

# BOWE2H Konferenz: Offshore Wind and Green Hydrogen

## Maritime Spatial Planning and Offshore Wind Energy

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# Introduction into Maritime Spatial Planning

*The open sea...*



# General introduction to maritime spatial planning

- Assessing human activities
- Preventing/resolving conflicts of use
- Develop, order, secure
  - Economic use (Blue Economy)
  - Protection of the marine environment

How do you achieve these goals?

- Holistic approach
- Forward planning
- Transnational coordination



Source:WWF

# General introduction to maritime spatial planning

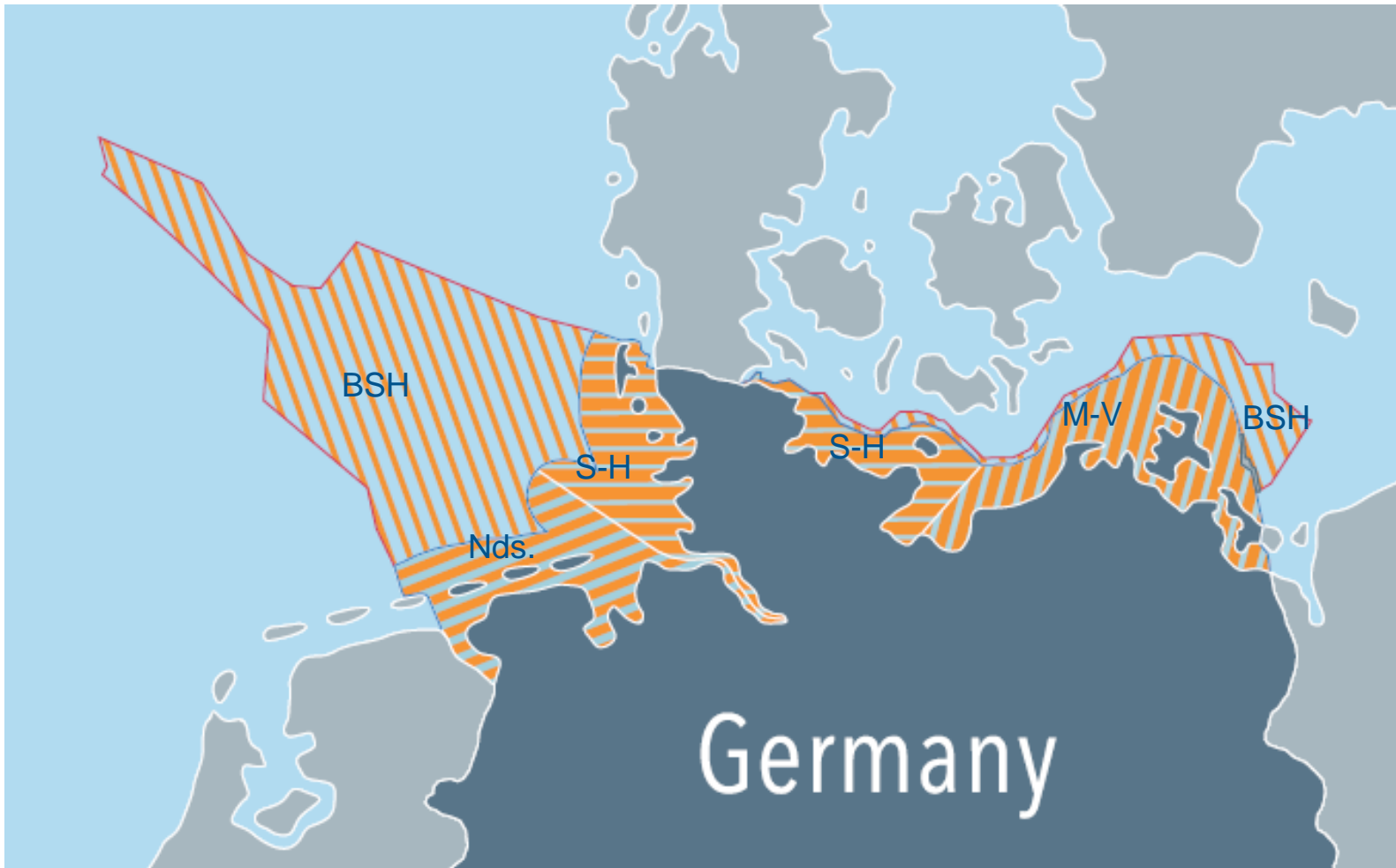
## Increasing use of and pressures on marine space

- i.p. increasing number of **offshore wind farms** in EEZ
- **Competition** and **conflicts** between uses and environmental protection
- New **EU framework** on SUP (2001), INSPIRE (2004), MSFD (2008) → MSP (2014)
- New **legislation** / spatial planning law



Source:WWF

# German Waters – Responsibilities for MSP



## EEZ

### BMWSB/BSH:

Federal Government in  
the North and Baltic Sea

### Territorial Sea

Land Niedersachsen  
Land Schleswig-Holstein  
Land Mecklenburg-  
Vorpommern

## MSP sets designations

- for the **EEZ** as planning area and in a **regular mid-term** period
- in form of **textual** and **spatial** designations (also temporarily a/o conditionally)

- Priority areas
- Priority areas with exclusion effect (**new\***)

Reservation areas

Suitability areas  
(with ~~exclusion~~  
effect)  
**(deleted\*)**

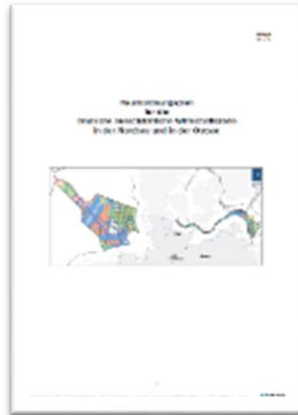
- as **objectives** and **principles** of spatial planning to achieve to develop, order and secure space

\*last amendment of Federal Spatial Planning Act

# MSP Products



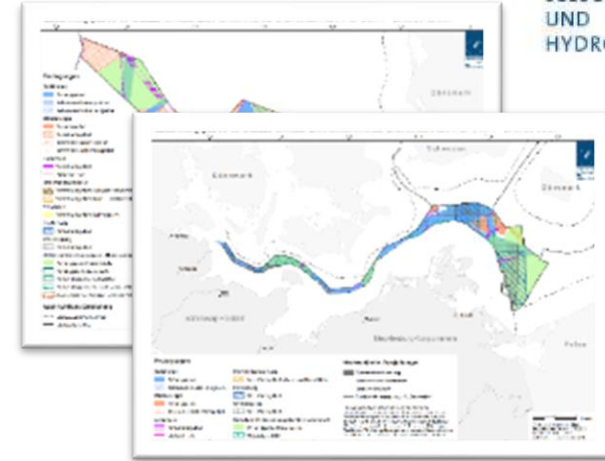
*Ordinance*



*Maritime Spatial Plan and  
summary declaration*



*Environmental  
reports*

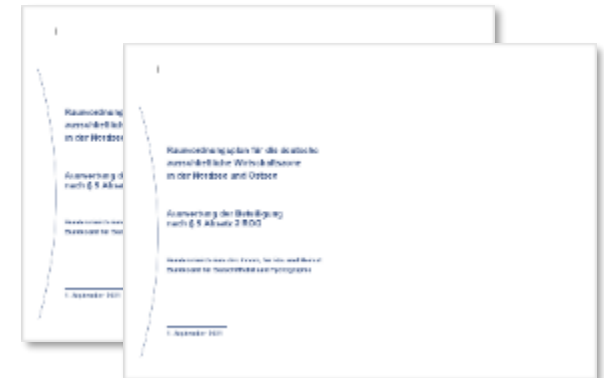


*Maps*

- Download on websites of [BMI/BMWSB](https://www.bmi.bund.de) and [BSH](https://www.bsh.de)
- Geo data via WMS and WFS Service on GeoSeaPortal)
- Blog <https://wp.bsh.de/>

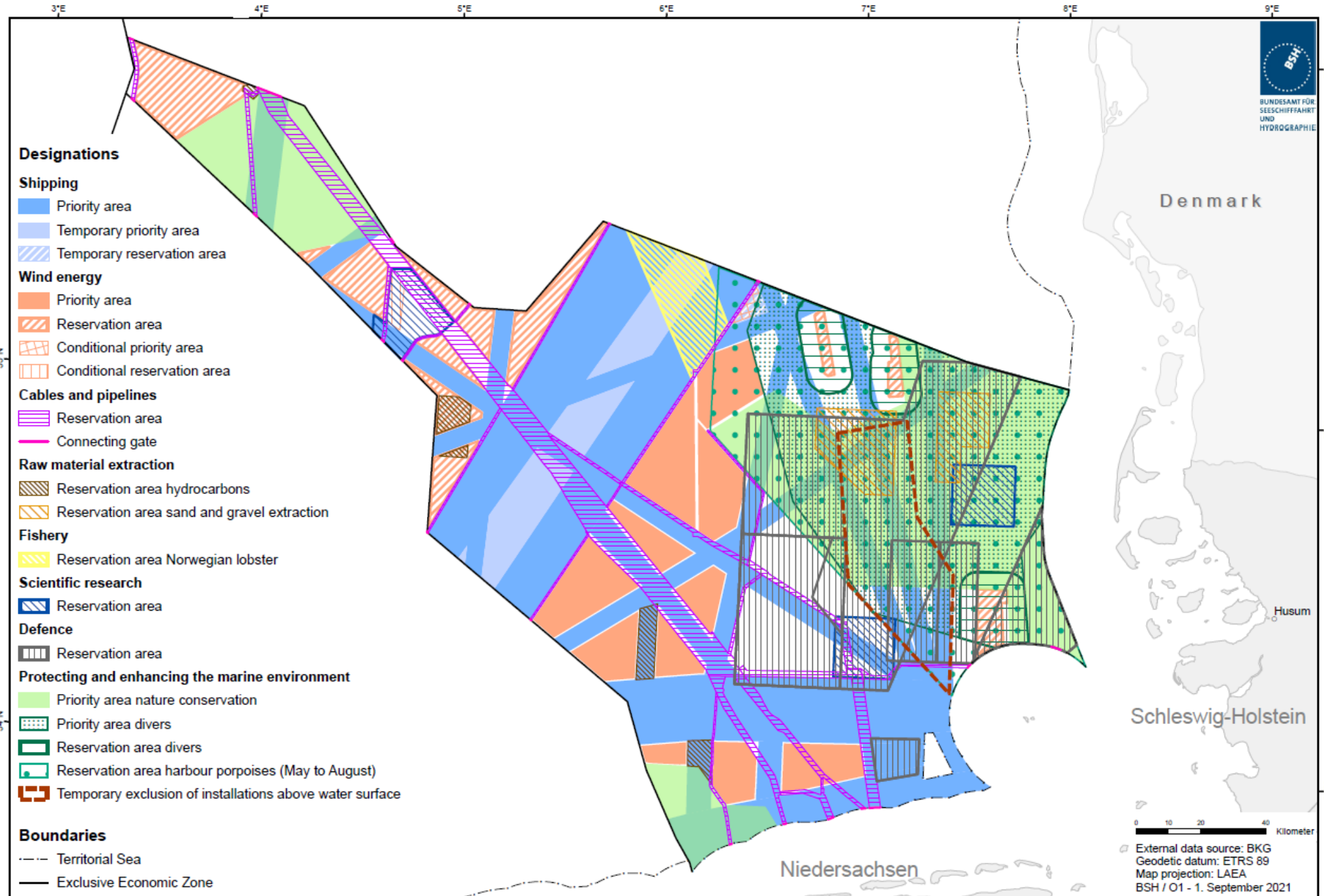


*Data on GeoSeaPortal*



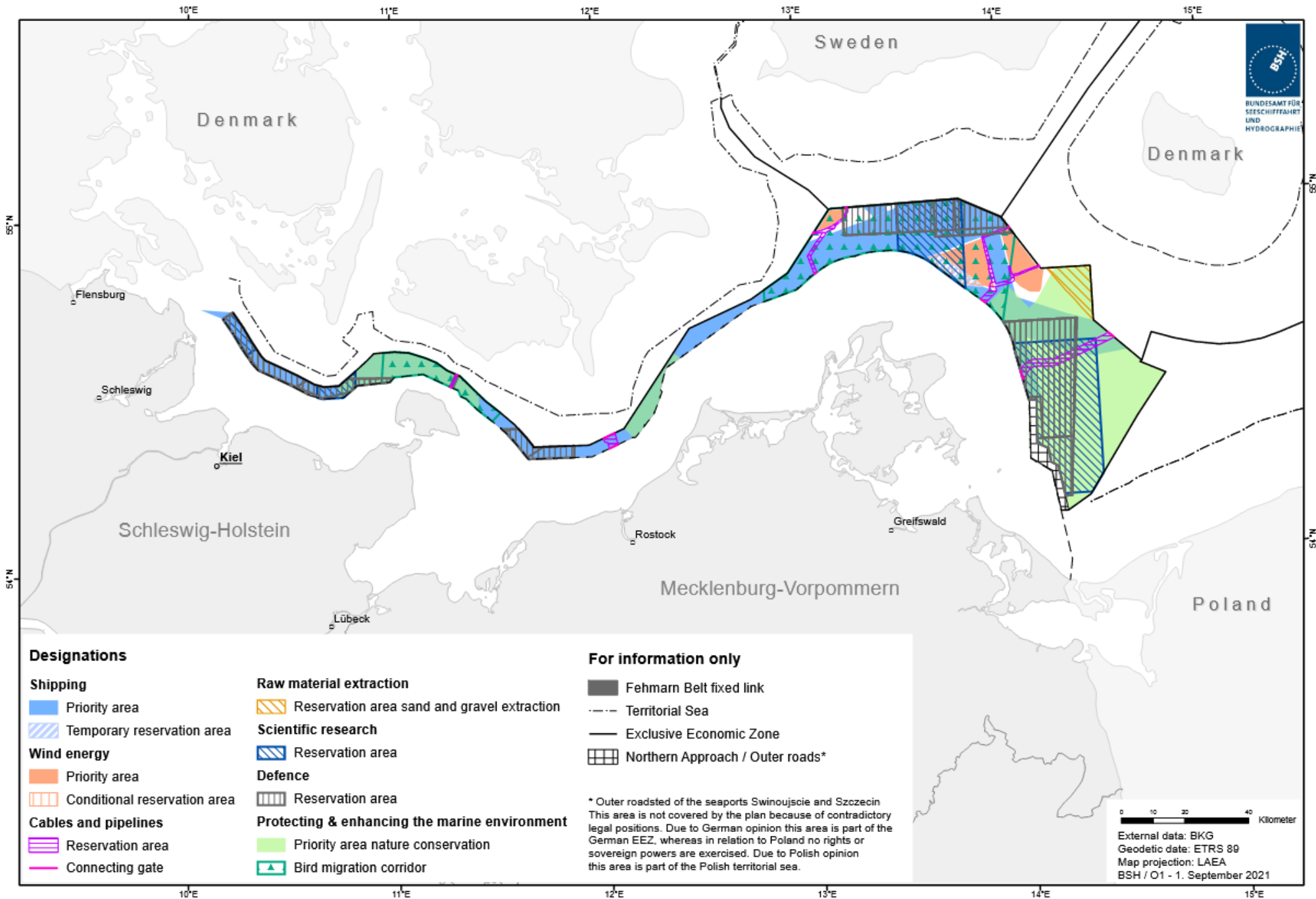
*Documentation of consultation*

# Maritime Spatial Plan for the German exclusive economic zone in the North Sea and the Baltic Sea - Map North Sea



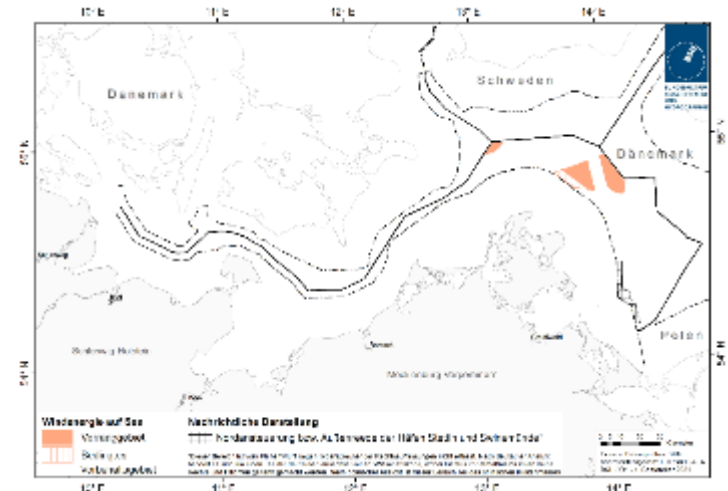
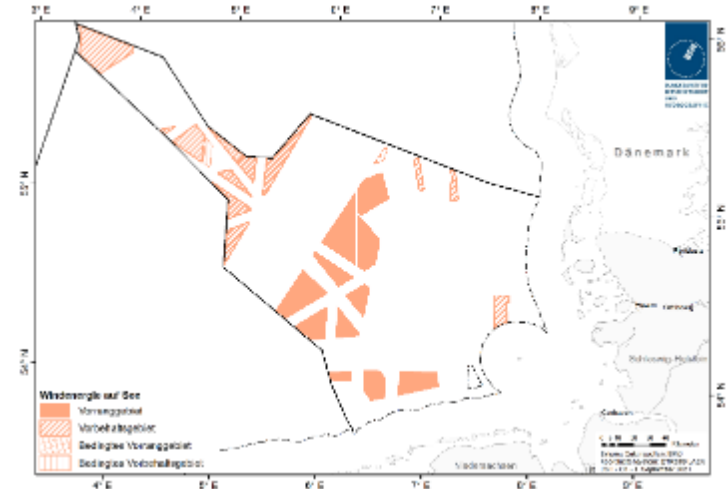


# Maritime Spatial Plan for the German exclusive economic zone in the North Sea and the Baltic Sea - Map Baltic Sea

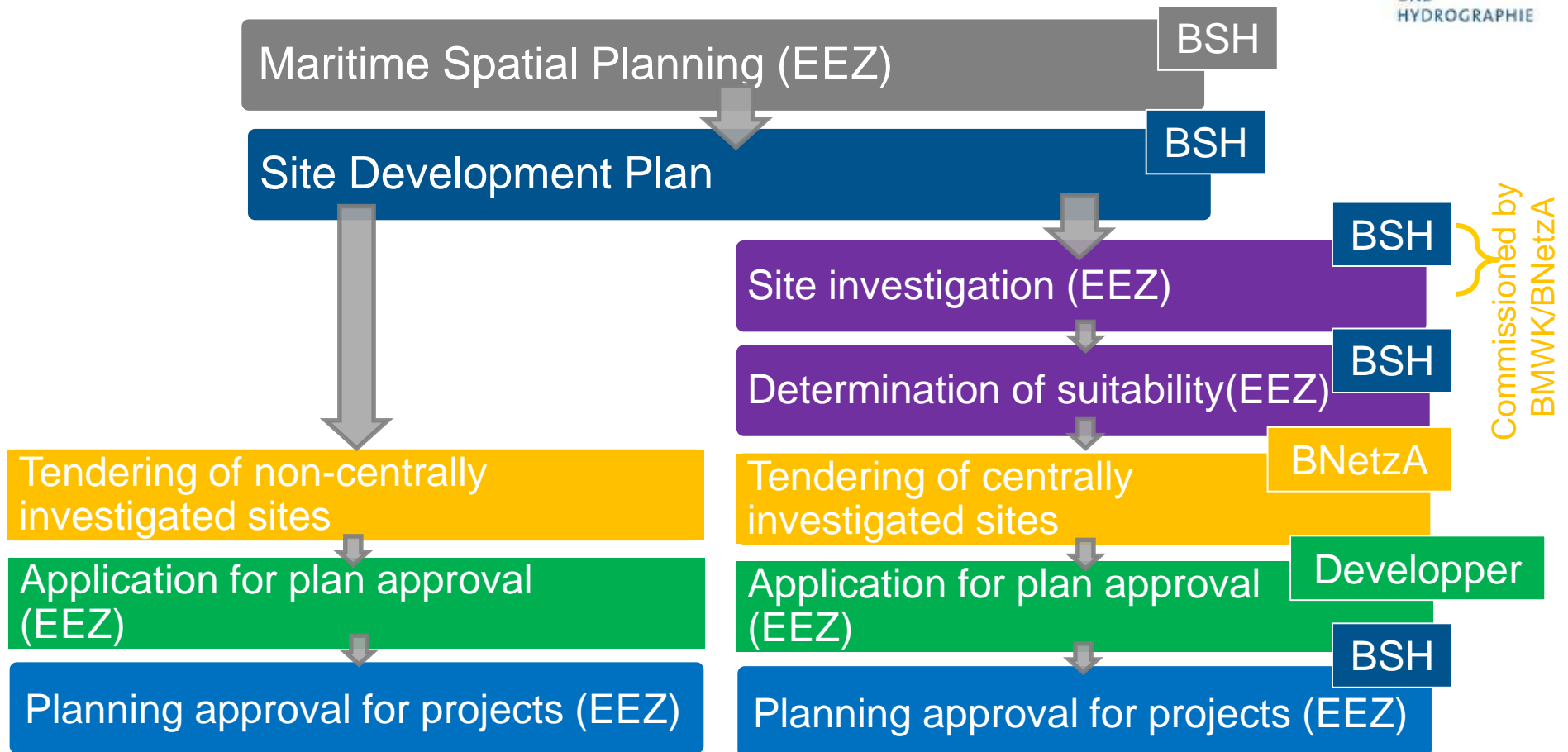


# Designations for offshore wind energy

- Priority areas to achieve the national wind offshore targets 2030 (according FEP 2020)
- Reservations areas to secure space for further offshore wind targets
- Conditional designations pending an assessment by the ministry responsible for shipping



# Planning Instruments for Offshore Wind Energy

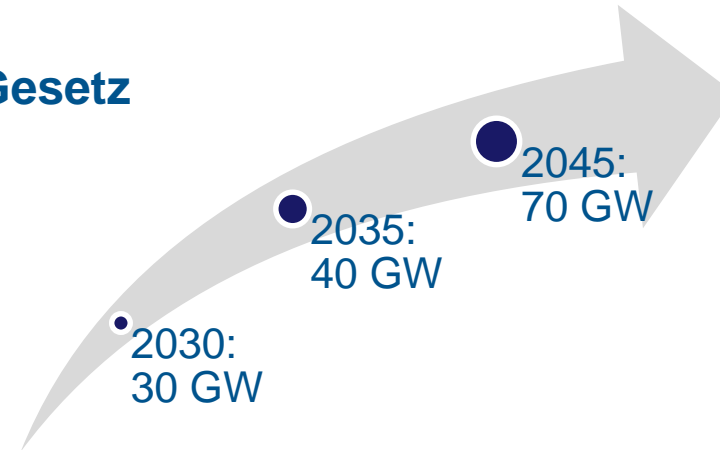


# Site development plan – Legal framework

## Targets in the Windenergie-auf-See Gesetz

Status in 2023:

- 8 GW installed capacity



## Renewable-Energy-Act

- Target: 80 % of electricity production 2030 through renewable energies
- 2022: ca. 48 %

## Amendment Climate Protection Act

- Climate neutrality by 2045

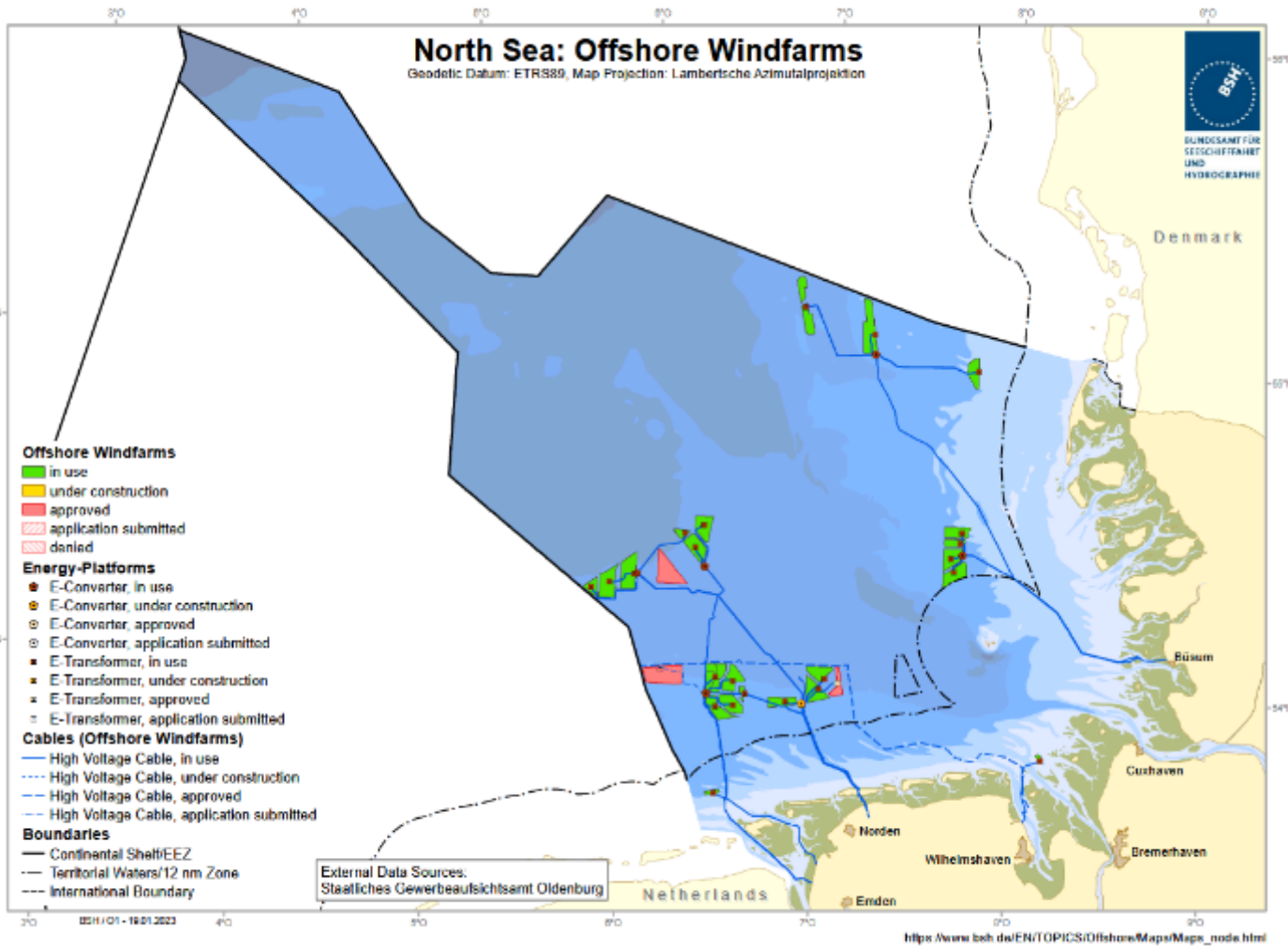
## EU Green Deal

- De-carbonisation by 2050

# Development of offshore wind energy - Targets

- 2002 2 – 3 GW by 2010, 20 - 25 GW by 2030 (Strategy)
- 2009 20 – 25 GW by 2030 (EEG)
- 2012 25 GW by 2030 (EEG)
- 2014 6.6 GW by 2020, 15 GW by 2030 (EEG)
- 2017 15 GW by 2030 (WindSeeG)
- 2020 20 GW by 2030, 40 GW by 2040 (WindSeeG)
- 2023 30 GW by 2030, 40 GW by 2035, 70 GW by 2045 (WindSeeG)

# Status offshore wind development – North Sea



## North Sea

22 parks in operation

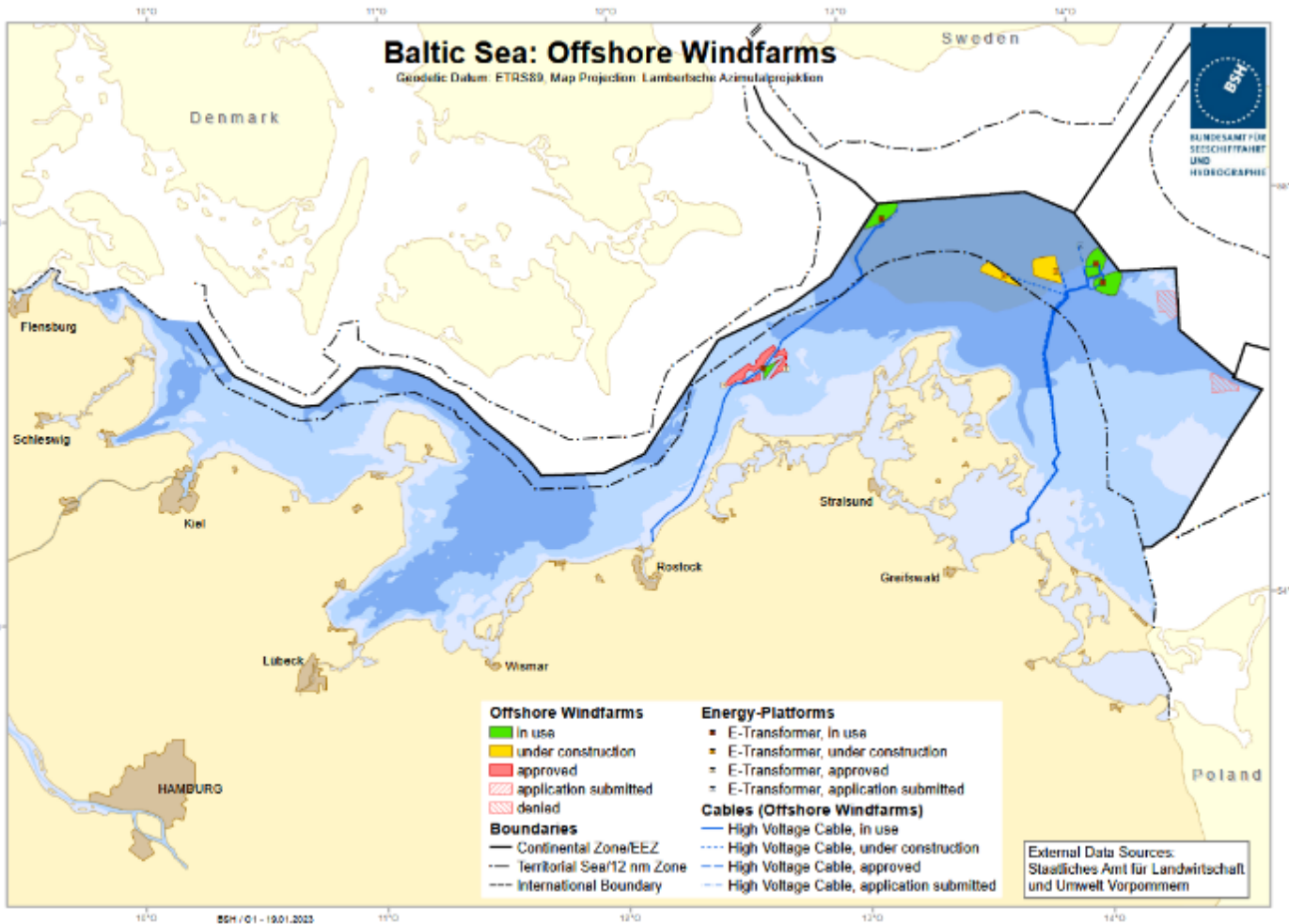
1.258 turbines

6.802 MW

2023: construction  
planned for 2 parks  
(106 turbines; 1.142  
MW)

2 current permitting  
processes

# Status offshore wind development – Baltic Sea



## Baltic Sea

3 parks in operation  
210 turbines  
1.027 MW  
1 park under construction  
(66 turbines, 476 MW)  
1 current permitting  
processes

**Total capacity in North Sea  
and Baltic Sea (EEZ &  
territorial seas)**

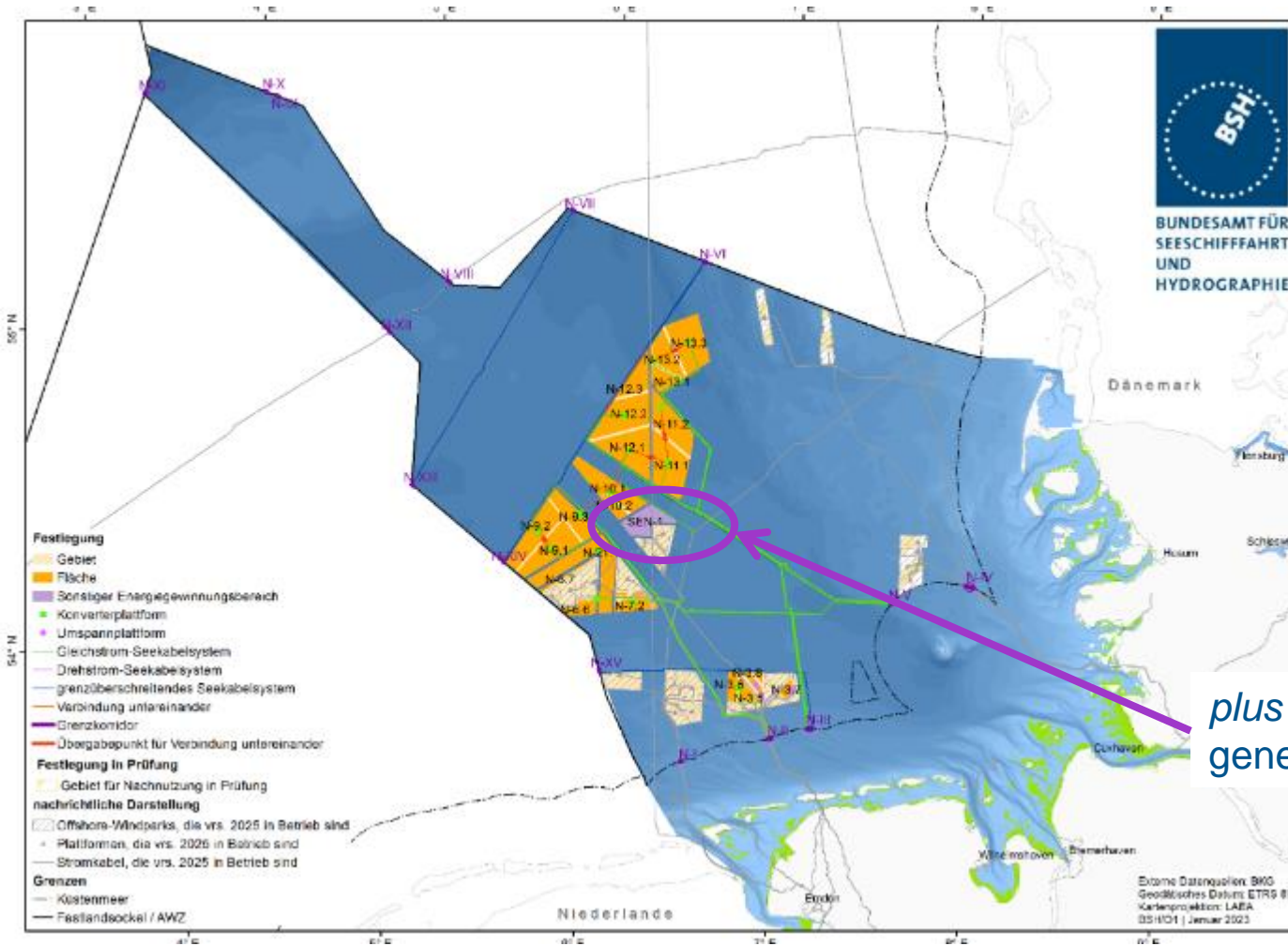
**1.539 turbines**

**8,042 GW**

# Site Development Plan North Sea, published in January 2023

## North Sea

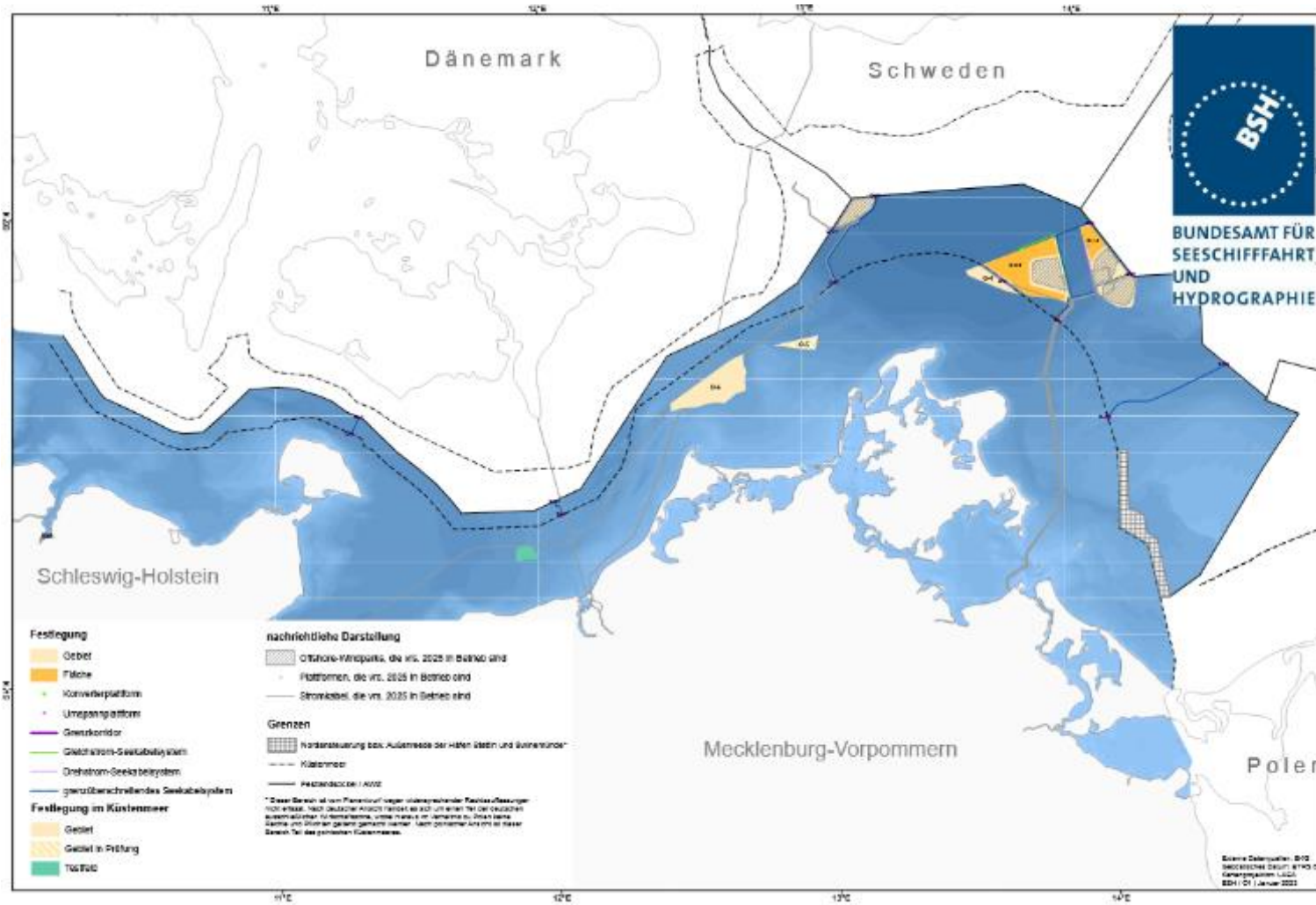
### Designations for 23.4 GW



*plus area for other forms of energy generation or hydrogen production*



# Site Development Plan Baltic Sea, published in January 2023



## Baltic Sea

## Designations for 1.3 GW

## Task: Coherent planning of offshore wind expansion

Current Site Development Plan was published on 20 January 2023

- Contains designations to achieve an offshore wind capacity of **24,7 GW**
- Future amendments and revisions of the plan will take into account the energy targets and the further development
- Current parks and plan designations support **36,5 GW** production

- Spatial designations for offshore wind energy in MSP 2021 relate to targets at the time
  - 20 GW 2030; 40 GW 2040 (WindSeeG)
  - Szenariorahmen 2035 (2021) (BNetzA): 28-34 GW 2035; 40 GW 2040
- Coordination with NL and DK regarding shipping routes in the North Sea (SN10) to identify additional spatial potential for offshore wind
  - FEP identifies potential wind energy areas in shipping designation SN10

- Proceedings for obtaining permission to deviate from a planning objective (Zielabweichungsverfahren) in FEP 2023 to designate priority areas shipping as offshore wind energy areas
- Changes in FEP don't change the underlying objectives of the Maritime Spatial Plan 2021
  - ⇒ MSP 2021 provides a stable basis for the spatial development at sea

Thank you for your attention!



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