



Ministerie van Infrastructuur  
en Waterstaat

# Mare Liberum or Mare Constrictum?

Changing policy for a changing  
North Sea

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With yellow post-it service!!

# "The only constant on the North Sea is change"



How the use of the North Sea has drastically changed over the past decades



How policy and management evolved with it



What this means for the knowledge and know-how we need today and in the future



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How policy and management evolved with it

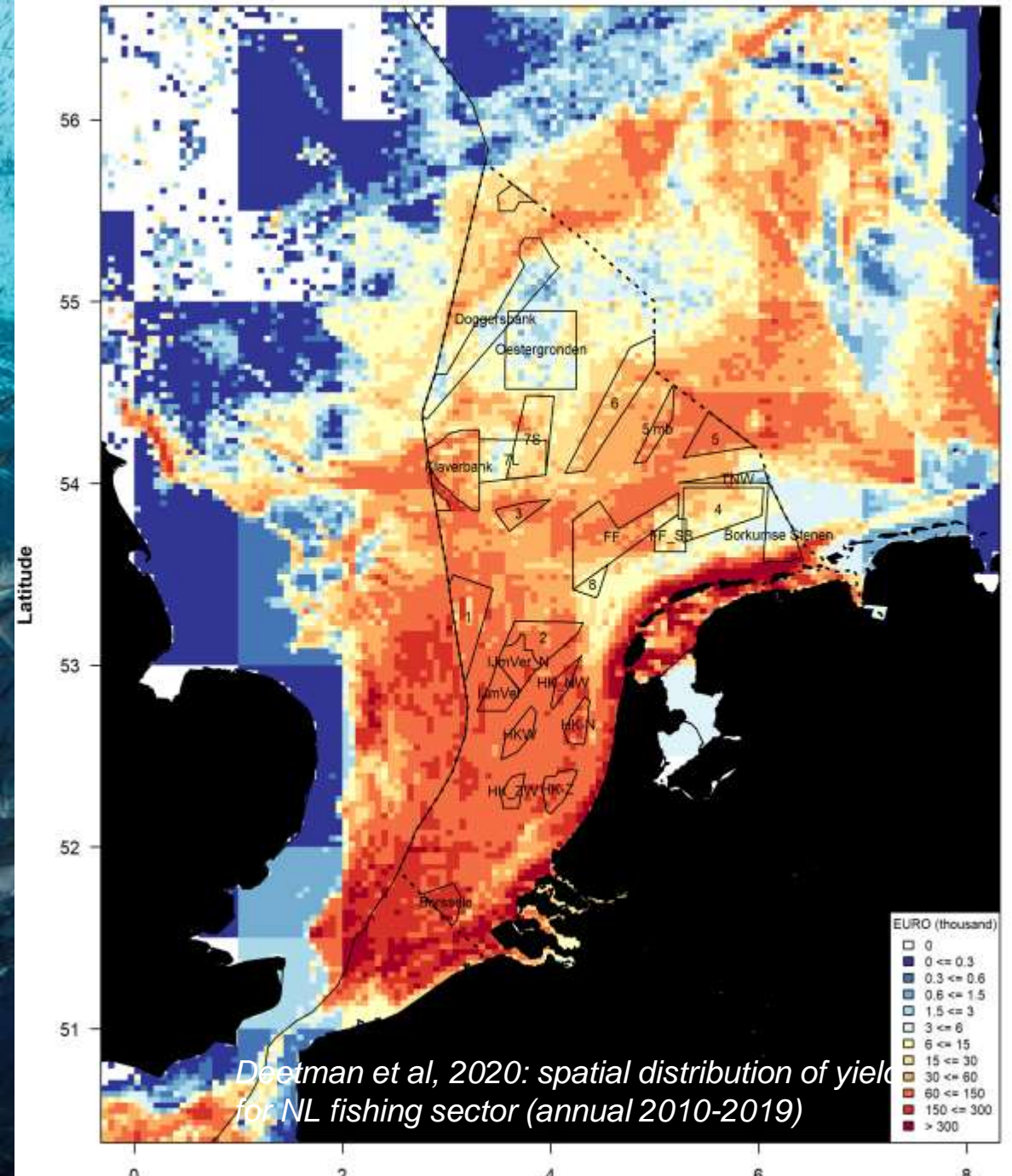
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## Evolving use of the north sea in the past decades

- Fishing
- Shipping
- Oil and gas production
- Renewable energy
- MPAs
- But there is more....

# Fishing

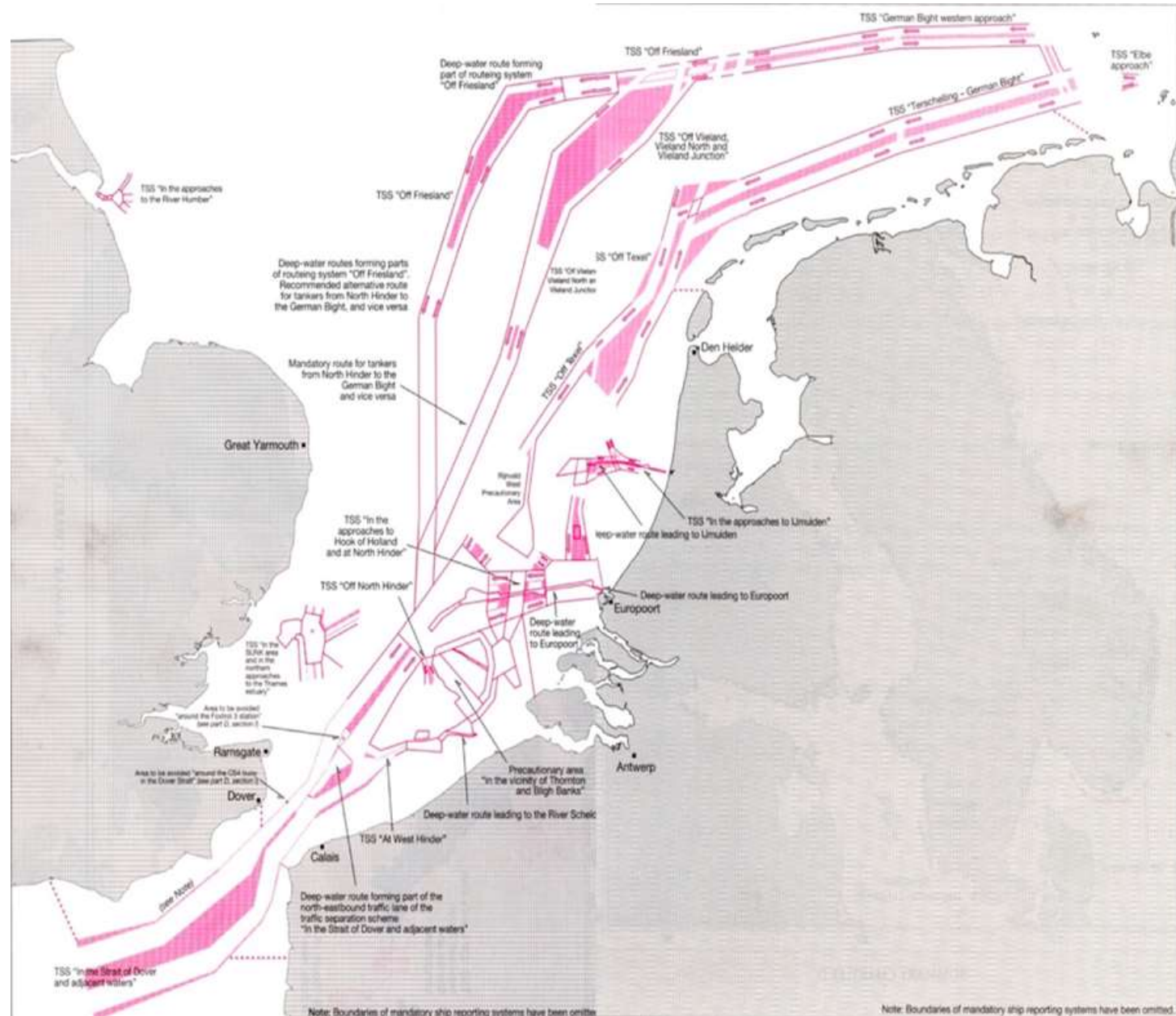
- Rich history; large number of fishing vessels engaged in bottom trawling.
- Many changes in recent decades:
  - 2000s: more stringent quota management / fisheries management plans ~ scientific advice; at its core catch documentation, scientific research , data collection
  - 2010s: Fleet size ~ sustainable catch limits.
  - 2010s: Technological innovation, lower environmental impact. Pulse gear.
  - 2010s: Landing obligation
  - 2010s: Certification for market access
  - 2020s: Brexit = limited access fishing grounds
  - 2020s: Increased fossil fuel prices
  - 2020s: EU ruling on pulse fishing
- Spatial distribution frozen into one picture for average 2010s
- “internal” changes vs “external” developments
- Looking into the future
  - “Internal” : Vision of Food from Sea ([workshop](#))
  - “External”: spatial competition or spatial synergies? ([workshops](#))

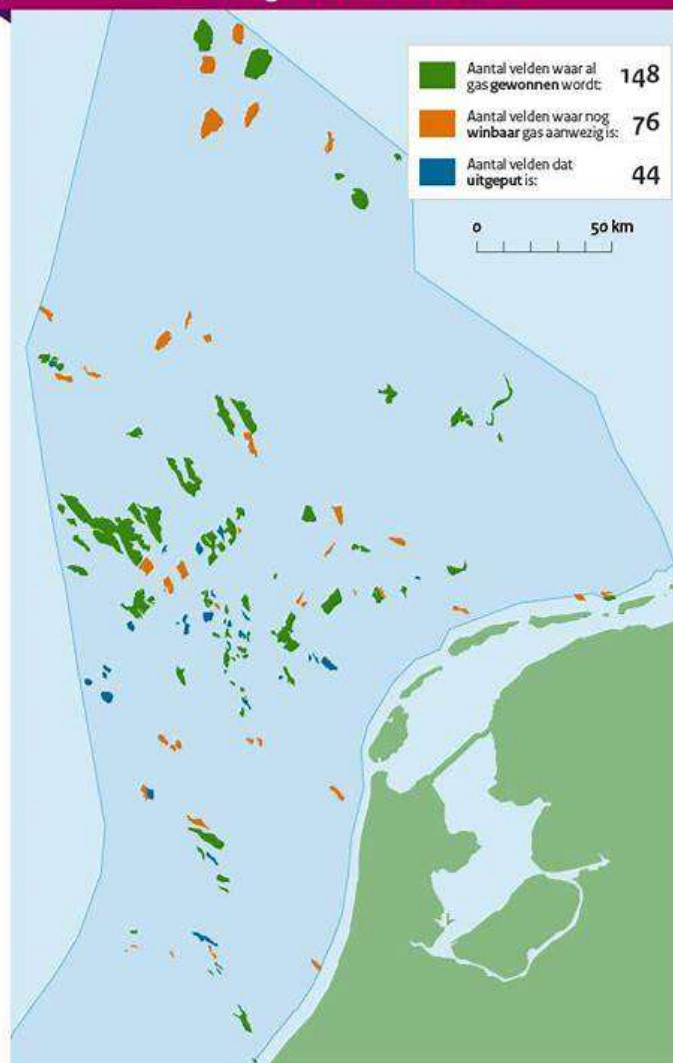




# Shipping

- Global trade: Shipping and tonnage have gone up and continue to increase
- Larger vessels causes a shift in traffic from closer to shore to deeper lanes of the VSS
- New shipping lanes due to climate change: Northern Sea Route





Economisch winbaar gas bij bekende gasvelden onder de Noordzee:  
118 miljard m³.



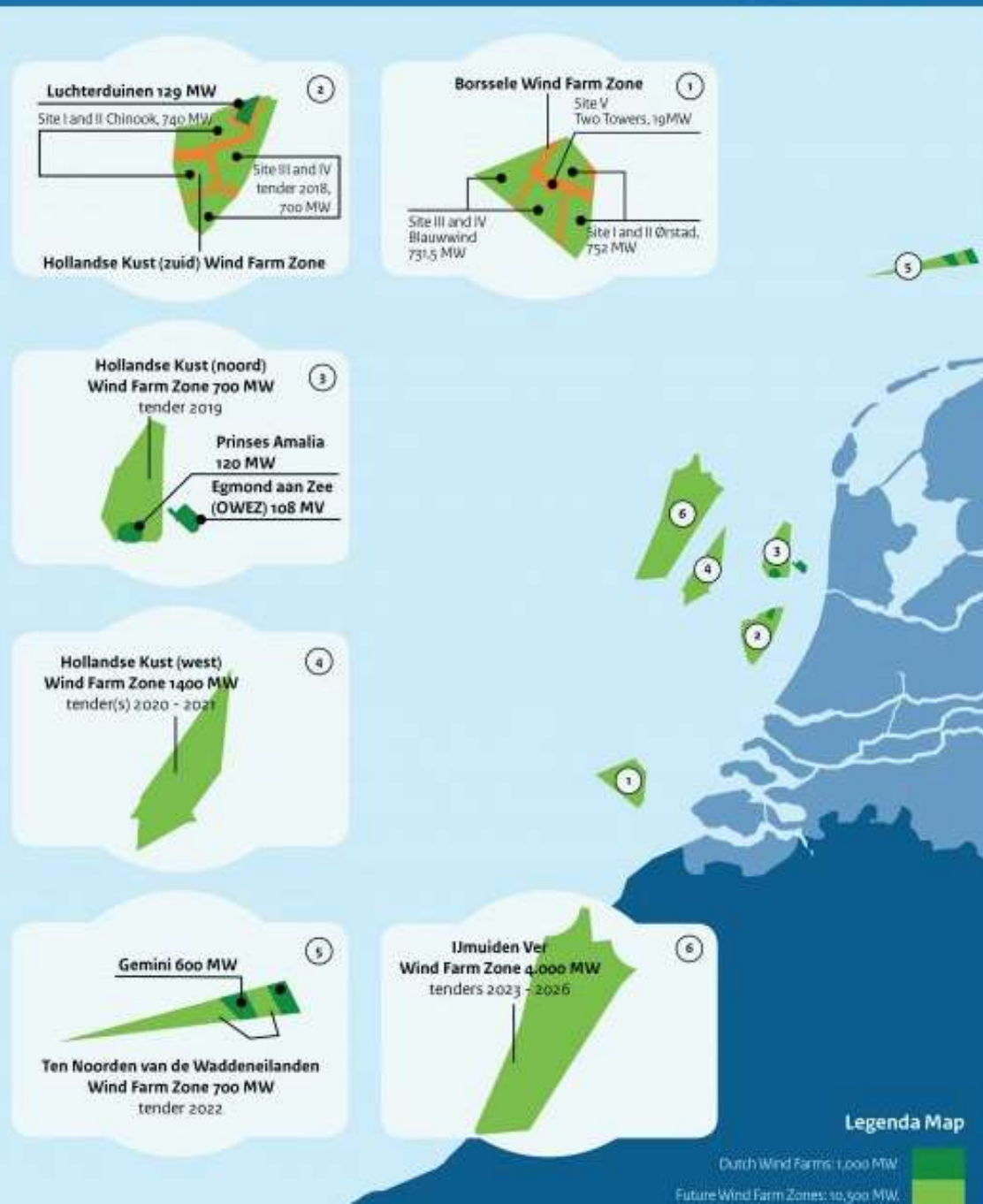
Schatting van nog te ontdekken gasvoorraad onder de Noordzee:  
165 miljard m³.



Nederlanders (huishoudens & bedrijven) verbruikten in 2014  
38 miljard m³ gas. Het jaarlijks verbruik is afhankelijk van de temperatuur.

## Oil and gas

- › Exploitation since early 60's - peak of commercial exploitation after Suez crisis in 70s.
- › continued operation as exploitation and increase in oil and gas prices go hand in hand
- › 2010s: rise of renewable energy, reducing reliance on fossil fuels (Paris agreement 2015)
- › Overview 2010s: image
- › 2020s: decommissioning of platforms after depletion of fields and discussion regarding CCS and hydrogen storage
- › recent developments: acceleration of remaining production due to Russian aggression, and Kleine Velden beleid vs Groningen
- › Into the future; how do spatial claims go hand in hand with other uses? Price developments?

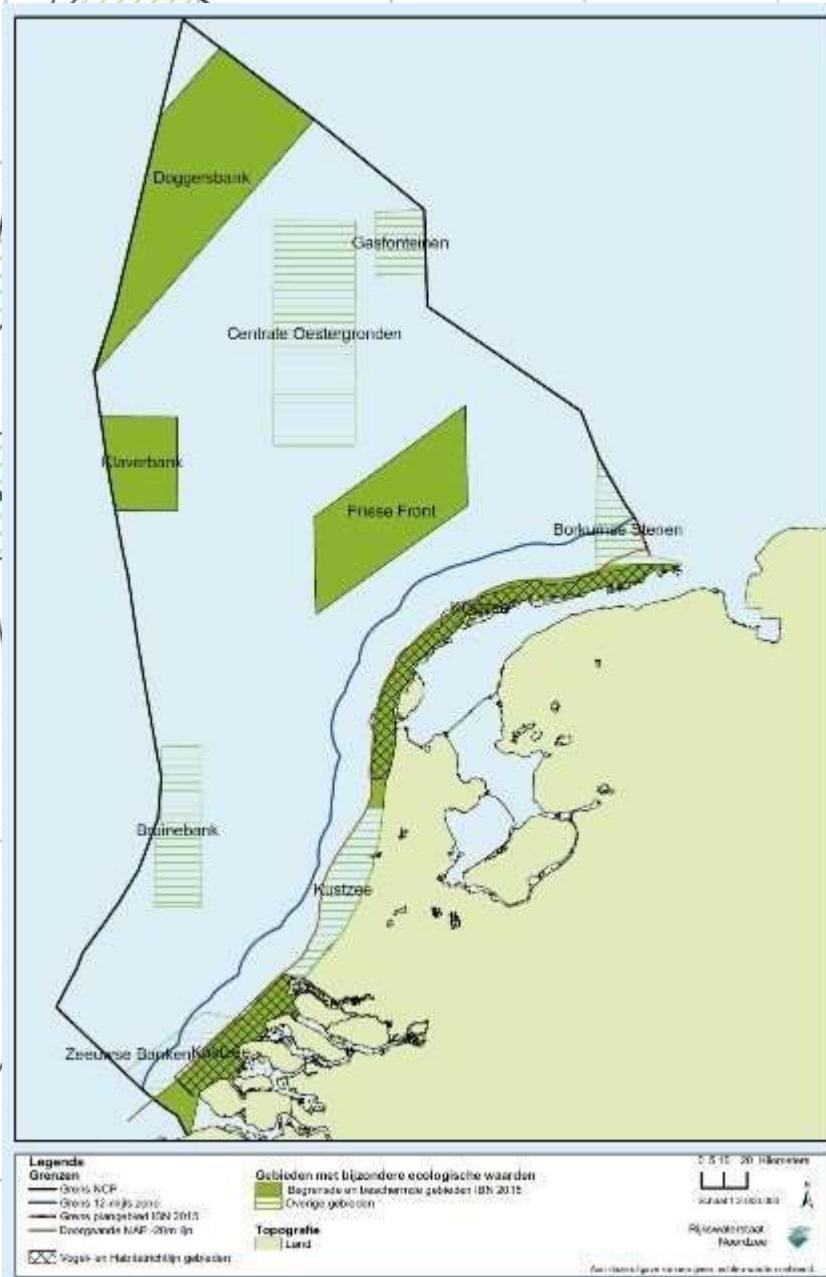


## New Kid on the block: Off-shore Wind

- EU targets 300 GW of off-shore wind as part of its drive for a zero emission future.
- North Sea is seen as the focal area for that development (NSEC target 260 GW by 2050)
- The Netherlands installed its first wind farm in 2007 and will reach 4,5 GW installed this year.
- Ambition is to grow to 21GW in 2030, to 50GW in 2040 and 70GW in 2050.
- Current “routekaart WoZ”

# Nature protection on the North Sea

- B&HD = Natura2000
- MSFD
- Future Nature Restoration Directive > **workshop**



## Some other uses...

- › Cables
- › Pipelines
- › Military activities
- › Sand and gravel extraction
- › Coastal protection activities
- › Recreation (e.g. sailing)
- › Aqua/Mariculture (keynote)





# The energy transition is not the only transition and NL is not alone



- The climate crisis is real
- But the biodiversity crisis is no less real
- And we will also rely on food production from the North Sea in the future
- Three transitions: energy, nature and food, in balance with other use
- **Keynote**
- And they must take place in the context of the greater north sea
  - > **Workshop**



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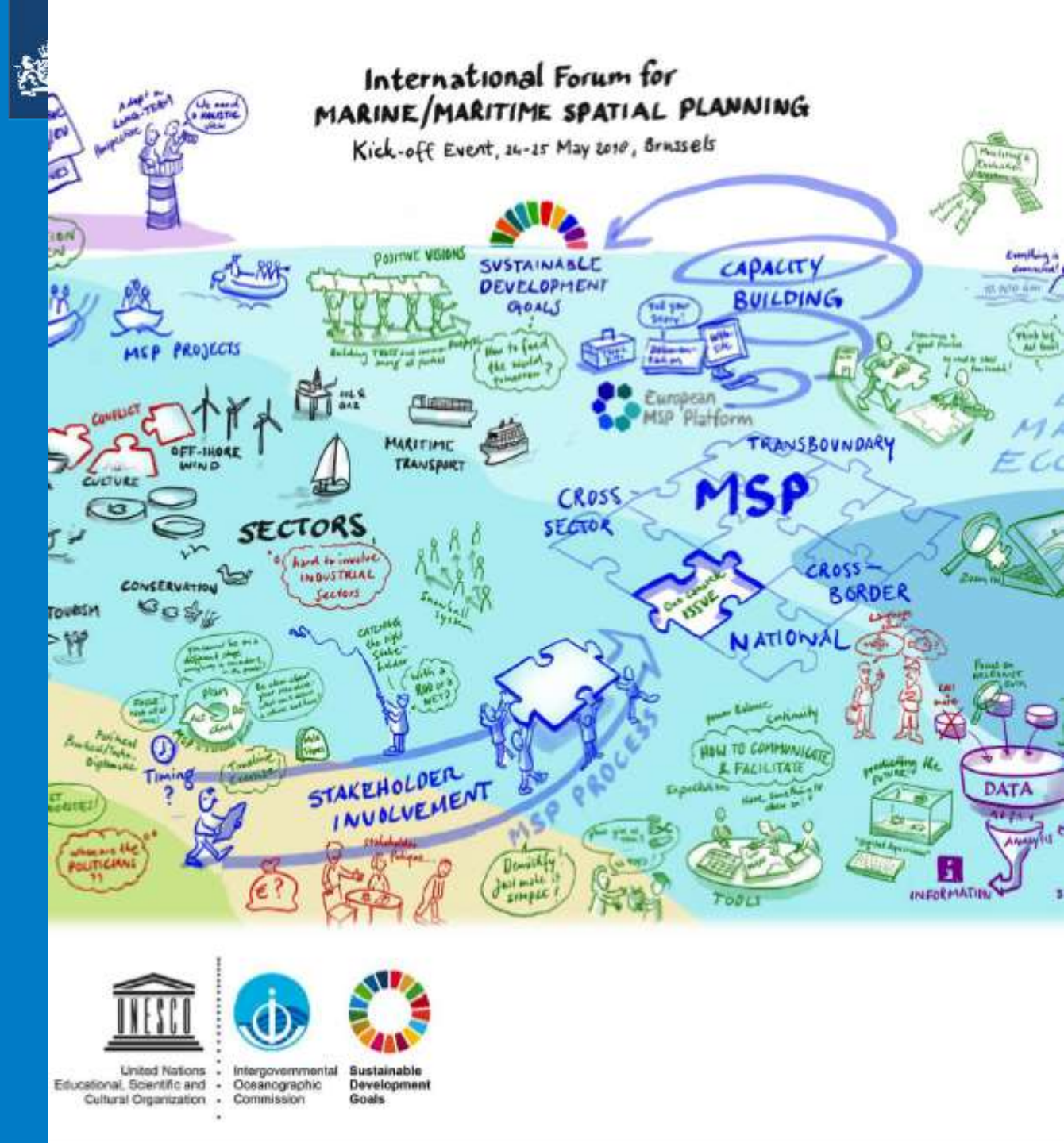
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## Evolving North Sea Policy

- Late 2000s: enter MSFD and MSPD
- Both implemented nationally via National Water Plan / Law
- Evolution of Maritime Spatial Plans of NL:
  - 2009 - 2015,
  - 2016 - 2021,
  - 2022 – 2027
  - Partial revision 2025
  - 2028 - 2033

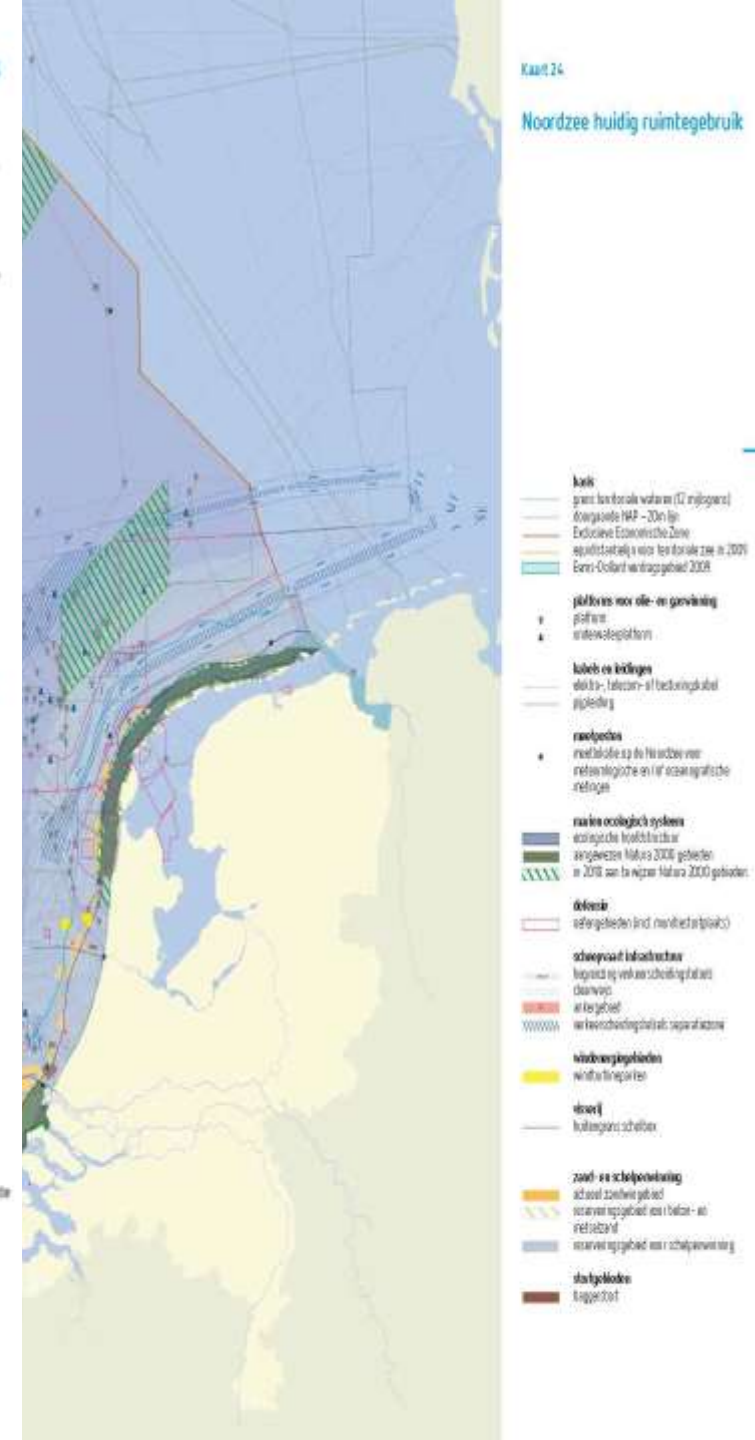
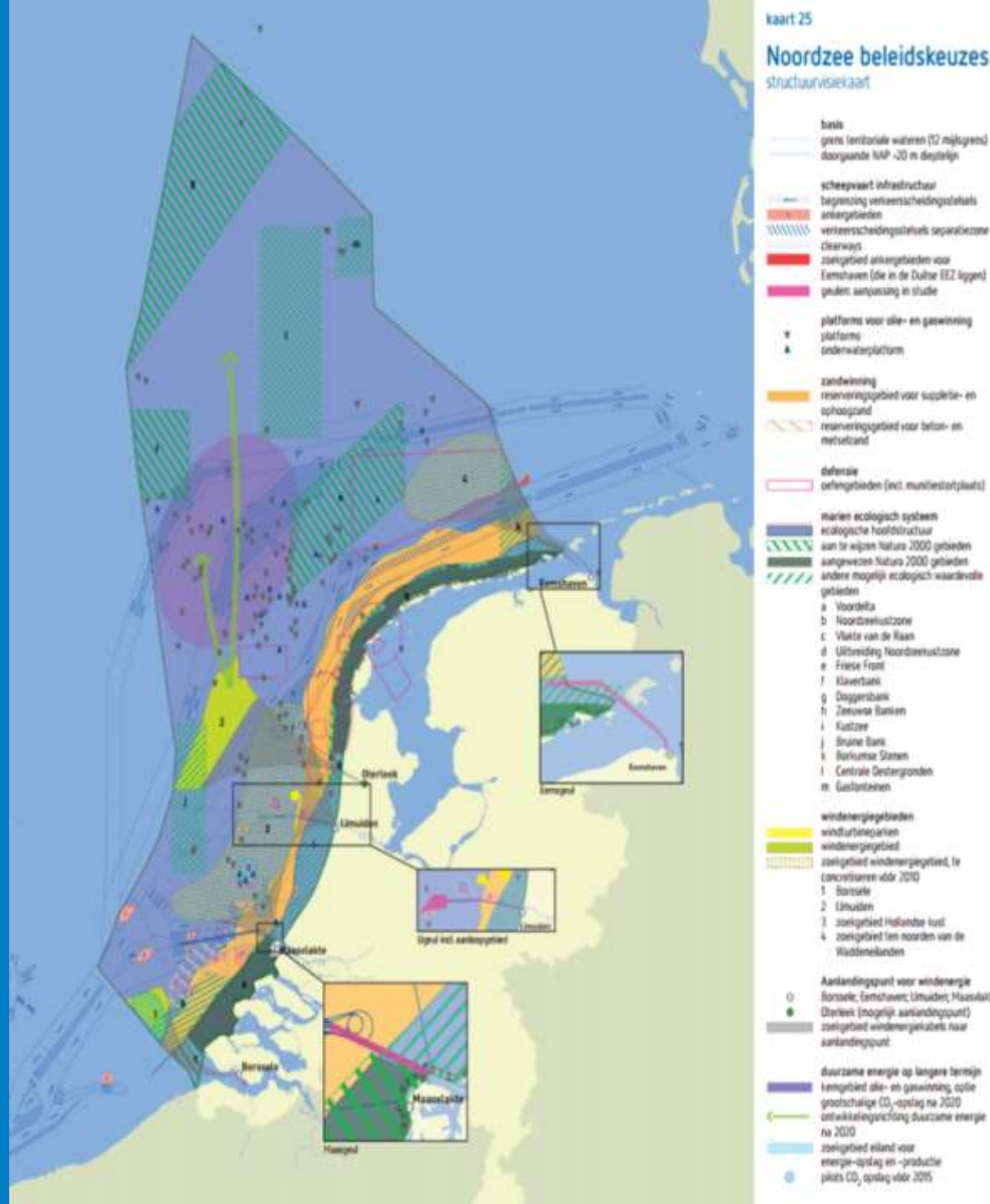
# New policy paradigm: Spatial planning at sea

- › Already a part of the National Water Plan 2009-2015
- › Netherlands early adapter/driver
- › EU Marine Spatial Planning (MSP) followed in 2014
- › Essential ingredients:
  - Integrated management
  - Zoning = Separate what needs to be separated; combine what can be combined
  - Ecosystem-based approach
  - Data and research
  - International collaboration
  - **workshop**
  - Stakeholder involvement

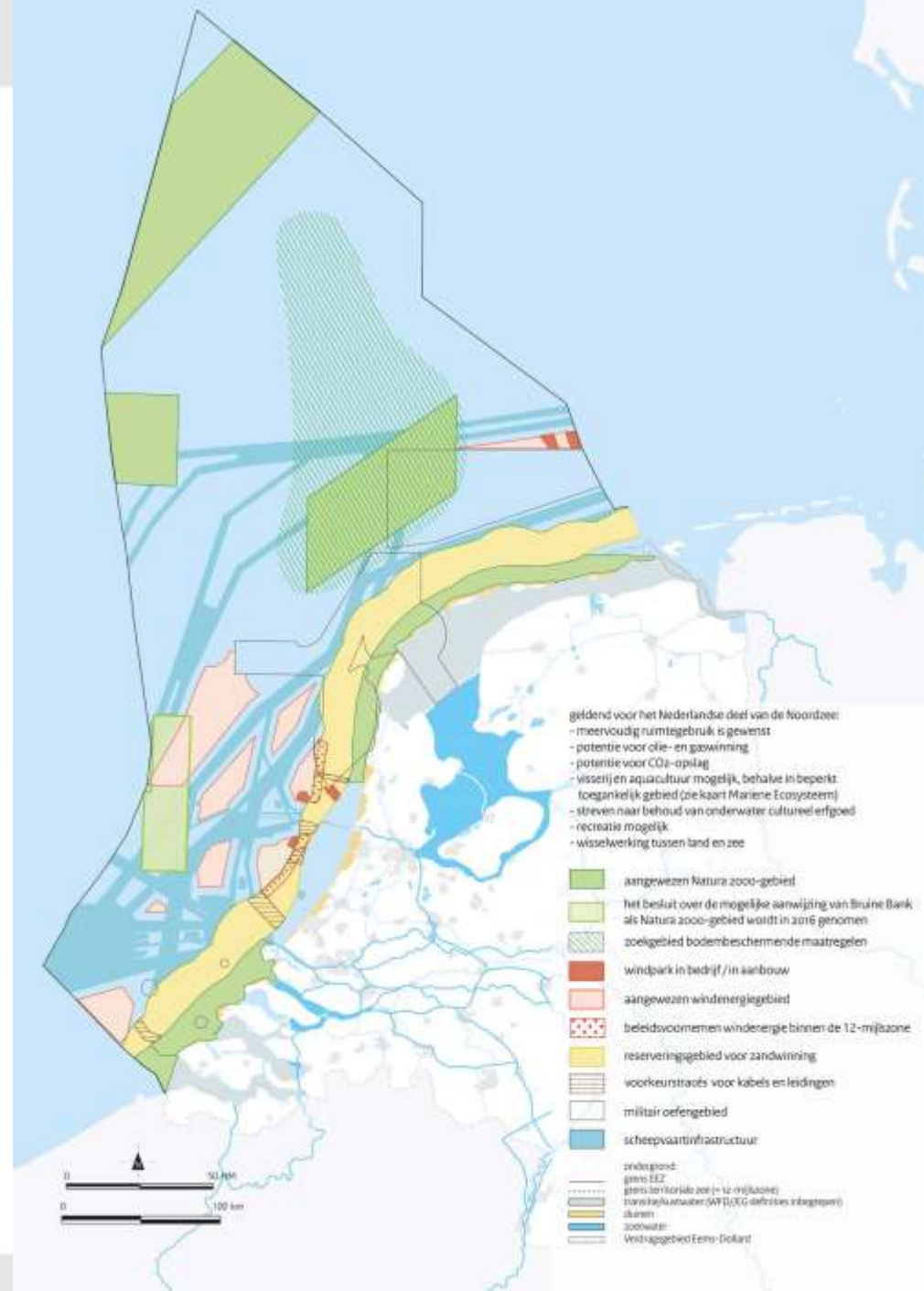
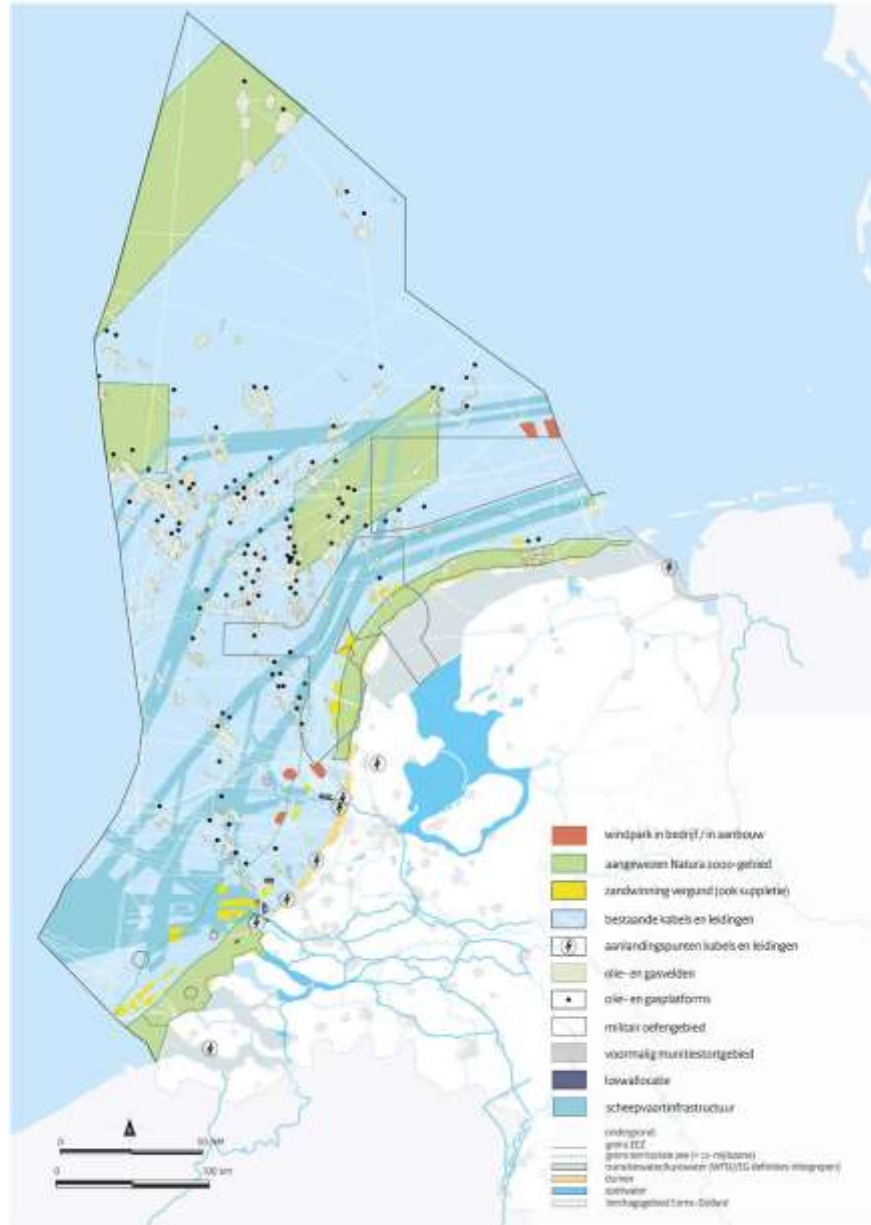


# NWP 2009-2015

- > First true MSP
- > TSS and anchoring
- > N2000 areas to be designated
- > First indication wind "areas", incl Borssele IJmuiden
- > Reserved area for sand extraction
- > NOTE: search artificial island



Figuur 3.1 Huidig gebruik Noordzee



# Beleidsnota Noordzee 2016-2021

- N2000 has been designated
- More windparks in use
- Offshore wind law in place > designated wind areas
- Artificial island deleted
- Busier.....

# PNZ 2022-2027

- Windpark developments continue
- Many search areas for future windpark development
- Nature protection areas expanded
- Still busier

**Begrenzings**

- Mariene wateren, Exclusieve Economische Zone (EEZ)
- Mariene wateren, Territoriale Zee
- Basislijn
- 12 nautische mijl vanaf de basislijn
- Grens Exclusieve Economische Zone (EEZ)
- Bevoegdheidslijn
- Verdragsgebied Eems-Dollard

**Windenergie**

- Windparken in gebruik
- Windparken in aanbouw of inpassingsruimte binnen windenergiegebied (Routekaart 2023)
- Aangewezen windenergiegebied, windparken in voorbereiding (Routekaart 2030)
- Aangewezen windenergiegebied in Programma Noordzee
- 1-2 = 1 (zuid)
- 1-n = 1 (noord)
- 2-2 = 2 (zuid)
- 2-n = 2 (noord)
- 5-0 = 5 (oost)
- U-Ver-n = IJmuiden Ver (noord)
- HK-w-z = Hollandse Kust (west, zuidelijk deel)
- Met als voorwaarde: tot en met 2030 maximaal 10 GW + 0,7 GW realiseren in deze gebieden tezamen

**Scheepvaart**

- Scheepvaartinfrastructuur
- Geul-as
- Overige
- Separatiezone
- Special area
- Ankergebieden
- Ruimte voor clearway IJmuiden-Newcastle en verbinding met toekomstige Northern Sea route (zie Zoekgebiedenkaart)
- Ruimte voor clearway IJmuiden-Newcastle door windenergiegebied
- Ruimte voor mogelijke extra bufferzone scheepvaartveiligheid
- Borssele Pass

**Natuurbescherming**

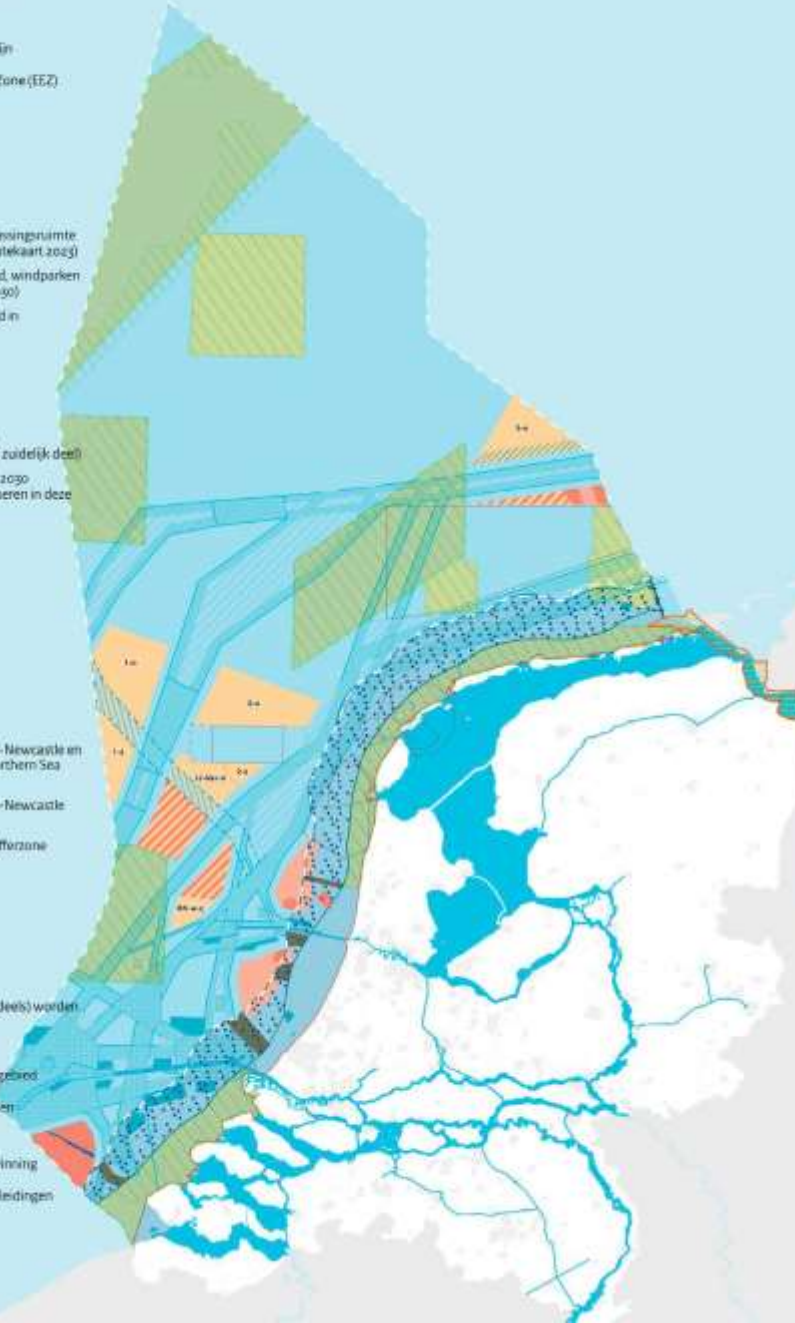
- Natura 2000-gebied
- KRM-gebied
- Zones waar visserijactiviteiten (deels) worden beperkt

**Defensie**

- Manoeuvreszones militair oefengebied
- Militaire oefen- en schietgebieden

**Delfstoffen**

- Reserveringsgebied voor zandwinning
- Voorkeustraces voor kabels en leidingen



Structuurvisiekaart Noordzee

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- Met als voorwaarde: tot en met 2030 maximaal 10 GW + 0,7 GW realiseren in deze gebieden tezamen
- Zoekgebied voor windenergie na 2030 \*
- Aanvullend zoekgebied voor beginnende windenergiegebied na 2030 \*
- \*Niet alle zoekgebieden zijn nodig. Aangewezen ruimte is indicatief, vorm en begrenzing kan nog veranderen. Besluitvorming hierover in parabele herziening.

**Scheepvaart**

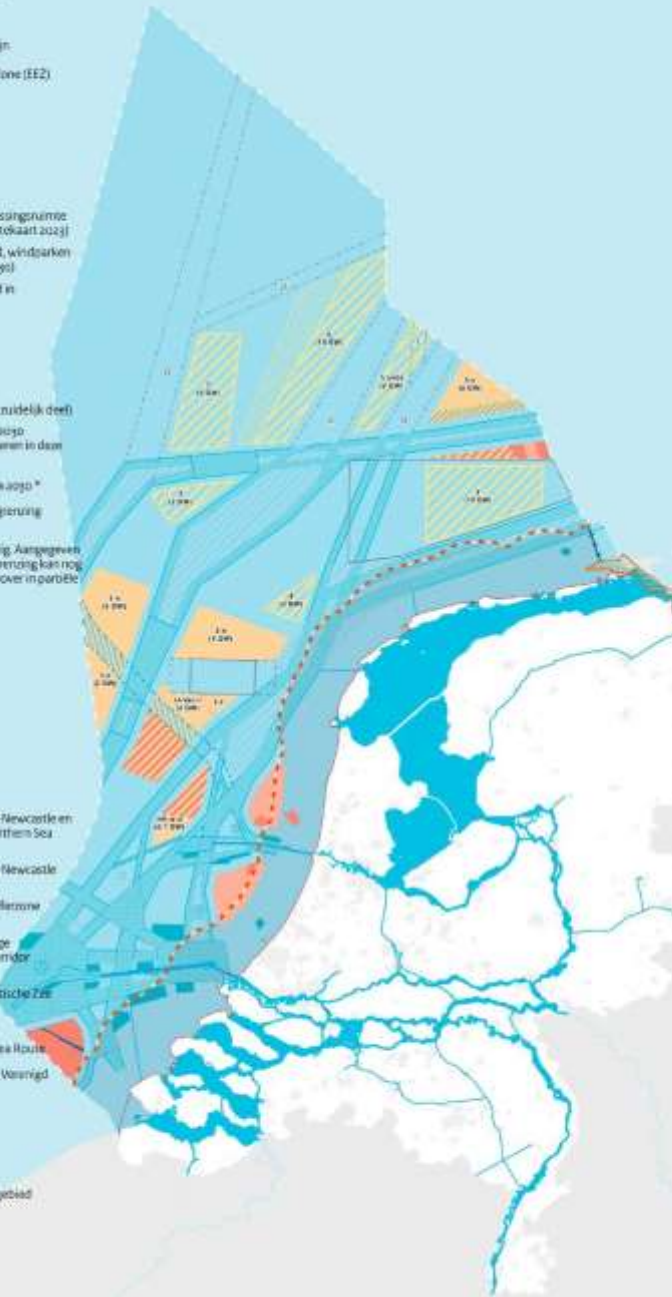
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- Ruimte voor mogelijke extra bufferzone scheepvaartveiligheid
- Indicatie ruimte voor toekomstige scheepvaartroute / clearway / corridor
- a - Clearway aansluiting Duitse scheepvaartroute in richting Baltische Zee
- b - Northern Sea Route
- c - Afwijking richting Northern Sea Route
- d - Clearway Esbjerg richting het Verenigd Koninkrijk
- Borssele Pass

**Defensie**

- Oefengebied
- Manoeuvreszones militair oefengebied



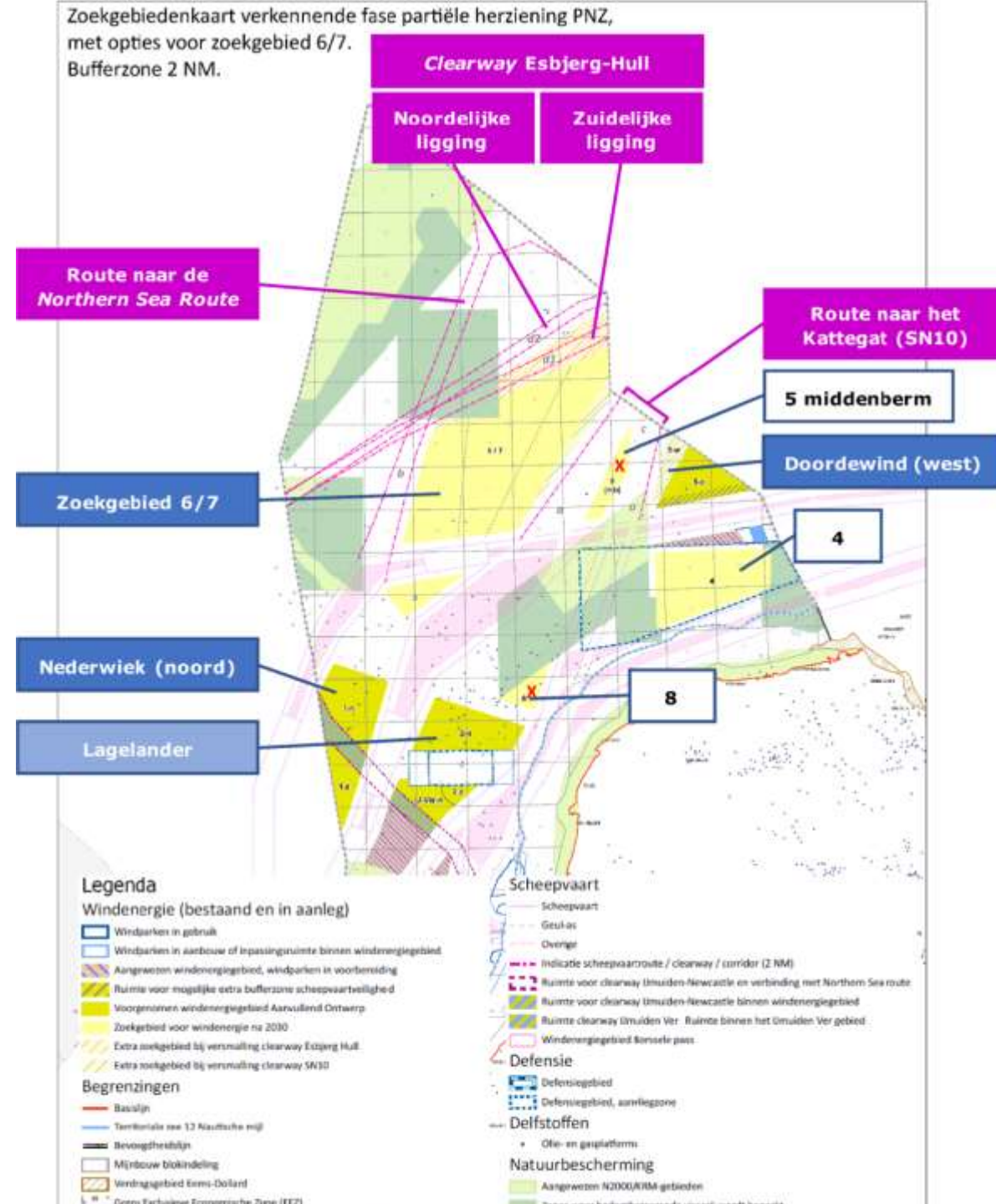
Zoekgebiedenkaart





# What lies ahead?

- › Currently we are working on a revision of the PNZ
- › This will be published in 2025
- › And will identify wind areas for another 23-26 GW, doubling our currently identified surface areas
- › And will establish clearways for shipping





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What this means for the knowledge and know-how we need today and in the future

Do we have the knowledge and data we need for this policy?

2 key issues:

- Balancing use:  
Integral spatial planning requires spatial information of different use categories
- GES:  
Ecological carrying capacity as cornerstone



# Integrated decision making on spatial uses

- Requires spatially explicit information eg to inform MKBA (societal cost benefit analysis)
- How do you avoid being in each other's hair?
- How do you decide on preferred use when uses are mutually exclusive in one place?
- Findings European Court of Auditors (energy transition and fishing for example)

# Ecological carrying capacity as starting point for decision-making

- › Prevention, Mitigation, Compensation of environmental effects
- › Cumulation across use categories and internationally (workshops)
- › European Court of Auditors: take “system effects” more seriously (keynote, workshops)
- › Research agendas of Wozep and MONS (workshop)





# How can we stay within the ecological boundaries of the North Sea?

Answering this questions implies that we need knowledge of:

- 1) The functioning of the ecosystem of the North Sea as a whole
- 2) The functioning of each part of the ecosystem (i.e., what is the impact of bird mortality)
- 3) The current state of the North Sea  
> **Keynote**
- 4) Predictions for the future state of the North Sea
- 5) The impact/consequences of each policy decision
- 6) The cumulative effects of all decisions > **workshop**

# National



# Regional



# Global



## Research

“How can we stay within the ecological boundaries of the North Sea?”

Workshops (eg MONS WOZEP GNSBI)

Keynote (OSPAR, Deltares, NIOZ)



# The narrative of North Sea policy is changing:

From “How to use the North Sea?” to “How to care for the North Sea?”

From “accommodating and facilitating use” to “spatial steering and defining environmental boundaries”

This means our questions for academia, research institutions, monitoring and data acquisition are changing.



Thank you