

Offshore Wind in Denmark by 2030

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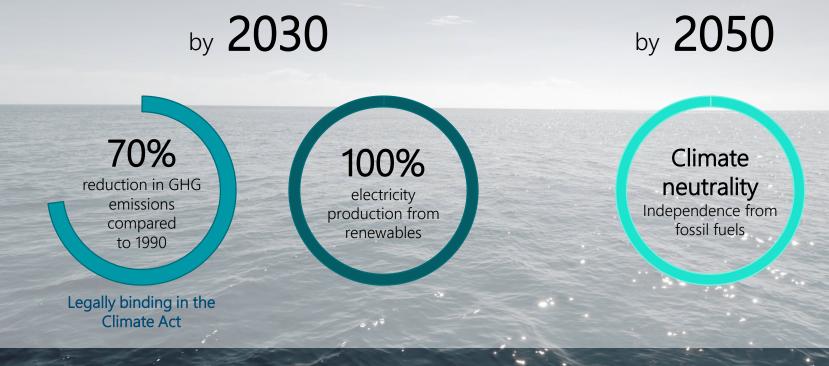
An introduction: Denmark's climate targets

Background behind the Danish climate targets

- Targets guide energy policy implementation in Denmark
- New policy initiatives are used to reach the set targets
- In line with (and even beyond) the Paris agreement.



Denmark's climate targets



Danish Energy

New Climate Agreement (2020)

New initiatives for further CO₂ reductions:

- New era with energy islands
- Green technologies of the future: Green fuels and CO₂ capture
- Green transition of the industrial sector and cooperation with the business sector
- Efficient use of energy and renovations
- Green heat for the Danish citizens
- Green waste sector and more recycling.



Danish Energy Agency

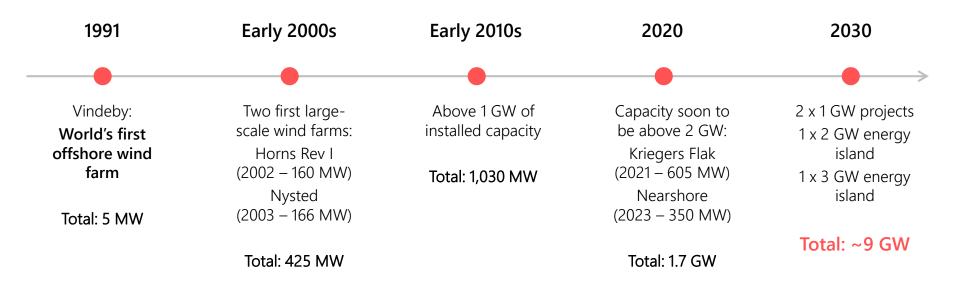
Offshore wind: A key element to achieve the climate goals



WHY OFFSHORE WIND?

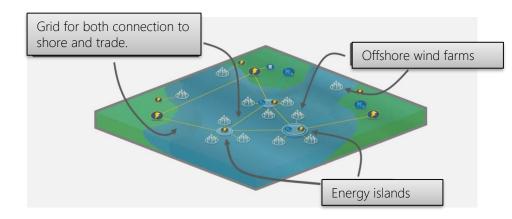
- Cost-competitive technology to accelerate clean energy transitions and minimise fossil fuel dependence
- High capacity factors can contribute to security of supply
- Lower interference with land use
- Potentially closer to major demand centers
- Can create local jobs both short and long term.

From 1990s to 2030s: Denmark remains a pioneer

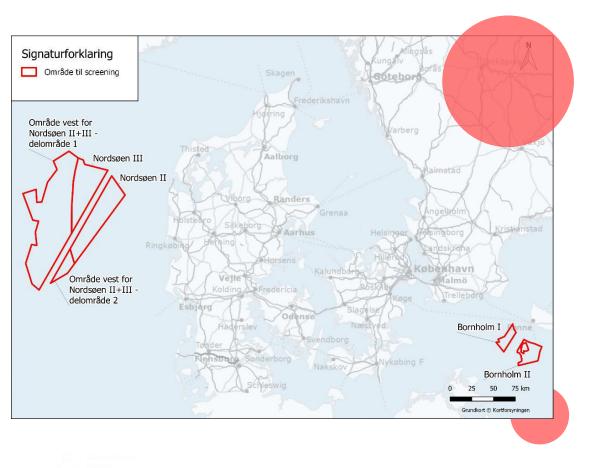




An energy island serves as a hub for electricity generation for the surrounding wind farms, by collecting and distributing the electricity between countries connected by an electricity grid







WHY ENERGY ISLANDS?

- Massive production of green electricity
- Meeting the European demand
- Conversion to Power-to-X: fuels for heavy transport sector

Island construction

North Sea hub Three options under consideration:



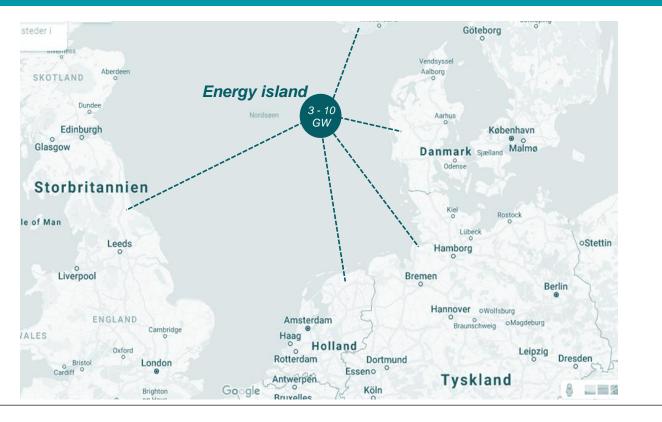
Illustration credits: North Sea Wind Power Hub



Baltic Sea hub Bornholm island as hub:



Sharing the power in Europe







Thank you

More information: <u>https://ens.dk/en/our-</u> <u>responsibilities/wind-</u> <u>power/ongoing-offshore-</u> <u>wind-tenders</u>

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