RWE Renewables UK Dogger Bank South (West) Limited

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Dogger Bank South Offshore Wind Farms

Environmental Statement

Volume 7

Appendix 18-10 - Biodiversity Net Gain Strategy

June 2024

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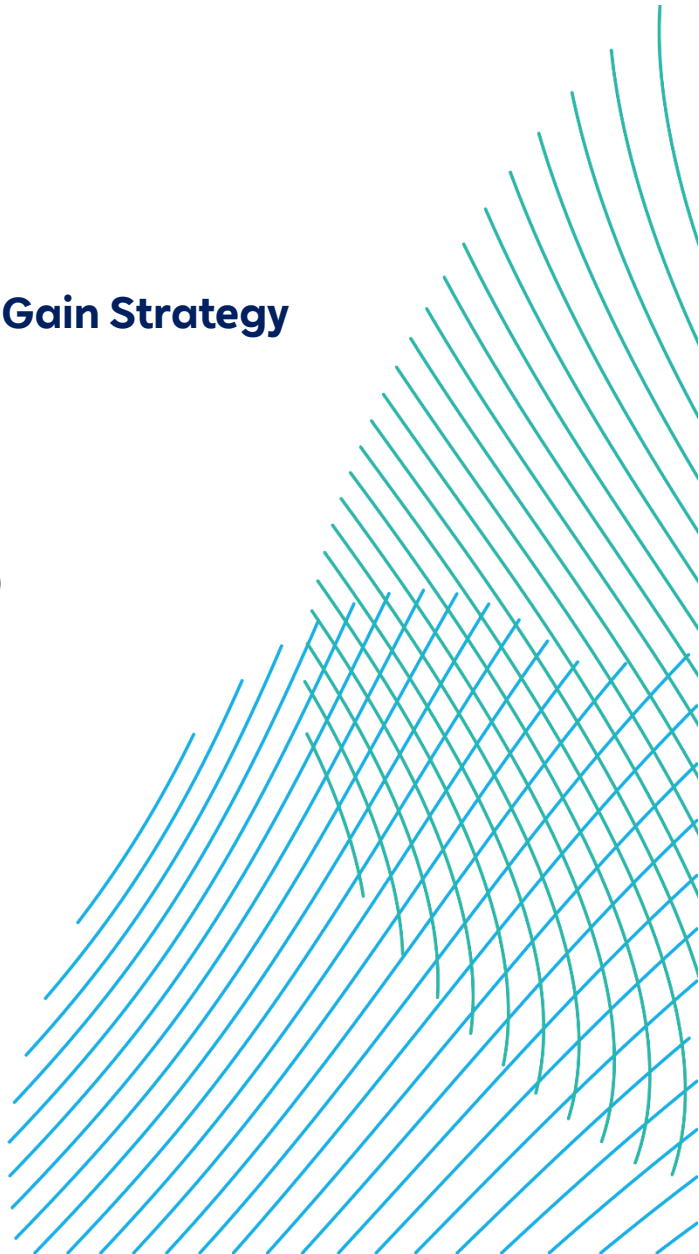

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Glossary

Term	Definition
Biodiversity Net Gain Strategy	A Biodiversity Net Gain Strategy is a document that shows how a project will achieve BNG. The final strategy should be based upon detailed design and include detail of the legal and financial mechanisms to secure BNG measures, including long term management and monitoring.
Biodiversity Net Gain (BNG)	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected to ensure that the current loss of biodiversity through development will be halted and ecological networks can be restored.
Biodiversity Unit (BDU)	A proxy value for biodiversity, calculated by the Statutory Metric. There are three subcategories of BDU, Habitat Unit, Hedgerow Unit and Watercourse Unit. These are defined by the module type used to calculate their value. The values of different BDU types are not transferable and cannot be summed, i.e., one Habitat Unit does not equal one Hedgerow Unit, and cannot be used to mitigate for its loss.
BNG Study Area	Terrestrial and intertidal habitats above the MLWS mark which are contained within the Onshore Development Area. The BNG Study Area forms the extent of this assessment. Habitats below the MLWS mark are considered marine and outside of this assessment.
Temporary Construction Compound	An area set aside to facilitate the construction of the Projects. These will be located adjacent to the Onshore Export Cable Corridor and within the Onshore Substation Zone, with access to the highway.

Term	Definition
Habitat composite	X% of baseline habitats, where impacts are taking place in an unknown location which account for X% of an area. For example, if a Haul Road location is unknown but is expected to cover 10% of an application boundary area, then it is assumed that 10% of each habitat type within the application boundary will be affected. If a proportion of the application boundary area has known activities within a known location, then these areas may be excluded from the habitat composite calculation.
Habitat reinstatement	Replacement of soils and replanting of the habitat. Habitat restoration starts at the point of reinstatement.
Habitat restoration	Starts at the point of habitat reinstatement when soil, hydrological and vegetative conditions are returned to baseline. Full habitat restoration is achieved when the baseline habitat type and condition is achieved. This may take a number of years, depending on the habitat type and condition required.
Horizontal Directional Drill (HDD)	HDD is a trenchless technique to bring the offshore cables ashore at the landfall and can be used for crossing other obstacles such as roads, railways and watercourses onshore.
Module	Calculator within the biodiversity statutory metric used to assess different habitat types. There are three module types: habitat, hedgerow and watercourse. These are used to calculate the values of different habitat types. Each module generates its own type of Biodiversity Unit.
Temporary habitat loss	Habitats which are fully restored to their original habitat type and condition within two years of impact.
Trenchless Crossing Zone (TCZ)	Areas where trenching is not used to cross obstacles such as hedgerows, habitats or other receptors. Includes HDD or other techniques for installation of ducts or cables where trenching may not be suitable such as micro tunnelling or auger boring.

Acronyms

Term	Definition
BDU	Biodiversity Unit
BNG	Biodiversity Net Gain
CIEEM	Chartered Institute of Ecology and Environmental Management
DBS	Dogger Bank South
DCO	Development Consent Order
Defra	Department for Environment Food and Rural Affairs
HDD	Horizontal Directional Drill
TCZ	Trenchless Crossing Zones
MLWS	Mean low water spring tide mark
NCA	National Character Area

18.10 Biodiversity Net Gain Strategy

18.10.1 Introduction

1. Royal HaskoningDHV was commissioned by the Applicants to prepare a Biodiversity Net Gain (BNG) Strategy for the Dogger Bank South (DBS) Offshore Wind Farms (herein 'DBS' or 'the Projects'), to accompany the Projects' Development Consent Order (DCO) application under the Planning Act 2008.

2. This report sets out the strategy of assessing and securing BNG for the onshore elements of the Projects, and includes the following:

   - A summary of the relevant legal and policy background;
   - The proposed outline approach to delivering BNG for the Projects;
   - The proposed approach to calculating Biodiversity Units required to secure BNG for the Projects; and
   - The deliverables associated with the Projects' BNG assessment.

3. Reporting and assessment herein is based on the reasonable worst case BNG impacts, resulting from the sequential construction scenario. With regard to BNG, this is considered the reasonable worst case scenario as it would require the greatest quantum of habitat disturbance, and therefore BNG requirement. Further detail on these assumptions is provided within section 18.10.4 below.

4. This Strategy will be updated post-consent once the full design detail of the Projects is known. The updated Strategy will be submitted for approval prior to implementation.

18.10.1.1 Biodiversity Net Gain Overview

5. The Environment Act 2021 sets out provisions for delivering "*Biodiversity gain in planning*" for developments in England. The delivery of 10% BNG for nationally significant infrastructure projects (NSIPs) is anticipated to be mandated for applications from November 2025 onwards via secondary legislation. At the time of writing, the Applicants' delivery of BNG in relation to the Projects is therefore voluntary.

6. Defra (2023a) defines BNG as "*a way to contribute to the recovery of nature while developing land. It is making sure the habitat for wildlife is in a better state than it was before development*". This is achieved through the retention, enhancement, and creation of habitats of biodiversity value, on or off-site.

7. Biodiversity calculators, such as the 'Statutory Metric', hereafter referred to as the "Metric", published by Defra (2023a), allow developers to quantify the biodiversity value of their site pre- and post-development. In doing so, the amount of biodiversity compensation that is required to achieve a measurable BNG can be calculated.

8. At the time of writing, planning policy encourages developers of NSIPs to seek opportunities to provide BNG. As such, the Overarching National Policy Statement for Energy (EN-1) states appropriate weight should be given to environmental and Biodiversity Net Gain in the determination of NSIP applications (Department for Energy Security and Net Zero [DESNZ], 2024). Further information on the legislation and policy relevant to BNG is provided within section 18.10.1.4 below.

18.10.1.2 Purpose of this Report

9. This report seeks to:

- Set out the Projects' approach to, delivering no net loss of biodiversity and net gain where possible;
- Set out key assumptions that have been used when determining biodiversity values; and
- Identify and justify any anticipated or unavoidable deviations from the Statutory biodiversity metric standard guidelines.

18.10.1.3 Assessor Technical Competence

10. The Defra BNG technical guidance (Defra, 2023d) states a BNG assessment should be carried out by a competent person. This states, "*A competent person has the knowledge and skills to perform specified tasks to complete and review biodiversity metric calculations. You obtain this through training, qualifications, experience, or a combination of them*".

11. This report was written by a Royal HaskoningDHV Principal Ecologist with over 9 years' experience as a professional ecological consultant. They are an Associate member of CIEEM and therefore follows CIEEM's code of professional conduct (CIEEM, 2022). In addition, they are a qualified botanist with a Level 4 Field Identification Skills Certificate (FISC) from Botanical Society of Britain and Ireland (BSBI) and have extensive experience conducting BNG assessments for a range of project types and sizes.

12. Additional technical review, support and quality assurance was provided by the Royal HaskoningDHV Terrestrial Ecology Practice Lead. They are a full member of CIEEM and a Chartered Environmentalist, with over 20 years' experience as a professional ecologist.

13. Both the author, and technical reviewer of this report surpass the criteria for 'competent person' (Defra, 2023d).

18.10.1.4 Policy and Legislation

14. This BNG strategy has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework, from which the protection of sites, habitats and species is derived in England:

- The Environment Act 2021 (2021 Act);
- Planning Act 2008 (2008 Act);
- National Policy Statements for energy infrastructure EN-1, EN-3 and EN-5 (DESNZ, 2024);
- The Natural Environment and Rural Communities Act 2006 (NERC); and
- ERYC Local Plan Strategy Document (2016).

15. Section 99 and Schedule 15 of the 2021 Act will mandate the provision of BNG for NSIPs by inserting secondary amendments into the 2008 Act. It is anticipated that Section 99 and Schedule 15 will be brought into force in November 2025.

16. The 2021 Act outlines Local Nature Recovery Strategies (LNRS) as a mandatory requirement for local policy to contribute to the wider Nature Recovery Network (NRN) across England. County-wide LNRS will reflect local biodiversity priorities and be used to inform targeted off-site compensation for BNG. NPS EN-1 Section 4.6.12 states "*If published, the relevant strategy is the Local Nature Recovery Strategy (LNRS). If an LNRS has not been published, the relevant consenting body or planning authority may specify alternative plans, policies or strategies to use*". A LNRS does not currently exist for East Riding of Yorkshire Council, however a strategy is set to be complete by early 2025.

17. The 2008 Act as amended by the 2021 Act sets out provisions regarding the preparation of biodiversity gain statements, being a statement of government policy in relation to the biodiversity gain to be achieved in connection with NSIP developments. A biodiversity gain statement must set out a biodiversity gain objective of at least 10%. for developments to which the statement relates.

18. The 2008 Act as amended by the 2021 Act would provide that, where the relevant national policy statement contains a biodiversity gain statement, or a separate biodiversity gain statement has been issued, the Secretary of State may not grant an application for an NSIP unless satisfied that the biodiversity gain objective contained in the biodiversity gain statement is met in relation to the development to which the application relates.

19. The Defra (2023b) policy paper sets out that, once brought into effect, at least 10% measurable net gain will be required and must be maintained for at least 30 years. Legal and financial provision would therefore be required over this period for the maintenance of habitat areas that are essential to the delivery of the project's BNG.

20. The Overarching National Policy Statement for Energy (EN-1,), which came into force 17th January 2024, states that "*Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible*" (DESNZ, 2024).

21. EN-1 goes on to state within Section 4.6.3 that "*The Secretary of State should give appropriate weight to environmental and biodiversity net gain, although any weight given to gains provided to meet a legal requirement (for example under the Environment Act 2021) is likely to be limited*." This indicates that voluntary BNG delivery, before the November 2025 mandatory date, should be positively weighted in the planning decision.

22. The National Policy Statement for Electricity Networks (EN-5) Section 2.5 deals with BNG, and notes *"When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to: i. reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or ii. connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements."*

23. Section 40 of The NERC Act outlines the duty in of a public authority to consider what action the authority can properly take to further the general biodiversity objective, which is the conservation and enhancement of biodiversity in England through the exercise of functions in relation to England.

24. Policy ENV4 of the East Riding of Yorkshire Council Local Plan Strategy Document states "proposals should seek to achieve a net gain in biodiversity where possible" (East Riding of Yorkshire Council, 2016).

18.10.2 Methods – Delivery of Biodiversity Net Gain

18.10.2.1 Overview

25. BNG is an approach to development activities that leave the natural environment in a measurably better state than it was before.

26. BNG works with and does not replace the mitigation hierarchy. Primarily avoiding impacts on ecological receptors, as per the mitigation hierarchy, minimises the need for providing compensation for losses. If losses are encountered and impacts cannot be avoided, other tiers of the mitigation hierarchy, and therefore BNG compensation and enhancement, should be sought. Additionally, the mitigation hierarchy applies to all ecological receptors, whilst BNG calculations are based purely on habitat data and delivery of BNG may not sufficiently compensate for all potential ecological receptors, for example European Protected Species (EPS).

27. BNG does not replace existing legal requirements and it should not be applied to compensate for effects on irreplaceable habitats. Bespoke compensation to address losses and deterioration of irreplaceable habitats needs to be agreed on a case-by-case basis with the determining body or planning authority (in this case East Riding of Yorkshire Council) The post-development sheets of the Metric cannot include any bespoke compensation to address specific losses and deterioration of irreplaceable habitats.

28. The Projects will follow industry best practice for BNG, and namely adhere to the ten principles developed by CIEEM, IEMA and CIRIA (CIEEM, *et al.*, 2016), summarised in **Table 18-10-1**. Even though **Table 18-10-1** is based on guidance produced in 2016, these principles remain relevant.

Table 18-10-1 BNG good practice principles for development, taken from CIEEM, CIRA and IEMA (2016) Biodiversity net gain good practice principles for development.

Principle	Description
Principle 1 – apply the mitigation hierarchy	Primarily avoid and then minimise impacts on biodiversity. Compensation for losses that cannot be avoided should only be used as a last resort, and in agreement with external decision-makers. If compensation for losses is not possible within the development footprint or does not generate the most beneficial outcome for nature conservation, then biodiversity losses should be offset by gains elsewhere.

Principle	Description
Principle 2 – avoid losing biodiversity that cannot be offset by gains elsewhere	Impacts should be avoided in areas considered to have 'irreplaceable biodiversity'. Such impacts cannot be offset to achieve no net loss or net gain.
Principle 3 – be inclusive and equitable	Stakeholders should be engaged early in the project and involved in design, implementing, monitoring and evaluating the approach to net gain. Net gain should be achieved in partnership with stakeholders where possible and the benefits shared fairly among stakeholders.
Principle 4 – address risks	Any difficulties, uncertainties, and other risks to achieving net gain will require mitigation. Best practice and industry accepted methods should be used to add contingency when calculating biodiversity losses and gains, to account for risks and compensate for the period between losses and gains to establish.
Principle 5 – make a measurable net gain contribution	Achieve a measurable, overall net gain of biodiversity and ecosystem services provided while also directly contributing towards nature conservation priorities.
Principle 6 – achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when: • Delivering ecologically proportional compensation which accounts for type, timing, amount, condition and location of losses; • Compensating for losses of on type of biodiversity using a more beneficial type for nature conservation; • Achieving net gain at local, regional and national levels; • Enhancing existing or creating new habitat; and • Enhancing ecological connectivity.
Principle 7 – be additional	Achieve nature conservation outcomes that exceed existing obligations and enhance biodiversity.

Principle	Description
Principle 8 – create a net gain legacy	Ensure net gain has long-term benefits by: • Engaging stakeholders when agreeing practical solutions that ensure net gain is achieved; • Plan for the adaptive management and funding for long-term management of net gain sites; • Net gain design should be resilient to external factors, especially climate change; • Avoid displacing negative and harmful activities from one location to another; and • Support local-level management of net gain activities.
Principle 9 – optimise sustainability	BNG should be a priority, as well as optimising wider environmental benefits for a sustainable society and economy.
Principle 10 – be transparent	All net gain activities should be communicated in a transparent and timely manner, sharing findings with stakeholders.

29. To adhere to principle 5 and ensure net gain is 'measurable', the Projects will be using the Metric. The Metric uses habitat types as an indicator of biodiversity in an area, based on the assumption that if a suitable habitat is present species will colonise it. As a result, use of the Metric does not account for species-specific compensation, mitigation, and enhancement.

30. Along with technical competence highlighted in section 18.10.1.3, the competent person will ensure any Metric outputs are interpreted using ecological expertise to inform Projects plans and decisions.

31. The Metric can be used to inform and optimise project planning, design, land management and decision-making (Defra, 2023d). The Metric uses habitats and the 'Biodiversity Units' they generate as a proxy to indicate the biodiversity value of an area. These Biodiversity Units are the 'currency' of the Metric that quantify biodiversity value.

32. There are three types of Biodiversity Unit (BDU) in the Metric, which are calculated in three separate habitat 'modules' of the Metric:

    - Habitat Units – these are calculated within the Area Module and apply to habitats measured in hectares (ha), such as grassland and woodland;

- Hedgerow Units – calculated within the Hedgerow Module, these apply to linear hedgerows and lines of trees measured in km; and
- Watercourse Units – calculated within the Watercourse Module, these apply to linear freshwater habitats such as rivers, streams and ditches which are measured in km.

33. The Defra Metric calculation of the change in biodiversity resulting from a project or development is made by deducting the baseline unit value of a development area from the number of post-development Biodiversity Units. Post-development units incorporate temporary and permanent losses resulting from the Projects, along with the value of any mitigation, compensation, and enhancement measures also part of the Projects.

34. As well as habitat type and quantity for area, hedgerow and watercourse habitats, various factors and multipliers are considered to produce the Biodiversity Unit values for each module, namely:

- **Habitat distinctiveness**: "*a measure based on the type of habitat and its distinguishing features. This includes consideration of species richness, rarity, the extent to which the habitat is protected by designations and the degree to which a habitat supports species rarely found in other habitats*" (Defra, 2023d);
- **Habitat condition**: "*a measure of the habitat against its ecological optimum state. Condition is a way of measuring variation in the quality of patches of the same habitat type.*" (Defra, 2023d);
- **Strategic significance**: a factor that "*describes the local significance of the habitat based on its location and the habitat type.*" (Defra, 2023d); and
- **Other risks and multipliers**: the Metric also accounts for potential risks in the forms of multipliers, including the difficulty, temporal and spatial risks associated with post-development habitat management. This incorporates the feasibility for projects realistically achieving their BNG targets.

35. The Statutory Metric can be used throughout all stages of a project, however the earlier it is applied, the greater the opportunity and benefit to design for biodiversity and wider ecological benefits.

18.10.2.2 Rules and Principles of the Defra Biodiversity Metric

18.10.2.2.1 Defra Biodiversity Metric rules

36. The Metric has four rules which must be followed, otherwise a project cannot claim to have achieved BNG. These rules will be followed by the Projects and are outlined below in **Table 18-10-2.**

Table 18-10-2 Defra Metric rules (taken from The Statutory Biodiversity Metric User Guide [Defra, 2023d]).

Rule Number	Rule Description
Rule 1	The trading rules of this metric must be followed.
Rule 2	Biodiversity unit outputs are unique to this metric. The results of other metrics, including previous versions of this metric, are not comparable to those of this metric. The three types of Biodiversity Units generated by this metric (area, hedgerow, and watercourse) cannot be summed, traded, or converted between modules. The requirement to deliver at least a 10% net gain applies to each type of unit.
Rule 3	To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool
Rule 4	In exceptional ecological circumstances, deviation from this metric methodology may be permitted by the relevant consenting body or planning authority. Any deviation must be fully justified and evidenced.

37. Rule 1, also referred to as the BNG 'trading rules', set out the minimum level of habitat creation or enhancement in order to compensate for losses of specific habitats based on their distinctiveness. The Metric trading rules are set out below in **Table 18-10-3**.

Table 18-10-3 Summary of the trading rules to compensate for habitat losses (taken from The Statutory Biodiversity Metric User Guide [Defra, 2023d]).

Baseline Habitat Distinctiveness	**Area Module (Habitat Units)**	**Hedgerow Module (Hedgerow Units)**	**Watercourse Module (Watercourse Units)**
Very high	Priority should be given to replacing losses with area Habitat Units of the same habitat type.	Losses must be replaced with hedgerow units of the same habitat type.	Priority should be given to replacing losses with watercourse units of the same habitat type
High	Losses must be replaced with Habitat Units of the same habitat type.	Losses must be replaced with hedgerow units of the same habitat type or higher distinctiveness band.	Losses must be replaced with watercourse units of the same habitat type.
Medium	Losses must be replaced by Habitat Units either: Medium distinctiveness habitats within the same broad habitat type. OR Any habitat from a higher distinctiveness band (from any broad habitat type).	Losses must be replaced with hedgerow units of the same or higher distinctiveness band.	Losses must be replaced with watercourse units of the same habitat type.
Low	Losses must be replaced with Habitat Units of the same or higher distinctiveness band.	Losses must be replaced with hedgerow units of the same or higher distinctiveness band.	Losses must be replaced with watercourse units of the same or higher distinctiveness band.

Baseline Habitat Distinctiveness	Area Module (Habitat Units)	Hedgerow Module (Hedgerow Units)	Watercourse Module (Watercourse Units)
Very low	N/A	Losses must be replaced with hedgerow units of the same or higher distinctiveness band.	N/A

38. Rule 4 states "*In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority*". Therefore, if irreplaceable habitats are present within the development boundary and specific losses or deterioration cannot be avoided, bespoke compensation will be required to address this which also considers all relevant up-to-date policy, legislation, and regulations. Such compensation will include stakeholder consultation and will be agreed upon on a case-by-case basis with the determining body or planning authority. All irreplaceable habitats must be recorded in the irreplaceable habitat sheet within the Metric.

39. Some very high distinctiveness habitats are considered to be irreplaceable habitats, but not all. Regardless, very high distinctiveness habitats also require bespoke compensation if their losses or deterioration cannot be avoided by a development. However, bespoke compensation is not required for very high distinctiveness hedgerows.

40. Ancient woodland irreplaceable habitat is not a specific habitat type and is therefore not an option in the habitat categories presented in the Metric. For example, it can include ancient semi-natural woodlands, plantations on ancient woodland sites and also ancient woodland pasture / parkland.

41. Individual ancient and veteran trees can be found within a variety of habitats, such as hedgerows, lines of trees, woodland, open habitats and urban settings. Where ancient or veteran trees occur, they should be considered and recorded as irreplaceable habitat.

18.10.2.2.2 Defra Metric principles

42. In addition to the Metric rules and BNG good practice principles set out within **Table 18-10-1**, there are nine principles set out by Defra (Defra, 2023d) which should be used to inform best use of the Metric. These principles will be followed by the Projects and are summarised in **Table 18-10-4**.

Table 18-10-4 Statutory Biodiversity Metric principles which must be followed to inform the use of the Metric (The Statutory Biodiversity Metric User Guide [Defra, 2023d]).

Principle Number	Principle Description
Principle 1	The metric assessment should be completed by a competent person.
Principle 2	The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.
Principle 3	This Metric should be used in accordance with established good practice guidance and professional codes.
Principle 4	This Metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
Principle 5	Biodiversity units are a proxy for biodiversity and should be treated as relative values.
Principle 6	This Metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
Principle 7	Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
Principle 8	Created and enhanced habitats should seek, where practical and reasonable, to be local to any impact and deliver strategically important outcomes for nature conservation.
Principle 9	The Metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to: • Maintain habitat extent - supporting more, bigger, better and more joined up ecological networks; and • Ensure that proposed or retained habitat parcels are of sufficient size for ecological function.

18.10.2.3 Proposed Approach

43. For the Projects to deliver BNG where possible, the approach proposed below will be followed. This approach covers project-specific requirements such as defining key terms, baseline data needs, pre-consent calculations and post-development approach.

44. The Projects' BNG Assessment and Metric Assessment only apply to terrestrial and intertidal habitats within the BNG Study Area. The BNG Study Area is defined as all terrestrial habitats within the Projects Onshore Development Area, as defined within the Environmental Statement **(Volume 7, Appendix 18-2 Habitat Survey Report, Appendix C (application ref: 7.18.18.2))**. This includes all habitats within the mean low water spring tide mark (MLWS). Habitats beyond the MLWS mark are considered marine and outside the scope of this assessment.

45. With regard to Marine Net Gain (MNG), which is currently in its very early stages, Defra published a summary of responses on 21st March 2023 following a 12-week consultation period in 2022. It is unknown when MNG will become statutory, however this is expected to be after the Projects construction and therefore is not currently considered as part of the Projects.

18.10.2.3.1 Defining Terms

46. In order to discuss BNG and the use of the Metric to calculate gains and losses, there are a number of specific terms which must be used. These are defined below.

18.10.2.3.1.1 Strategic Significance

47. As part of using the Metric, all habitats within each module require input of a strategic significance value. Where Local Nature Recovery Strategies (LNRS) are yet to be published, as is the case within ERYC, Table 8 of the Statutory Biodiversity Metric User Guide (Defra, 2023d) is applied.

48. In order to determine strategic significance of each habitat, consideration of a range of local policies, strategies and action plans were used. Defra (2023d) identifies the following plans, policies and strategies that may influence strategic significance:

- Draft Local Nature Recovery Strategies;
- Local Plans and Neighbourhood Plans;
- Local Planning Authority Local Ecological Networks;
- Tree strategies;

- Areas of Outstanding Natural Beauty (AONB) management plans;
- Biodiversity Action Plans;
- Species and protected sites conservation strategies;
- Woodland strategies;
- Green Infrastructure (GI) strategies;
- River basin management plans;
- Catchment plans and catchment planning systems;
- Shoreline management plans; and
- Estuary strategies.

49. Plans, policies, and strategies relevant to the Projects and BNG strategic significance assessment include:

- UK Biodiversity Action Plan (BRIG, 2011); and
- East Riding Local Plan (ERYC, 2016).

50. Following the consideration of local plans, policies and strategies, the definitions in **Table 18-10-5** of each level of strategic significance were prepared for the Projects. These definitions were used to determine the strategic significance score of each habitat present within the Projects' BNG Study Area.

Table 18-10-5 Levels of strategic significance

Strategic Significance	Habitat Criteria
High	• Sites of Specific Scientific Interest (SSSI); • Special Areas of Conservation (SAC) and Special Protected Areas (SPA); • Local Wildlife Sites (LWS); • Locally important sites such as ancient woodland, veteran trees, and other irreplaceable habitats (Defra, 2023c); and • NERC Act 2006 Section 41 priority habitats.
Medium	• Areas and habitats immediately adjacent to the above sites for nature conservation, with potential to support the features of interest of the site or buffer impacts to them;

Strategic Significance	Habitat Criteria
	• Areas which meet local LWS selection criteria but are not designated as such; and, • Areas of land and habitats identified in Natural England's habitat network mapping data including information on habitat restoration-creation, restorable habitat, plus fragmentation action, and network enhancement and expansion zones.
Low	• All remaining habitats which do not meet the above criteria.

18.10.2.4 'On-site' and 'Off-site'

51. Habitats within the Metric are considered as either on or off-site. Distinguishing between these two categories allows for consideration of Principle 8, detailed within **Table 18-10-4**, which aims to incentivise BNG delivery local to the point of impact.

52. Broadly speaking, on-site compensation is given a higher weighting and therefore benefit versus off-site compensation. The weighting of off-site compensation further decreases as the distance from the point of impact increases. This is quantified through 'Spatial Risk' multipliers within the Metric, as summarised in **Table 18-10-6** below.

53. The Defra (2023d) Statutory Biodiversity Metric Draft User Guide defines the terms 'on-site' and 'off-site' as:

- **On-site**: "*All land within a red line boundary of a development*".
- **Off-site**: "*Off-site for the purposes of the metric calculation tool means land outside of the onsite boundary, which is dedicated to habitat interventions (habitat enhancement or creation), regardless of proximity or ownership*".

54. For the purposes of this strategy, the Defra (2023d) definitions of on-site and off-site have been interpreted as follows:

- **On-site**: BNG Study Area which aligns with the onshore and intertidal habitats within the Onshore Development Area, submitted with the Projects ES.
- **Off-site**: This refers to all other areas outside of the BNG Study Area.

Table 18-10-6 Summary of spatial risk multipliers, demonstrating the number of compensator Biodiversity Units required when delivered on-site versus off-site. Multiplier values taken from the Metric (Defra, 2023a).

Category / Distance of BNG compensation from point of impact	Multiplier	Ratio of Biodiversity Units required vs on-site compensation
Compensation inside Local Planning Authority (LPA) boundary or National Character Area (NCA) of impact site. For intertidal habitats, compensation inside Marine Plan Area of impact site	1	1:1
Compensation outside LPA or NCA of impact site, but in neighbouring LPA or NCA. For intertidal habitats, compensation outside same Marine Plan Area but in neighbouring Marine Plan Area	0.75	1:1.33
Compensation outside LPA or NCA of impact site and neighbouring LPA or NCA. For intertidal habitats, compensation outside Marine Plan Area of impact site and beyond neighbouring Marine Plan Area	0.5	1:2

18.10.2.5 Baseline Data Collection

55. Habitat surveys of the BNG Study Area were carried out between 2022 and 2023, full details and methods are provided within **Volume 7, Chapter 18 Terrestrial Ecology Appendix 18-2 Habitat Survey Report (application ref: 7.18)**.

56. Where necessary, habitats were converted from UKHab to align with the habitats included within the Metric. Conversions were carried out in accordance with the habitat translations included tab "G-1 All Habitats" of the Metric (Defra, 2023a), unless otherwise specified.

18.10.2.5.1 Assumptions and Limitations

57. The majority of habitats within the BNG Study Area were subject to field surveys, with the exception of a small number of inaccessible road verges. These areas have been assessed using aerial mapping and mapped accordingly using best professional judgement and a proportionate level of precaution as to avoid undervaluing, in accordance with the precautionary principle, (Defra, 2023d).

58. River condition assessments (RCA) were not carried out as part of the baseline habitat surveys. Once design details have been finalised post-consent, RCA may be required of any watercourses which would be affected.

18.10.2.6 Stakeholder Consultation

59. Stakeholder consultation was carried out to assess on-site and off-site BNG delivery opportunities. This included East Riding of Yorkshire Council, Natural England, Yorkshire Wildlife Trust, the Environment Bank, and a number of private stakeholders.

18.10.3 Baseline Conditions

60. No degradation of habitats was carried out prior to the baseline habitat surveys being completed. The habitat surveys completed in 2022 and 2023, which have informed this assessment, are therefore taken to represent the baseline biodiversity value of the BNG Study Area.

18.10.3.1 Summary of Habitats Present

61. The BNG Study Area is predominantly of agricultural use and dominated by Cropland, which accounts for over 80% of the total land cover. The remaining areas comprise a combination of woodland, grassland, wetland, scrub, urban, freshwater and hedgerow habitats.

62. Irreplaceable habitats (as defined under The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024) recorded within the BNG Study Area include small (below 3ha per habitat block) areas of lowland fen and ancient woodland.

18.10.3.2 Baseline Metric Calculations

63. Full metric assessments of baseline habitats present within the BNG Study Area are provided within **Annex A - Biodiversity Metric, on-site habitat baseline and creation** and **Annex B - Biodiversity Metric, on-site hedgerow and watercourse baseline and creation**.

64. The biodiversity value of the BNG Study Area, by module, is:

- 1085.1 Habitat Units (values exclude irreplaceable fen and ancient woodland habitats, as per best practice [Defra (2023d]);
- 104.4 Hedgerow units; and
- 28.04 Watercourse units.

65. **Table 18-10-7**, **Table 18-10-8** and **Table 18-10-9** below provide summaries of the habitats present and their biodiversity value, per module type (area, hedgerow, and watercourse, respectively).

Table 18-10-7 Summary of baseline Habitat Units and area per habitat type within the Projects BNG Study Area.

Habitat Type	Area (ha)	Distinctiveness	Suggested action to address habitat losses	Habitat Units
Horticulture	4.29	Low	Same distinctiveness or better habitat required ≥	8.58
Arable field margins cultivated annually	2.07	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	8.28
Arable field margins tussocky	1.82	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	7.28
Arable field margins pollen and nectar	1.83	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	7.32
Arable field margins game bird mix	0.28	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	1.12
Temporary grass and clover leys	15.36	Low	Same distinctiveness or better habitat required ≥	30.72

Habitat Type	Area (ha)	Distinctiveness	Suggested action to address habitat losses	Habitat Units
Cereal crops	269.91	Low	Same distinctiveness or better habitat required ≥	539.82
Non-cereal crops	81.79	Low	Same distinctiveness or better habitat required ≥	163.58
Fens (upland and lowland)	1.73	V.High	Bespoke compensation likely to be required	2.56
Other neutral grassland	11.89	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	103.28
Modified grassland	22.04	Low	Same distinctiveness or better habitat required ≥	50.96
Bramble scrub	0.42	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	1.68
Hawthorn scrub	0.04	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	0.32
Mixed scrub	0.07	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	0.52
Ponds (non-priority habitat)	0.14	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	1.12

Habitat Type	Area (ha)	Distinctiveness	Suggested action to address habitat losses	Habitat Units
Watercourse footprint	0.24	V.Low	Compensation Not Required	0
Maritime cliff and slopes	0.17	High	Same habitat required =	2.04
Littoral sand	14.37	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	114.96
Vegetated garden	0.14	Low	Same distinctiveness or better habitat required ≥	0.28
Developed land; sealed surface	24.18	V.Low	Compensation Not Required	0
Other woodland; broadleaved	2.85	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	33.48
Other woodland; mixed	0.9	Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	7.2
Total	**456.53**			**1085.1**

Table 18-10-8 Summary of Hedgerow Units recorded at baseline within the Projects BNG Study Area.

Habitat Type	Length (km)	Distinctiveness	Suggested action to address habitat losses	Hedgerow Units

Native hedgerow	11.9	Low	Same distinctiveness band or better	55.32
Species-rich native hedgerow	4.21	Medium	Same distinctiveness band or better	45.12
Ecologically valuable line of trees	0.56	Medium	Same distinctiveness band or better	3.96
Total	**16.67**			**104.4**

Table 18-10-9 Summary of Watercourse Units recorded at baseline within the Projects Study Area BNG Study Area.

Habitat Type	Length (km)	Distinctiveness	Suggested action to address habitat losses	Watercourse Units
Other rivers and streams	0.18	High	Same habitat required	2.16
Ditches	4.7	Medium	Same habitat required	25.88
Total	**4.48**			**28.04**

18.10.4 Proposed Design, Strategy and Assumptions

66. Full details of the Projects proposals, including worst case scenarios are set out within **Volume 7, Chapter 5 Project Description (application ref: 7.5) and Volume 7, Chapter 18 Terrestrial Ecology and Ornithology (application ref: 7.18)**. For the purposes of this assessment, a number of additional assumptions have been made and detailed below. This includes assumptions for impacts, construction methods, habitat reinstatement, habitat creation and/or enhancement and development. All assumptions apply to habitats within the BNG Study Area.

18.10.4.1 Broad Strategy and Assumptions

67. The development proposals will require **temporary** and **permanent** habitat losses throughout the BNG Study Area.

68. For BNG purposes, temporary losses are defined as habitats which are fully restored to their original habitat type and condition within two years of impact. Temporary losses can be discounted from habitat loss calculations (Defra, 2023d), substantially reducing BNG impacts. Construction methods will therefore be adapted where possible to minimise habitat loss durations and reduce BNG impacts. Further details of which are provided in section 18.10.4.2.2 below.

69. It should be noted that full habitat restoration takes multiple years for most habitat types (as shown within **Table 18-10-10**). However, it is considered that subject to soils being reinstated in accordance with the Soil Management Plan, cropland habitats are fully restored once their soils have been replaced. Therefore, losses of this habitat type can be classified as temporary, subject to soil reinstatement being completed within two years of impact.

18.10.4.2 BNG Assumptions – Area Module (Habitat Units)

70. At the time of writing, the location of construction activities within the Onshore Development Area are mostly unknown, except for the locations of:

- The trenchless crossings zones, which use Horizontal Directional Drilling (HDD) or other trenchless techniques such as micro tunnelling or auger boring;
- Temporary Construction Compounds;
- Works within intertidal habitats;
- Substation Construction Zones; and
- The Onshore Substation Zone.

71. Where specific construction locations are unknown the effect upon habitats cannot be assessed. Therefore, to provide an indicative assessment, average habitat values from within the BNG Study Area can be used as a proxy. Those habitats which are known to be retained or impacted by other activities are excluded from the average value. This value is defined as a '**habitat composite**'. For the purpose of this assessment, the area used to calculate habitat composites comprises the Onshore Development Area, minus the areas of works listed in paragraph 70.

18.10.4.2.1 Retained Area Habitats

72. All habitats within the c. 41.9ha Landfall Zone (29ha terrestrial, 12.9ha intertidal) **(Volume 7, Figure 5.3a Onshore Development Area Indicative Design (application ref: 7.5.1))** will be retained throughout the construction and post-development phase with the exception of:

- Up to 3.2ha of terrestrial habitats used for Temporary Construction Compounds, including the Transition Joint Bay (TJB) Compound, Temporary Construction Compound and a TJB Temporary Construction Compound (approximately 11% of Landfall Zone terrestrial habitats, i.e., habitat composite value);
- Up to 0.12ha within the intertidal area which will be area required for up to 6 trenchless crossing exit pits (20x10m each); and
- Up to 6.3ha area of Onshore Export Cable Corridor. This area will be subject to temporary disturbance as detailed in section 18.10.4.2.2 below.

73. Other habitats which will be retained include:

- All habitats beneath Trenchless Crossing Zones (TCZ);
- All intertidal habitats within the emergency beach access route (though it should be noted that protective matting may be installed within this area. This area will be monitored should emergency access be required); and
- All areas of irreplaceable habitat, specifically areas of ancient woodland and lowland fen, categorised as 'Woodland and forest - Other woodland; broadleaved' and 'Wetland - Fens (upland and lowland)' within the Metric.

74. All other area habitats within the Onshore Development Area are anticipated to be subject to disturbance (such as temporary or permanent losses) as a result of the Projects.

18.10.4.2.2 Temporary Losses (restored within two years)

75. Temporary losses can be discounted from habitat loss calculations if baseline habitats can be restored (defined as a reinstated habitat reaching its baseline habitat type and condition) within two years (Defra, 2023d).

76. Habitats which can be restored within two years are generally limited to cropland habitats, though some grassland and heathland and scrub and non-priority pond habitats are also capable of this (as shown within **Table 18-10-10**).

77. Conversely, if the habitat type takes longer than two years to establish and/or the baseline condition cannot be achieved within two years (e.g., most woodland habitats require 30+ years to establish and achieve moderate condition) then no losses can be considered temporary.

78. The construction phase of the Projects is anticipated to take up to six years. However, some areas within the Onshore Development Area will have habitat reinstatement (defined as replacement of soils and replanting of the habitat, restoration starts at the point of reinstatement) started within one to two years. Once soils have been appropriately reinstated (in accordance with the **Appendix A, Soil Management Plan** of the **OCoCP (Volume 8, application ref: 8.9**), cropland habitats are considered to have been fully restored to their original habitat type and condition. Subject to this being complete within a two year period, effects on these habitats are considered temporary and therefore, can be discounted from the BNG habitat loss calculations (see **Table 18-10-10** below).

79. It is assumed that the habitats within the ducted sections of the cable route (between the Jointing Bays), and associated soil storage area will have their soils reinstated within two years. The exact area and location of the ducted cable route sections are unknown at the time of writing. However, as a worst-case, they are assumed to comprise all habitats within the Onshore Development Area, excluding areas which have been identified within the following sections of this report:

- 18.10.4.2.1 Retained Area Habitats;
- 18.10.4.2.3 Permanent Habitat Loss or Creation; and
- 18.10.4.2.4 Habitat Reinstatement Starting Upon Completion of Construction.

80. The area of the ducted sections of the cable route and associated soil storage are estimated to equal approximately 152.76ha. Approximately 153.34ha of this comprise cropland habitats which can be restored within two years (i.e. temporary losses).

81. It is assumed that 50% of the Temporary Construction Compounds and associated soil storage (approximately 14.33ha) will be reinstated within two years. It is assumed that low value cropland habitats will be reinstated first (to allow for a worst-case loss assessment). Impacts within these areas are therefore classified as temporary losses and discounted from the metric calculations.

82. The design and location of the Haul Road is yet to be determined and therefore, the following assumptions have been made:

- The Haul Road will run the length of the c.34km cable corridor (including the Onward Cable Connection between the Onshore Converter Station(s) and proposed Birkhill Wood National Grid Substation);
- It will be 5m wide, with a 5m wide soil storage area running parallel to the route;
- The total footprint will be 10m wide, covering an area of 34.13ha;
- 50% of the Haul Road and soil storage area will be reinstated within two years; and
- Low value cropland habitats will be reinstated first (to allow for a worst-case loss assessment).

*Table 18-10-10 Time in years for newly created habitats to achieve target condition. Habitat list limited to those recorded within the Dogger Bank South Windfarm Onshore Development Area (data adapted from the Metric [Defra, 2023d]). *Reserved for habitats which cannot achieve poor, moderate or good condition due to habitat type. **habitats considered to be restored once soils have been appropriately reinstated (full details provided within section 18.10.4.2.2).*

Habitat Type Undergoing Restoration	Years to 'Good' condition	Years to 'Moderate' condition	Years to 'Poor' condition	Years to 'Condition Assessment N/A'*
Cropland - Horticulture	N/A	N/A	N/A	1**
Cropland - Arable field margins cultivated annually	N/A	N/A	N/A	1**
Cropland - Arable field margins tussocky	N/A	N/A	N/A	1**
Cropland - Arable field margins pollen and nectar	N/A	N/A	N/A	1**
Cropland - Arable field margins game bird mix	N/A	N/A	N/A	1**
Cropland - Temporary grass and clover leys	N/A	N/A	N/A	1**
Cropland - Cereal crops	N/A	N/A	N/A	1**
Cropland - Non-cereal crops	N/A	N/A	N/A	1**

Habitat Type Undergoing Restoration	Years to 'Good' condition	Years to 'Moderate' condition	Years to 'Poor' condition	Years to 'Condition Assessment N/A'*
Wetland - Fens (upland and lowland)	30	20	10	N/A
Grassland - Other neutral grassland	10	5	2	N/A
Grassland - Modified grassland	7	4	1	N/A
Grassland - Lowland meadows	15	10	5	N/A
Heathland and shrub - Bramble scrub	N/A	N/A	N/A	1
Heathland and shrub - Hawthorn scrub	10	5	1	N/A
Heathland and shrub - Mixed scrub	10	5	1	N/A
Woodland and forest - Other woodland; broadleaved	30+	15	5	N/A
Woodland and forest - Other woodland; mixed	30+	30	5	N/A
Woodland and forest - Wet woodland	30+	15	5	N/A
Lakes - Ponds (non-priority habitat)	5	3	1	N/A
Sparsely vegetated land - Maritime cliff and slopes	20	10	5	N/A
Intertidal sediment - Littoral sand	4	1	1	N/A
Urban - Developed land; sealed surface	N/A	N/A	N/A	0

Habitat Type Undergoing Restoration	Years to 'Good' condition	Years to 'Moderate' condition	Years to 'Poor' condition	Years to 'Condition Assessment N/A'*
Urban - Unvegetated garden	N/A	N/A	N/A	0
Urban - Artificial unvegetated, unsealed surface	N/A	N/A	N/A	0
Urban - Vegetated garden	N/A	N/A	N/A	1

18.10.4.2.3 Permanent Habitat Loss or Creation

83. It is assumed that the only areas of permanent habitat loss or creation will be:

- The Onshore Substation Zone – a proportion of baseline habitats within this area will be permanently changed to a combination of vegetated and unvegetated habitat types. Though details of the habitat creation within this area may be subject to refinement, an outline plan can be seen within the **Outline Landscape Management Plan (OLMP) (Volume 8, application ref: 8.11)**; and
- Approximately 0.11ha, associated with above ground Link Boxes (assuming an average interval of 1250m and total of 124, 10m^2 Link Boxes installed). The location and therefore habitats within these areas are not currently known, therefore a habitat composite has been used as a proxy. The habitat composite is a proportion of all habitats present at baseline, excluding areas which are known to be retained and intertidal areas. The 0.11ha associated with the Link Boxes will become classified as "*Developed land; sealed surface*" and have a biodiversity value of zero.

84. It is anticipated that the only parcels of land which will remain under the long term (+30 years) control, management and maintenance of the Applicants (or their successors as undertaker under the draft DCO) will be within the Onshore Substation Zone, TJBs and Link Boxes.

18.10.4.2.4 Habitat Reinstatement Starting Upon Completion of Construction

85. Habitats not included within the sections 18.10.4.2.1, 18.10.4.2.2, or 18.10.4.2.3 assumptions will have reinstatement commence upon completion of construction.

86. The following areas are anticipated to be reinstated six years after initial loss:

- Up to 1.96ha of cropland habitat which may be required for use as Temporary Construction Compounds with the Landfall Zone;
- 50% of 10m wide Haul Road (high value habitats);
- 50% of the non-landfall related Temporary Construction Compounds (high value habitats);
- The two Substation Temporary Construction Compounds which are located outside of the permanent substation footprint (total area of 5.93ha, with baseline habitats of 3.21ha non-cereal crop and 2.71ha cereal crop);
- 3.1ha working areas for Jointing Bays. Area assumed to cover 10 x 25m per Jointing Bay and for there to be one Jointing Bay per Link Box (Link Boxes assumed to be spaced an average of 1750m apart along the route, with an estimated total of 124); and

87. The following areas is anticipated to be reinstated 1.5 years after initial loss:

- 0.12ha within the intertidal area which will be required for up to 6 trenchless crossing exit pits (20x10m each).

88. Where reinstatement in proposed, it is assumed that it will be returned to the same habitat type, condition and land use as established by the baseline studies. Management of the land will revert to the landowners. Full details of this will be provided within the final BNG Strategy.

18.10.4.3 BNG Assumptions – Hedgerow Module (Hedgerow Units)

18.10.4.3.1 Temporary Losses (reinstated within 6 years of impact)

89. It is assumed that:

- For every hedgerow which requires crossing by a section of ducted cable or Haul Road a 24m section will be removed;
- Where hedgerows interest with construction access points off of existing roads, an average of 25m (12.5m from the centre point) of hedgerow will be removed for access and visibility splays;
- Hedgerows that intersect with Temporary Construction Compounds will be removed; and
- Upon the completion of construction (within 6 years of commencement), these sections of hedgerow will be replanted with native, species rich hedgerow planting.

18.10.4.3.2 Permanent Habitat Loss or Creation

90. Lengths of hedgerow that intersect with the Onshore Converter Station and Substation Access Road are assumed to be permanently lost.

91. Within the Onshore Substation Zone, lengths of new species rich hedgerow planting are proposed. Details of this can be seen within the **Outline Landscape Management Plan (Volume 8, application ref: 8.11)**.

18.10.4.4 BNG Assumptions – Watercourse Module (Watercourse Units)

92. Approximately 4.88km of watercourses have been identified within the Projects. Approximately 4.32km (88.5%) of which will be retained. With regard to BNG, it is anticipated that impacts from the Projects will be limited to 0.54km of ditches in moderate or poor condition and 0.02km of 'other rivers and streams' (as defined within the Statutory Biodiversity Metric User Guide (Defra, 2023d)).

93. It is assumed that for every watercourse which requires crossing by a section of trenched cable or Haul Road, a 24m section will be lost for up to 6 years, after which, habitat reinstatement will be completed. Reinstated habitats are assumed to target like for like habitat types in moderate condition.

94. It is assumed that approximately 0.24km of ditch habitat will be permanently lost as a result of construction of the Onshore Converter Station.

18.10.5 Feasibility of Biodiversity Net Gain

18.10.5.1 Commitment to Mitigation Hierarchy

95. Principle 1 of the Biodiversity Net Gain Good Practice Principles for Development (CIEEM, *et al.,* 2016) is to follow the mitigation hierarchy. This sets out the need to prioritise avoiding impacts to biodiversity wherever possible. Where this is not possible, impacts should be reduced and finally, as a last resort, impacts should be compensated for.

96. In order to uphold this principle, impacts to irreplaceable habitats have been avoided and those to high distinctiveness habitats have been minimised by redefining the Onshore Development Area, the use of TCZ and a future commitment to micro-siting of construction activities during the construction phase.

97. Where impacts to habitats cannot be avoided alongside development, the following measures have been taken to reduce impacts on biodiversity:

- For the majority of the Onshore Development Area, the width of the construction zone has been reduced from 100m wide to 75m wide; and

- Where possible habitats within the ducted sections of the cable route will be restored within two years, this represents a significant proportion on the total BNG Study Area (approximately 153.34ha, or 34.9% of the Onshore Development Area).

98. Finally, as a last resort, to compensate for unavoidable impacts on biodiversity:

- The majority of baseline habitats (approximately 233ha or 51% of the total Onshore Development Area) will be reinstated after completion of the construction phase (up to 6 years from commencement); and
- Areas of on-site and off-site compensation will be delivered.

18.10.5.2 Stakeholder Engagement

99. The development of this Biodiversity Net Gain Strategy has been informed through consultation with a range of stakeholders.

18.10.5.2.1 East Riding of Yorkshire Council

100. On 11th December 2023 and 12th January 2024, RHDHV consulted with ERYC via pre-arranged video conference calls regarding the BNG objectives of the Projects and opportunities for delivery within the local area **(Volume 7, Appendix 18-1 Terrestrial Ecology and Ornithology Consultation Responses (application ref: 7.18.18.1))**.

101. ERYC supported the objectives of the Projects to deliver a minimum of no net loss for biodiversity and a net gain, where possible. At the time of the meetings, ERYC confirmed that they were unable to directly provide options to purchase off-site BDUs for off-site BNG delivery.

102. On 19th March 2024 ERYC agreed with the strategy that cropland with soils reinstated within two years could be considered a temporary loss, subject to the related soil storage areas being sown with a native mix of annual wildflowers **(Volume 7, Appendix 18-1 Terrestrial Ecology and Ornithology Consultation Responses (application ref: 7.18.18.1))**.

18.10.5.2.2 Natural England

103. On 14th December 2023 RHDHV consulted with Natural England via pre-arranged video conference to discuss the BNG objectives of the Projects and opportunities for delivery within the local area.

104. Natural England were supportive of the Projects objectives to deliver a minimum of no net loss for biodiversity and a net gain, where possible. No additional comment was provided.

18.10.5.2.3 Yorkshire Wildlife Trust

105. On 11th December 2023 RHDHV consulted with Yorkshire Wildlife Trust via pre-arranged video conference to discuss the BNG objectives of the Projects and opportunities for delivery within the local area.

106. They were supportive of the Projects objectives to deliver a minimum of no net loss for biodiversity and a net gain, where possible.

107. Yorkshire Wildlife Trust confirmed that they had no commercial availability of habitat units for off-site BNG compensation available in the short term. However, it was noted that a scheme may become available in the future.

18.10.5.2.4 Private Stakeholders and Habitat Banks

108. RHDHV and the Applicants have been in ongoing discussions since November 2023 with local private landowners and habitat banks to explore opportunities to deliver BNG compensation off-site.

18.10.5.3 On-site Compensation Proposals

109. Within the Onshore Substation Zone a combination of vegetated and unvegetated habitat types will be created. The unvegetated habitats will comprise the Onshore Converter Station, access roads and associated infrastructure and are anticipated to provide zero biodiversity value. Areas of vegetated habitat will seek to maximise on-site BNG opportunities. Habitats which are proposed within the **Outline Landscape Management Plan (Volume 8, application ref: 8.11)** include woodland, grassland, hedgerow and ephemeral waterbodies.

110. In addition, soil stockpiles related to areas of cropland habitat which will be reinstated within a two year period will be sown with native annual wildflowers. This is to provide temporary pollen and nectar rich resources and to provide flexibility with the reinstatement of the cropland habitats within a one to two year period. As such, the reinstatement of these habitats' soils, within a maximum of two years, is considered temporary and can be carried out during suitable seasonal and weather conditions.

111. The detail behind these on-site provisions will be finalised and confirmed, pre-commencement, as part of a final Biodiversity Net Gain Strategy.

18.10.5.4 Recommendations for Management to Maximise Biodiversity Benefits

112. Additional opportunities to deliver BNG on-site have been identified. These opportunities have not been detailed or secured at this stage. However, they will be considered when designing the final Biodiversity Net Gain Strategy. These opportunities are as follows:

- Retained hedgerow enrichment planting;
- Planting of trees in hedgerows;
- Tree and, or shrub planting in filed corners;
- Retained lowland fen enhancement and, or expansion;
- Ancient woodland enhancement; and
- Creation and or widening of reinstated field margins.

18.10.5.5 Off-site Compensation Proposals

113. It is anticipated that a proportion of the BDUs required to deliver no net loss or a BNG will require delivery off-site.

114. Where this is the case, habitat trading rules will be followed to ensure habitats of equal or greater distinctiveness are created to mitigate for any anticipated losses.

115. The majority of the BNG Study Area comprises low distinctiveness cropland habitats (approximately 82.7% by area), which provides a high degree of flexibility to provide strategically significant off-site habitat compensation while meeting trading rules. This may include the delivery of moderate or high distinctiveness habitats, including grassland, woodland, or wetland.

116. Consultation with external stakeholders completed (as detailed within section 18.10.5.2.4) to date has revealed a number of viable options for BDU delivery within the same or neighbouring LPA or NCA to the Projects.

117. As a last resort, where sufficient on-site and off-site compensation cannot be delivered, Statutory Biodiversity Credits can be purchased via the credit sales service (Defra, 2023b). However, this option is not anticipated to be required for the Projects.

18.10.6 BNG Metric

118. **Table 18-10-11** provides a summary of the estimated on-site baseline, on-site post intervention and on-site net change biodiversity values.

Table 18-10-11 Summary of BNG Metric results, for the BNG Study Area of the Projects Onshore Development Area.

	Habitats	Hedgerows	Watercourses
Total baseline area (ha) / length (km)	456.53ha	16.67km	4.88km
Total baseline units	1085.1	104.4	28.04
Total baseline area (ha) / length (km) retained	342.51ha	13.47km	4.32km
Total baseline units retained	801.46	85.54	25.48
Total baseline area (ha) / length (km) lost	114.02ha	3.20km	0.56km
Total baseline units lost	283.64	18.86	2.56
Total area (ha) / length (km) created	114.02ha	5.33km	0.32km
Total units created	281.83	23.9	0.87
Net change in area (ha) / length (km)	0ha	+2.13km	-0.24km
Net change in units	-1.81	+5.04	-1.69
Net change in percent	-0.17%	4.83%	-6.04%

	Habitats	Hedgerows	Watercourses
Units required to achieve 10% BNG	110.32	5.40	4.5

119. Full details of the metric calculations, including habitat types, the areas of each present on-site and their assigned biodiversity values can be reviewed within the Metric calculator, **Annex A - Biodiversity Metric, on-site habitat baseline and creation** and **Annex B - Biodiversity Metric, on-site hedgerow and watercourse baseline and creation**.

120. A copy of the full, interactive Metric calculator (in Excel format) will be made available upon request. This is to accord with principle 10 of the BNG good practice principles for development (**Table 18-10-1**) and be transparent.

18.10.7 Discussion

121. In accordance with the mitigation hierarchy, the Projects route alignment has been designed to avoid impacts on designated sites and high distinctiveness habitats.

122. The construction strategy has been adapted to minimise habitat impact durations, with a commitment to reinstate and restore a significant proportion of habitats within the Onshore Development Area in two years. This commitment reduces impacts on an area of approximately 184.73ha and accounts for approximately 334 Habitat Units.

123. The majority of baseline habitats within the BNG Study Area comprises habitats of low distinctiveness and, correspondingly, low Habitat Unit value per hectare (approximately 2 Habitat Units/ha). Impacts to irreplaceable habitat and habitats of higher distinctiveness which have a greater biodiversity value, approximately 16 to 12 Habitat Units/ha, are either entirely or mostly avoided, as outlined above. This substantially reduced the potential impacts of the Projects on terrestrial habitats and reduces the requirement for biodiversity mitigation.

124. On-site avoidance measures, construction methods and habitat creation opportunities, in combination with off-site opportunities ensure a high degree of feasibility for delivering a no net loss outcome and a net gain, where possible, for the Projects.

125. Habitat creation within the Onshore Substation Zone will be subject to future refinement. However, this area provides the potential to provide a substantial number of BDUs and contribute significantly towards the Projects potential to deliver no net loss or a net gain.

126. Based upon the assumptions outlined within section 18.10.4 of this Strategy, the on-site net change in biodiversity is -0.17% Habitat Units, +4.83% Hedgerow Units and -6.04% Watercourse Units (**Table 18-10-11**).

127. BNG could be delivered on-site through additional enhancements, including, though not limited to those outlined within section 18.10.5.3 above. Where on-site options are not feasible, off-site options should be secured. These are likely to come in the form of purchasing Biodiversity Units from a private habitat bank or through agreement with local landowners. It is not anticipated that the use of Statutory Credits will be required.

128. It should be noted that a combination of on and off-site BDU provision can be delivered. BDU delivery, local to the point of impact, should be prioritised in order to reduce the effects of 'spatial risk' which reduced biodiversity mitigation effectiveness as distance increases (as outlined within **Table 18-10-6**).

18.10.8 Next Steps

129. In order to secure BNG for the Projects a Biodiversity Net Gain Strategy will be provided prior to the commencement of construction.

130. The final Biodiversity Net Gain Strategy will be informed by the detailed design of the Projects, including landscape proposals, construction methods and Projects timescale. Based upon these parameters, the final Biodiversity Net Gain Strategy will:

- Provide a finalised metric calculation to assess the on-site net change in biodiversity and the requirements to deliver a net gain;
- Detail the on-site and off-site measures to deliver a no net loss, or where possible a net gain; and
- Detail how compensation will be legally secured, managed and monitored for a minimum 30 year period.

References

BRIG. 2011. UK Biodiversity Action Plan: Priority Habitat Descriptions. JNCC, Peterborough.

CIEEM (2022) Code of Professional Conduct. Available at: https://cieem.net/resource/code-of-professional-conduct/. Last accessed: December 2023.

CIEEM, CIRIA, and IEMA (2016). Biodiversity Net Gain Good Practice Principles for Development. Available at: https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf. Last accessed December 2023.

Defra (2022). Consultation on Biodiversity Net Gain Regulations and Implementation. Available at: https://consult.defra.gov.uk/defra-net-gain-consultation-team/consultation-on-biodiversity-net-gain-regulations/. Last accessed: December 2023.

Defra (2023a) Understanding biodiversity net gain. Available at: https://www.gov.uk/guidance/understanding-biodiversity-net-gain. Last accessed: December 2023.

Defra (2023b) Guidance on Statutory Biodiversity Credit Prices. Available at: https://www.gov.uk/guidance/statutory-biodiversity-credit-prices. Last accessed: December 2023.

Defra (2023c) Irreplaceable habitats and BNG: what you need to know. Available at: https://defralanduse.blog.gov.uk/2023/10/05/irreplaceable-habitats-and-bng-what-you-need-to-know/. Last accessed; January 2024.

Defra (2023d) The Statutory Biodiversity Metric User Guide. Available at: https://assets.publishing.service.gov.uk/media/65673fee750074000d1dee31/The_Statutory_Biodiversity_Metric_-_Draft_User_Guide.pdf. Last accessed January 2024.

Defra (2024) The Biodiversity Net Gain Statutory Instruments – explained. Available at: https://defralanduse.blog.gov.uk/2023/11/29/the-biodiversity-net-gain-statutory-instruments-explained/. Last accessed: January 2024.

Department of Energy and Climate Change (2023a) Overarching National Policy Statement for Energy (EN-1). Presented to Parliament pursuant to Section 5(9) of the Planning Act 2008. The Stationary Office, London.

Department of Energy and Climate Change (2023b) National Policy Statement for Renewable Energy Infrastructure (EN-3). Presented to Parliament pursuant to Section 5(9) of the Planning Act 2008. The Stationary Office, London.

Department of Energy and Climate Change (2023c) National Policy Statement for Electricity Networks Infrastructure (EN-5). Presented to Parliament pursuant to Section 5(9) of the Planning Act 2008. The Stationary Office, London.

DESNZ (2024) National Policy Statements for energy infrastructure. Available at: https://www.gov.uk/government/collections/national-policy-statements-for-energy-infrastructure. Last accessed: January 2024.

ERYC (2016) East Riding Local Plan (adopted April 2016). Available at: https://www.eastriding.gov.uk/planning-permission-and-building-control/planning-policy-and-the-local-plan/east-riding-local-plan/. Last accessed: January 2024.

Natural England (2018) Ancient Woodland Inventory handbook (NECR248). Available at: https://publications.naturalengland.org.uk/publication/4876500800634880. Last accessed: December 2023.

Natural England (2019) Ancient Woodland (England). Available at: https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::ancient-woodland-england/about. Last accessed: December 2023.

Planning Inspectorate (2018) Advice Note Nine: Rochdale Envelope.

The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. Available at: https://www.legislation.gov.uk/uksi/2024/48/contents/made. Last accessed: January 2024.

UKHab Ltd. (2023) UK Habitat Classification Version 2.0. Available at: https://www.ukhab.org. Last accessed: December 2023.

Dogger Bank South Offshore Wind Farms

Annex A - Biodiversity Metric, on-site habitat baseline and creation

Unrestricted

004300159

The Statutory Biodiversity Metric
Start page

Project details			
Planning authority:	East Riding of Yorkshire		
Project name:	Dogger Bank South Offshore Wind Farms		
Applicant:			
Application type:	DCO		
Planning application reference:			
Completed by:	RHDHV - T. Clemence		
Date of metric completion:	30 January 2023		
Reviewer:			
Calculation iteration:	DBS-PC2340-stat-WIP-X19-1 - Area habitats combined.		
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	Yes ⚠		
Total site area - including irreplaceable habitat area (hectares):	456.53	Irreplaceable habitat site area (hectares):	1.57
Total off-site area - including irreplaceable habitat area (hectares):	N/A	Irreplaceable habitat area off-site (hectares):	N/A

Main menu

Results

Dogger Bank South Offshore Wind Farms

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	*Habitat units*	1085.10
	Hedgerow units	0.00
	Watercourse units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	1083.29
	Hedgerow units	0.00
	Watercourse units	0.00
On-site net change (units & percentage)	*Habitat units*	-1.81
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Off-site net change (units & percentage)	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-1.81
	Hedgerow units	0.00
	Watercourse units	0.00
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-1.81
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.17%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?		No - Check Trading Summaries ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	1085.10	1193.61	110.32

Project Name: Dogger Bank South Offshore Wind Farms Map Reference:

A-1 On-Site Habitat Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	-1.81
Total Net % Change	-0.17%
Trading Rules Satisfied	No - check trading summaries ▲

Please ensure the watercourse details for any watercourse footprints recorded are included in the watercourse tabs ⚠

	Existing area habitats				Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline							Bespoke compensation agreed for losses of VHDH or irreplaceable habitat	Comments		
Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		User comments	Planning authority comments	Habitat reference number
1	Cropland	Horticulture	No	4.29	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	8.58	3.68		7.36	0.00	0.61	1.22		For full user comments, cross reference with Dogger Bank South Offshore Wind Farms Environmental Statement Appendix 18-10 Biodiversity Net Gain Strategy.		
2	Cropland	Arable field margins cultivated annually	No	2.07	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	8.28	1.64		6.56	0.00	0.43	1.72				
3	Cropland	Arable field margins tussocky	No	1.82	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	7.28	1.57		6.28	0.00	0.25	1.00				
4	Cropland	Arable field margins pollen and nectar	No	1.83	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	7.32	1.02		4.08	0.00	0.81	3.24				
5	Cropland	Arable field margins game bird mix	No	0.28	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.12	0.24		0.96	0.00	0.04	0.16				
6	Cropland	Temporary grass and clover leys	No	15.36	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	30.72	9.33		18.66	0.00	6.03	12.06				
7	Cropland	Cereal crops	No	129.8	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	259.60	73.31		146.62	0.00	56.49	112.98				
8	Cropland	Cereal crops	No	140.11	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	280.22	130.7		261.40	0.00	9.41	18.82				
9	Cropland	Non-cereal crops	No	48.25	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	96.50	29.59		59.18	0.00	18.66	37.32				
10	Cropland	Non-cereal crops	No	33.54	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	67.08	29.03		58.06	0.00	4.51	9.02				
11	Wetland	Fens (upland and lowland)	Yes	1.57	V.High	Moderate	Area/compensation not in local strategy/ no local strategy	Bespoke compensation likely to be required	0.00	1.57		Irreplaceable habitat - no units generated ⚠	0.00	0.00	0.00		No loss of this habitat - Trading rule satisfied. Ignore warning message.		
12	Wetland	Fens (upland and lowland)	No	0.16	V.High	Moderate	Area/compensation not in local strategy/ no local strategy	Same habitat required – bespoke compensation option ⚠	2.56	0.16		2.56	0.00	0.00	0.00				
13	Grassland	Other neutral grassland	No	5.31	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	63.72	2.51		30.12	0.00	2.80	33.60				
14	Grassland	Other neutral grassland	No	1.64	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	13.12	0.51		4.08	0.00	1.13	9.04				
15	Grassland	Other neutral grassland	No	3.31	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	13.24	0.71		2.84	0.00	2.60	10.40				
16	Grassland	Other neutral grassland	No	0.04	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.48	0		0.00	0.00	0.04	0.48				
17	Grassland	Modified grassland	No	0.27	Low	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	1.62	0.12		0.72	0.00	0.15	0.90				
18	Grassland	Modified grassland	No	2.9	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	11.60	1.66		6.64	0.00	1.24	4.96				
19	Grassland	Modified grassland	No	18.87	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	37.74	12.61		25.22	0.00	6.26	12.52				
20	Heathland and shrub	Bramble scrub	No	0.42	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.68	0.38		1.52	0.00	0.04	0.16				
21	Heathland and shrub	Hawthorn scrub	No	0.04	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.32	0		0.00	0.00	0.04	0.32				
22	Heathland and shrub	Mixed scrub	No	0.06	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.48	0		0.00	0.00	0.06	0.48				
23	Heathland and shrub	Mixed scrub	No	0.01	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.04	0.01		0.04	0.00	0.00	0.00				
24	Grassland	Other neutral grassland	No	1.59	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	12.72	0.43		3.44	0.00	1.16	9.28				
25	Lakes	Ponds (non-priority habitat)	No	0.13	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	1.04	0.05		0.40	0.00	0.08	0.64				
26	Lakes	Ponds (non-priority habitat)	No	0.01	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.08	0		0.00	0.00	0.01	0.08				
27	Watercourse footprint	Watercourse footprint	No	0.24	V.low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00	0.24		0.00	0.00	0.00	0.00		River Hull. Accounted for within Watercourse Module.		
28	Sparsely vegetated land	Maritime cliff and slopes	No	0.17	High	Moderate	Area/compensation not in local strategy/ no local strategy	Same habitat required =	2.04	0		0.00	0.00	0.17	2.04				
29	Intertidal sediment	Littoral sand	No	14.37	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	114.96	14.25		114.00	0.00	0.12	0.96				

30	Urban	Vegetated garden	No	0.14	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.28		0.14		0.28	0.00	0.00	0.00				
31	Urban	Developed land; sealed surface	No	24.18	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Compensation Not Required	0.00		23.32		0.00	0.00	0.86	0.00				
32	Woodland and forest	Other woodland; broadleaved	No	2.54	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	30.48		2.52		30.24	0.00	0.02	0.24				
33	Woodland and forest	Other woodland; broadleaved	No	0.04	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.48		0.04		0.48	0.00	0.00	0.00				
34	Woodland and forest	Other woodland; broadleaved	No	0.04	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.16		0.04		0.16	0.00	0.00	0.00				
35	Woodland and forest	Other woodland; broadleaved	No	0.13	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	1.56		0.13		1.56	0.00	0.00	0.00				
36	Woodland and forest	Other woodland; broadleaved	No	0.1	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	0.80		0.1		0.80	0.00	0.00	0.00				
37	Woodland and forest	Other woodland; mixed	No	0.9	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (2)	7.20		0.9		7.20	0.00	0.00	0.00				
38																				
39																				
40																				
41																				
42																				
		Total habitat area		456.53					1085.10		342.51	0.00	801.48	0.00	114.02	283.64				
		Site Area (Excluding area of individual trees, green walls, intertidal hard structures)		456.53																

Total area lost (excluding area of individual trees, green walls and intertidal hard structures)	114.02

M² to hectares conversion tool:	Select a unit	Hectares	M²

Project Name: Dogger Bank South Offshore Wind Farms Map Reference:

A-2 On-Site Habitat Creation

Condense / Show Columns | Condense / Show Rows | Main Menu

Area habitat summary	
Total Net Unit Change	-1.81
Total Net % Change	-0.17%
Trading Rules Satisfied	No - check trading summaries ▲
Area Check	Area Acceptable ✓

Note; Habitat selected has a time to target condition greater than 30 years. Non standard agreement may be required.

	Post intervention habitats											
				Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty		Comments	
Ref	Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	Habitat units delivered	User comments	Planning authority comments	Habitat reference number
1	Grassland	Other neutral grassland	2.32	Medium	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	18.81	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
2	Grassland	Other neutral grassland	0.67	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	6	Low	4.33	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
3	Grassland	Other neutral grassland	0.95	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	3	Low	3.41	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
4	Grassland	Other neutral grassland	0.03	Medium	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	0.24	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
5	Grassland	Modified grassland	0.1	Low	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	8	Low	0.45	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
6	Grassland	Modified grassland	0.54	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	5	Low	1.81	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
7	Heathland and shrub	Hawthorn scrub	0.03	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	6	Low	0.19	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
8	Heathland and shrub	Mixed scrub	0.05	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	6	Low	0.32	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
9	Grassland	Other neutral grassland	1	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	6	Low	6.46	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
10	Lakes	Ponds (non-priority habitat)	0.07	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	4	Low	0.49	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
11	Lakes	Ponds (non-priority habitat)	0.01	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	4	Low	0.07	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
12	Sparsely vegetated land	Maritime cliff and slopes	0.14	High	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	High	0.37	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
13	Woodland and forest	Other woodland; broadleaved	0.02	Medium	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	30+	Low	0.08	Habitat reinstated within 1 year which cannot be fully restored within the 2 year window which qualifies as a temporary loss		
14	Cropland	Horticulture	0.61	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	0.95	Habitat reinstatement started 6 years after impact during construction		
15	Cropland	Arable field margins cultivated annually	0.43	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	1.34	Habitat reinstatement started 6 years after impact during construction		
16	Cropland	Arable field margins tussocky	0.25	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	0.78	Habitat reinstatement started 6 years after impact during construction		
17	Cropland	Arable field margins pollen and nectar	0.81	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	2.52	Habitat reinstatement started 6 years after impact during construction		
18	Cropland	Arable field margins game bird mix	0.04	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	0.12	Habitat reinstatement started 6 years after impact during construction		
19	Cropland	Temporary grass and clover leys	0.32	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	0.50	Habitat reinstatement started 6 years after impact during construction		
20	Cropland	Cereal crops	18.21	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	28.38	Habitat reinstatement started 6 years after impact during construction		
21	Cropland	Cereal crops	9.36	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	14.59	Habitat reinstatement started 6 years after impact during construction		
22	Cropland	Non-cereal crops	6.45	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	10.05	Habitat reinstatement started 6 years after impact during construction		
23	Cropland	Non-cereal crops	4.5	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	7.01	Habitat reinstatement started 6 years after impact during construction		
24	Grassland	Other neutral grassland	0.38	Medium	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	16	Low	2.58	Habitat reinstatement started 6 years after impact during construction		
25	Grassland	Other neutral grassland	0.11	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	0.59	Habitat reinstatement started 6 years after impact during construction		
26	Grassland	Other neutral grassland	0.16	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	8	Low	0.48	Habitat reinstatement started 6 years after impact during construction		

27	Grassland	Other neutral grassland	0.01	Medium	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	16	Low	0.07	Habitat reinstatement started 6 years after impact during construction		
28	Grassland	Modified grassland	0.05	Low	Good	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	13	Low	0.19	Habitat reinstatement started 6 years after impact during construction		
29	Grassland	Modified grassland	0.09	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	10	Low	0.25	Habitat reinstatement started 6 years after impact during construction		
30	Grassland	Modified grassland	-0.53	Low	Poor	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	-0.83	Habitat reinstatement started 6 years after impact during construction		
31	Heathland and shrub	Bramble scrub	0.04	Medium	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	0.12	Habitat reinstatement started 6 years after impact during construction		
32	Heathland and shrub	Hawthorn scrub	0.01	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	0.05	Habitat reinstatement started 6 years after impact during construction		
33	Heathland and shrub	Mixed scrub	0.01	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	0.05	Habitat reinstatement started 6 years after impact during construction		
34	Grassland	Other neutral grassland	0.16	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	0.86	Habitat reinstatement started 6 years after impact during construction		
35	Lakes	Ponds (non-priority habitat)	0.01	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	9	Low	0.06	Habitat reinstatement started 6 years after impact during construction		
36	Sparsely vegetated land	Maritime cliff and slopes	0.03	High	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	16	High	0.07	Habitat reinstatement started 6 years after impact during construction		
37	Intertidal sediment	Littoral sand	0.12	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Medium	0.50	Habitat reinstatement started 6 years after impact during construction		
38	Urban	Developed land; sealed surface	0.85	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	6	Low	0.00	Habitat reinstatement started 6 years after impact during construction		
39	Urban	Developed land; sealed surface	17.21	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	0	Low	0.00	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan.		
40	Grassland	Other neutral grassland	16.33	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	88.28	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
41	Grassland	Other neutral grassland	0.93	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	5.03	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
42	Woodland and forest	Other coniferous woodland	5.11	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	30	Low	7.02	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
43	Woodland and forest	Other woodland; broadleaved	7.36	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	15	Low	34.50	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
44	Heathland and shrub	Mixed scrub	0.66	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	3.57	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
45	Grassland	Other neutral grassland	1.86	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	10.06	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
46	Cropland	Cereal crops	16.05	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	7	Low	25.01	Habitat created within the Substation Zone - details provided within Outline Landscape Mitigation Plan		
47	Urban	Developed land; sealed surface	0.1	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	Standard time to target condition applied	6	Low	0.00	Link boxes above ground infrastructure.		
48													
49													
50													
51													
52													
		Total habitat area	114.02							281.83			

Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	114.02

M² to hectares conversion tool:	Select a unit	Hectares	M²

Dogger Bank South Offshore Wind Farms

Annex B - Biodiversity Metric, on-site hedgerow and watercourse baseline and creation

Unrestricted

004300159

The Statutory Biodiversity Metric
Start page

Project details			
Planning authority:	East Riding of Yorkshire		
Project name:	Dogger Bank South Offshore Wind Farms		
Applicant:			
Application type:	DCO		
Planning application reference:			
Completed by:	RHDHV - T. Clemence		
Date of metric completion:	12 February 2024		
Reviewer:			
Calculation iteration:	DBS-PC2340-stat-WIP-X21-1 - Linear Habitats only		
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	No ✓		
Total site area - including irreplaceable habitat area (hectares):	0.00	Irreplaceable habitat site area (hectares):	0.00
Total off-site area - including irreplaceable habitat area (hectares):	N/A	Irreplaceable habitat area off-site (hectares):	N/A

Main menu

Results

Dogger Bank South Offshore Wind Farms

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	*Habitat units*	0.00		
	Hedgerow units	104.40		
	Watercourse units	28.04		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	109.44		
	Watercourse units	26.35		
On-site net change (units & percentage)	*Habitat units*	0.00	0.00%	
	Hedgerow units	5.04	4.83%	On-site net gain is less than target set ⚠
	Watercourse units	-1.69	-6.04%	On-site net gain is less than target set ⚠
Off-site baseline	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	5.04		
	Watercourse units	-1.69		
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	5.04	
	Watercourse units	-1.69	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.00%	
	Hedgerow units	4.83%	Total net gain achieved is less than target set ▲
	Watercourse units	-6.04%	Total net gain achieved is less than target set ▲
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	0.00	0.00	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	104.40	114.84	5.40	
Watercourse units	10.00%	28.04	30.84	4.50	

Input errors/rule breaks present in metric ▲

Project Name: Dogger Bank South Offshore Wind Farms Map Reference:

B-1 On-Site Hedge Baseline

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Main Menu

Hedgerow summary	
Total Net Unit Change	5.04
Total Net % Change	4.83%
Trading Rules Satisfied	Yes ✓

	Existing hedgerow habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline							Comments		
Ref	Hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance		Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning authority comments	Habitat reference number
1		Native hedgerow	5.3	Low	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	31.80	4.36		26.16	0.00	0.94	5.64	Converted from h2a - Hedgerow (priority habitat)		
2		Native hedgerow	5.07	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	20.28	3.87		15.48	0.00	1.20	4.80	Converted from h2a - Hedgerow (priority habitat)		
3		Native hedgerow	1.47	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	2.94	1.2		2.40	0.00	0.27	0.54	Converted from h2a - Hedgerow (priority habitat)		
4		Species-rich native hedgerow	2.86	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	34.32	2.35		28.20	0.00	0.51	6.12	Converted from h2a - Hedgerow (priority habitat) (important)		
5		Species-rich native hedgerow	1.35	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	10.80	1.19		9.52	0.00	0.16	1.28	Converted from h2a - Hedgerow (priority habitat) (important)		
6		Native hedgerow	0.03	Low	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.18	0.03		0.18	0.00	0.00	0.00	Converted from h2b - Other hedgerows		
7		Native hedgerow	0.03	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.12	0.03		0.12	0.00	0.00	0.00	Converted from h3a - Blackthorn scrub		
8		Ecologically valuable line of trees	0.02	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.16	0.02		0.16	0.00	0.00	0.00	Converted from w1g - Other woodland; broadleaved		
9		Ecologically valuable line of trees	0.33	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	2.64	0.33		2.64	0.00	0.00	0.00	Converted from w1g6 - Line of trees		
10		Ecologically valuable line of trees	0.17	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.68	0.05		0.20	0.00	0.12	0.48	Converted from w1g6 - Line of trees		
11		Ecologically valuable line of trees	0.04	Medium	Good	Area/compensation not in local strategy/ no local strategy	Same distinctiveness band or better	0.48	0.04		0.48	0.00	0.00	0.00	Converted from w1g7 - Other broadleaved woodland types		
12																	
13																	
14																	
15																	
16																	
			16.67					104.40	13.47	0.00	85.54	0.00	3.20	18.86			

Project Name: Dogger Bank South Offshore Wind Farms Map Reference:

B-2 On-Site Hedge Creation

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Hedgerow summary	
Total Net Unit Change	5.04
Total Net % Change	4.83%
Trading Rules Satisfied	Yes ✓

		Proposed habitats		Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty risk multipliers	Hedge units delivered	Comments		
Ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation		User comments	Planning authority comments	Habitat reference number
1		Native hedgerow	1.8	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	4.87	HEDGEROW REINSTATMENT STARTED UP TO 6 YEARS AFTER IMPACT - ASSUME MODERATE CONDITION		
2		Species-rich native hedgerow	0.68	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	3.68	HEDGEROW REINSTATMENT STARTED UP TO 6 YEARS AFTER IMPACT - ASSUME MODERATE CONDITION		
3		Ecologically valuable line of trees	0.02	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	26	Low	0.06	HEDGEROW REINSTATMENT STARTED UP TO 6 YEARS AFTER IMPACT - ASSUME MODERATE CONDITION		
4		Species-rich native hedgerow	2.83	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Low	15.30	Hedgerow creation within Substation Zone, as shown within the Outline Landscape Masterplan. Assume all hedgerow planting within this area will be species rich and target moderate condition. Possible opportunity to create habitat sooner than 6 years.		
5													
6													
7													
8													
9													
			5.33							23.90			

Project Name: Dogger Bank South Offshore Wind Farms
C-1 On-Site WaterC' Baseline

Condense / Show Columns | Condense / Show Rows

Main Menu

Watercourse summary	
Total Net Unit Change	-1.69
Total Net % Change	-6.04%
Trading Rules Satisfied	No - check trading summary ▲

Existing watercourse type			Distinctiveness	Condition	Strategic significance	Watercourse encroachment	Riparian encroachment	Required Action to Meet Trading Rules	Ecological baseline							Bespoke compensation agreed for losses of VHDH	Comments		
Ref	Watercourse type	Length (km)	Distinctiveness	Condition	Strategic significance	Extent of encroachment	Extent of encroachment for both banks		Total watercourse units	Length retained	Length enhanced	Units retained	Units enhanced	Length Lost	Units Lost		User Comments	Planning authority comments	Habitat reference number
1	Other rivers and streams	0.1	High	Moderate	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	1.20	0.1	0	1.20	0.00	0.00	0.00		River Hull. Assume no enhancement.		
2	Ditches	0.61	Medium	Good	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	7.32	0.61	0	7.32	0.00	0.00	0.00		r1 - Standing open water and canals. Assume no enhancement.		
3	Ditches	0.2	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	1.60	0.2	0	1.60	0.00	0.00	0.00		r1 - Standing open water and canals. Assume no enhancement.		
4	Ditches	0.66	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	2.64	0.56	0	2.24	0.00	0.10	0.40		r1 - Standing open water and canals. Assume no enhancement.		
5	Ditches	1	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	4.00	1	0	4.00	0.00	0.00	0.00		r1 - Standing open water and canals. Assume no enhancement.		
6	Ditches	0.11	Medium	Good	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	1.32	0.11	0	1.32	0.00	0.00	0.00		r1a - Eutrophic standing waters. Assume no enhancement.		
7	Ditches	0.11	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	0.88	0.09	0	0.72	0.00	0.02	0.16		r1a - Eutrophic standing waters. Assume no enhancement.		
8	Ditches	1.58	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	6.32	1.24	0	4.96	0.00	0.34	1.36		r1a - Eutrophic standing waters. Assume no enhancement.		
9	Ditches	0.09	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	0.36	0.09	0	0.36	0.00	0.00	0.00		r1a - Eutrophic standing waters. Assume no enhancement.		
10	Ditches	0.02	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	0.16	0	0	0.00	0.00	0.02	0.16		r1a6 - Other eutrophic standing waters. Assume no enhancement.		
11	Ditches	0.32	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	1.28	0.26	0	1.04	0.00	0.06	0.24		r1a6 - Other eutrophic standing waters. Assume no enhancement.		
12	Other rivers and streams	0.08	High	Moderate	Area/compensation not in local strategy/ no local strategy	No Encroachment	No Encroachment/ No Encroachment	Same habitat required =	0.96	0.06	0	0.72	0.00	0.02	0.24		r2b - Other rivers and streams. Assume no enhancement.		
13																			
14																			
15																			
16																			
17																			
		4.88							28.04	4.32	0.00	28.48	0.00	0.56	2.56				

Project Name: Dogger Bank South Offshore Wind Farms Map Reference:

C-2 On-Site WaterC' Creation

Condense / Show Columns | Condense / Show Rows | Main Menu

Watercourse summary	
Total Net Unit Change	-1.69
Total Net % Change	-6.04%
Trading Rules Satisfied	b - check trading summary

	Proposed habitats		Distinctiveness	Condition	Strategic significance	Temporal multiplier		Difficulty multipliers	Watercourse encroachment	Riparian encroachment	Watercourse units delivered	Comments		
Ref	Watercourse type	Length (km)	Distinctiveness	Condition	Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation	Extent of encroachment	Extent of encroachment for both banks		User comments	Planning authority comments	Habitat reference number
1	Ditches	0.1	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Medium	Minor	Minor/ Minor	0.28	Reinstatement post-construction. Assume moderate condition, minor watercourse encroachment and minor/minor riparian encroachment.		
2	Ditches	0.12	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Medium	Minor	Minor/ Minor	0.33	Reinstatement post-construction. Assume moderate condition, minor watercourse encroachment and minor/minor riparian encroachment.		
3	Ditches	0.08	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	Medium	Minor	Minor/ Minor	0.22	Reinstatement post-construction. Assume moderate condition, minor watercourse encroachment and minor/minor riparian encroachment.		
4	Other rivers and streams	0.02	High	Moderate	Area/compensation not in local strategy/ no local strategy	Check details- Delay in starting habitat in required condition? ⚠	11	High	Minor	Minor/ Minor	0.04	Reinstatement post-construction. Assume moderate condition, minor watercourse encroachment and minor/minor riparian encroachment.		
5														
6														
7														
8														
9														
		0.32									0.87			

RWE Renewables UK Dogger Bank South (West) Limited

RWE Renewables UK Dogger Bank South (East) Limited

Windmill Hill Business Park
Whitehill Way
Swindon
Wiltshire, SN5 6PB