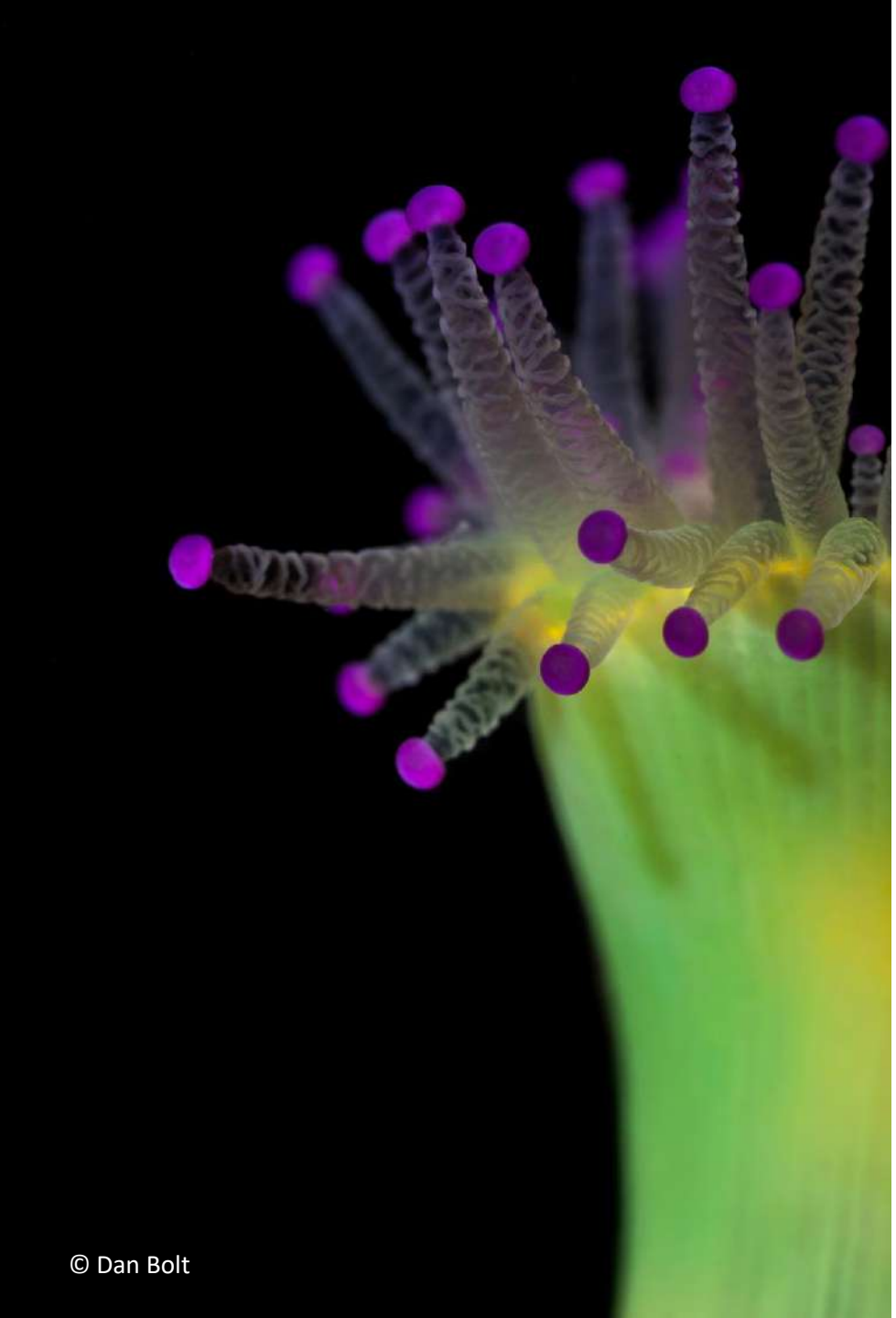
Is the projected scale of offshore wind development sustainable?

Tania Davey

Living Seas Sustainable Development Officer

Coastal Futures: 15th January 2020



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Overview

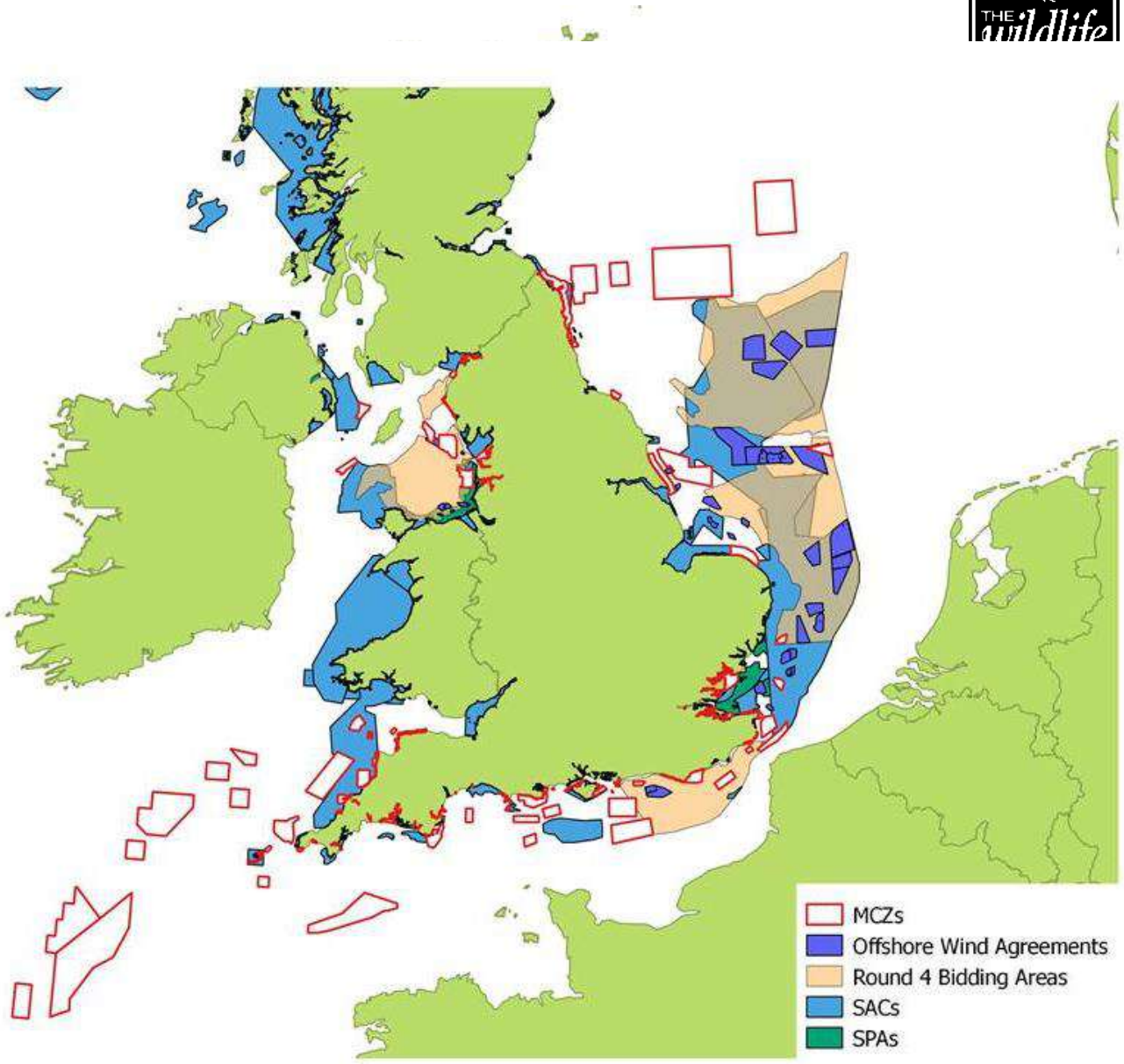
- TWT supports climate change action, but renewable developent must use right technology in the right location
- Healthy functioning marine environment essential contribution in meeting net zero
- Offshore wind farm development will not be sustainable if continue with same approach
- Options are available to reduce impacts

What is the scale?

Current target = 30GW by 2030

And beyond 2030??

75GW by 2050



Why are we concerned?

Underwater noise impacts

- Variety of marine mammals use UK waters
- Use sound to detect environment
- Offshore wind construction is noisy
- If not managed correctly and can cause:
  - Death
  - Injury
  - Disturbance
- Cumulative impacts of underwater noise key concern
- Population concequences to meet 2050 target?


Rob Spray

Benthic impacts

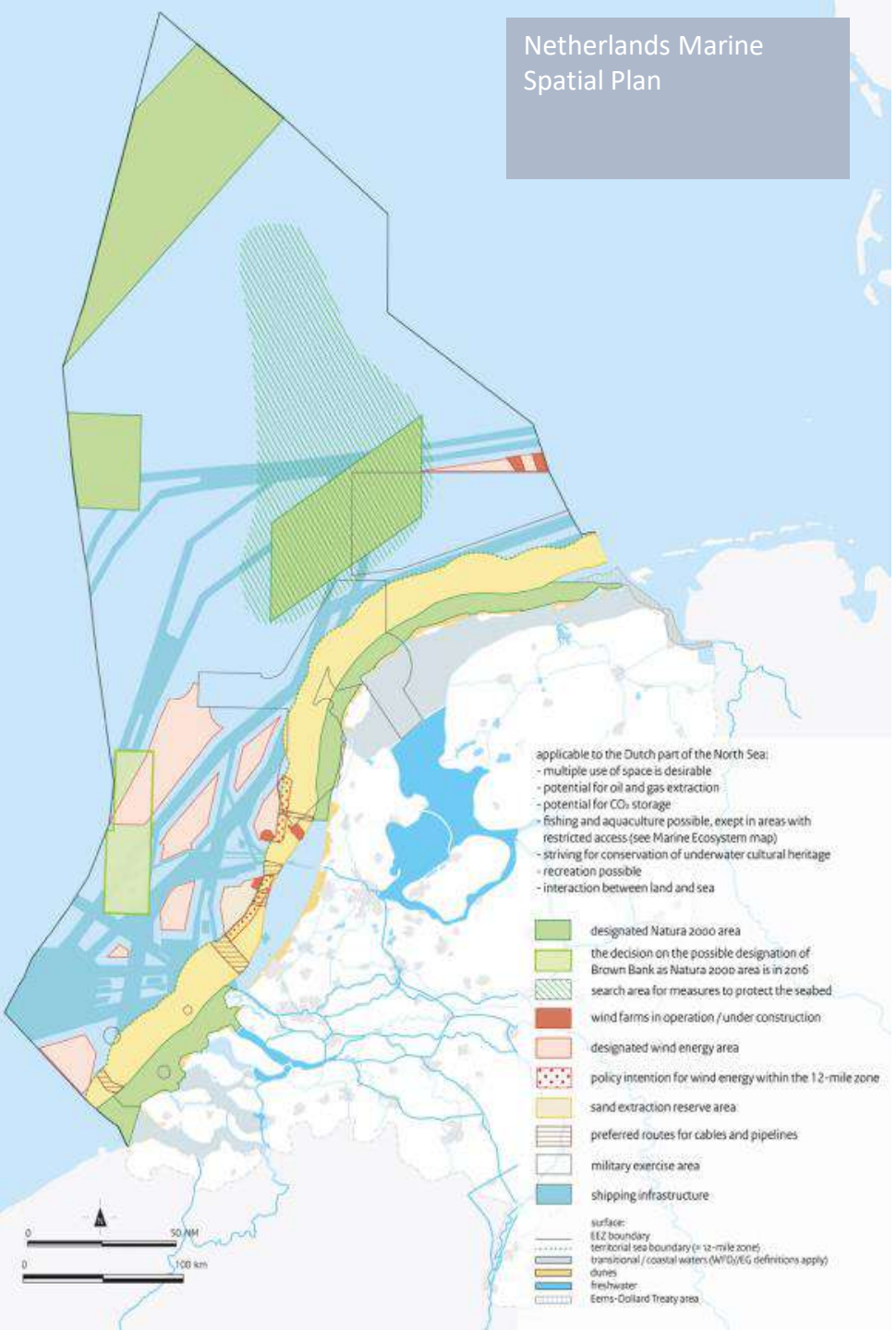
- Damage and loss of habitats
- Dependent on location and type of infrastructure
- Some SACs in unfavourable condition due to non-recovery from installation of wind farm infrastructure
- What will the cumulative damage and loss of habitats be to meet the 2050 target? Ecosystem effect implications?


Robin Cosgrove

Ornithological impacts

- UK globally important for seabirds
- Many UK seabird populations are struggling e.g. kittiwake, lesser black backed gull
- Concern:
  - Collision risk and displacement impacts
  - Cumulative impacts of offshore wind development on breeding and non-breeding seabirds
- How avoid, reduce and compensation for impacts?

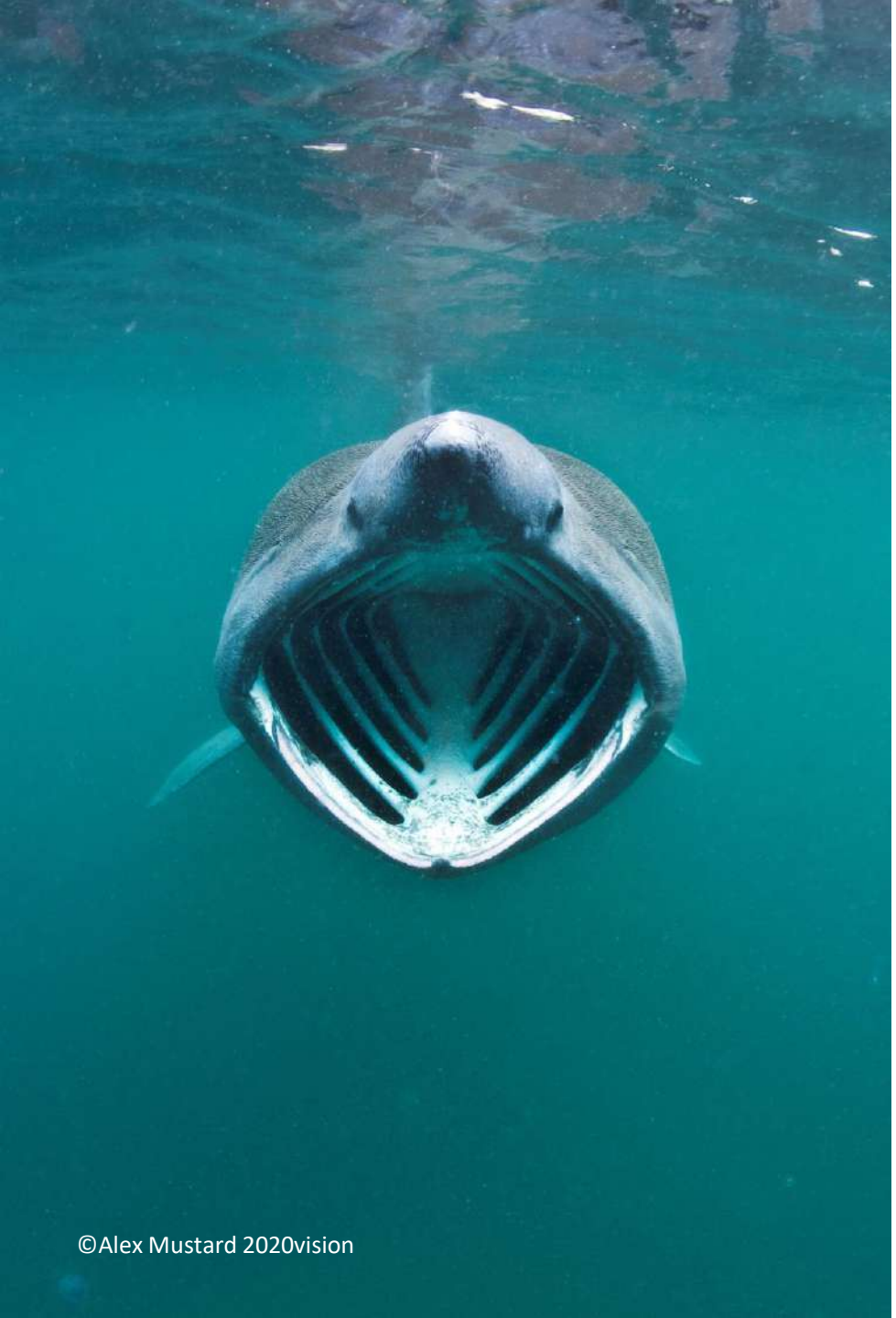
What should be done to ensure sustainable development of offshore wind?



Netherlands Marine Spatial Plan

Scale and need for spatial planning

- Is 75GW by 2050 achievable?
- Spatial marine planning will be essential in working out
- Will require cross government working to achieve
- Without this joined up approach, proposed ambition unlikely to be sustainable



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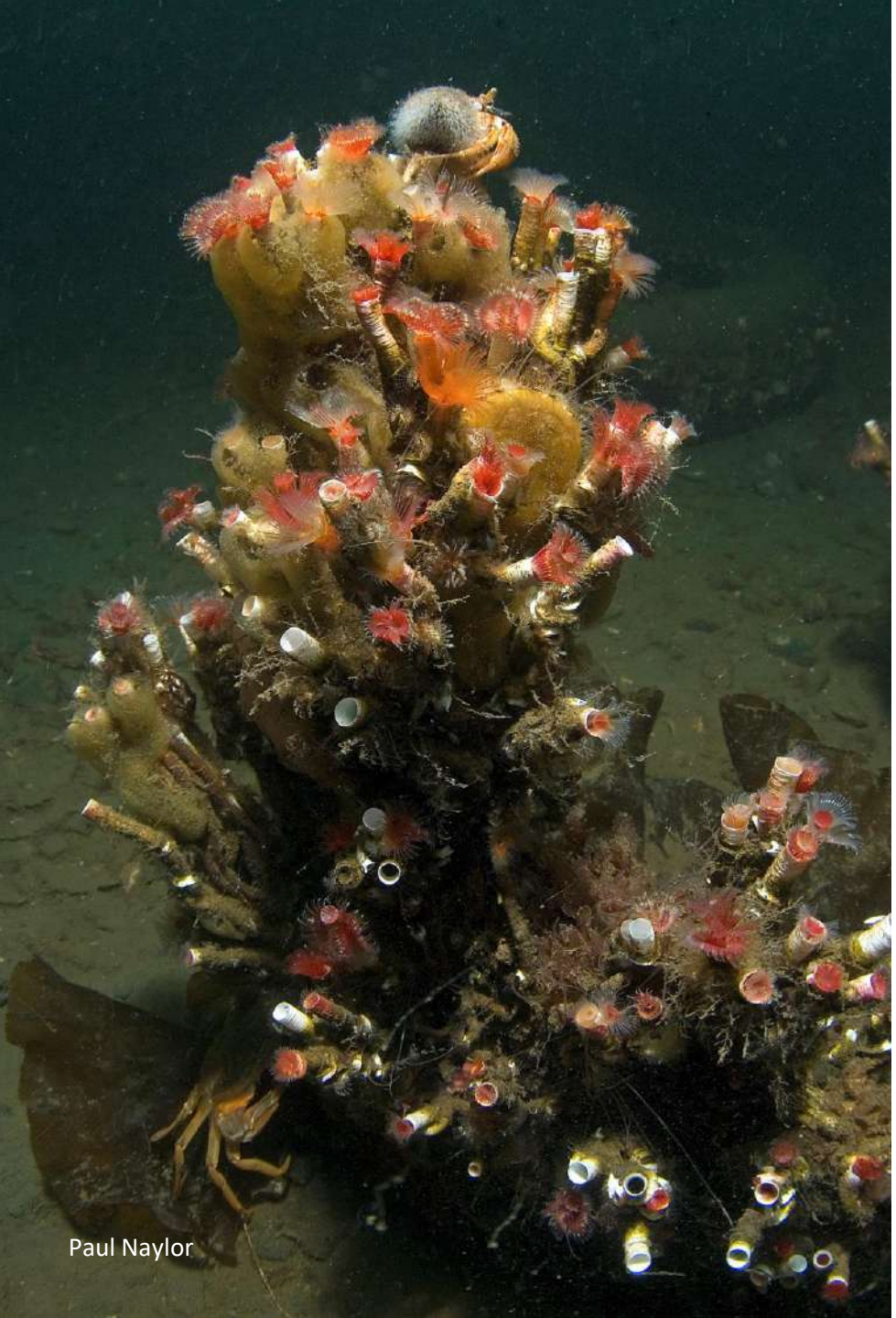
Managing impacts on the MPA network

- Ensuring a well managed and coherent network of MPAs
- But compensation already being explored for offshore wind farm developments
- Can compensation be delivered for scale projected by 2050?
- More emphasis on alternatives to avoid need for compensation
- Consideration of Good Environmental Status

Undewater noise impacts can be reduced

- Less noisy alternative are available
- Noise reduction techniques available and successfully used in countries such as Germany
- Currently little implementation in UK waters
- Future noise reduction will be required in harbour porpoise SACs
- But regulation will be complicated - equivalent of air traffic control
- Marine mammals ignore our boundaries – widers seas management required.


Paul Naylor

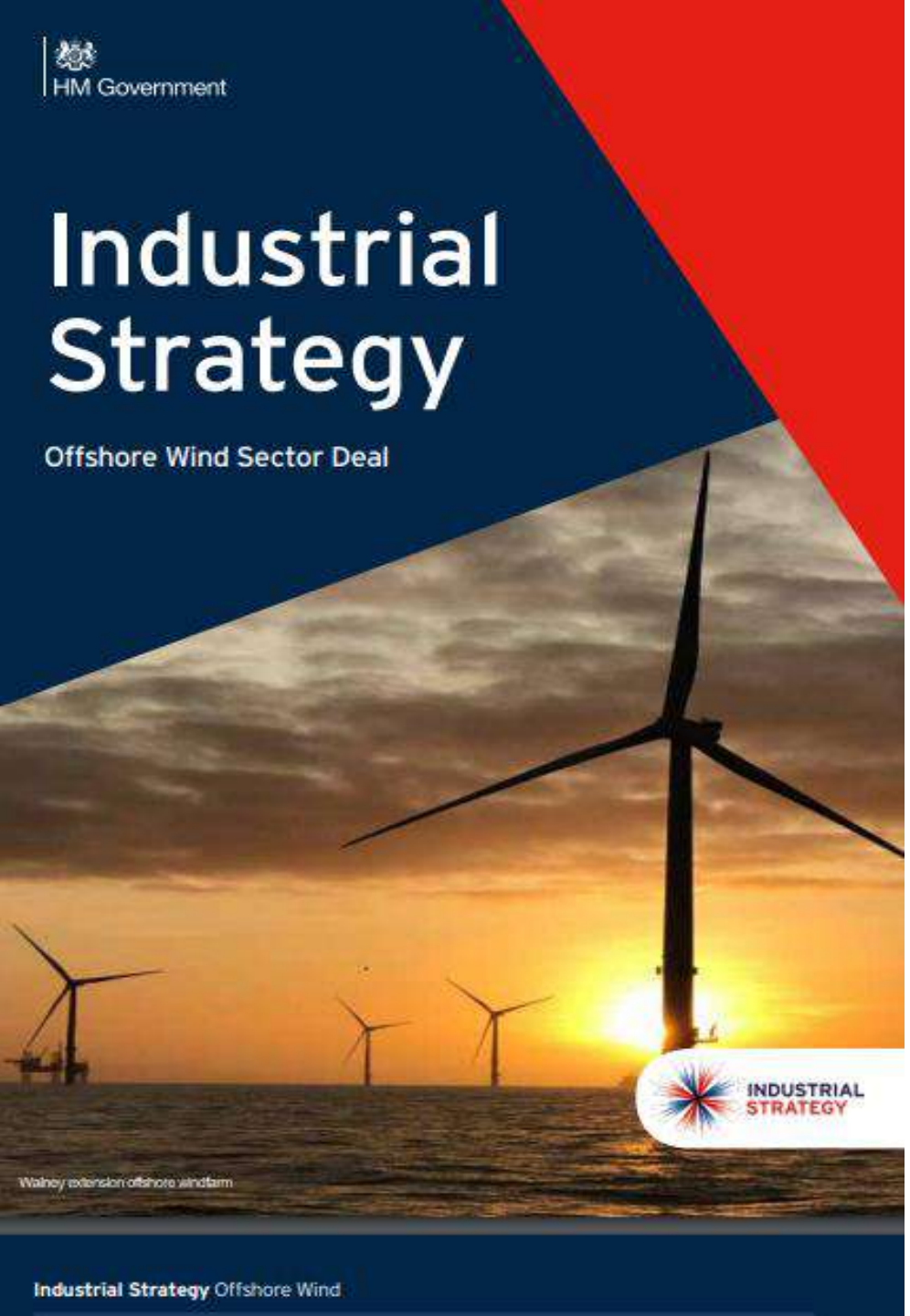
Cabling

- Cabling will become limiting factor for future offshore wind farm development
- Strategic approach required
- System not set up to deliver
- Review and regulatory change required


Emily Cunningham

Monitoring and learning

- Current monitoring is poor
- 20 years of offshore wind farm development – more could have been learned
- Strategic approach required



Working together

- Only way to deal with uncertainty is to work together
- The Crown Estate: Strategic Enabling Action Programme
- Bringing right people together to coordinate actions required

Our key asks

- Within ecological and environmental limits
- Strong decision making
- Evidence, research and tools
- Good ecological management

Thank you

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