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Wind farming and improving the marine environment as well

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Ørsted develops energy systems that are green, independent and economically viable

Installed Under construction

Offshore wind

- Global leader in offshore wind
- Develop, construct, operate and own offshore wind farms
- Ambition to reach ~30 GW installed capacity by 2030

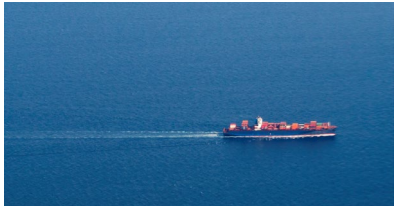
Onshore renewables

- Strong presence in the United States and Europe
- Develop, operate and own onshore wind, solar PV and storage projects
- Ambition to reach ~17.5 GW installed capacity by 2030

Bioenergy & other

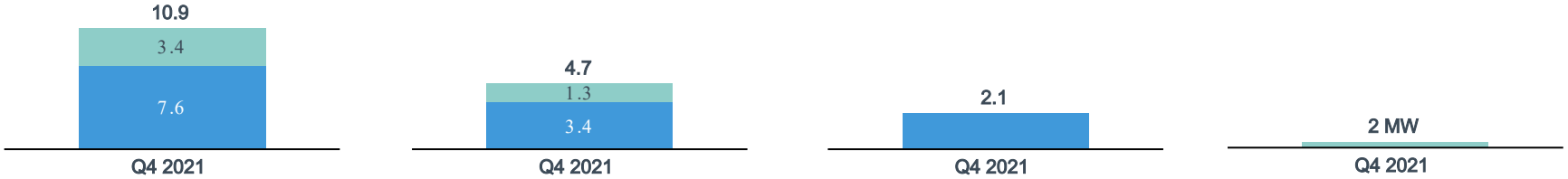
- Presence in Europe, including bioenergy plants, legacy gas activities and patented waste-to-energy technology
- Own and operate bioenergy and waste-to-energy plants, and optimise gas portfolio[1]

Renewable hydrogen and green fuels



- Emerging platform with 10 pipeline projects (+3 GW) mainly in Europe
- Develop, construct, own and operate hydrogen facilities
- Ambition to become a global leader in renewable hydrogen and green fuels by 2030

Capacity, GW



1. We neither enter into new long-term gas sourcing contracts nor prolong expiring contracts, our focus is on maximising the value of our legacy natural gas portfolio

Source: Ørsted Financial and ESG Report Q4 2021

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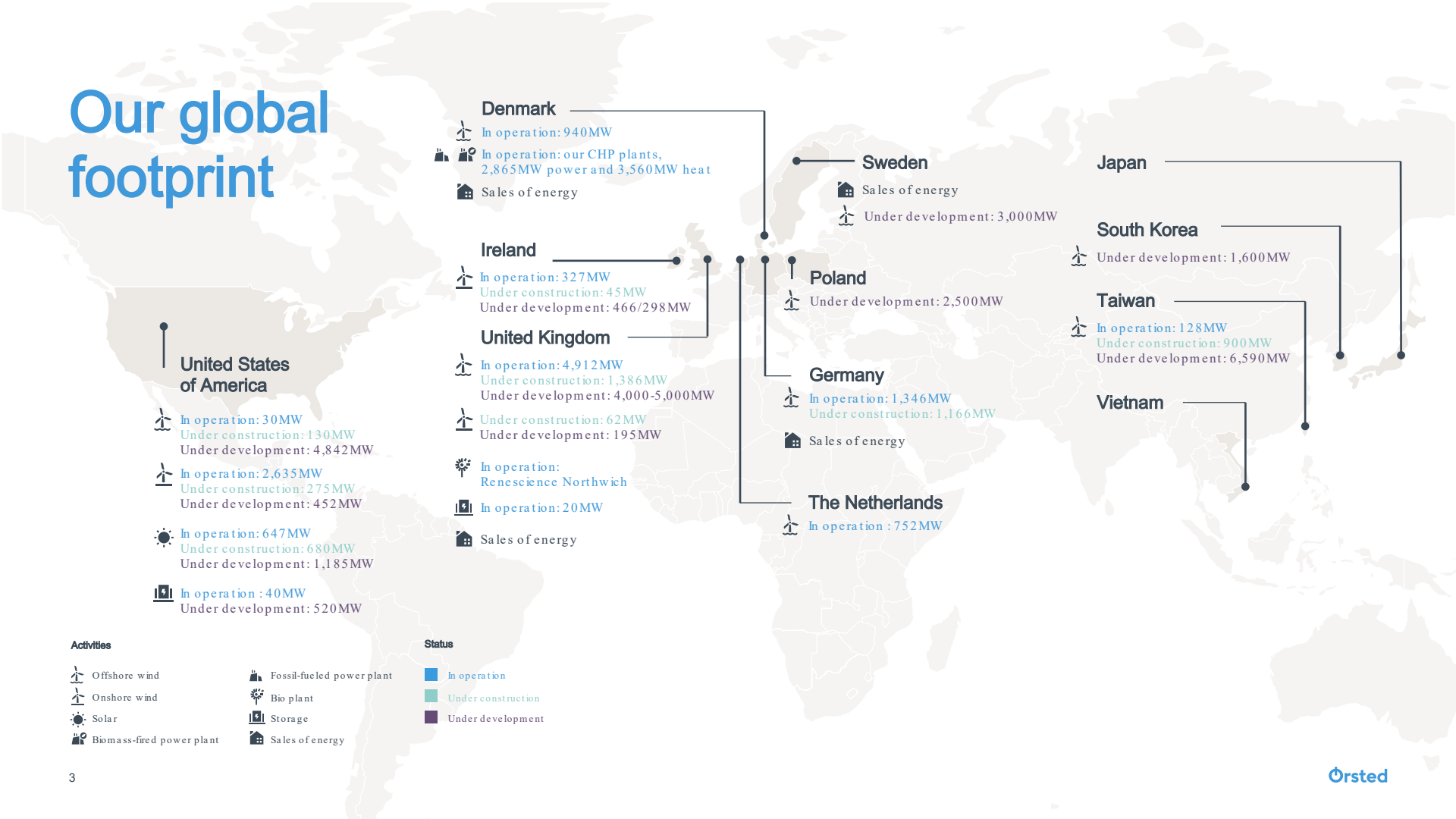
Our global footprint



Activities

- Offshore wind
- Onshore wind
- Solar
- Biomass-fired power plant
- Fossil-fueled power plant
- Bio plant
- Storage
- Sales of energy

Status

- In operation
- Under construction
- Under development

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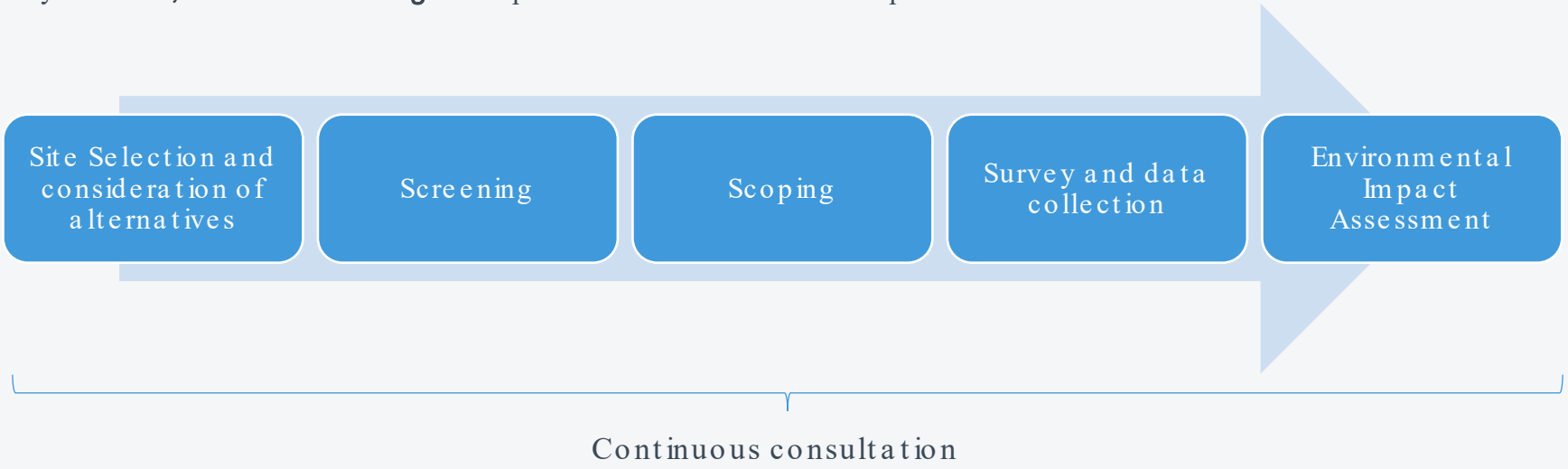
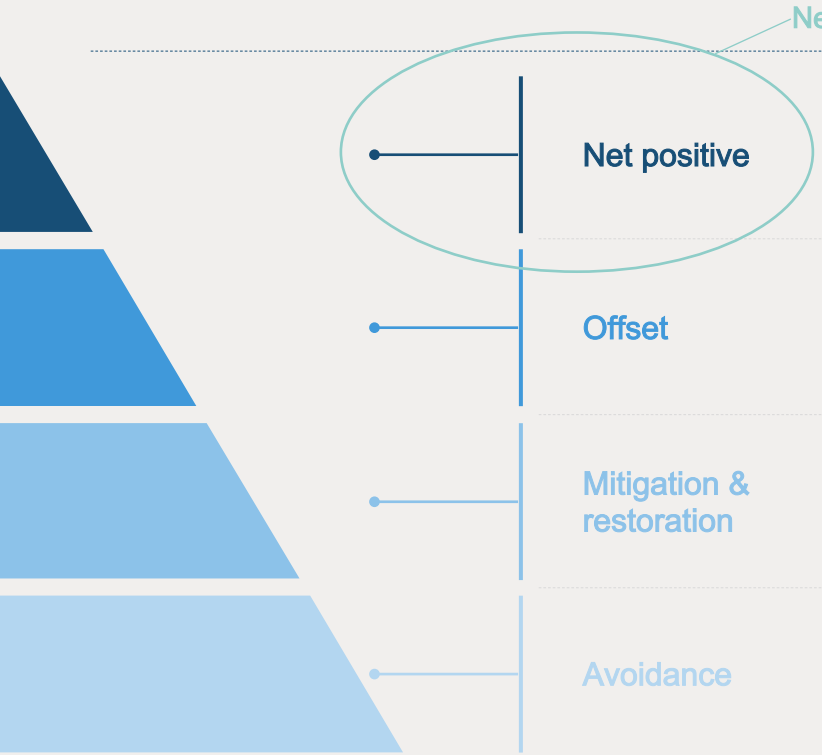
Ørsted and the environment

Ørsted's general standards are to comply fully with all relevant national legislation, and international frameworks.

To date, each Asset Project goes through a thorough process considering the environment in detail and the best way to **avoid, minimize and mitigate** potential environmental impacts.



The biodiversity mitigation hierarchy



- More than outweighs the biodiversity disturbances and damage
- *Ørsted example:* Deploying artificial cod pipes at Borssele

- Compensates for significant, residual biodiversity loss from development projects achieving No Net Loss of biodiversity
- *Ørsted example :* Deploying artificial nest structures at Hornsea 3 for kittiwakes

- Aims to return an area to the original ecosystem present before impact
- *Ørsted example:* Using noise mitigation technology (bubble curtains) during installation

- Avoids disturbance of biodiversity from the outset during development
- *Ørsted example* : Avoidance of sensitive habitats for on and offshore cable routes

Source: International Union for Conservation of Nature; OECD; The Biodiversity Consultancy

Why is biodiversity important to Ørsted?

- The world needs to **accelerate** the transition to **green energy**
- **Scaling up** renewable energy at the pace required will have increased local environmental impacts
- We must continue to find ways to **build in balance with nature**
- As Ørsted accelerates the build-out of green energy, we will work with **a greater number** and more diverse set **of ecosystems**

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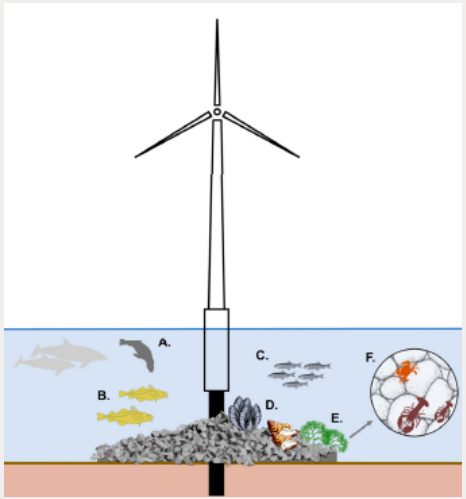
Our biodiversity ambition

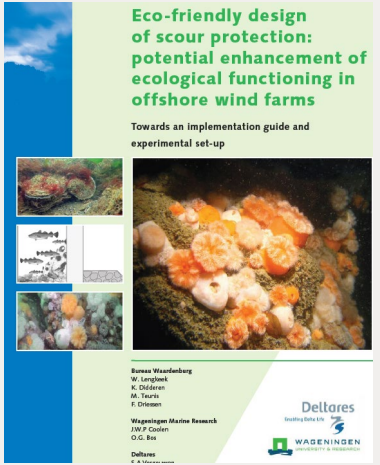
As part of Ørsted's new 2030 strategy, the company has set **the ambition to deliver net-positive biodiversity impact in all renewable energy projects it commissions from 2030**, strengthening the green energy build-out in balance with nature

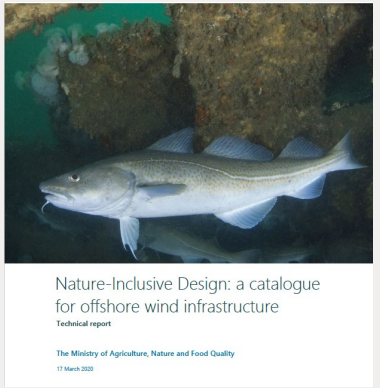
Nature enhancement of offshore wind – Nature inclusive design

Offshore wind offer opportunities:

- Indicated that scour protection meets the requirements to function as artificial reefs often providing shelter, nursery, reproduction, and/or feeding opportunities
- Wind farms offer space and protection for nature to develop - often no bottom trawling
- Nature inclusive design requirement in wind farm permits in the Netherlands
- Must be tailored to local conditions
- Research and monitoring needed to explore and test new and innovative nature inclusive scour protection designs







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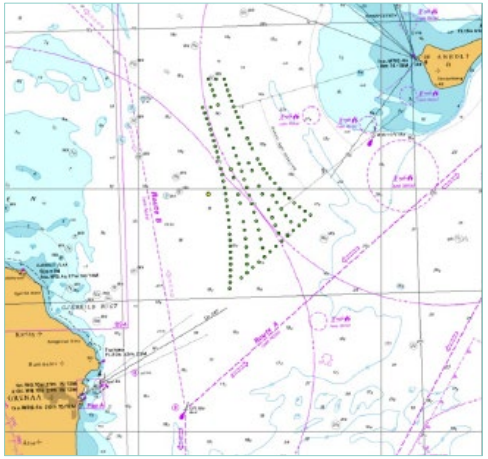
Anholt wind farm boulder reefs
Artificial reef creation

- The historic use of boulders to construct man-made structures such as harbour piers has meant that naturally occurring boulder reefs, and their accompanying flora and fauna, are now a rare features in Danish waters
- In response to this, Ørsted relocated 5,000 large boulders, as part of the construction of the Anholt offshore wind farm (DK) in 2012, and used them to create 23 artificial reefs
- Monitoring effects of the reefs on biodiversity in the planning



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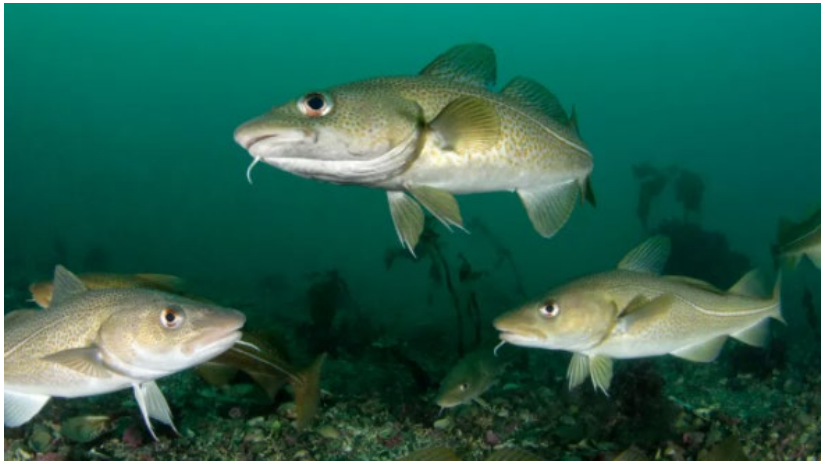
Cod pipe reefs in Borssele wind farm (NL)

Artificial reef creation

- As part of the 2020 construction of the Borssele 1 &2 offshore wind farm in Dutch waters, Ørsted designed and installed 4 purpose-built cod-pipe reefs
- Each cod-pipe-reef is about 10 m in diameter and vary from ca. 0,5 -3 m in height.
- The reefs provide much-needed habitat for Atlantic cod - identified by the Dutch authorities as a 'policy-relevant target-species'
- Ongoing monitoring of cod and lobster behaviour (acoustic monitoring) and biodiversity (eDNA) in and around the reefs
- Collaborative approach together with research institute and environmental organisation



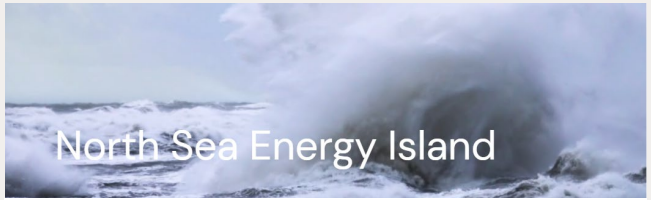
Biohuts in Grenå

Artificial reef creation

- In 2021 Ørsted collaborated with WWF to install 10 BioHuts in Grenå harbour in the Danish Kattegat
- The BioHuts will provide shelter for juvenile fish with the intention of restoring both cod populations and wider ecosystem balance
- Joint effort also focussing on education and dissemination of knowledge on marine life and biodiversity

The North Sea Energy Island

- Large-scale construction project in the North Sea
- Artificial energy island surrounded by 10 GW offshore wind
- Ørsted in consortium bidding for construction of the Energy Island - all partner having experience with nature inclusive design and strong biodiversity ambitions



The North Sea Energy Island must be more than just an island. The Danish energy island should promote new standards for the build-out of offshore wind power in Europe, while being based on sustainable construction and design. Most importantly, it must be prepared to meet future needs.

— Ørsted + ATP and partners

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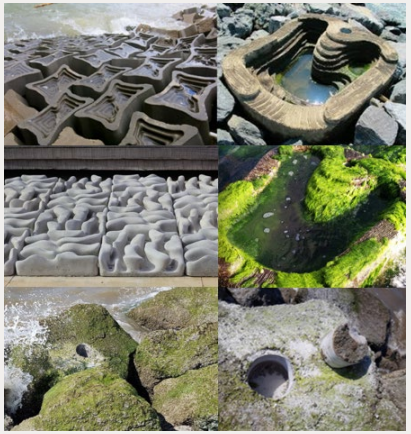
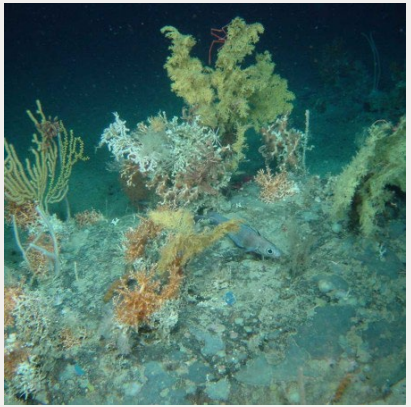
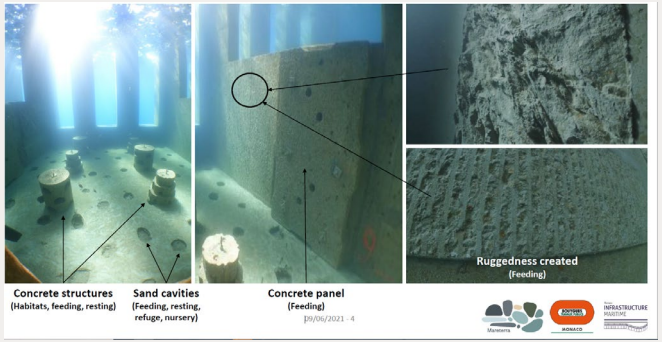
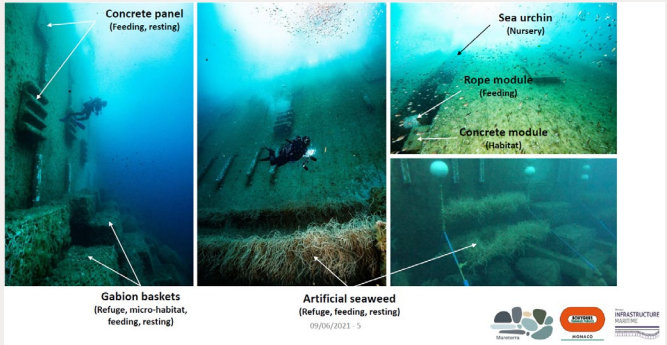
Outlook for nature inclusive design biodiversity enhancement of the island

- By ecological enhancing of the NSEI design, potential risks will be mitigated, and opportunities can be seized to create synergies with current and future conservation efforts in the North Sea
- BUT to make the right nature inclusive design solutions and deliver on our biodiversity ambitions we need (as a minimum):
  - to understand the baseline, define potential indicators and setting targets…….
  - a long-term national conservation policy and vision…
- AND we cannot do this alone!










Thank you for listening
Questions?

Back-up slides

The challenges in achieving our ambition

Understanding our current biodiversity footprint and how this can be measured

Delivering net positive in dynamic marine ecosystems

Increase in initial investment

Managing stakeholder expectations and views in the multiple markets we operate

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Potential conflict with other sea users

How we'll go about meeting our net positive ambition by 2030

2021
Launch of net positive ambition and Ørsted's biodiversity programme

2021
- Develop full programmatic approach
- Identify asset projects with COD before 2030
- Review available biodiversity indicators to measure footprint

2022 -2023
- Examine existing and future offsetting actions across different asset types
- Select preferred indicator capable of measuring our biodiversity footprint across multiple markets and businesses
- Secure strategic delivery partner

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2030
Asset projects with net positive impact commissioned