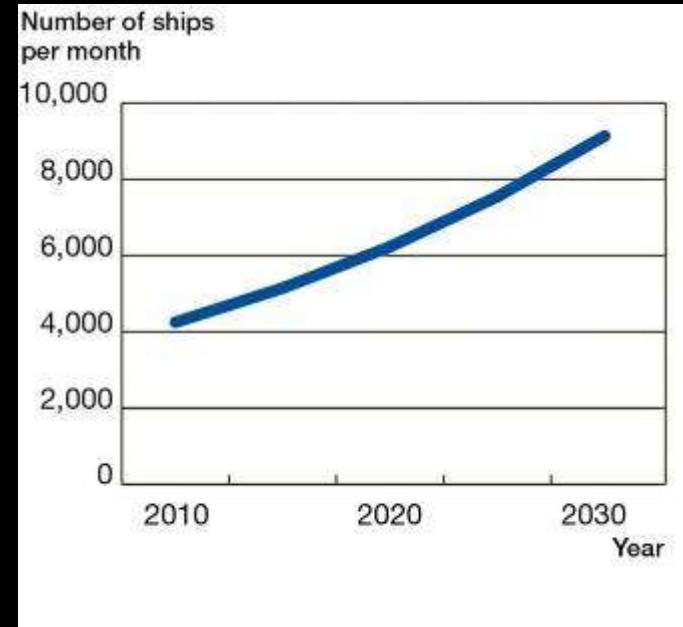
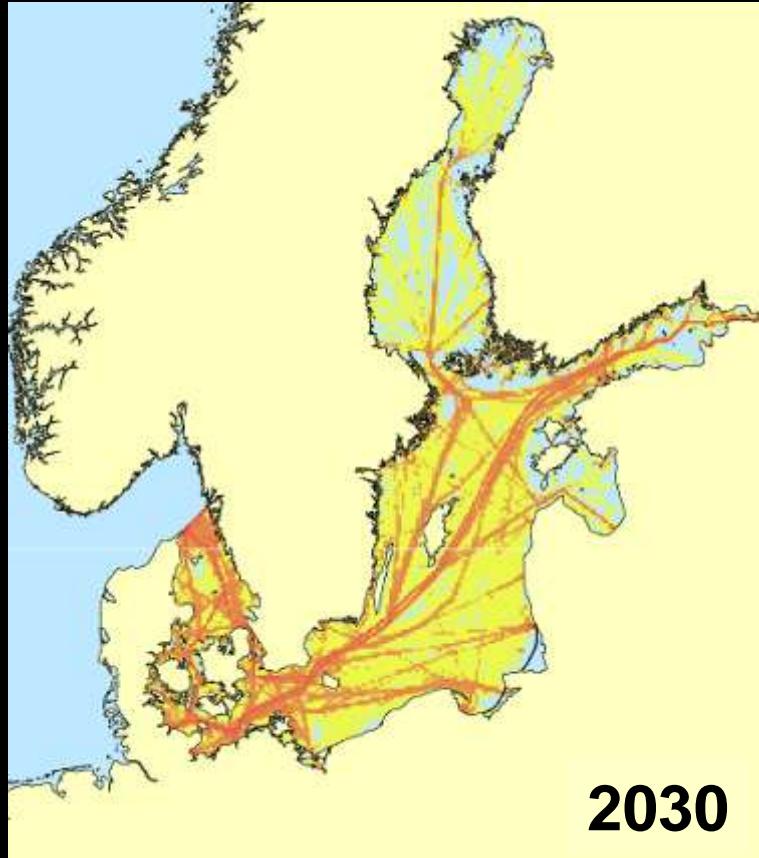


Wind Energy



- **Expected to expand by 6000%**

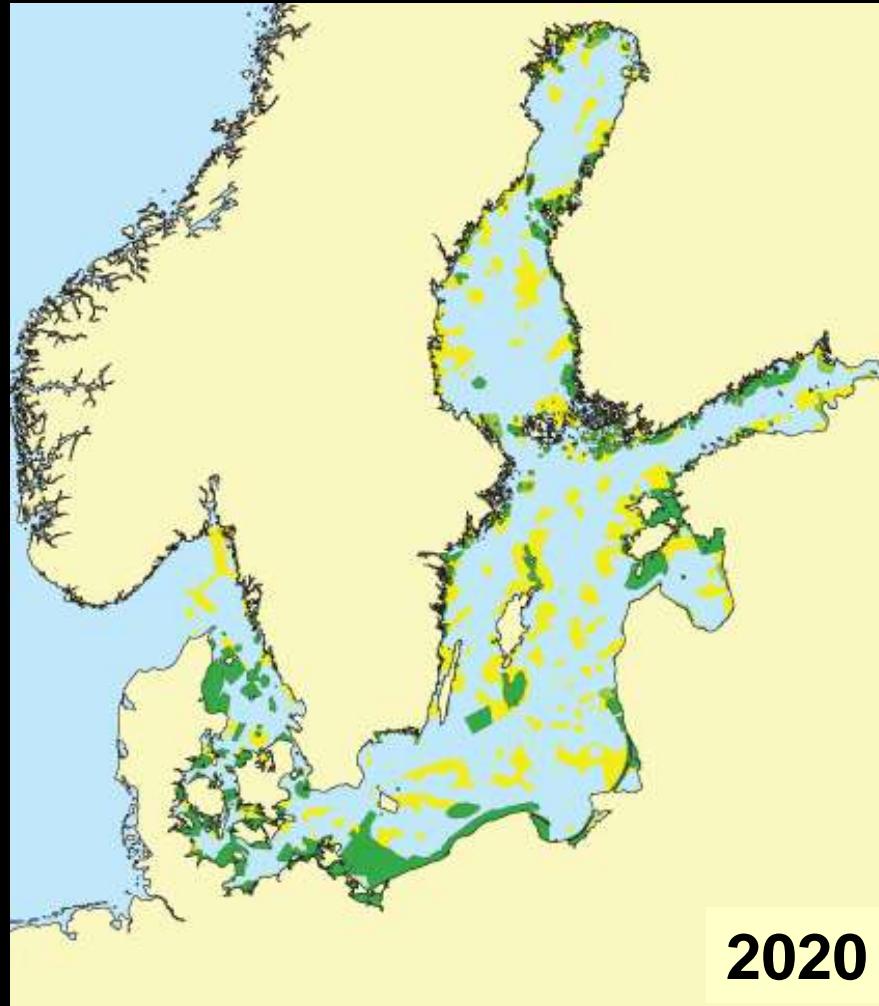
Shipping

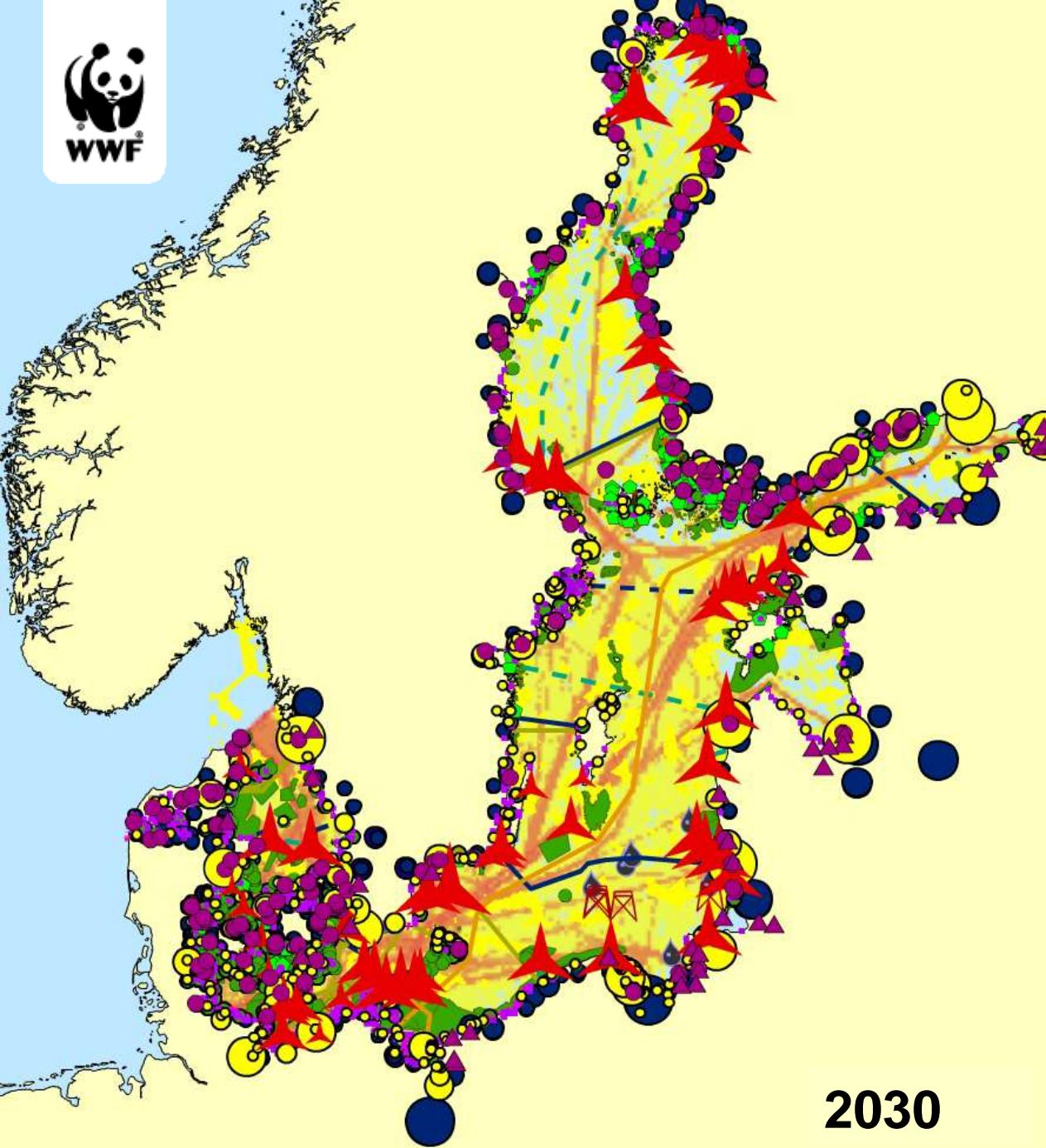


- **Expected to double by 2030**



Marine Protected Areas





“Baltic Trends”

Kommersiellt fiske

Sjöfart

Muddring

Olja och gas

Kablar och rör

Fysisk exploatering

Marina skyddade områden

Vattenbruk

Jordbruk

Kväve
Fosfor

Turism och Rekreation

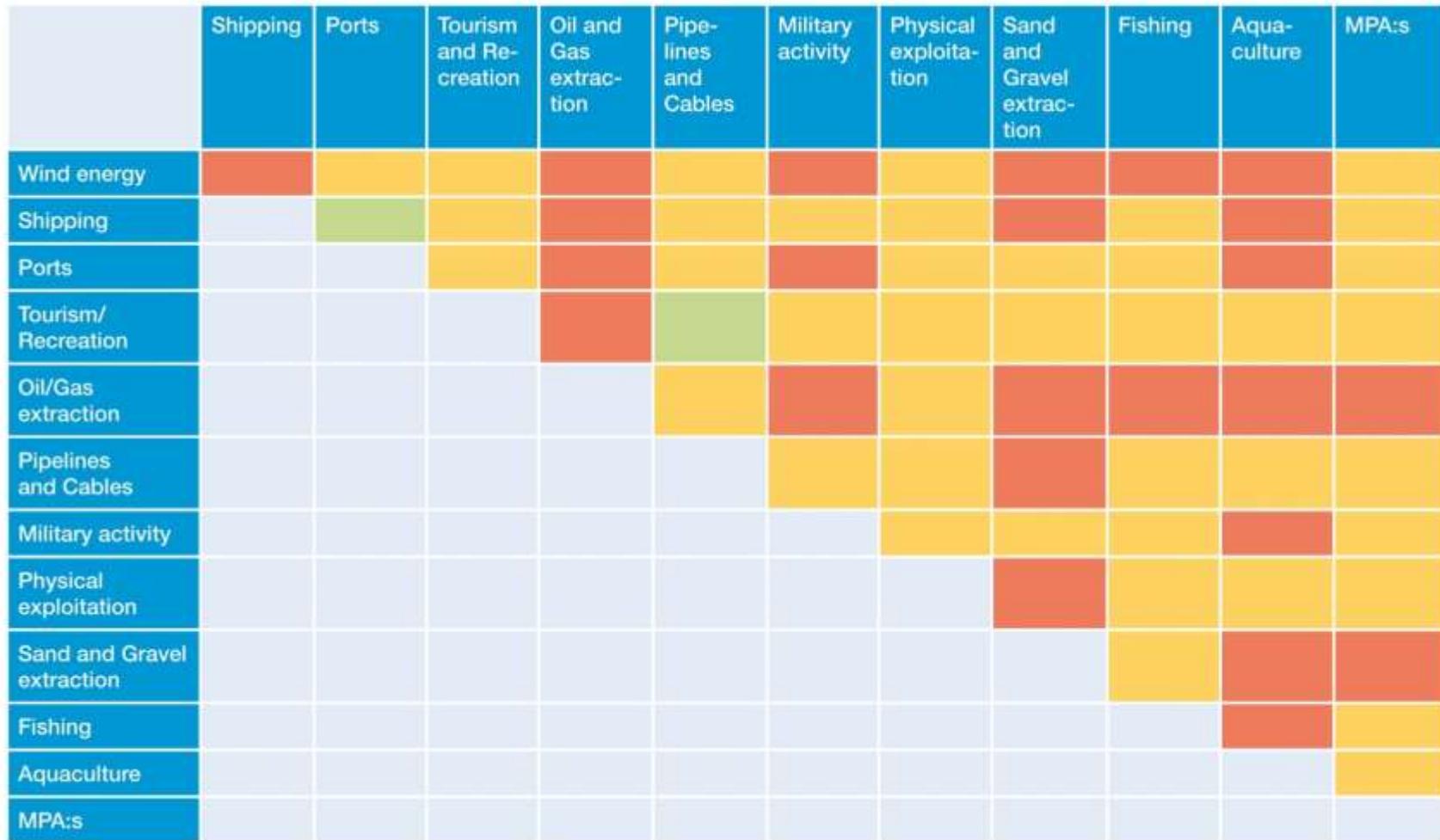
Hamnar

Vindkraft

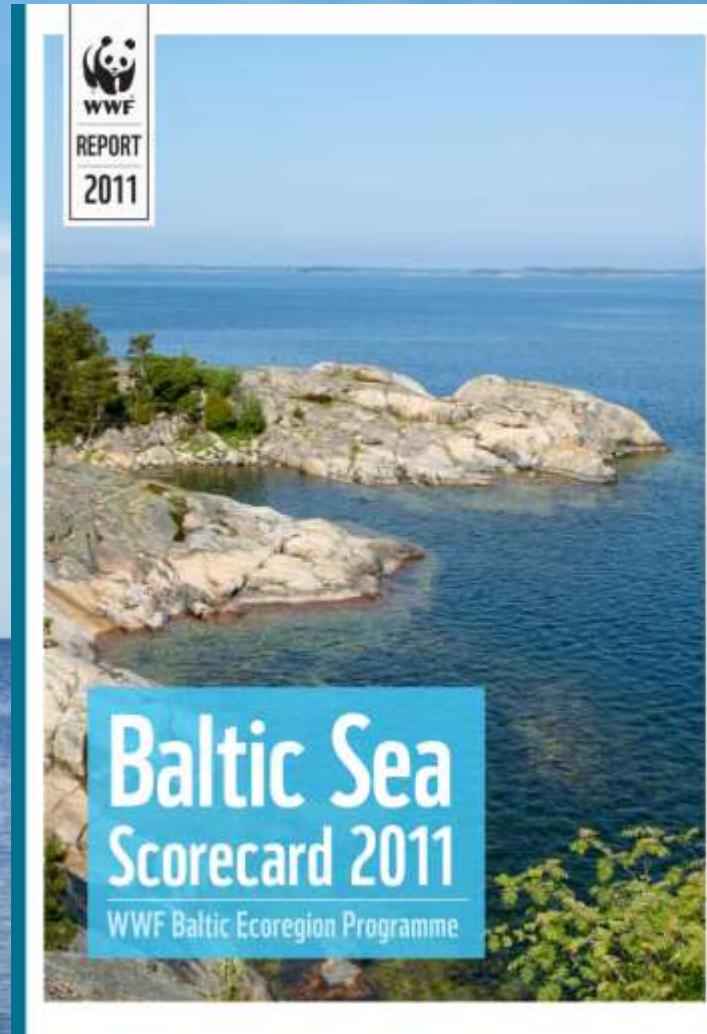
Industrier



Compatibility and conflicts



Challenges: Growth and Governance





**We need to apply a regional integrated approach,
including Marine Spatial Planning!**



Baltic Sea Scenarios workshop



② CERTAINTIES

- Increased temp
- MSP established in most countries
- Increased env awareness of consumers
- Dramatic increase of use of natural resources
- Due to increased env burden one (or more) of Baltic nations have collapsed

UNCERTAINTIES

- Fundamental changes in the (capitalistic) economy towards sust growth paradigm will not change
- "Stronger european identity"
- Overload of information and interests obscure actions



CERTAIN TRENDS

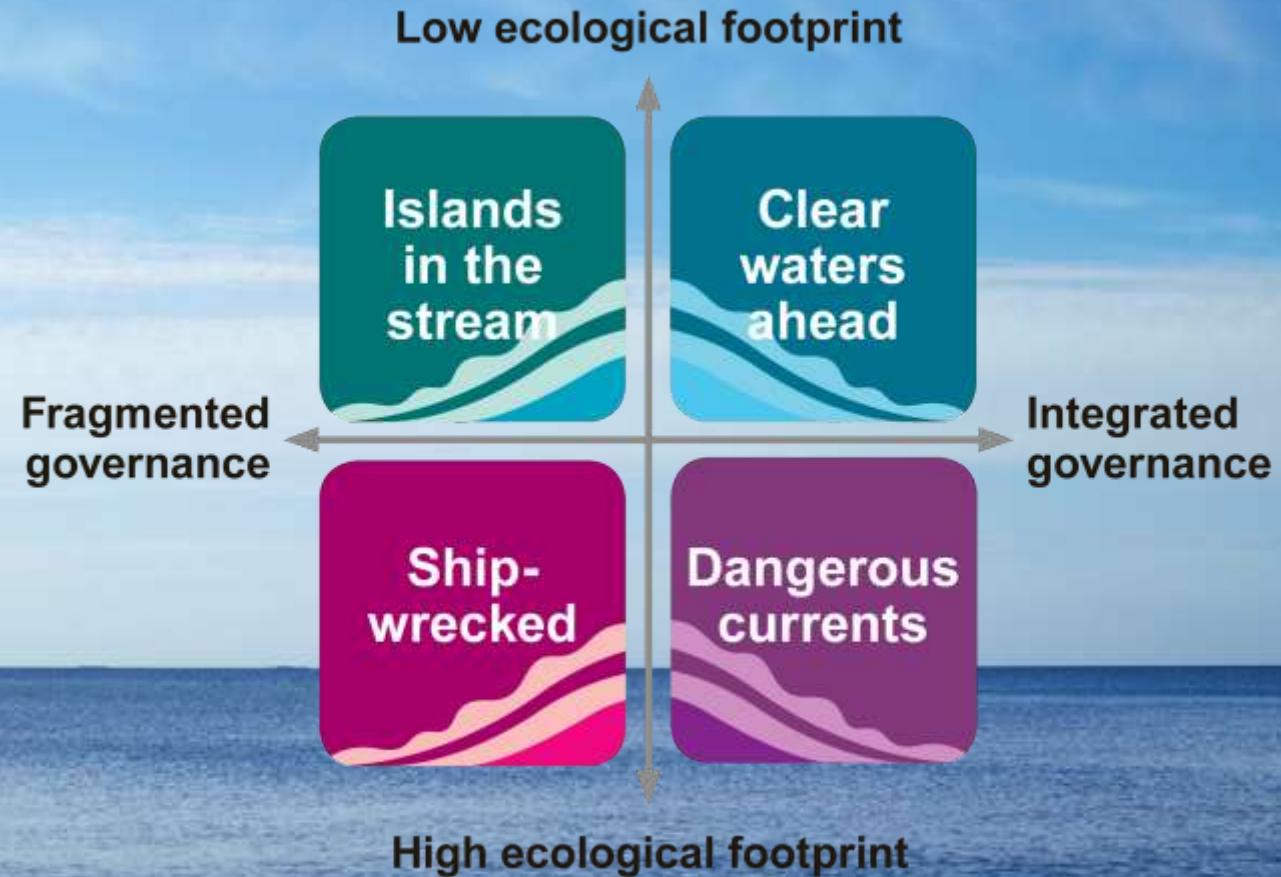
- Increased energy demand (space for inst. grids)
- Increased maritime transport
- Growing demand for sustainable food production (on land and sea)
- Increased regulatory needs
- Increased importance of non-state actors and other stakeholders

UNCERTAINTIES

- Geopolitical situation
- Global environmental challenges (climate change and haz. rel.)
- Economic development in the region (incl. jobs)
- Governance structures and institutions to meet challenges
- Increased cooperation on data collection and management



Four Scenarios for the Baltic Sea in 2030





TURNING ADVERSITY INTO OPPORTUNITY

A BUSINESS PLAN FOR THE BALTIC SEA

50
YEAR
THE BOSTON CONSULTING GROUP

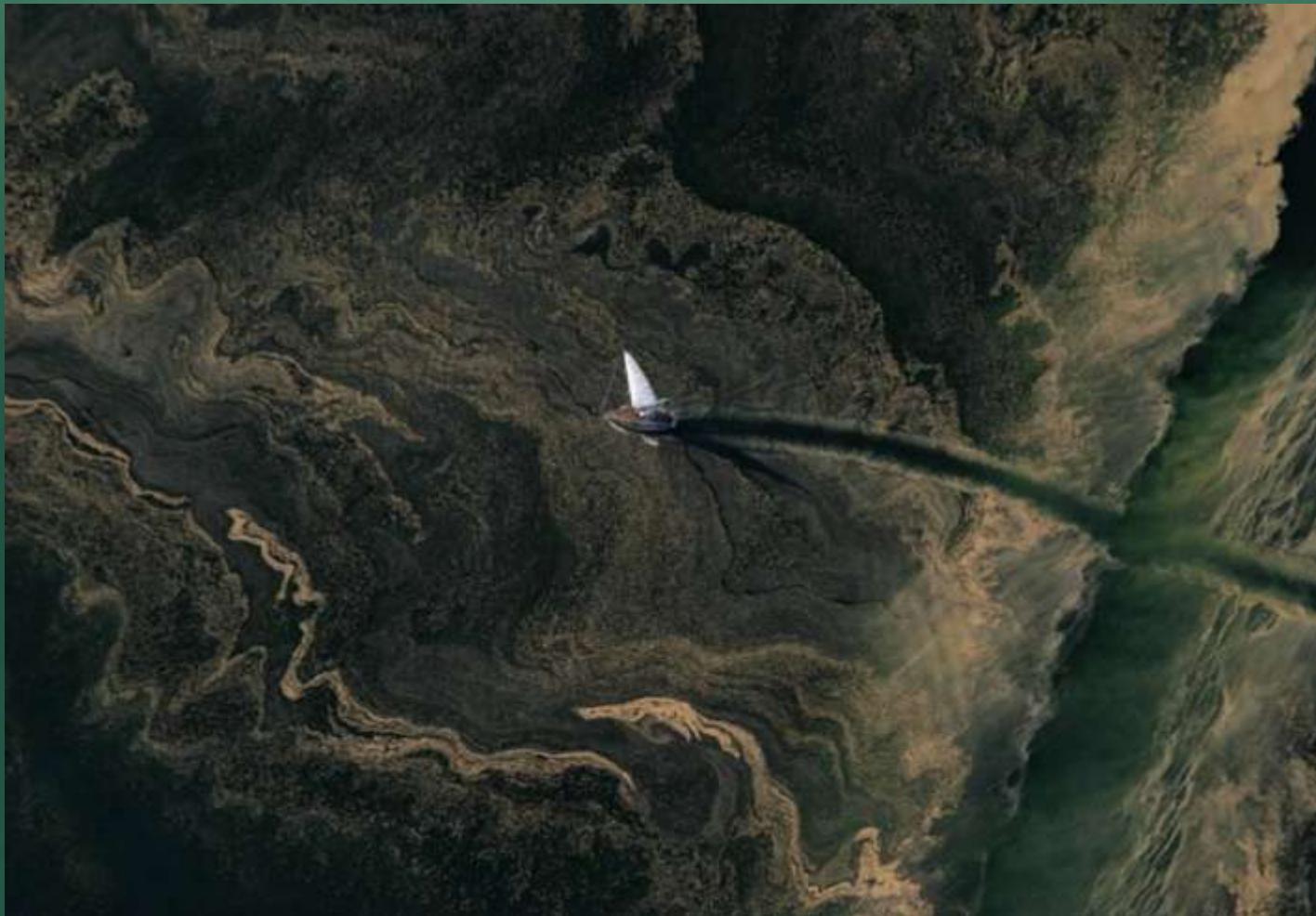


BCG

The Boston Consulting Group

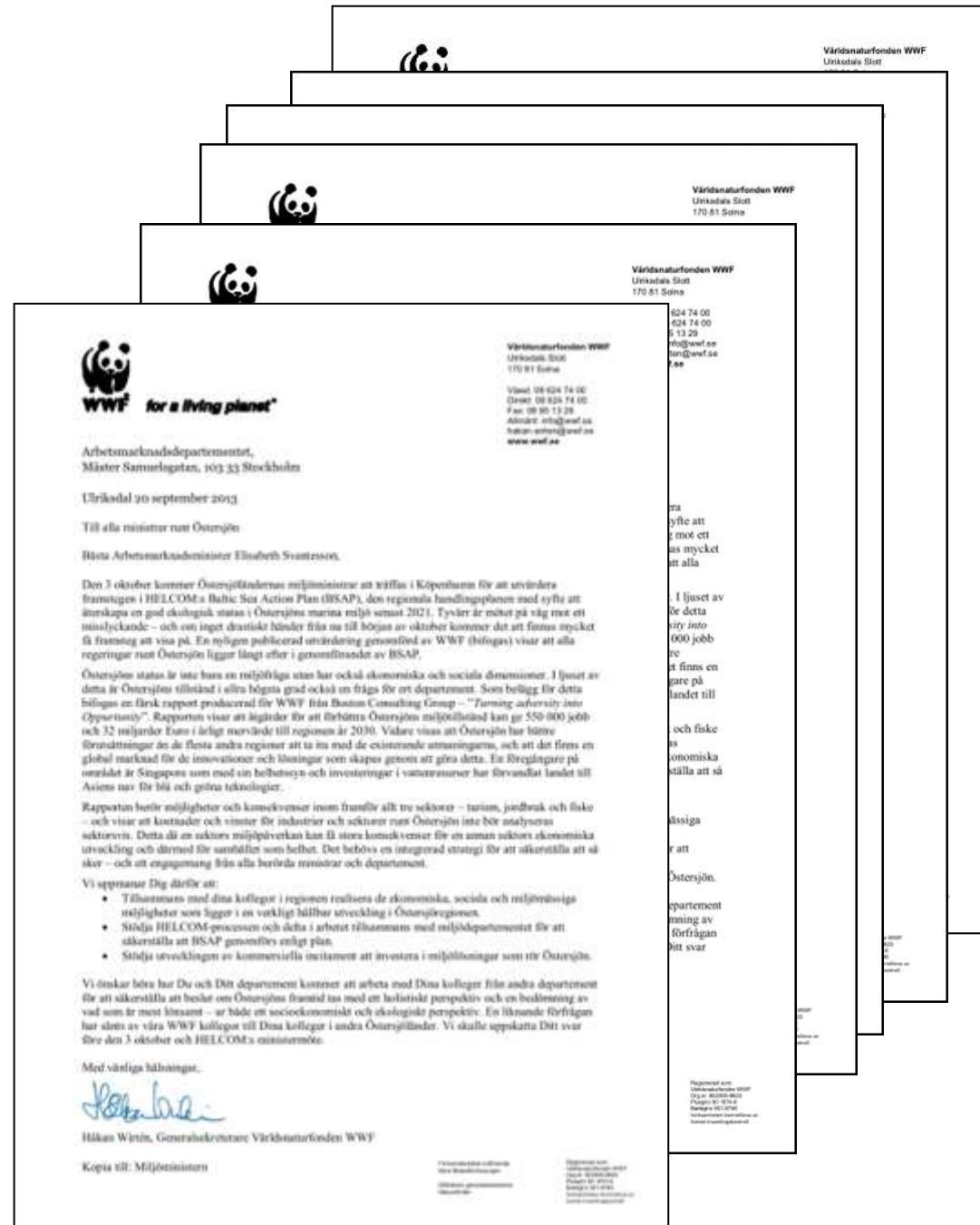


550,000 jobs & 32 €B
in annual value by 2030





To all Ministers around
the Baltic Sea...





Time for a
change?



Fundamentals for the Future

- Shared vision for the region
- Integrated & realistic goals based on ecosystem capacity boundaries
- Define the ecosystem capacity boundaries
- Holistic & coordinated governance
- Collective responsibility of all users - collective action
- Ecosystem based MSP

The BALANCE project

19 partners & 9 countries
2½ year (2005 to 2007)

Aim:

Develop tools for informed marine
planning/management

Main activities:

Collation of marine data
Benthic seafloor mapping
Biodiversity assessment
Marine spatial planning



Our shared Baltic Sea.



www.balance-eu.org

Data harmonization - <http://maps.sgu.se/portal>

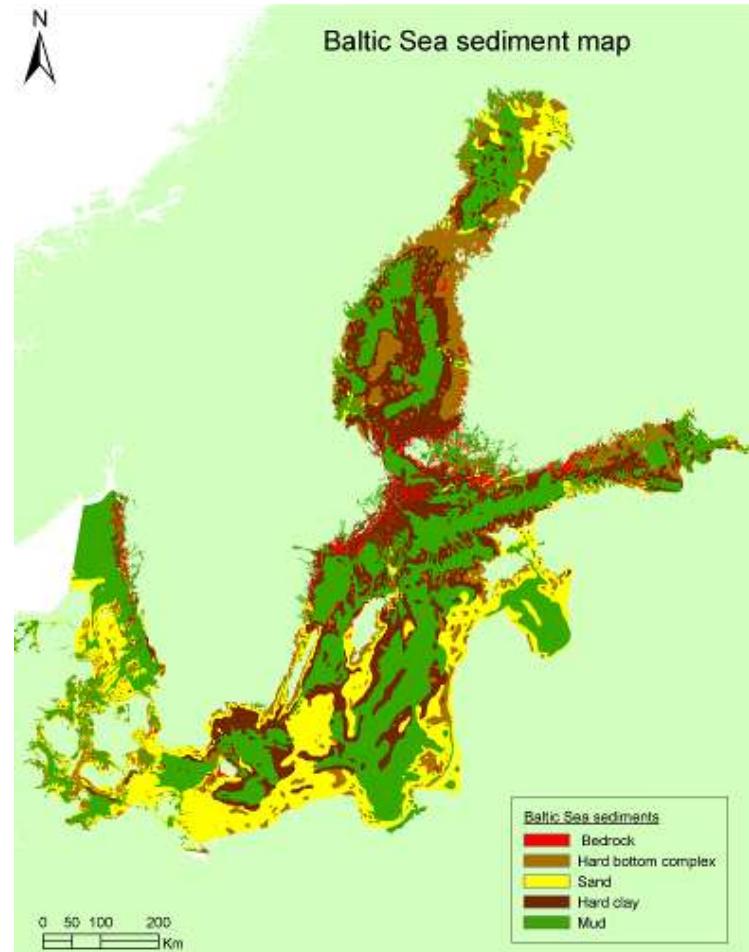
Basic layers:

- Sediments
- Salinity
- Light
- Bathymetry

9 countries / cultures

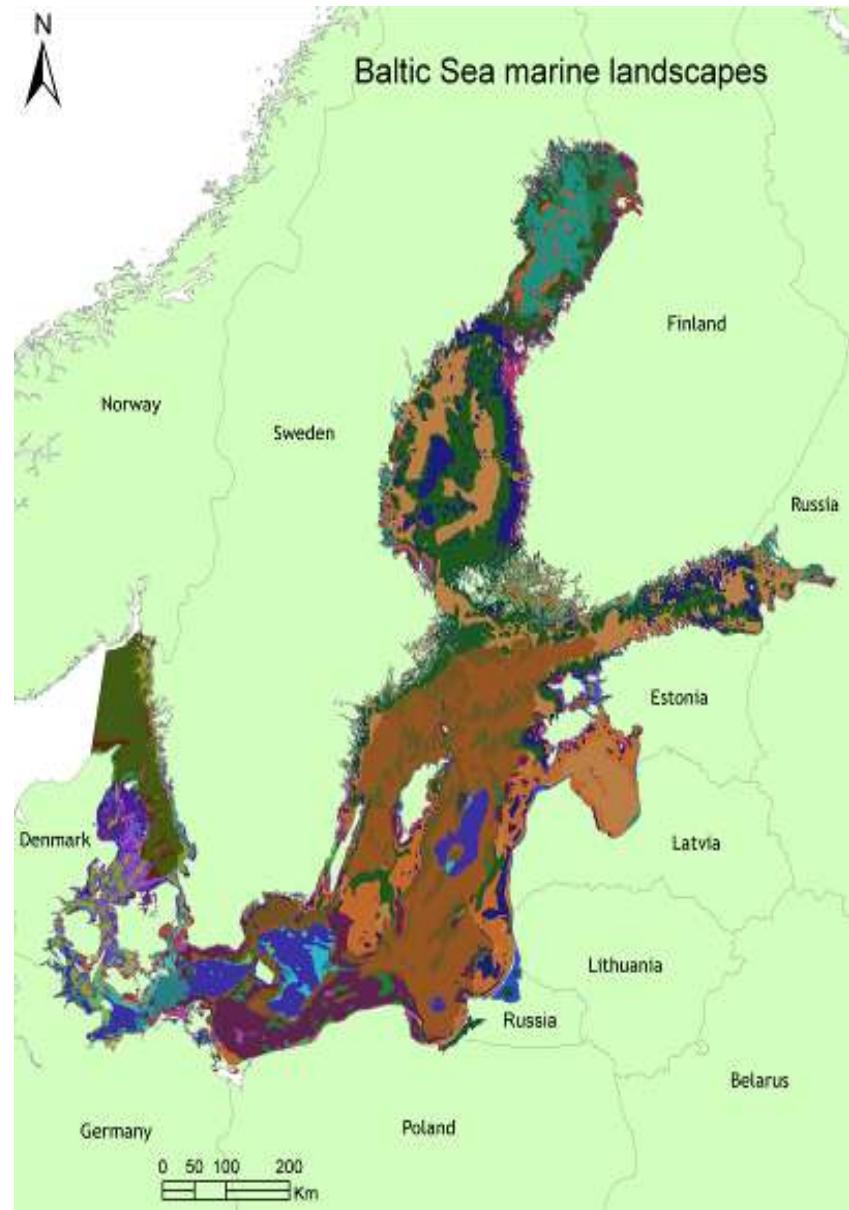
9 languages

19 classifications



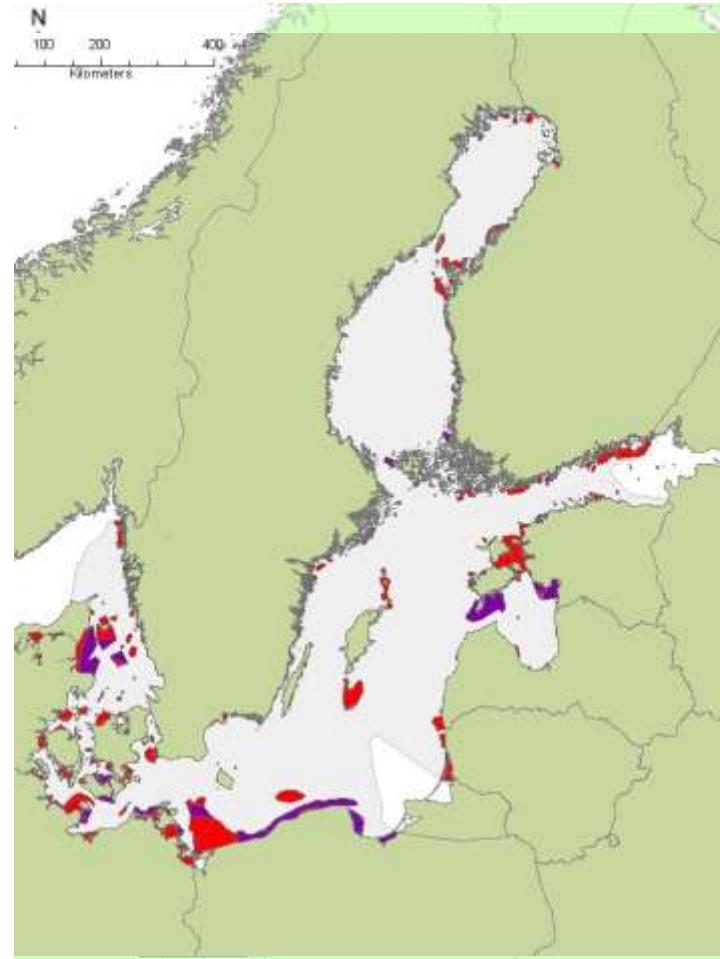
Marine landscapes – characterising the sea

- A broad scale environmental characterisation of the sea floor (salinity, sediment, photic depth)
- Describe the marine ecosystem
- 60 benthic landscapes identified
- Validated with biological data



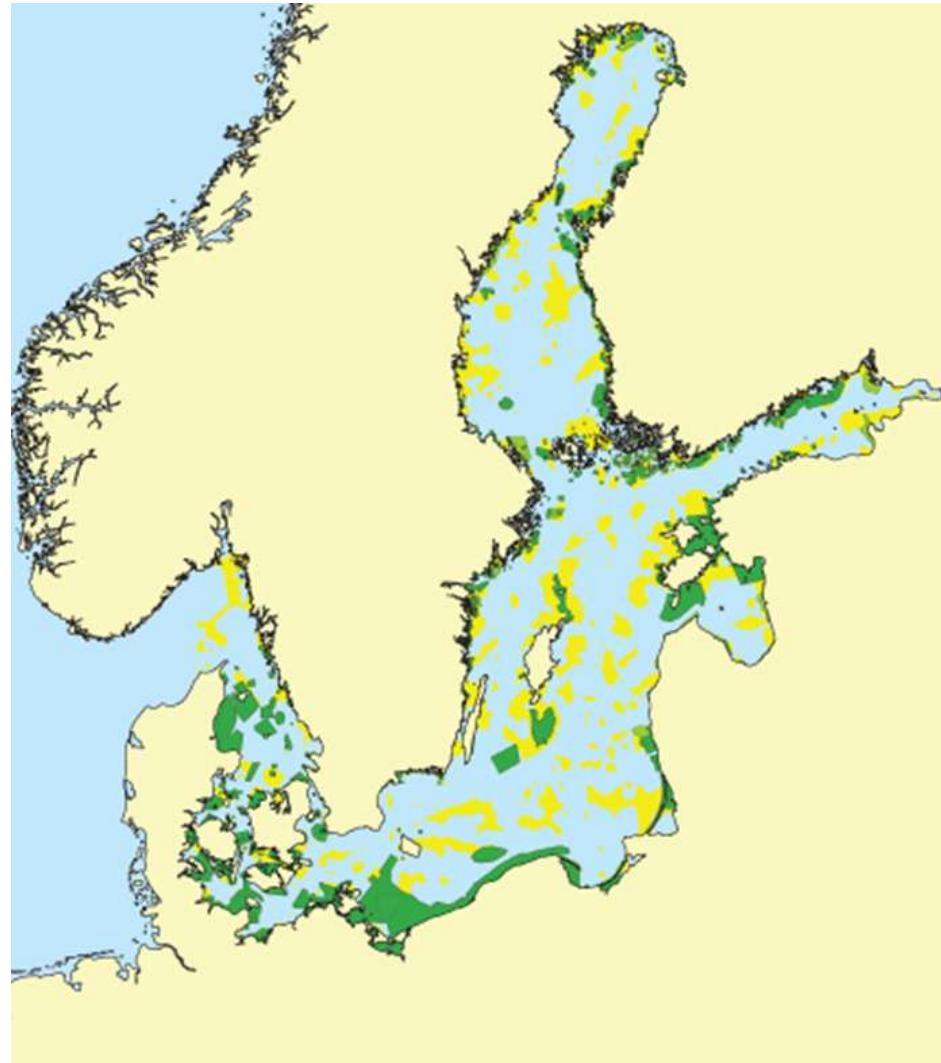
Ecologically Coherent MPA network - Systematic regional site selection

- 1. Include 20% of each marine landscape (+ X% of specific species and habitats)**
- 2. Ensure representation in all sub-regions and an even distribution between countries:**
 - Sub-regions: natural range of variation/replication
 - Political Units: “fair” distribution
- 3. Take socio-economic aspects into account = Avoid areas with many conflicting interest/threat**
- 4. Build on existing MPA network**



Example – Representative MPA network (min 20%)

Min. 20% of each benthic marine landscape



A photograph of a window with a wooden frame, looking out onto a coastal landscape. The window is divided into four panes. The top-left pane shows a clear blue sky and the ocean. The top-right pane shows a rocky cliff face. The bottom-left pane shows a rocky shore with low-lying green vegetation. The bottom-right pane shows a rocky shore with more green vegetation. The window frame is dark wood, and the wall on the right is also dark.

WWF Reflections

To successfully implement ecosystem based MSP we must:

- Apply a regional integrated approach
- Agree on a shared vision for the region
- Develop integrated & realistic goals based on ecosystem capacity boundaries
- Define the ecosystem capacity boundaries
- Ensure holistic and coordinated governance
- Act in partnership - collective responsibility of all users
- Include the establishment of an ecologically coherent network of MPAs as a key component in MSP
- Use best available data and knowledge

Thank you!



www.panda.org/baltic-future-scenarios

Ecosystem based management - what does that mean?

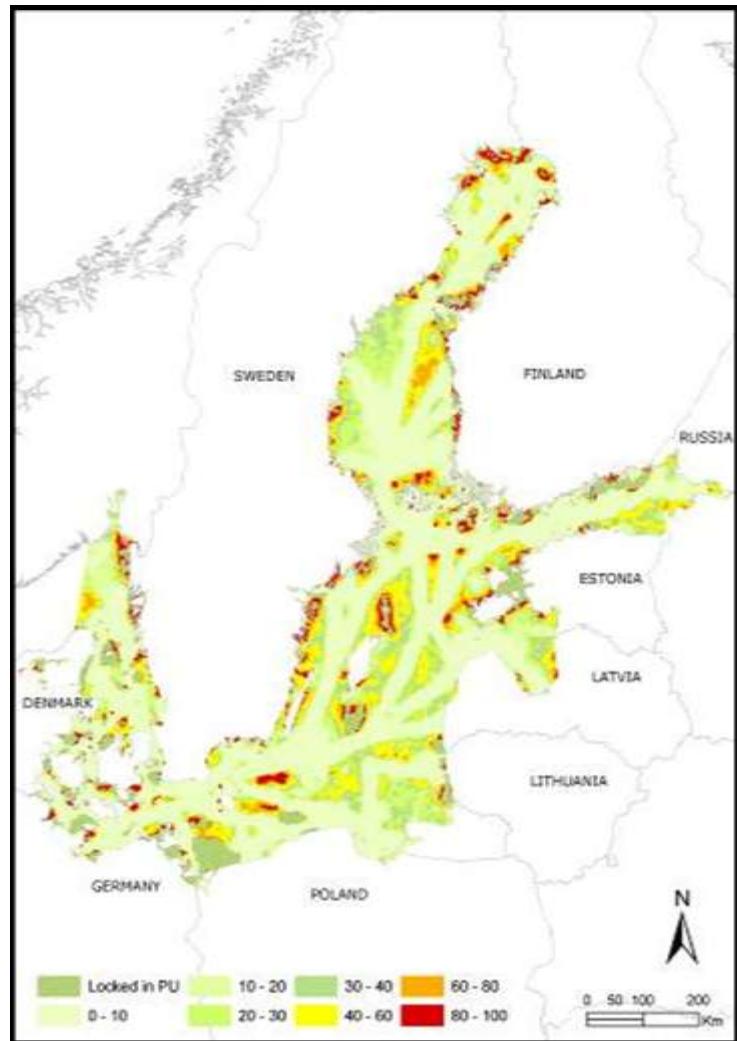
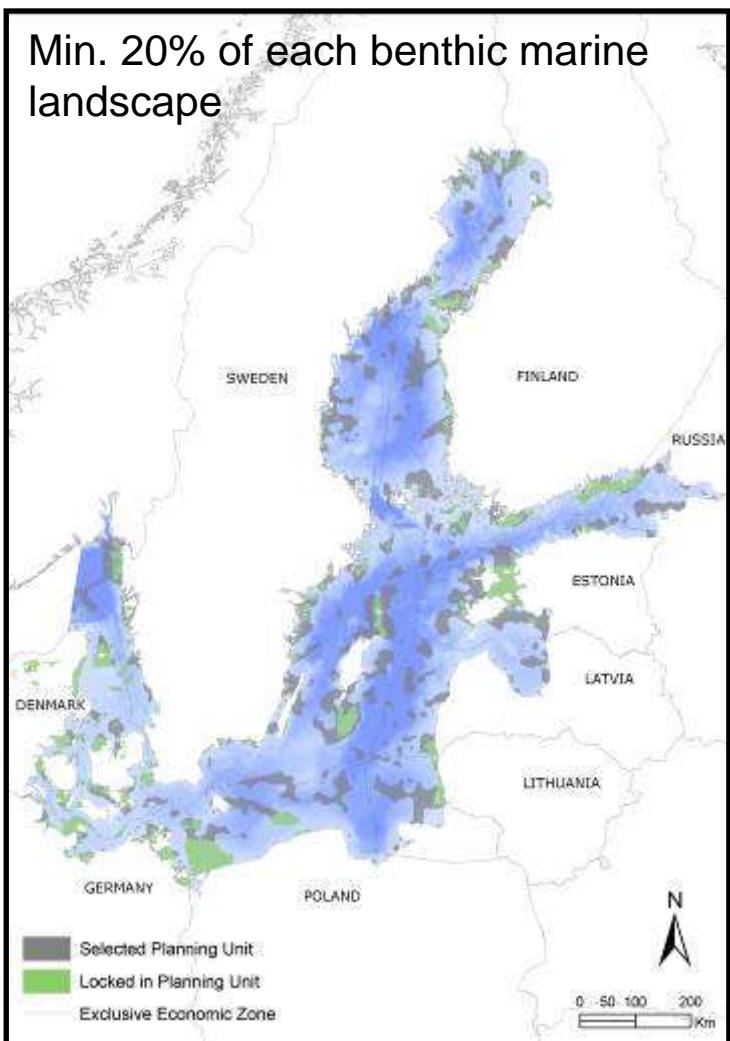
The Mediterranean Basin



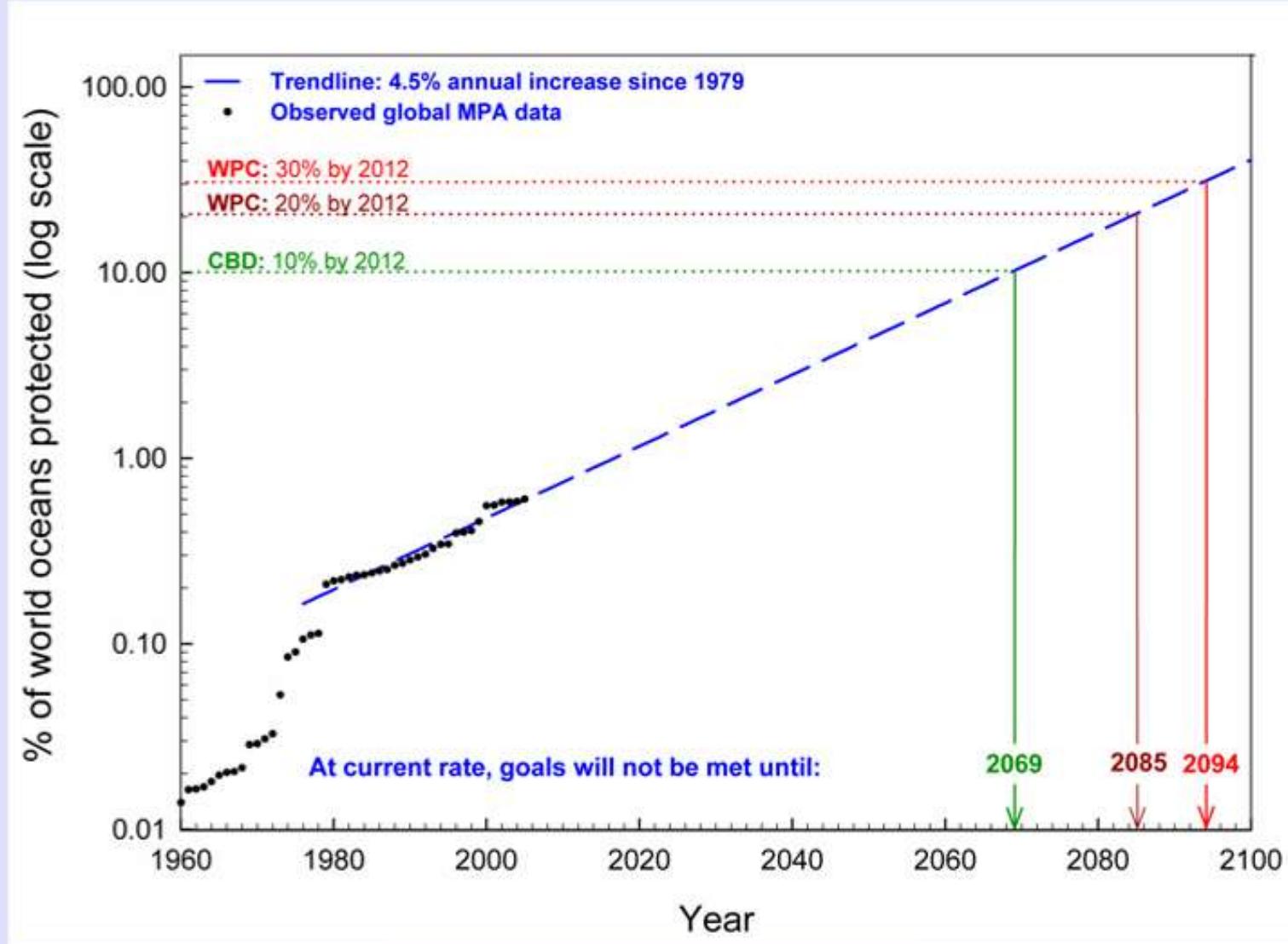
Ecosystem-based approach (Art. 1(3)):

- ensuring that the collective pressure of human activities is kept within levels compatible with the achievement of good environmental status
- and that the capacity of marine ecosystems to respond to human-induced changes is not compromised,
- while enabling the sustainable use of marine goods and services by present and future generations.”

Example – Representative MPA network (min 20%)

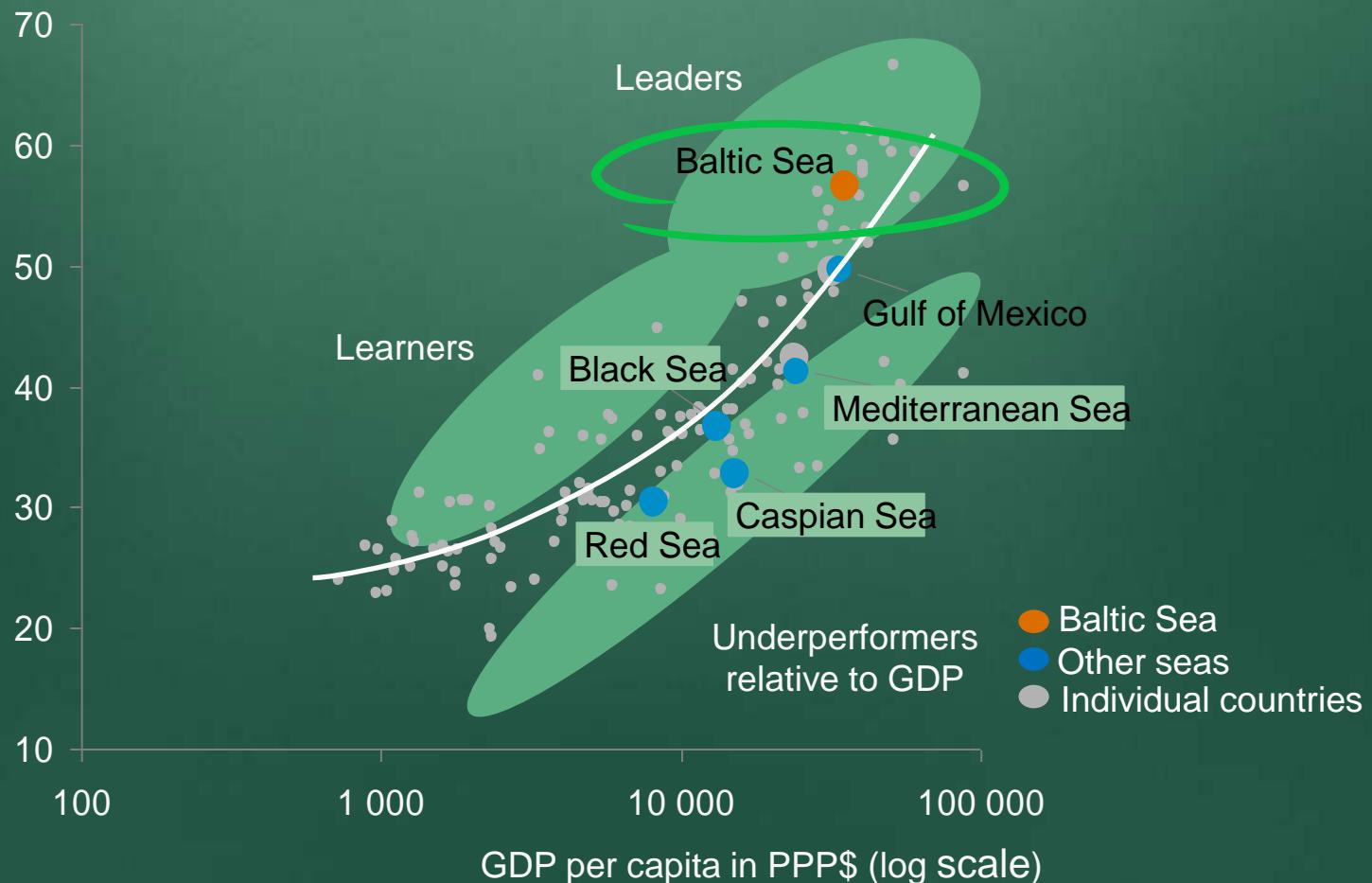


Future of the global MPA network



Baltic Sea region well equipped to find solutions

Global Innovation Index score 2013



Recommendations

- 1 Focus on key priorities
- 2 Increase accountability
- 3 Take an integrated approach
- 4 Create commercial incentives
- 5 Invest to develop the region into a 'blue and green' technology hub

Users Views

- Support for MSP
- Interest in being consulted and involved
- Importance of balancing environmental & economic considerations
- Need for fair and transparent process
- Frustration with uncertain planning environment
- Confusion about who is in charge

