ECOWind ECOFlow

Annual Impact Meeting

Strategic Compensation & Marine Net Gain

Session Chair: Dickon Howell

THE CROWN ESTATE

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UKRI Natural Environment Research Council

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Marine Net Gain in England

NATURAL ENGLAND

ERM

Department for Environment Food & Rural Affairs

Marine Net Gain in England

Net Gain – An approach to development that aims to leave the natural environment in a measurably better state than beforehand

Reverse the loss of marine biodiversity

- Habitat creation and restoration schemes
- Support for species management and recovery, such as predator reduction

Embed environmental improvement into the heart of infrastructure planning and development

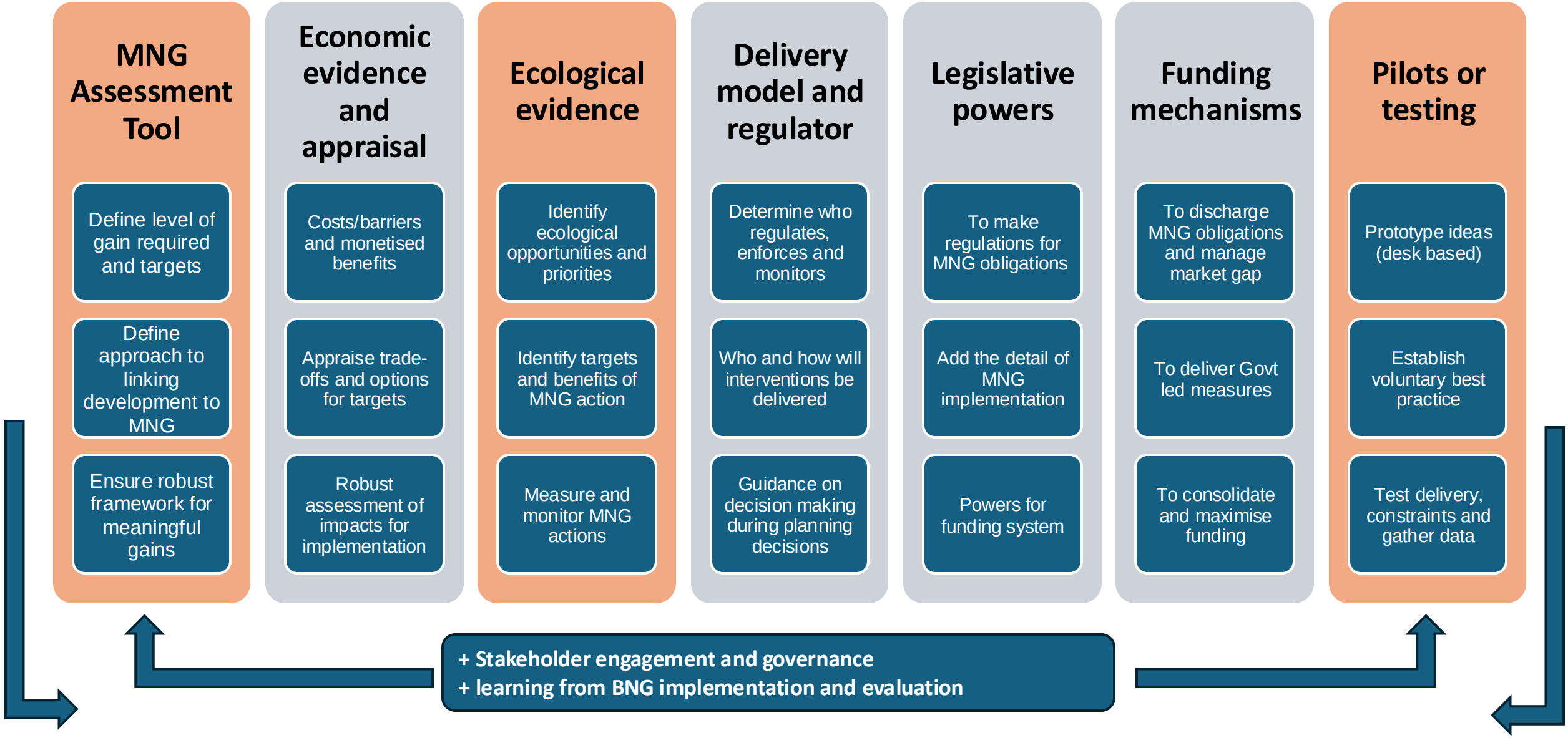
- Clear process for developers to demonstrate net gains
- Increasing natural capital assets

Leave the environment in a measurably better state than beforehand

- Secure additional recovery and restoration measures to contribute to national and international targets
- Reduce cumulative impacts and identify opportunities for enhancement

MNG Constraints

- Nature first regulatory framework
  - Proportionate
  - Accountable
  - Consistent / Repeatable
  - Transparent
  - Targeted
- Legally robust
- Limited additional economic burden


MNG Assessment Tool
Define level of gain required and targets
Define approach to linking development to MNG
Ensure robust framework for meaningful gains
Economic evidence and appraisal
Costs/barriers and monetised benefits
Appraise trade-offs and options for targets
Robust assessment of impacts for implementation
Ecological evidence
Identify ecological opportunities and priorities
Identify targets and benefits of MNG action
Measure and monitor MNG actions
Delivery model and regulator
Determine who regulates, enforces and monitors
Who and how will interventions be delivered
Guidance on decision making during planning decisions
Legislative powers
To make regulations for MNG obligations
Add the detail of MNG implementation
Powers for funding system
Funding mechanisms
To discharge MNG obligations and manage market gap
To deliver Govt led measures
To consolidate and maximise funding
Pilots or testing
Prototype ideas (desk based)
Establish voluntary best practice
Test delivery, constraints and gather data
+ Stakeholder engagement and governance
+ learning from BNG implementation and evaluation

Marine Net Gain Assessment Framework (MNGAF)

- Assess potential frameworks **to assess ecological losses and gains to inform MNG**
- Habitats and **species** (marine birds, mammals and fish)
- Only subtidal element
- Developing the evidence base to support the development of an MNG mechanism

Outcomes:

- Understanding across the sectors on the approach to measuring ecological loss and gain in the marine environment in a regulatory framework
- Recommendations on the development of an MNG framework for England

Assumptions for MNG from TAG

The delivery of MNG requires a strategic, spatial plan for nature restoration to set targets based on opportunity and priority. This should be explicitly linked to the UKMS GES indicators as the underlying environmental outcome for UK seas. Such a plan should allow for regional assessment alongside local delivery. It should explicitly link to the UKMS Programme of Measures (PoM)

Assumptions for MNG from TAG

Ecosystem modelling techniques should underpin environmental status assessment as well as the prioritisation and direction of MNG measures in a much more meaningful way than is currently used in regulatory decision making.

Whilst assessments of ecosystem functionality and dynamics are possible on a case by case basis, they have too much dynamic complexity within them (spatial, temporal, seasonal) to make connections between the contribution towards ecosystem functionality of different ecosystem components / features, or indeed the same components in different biogeographic spaces, that is precise enough to currently support a generic, regulatory, metric based approach for all descriptors.

Assumptions for MNG from TAG

The approach to developing a framework for MNG in the short term requires the ability to make decisions within consenting that are focused primarily on ecological loss and gain. This must allow for consistent, proportionate judgments on how the loss from a project relates to ecological targets, using techniques and evidence that are currently available.

The natural capital evidence base is not currently robust enough for ecosystem services and interactions between natural capital assets to be meaningfully used to quantitatively measure ecological change within the constraints required for a regulatory framework.

However, the natural capital approach is useful in understanding the relative ecological, social and economic value of different gain measures and informing decisions about how best to meet strategic environmental targets and should be informed further in this context

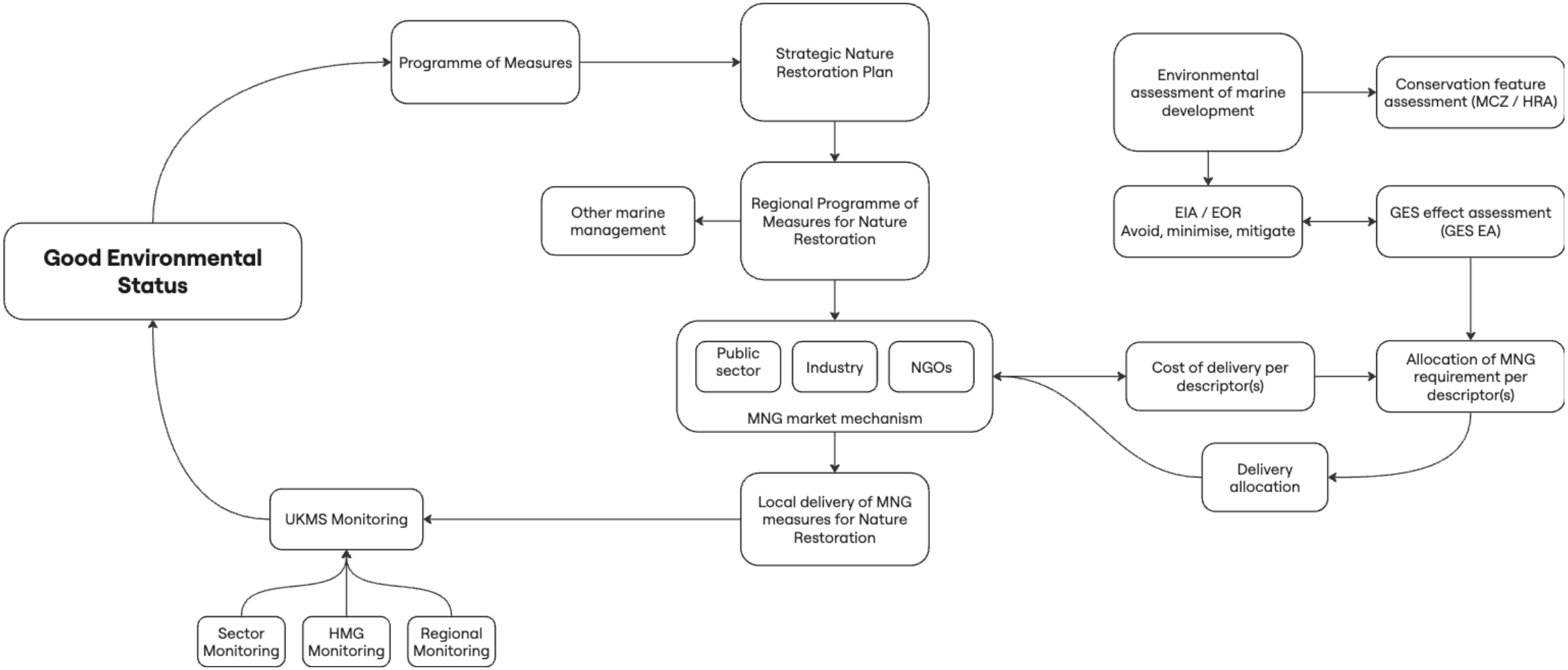
MNG Delivery Model

(*proposed draft developed by HMC for discussion purposes only*)

Approach to delivering MNG

- Strategic targets
- Alignment with other policy areas
- Common currency between targets and marine development
- Strong evidence base
- Needs to build on current technical capability and evidence

Proposal for an MNG delivery model



Questions for delivery proposal

What are the market constraints and opportunities?

How do you take an ecosystem approach to target setting?

How do existing policy and MNG measures interact?

How do you secure delivery of measures?

What is the scale of contribution of MNG to GES?

How does strategic nature restoration planning interact with other forms of planning?

How do we incentivise the need to improve GES?

Can you do GES EA with EIA data?

How does existing policy and MNG monitoring interact?

ECOWind and ECOFlow Annual Impact Meeting

Strategic Compensation

OffshoreWind IndustryCouncil

Strategic Compensation

The need

- Coordinated approach
- Reduce consenting delays

What's been approved

1. Designation/extension of MPA's (benthic)
2. offANS for kittiwake (Rd 4 - England only)
3. Mammalian predator reduction (seabirds)

Non-like-for-like

- Improve wider marine ecosystems
- Best ecological outcomes

Strategic Compensation Studies Overview

Aims

To investigate the **effectiveness** of certain strategic compensation measures through desk-based **feasibility case studies** and **practical pilots** to increase confidence and outline compensation options for the offshore wind industry

To create a **toolbox** of collaborative compensation lessons learnt, incorporating measures and a mechanism by which these can be **secured, delivered** and **relied upon** in plan and project consenting decisions

Objectives

- Develop and test a delivery mechanism(s) and governance arrangements to allocate benefits and share risks across multiple schemes
- Test and monitor potential strategic compensation measures through a series of practical pilots and desk-based studies
- Define and test the most appropriate approaches to monitoring and managing strategic measures (including adaptive management)
- Provide options that satisfy Habitat Regulations / Marine and Coastal Access Act compensation requirements for offshore wind plans and projects

Offshore Wind Evidence + Change Programme

Work Packages

Artificial Nesting Structures (ANS) - Site selection of optimum locations for ANS for auks, trialling ANS for multiple species, enhanced monitoring, roadmap for repurposing oil and gas infrastructure

Predator reduction - Avian predator opportunity, feasibility assessments – including delivery mechanism pilot, enhanced monitoring & biosecurity and efficacy of control measures

Habitat creation/restoration - Studies of non-like-for-like habitat opportunities and wider ecosystem benefits and monitoring of habitat recovery (sandbanks and reef).

Infrastructure Removal - Mapping of defunct infrastructure in Celtic Sea, review work carried out in Southern North Sea and monitoring removal of infrastructure for effectiveness

Delivery mechanism and Overarching Actions - Develop and test delivery mechanism - allocation of benefits and risk, enforcement, compliance etc, standardised approach to monitoring SC measures and adaptive management principles.
Overarching – compensation forecasting, good practice/lessons learnt, database of non-like-for-like measures and interconnectivity of seabirds with national site network study

Supporting measures - Supporting/trialling other SC measures, including bycatch trials and follow up work to test mitigation, red-throated diver opportunities and investigating measures that could support prey availability

Offshore Wind Evidence + Change Programme

Areas of interest – can you help!

- Enhanced monitoring kittiwake – diet (eDNA) studies
- Habitat creation/restoration – wider ecosystem benefits
  - Projects in delivery or being delivered 2025/26
  - What's already being looked at for wider benefits?
- Existing studies on interconnectivity of seabirds using national site network – ringing/tagging/tracking/GPS
- Bycatch mitigation

Ørsted

Compensation & Marine Net Gain

A need for more strategic approaches

Agenda

1. Current landscape
2. Barriers to enabling a strategic approach
3. Ørsted biodiversity framework
4. Future need

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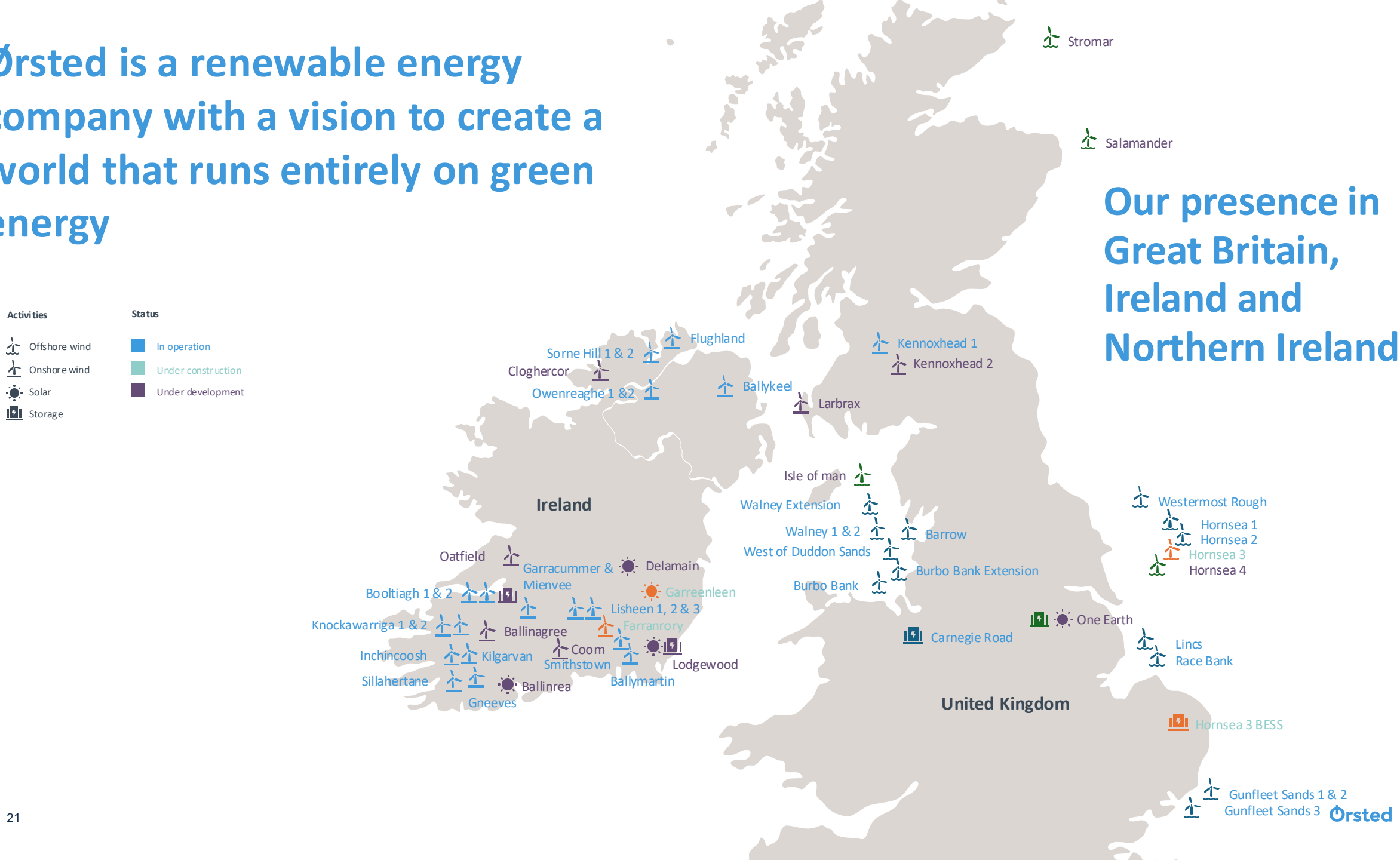
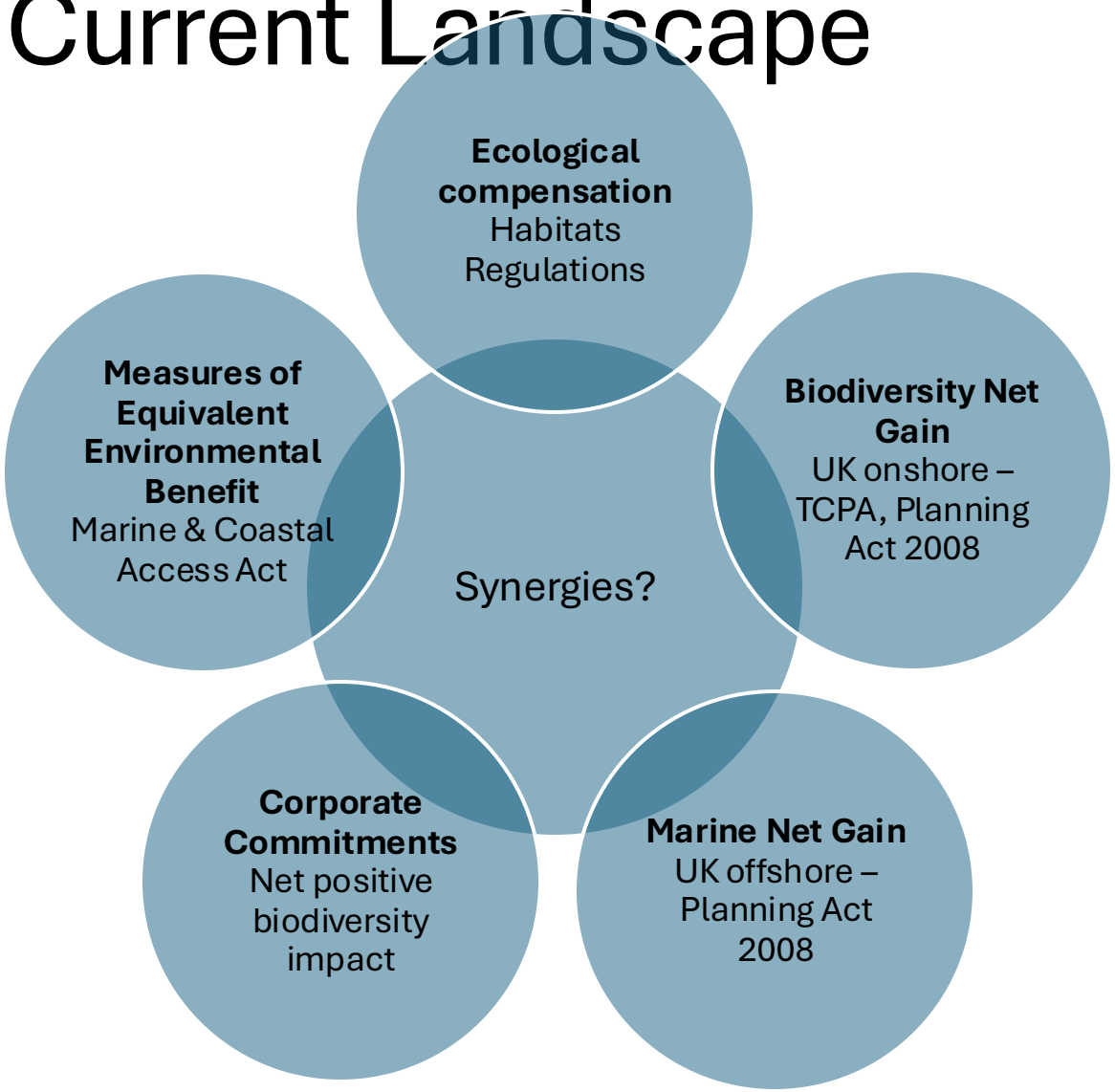
Ørsted

Ørsted is a renewable energy company with a vision to create a world that runs entirely on green energy

Our presence in Great Britain, Ireland and Northern Ireland



Current Landscape



Ørsted ambition that all new renewable energy projects we commission from 2030 onwards should deliver a net-positive biodiversity impact

Ørsted Biodiversity & Compensation Projects

Wilder Humber Partnership

Hornsea Three Artificial Nesting Structures

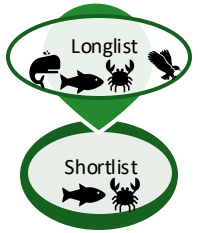
Barriers to Enabling a Strategic Approach

- Timing
- Precaution
- Assessment
- Additionality
- Traceability
- Tradeability

Ørsted Biodiversity Strategy steps

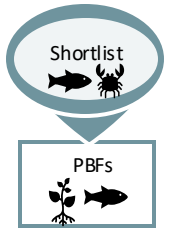
Step 1
Shortlist

- Review of biodiversity features to create longlist
- Screening to create shortlist



Step 2
PBFs

- Apply criteria to short list
- Identify Priority Biodiversity Features



Step 3
Scope

- Metrics for baseline
- Metrics for quantifying potential losses
- Metrics for quantifying potential gains

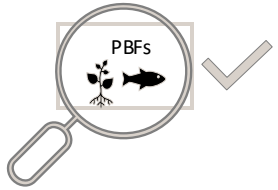
Baseline: [Sand/Gravel = 4]

Habitat: [Extent x Condition = Quality]

Species: [Number of individuals]

Step 4
Baseline

- Surveys to verify presence of Priority Biodiversity Features and measure the baseline



Step 5
Potential Losses

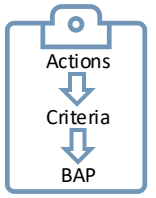
- Quantify Potential Losses
- Record in NPI Loss & Gain Tracker

Benthic impact m^2 x habitat type...

Total: 78

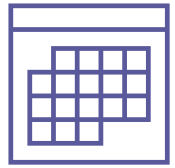
Step 6
Potential Gains

- Identify actions to achieve NPI
- Apply criteria to actions
- Develop Biodiversity Action Plan



Step 7
Action

- Implement the BAP
- Outline monitoring programme



Step 8
Report

- Track progress in NPI Loss & Gain Tracker
- Report results

Concluding remarks:

- Future needs
- Questions to be answered