Morecambe Offshore Windfarm: Generation Assets

Development Consent Order Documents

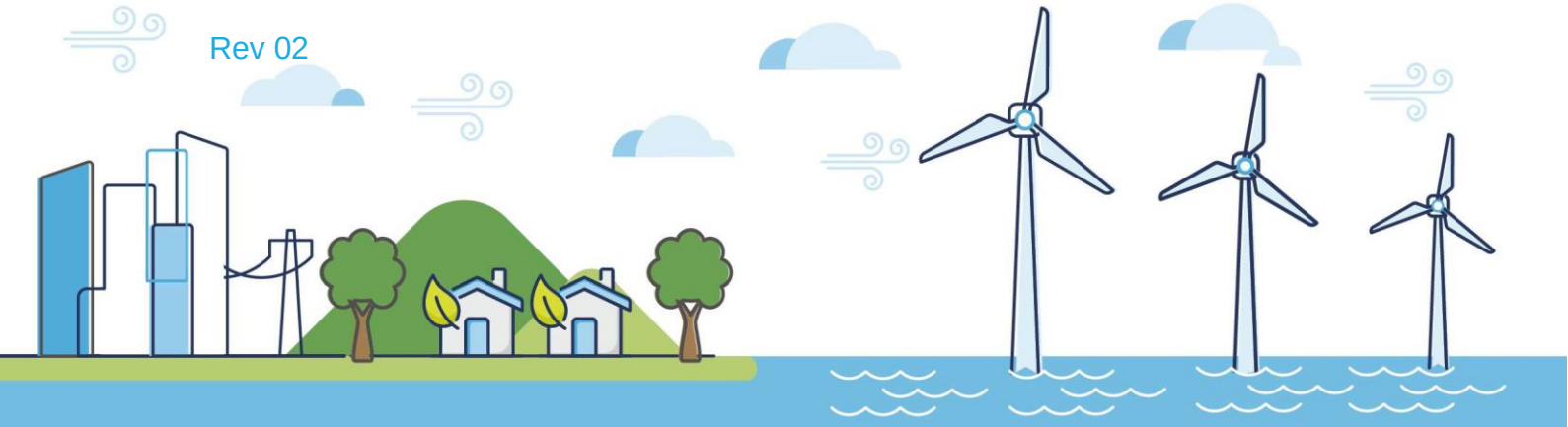
Volume 4

Environmental Benefit and Net Gain Statement

PINS Document Reference: 4.4

APFP Regulation: 5(2)(q)

Rev 02



Document History

Doc No	MOR001-FLO-CON-ENV-RPT-0015	**Rev**	02
Alt Doc No	PC1165-RHD-ES-XX-RP-Z-0056		
Document Status	Approved for Use	**Doc Date**	26 November 2024
PINS Doc Ref	4.4	**APFP Ref**	5(2)(q)

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	31 May 2024	Approved for Use	Royal HaskoningDHV	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a
02	26 November 2024	Approved for Use	Royal HaskoningDHV	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Updates for Deadline 1

Contents

1 Introduction 9
1.1 Brief description of Project 9
1.2 Legislative context 11
1.2.1 Overview 11
1.2.2 National Policy Statements 11
1.2.3 The North West Marine Plan 15
1.2.4 Marine Net Gain 16
1.3 Purpose of the document 16
2 The Applicant's position on terrestrial BNG 17
3 The Applicant's position on ENG 17
4 Conclusion 18
5 References 19

Tables

Table 1.1 National Policy Statement guidance relevant to ENG 12
Table 1.2 North West Marine Plan policies relevant to ENG 15

Figures

Figure 1.1 Morecambe Offshore Windfarm location 10

Glossary of Acronyms

BNG	Biodiversity Net Gain
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
ENG	Environmental Net Gain
EIA	Environmental Impact Assessment
ES	Environmental Statement
INNS	Invasive Non-Native Species
MNG	Marine Net Gain
NGESO	National Grid Electricity System Operator
NPSs	National Policy Statements
NSIP	Nationally Significant Infrastructure Project
OSP(s)	Offshore substation platform(s)
PEIR	Preliminary Environmental Information Report
SoS	Secretary of State
UK	United Kingdom
WTG(s)	Wind turbine generator(s)

Glossary of Unit Terms

Km	kilometre
km^2	square kilometre
M	metre
MW	Megawatt

Glossary of Terminology

Applicant	Morecambe Offshore Windfarm Ltd
Application	This refers to the Applicant's application for a Development Consent Order (DCO). An application consists of a series of documents and plans which are published on the Planning Inspectorate's (PINS) website.
Environmental Net Gain (ENG)	An approach to development that aims to leave the natural environment in a measurably better state than beforehand
Generation Assets (the Project)	Generation assets associated with the Morecambe Offshore Windfarm. This is infrastructure in connection with electricity production, namely the fixed foundation wind turbine generators (WTGs), inter-array cables, offshore substation platform(s) (OSP(s)) and possible platform link cables to connect OSP(s).
Inter-array cables	Cables which link the WTGs to each other and the OSP(s).
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The transmission assets for the Morgan Offshore Wind Project Generation Assets and the Morecambe Offshore Windfarm. This includes the OSPs[1], interconnector cables, Morgan offshore booster station, offshore export cables, landfall site, onshore export cables, onshore substations, 400 kilovolts (kV) cables and associated grid connection infrastructure such as circuit breaker infrastructure. Also referred to in this Statement as the Transmission Assets, for ease of reading.
Offshore substation platform(s) (OSP(s))	A fixed structure located within the windfarm site, containing electrical equipment to aggregate the power from the WTGs and convert it into a more suitable form for export to shore.
Platform link cable	An electrical cable which links one or more OSPs.
Windfarm site	The area within which the WTGs, inter-array cables, OSP(s) and platform link cables will be present.
Wind turbine generator (WTG)	A fixed structure located within the windfarm site that converts the kinetic energy of wind into electrical energy.

[1]At the time of writing the Environmental Statement (ES), a decision had been taken that the offshore substation platforms (OSPs) would remain solely within the Generation Assets application and would not be included within the Development Consent Order (DCO) application for the Transmission Assets. This decision post-dated the Preliminary Environmental Information Report (PEIR) that was prepared for the Transmission Assets. The OSPs are still included in the description of the Transmission Assets for the purposes of this ES as the Cumulative Effects Assessment (CEA) carried out in respect of the Generation/Transmission Assets is based on the information available from the Transmission Assets PEIR.

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1 Introduction

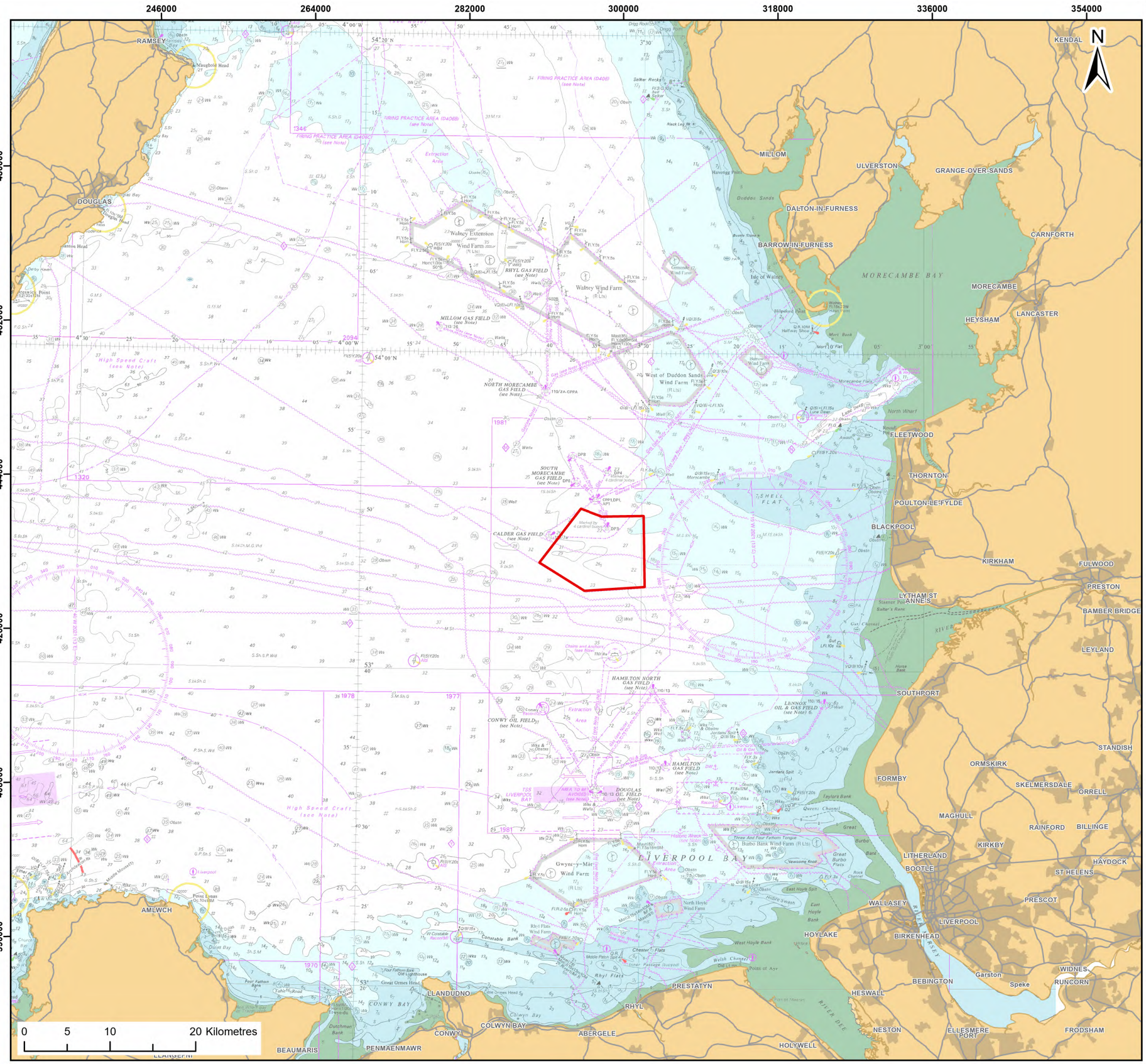
1. This Environmental Benefit and Net Gain Statement forms part of a set of documents that supports the Development Consent Order (DCO) Application submitted by Morecambe Offshore Windfarm Ltd (the Applicant) for the Morecambe Offshore Windfarm Generation Assets (the Project).

1.1 Brief description of Project

2. The Applicant is promoting the development of the Project in the Eastern Irish Sea. The Project would consist of up to 35 wind turbine generators (WTGs) and will have a generating capacity greater than 100MW, and therefore is a Nationally Significant Infrastructure Project (NSIP), as defined by Section 15(3) of the Planning Act 2008, as amended. As such, there is a requirement to submit an Application for a DCO.

3. The Project relates only to the Generation Assets of the Morecambe Offshore Windfarm (including WTGs, inter-array cables, offshore substation platform(s) (OSP(s)), and possible platform link cables to connect OSP(s). A separate DCO application for the Transmission Assets associated with the Morecambe Offshore Windfarm and the Morgan Offshore Wind Project (another proposed windfarm to be located in the Irish Sea) is being sought independently.

4. The windfarm site, containing the Generation Assets, covers 87km^2 and is approximately 30km from the Lancashire coast (**Figure 1.1**).



Legend:

Morecambe Offshore Windfarm Site

Report:
Morecambe Offshore Windfarm: Generation Assets Environmental Benefit and Net Gain Statement

Title:
Morecambe Offshore Windfarm location

Figure: 1.1	Drawing No: PC1165-RHD-ES-OF-DG-Z-0143				
Revision:	Date:	Drawn:	Checked:	Size:	Scale:
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Co-ordinate system: WGS 1984 UTM Zone 30N

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1.2 Legislative context

1.2.1 Overview

5. This section sets out the planning policy requirements and legislation that the Applicant considers are relevant to the provision of environmental benefits and net gain.

1.2.2 National Policy Statements

6. National Policy Statements (NPSs) for energy infrastructure provide guidance on government policy on the need for NSIPs, how applications for energy infrastructure will be assessed and the way in which impacts and mitigations will be judged. The NPSs (EN-1 and EN-3, Department for Energy Security and Net Zero (DESNZ), 2023a and 2023b) provide some guidance for Environmental Net Gain (ENG) and Biodiversity Net Gain (BNG), as set out in **Table 1.1**.

7. The NPSs note all NSIPs (including offshore NSIPs) should consider ENG, which is defined as '*an approach to development that aims to leave the natural environment in a measurably better state than beforehand*.' It is made clear that ENG is not limited to consideration of biodiversity or ecology and can also encompass the delivery of environmental gains and benefits to communities in the local area. The scope of any ENG interventions is expected to be dependent on the type, scale and location of specific projects.

Table 1.1 National Policy Statement guidance relevant to ENG

National Policy Statement	Paragraph	Text	Where addressed
Overarching NPS for Energy (EN-1)	4.6.1	Environmental net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. Projects should therefore not only avoid, mitigate and compensate harms, following the mitigation hierarchy, but also consider whether there are opportunities for enhancements.	Chapter 4 Site Selection and Assessment of Alternatives of the Environmental Statement (ES) (Document Reference 5.1.4) highlights the approach taken to avoid and minimise impacts. The Schedule of Mitigation (Document Reference 5.5) summarises the mitigations identified through the Environmental Impact Assessment (EIA) process, for each of the ES technical chapters and how these have been secured. Opportunities for environmental enhancement undertaken by the Applicant have been considered throughout the EIA process and are described in **Section 3**.
	4.6.3	Currently, biodiversity net gain policy in England only applies to terrestrial and intertidal components of projects. Principles for Marine Net Gain are currently being rolled out by the Government, who will provide guidance in due course. There are provisions in the Environment Act 2021 to allow Marine Net Gain to be made mandatory for NSIPs in the future.	As an offshore project, the Applicant's position on Marine Net Gain (MNG) is set out in **Section 1.2.4**.
	4.6.6	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.	The planet positive design principles (Design Statement, Document Reference 4.3) of the Project also facilitate enhancement opportunities. Opportunities for

National Policy Statement	Paragraph	Text	Where addressed
			environmental enhancement undertaken by the Applicant are described in **Section 3**.
	4.6.13	In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains and benefits to communities relevant to the local area, and to national policy priorities, such as: ▪ Reductions in GHG emissions ▪ Reduced flood risk ▪ Improvements to air or water quality ▪ Climate adaptation ▪ Landscape enhancement ▪ Increased access to natural greenspace ▪ The enhancement, expansion or provision of trees and woodlands The scope of potential gains will be dependent on the type, scale and location of specific projects. Applicants should look for a holistic approach to delivering wider environmental gains and benefits, through the use of nature-based solutions and Green Infrastructure.	The Project would make a significant contribution to the achievement of both the national renewable energy targets and to the United Kingdom (UK's) contribution to global efforts to reduce the effects of climate change, by reducing the UK's GHG emissions from power generation. This contribution to reducing climate change effects will have associated environmental benefits. Further opportunities for environmental enhancement undertaken by the Applicant are described in **Section 3**.
	4.6.15	Applications for development consent should be accompanied by a statement demonstrating how opportunities for delivering wider environmental net gains have been considered, and where appropriate, incorporated into proposals as part of good design (including any relevant operational aspects) of the project.	This document satisfies the requirements of paragraph 4.6.15.

National Policy Statement	Paragraph	Text	Where addressed
NPS for Renewable Energy Infrastructure (EN-3)	2.8.102 (Biodiversity and ecological conservation)	Applicants need to consider environmental and biodiversity net gain as set out in Section 4.6 of EN-1 and the Environment Act 2021.	Opportunities for environmental enhancement undertaken by the Applicant are described in **Section 3.** See above in this table for consideration of aspects of environmental and BNG set out in Section 4.6 of EN-1.

1.2.3 The North West Marine Plan

8. The North West Marine Plan (NW MP) (HM Government, 2021) has been prepared by the Marine Management Organisation (MMO) for the purposes of s51 of the Marine and Coastal Access Act (MCAA) 2009. The NW MP introduces a strategic approach to planning within the English inshore and offshore waters between the Solway Firth and River Dee. It aims to inform decision-making by marine users and regulators on where, when or how activities might take place within the north west inshore and north west offshore marine plan areas.

9. The NW MP includes policies of relevance to ENG, which are set out in **Table 1.2**.

Table 1.2 North West Marine Plan policies relevant to ENG

Policy	Text	Where addressed
NW-FISH-3	Proposals that enhance essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes, should be supported.	The Project ES outlines how impacts have been avoided, minimised and mitigated. Opportunities for environmental enhancement undertaken by the Applicant are described in **Section 3**.
NW-BIO-1	Proposals that enhance the distribution of priority habitats and priority species will be supported.	
NW-CC-1	Proposals that conserve, restore or enhance habitats that provide flood defence or carbon sequestration will be supported.	
NW-MPA-2	Proposals that enhance a marine protected area's ability to adapt to climate change, enhancing the resilience of the marine protected area network, will be supported.	Opportunities for environmental enhancement undertaken by the Applicant are described in **Section 3**, noting the contribution the Project would make to decarbonisation.
NW-BIO-2	Proposals that enhance or facilitate native species or habitat adaptation or connectivity, or native species migration, will be supported.	Opportunities for environmental enhancement, including monitoring for non-native species, undertaken by the Applicant are described in **Section 3**.

Policy	Text	Where addressed
NW-BIO-3	Proposals that conserve, restore or enhance coastal habitats, where important in their own right and/or for ecosystem functioning and provision of ecosystem services, will be supported.	Opportunities for environmental enhancement undertaken by the Applicant, including sand dune restoration, are described in **Section 3**.

1.2.4 Marine Net Gain

10. The Environment Act 2021 sets out a legal framework obliging terrestrial projects seeking consent under the Town and Country Planning Act 1990 to achieve a specified level of BNG to their projects and plans.

11. However, these requirements are not yet in place for terrestrial NSIPs, or any marine projects.

12. In the case of marine projects, including marine NSIPs (such as the Project), there is no proposed implementation date for MNG requirements, or clarity on whether MNG will be mandatory and how it could be delivered. Whilst there are no requirements for MNG, Schedule 15 of the Environment Act does include a power for the Secretary of State (SoS) to make regulations to introduce MNG requirements in the future.

13. It is recognised that the Department for Environment, Food and Rural Affairs (Defra) has recently published the results of a 'first principles' public consultation on the concepts of MNG, including definition, scope, potential interventions and issues around additionality.

14. Given the current timescale of the ongoing government consultation, it is assumed to be unlikely that there will be any formalisation of the requirement for the delivery of MNG within the DCO determination timeframe of the Project. However, the Applicant is committed to engaging positively with ENG initiatives, as set out in **Section 3**.

1.3 Purpose of the document

15. This Environmental Benefit and Net Gain Statement satisfies the NPS requirements on ENG (see NPS EN-1 paragraph 4.6.15), setting out measures that the Applicant is pursuing to deliver additional environmental benefits.

2 The Applicant's position on terrestrial BNG

16. Due to the entirely offshore nature of the Project, terrestrial BNG requirements do not apply.

17. In line with government initiated reviews (NGESO, 2022; 2024) to improve the coordination of offshore wind generation connections and transmission networks, the Morecambe Offshore Windfarm and the Morgan Offshore Wind Project (another proposed windfarm to be located in the Irish Sea) will both connect their windfarms to the National Grid electricity transmission network at Penwortham in Lancashire. Given this shared onshore grid connection location, the Morecambe Offshore Windfarm and Morgan Offshore Wind project are working collaboratively to deliver the Transmission Assets associated with both projects and are jointly seeking a single DCO for the Transmission Assets for both projects. This collaboration and co-location between projects has been undertaken with the reduction of environmental and local community impacts in mind, including the design adopting shared offshore and onshore export cable corridors. The coordinated approach also negates the need for each project having separate landfall locations and onshore cable routes, with the associated environmental and local community impacts that individual grid connections would incur at each location.

18. The Transmission Assets for the Project together with the Morgan Offshore Wind Project includes both offshore and onshore components. As such, the approach to terrestrial BNG is considered in the associated DCO application for the Transmission Assets.

3 The Applicant's position on ENG

19. The Project, as identified in the ES, provides a number of benefits including:

- Renewable energy, carbon savings and contribution to combat climate change (see **Chapter 2 Need for the Project** of the ES (Document Reference 5.1.2) and **Chapter 21 Climate Change** (Document Reference 5.1.21) as well as the Planning Development Consent and Need Statement (Document Reference 4.8) for further detail)
- Economic and employment benefits (see **Chapter 2 Need for the Project** of the ES (Document Reference 5.1.2) and **Chapter 20 Socio-economics Tourism and Recreation** (Document Reference 5.1.20) for further detail)
- Wider societal public health benefits (**see Chapter 2 Need for the Project** of the ES (Document Reference 5.1.2), **Chapter 19 Human Health** (Document Reference 5.1.19) and **Chapter 20 Socio-economics Tourism and Recreation** (Document Reference 5.1.20) for further detail)

20. Opportunities to enhance benefits are being undertaken by the Applicant as part of the development of the Project; for example, employment benefits are being planned with opportunities for enhancement via the development of an Outline Skills and Employment Plan (Document Reference 6.11).

21. The Applicant is also seeking opportunities to provide benefit to the environment and local communities where feasible and in line with Project objectives. These initiatives are separate, and additional to, compensation plans being considered under the Habitat Regulation Assessment. For example, the Applicant has contributed resources to the Fylde Sand Dunes Project, led by The Wildlife Trust and the Environment Agency, which strategically places donated Christmas trees in front of existing sand dunes, in order to trap wind-blown and tidal sand, to create the start of new dune ecosystems along the coast. This scheme provides numerous environmental and ecological benefits, such as providing suitable habitat for flora and fauna of international and national importance and these dunes also serve as an effective soft sea defence for the local community. Other opportunities within the design of the Project or as part of existing restoration projects are being explored which will be considered further post-consent in terms of the level of benefit delivered, feasibility, cost and alignment with the Project objectives.

22. Furthermore, the Applicant is supportive in the role that can be played through environmental monitoring and is seeking opportunities regarding the contribution that can be made in this respect. For example, whilst no significant effects due to Invasive Non-Native Species (INNS) have been identified, the Applicant has committed to monitoring Project infrastructure for INNS to further aid the understanding of INNS risk management and presence in the Irish Sea. In addition, by submitting the data from pre-application monitoring and surveys to the Marine Environmental Data and Information Network, the Applicant is contributing to the publicly available scientific evidence base for the Eastern Irish Sea. For example, making ornithological and marine mammal aerial survey data publicly available will help update the models for other local offshore windfarms and provides important information on bird and marine mammal presence in the area to support conservation efforts.

4 Conclusion

23. This document presents the measures being explored through the development of the Project associated with net environmental benefits. These, and other, ENG measures will be considered and developed further, with stakeholders, post-consent.

5 References

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