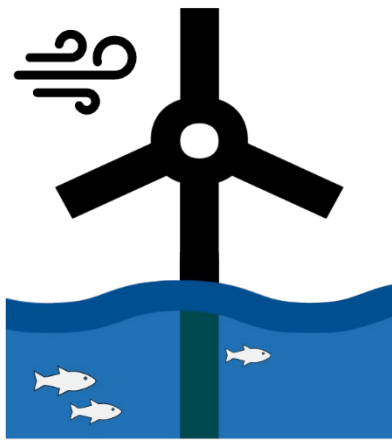


Matthieu Povidis Delefosse (Senior Bioscience Expert)

Offshore windfarm
more than just fossil free electricity?

Challenge: Massive build up of offshore wind farm



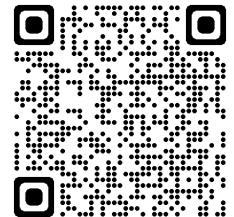
2023: 30 GW ▶ 2030: 150 GW ▶ 2050: 450 GW

2023: 2.7 GW ▶ 2030: 13 GW

<https://windeurope.org/>

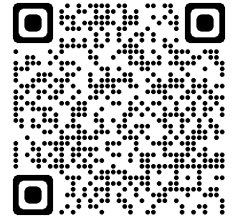
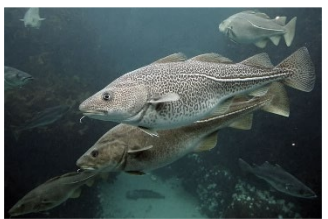
Rigorously applying mitigation hierarchy Throughout all project life phases

1. Development
2. Construction
3. Operation
4. Decommissioning



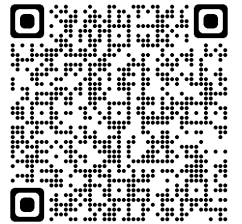
Beyond mitigation: making positive contributions Through Nature Inclusive design (NID)

Water replenishment holes open access
to inside of the monopile



Beyond mitigation: making positive contributions

Through offsite measures





Challenge: Multiple Interests at Sea

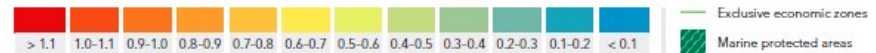
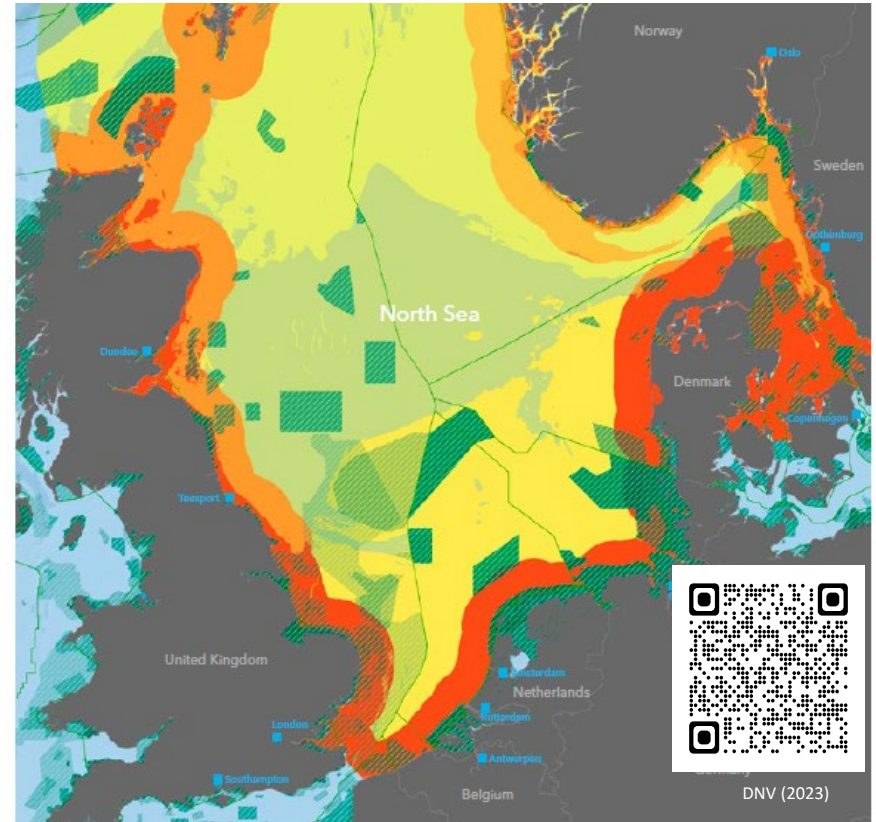
Energy production

Nature protection

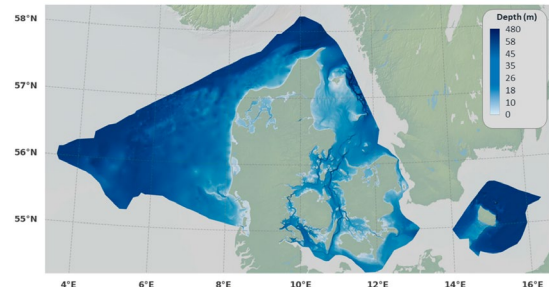
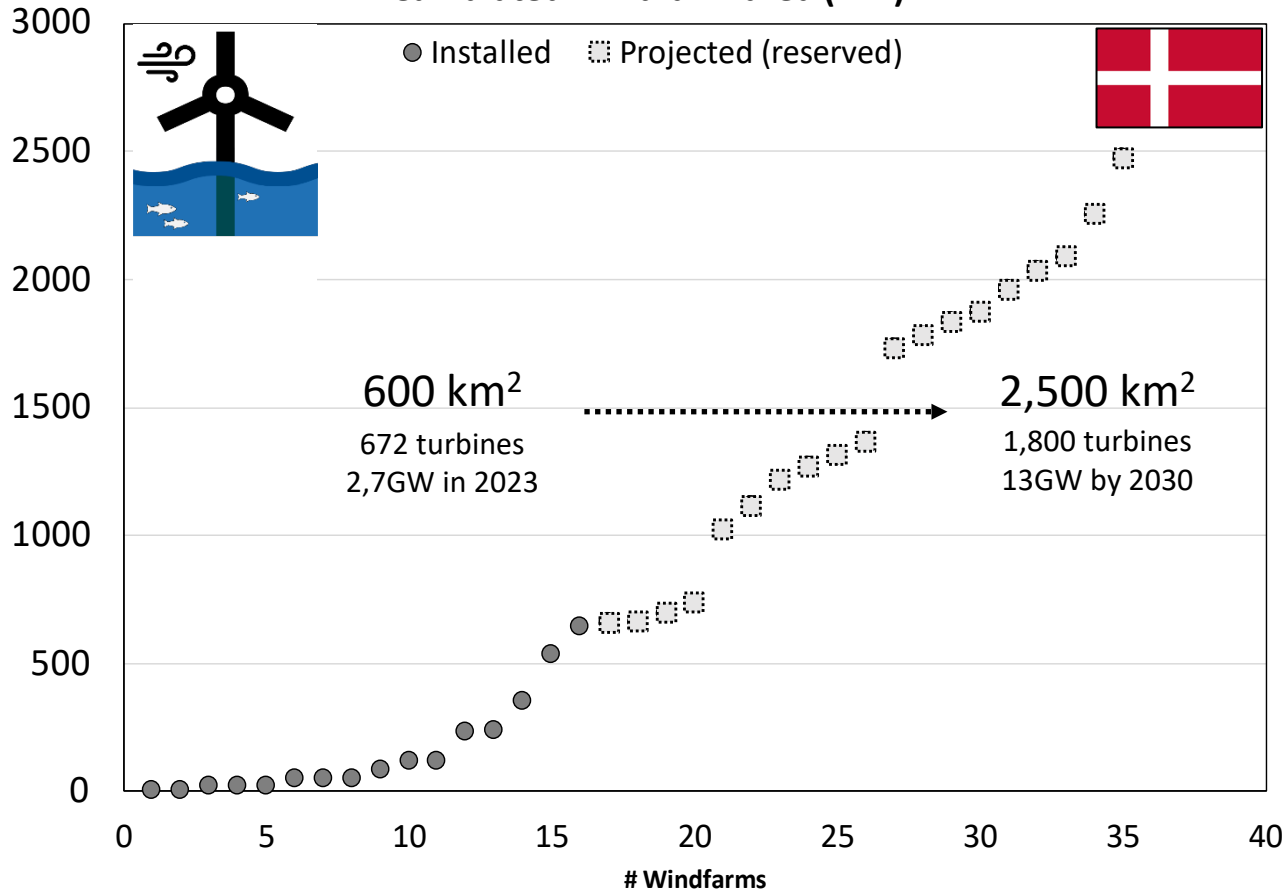
Fisheries, Aquaculture

Shipping

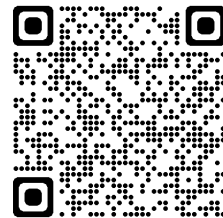
DNV (2023) “Future space requirements and spatial competition **will trigger new forms** of collaboration and **multi-use** strategies to achieve spatial efficiency, circularity, and shared costs and resources.”



Cumulated Windfarm area (km²)



Danish EEZ 105,000 km²



4C offshore (2023)

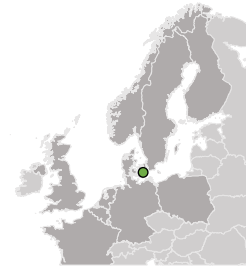
Multi-use in offshore operating windfarm

Testing sustainable food production




 **WIN@sea**

 **OLAMUR**



 **AARHUS UNIVERSITY**

 **DTU** Technical University of Denmark

Kerteminde Seafarm

 **UNIVERSITY OF COPENHAGEN**

 **Kattegatcentret**



VATTENFALL 

Multi-use in offshore operating windfarm

Through passive conservation



Photo: Ørsted

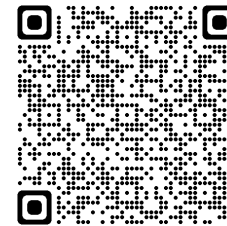
Marine nature protection

Protected

- Today: 12%
- 2030 target: 30%

Strictly protected:

- Today: 4.1%
- 2030 target: 10%



Biodiversitetsrådet (2022)

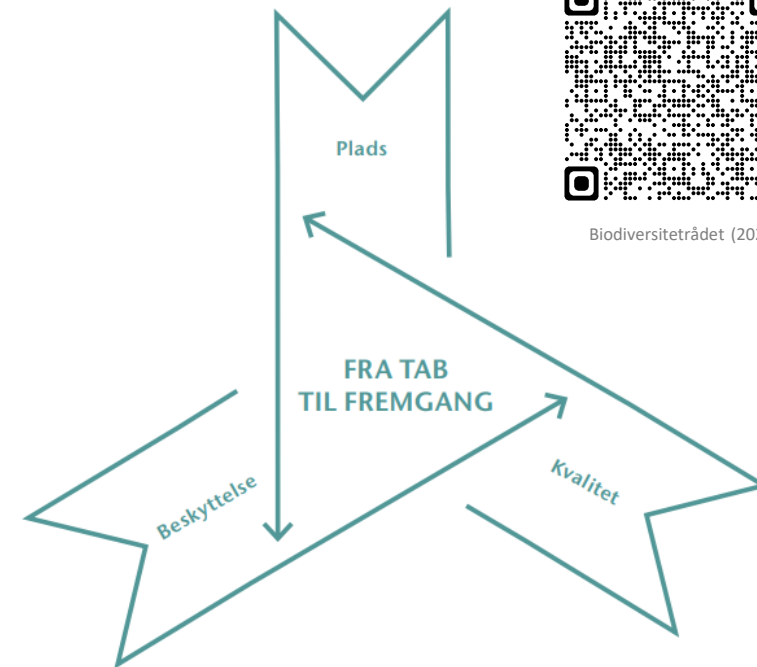


Fig 1.1.3. For at vende tabet af biodiversitet til fremgang er der behov for Mere plads med Mere kvalitet, som er Mere beskyttet.

Offshore windfarm more than just fossil free electricity?

YES!

**Promote positive impacts on biodiversity
Enable multiple sustainable use practices**

Photo: Michael Palmgren (Lillgrund)

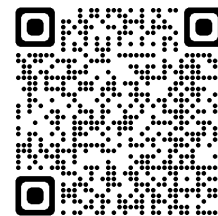
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Linked in



VATTENFALL OFFSHORE WIND

March, 2023

Confidentiality: C1 - Public

