

RWE Renewables UK Dogger Bank South (West) Limited RWE Renewables UK Dogger Bank South (East) Limited

Dogger Bank South Offshore Wind Farms

Environmental Statement

Volume 7

Chapter 1 - Introduction

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Dogger Bank South Offshore Wind Farms

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Glossary

Term	Definition		
Concurrent Scenario	A potential construction scenario for the Projects where DBS East and DBS West are both constructed at the same time.		
Development Scenario	Description of how the DBS East and / or DBS West Projects would be constructed either in isolation, sequentially or concurrently.		
Dogger Bank South (DBS) Offshore Wind Farms	The collective name for the two Projects, DBS East and DBS West.		
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach, and information to support, the Environmental Impact Assessment (EIA) and Habitats Regulations Assessment (HRA) for certain topics.		
Habitats Regulations Assessment (HRA)	The process that determines whether or not a plan or project may have an adverse effect on the integrity of a European Site or European Offshore Marine Site.		
In Isolation Scenario	A potential construction scenario for one Project which includes either the DBS East or DBS West array, associated offshore and onshore cabling and only the eastern Onshore Converter Station within the Onshore Substation Zone and only the northern route of the onward cable route to the proposed Birkhill Wood National Grid Substation.		
Scoping Opinion	The report adopted by the Planning Inspectorate on behalf of the Secretary of State.		
Scoping Report	The report that was produced in order to request a Scoping Opinion from the Secretary of State.		
Sequential Scenario	A potential construction scenario for the Projects where DBS East and DBS West are constructed with a lag between the commencement of construction activities. Either Project could be built first.		

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Term	Definition		
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).		
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South offshore wind farms).		
Topic specific Study Area	y The area where potential impacts from the Projects could occur as defined for each individual EIA topic.		



Acronyms

Term	Definition		
BEIS	Department for Business, Energy and Industrial Strategy, now succeeded by the Department for Energy Security and Net Zero		
CEA	Cumulative Effects Assessment		
DCO	Development Consent Order		
DBS	Dogger Bank South		
DESNZ	Department for Energy Security and Net Zero		
EIA	Environmental Impact Assessment		
ES	Environmental Statement		
EU	European Union		
EPP	Evidence Plan Process		
GW	Gigawatt		
ICES	International Council for the Exploration of the Seas		
IEMA	Institute of Environmental Management and Assessment		
Km	Kilometre		
NSIP	Nationally Significant Infrastructure Project		
MW	Megawatt		
PEIR	Preliminary Environmental Information Report		
SoCC	Statement of Community Consultation		
UK	United Kingdom		

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1 Introduction

1.1 Purpose of this Document

- 1. This document is the Environmental Statement (ES) for the Dogger Bank South (DBS) East and DBS West offshore wind farms, collectively known as DBS offshore wind farms (herein 'the Projects').
- 2. The purpose of the ES is to identify, describe and assess the direct and indirect significant effects of the proposed development as part of the Environmental Impact Assessment (EIA). The findings of the EIA are presented to allow stakeholders to develop an informed view of the potential effects of the Projects, as required by The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations 2017).
- 3. The ES describes the baseline environment, EIA methodology, likely significant effects and proposed mitigation measures. It also sets out the consultation undertaken on the EIA (Volume 7, Chapter 7 Consultation (application ref: 7.7).
- 4. The EIA considers impacts associated with the construction, operation and maintenance and decommissioning phases of the Projects, both from the Projects alone and cumulatively with other plans and projects.
- 5. The ES is informed by a **Scoping Opinion (Volume 8, application ref: 8.7)** that was provided by the Planning Inspectorate on behalf of the Secretary of State in September 2022, along with ongoing technical consultation either via the Evidence Plan Process (EPP) or directly with stakeholders (discussed further in section 1.6 and **Volume 7**, **Chapter 7 Consultation (application ref: 7.7)**.
- 6. Feedback from consultation on the Preliminary Environmental Information Report (PEIR) is taken into consideration and, where relevant, is used to inform the ongoing design of the Projects and the scope of the final impact assessment reported in the ES. The ES is submitted as part of an application for a Development Consent Order (DCO) pursuant to Section 37 of the Planning Act 2008. Further detail on the legislative context for the Projects is provided in **Volume 7**, **Chapter 3 Policy and Legislative Context** (application ref: 7.3).

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1.2 Background

- 7. In November 2017, The Crown Estate announced a new round of offshore wind leasing. In September 2019, the final bidding areas were announced, and the Offshore Wind Leasing Round 4 was launched. As part of the Round 4 process, developers were able to identify preferred sites within bidding areas defined by The Crown Estate. Applications were then submitted by developers under a competitive bidding process, culminating in an auction held in February 2021. RWE was successful in this auction process, securing preferred bidder status on two adjacent projects, DBS East and DBS West.
- 8. The Crown Estate carried out a plan-level Habitats Regulation Assessment (HRA) for the Offshore Wind Leasing Round 4, which assessed the potential cumulative impacts of the six offshore wind projects identified through the Round 4 tender process. The Crown Estate gave notice to the United Kingdom (UK) and Welsh Government of its intent to proceed with the Round 4 Plan on the basis of a derogation in April 2022. The Secretary of State for Business, Energy and Industrial Strategy has agreed that The Crown Estate can proceed with the Plan. The Applicants have signed an Agreement for Lease with The Crown Estate and have applied for a DCO.
- 9. The array areas are located more than 100km offshore on the Dogger Bank in the southern North Sea and each covers approximately 350km².
- 10. Based on an estimated capacity of 3 gigawatts (GW) once fully operational, the Projects could be capable of generating enough electricity to meet the average annual domestic energy needs of around 3 million typical UK homes¹.

1.3 The Applicants and the Projects Team

11. The Applicants, RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited, are jointly owned by the RWE group of companies (51% stake) and Masdar (49% stake).

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¹ Calculation based on 2021 generation, and assuming average (mean) annual household consumption of 3,509 kWh, based on latest statistics from Department of Energy Security and Net Zero (Subnational Electricity and Gas Consumption Statistics Regional and Local Authority, Great Britain, 2021, Mean domestic electricity consumption (kWh per meter) by country/region, Great Britain, 2021



- 12. RWE is a leading partner in the delivery of the UK's Net Zero ambitions and energy security, as well as in contributing to the UK build-out target for offshore wind of 50 GW by 2030. RWE already operates 10 offshore wind farms across the UK. Including the three Norfolk offshore wind projects from Vattenfall, RWE is developing nine offshore wind projects in the UK, representing a combined potential installed capacity of around 9.8 GW, with RWE's pro rata share amounting to 7 GW. Furthermore, RWE is constructing the 1.4 GW Sofia offshore wind project in the North Sea off the UK's east coast. RWE's unparalleled track record of more than 20 years in offshore wind has resulted in 19 offshore wind farms in operation. The company's goal is to triple its global offshore wind capacity from 3.3 GW today to 10 GW in 2030.
- 13. Abu Dhabi Future Energy Company (Masdar) is the UAE's clean energy champion and one of the fastest growing renewable energy companies in the world, advancing the development and deployment of renewable energy and green hydrogen technologies to address global sustainability challenges. Established in 2006, Masdar has developed and partnered in projects in over 40 countries, helping them to achieve their clean energy objectives and advance sustainable development. Masdar is jointly owned by Abu Dhabi National Oil Company (ADNOC), Mubadala Investment Company (Mubadala), and Abu Dhabi National Energy Company (TAQA), and under this ownership the company is targeting a renewable energy portfolio capacity of at least 100GW by 2030.
- 14. Royal HaskoningDHV has been commissioned by the Applicants as the consultant to lead the EIA for the Projects, with support through the EIA process from additional consultants who are responsible for specialist topics.
- 15. Royal HaskoningDHV has provided environmental, development and consenting support on over 14GW of renewable energy projects across 26 UK offshore wind farms. Their EIA activities and ESs are accredited by the Institute of Environmental Management and Assessment (IEMA) under the EIA Quality Mark Scheme. This demonstrates Royal HaskoningDHV's expertise in the field and commitment to ensuring EIA is maintained at high quality, in accordance with best practice and therefore satisfies the requirements of the EIA Regulations 2017 which state that the developer must ensure the ES is prepared by competent experts.

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1.4 Purpose of the Projects

- 16. Climate change as a result of greenhouse gas emissions is a global issue associated with impacts on weather, ecosystems, human health and welfare. The UK has made an ambitious commitment to bring all greenhouse gas emissions to net-zero by 2050, an increase from the 1990 target of an 80% reduction by 2050 (Department for Business, Energy and Industrial Strategy (BEIS), 2021). According to recent advice from the Committee on Climate Change, the UK may need at least 125GW of operating offshore wind farms to reach the new legally binding net-zero greenhouse gas emissions target by 2050 (HM Government, 2023). There is currently 13.8GW of offshore wind in operation in UK waters, with a further 78.1GW currently in the UK pipeline (HM Government, 2023). As part of the UK government's British Energy Security Strategy published in 2022, the target for offshore wind capacity is now up to 50GW by 2030 (BEIS, 2022).
- 17. The Projects would make a substantial contribution, both to the achievement of UK decarbonisation targets and to global commitments to mitigating climate change. By generating low carbon, renewable and low-cost electricity in the UK, the Projects would also help to reduce the UK's reliance on imported energy and to improve energy security. Further detail is provided in Volume 7, Chapter 2 Need for the Project (application ref: 7.2) and Volume 7, Chapter 3 Policy and Legislative Context (application ref: 7.3).





1.5 Consent and EIA Process

- 18. DBS East and DBS West are separate projects and separate legal entities. However, the Projects form the basis of a single DCO application. This approach, based on a single planning process and DCO application, allows for consistency across the Projects on approach to assessments, consultation and examination. Separate Deemed Marine Licences will be requested as schedules to the DCO to cover the array areas and associated transmission infrastructure for each of the Projects. This approach allows each Project to retain rights to their own particular assets should ownership of each Project change.
- 19. Whilst DBS East and DBS West are two separate Projects, they are the subject of a single DCO application (with a combined EIA process and associated submissions). The assessments cover three potential 'Development Scenarios' the possibility that either DBS East or DBS West are developed In Isolation, as well as both DBS East and DBS West being developed, either Concurrently or Sequentially. Whilst less likely to be taken forward, an 'In Isolation' Scenario is included within the assessments (and mitigation proposed where appropriate) as this forms the worst-case scenario if only one Project were to be developed. Further details of the Development Scenarios are given in **Volume 7**, **Chapter 5 Project Description (application ref: 7.5)**.
- 20. The EIA considers each Development Scenario and presents the results on a topic-by-topic basis.
- 21. DBS East and DBS West would each have a capacity of over 100 MW and are therefore each above the threshold to be considered as Nationally Significant Infrastructure Projects (NSIPs) under the Planning Act 2008. The EIA Directive is transposed into English law for NSIPs by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. An EIA must be undertaken in support of applications for development consent of NSIPs.
- 22. In 2019 the Government introduced regulations to ensure that, following the withdrawal of the UK from the European Union (EU), legislation concerning the environment continues to operate effectively. These include the Environment (Amendment, etc.) (EU Exit) Regulations 2019 and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.



23. The ES sets out the findings of the EIA and supports the application for development consent of the Projects. The assessment methodology applied to the development of the ES is explained in further detail in **Volume 7**, **Chapter 6 EIA Methodology (application ref: 7.6)**.

1.6 Technical Consultation

- 24. As discussed in section 1.2, the ES is informed by a **Scoping Opinion** (**Volume 8, application ref: 8.7**) that was provided by the Planning Inspectorate in September 2022.
- 25. In addition, the Applicants have undertaken technical consultation through the EPP and wider technical consultation. The EPP is a non-statutory, voluntary process aimed at providing a mechanism to help agree with key technical stakeholders the information the Applicants need to provide in the EIA and HRA as part of the DCO application to the Secretary of State.
- 26. The EPP includes the following topics:
 - Seabed Topics (covering Marine Physical Processes, Marine Water and Sediment Quality, Benthic and Intertidal Ecology, and Fish and Shellfish Ecology);
 - Marine Mammal Ecology and Underwater Noise;
 - Offshore Ornithology;
 - Offshore and Onshore Archaeology and Cultural Heritage;
 - Landscape and Visual Impact Assessment (LVIA);
 - Terrestrial Ecology;
 - Flood Risk and Hydrology;
 - Geology and Land Quality;
 - Public Rights of Way and Access;
 - Traffic and Transport;
 - Air Quality;
 - Noise and Vibration: and
 - Human Health.
- 27. EIA topic areas for which there are established consultation processes outside the EPP include Shipping and Navigation, Aviation and Radar, Commercial Fisheries, Socioeconomics, and Tourism and Recreation. Technical consultation on these topics has also been undertaken, as described in **Volume 7**, **Chapter 7 Consultation (application ref: 7.7)** and the relevant ES chapters.

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1.7 Community Consultation

- 28. A non-statutory introductory public consultation was held during September and October 2022. Information was provided via the Projects website (RWE, 2024) and at a series of public exhibitions held in Skipsea, Catwick and Beverley.
- 29. A Statement of Community Consultation (SoCC) was published in May 2023, outlining the plans for the ES and DCO and proposed project timeline.

1.8 Section 42, 47 and 48 Consultation

- 30. A statutory public consultation ran from 6th June to 17th July 2023. Information was provided via the Projects website (RWE, 2024) at a series of public exhibitions held in Skipsea, Leven, and Beverley and also via postcards / letter distribution, online events including webinars. The PEIR formed the basis of the consultation, alongside a Non-Technical Summary (NTS), a Consultation Brochure and feedback questionnaire.
- 31. A localised supplementary statutory consultation ran from 4th August to 15th September 2023 to target those addresses that had unintentionally been omitted from the initial letter distribution. Further targeted statutory consultation for landowners was held from 13th November 2023 to 10th December 2023 following amendments to the Onshore Development Area since the PEIR stage.
- 32. As discussed in section 1.1, the ES was provided to support public and stakeholder consultation under Sections 42, 47 and 48 of the Planning Act 2008. RWE has taken into account feedback from the consultation and where practicable and appropriate used it to inform the ongoing design of the Projects and the scope of the EIA.



1.9 The ES Structure

- 33. Topic specific Study Areas have been defined for each topic at the relevant scale and are stated within the ES topic chapters. These have been determined by a number of factors such as the distribution of receptors, footprint of potential impact and administrative / management boundaries (e.g. territorial waters, International Council for the Exploration of the Seas (ICES) rectangles) and where possible these have been agreed with regulators or advisors.
- The ES covers both the Offshore and Onshore Development Areas for the Projects and comprises **Volume 7** of the DCO, that includes ES Chapters, Figures and Appendices (chapter list is shown in **Table 1-1**).

Table 1-1 ES Volume 7 Chapter List

Section	Chapter	Title
Introductory	Chapter 1	Introduction
	Chapter 2	Need for the Project
	Chapter 3	Policy and Legislative Context
	Chapter 4	Site Selection and Assessment of Alternatives
	Chapter 5	Project Description
	Chapter 6	EIA Methodology
	Chapter 7	Consultation
Offshore	Chapter 8	Marine Physical Environment
	Chapter 9	Benthic and Intertidal Ecology
	Chapter 10	Fish and Shellfish Ecology
	Chapter 11	Marine Mammals
	Chapter 12	Offshore Ornithology
	Chapter 13	Commercial Fisheries
	Chapter 14	Shipping and Navigation
	Chapter 15	Aviation and Radar



Section	Chapter	Title
	Chapter 16	Infrastructure and Other Users
	Chapter 17	Offshore Archaeology and Cultural Heritage
Onshore	Chapter 18	Terrestrial Ecology and Ornithology
	Chapter 19	Geology and Land Quality
	Chapter 20	Flood Risk and Hydrology
	Chapter 21	Land Use
	Chapter 22	Onshore Archaeology and Cultural Heritage
	Chapter 23	Landscape and Visual Impact Assessment
	Chapter 24	Traffic and Transport
	Chapter 25	Noise
	Chapter 26	Air Quality
Wider Scheme	Chapter 27	Human Health
Aspects	Chapter 28	Socio-economics
	Chapter 29	Tourism and Recreation
	Chapter 30	Climate Change
Summary of the ES	-	Non-Technical Summary



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