



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

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Dogger Bank South Offshore Wind Farms

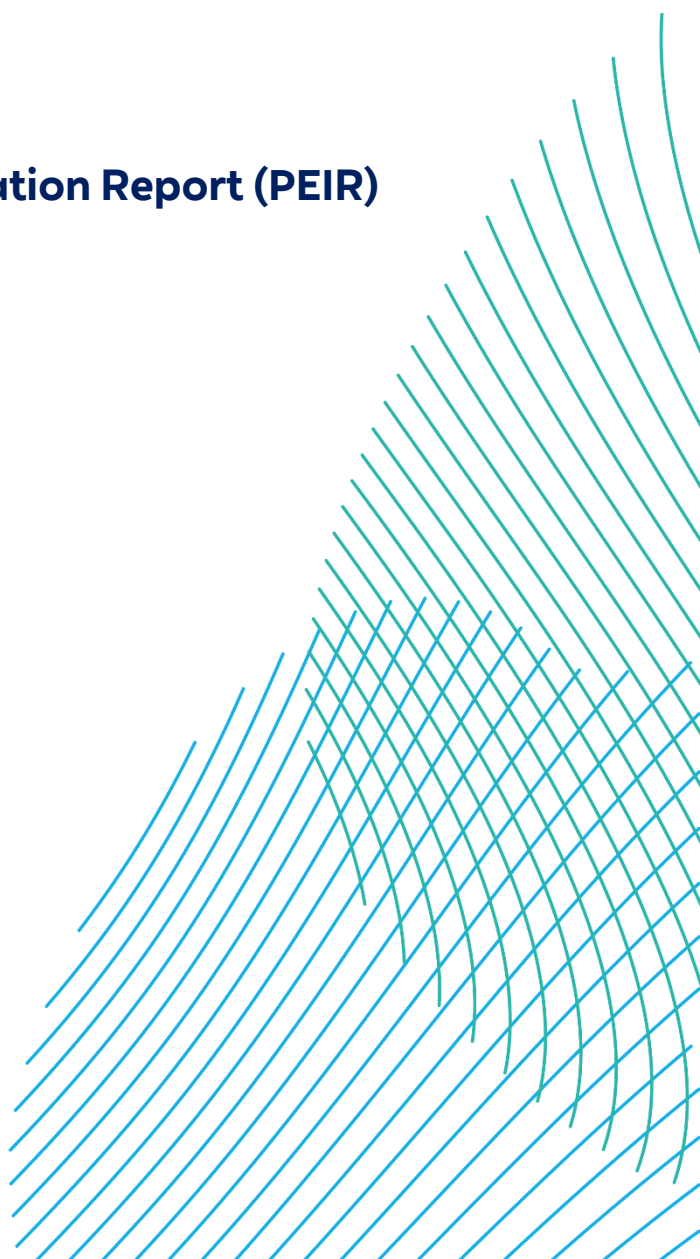
**Preliminary Environmental Information Report (PEIR)
Chapter 1 – Introduction**

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Glossary

Term	Definition
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.
Scoping Report	The report that was produced in order to request a Scoping Opinion from the Secretary of State.
Scoping Opinion	The report adopted by the Planning Inspectorate on behalf of the Secretary of State.
Topic Specific Study Area	The area where potential impacts from the Projects could occur, as defined for each individual EIA topic.
The Applicant	RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited as the owners of DBS West and DBS East respectively are the named undertakers that will have the benefit of the Development Consent Order. References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited.
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South offshore wind farms).

Acronyms

Term	Definition
BEIS	Department for Business, Energy and Industrial Strategy
CEA	Cumulative Effects Assessment
DCO	Development Consent Order
DBS	Dogger Bank South
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

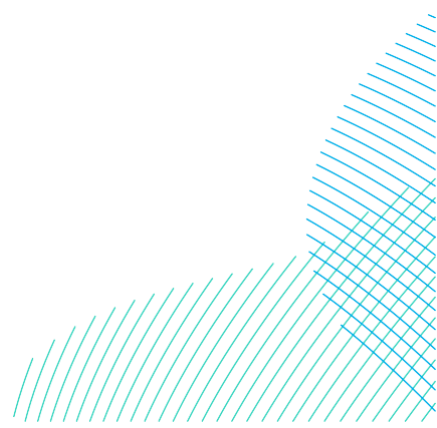
1 Introduction

1.1 Purpose of this Document

1. This document is the Preliminary Environmental Information Report (PEIR) 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 PEIR is to provide preliminary environmental information in relation to the Environmental Impact Assessment (EIA) to allow stakeholders to develop an informed view of the effects of the Projects, as required by The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations 2017).
3. This PEIR describes the baseline environment; EIA methodology; likely significant effects (assessed to date); and any proposed mitigation measures. It also sets out the consultation undertaken to date on the EIA (**Chapter 7 Consultation**).
4. The EIA considers impacts associated with the construction, operation, maintenance and decommissioning phases of the Projects, both from the Projects alone and cumulatively with other plans and projects.
5. This PEIR has been informed by a Scoping Opinion 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 **Chapter 7 Consultation**).
6. The PEIR has been produced to support public and stakeholder consultation under Sections 42, 47 and 48 of the Planning Act 2008. Feedback from this consultation will be taken into consideration and, where relevant, will be used to inform the ongoing design of the Projects and the scope of the final impact assessment which will be reported in the ES. The ES will be 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 **Chapter 3 Policy and Legislative Context**.

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, collectively known as the DBS offshore wind farms.
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 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 Applicant has signed an Agreement for Lease with The Crown Estate and will now progress to applying 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 500km².
10. When operational, DBS East and DBS West combined would have the potential to generate renewable power for 3.4 million United Kingdom (UK) homes from up to 200 wind turbines combined between the Projects (up to 3GW in total).



1.3 The Applicant and the Projects Team

11. RWE is one of the world's leading renewable energy companies and is a key player in the offshore wind market. RWE has been involved in offshore wind energy in the UK since the very start. Through E.ON Climate and Renewables, now part of RWE, the company has operated Blyth – the UK's first commercial wind farm in 2003, the 60MW North Hoyle Offshore Wind Farm.
12. RWE expects to invest around £15 billion into green technologies and infrastructure in the UK by 2030 as part of its Growing Green strategy to grow its renewable portfolio and to become carbon neutral by 2040. As a driver of the energy transition, the company also focuses on innovative projects such as floating offshore as well as the generation and use of hydrogen.
13. RWE is the UK's largest power producer and one of the country's largest renewables generators, accounting for around 15% of all electricity generated. With a diverse operational portfolio of onshore wind, offshore wind, hydro, biomass and gas amounting to over 10 gigawatts (GW) pro rata (12 GW installed capacity), the company generates enough power for over 10 million homes.
14. In total, RWE operates 33 onshore wind farms, 10 offshore wind farms, 21 hydro plants and one biomass plant.
15. With partners, RWE's offshore portfolio continues to expand in the UK with a further six projects in the development phase. This is one of the largest offshore wind pipelines in the country. Triton Knoll Offshore Wind Farm completed turbine commissioning in January 2022 and is now fully operational, capable of generating enough green electricity to power 800,000 typical UK homes per year. Construction is well underway on Sofia Offshore Wind Farm.
16. For further information visit: www.rwe.com/rwe-renewables-uk.
17. Royal HaskoningDHV has been commissioned by RWE 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.

18. 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.

1.4 Purpose of the Projects

19. 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 (CCC, 2019), the UK may need at least 75GW of operating offshore wind farms to reach the new legally binding net-zero greenhouse gas emissions target by 2050. There is currently 10GW of offshore wind in operation in UK waters, 10GW committed (under construction or with government support on offer) and a further 15GW in development (The Crown Estate, 2020). 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).
20. 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 will also help to reduce the UK's reliance on imported energy and to improve energy security. Further detail is provided in **Chapter 2 Need for the Project** and **Chapter 3 Policy and Legislative Context**.

1.5 Consent and EIA Process

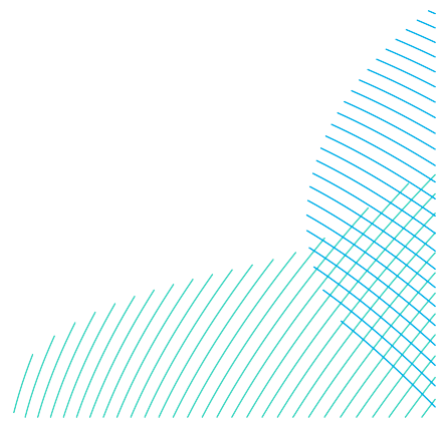
21. DBS East and DBS West are separate projects and separate commercial entities. However, the Projects will form the basis of a single DCO application. This approach, based on a single planning process and DCO application, allows for consistency across the Projects on approach to assessments, consultation and examination. While a single DCO application will be made for both Projects, 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 over time.
22. Whilst the Projects will form the basis of a single DCO application (with a combined EIA process and associated submissions), each Project will be assessed individually so that mitigation, where appropriate, is project specific. As such, the assessment will consider the possibility that the projects are developed concurrently or sequentially.
23. The EIA will consider the appropriate realistic worst-case scenarios based on the above and present the results on a topic-by-topic basis.
24. DBS East and DBS West will 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.
25. 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.
26. This PEIR sets out the preliminary findings of the EIA that will be finalised and reported within the ES supporting the application for development consent. The assessment methodology that has been applied to the development of the PEIR is explained in further detail in **Chapter 6 EIA Methodology**.

1.6 Technical Consultation

27. As discussed in section 1.2, this PEIR has been informed by a Scoping Opinion that was provided by the Planning Inspectorate in September 2022.
28. In addition, RWE has 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 RWE needs to provide in the EIA and HRA as part of the DCO application to the Secretary of State.
29. 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;
 - Seascape, landscape and visual impact assessment (SLVIA);
 - Onshore ecology (including onshore ornithology);
 - Onshore water resources and flood risk;
 - Land quality and geology;
 - Land use;
 - Traffic and transport;
 - Air quality (including climate change); and
 - Noise and vibration.
30. EIA topic areas for which there are established consultation processes outside the EPP include shipping and navigation, aviation and radar, commercial fisheries, human health, socioeconomics and tourism and recreation. Technical consultation on these topics has also been undertaken, as described in **Chapter 7 Consultation** and the relevant topic chapters.

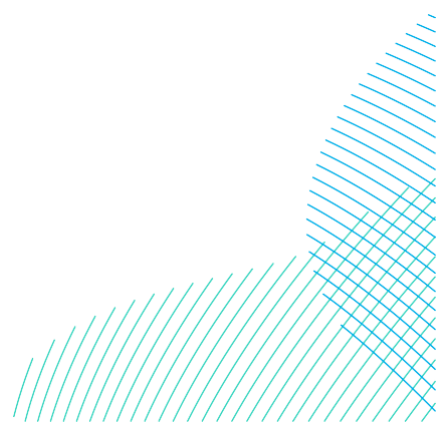
1.7 Community Consultation

31. A non-statutory introductory public consultation was held during September and October 2022. Information was provided via the Projects website (uk-ireland.rwe.com/project-proposals/dogger-bank-south) and at a series of public exhibitions held in Skipsea, Catwick and Beverley.
32. A Statement of Community Consultation (SoCC) will be published in advance of the consultation, which outlines the plans for ongoing consultation.



1.8 Section 42, 47 and 48 Consultation

33. As discussed in section 1.1, this PEIR is provided to support public and stakeholder consultation under Sections 42, 47 and 48 of the Planning Act 2008. RWE will have regard to feedback from the consultation and where practicable and appropriate use it to inform the ongoing design of the Projects and the scope of the EIA.
34. This PEIR can be downloaded at www.doggerbanksouth.co.uk and USB copies are available on request. Hard copies of the non-technical summary are also available on request.
35. If you have any questions or feedback on this PEIR, please get in touch via:
 - Email: dbs@rwe.com;
 - Website form: www.doggerbanksouth.co.uk; or
 - Post: FREEPOST DBSOWF.
36. Subject to publicity and other requirements, consultation on the PEIR is expected to take place in June – July 2023. Please see the DBS website for further details.



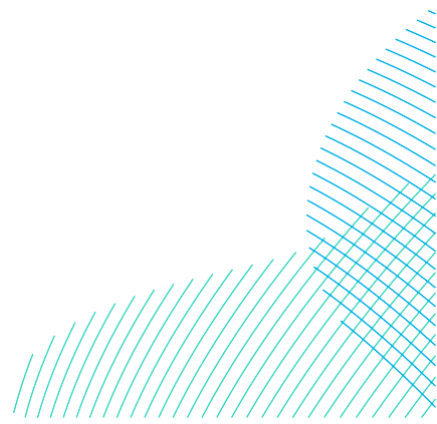
1.9 The PEIR Structure

37. Topic Specific Study Areas have been defined for each topic at the relevant scale and are stated within the 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.
38. This document covers both the Offshore and Onshore Development Areas for the Projects. It comprises three volumes:
- Volume 1: PEIR Chapters (chapter list shown in Table 1-1);
 - Volume 2: Figures; and
 - Volume 3: Appendices.

Table 1-1 PEIR Volume 1 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 Habitats
	Chapter 10	Fish and Shellfish Ecology
	Chapter 11	Marine Mammals
	Chapter 12	Offshore Ornithology

Section	Chapter	Title
	Chapter 13	Commercial Fisheries
	Chapter 14	Shipping and Navigation
	Chapter 15	Aviation and Radar
	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 Aspects	Chapter 27	Human Health
	Chapter 28	Socio-Economics
	Chapter 29	Tourism and Recreation
	Chapter 30	Climate Change



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