Baltic InteGrid

Integrated Baltic Offshore Wind Electricity Grid Development

Public Acceptance for OWE in Germany

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FOUNDATION OFFSHORE WIND ENERGY

EU STRATEGY FOR THE BALTIC SEA REGION FLAGSHIP

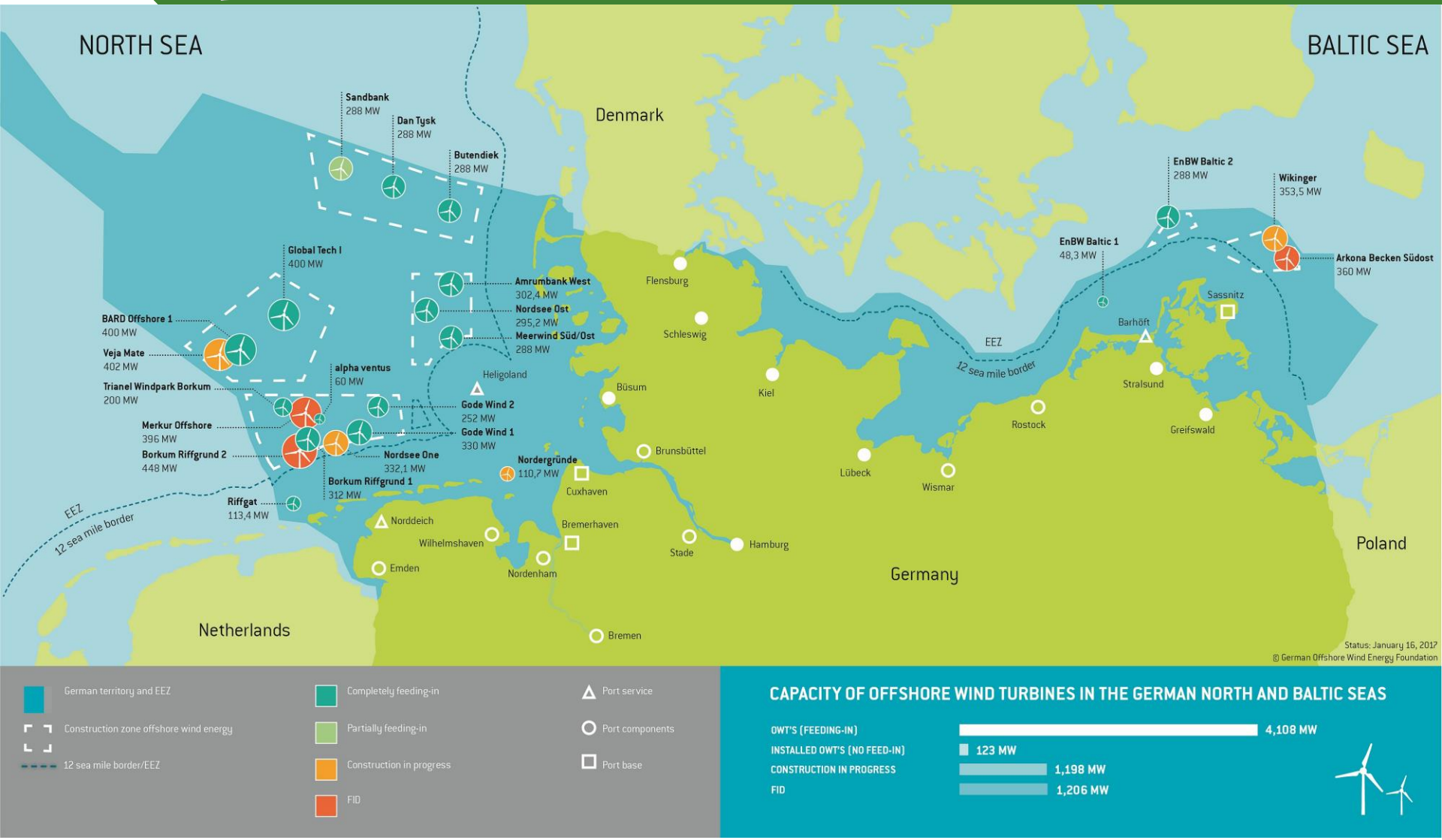
Interreg Baltic Sea Region

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Public Acceptance – Key Factors

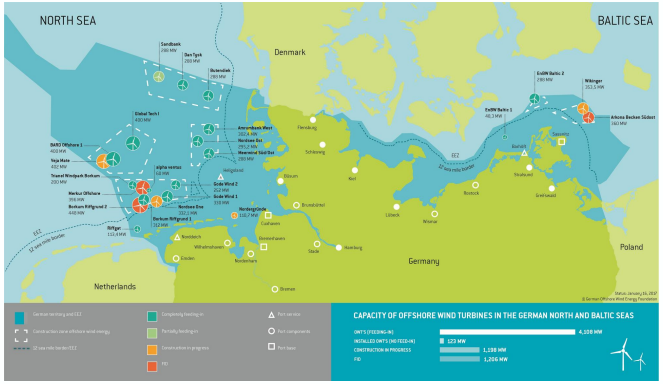
- Visual and Astetic Impacts
- Impacts on Nature
- Information, Trust and Transparency

OWE in the German EEZ



Visual Impacts & Tourism

- Under favourable viewing conditions OFW are visible up to around 40 km.
- Several elements have an influence on the produced visual effect. For example:
  - The site and size of wind farm area;
  - The wind turbines: size, materials and colors;
  - The layout and spacing of wind farms and associated structures;
  - Navigational visibility (e.g. yellow painting), markings and lights;
  - The transportation and maintenance boats;
- There is a total of 4108 MW offshore wind capacity in Germany.
- In Germany, OFW are manly located in the German EEZ. Only about 160 MW are installed within the 12 mile zone.



Thresholds

< 13 km possible major visual effects
13-24 km possible moderate visual effects
> 24km possible minor visual effects

Visual Impacts & Tourism

Case Study: Baltic 1

Visual Impacts & Tourism

Case Study: Baltic 1 with planned Gennaker extension

Public Perception

Visual Impacts & Tourism

In general, there is less opposition of seaside resorts and civil society if OWFs are not visible.

Please note:

- Visual OWF do not necessarily lead to a negative economic effects for local tourism business (e.g. EnBW Baltic I).
- OWF may have a positive effect on local tourism (e.g. sightseeing, information centres).

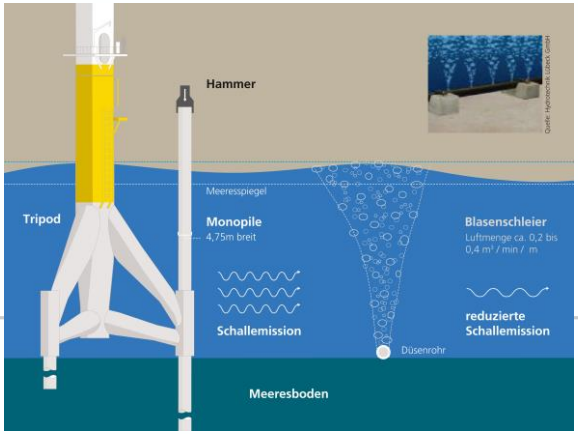
Impacts on Nature

- Citizens are mainly concerned about the impact on sea manuals and birds (, but less about benthos and fish).
- The **German Federal Agency for Nature Conservation (BfN)** is consulted during the permitting process regarding all environmental topics (cf. Standard Investigation of the Impacts of Offshore Wind Turbines on the Marine Environment (StUK 4)).
- If possible, measures to reduce negative impacts on nature should be implemented.
- There is more public acceptance for OWF if citizens are informed about the benefits and challenges of OWE.

Impacts on Nature

Case Study: Porpoise (lt. Phocoena phocoena)

- In Germany, noise **emissions are being controlled and reduced**, when structures are driven into the seafloor.
- Legal requirement: 160 dB in 750 meter distance (backround noise in the North Sea up to 90 dB)
- **Porpoises are sensitive to noise** and protected by animal conservation laws, and other marine mammals.



Information, Trust and Transparency

Public Acceptance Work by Stiftung OFFSHORE-WINDENERGIE

- **Project INSCHOOL**
- Travelling Exhibition „**Faszination Offshore**“ (here Sails in Sassnitz, DE)
- **Consultation for exhibition places**, e.g.
  - Klimahaus, Bremerhaven (DE)
  - Offshore exhibition in Rostock (DE)
  - National park haus Norderney (DE)

Recommendations

Planning Stage

- Balanced Information (e.g. Events with experts)
- Information at an early planning stage on the part of authorities and developers
- Planning alternatives
- Point out participation possibilities
- Involve local experts
- Consider the concerns of local communities (seriously)

Construction & Operation

- Minimise impact on nature during the construction phase
- Online presence to inform about project development
- Involve local companies during the construction and maintenance

Conclusion

- The main challenge in regard to public acceptance is **lack of information**.
- A **good communication strategy** during planning and construction phase is a key factor to public acceptance.
- It is important to **take existing concerns seriously**, reduce uncertainty and inform about the benefits and risks.
- Additionally, it is helpful to **point out the possibilities for public participation** to the civil society.

Thank you for your attention!

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