

Offshore Wind Evidence + Change Programme

Programme Steering Group Meeting

Thursday 19 May 2022





Programme Overview

Programme overview

Projects

• £22.2 million committed into 23 projects and programme running costs + £11m match funding/in kind.

Processes

- <u>Project calls</u> lessons learned simplification, less stages
- Gap analysis clearer up front signalling of priorities / signposting critical evidence gaps

Publicity and Impact

- Newsletters, webinars, Marine Data Exchange (MDE)
- Coordination with other initiatives e.g. P2, ORJIP
- Outcomes and Impact Tracker



Programme overview *

Main Call Projects - POSEIDON, PrePARED, Seabird Tracking (£12m)

- Kicked off January
- Progress reporting systems/ templates / KPIs being developed

Pathfinder Projects completed this quarter

- Future Offshore Wind Scenarios, North Sea Net Gain
- Formalised project closure process

OWEC Projects Dashboard May 2022

Contains progress updates since the January 2022 PSG meeting for :

- Completed Projects
- Main Call Projects- £500,000 £5,000,000
- Intermediate Call Projects- £50,000 £500,000
- · Discretionary Projects up to £50,000
- · Pathfinder Projects started before 2021
- · Withdrawn Projects

All projects fit the Programme's Core Themes

Financial commitments

Our April 2022 end of year position is that £22.2m of the kick-start investment of £25m has been committed to projects and programme running costs.

Spatial co-ordination and co-location	To improve the understanding of environmental impacts and benefits
To increase strategic coordination of different activities and interests in the seaspace and onshore, opening-up new opportunities for offshore wind through co-location and innovation allowing multi-use of space.	Strategic research, evidence gathering and data sharing projects to: reduce impacts, uncertainty and risk, foster innovation, enabling more offshore wind to be deployed with confidence that impacts will not impede recovery of the environment and preservation of our cultural heritage.
To investigate the derogation process to unlock further offshore wind deployment	Delivery of net environmental gains
To investigate the availability and use of the Habitats Regulations Assessment (HRA) derogation process and Measures of Equivalent Environmental Benefit (MEEB) to help the consenting of offshore wind whilst maintaining the integrity of Marine Protected Areas – including alternatives and compensatory measures.	To investigate the delivery of net environmental gains to evidence and secure the benefits of deployment of offshore wind.

*See project dashboard for fuller update

Core themes for the Programme





Pathfinder project updates









ARUP





Department for Business, Energy & Industrial Strategy (BEIS), The Crown Estate (TCE), and Crown Estate Scotland (CES)

Future Offshore Wind

Future offshore wind scenarios: an assessment of deployment drivers

North Sea Net Gain project

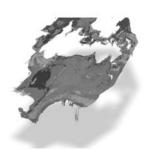
Project complete - April 2022

- An international collaboration which has brought together data from seven countries across the North Sea in order to enhance our understanding of seabed biodiversity
- "Big data" has been harnessed to produce detailed maps which model community types and distributions of key benthic species
- Developed infrastructure and enhanced data flows between UK and European data repositories
- Looks beyond international boundaries, with a view to informing the sustainable expansion of offshore wind
- Raw data & modelled layers are available via interactive web apps, and project report is published on the Marine Data Exchange
- Outputs already being used by other Offshore Wind Evidence and Change projects, including POSEIDON

OneBenthic Layers



Biodiversity models using big data

















Main call project updates

PrePARED Predators and Prey Around Renewable Energy Developments



Aim: to ↑ stakeholder confidence in response of protected marine mammal and seabird populations to potential OWF impacts + magnitude of cumulative impacts → derisking consenting

Gather new data on fish response to OWF

Understand how seabirds + marine mammals respond to changes in prey (fish) + OWF

Integration and use of new evidence in environmental impact assessments

↓ uncertainty
 in CIA

APRIL 2022

How are individual fish using turbine arrays?



84 acoustic receivers deployed in BOWL + Moray East OWFs; 50 cod + haddock tagged



JUNE/JULY 2022

How does fish distribution change with OWF construction and operation?

Fisheries acoustic surveys in and around OWFs in Moray + Forth



AUGUST 2022

How do turbines affect fish biomass, assemblages and diversity?

Baited remote underwater camera + video



DEVELOPER FUNDED JUNE-AUGUST 2022

Seabird + marine mammal behaviour

Seabird GPS tagging + MM passive acoustic monitoring



















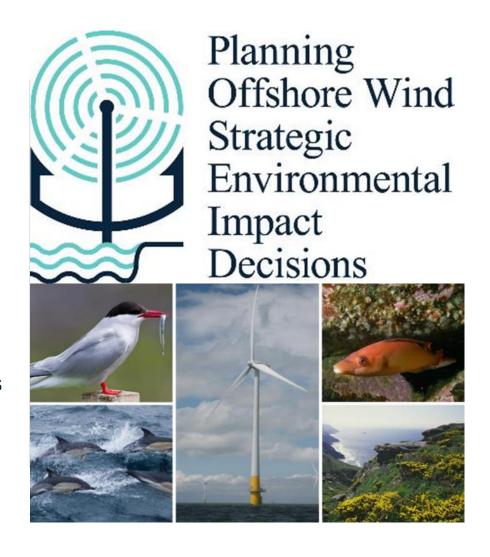




POSEIDON Project Update

Key Highlights January - May 2022

- 1. Project Advisory Group and two Technical Advisory Groups (Highly Mobile Species and Benthic) formed, with meetings and group work underway.
- 2. Contract for Mapping and Modelling of Seabirds and Mammals awarded.
- 3. Tender for benthic 2022 data collection advertised with surveys anticipated to start summer 2022.
- 4. Framework Agreement for Digital Aerial Surveys for birds and mammals prepared, with surveys anticipated to start Autumn 2022.
- 5. Work underway on Evaluation Framework and Communications & Engagement Plan.
- 6. Ongoing coordination with other initiatives.



The Remote Tracking of Seabirds at Sea

Background

- Aim: address uncertainty to facilitate sustainable and rapid expansion of offshore wind in the UK
- Includes: trialling new methods, filling critical knowledge gaps in movements and population consequences

Progress

- Contracts
- Project manager to be recruited
- Prototype tracking tags
- Off-bird testing by the Autumn





Pathways to Growth

Pathways to Growth

What is Pathways to Growth?

- Offshore Wind Sector Deal delivery workstream
- Focused on resolving consent and environmental challenges
- Supported by the P2G Coordination Group and Executive Board
- Aims to ensure actions complement and enhance the work of existing work programmes and strategic groups.
- Responsible for ensuring that there is a clear road map to resolve identified issues.

Executive P2G Board - Offshore Wind Chaired by Benjamin Sykes (OWIC)











P2G Co-ordination Group - Offshore Wind

Chaired by Brian McFarlane (OWIC)



NATURAL ENGLAND













Cyfoeth Naturiol Cymru Natural Resources Wales













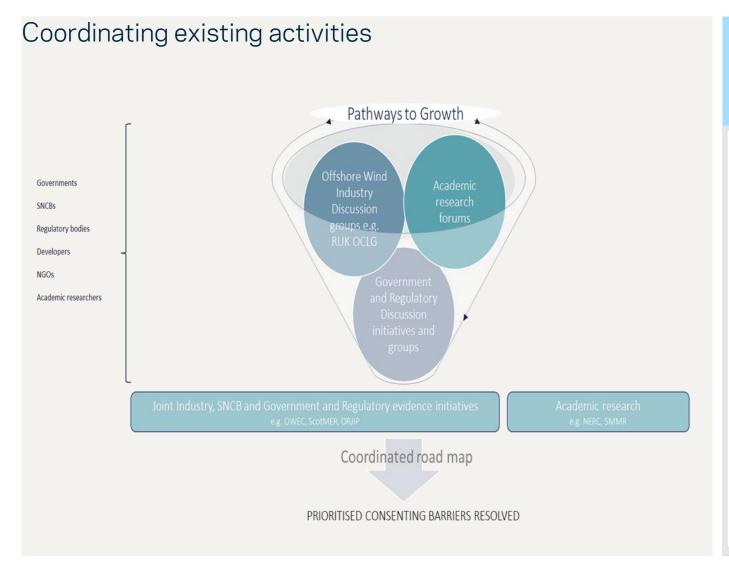






Plus offshore wind developer representatives

Pathways to Growth



Roadmap approach Pathways to Growth Barrier 4: Biodiversity and OSW. "Biodiversity policy targets may limit the amount of marine space available to meet the scale of fshore wind deployment required to meet 2030 and net zero targets." 2025 North Sea Net Gain project Collate existing evidence from developers and agree current understanding (GAP) EXISTING EVIDENCE GAINS AND OFFSHORE a series of nature positive trials at offshore wind sites [GAP] Review <u>EcoWind</u> projects [GAP] Agree and prioritise trials to be DESIGN AND commissioned [GAP] Set up and deliver trials [GAP] CONSTRUCTION OPTIONS THAT DELIVER MUTUAL BENEFITS agreed and adopted [GAP] Future Scenarios project Workshop: Consenting Definitions of biodiversity net gain and CONSENTING DECISIONS compensation measures in FAQ_[Cross risks and adequacy of TO MEET BIODIVERSITY ov Compensation Working Group) GOALS AND OFFSHORE

Interface to other barriers

Pathways to Growth: "Barriers to Growth"

1. Derogations	There isn't sufficient UK Government and Devolved Administration guidance available to define how to present a Habitats Regulations derogation case, define and deliver compensatory measures or principles to enforce and adaptively manage compensatory measures.
2. Resources	There is a shortfall in the required volume and range of skilled resources within the SNCBs and regulatory bodies to meet the demand in case work to deliver offshore wind 2030 and net zero targets.
3. CIA on Seabirds	There is a lack of certainty and consistency in the approach taken to estimate cumulative impacts on seabirds during the construction and operational phase.
4. Biodiversity	Biodiversity policy targets may limit the amount of marine space available for offshore wind deployment required to meet 2030 and net zero targets.
4. Marine Spatial Planning	The existing approaches to marine spatial planning across the UK do not currently provide clarity on how decisions are being made about the use of marine space to ensure there is adequate area available to meet 2030 and net zero offshore wind targets.
6. Future Policy	Opportunities to resolve policy or legislative challenges or to make improvements to wider policy delivery are missed leading to delays meeting UK net zero targets.
7. Underwater noise guidance	There is a lack of clear guidance on underwater noise management within harbour porpoise SACs (England and Wales specific).
8. Proportionate EIA	The volume of information required for offshore wind EIAs will continue to impact decision makers' resource availability, leading to delays during both consent application and preconstruction discharge of consent conditions.
9. Adoption of new research	There isn't a defined process or transparent way of communicating when and how evidence and research outcomes inform Government, SNCB and regulatory body positions on the impacts of offshore wind farms.
9. Strategic approach to data collection	The different approaches to collecting monitoring data at project sites across the UK is preventing development of a more coordinated, robust evidence base to support the understanding and potential resolution of uncertainty in offshore wind development.

Pathways to Growth and OWEC

OWEC Programme Core Themes

P2G relevant barriers and road mapped activities

Spatial coordination and colocation

- Barriers: Marine Planning; Biodiversity
- OWEC: East Coast Grid Spatial Study, Future Scenarios
- **P2G activities:** Identifying practical opportunities for coexistence and colocation based on existing evidence and need for further evidence gathering.

To improve the understanding of environmental impacts and benefits

- Barriers: Derogations; CIA in seabirds; Strategic Data; Adoption of new research; Underwater noise guidance.
- OWEC: OWEER, Knowledge and Evidence Hub, ECOWind
- P2G activities
 - Identifying evidence to analyse collectively across the UK.
 - Learning lessons— evice lie kntopadante to tembedding evidence in decision making.

To investigate the derogation process to unlock further offshore wind deployment

- Barriers: Derogations; Resources
- OWEC: Headroom in Cumulative Offshore Wind farm Impacts, OWEER, Future Scenarios
- **P2G activities:** Testing a delivery mechanism for strategic compensation through case studies and pilots.

Delivery of net environmental gains

- Barriers: Biodiversity; Marine Spatial Planning
- OWEC: Strategic Targets for Net Gain, Future Scenarios, ECOWind, NICE
- P2G activities: Agreeing lessons learnt to date, identifying design and construction standards that can be agreed now and identifying scope of work to support further standardisation where possible.

Applicable across all OWEC Programme Core Themes:

Barriers: Resources; Future Policy; Proportionate EIA

OWEC: Future Scenarios **P2G activities:**

- Reviewing and identifying opportunities to amend policy and legislation to support net zero targets.
- Offshore wind e-learning modules.
- Building training and development programmes for long-term careers in SNCBs and regulatory bodies.
- Implementing greater transparency in consenting casework demand to support resource planning.



Programme Forward Look

The Next Project Call

Changes

- Single call for projects up to £3m (inc. VAT)
- 2 submissions stages outline and full bid
- Focus on demonstrating delivering "real world impact" incl. priorities from gap analysis, Offshore Wind Environmental Evidence Register (OWEER) and British Energy Security Strategy (BESS).

Delivering at Pace

- Uplift to discretionary project max threshold from £50k-£100k, with immediate effect
- Welcome views on what more.

Delivering Impact

- Outcomes and impact tracker capturing and monitoring "benefits", programme legacy.
- Project impact reviews "what has changed as a result of this project?"



Outcomes - Impact Tracker

Project Name: Strategic Targets for Net Gain (PIP No. 016)						
High Level Outcome	By When	Outcomes Likelihood (RAG Rating)	Expected Impact & Measurement Method	Impact Review Dates	Impact Type	Impact Owners
A robust set of recommended strategic targets for marine net gain (MNG), which have strong consensus and agreement from industry, regulators and conservation bodies.	High Level Outcome - Achieved		Expected Impact: The recommended strategic net gain targets to be used by Defra to inform development of MNG policy and principles through the Offshore Wind Enabling Actions Programme (OWEAP). Measured: via feedback received as part of the Project Impact Review. Also, views / downloads of the report published on the Marine Data Exchange (MDE).	09/09/2022 (six months post-project completion) 09/03/2023 (one year post-project completion)	To be confirmed as part of Project Impact Review - For example 'Influencing policy'	Impact Owner/s: Strategic Net Gain T&F Group - named individual contacts confirmed and approved Consulted / Informed: TCE



Outcomes - Impact Tracker

Project: Ornithological Headroom (PIP No. 005)						
High Level Outcome	By When	Outcomes Likelihood (RAG Rating)	Impact & Measurement Method	Impact Review Dates	Impact Type	Impact Owners
Provide greater certainty on the use of as-built scenarios in impact assessment for offshore windfarms in order reduce over precaution in assessment and enable offshore windfarm development.	Example: by project completion unless agreed otherwise		As a result of the project, text has been included within the Draft National Policy Statement for renewable energy infrastructure (EN-3) which aims to address several of the report's recommendations. The report and webinar are available on the Marine Data Exchange (MDE) and have seen high engagement. TCE will continue to monitor the impact of the report and look to engage with stakeholders in enabling progress against the recommendations. Also measuring impact via feedback received as part of the project evaluation, including Project Impact Review/s.	six months (post-project completion) One year (post-project completion)	To be confirmed as part of Project Impact Review - for example 'Influencing policy'	Impact Owner: BEIS Consulted / Informed: MMO, Defra (under OWEAP), TCE



Outcomes - Impact Tracker

Project Name: Offshore Wind Environmental Evidence Register (OWEER) (PIP No. 014)

High Level Outcome	By When	Outcomes Likelihood (RAG Rating)	Expected Impact & Measurement Method	Impact Review Dates	Impact Type	Impact Owners
Identification of research gaps and potential strategic projects UK-wide for ecological receptors (Fish / Marine Mammals / Ornithology / Benthic), to ensure targeted research projects and support prioritisation.	Example: by project completion unless agreed otherwise		That OWEER is used to prioritise evidence gaps which are then addressed by forthcoming research projects. Measured through reference to the OWEER in research submissions and through addressing of research gaps. Also, feedback received as part of the project evaluation, including Project Impact Review/s. Note that the OWEER has been referenced in submissions to the EcoWIND project, and OWEC submissions.	six months (post-project completion) (one year post-project completion)	To be confirmed as part of Project Impact Review - for example 'Influencing policy'	Impact Owner/s: Defra, JNCC Consulted / Informed: TCE



Definitions

- > **Output -** Outputs refer to the results (for example, reports, webinars, datasets etc.) of the project and which shall be published in such a manner so as to ensure that the Output is freely available for use (i.e. via the Marine Data Exchange and/or equivalent). In this context, 'Outputs' is encompassed by the definition of 'Final Report' as set out in the Project Funding Agreement.
- > Outcome The conditions created which have the potential to enable and affect real-world change and value (social, environmental and/or economic). For example, recommendations made that could be used in future policy.
 - > **High Level Outcome** in this context, refers to a summary of the Project's *overarching and priority outcomes*.
- > **Impact** The evidenced *real-word change and value* (social, environmental and/or economic) created by the Outputs and Outcomes. For example, national policy that has been influenced or changed by the project's Outputs and Outcomes.
- ➤ **Impact Owner -** Organisation and role/s responsible for *driving the High Level Outcome forward* (leading on Outcome delivery and enabling it to effect real-world Impact) and for the *completion of the Project Impact Review* (in coordination with TCE). This includes responsibility for *evidencing the project's Impact*.

Outputs

Project results including final reports and associated items (e.g. workshop webinars, datasets, tools)

Outcomes

The influence, changes and value the Outputs enable or have created the conditions for (e.g. recommendations, increased and improved access to data)

Impacts

The evidenced real-world changes and value created by the Outputs and Outcomes (e.g. policy influenced by project recommendations)





British Energy Security Strategy

OWEC & the British Energy Security Strategy

- Reducing consent time from up to four years down to one year.
- Strengthening the Renewable National Policy Statements to reflect the importance of energy security and net zero.
- Reviewing the way in which the Habitats Regulations Assessments are carried out for all projects
 making applications from late 2023 to maintain valued protection for wildlife, whilst reducing reams of
 paperwork.
- Implementing a new Offshore Wind Environmental Improvement Package including an industry-funded Marine Recovery Fund and nature-based design standards to accelerate deployment whilst enhancing the marine environment.
- Working with the Offshore Wind Acceleration Task Force; a group of industry experts brought together to work with Government, Ofgem and National Grid on further cutting the timeline.
- Establishing a fast-track consenting route for priority cases where quality standards are met, by amending Planning Act 2008 so that the relevant Secretary of State can set shorter examination timescales.



BESS

- Supporting Government ambition to accelerate offshore wind and ensure that environmental improvement is delivered
- Working at pace, a lot is still to be fully designed, this represents our current thinking

HRA Reform

- Review the way that the offshore wind industry HRA's are undertaken and provide recommendations of how to do this more efficiently and identify how Government could usefully supplement HRA
- Define what can be included as compensatory measures and provide an explanation around additionality
- Workshops with developers and technical experts to identify the sites
 / receptors that we can reasonably assume would be impacted with
 R4 or in the near future.

Strategic compensation

- We will use the existing strategic compensation working groups to develop a 'library' of strategic compensation measures.
- We will introduce iterative environmental measures, including for projects already in the system, to offset environmental effects and reduce consenting times;

Marine Recovery Fund (MRF)

- Developing an offshore wind industry funded MRF as an optional framework for developers to deliver strategic MPA compensatory measures.
- Could also potentially deliver strategic Marine Net Gain (MNG) interventions in the future which would include wider in-scope marine industries.
- Working on the basis that the MRF can be operable UK wide as the BESS makes UK wide commitments. We will involve Devolved Administrations in designing the fund.

Nature-based design standards

- We will implement minimum requirements to reduce environmental impact. E.g. mandatory use of noise management techniques, avoidance of particular seabed habitat types and minimum hub heights to reduce bird collision risk.
- Creating a task and finish group with industry experts to develop commercially feasible design requirements, designed to mitigate risks to specific types of habitat or species

Energy Bill

- Using Energy Bill to bring in any primary legislation required
- Will be a form of formal consultation in June, likely to only be a week
- More detailed discussions in summer