

Norfolk Boreas Offshore Wind Farm

Appendix 12.3

Marine Mammal Cumulative Impact Assessment (CIA) screening

Environmental Statement

Volume 3

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Glossary of Acronyms

CIA	Cumulative Impact Assessment
ES	Environmental Statement
GS	Grey seal
HP	Harbour porpoise
HS	Harbour seal
NB	Norfolk Boreas
MU	Management Unit
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
SNS	Southern North Sea
UK	United Kingdom

Glossary of Terminology

Array cables	Cables which link wind turbine to wind turbine, and wind turbine to offshore electrical platforms.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support HRA.
Interconnector cables	Offshore cables which link offshore electrical platforms within the Norfolk Boreas site
Landfall	Where the offshore cables come ashore at Happisburgh South.
Norfolk Boreas site	The Norfolk Boreas wind farm boundary. Located offshore, this will contain all the wind farm array.
Norfolk Vanguard	Norfolk Vanguard offshore wind farm, sister project of Norfolk Boreas.
Norfolk Vanguard OWF sites	Term used exclusively to refer to the two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West (also termed NV East and NV West) which will contain the Norfolk Vanguard arrays.
Offshore cable corridor	The corridor of seabed from the Norfolk Boreas site to the landfall site within which the offshore export cables will be located.
Offshore electrical platform	A fixed structure located within the Norfolk Boreas site, containing electrical equipment to aggregate the power from the wind turbines and convert it into a suitable form for export to shore.
Offshore export cables	The cables which transmit electricity from the offshore electrical platform to the landfall.
Offshore project area	The area including the Norfolk Boreas site, project interconnector search area and offshore cable corridor.
Offshore service platform	A platform to house workers offshore and/or provide helicopter refuelling facilities. An accommodation vessel may be used as an alternative for housing workers.
Project interconnector cable	Offshore cables which would link either turbines or an offshore electrical platform in the Norfolk Boreas site with an offshore electrical platform in one of the Norfolk Vanguard sites.
Project interconnector search area	The area within which project interconnector cables would be installed.
Safety zone	An area around a vessel which should be avoided during offshore construction.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the

	foundations as a result of the flow of water.
The Applicant	Norfolk Boreas Limited.
The project	Norfolk Boreas Wind Farm including the onshore and offshore infrastructure.

1 Introduction

1. The Tables in this Appendix summarise the CIA screening and lists of plans and projects which have been screened into the marine mammal cumulative impact assessment (CIA) as they were:
 - a. Within the agreed reference population boundary for the given receptor (see section 12.6 of Chapter 12 Marine mammals).
 - b. Had the potential to cause the type of impact which could have a cumulative impact with Norfolk Boreas (Table 12.65 of Chapter 12 Marine Mammals).
 - c. From a tier (Table 12.10 of Chapter 12 Marine Mammals) which was screened into the assessment.
2. The screening results are provided for each type of plan/project including other offshore wind farms, other renewable developments, aggregate extraction and dredging, licensed disposal sites, navigation and shipping, planned construction of subsea cables and pipelines and oil and gas installations (including surveying).
3. Any plans or projects that have the potential for a construction/commissioning cumulative impact that commenced construction/commissioning between the end of the baseline and submission of the Environmental Statement (ES) will not be taken forward in the CIA for this type of cumulative impact. It is assumed that construction/commissioning will be completed before the start of construction of Norfolk Boreas.
4. The screening is based on widest possible range of construction dates for Norfolk Boreas between 2020 and 2031, with construction starting as early as 2024 and the likely latest end point for construction completion would be 2031, regardless of the consent window (2020-2027) and the main construction duration (2026-2028) to allow for any delays.

1.1 Data Sources

5. A wide range of data sources and information was used for the CIA and CIA screening, including, but not limited to:
 - Project ESs (and Preliminary Environmental Information Report (PEIR) for East Anglia ONE North and TWO);
 - Developer websites;
 - 4C Offshore Winds Database (<http://www.4coffshore.com/offshorewind/>);
 - Renewable UK website (<http://www.renewableuk.com>);
 - Crown Estate website;

- Oil and gas UK licensing rounds website (<https://www.gov.uk/guidance/oil-and-gas-licensing-rounds#past-licensing-rounds>);
- Cefas website (e.g. <http://data.cefas.co.uk/#/View/407>);
- Planning Inspectorate National Infrastructure Planning website;
- European Marine Observation and Data Network (EMODnet) data;
- Netherlands Oil and Gas (NLOG) website;
- Danish Energy Agency website;
- Norwegian Petroleum Directive website; and
- Dutch Ministry of Infrastructure and the Environment – Rijkswaterstaat website.

2 Offshore Wind Farms

6. Annex 1 lists all the United Kingdom (UK) and European offshore wind farm projects considered in the CIA screening categorised tier 1-5.

2.1 UK offshore wind farms

7. UK based projects (section 2.1) listed in tiers 1-4 were considered for potential construction, operation and maintenance, and decommissioning cumulative impacts, if those phases could overlap with the proposed construction, operation and maintenance, and decommissioning of Norfolk Boreas and sufficient information and certainty in project programmes allowed for a meaningful assessment. In addition, tier 5 projects for which the applications are currently in preparation have also been considered.
8. As a precautionary approach and to allow for any delays and changes in schedule, the potential for overlap with the proposed construction of Norfolk Boreas with all UK consented (tier 3) projects is based on seven year window in which construction could occur (although most projects have a five year consent window). For UK tier 4 projects (application submitted) the possible construction windows were based on the best available information. This approach represents the worst-case scenario for the CIA.
9. As a more realistic approach, a second assessment (indicative scenario) included currently consented (tier 3) UK offshore wind farm developments that could be piling at the same time as Norfolk Boreas, based on best available information on when the developments are likely to be constructing and piling. This indicative scenario is could change but currently more accurately reflects the limitations and constraints to project delivery (see section 12.8 of Chapter 12 Marine Mammals).
10. The screening resulted in a list of 48 UK offshore wind farms with the potential for construction, operation and decommissioning cumulative impacts on harbour porpoise. Of the 48 projects, up to 21 have the potential for construction to overlap with the proposed construction of Norfolk Boreas (this includes seven projects with

unknown construction windows, and 14 of the 21 projects have a defined construction window which could overlap with construction at Norfolk Boreas).

11. Operational wind farms were considered part of the baseline if they were operational at the time of the start of the Norfolk Boreas site specific surveys (August 2016). Therefore, up to 32 offshore wind farms currently classed as tier 2-5, were screened in for the potential for operation and maintenance to overlap with the construction, operation and maintenance or decommissioning of Norfolk Boreas.
12. All 49 projects have the potential for decommissioning to overlap with the operation and maintenance or decommissioning of Norfolk Boreas, and therefore have the potential for cumulative impacts for harbour porpoise.
13. For grey seal, 35 projects have been screened in, with the potential of construction cumulative impacts for 14 projects (one of which has an unknown construction window); operation and maintenance cumulative impacts for 20 projects; and decommissioning cumulative impacts for all 35 projects.
14. For harbour seal, 33 projects were screened in, with 13 projects having the potential of construction cumulative impacts (one of which has an unknown construction window); 18 with potential operations and maintenance cumulative impacts; and all 33 with possible decommissioning cumulative impacts. The results of the screening are presented in Table 1.

Table 1 Results of the CIA screening for UK offshore windfarm projects: list of UK offshore wind farms (status at time of writing) within the harbour porpoise (HP), harbour seal (HS) and grey seal (GS) Management Units (MUs) and the HP Southern North Sea (SNS) Special Area of Conservation (SAC) with potential to overlap with Norfolk Boreas (NB) construction, operation or decommissioning phases. N = No. Y = Yes.

Name of Project	Country	Status	Tier	Month/yr consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for				
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
European Offshore Wind Deployment Centre EOWDC (Aberdeen Demonstration)	UK	Construction	1	2013 (Operational by September 2018)	545	N	Y	Y	Y	N	N	N	N
Blyth demonstration site (2)	UK	Operational	1	2013 (Operational by June 2018)	351	N	Y	Y	Y	Y	N	N	N
Dudgeon	UK	Operational	1	2012 (Operational by 2017)	90	N	Y	Y	Y	Y	Y	N	N
Galloper	UK	Commissioned	1	2013 (Operational by September 2018)	108	N	Y	Y	Y	Y	Y	N	Y
Greater Gabbard	UK	Operational	1	2002 (Operational by 2009)	112	N	N	Y	Y	Y	Y	N	Y
Gunfleet Sands 3 (Demo Zone)	UK	Operational	1	2012 (Operational by 2013)	167	N	N	Y	Y	Y	Y	N	N
Gunfleet Sands I	UK	Operational	1	2004 (Operational by 2010)	160	N	N	Y	Y	Y	Y	N	N
Humber Gateway	UK	Operational	1	2011	174	N	N	Y	Y	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/yr consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for				
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
				(Operational by 2015)									
Hywind Pilot Park	UK	Commissioned	1	2015 (Operational by 2017)	550	N	Y	Y	Y	N	N	N	N
Inner Dowsing	UK	Operational	1	2003 (Operational by 2009)	153	N	N	Y	Y	Y	Y	N	N
Kentish Flats	UK	Operational	1	2003 (Operational by 2005)	192	N	N	Y	Y	Y	Y	N	N
Kentish Flats Extension	UK	Operational	1	2013 (Operational by 2015)	193	N	N	Y	Y	Y	Y	N	N
Levenmouth (Demo)	UK	Operational	1	2013 (Operational by 2013)	505	N	N	Y	Y	N	N	N	N
Lincs	UK	Operational	1	2008 (Operational by 2013)	150	N	N	Y	Y	Y	Y	N	N
London Array	UK	Operational	1	2006 (Operational by 2013)	156	N	N	Y	Y	Y	Y	N	N
Lynn	UK	Operational	1	2003 (Operational by 2008)	153	N	N	Y	Y	Y	Y	N	N
Race Bank	UK	Operational	1	2012 (Operational	124	N	Y	Y	Y	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/yr consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for				
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
				by 2017)									
Rampion Wind Farm	UK	Construction	1	2014 (Operational by December 2018)	318	N	Y	Y	Y	N	N	N	N
Scroby Sands	UK	Operational	1	2002 (Operational by 2004)	68	N	N	Y	Y	Y	Y	N	Y
Sheringham Shoal	UK	Operational	1	2008 (Operational by 2012)	104	N	N	Y	Y	Y	Y	N	N
Teesside	UK	Operational	1	2007 (Operational by 2013)	304	N	N	Y	Y	Y	Y	N	N
Thanet	UK	Operational	1	2006 (Operational by 2010)	175	N	N	Y	Y	Y	Y	N	Y
Westermost Rough	UK	Operational	1	2011 (Operational by 2014)	187	N	N	Y	Y	Y	Y	N	N
Beatrice	UK	Construction	2	Mar-14	665.1	N	Y	Y	Y	N	N	N	N
East Anglia One	UK	Construction	2	Jun-14 (5 year consent)	61.75	N	Y	Y	Y	Y	Y	N	Y
Hornsea Project One	UK	Construction	2	Dec-14	85.92	N	Y	Y	Y	Y	Y	Y	N
Kincardine (floating)	UK	Construction	2	Mar-17	573.6	N	Y	Y	Y	N	N	N	N

Name of Project	Country	Status	Tier	Month/yr consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for				
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
turbines)													
Blyth demonstration site (3A & 4)	UK	Consented	3	Nov-13	350.61	Y	Y	Y	Y	Y	N	N	N
Dogger Bank Zone Creyke Beck A	UK	Consented	3	Feb-14 (5 year consent)	173.09	Y	Y	Y	Y	Y	Y	Y	N
Dogger Bank Zone Creyke Beck B	UK	Consented	3	Feb-14 (5 year consent)	196.43	Y	Y	Y	Y	Y	Y	Y	N
Dogger Bank Zone Teesside A	UK	Consented	3	Aug-15	190.81	Y	Y	Y	Y	Y	Y	Y	N
Dounreay Tri	UK	Consented	3	Mar-17 ON HOLD	765.91	unknown	Y	Y	Y	N	N	N	N
East Anglia THREE	UK	Consented	3	2017	13.2	Y	Y	Y	Y	Y	Y	Y	Y
Firth of Forth Phase 1 Seagreen Alpha	UK	Consented	3	Oct-14 ON-HOLD	500	unknown	Y	Y	Y	N	N	N	N
Firth of Forth Phase 1 Seagreen Bravo	UK	Consented	3	Oct-14 ON-HOLD	500	unknown	Y	Y	Y	N	N	N	N
Hornsea Project Two	UK	Consented	3	Aug-16 (5 year consent)	100.94	Y	Y	Y	Y	Y	Y	Y	N
Inch Cape	UK	Consented	3	ON-HOLD	489.58	Unknown	Y	Y	Y	N	N	N	N
Moray East (including MORL MacColl, MORL)	UK	Consented	3	Mar-14	656.82	Y	Y	Y	Y	N	N	N	N

Name of Project	Country	Status	Tier	Month/yr consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for				
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Stevenson and MORL Telford)													
Neart na Gaoithe	UK	Consented	3	Oct-14 ON-HOLD	468.16	Unknown	Y	Y	Y	N	N	N	N
Sofia (previously Dogger Bank Zone Teesside B)	UK	Consented	3	Aug-15	185.05	Y	Y	Y	Y	Y	Y	Y	N
Triton Knoll phase 1-3 43	UK	Consented	3	Jul-13	123.98	Y	Y	Y	Y	Y	Y	N	N
Hornsea Project THREE	UK	Application submitted	4	-	52.94	Y	Y	Y	Y	Y	Y	Y	Y
Moray Firth West	UK	Application submitted	4	-	629.24	Unknown	Y	Y	Y	N	N	N	N
Norfolk Vanguard	UK	Application submitted	4	-	30	Y	Y	Y	Y	Y	Y	Y	Y
Thanet Extension	UK	Application submitted	4	-	174.84	Y	Y	Y	Y	Y	Y	Y	Y
East Anglia ONE North	UK	Environmental Statement in preparation	5	-	50.8	Y	Y	Y	Y	Y	Y	Y	Y
East Anglia TWO	UK	Environmental Statement in preparation	5	-	72.86	Y	Y	Y	Y	Y	Y	Y	Y
Hornsea Project Four	UK	Environmental Statement in preparation	5	-	119	Unknown	Y	Y	Y	Y	Y	Y	N

2.2 European Offshore Wind Farms

15. European projects (Table 2) listed in tier 1-3 were considered for the CIA. The screening for the construction of the European offshore wind farm tier 3 projects was based on the seven year window in which construction could occur (e.g. from date of consent for tier 3 projects in 2018 or later). If there was no information or any uncertainty, the projects were screened in as a precautionary approach.
16. The screening resulted in a list of 67 European offshore wind farms with the potential for construction, operation and decommissioning cumulative impacts on harbour porpoise. Of the 67 projects, 17 have the potential for construction to overlap with the proposed construction of Norfolk Boreas (with two of these having unknown construction windows).
17. As above, operational wind farms were considered part of the baseline if they were operational at the time of the start of the Norfolk Boreas site specific surveys. Therefore, up to 39 offshore wind farms currently classed as tier 2-3 have the potential for operation and maintenance to overlap with the construction, operation and maintenance or decommissioning of Norfolk Boreas; and all 67 projects have the potential for decommissioning to overlap with the operation and maintenance or decommissioning of Norfolk Boreas, and therefore have potential of cumulative impacts for harbour porpoise.
18. For grey seal, five projects have been screened in, with the potential of construction cumulative impacts for two projects; operation and maintenance cumulative impacts for four projects; and decommissioning cumulative impacts for all five projects.
19. For harbour seal, five projects were screened in, with two projects having the potential of construction cumulative impacts; four with potential operations and maintenance cumulative impacts; and all five with possible decommissioning cumulative impacts.
20. The results of the screening are presented in Table 2.

Table 2 Results of the CIA screening for European offshore windfarm projects: list of UK offshore wind farms (status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning phases. N = No. Y = Yes.

Name of Project	Country	Status	Tier	Month/year consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for		
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU
Belwind 1	Belgium	Commissioned (operational by 2010)	1	2008	129	N	N	Y	Y	N	N
Belwind Alstom Haliade Demonstration	Belgium	Commissioned (operational by 2014)	1	Unknown	118	N	N	Y	Y	N	N
Mermaid	Belgium	Consented	3	2015	126	Y	Y	Y	Y	N	N
Nobelwind	Belgium	Commissioned (operational by 2017)	1	2008	129	N	Y	Y	Y	N	N
Norther	Belgium	Pre-Construction	2	Jan-12	132	N	Y	Y	Y	Y	Y
Northwester 2	Belgium	Consented	3	2015	130	Y	Y	Y	Y	Y	Y
Northwind	Belgium	Commissioned (operational by 2014)	1	2009	138	N	N	Y	Y	N	N
RENTEL	Belgium	Construction	2	Feb-14	140	Y	Y	Y	Y	Y	Y
SeaStar	Belgium	Consented	3	2014	134	Y	Y	Y	Y	N	N
Thornton Bank phase I	Belgium	Commissioned (operational by 2009)	1	2004	144	N	N	Y	Y	N	N
Thornton Bank phase II	Belgium	Commissioned (operational by 2013)	1	2004	145	N	N	Y	Y	N	N
Thornton Bank phase III	Belgium	Commissioned (operational by 2013)	1	2004	148	N	N	Y	Y	N	N
Horns Rev 1	Denmark	Commissioned (operational by 2002)	1	2001	396	N	N	Y	Y	N	N
Horns Rev 2	Denmark	Commissioned (operational by 2010)	1	2007	389	N	N	Y	Y	N	N
Horns Rev 3	Denmark	Construction	2	2015	397	Y	Y	Y	Y	N	N
Nissum Bredning	Denmark	Commissioned	1	2017	504	N	Y	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/year consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for		
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU
Vind		(operational by 2018)									
Rønland	Denmark	Commissioned (operational by 2014)	1	2009	504	N	N	Y	Y	N	N
Vesterhav Nord/Syd	Denmark	Consented	3	2016	519	N*	Y	Y	Y	N	N
Eoliennes du Calvados	France	Consented	3	2016	441	Y	Y	Y	Y	N	N
Parc éolien en mer de Fécamp	France	Consented	3	2016	363	Y	Y	Y	Y	N	N
Alpha Ventus	Germany	Commissioned (operational by 2010)	1	2001	249	N	N	Y	Y	N	N
Amrumbank West	Germany	Commissioned (operational by 2015)	1	2004	333	N	N	Y	Y	N	N
BARD Offshore 1	Germany	Commissioned (operational by 2013)	1	2007	224	N	N	Y	Y	N	N
Borkum Riffgrund I	Germany	Commissioned (operational by 2010)	1	2001	241	N	N	Y	Y	N	N
Borkum Riffgrund II	Germany	Construction	2	Dec-11	237	N	Y	Y	Y	N	N
Borkum Riffgrund West I	Germany	Consented	3	2004	225	N	Y	Y	Y	N	N
Borkum Riffgrund West II	Germany	Consented	3	2017	237	Y	Y	Y	Y	N	N
Butendiek (Offshore-Bürger- windpark)	Germany	Commissioned (operational by 2015)	1	2002	364	N	N	Y	Y	N	N
Dan Tysk	Germany	Commissioned (operational by 2015)	1	2005	337	N	N	Y	Y	N	N
Deutsche Bucht	Germany	Construction	2	Feb-10	213	N	Y	Y	Y	N	N
Deutsche Bucht Pilot Park	Germany	Consented	3	Unknown	213	Unknown	Y	Y	Y	N	N
EnBW He Dreiht	Germany	Consented	3	2010	236	N	Y	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/year consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for		
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU
EnBW Hohe See (Hochsee Windpark 'Nordsee')	Germany	Construction	2	Jul-06	251	N	Y	Y	Y	N	N
ENOVA Ems Emden	Germany	Commissioned (operational by 2004)	1	2003	295	N	N	Y	Y	N	N
Global Tech I	Germany	Commissioned (operational by 2015)	1	2006	256	N	N	Y	Y	N	N
Gode Wind 03	Germany	Consented	3	2016	280	Y	Y	Y	Y	N	N
Gode Wind 04	Germany	Consented	3	2009	277	N	Y	Y	Y	N	N
Gode Wind 1 and 2	Germany	Commissioned (operational by 2017)	1	2009	271	N	Y	Y	Y	N	N
Kaskasi	Germany	Consented	3	2018	334	Y	Y	Y	Y	N	N
Meerwind Sud/Ost	Germany	Commissioned (operational by 2014)	1	2007	326	N	N	Y	Y	N	N
Merkur	Germany	Construction	2	2009	243	N	Y	Y	Y	N	N
Nordergrunde	Germany	Commissioned (operational by 2017)	1	2008	344	N	Y	Y	Y	Y	Y
Nordsee One (Innogy Nordsee I)	Germany	Commissioned (operational by 2017)	1	2012	257	N	Y	Y	Y	N	N
Nordsee Ost	Germany	Commissioned (operational by 2015)	1	2004	266	N	N	Y	Y	N	N
OWP Albatros Phase 1	Germany	Construction	2	2011	250	N	Y	Y	Y	N	N
OWP West	Germany	Consented	3	Apr-14	220	N	Y	Y	Y	N	N
Riffgat	Germany	Commissioned (operational by 2014)	1	2010	230	N	N	Y	Y	Y	Y
Sandbank	Germany	Commissioned (operational by 2017)	1	2004	325	N	Y	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/year consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for		
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU
Trianel Windpark Borkum Phase 1 (Borkum West II phase 1)	Germany	Commissioned (operational by 2015)	1	2008	240	N	N	Y	Y	N	N
Trianel Windpark Borkum Phase 2 (aka Borkum West II phase 2)	Germany	Construction	2	2007	238	N	Y	Y	Y	N	N
Veja Mate	Germany	Commissioned (operational by 2017)	1	2009	216	N	Y	Y	Y	N	N
Borssele I and II	Netherlands	Consented	3	May-16	121	Y	Y	Y	Y	N	N
Borssele III and IV	Netherlands	Consented	3	May-16	128	Y	Y	Y	Y	N	N
Borssele Site V - Leegwater - InNvation Plot	Netherlands	Consented	3	May-16	126	Y	Y	Y	Y	N	N
Egmond aan Zee (aka OWEZ)	Netherlands	Commissioned (operational by 2007)	1	2005	89	N	N	Y	Y	N	N
Eneco Luchterduinen	Netherlands	Commissioned (operational by 2015)	1	2012	100	N	N	Y	Y	N	N
Gemini	Netherlands	Commissioned (operational by 2017)	1	2009	214	N	Y	Y	Y	N	N
Hollandse Kust Zuid Holland I and II	Netherlands	Consented	3	2018	73	Y	Y	Y	Y	N	N
Irene Vorrink	Netherlands	Commissioned (operational by 1996)	1	Unknown	185	N	N	Y	Y	N	N
Prinses Amalia Windpark (formerly Q7)	Netherlands	Commissioned (operational by 2007)	1	2008	80	N	N	Y	Y	N	N
Westermeerwind	Netherlands	Commissioned (operational by June)	1	2012	170	N	N	Y	Y	N	N

Name of Project	Country	Status	Tier	Month/year consent authorised	Distance to NB (km)	Phase of plan considered in CIA			Spatial Area Screened in for		
						Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU
		2016)									
Windpark Fryslan	Netherlands	Consented	3	2018	136	Y	Y	Y	Y	N	N
Hywind - Metcentre	Norway	Commissioned (operational by 2009)	1	2006	696	N	N	Y	Y	N	N
Kvitsøy Wind Turbine Demonstration Area	Norway	Consented	3	2010	657	N	Y	Y	Y	N	N
Rennesøy Wind Turbine Demonstration Area	Norway	Consented	3	2010	663	N	Y	Y	Y	N	N
TetraSpar Demo (Metcentre)	Norway	Consented	3	Unknown	662	Unknown	Y	Y	Y	N	N
SeaTwirl S1	Sweden	Commissioned (operational by 2015)	1	2015	781	N	N	Y	Y	N	N

HP = harbour porpoise, GS = grey seal, HS = harbour seal, MU = Management Unit, SNS = Southern North Sea, SAC = Special Area of Conservation.

*Vesterhav Nord/Syd: License sets out construction to be complete by the end of 2020, therefore no overlap with Norfolk Boreas construction

3 Other Marine Renewable Developments

21. Other marine renewable projects (e.g. wave and tidal) assessed in the CIA screening were tier 1-5 for UK based projects, and tier 1-3 for other European projects. Annex 2 lists all the other marine renewable projects considered in the CIA screening.
22. UK based projects listed in tiers 1-4 were screened in for potential construction, operation and maintenance and decommissioning cumulative impacts, if those phases could overlap with the proposed construction, operation and maintenance, and decommissioning of Norfolk Boreas and sufficient information was available to determine this. No European projects have been screened in (tier 3 or above). The results of the screening are in Table 3.
23. A total of 17 projects were screened into the harbour porpoise CIA, none of which could have the potential for construction to overlap with the proposed construction of Norfolk Boreas and 16 have the potential for operational cumulative impacts.
24. No wave and tidal projects were screened into the CIA for grey seal or harbour seal.
25. Piling is highly unlikely to be used during the installation of wave and tidal projects. The installation of wave/tidal projects is typically using drilled pins or gravity bases. Percussive piling is not anticipated to be used as an installation method and therefore the noise impacts during construction will have a very limited impact range, especially compared to offshore wind farms.
26. The installation of wave or tidal developments is highly unlikely to contribute to the cumulative impacts of the disturbance of harbour porpoise from underwater noise sources and therefore have not been included in the CIA.
27. Similarly, the operation and maintenance of wave and tidal projects are also highly unlikely to contribute to the cumulative impacts of the disturbance of harbour porpoise from underwater noise sources and therefore have not been included in the CIA.

Table 3 Results of CIA screening for marine renewable projects: list of UK projects (status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning

Name of Project	Type of Project	Country	Status	Tier	Phase of plan considered in CIA			Spatial Area Screened in for				
					Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Billa Croo Development Area	Wave	UK	Operational	1	N	Y	Y	Y	N	N	N	N
Bluemull Sound	Tidal	UK	Operational	1	N	Y	Y	Y	N	N	N	N
EMEC Clean Energy from Ocean Waves (CEFOW) Phase 1	Wave	UK	Consented	3	N	Y	Y	Y	N	N	N	N
EMEC Laminaria	Wave	UK	Consented	3	N	Y	Y	Y	N	N	N	N
EMEC OpenHydro	Tidal	UK	Operational	1	N	y	y	Y	N	N	N	N
EMEC Scapa Flow (CorPower Ocean)	Wave	UK	Operational	1	N	Y	Y	Y	N	N	N	N
EMEC Scotrenewables SR2000	Tidal	UK	Operational	1	N	Y	Y	Y	N	N	N	N
EMEC Seatricity	Wave	UK	Operational	1	N	Y	Y	Y	N	N	N	N
EMEC Sustainable Marine Energy	Tidal	UK	Construction	2	N	Y	Y	Y	N	N	N	N
EMEC Tocado Phase 2	Tidal	UK	Consented	3	N	Y	Y	Y	N	N	N	N
EMEC Wello Oy	Wave	UK	Operational	1	N	Y	Y	Y	N	N	N	N
MeyGen Pentland Firth Phase 1a	Tidal	UK	Operational	1	N	Y	Y	Y	N	N	N	N
MeyGen Pentland Firth Phase 1B	Tidal	UK	Consented	3	N	Y	Y	Y	N	N	N	N
MeyGen Pentland Firth Phase 1C	Tidal	UK	Consented	3	N	Y	Y	Y	N	N	N	N

Name of Project	Type of Project	Country	Status	Tier	Phase of plan considered in CIA			Spatial Area Screened in for				
					Construction	Operation & Maintenance	Decommissioning	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Perpetuus Tidal Energy Centre (PTEC)	Tidal	UK	Consented ON HOLD	3	N	N	N	Y	N	N	N	Y
Shetland Tidal Array Phase 1	Tidal	UK	Operational	1	N	Y	Y	Y	N	N	N	N
Shetland Tidal Array Phase 2	Tidal	UK	Consented	3	N	Y	Y	Y	N	N	N	N

HP = harbour porpoise, GS = grey seal, HS = harbour seal, MU = Management Unit, SNS = Southern North Sea, SAC = Special Area of Conservation

4 Aggregate Extraction and Dredging (operational impacts only)

28. Aggregate extraction and dredging projects considered for the CIA screening were tier 1-3 for UK based projects (Table 4); no European projects were screened in due to a lack of information.
29. No projects were identified in tier 2 or 3, and all of the tier 1 projects identified by screening were already active dredge zones, and are therefore considered part of the baseline. Therefore, the 68 projects were screened out from further consideration in the CIA for marine mammals during the proposed construction, operation and maintenance and decommissioning of Norfolk Boreas.

5 Offshore Mining

30. Offshore mining projects considered for the CIA screening were tier 1-3 for UK based projects (Table 5); no European projects were assessed in due to a lack of information.
31. Two projects were identified, one under construction and one operational within the MU areas for harbour porpoise and grey seal.
32. The operational project is considered part of the current baseline and therefore not considered further in the CIA.
33. The other project is unlikely to contribute significantly to underwater noise as any construction will be on land or under the seabed, based on currently available information, and therefore not considered further in the CIA.

Table 4 Results of CIA screening for aggregate extraction and dredging projects: list of UK projects (active status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning phases. N = No. Y = Yes.

Name of Project	Area	Distance to NB (km)	Tier	Spatial Area Screened in for				
				HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Area 1 South	478	353	1	Y	N	N	N	N
Cross Sands	242 -361/1-3	54	1	Y	Y	Y	Y	Y
EEC North	474/1	316	1	Y	Y	Y	N	N
EEC North	474/2	316	1	Y	Y	Y	N	N
EEC North	474/3	316	1	Y	Y	Y	N	N
Goodwin Sands	521	200	1	Y	Y	Y	N	N
Greenwich Light East	473/1	314	1	Y	Y	Y	N	N
Greenwich Light East	473/2	307	1	Y	Y	Y	N	N
Humber 1	514/1	172	1	Y	Y	Y	N	N
Humber 2	514/2	172	1	Y	Y	Y	N	N
Humber 3	484	65	1	Y	Y	Y	Y	N
Humber 3	514/3	156	1	Y	Y	Y	Y	N
Humber 4	514/4	171	1	Y	Y	Y	Y	N
Humber 4 and 7	506	78	1	Y	Y	Y	N	N
Humber 5	483	62	1	Y	Y	Y	Y	N
Humber Estuary	106/1	153	1	Y	Y	Y	N	N
Humber Estuary	106/2	153	1	Y	Y	Y	N	N
Humber Estuary	106/3	153	1	Y	Y	Y	N	N
Humber Estuary	400	154	1	Y	Y	Y	N	N
Humber Overfalls	493	165	1	Y	Y	Y	N	N

Name of Project	Area	Distance to NB (km)	Tier	Spatial Area Screened in for				
				HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Inner Dowsing	481/1-2	142	1	Y	Y	Y	N	N
Inner Dowsing	481/1-2	142	1	Y	Y	Y	N	N
Inner Owers	396/1-2	331	1	Y	Y	N	N	N
Inner Owers	435/1-2	331	1	Y	Y	N	N	N
Inner Owers North	488	329	1	Y	Y	N	N	N
Longsand	508	145	1	Y	Y	N	N	Y
Longsand	509/1-3	142	1	Y	Y	N	N	Y
Longsand	510/1-2	142	1	Y	Y	N	N	Y
Median Deep	461	334	1	Y	N	N	N	N
Needles Isle of Wight	137	388	1	Y	N	N	N	N
Norfolk	212	57	1	Y	Y	Y	N	Y
North Cross Sands	494	56	1	Y	Y	Y	N	Y
North Falls East	501	133	1	Y	Y	Y	N	Y
North Inner Gabbard	498	107	1	Y	Y	Y	N	Y
North Inner Gabbard	498	107	1	Y	Y	Y	N	Y
North Nab	372/1	359	1	Y	N	N	N	N
Off Great Yarmouth	228	64	1	Y	Y	Y	N	Y
Off Great Yarmouth	254	63	1	Y	Y	Y	N	Y
Off Great Yarmouth Extension	240	61	1	Y	Y	Y	N	Y
Off Saltfleet	197	156	1	Y	Y	Y	N	N
Off Selsey Bill	395/1-2	352	1	Y	N	N	N	N
Off Selsey Bill	395/1-2	352	1	Y	N	N	N	N

Name of Project	Area	Distance to NB (km)	Tier	Spatial Area Screened in for				
				HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Outer Dowsing	515/1-2	121	1	Y	Y	Y	N	N
Owers Extension	453	328	1	Y	N	N	N	N
Shipwash	507/1-6	121	1	Y	Y	Y	N	Y
South East Isle of Wight	340	362	1	Y	N	N	N	N
South East Isle of Wight	340	362	1	Y	N	N	N	N
South East Isle of Wight	351	353	1	Y	N	N	N	N
South East Isle of Wight	351	353	1	Y	N	N	N	N
South Hastings	460	279	1	Y	Y	Y	N	N
South Hastings	460	279	1	Y	Y	Y	N	N
South Hastings	460	279	1	Y	Y	Y	N	N
South of Needles Channel	500/3	445	1	Y	N	N	N	N
South West Isle of Wight	500/4	400	1	Y	N	N	N	N
South West Isle of Wight	127/1-3	400	1	Y	N	N	N	N
South Wight	500/1-2	399	1	Y	N	N	N	N
Southwold East	430	81	1	Y	Y	Y	N	Y
Southwold East	430	81	1	Y	Y	Y	N	Y
St Catherine's	407	372	1	Y	N	N	N	N
St Catherine's	451	356	1	Y	N	N	N	N
TBC	511	69	1	Y	Y	Y	N	Y
TBC	512	65	1	Y	Y	Y	N	Y
TBC	513/1-2	59	1	Y	Y	Y	N	Y
West Bassurelle	458 & 464	299	1	Y	Y	Y	N	N

Name of Project	Area	Distance to NB (km)	Tier	Spatial Area Screened in for				
				HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
West Bassurelle	458 & 464	299	1	Y	Y	Y	N	N
West Wight	522	386	1	Y	N	N	N	N
Yarmouth	401/2A	52	1	Y	Y	Y	N	Y
Yarmouth	401/2B	64	1	Y	Y	Y	N	Y

Table 5 Results of CIA screening for offshore mining projects: list of UK projects (status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning.

Name of Project	Type of Project	Country	Status	Phase of plan considered in CIA			HP MU	Spatial Area Screened in for			
				Construction	Operation & Maintenance	Decommissioning		GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
Hundale Potash Mine	Offshore Minerals Exploration and Option	UK	Construction	Y	Y	Y	Y	Y	N	N	N
Boulby Potash Mine	Offshore Minerals Lease	UK	Operational	N	Y	Y	Y	Y	N	N	N

HP = harbour porpoise, GS = grey seal, HS = harbour seal, MU = Management Unit, SNS = Southern North Sea, SAC = Special Area of Conservation

6 Oil and Gas Installations/activities

34. Oil and gas exploration and installations could have the potential for cumulative impacts during construction, operation and maintenance, and decommissioning of Norfolk Boreas. Plans or projects considered during the CIA screening were tier 1-3 for UK based projects; no European projects are assessed in due to a lack of information.
35. All tier 1 projects considered in CIA screening were actively producing at the end of the baseline, and are therefore not considered for construction, operational and maintenance impacts. There is a large amount of uncertainty around decommissioning, and although there are a number of fields where production has ceased, no assumptions have been made about any decommissioning activities. Therefore, this phase of oil and gas projects has been screened out of the CIA.
36. Oil and gas activities considered in the CIA screening are tier 2 and 3 projects based on the 28th supplementary, 29th and 30th Round of Offers (see <https://www.gov.uk/oil-and-gas-licensing-rounds#past-licensing-rounds> for more detail). Confirming which of the Licence block or part blocks from these rounds are in which period of the Licence or whether exploration or extraction may be occurring is outwith the scope of this CIA. There is the potential that each of these plans or projects could be either in commissioning/exploration or operational phase during the lifespan of Norfolk Boreas.
37. A number of Licence blocks west of Shetland were also identified during screening, some of these blocks are on the boundary of the harbour porpoise North Sea Management Unit and have been screened out of the assessment due to the large spatial separation between the Norfolk Boreas site and the location of these blocks.
38. Table 6 lists the Licence blocks or part blocks (plans/projects) which have been identified in the CIA screening. A total of 265 Licence blocks or part blocks in the MU for harbour porpoise, 58 in the MU for grey seal and 52 in the MU for harbour seal. However, there is currently no information on if or when these blocks will or could be developed. Therefore, it is not currently possible to include them in the CIA, other than the potential seismic surveys that could be undertaken.
39. Operational activity of oil and gas projects in currently developed blocks are considered part of the baseline and are therefore not included in the CIA.

Table 6 Results of CIA screening for oil and gas exploration and installations projects: list of UK projects (status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning phases. N = No. Y = Yes.

Block	Distance to NB (km)	Round	Spatial Area Screened in for				SNS SAC (Summer)	SNS SAC (Winter)
			HP MU	GS MU	HS MU			
10/1b	737	28	Y	N	N	N	N	
10/6a	733	30	Y	N	N	N	N	
12/28 (Part)	590	28	Y	N	N	N	N	
13/18c	648	30	Y	N	N	N	N	
13/19c	648	30	Y	N	N	N	N	
13/20a	648	30	Y	N	N	N	N	
13/20f	648	30	Y	N	N	N	N	
13/21c	648	30	Y	N	N	N	N	
13/23c	648	30	Y	N	N	N	N	
13/30c	648	30	Y	N	N	N	N	
13/27	648	30	Y	N	N	N	N	
14/26d	612	30	Y	N	N	N	N	
14/28	608	30	Y	N	N	N	N	
14/29a	590	30	Y	N	N	N	N	
14/29b	590	30	Y	N	N	N	N	
14/30b	590	30	Y	N	N	N	N	
15/17c	597	30	Y	N	N	N	N	
15/18a	589	30	Y	N	N	N	N	
15/18c	558	30	Y	N	N	N	N	
15/18d	558	30	Y	N	N	N	N	
15/19a	558	30	Y	N	N	N	N	
15/19b	558	30	Y	N	N	N	N	
15/20d	558	30	Y	N	N	N	N	
15/28a	558	30	Y	N	N	N	N	
15/29c	558	30	Y	N	N	N	N	
15/29d	558	30	Y	N	N	N	N	
15/29e	558	30	Y	N	N	N	N	
15/30c	558	30	Y	N	N	N	N	
15/9 (Part), 15/10, 15/14, 15/15, 16/6b & 16/11a	579	29	Y	N	N	N	N	
16/1c & 16/2a	629	29	Y	N	N	N	N	
16/11b	597	30	Y	N	N	N	N	

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
16/16	579	30	Y	N	N	N	N
16/18c	579	28	Y	N	N	N	N
16/28d	547	30	Y	N	N	N	N
16/29e	637	30	Y	N	N	N	N
16/3d	629	30	Y	N	N	N	N
16/3e	629	30	Y	N	N	N	N
205/12	880	30	Y	N	N	N	N
205/14a	880	30	Y	N	N	N	N
205/19	880	30	Y	N	N	N	N
205/25	880	30	Y	N	N	N	N
205/5c	880	30	Y	N	N	N	N
206/10a	889	30	Y	N	N	N	N
206/11d	889	30	Y	N	N	N	N
206/16a	889	30	Y	N	N	N	N
206/1c	889	30	Y	N	N	N	N
206/5a	889	30	Y	N	N	N	N
206/5b	889	30	Y	N	N	N	N
206/5c	889	30	Y	N	N	N	N
207/1c	909	30	Y	N	N	N	N
207/2	909	30	Y	N	N	N	N
207/3	909	30	Y	N	N	N	N
208/11	956	30	Y	N	N	N	N
208/14	956	30	Y	N	N	N	N
208/18a	956	30	Y	N	N	N	N
208/18c	956	30	Y	N	N	N	N
208/19a	956	30	Y	N	N	N	N
208/19b	956	30	Y	N	N	N	N
208/1a	956	30	Y	N	N	N	N
208/1c	956	30	Y	N	N	N	N
208/20	956	30	Y	N	N	N	N
208/21a	956	30	Y	N	N	N	N
208/22a	956	30	Y	N	N	N	N
208/23	956	30	Y	N	N	N	N
208/24a	956	30	Y	N	N	N	N
208/24b	956	30	Y	N	N	N	N
208/25	956	30	Y	N	N	N	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
208/26	956	30	Y	N	N	N	N
208/27a	956	30	Y	N	N	N	N
208/27b	956	30	Y	N	N	N	N
208/28	956	30	Y	N	N	N	N
208/29	956	30	Y	N	N	N	N
208/30	956	30	Y	N	N	N	N
208/6	956	30	Y	N	N	N	N
21/10c	466	30	Y	N	N	N	N
21/14a	466	30	Y	N	N	N	N
21/15	466	30	Y	N	N	N	N
21/1b	466	30	Y	N	N	N	N
21/28b	466	30	Y	N	N	N	N
21/2d	466	30	Y	N	N	N	N
21/3c	466	30	Y	N	N	N	N
21/3d	466	30	Y	N	N	N	N
21/4b	466	30	Y	N	N	N	N
21/4c	466	30	Y	N	N	N	N
21/5b	466	30	Y	N	N	N	N
21/5d	466	30	Y	N	N	N	N
21/6a	466	30	Y	N	N	N	N
21/9c	466	30	Y	N	N	N	N
210/22d	911	30	Y	N	N	N	N
210/23c	911	30	Y	N	N	N	N
210/27f	911	30	Y	N	N	N	N
211/28a	894	30	Y	N	N	N	N
211/28c	894	30	Y	N	N	N	N
211/29f	882	30	Y	N	N	N	N
211/30c	882	28	Y	N	N	N	N
213/30a	949	30	Y	N	N	N	N
214/10b	928	30	Y	N	N	N	N
214/14a	928	30	Y	N	N	N	N
214/15a	928	30	Y	N	N	N	N
214/22a	928	30	Y	N	N	N	N
214/23	928	30	Y	N	N	N	N
214/24	928	30	Y	N	N	N	N
214/25	928	30	Y	N	N	N	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
214/26a	928	30	Y	N	N	N	N
214/27b	928	30	Y	N	N	N	N
214/28a	928	30	Y	N	N	N	N
214/29a	928	30	Y	N	N	N	N
214/30b	928	30	Y	N	N	N	N
214/30d	928	30	Y	N	N	N	N
214/4b	928	30	Y	N	N	N	N
214/5b	928	30	Y	N	N	N	N
214/5c	928	30	Y	N	N	N	N
214/9b	928	30	Y	N	N	N	N
216/30a	1,032	30	Y	N	N	N	N
217/26a	1,029	30	Y	N	N	N	N
22/03	489	30	Y	N	N	N	N
22/10b	489	30	Y	N	N	N	N
22/11b	489	30	Y	N	N	N	N
22/12b	489	30	Y	N	N	N	N
22/12d	489	30	Y	N	N	N	N
22/12e	489	30	Y	N	N	N	N
22/13c	489	30	Y	N	N	N	N
22/13d	489	30	Y	N	N	N	N
22/14c	489	30	Y	N	N	N	N
22/15d	489	30	Y	N	N	N	N
22/16b	489	30	Y	N	N	N	N
22/17c	489	30	Y	N	N	N	N
22/18d	489	30	Y	N	N	N	N
22/19f	489	30	Y	N	N	N	N
22/1b	489	30	Y	N	N	N	N
22/24f	489	30	Y	N	N	N	N
22/24g	489	30	Y	N	N	N	N
22/24h	489	30	Y	N	N	N	N
22/25f	489	30	Y	N	N	N	N
22/25g	489	30	Y	N	N	N	N
22/29d	489	30	Y	N	N	N	N
22/30d	489	30	Y	N	N	N	N
22/4b	489	30	Y	N	N	N	N
22/6b	489	30	Y	N	N	N	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
22/7b	489	30	Y	N	N	N	N
22/8a	489	30	Y	N	N	N	N
22/8b	489	30	Y	N	N	N	N
22/9b	489	30	Y	N	N	N	N
23/06	418	30	Y	N	N	N	N
23/11b	418	30	Y	N	N	N	N
23/11c	418	30	Y	N	N	N	N
23/16e	418	30	Y	N	N	N	N
23/21b	418	30	Y	N	N	N	N
23/22b	418	30	Y	N	N	N	N
23/26e	418	30	Y	N	N	N	N
27/3, 27/4, 27/5, 27/9, 27/10, 28/1 & 28/6	437	29	Y	Y	N	N	N
28/05	422	30	Y	N	N	N	N
28/10a	422	30	Y	N	N	N	N
28/10b	422	30	Y	N	N	N	N
28/20	422	30	Y	N	N	N	N
28/8b	422	30	Y	N	N	N	N
28/9b	422	30	Y	N	N	N	N
28/9c	422	30	Y	N	N	N	N
28/9d	422	30	Y	N	N	N	N
29/06	355	30	Y	N	N	N	N
29/16	355	30	Y	N	N	N	N
29/17	355	30	Y	N	N	N	N
29/18	355	30	Y	N	N	N	N
29/19a	355	30	Y	N	N	N	N
29/1e	355	30	Y	N	N	N	N
29/5e	355	30	Y	N	N	N	N
29/7b	355	30	Y	N	N	N	N
29/22b, 29/23b, 29/27, 29/28	355	29	Y	Y	N	N	N
3/16 (Part) & 3/17 (Part)	837	29	Y	N	N	N	N
3/4g	837	30	Y	N	N	N	N
3/5a	837	30	Y	N	N	N	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
3/8g	837	30	Y	N	N	N	N
30/08	358	30	Y	N	N	N	N
30/12c	358	30	Y	N	N	N	N
30/13c	358	30	Y	N	N	N	N
30/13e	358	30	Y	N	N	N	N
30/14b	358	30	Y	N	N	N	N
30/17h	358	30	Y	N	N	N	N
30/18c	358	30	Y	N	N	N	N
30/19c	358	30	Y	N	N	N	N
30/1a	358	30	Y	N	N	N	N
30/1d	358	30	Y	N	N	N	N
30/1e	358	30	Y	N	N	N	N
30/2e	358	30	Y	N	N	N	N
30/2f	358	30	Y	N	N	N	N
30/3d	358	30	Y	N	N	N	N
30/7d	358	30	Y	N	N	N	N
35/24, 35/28, 35/29, 35/30, 36/21, 36/26, 36/27, 36/28, 36/29 & 42/2a	210	29	Y	Y	N	N	N
36/15 (Part), 36/20, 37/11 (Part) & 37/16	287	29	Y	Y	N	N	N
36/24, 36/25, 37/21, 37/22 (Split), 37/23 (Split), 37/28b & 37/29b	287	29	Y	Y	N	N	N
37/17, 37/18, 37/19, 37/22 (Split), 37/23 (Split) & 37/24	287	29	Y	Y	y	N	N
38/27, 38/28, 44/2 & 44/3 (Part)	293	29	Y	Y	y	N	N
41/3, 41/4 & 41/9	283	29	Y	Y	N	N	N
42/13b	164	30	Y	y	y	y	N
42/14	164	30	Y	y	y	y	N
42/15b	164	30	Y	y	y	y	N
42/17	164	30	Y	y	y	N	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
42/18	164	30	Y	y	y	y	N
42/20a	164	30	Y	y	y	y	N
42/30d	164	30	Y	y	y	y	N
43/10	139	30	Y	y	y	y	N
43/14a	139	30	Y	y	y	y	N
43/14b	139	30	Y	y	y	y	N
43/15	139	30	Y	y	y	y	N
43/16	139	30	Y	y	y	y	N
43/17a	139	30	Y	y	y	y	N
43/23	139	30	Y	y	y	y	N
43/24b	139	30	Y	y	y	y	N
43/26c	139	30	Y	y	y	y	N
43/2a	139	30	Y	y	y	y	N
43/7	139	30	Y	y	y	y	N
43/8	139	30	Y	y	y	y	N
44/11d	141	30	Y	y	y	y	N
44/12d	141	30	Y	y	y	y	N
44/12e	141	30	Y	y	y	y	N
44/6	141	30	Y	y	y	y	N
44/7	141	30	Y	y	y	y	N
44/8b	141	30	Y	y	y	y	N
44/9b	141	30	Y	y	y	N	N
47/10c	127	30	Y	y	y	N	N
47/10d	127	30	Y	y	y	y	N
47/15c	127	30	Y	y	y	N	N
47/15d	127	30	Y	y	y	N	N
47/2d	127	30	Y	y	y	N	y
47/3f	127	30	Y	y	y	y	y
47/7a	127	30	Y	y	y	N	y
47/8d	127	30	Y	y	y	N	y
48/11c	109	30	Y	y	y	y	N
48/11d	109	30	Y	y	y	N	N
48/12b	109	30	Y	y	y	y	N
48/16	109	30	Y	y	y	N	N
48/17d	109	30	Y	y	y	N	N
48/18b	109	30	Y	y	y	y	N

Spatial Area Screened in for							
Block	Distance to NB (km)	Round	HP MU	GS MU	HS MU	SNS SAC (Summer)	SNS SAC (Winter)
48/19b	109	30	Y	Y	Y	Y	N
48/20c	109	30	Y	Y	Y	Y	N
48/24a	109	30	Y	Y	Y	Y	N
48/6c	109	30	Y	Y	Y	Y	N
48/8b	109	30	Y	Y	Y	Y	N
53/13a	26	30	Y	Y	Y	Y	Y
53/14b	23	30	Y	Y	Y	N	Y
53/1b	38	30	Y	Y	Y	N	Y
53/8a	19	30	Y	Y	Y	N	Y
53/9a	16	30	Y	Y	Y	N	Y
8/27, 8/28b, 15/2, 15/3, 15/7 & 15/8	623	29	Y	N	N	N	N
9/1	744	30	Y	N	N	N	N
9/10	719	30	Y	N	N	N	N
9/17b (Part) & 9/22 (Part)	668	29	Y	N	N	N	N
9/10a	668	30	Y	N	N	N	N
9/10b	668	30	Y	N	N	N	N
9/13g	668	30	Y	N	N	N	N
9/14c	668	30	Y	N	N	N	N
9/14d	668	30	Y	N	N	N	N
9/15c	668	30	Y	N	N	N	N
9/15d	668	30	Y	N	N	N	N
9/15e	668	30	Y	N	N	N	N
9/18f	668	30	Y	N	N	N	N
9/21b	668	30	Y	N	N	N	N
9/22c	668	30	Y	N	N	N	N
9/23a	668	30	Y	N	N	N	N
9/24e	668	30	Y	N	N	N	N
9/26b	668	30	Y	N	N	N	N
9/5c	668	30	Y	N	N	N	N
9/9f	668	30	Y	N	N	N	N
9/9g	668	30	Y	N	N	N	N

HP = harbour porpoise, GS = grey seal, HS = harbour seal, MU = Management Unit, SNS = Southern North Sea, SAC = Special Area of Conservation

7 Navigation and Shipping (operational impacts only)

40. Navigational and shipping projects considered in the CIA screening were tier 1-3 for UK based projects. All European projects were screened out. Projects were considered for potential operational impacts if the plan or project had not started by the end of the Norfolk Boreas baseline.
41. No projects were identified in tier 2 or 3, and all of the tier 1 projects identified by screening were already active, and are therefore considered part of the baseline.
42. Therefore, all navigation and shipping operations have been screened out of the CIA.

8 Subsea Cables and Pipelines (commissioning/construction impacts only)

43. Subsea cables and pipelines only have the potential for cumulative impacts with Norfolk Boreas during their construction. Plans or projects assessed for the CIA screening were tier 1-3, plus tier 4 and 5 projects were also considered, where relevant. All of the tier 1 projects identified during screening were already installed, and are therefore considered part of the baseline.
44. For harbour porpoise, 16 tier 2 projects were identified, and in addition, two tier 3 projects, six tier 4 and 18 tier 5 projects were also included in the CIA.
45. For grey seal, 12 tier 2 projects and an additional two tier 3, two tier 4 and 14 tier 5 projects were included in the CIA.
46. For harbour seal, 12 tier 2 projects and an additional one tier 3, two tier 4 and 11 tier 5 projects were included in the CIA (Table 7).

Table 7 Results of CIA screening for subsea cables and pipelines: list of projects (status at time of writing) within the HP, HS and GS MUs and the HP SNS SAC with potential to overlap with Norfolk Boreas construction, operation or decommissioning phases. N = No. Y = Yes.

Name of Project	Landfall Points	Company	Type of cable / pipeline	Tier	Within Species MU		
					HP	GS	HS
PL2236 - MIMAS TO SATURN	Blocks 48/09 & 49/11b (Norfolk Banks)	ConocoPhillips	10 inch GAS pipeline	2	Y	Y	Y
PL2237 - SATURN TO MIMAS	Blocks 48/09 & 49/11b (Norfolk Banks)	ConocoPhillips	3 inch CHEMICAL pipeline	2	Y	Y	Y
PLU3122 - JULIET TO PICKERILL A UMBILICAL	Block 48/11 (Norfolk Banks)	Engie	138 mm MIXED HYDROCARBONS pipeline	2	Y	Y	Y
PL3088 - CYGNUS TO ETS GAS PIPELINE	Block 44/11a & 44/12a (South Dogger Bank)	Engie	24 inch GAS pipeline	2	Y	Y	Y
PL3086 - CYGNUS A	Block 44/11a &	Engie	12 inch GAS pipeline	2	Y	Y	Y

Name of Project	Landfall Points	Company	Type of cable / pipeline	Tier	Within Species MU		
					HP	GS	HS
TO CYGNUS B GAS PIPELINE	44/12a (South Dogger Bank)						
PL2894 - KATY TO KELVIN GAS EXPORT PIPELINE	Block 44/19b (South Dogger Bank)	ConocoPhillips	10 inch GAS pipeline	2	Y	Y	Y
PL2895 - KELVIN TO KATY METHANOL PIPELINE	Block 44/19b (South Dogger Bank)	ConocoPhillips	2 inch METHANOL pipeline	2	Y	Y	Y
PL3121 - JULIET TO PICKERILL A GAS PIPELINE	Block 48/11 (Norfolk Banks)	Engie	12 inch MIXED HYDROCARBONS pipeline	2	Y	Y	Y
PL0219_PR K4-Z to K5-A	PR K4-Z to K5-A (Cleaver Bank)	Total E&P Nederland B.V.	6-inch Gas pipeline	2	Y	N	N
PL0219_UM K4-Z to K5-A	PR K4-Z to K5-A (Cleaver Bank)	Total E&P Nederland B.V.	5-inch Control pipeline	2	Y	N	N
Caithness Moray	Noss Head	Tannachy	HVDC 1,200 MW	2	Y	N	N
COBRACable	Eemshaven, Netherlands	Endrup, 6740, Denmark	HVDC 700MW	2	Y	Y	Y
Nemo Link	Pegwell Bay	Zeebrugge	HVDC 1,000MW	2	Y	Y	Y
Nordlink	Büsum, Germany	Ertsmyra, Norway	HVDC 1,400MW	2	Y	Y	Y
ElecLink	Folkestone	Les Mandarins, France	HVDC 1,000MW	2	Y	Y	Y
Oresund replacement	Kristinelundveien	Denmark	HVAC 132kV	2	Y	N	N
North Sea Link	Hylsfjorden, Norway	Blyth, UK	HVDC 1,400MW	3	Y	Y	N
Interconnexion France-Angleterre 2	Merville, France	Monks Hill Beach, UK	HVDC 1,000MW	3	Y	Y	Y
VikingLink Corridor	Lincolnshire Coast, UK to Southern Jutland, Denmark	National Grid Viking Link Ltd & Energinet.dk	Proposed High voltage (up to 500 kV) Direct Current (DC) electricity interconnector	4	Y	Y	Y
PLU3087 - CYGNUS A TO CYGNUS B UMBILICAL	Block 44/11a & 44/12a (South Dogger Bank)	Engie	193.3 mm CHEMICAL pipeline	4	Y	Y	Y
PL0221_HS D18-A to D15-FA-1	HS D18-A to D15-FA-1 (South Dogger / Cleaver Bank)	GDF SUEZ E&P Nederland B.V.	2-inch Methanol pipeline	4	Y	N	N
PL0221_PR D18-A to D15-FA-1	PR D18-A to D15-FA-1 (South Dogger / Cleaver Bank)	GDF SUEZ E&P Nederland B.V.	8-inch Gas pipeline	4	Y	N	N
AQUIND Interconnector	Portsmouth, UK	Le Havre, France	HVDC 2,000MW	4	Y	N	N
Atlantic Super	UK	Iceland	HVDC 1,000MW	4	Y	N	N

Name of Project	Landfall Points	Company	Type of cable / pipeline	Tier	Within Species MU		
					HP	GS	HS
Connection							
Goldeneye to St. Fergus	Peterhead	Peterhead CCS (Shell and SSE)	CSS pipeline	5	Y	Y	N
Elgood (subsea) to Blythe (NUI)	Elgood (subsea)	Blythe (NUI)	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Blythe (NUI) to PL370	Blythe (NUI)	PL370	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Vulcan NW (NUI) to Vulcan S (NUI)	Vulcan NW (NUI)	Vulcan S (NUI)	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Vulcan E (subsea) to Vulcan S (NUI)	Vulcan E (subsea)	Vulcan S (NUI)	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Vulcan S (NUI) to PL370 1	Vulcan S (NUI)	PL370 1	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Vulcan S (NUI) to PL370 2	Vulcan S (NUI)	PL370 2	10 inch proposed GAS pipeline operated by Independent Oil and Gas Ltd	5	Y	Y	Y
Shetland HVDC Link	Noss Head	Weisdale Voe	HVDC 600MW	5	Y	N	N
Channel Cable	Paluel, France	Ninfield UK	HVDC 1,400MW	5	Y	Y	Y
Eastern HVDC Link	Peterhead	Hawthorn	HVDC 2,000MW	5	Y	Y	N
NorthConnect	Peterhead, UK	Simadalen, Norway	HVDC 1,400MW	5	Y	Y	N
NorGer	Flekkefjord, Norway	Mooriem, Germany	HVDC 1,400MW	5	Y	Y	Y
Maali	Kergord, Shetland, UK	Bergen-Mongstad, Norway	HVDC 600MW	5	Y	N	N
COBRA 2	Denmark	Germany	HVDC 700MW	5	Y	Y	Y
Orkney Caithness	Billa Croo, Orkney, UK	Dounreay	HVAC 220MW	5	Y	N	N
NeuConnect	Greystones, UK	Conneforde, Germany	HVDC 1,400MW	5	Y	Y	Y
Nautilus (Nemo 2)	Leiston, UK	Belgium	HVDC 1,400MW	5	Y	N	N
UK-Netherands 2	UK	Netherlands	HVDC 2,000MW	5	Y	Y	Y

9 Carbon capture projects

47. Carbon capture projects considered in the CIA screening were tier 1-3 for UK based projects. All European projects were screened out.
48. No projects were identified in tier 2 or 3, and all of the tier 1 projects identified by screening were already active, and are therefore considered part of the baseline. Tier 4 and 5 projects were screened out, including the Endurance and Goldeneye projects as both are tier 5. Therefore, all carbon capture projects have been screened out of the CIA.

10 Summary

49. Table 8 summaries the results of the CIA screening process.

Table 8 Summary of the CIA screening: number of plans or project from each category which have been screened into the CIA for each receptor and the stage of the plan or project where a cumulative impact may occur (C = commissioning / construction O = operation, D = decommissioning, N/A = not assessed as there is no pathway)

Project category	Harbour porpoise			Grey seal			Harbour seal		
	C	O	D	C	O	D	C	O	D
Other UK offshore windfarms	21	32	49	14	20	35	13	18	33
European offshore windfarms	17	39	67	2	4	5	2	4	5
Other renewable developments (tidal and wave)	0	16	17	0	0	0	0	0	0
Subsea cables and pipelines	42	N/A	N/A	30	N/A	N/A	26	N/A	N/A

Annex 1 - Initial List of UK and European Offshore Wind Farms considered within the CIA Screening

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Aberdeen (EOWDC)	UK	1	Operational	Y	N	N
Aflandshage	Denmark	5	Concept & Early Planning	N	N	N
Aiolos	Germany	6	Cancelled	Y	N	N
Alpha Ventus	Germany	1	Operational	Y	N	N
Amrumbank West	Germany	1	Operational	Y	N	N
Anholt	Denmark	1	Operational	N	N	N
Arcadis Ost 1	Germany	3	Consented	N	N	N
AreaC I	Germany	6	Cancelled	Y	N	N
AreaC II	Germany	6	Cancelled	Y	N	N
AreaC III	Germany	6	Cancelled	Y	N	N
Arklow Bank Phase 1	Ireland	1	Operational	N	N	N
Arklow Bank Phase 2	Ireland	3	Consented	N	N	N
Arkona	Germany	1	Operational	N	N	N
Atlantis I	Germany	6	Cancelled	Y	N	N
Atlantis II	Germany	6	Cancelled	Y	N	N
Atlantis III	Germany	6	Cancelled	Y	N	N
Austerngrund	Germany	6	Cancelled	Y	N	N
Auvær (Category B area)	Norway	6	Development Zone	N	N	N
Avedøre Holme	Denmark	1	Operational	N	N	N
Baltic Eagle	Germany	3	Consented	N	N	N
BARC Offshore 1	Germany	1	Operational	Y	N	N
Barrow	UK	1	Operational	N	N	N
Beatrice	UK	2	Partial operational / under construction	Y	N	N
Beatrice - demonstrator project	UK	0	Decommissioned	Y	N	N
Belwind 1	Belgium	1	Operational	Y	N	N
Belwind Alstom Haliade Demonstration	Belgium	1	Operational	Y	N	N
Bight Power I	Germany	6	Cancelled	Y	N	N
Bight Power II	Germany	6	Cancelled	Y	N	N
Blyth	UK	0	Decommissioned	Y	Y	N
Blyth demonstration site (1)	UK	0	Decommissioned	Y	Y	Y
Blyth demonstration site (2)	UK	1	Operational	Y	Y	Y
Blyth demonstration site (3A & 4)	UK	3	Consented	Y	Y	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Bockstigen	Sweden	1	Operational	N	N	N
Borkum Riffgrund I	Germany	1	Operational	Y	N	N
Borkum Riffgrund II	Germany	2	Construction / partial operational	Y	N	N
Borkum Riffgrund West I	Germany	3	Consented	Y	N	N
Borkum Riffgrund West II	Germany	3	Consented	Y	N	N
Borssele I and II	Netherlands	3	Pre-construction	Y	N	N
Borssele III and IV	Netherlands	3	Consented	Y	N	N
Borssele Site V - Leeghwater - Innovation Plot	Netherlands	3	Consented	Y	N	N
Breeveertien II	Netherlands	6	Cancelled	Y	N	N
Breitling	Germany	1	Operational	N	N	N
Brown Ridge Oost	Netherlands	6	Cancelled	Y	N	N
Burbo Bank	UK	1	Operational	N	N	N
Burbo Bank Extension	UK	1	Operational	N	N	N
Butendiek (Offshore- Bürger-windpark)	Germany	1	Operational	Y	N	N
Callantsoog Noord	Netherlands	6	Failed to gain consent	Y	N	N
Clearcamp	Netherlands	6	Dormant	Y	N	N
Clogher Head	Ireland	5	Concept & Early Planning	N	N	N
Codling Bank	Ireland	3	Consented	N	N	N
Codling Bank Extension	Ireland	4	Application submitted	N	N	N
Concordia I	Germany	6	Cancelled	Y	N	N
Concordia II	Germany	6	Cancelled	Y	N	N
Dan Tysk	Germany	1	Operational	Y	N	N
Delta Nordsee 1	Germany	6	Cancelled	Y	N	N
Delta Nordsee 2 (OWP Delta Nordsee 2)	Germany	6	Cancelled	Y	N	N
Den Haag I	Netherlands	6	Failed to gain consent	Y	N	N
Den Haag II	Netherlands	6	Failed to gain consent	Y	N	N
Den Helder I	Netherlands	6	Cancelled	Y	N	N
Deutsche Bucht	Germany	2	Construction	Y	N	N
Deutsche Bucht Pilot Park	Germany	3	consented	Y	N	N
Diamant	Germany	6	Cancelled	Y	Y	Y
Dogger Bank Zone Creyke Beck A	UK	3	Consented	Y	Y	Y

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Dogger Bank Zone Creyke Beck B	UK	3	Consented	Y	Y	Y
Dogger Bank Zone Teesside A	UK	3	Consented	Y	Y	Y
Dogger Bank Zone Teesside C	UK	6	Cancelled	Y	Y	Y
Dogger Bank Zone Teesside D	UK	6	Cancelled	Y	Y	Y
Dounreay Tri	UK	3	Consented	Y	N	N
Dr Techn Olav Olsen and Seawind Systems Demo	Norway	6	Dormant	Y	N	N
Dublin Array	Ireland	4	Application submitted	N	N	N
Dudgeon	UK	1	Operational	Y	Y	Y
Dudgeon Extension	UK	5	Concept & Early Planning	y	Y	y
East Anglia ONE	UK	2	Construction	Y	Y	Y
East Anglia ONE North	UK	5	Application in preparation	Y	Y	Y
East Anglia THREE	UK	3	Consented	Y	Y	Y
East Anglia TWO	UK	5	Application in preparation	Y	Y	Y
Egmond aan Zee (aka OWEZ)	Netherlands	1	Operational	Y	N	N
EnBW Baltic 1	Germany	1	Operational	N	N	N
EnBW Baltic 2	Germany	1	Operational	N	N	N
EnBW He Dreiht	Germany	3	Consented	Y	N	N
Eneco Luchterduinen	Netherlands	1	Operational	Y	N	N
ENOVA Ems Emden	Germany	1	Operational	Y	N	N
ENOVA NSWP 10	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 11	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 12	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 13	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 14	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 15	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 8	Germany	6	Cancelled	Y	N	N
ENOVA NSWP 9	Germany	6	Cancelled	Y	N	N
Eoliennes du Calvados	France	3	Consented	Y	N	N
EOLINK Test site	France	1	Operational	N	N	N
EolMed	France	5	Concept / early planning	N	N	N
EolMed - Ideol & Quadran floating project	France	5	Concept / early planning	N	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Euklas	Germany	6	Cancelled	Y	N	N
Fallbadan	Sweden	5	Concept & Early Planning	N	N	N
Floatgen Project	France	1	Operational	N	N	N
Floating Power Plant	Ireland	5	Concept & Early Planning	N	N	N
Floating Power Plant - Dyfed Floating Power	UK	5	Concept & Early Planning	N	N	N
Floating Power Plant - Katanes array	UK	5	Concept & Early Planning	Y	N	N
Floating Power Plant - Katanes commercial	UK	5	Concept & Early Planning	Y	N	N
Floating Power Plant - Katanes pilot	UK	5	Concept & Early Planning	Y	N	N
ForthWind Demo Phase 1	UK	3	Consented	Y	N	N
ForthWind Demo Phase 2	UK	5	Concept & Early Planning	Y	N	N
Frederikshavn	Denmark	1	Operational	N	N	N
Frederikshavn Offshore Wind Demo	Denmark	5	Concept & Early Planning	N	N	N
Frøyabanken (Category B area)	Norway	6	Development Zone	N	N	N
Frøyagrunnene (Category A area)	Norway	6	Development Zone	Y	N	N
Future Commercial Floating Tenders	France	6	Development Zone	Y	N	N
Future Fixed-Bottom Tenders	France	6	Development Zone	Y	N	N
GAIA I	Germany	6	Cancelled	Y	N	N
GAIA II	Germany	6	Cancelled	Y	N	N
GAIA III	Germany	6	Cancelled	Y	N	N
GAIA IV	Germany	6	Cancelled	Y	N	N
GAIA V	Germany	6	Cancelled	Y	N	N
Galloper	UK	1	Operational	Y	Y	Y
Galloper Extension	UK	5	Concept & Early Planning	Y	Y	y
Galway Bay	Ireland	1	Operational	N	N	N
Gannet	Germany	6	Cancelled	Y	N	N
Gemini ZeeEnergie	Netherlands	1	Operational	Y	N	N
Gennaker	Germany	4	Application submitted	N	N	N
GICON SOF (PILOT)	Germany	3	Pre-construction	N	N	N
GICON SOF (test turbine)	Germany	5	Concept & Early Planning	Y	N	N
Global Tech I	Germany	1	Operational	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Global Tech II	Germany	6	Cancelled	Y	N	N
Gode Wind 03	Germany	3	Consented	Y	N	N
Gode Wind 04	Germany	3	Consented	Y	N	N
Gode Wind 1 and 2	Germany	1	Operational	Y	N	N
Greater Gabbard	UK	1	Operational	Y	Y	Y
Greater Gabbard Extension	UK	5	Concept & Early Planning	Y	Y	y
Gretas Klacker	Sweden	5	Concept & Early Planning	N	N	N
Gunfleet Sands 3 (Demo Zone)	UK	1	Operational	Y	Y	Y
Gunfleet Sands I	UK	1	Operational	Y	Y	Y
Gustav Dahlen 1	Sweden	5	Concept & Early Planning	N	N	N
Gustav Dahlen 2	Sweden	5	Concept & Early Planning	N	N	N
Gwind - Spinwind 1	Norway	0	Decommissioned	Y	N	N
Gwind - Spinwind 2	Norway	6	Cancelled	Y	N	N
Gwynt y Mor	UK	1	Operational	N	N	N
Gwynt y Mor Extension	UK	5	Concept & Early Planning	N	N	N
H2-20	Germany	6	Cancelled	Y	N	N
Hakefjorden - Vindplats Göteborg	Sweden	6	Failed Proposal	N	N	N
Havsul I	Norway	3	Consent Authorised	N	N	N
Havsul II	Norway	6	Failed Proposal	N	N	N
Havsul IV	Norway	6	Failed Proposal	N	N	N
Havvind demo	Norway	5	Concept/Early Planning	N	N	N
He dreiht II	Germany	6	Cancelled	Y	N	N
Heron	Germany	6	Cancelled	Y	N	N
Hohe See	Germany	2	Construction	Y	N	N
Hollandse Kust Noord Holland I and II	Netherlands	5	Concept & Early Planning	Y	N	N
Hollandse Kust Zuid Holland I and II - Chinook	Netherlands	3	Consented	Y	N	N
Hollandse Kust Zuid Holland III and IV	Netherlands	5	Concept & Early Planning	Y	N	N
Hooksiel	Germany	0	Decommissioned	Y	N	N
Horizont I	Germany	6	Cancelled	Y	N	N
Horizont II	Germany	6	Cancelled	Y	N	N
Horizont III	Germany	6	Cancelled	Y	N	N
Horizont IV	Germany	6	Cancelled	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Horns Rev 1	Denmark	1	Operational	Y	N	N
Horns Rev 2	Denmark	1	Operational	Y	N	N
Horns Rev 3	Denmark	2	Construction	Y	N	N
Horns Rev 4	Denmark	6	Development Zone	Y	N	N
Horns Rev B HR5	Denmark	6	Development Zone	Y	N	N
Horns Rev B HR6	Denmark	6	Development Zone	Y	N	N
Horns Rev B HR7	Denmark	6	Development Zone	Y	N	N
Horns Rev Reserved Area	Denmark	6	Development Zone	Y	N	N
Hornsea Project Four	UK	5	Application in preparation	Y	Y	Y
Hornsea Project One	UK	2	Construction	Y	Y	Y
Hornsea Project Three	UK	4	Application submitted	Y	Y	Y
Hornsea Project Two	UK	3	Consented	Y	Y	Y
HTOD 1	Germany	6	Cancelled	Y	N	N
HTOD 2	Germany	6	Cancelled	Y	N	N
HTOD 3	Germany	6	Cancelled	Y	N	N
HTOD 4	Germany	6	Cancelled	Y	N	N
HTOD 5	Germany	6	Cancelled	Y	N	N
HTOD 6	Germany	6	Cancelled	Y	N	N
Humber Gateway	UK	1	Operational	Y		Y
Hywind - Demo	Norway	1	Fully Commissioned	Y	N	N
Hywind Scotland Pilot Park	UK	1	Operational	Y	N	N
Hywind Tampen	Norway	5	Concept/Early Planning	Y	N	N
Ideol/Atlantis Energy 1.5 Floating Project	UK	5	Concept & Early Planning	Y	Y	N
Ideol/Atlantis Energy 1.5 Floating Project - Phase One	UK	5	Concept & Early Planning	Y	Y	N
Ijmuiden	Netherlands	6	Cancelled	Y	N	N
Inch Cape	UK	3	Application submitted	Y	N	N
InFLOW (INDustrialization setup of a Floating Offshore Wind turbine)	France	6	Cancelled	N	N	N
Inner Dowsing	UK	1	Operational	Y		Y
Irene Vorrink	Netherlands	1	Operational	Y	N	N
Jammerbugt A J1	Denmark	6	Development Zone	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Jammerbugt A J2	Denmark	6	Development Zone	Y	N	N
Jammerbugt A J3	Denmark	6	Development Zone	Y	N	N
Jammerbugt A J4	Denmark	6	Development Zone	Y	N	N
Jammerbugt B J1	Denmark	6	Development Zone	Y	N	N
Jammerbugt B J2	Denmark	6	Development Zone	Y	N	N
Jammerbugt Reserved Area	Denmark	6	Development Zone	Y	N	N
Jammerland Bugt	Denmark	5	Concept & Early Planning	N	N	N
Jules Verne	Germany	6	Cancelled	Y	N	N
Kaikas	Germany	6	Cancelled	Y	N	N
Karehamn	Sweden	1	Operational	N	N	N
Kaskasi	Germany	3	Consented	Y	N	N
Kattegatt Offshore	Sweden	3	Consent Authorised	N	N	N
Kentish Flats	UK	1	Operational	Y	Y	Y
Kentish Flats Extension	UK	1	Operational	Y	Y	Y
Kilmichael Point	Ireland	5	Concept & Early Planning	N	N	N
Kincardine	UK	2	Construction	Y	N	N
Kreigers Flak II	Sweden	3	Consent Authorised	N	N	N
Kriegers Flak	Denmark	3	Consented	N	N	N
Kriegers Flak B K1	Denmark	6	Development Zone	N	N	N
Kriegers Flak Reserved Area	Denmark	6	Development Zone	N	N	N
Kvitsøy Wind Turbine Demonstration Area	Norway	3	Consent Authorised	Y	N	N
Langgrund	Sweden	5	Concept & Early Planning	N	N	N
Langgrund II	Sweden	5	Concept & Early Planning	N	N	N
Lellebaelt Syd (Lillegrund)	Denmark	5	Concept & Early Planning	N	N	N
Lely	Netherlands	0	Decommissioned	Y	N	N
L'eolien en mer region Dunkerque	France	6	Development Zone	Y	Y	Y
Les eoliennes flottantes de Groix & Belle-Lle	France	4	Application submitted	N	N	N
Les eoliennes flottantes de Provence Grand Large	France	5	Concept / early planning	N	N	N
Les eoliennes flottantes du Golf du Lion	France	5	Concept / early planning	N	N	N
Levenmouth (Demo)	UK	1	Operational	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Lillgrund	Sweden	1	Operational	N	N	N
Lincs	UK	1	Operational	Y	Y	Y
London Array	UK	1	Operational	Y	Y	Y
Lynn	UK	1	Operational	Y	Y	Y
Meerwind Ost Sud	Germany	1	Operational	Y	N	N
Meerwind West	Germany	6	Cancelled	Y	N	N
Mejflak	Denmark	4	Application submitted	N	N	N
Merkur	Germany	2	Construction / partial operational	Y	N	N
Mermaid	Belgium	3	Consented	Y	N	N
Middelgrunden	Denmark	1	Operational	N	N	N
Ming Yang 6MW Demo - Metcentre	Norway	6	Cancelled	Y	N	N
Moray Firth Eastern Development Area 1	UK	3	Consented (Financial Decision Awaiting)	Y	N	N
Moray Firth Eastern Development Area 2	UK	3	Consented (Financial Decision Awaiting)	Y	N	N
Moray Firth Western Development Area	UK	4	Application submitted	Y	N	N
Nautilus I	Germany	6	Cancelled	Y	N	N
Neart na Gaoithe	UK	3	Consented	Y	N	N
Nemo	Germany	6	Cancelled	Y	N	N
Nenuphar test site	France	3	Consented	N	N	N
Neptune I	Germany	6	Cancelled	Y	N	N
Neptune II	Germany	6	Cancelled	Y	N	N
Neptune III	Germany	6	Cancelled	Y	N	N
Nissum Bredning Vind	Denmark	1	Operational	Y	N	N
NOAKA	Norway	5	Concept/Early Planning	Y	N	N
Nobelwind	Belgium	1	Operational	Y	N	N
Nord Øyan - Ytre Vikna (Category B area)	Norway	6	Development Zone	N	N	N
Nordergrunde	Germany	1	Operational	Y	Y	Y
Norderland	Germany	6	Cancelled	Y	N	N
Nord-Holland boven Noordzeekanaal Potentiele Zoekgebieden	Netherlands	6	Development Zone	Y	N	N
Nordlicher Grund	Germany	6	Cancelled	Y	N	N
Nord-Ost Passat I	Germany	6	Cancelled	Y	N	N
Nord-Ost Passat II	Germany	6	Cancelled	Y	N	N
Nord-Ost Passat III	Germany	6	Cancelled	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Nordpassage	Germany	6	Cancelled	Y	N	N
Nordre Flint	Denmark	5	Concept & Early Planning	N	N	N
Nordsee 2 (Innogy Nordsee II)	Germany	6	Cancelled	Y	N	N
Nordsee 3 (Innogy Nordsee III)	Germany	6	Cancelled	Y	N	N
Nordsee One (Innogy Nordsee I)	Germany	1	Operational	Y	N	N
Nordsee Ost	Germany	1	Operational	Y	N	N
Norfolk Boreas	UK	5	Application in preparation	Y	Y	Y
Norfolk Vanguard	UK	4	Application submitted	Y	Y	Y
North Hoyle	UK	1	Operational	N	N	N
North Irish Sea Array	Ireland	5	Concept & Early Planning	N	N	N
Norther	Belgium	2	Construction	Y	Y	Y
Northwester 2	Belgium	3	Consented	Y	Y	Y
Northwind	Belgium	1	Operational	Y	N	N
Nysted	Denmark	1	Operational	N	N	N
Okeanos	Netherlands	6	Failed to gain consent	Y	N	N
Olderveggen (Category B area)	Norway	6	Development Zone	Y	N	N
Omo Syd	Denmark	5	Concept & Early Planning	N	N	N
Oriel Wind Farm	Ireland	4	Application submitted	N	N	N
Ormonde	UK	1	Operational	N	N	N
Oskarshamn	Sweden	5	Concept & Early Planning	N	N	N
OWP Albatros Phase 1	Germany	2	Construction	Y	N	N
OWP Albatros Phase 2	Germany	6	Cancelled	Y	N	N
OWP West	Germany	3	Consented	Y	N	N
P12	Netherlands	6	Failed to gain consent	Y	N	N
Parc des Iles d'Yeu et de Noirmoutier	France	3	Consented	N	N	N
Parc eolien en mer de Dieppe - Le Treport	France	4	Application submitted	Y	N	N
Parc éolien en mer de Fécamp	France	3	Consented	Y	N	N
Petrel	Germany	6	Cancelled	Y	N	N
Poseidon P60 - Mermaid	Belgium	5	Concept & Early Planning	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Prinses Amalia Windpark (formerly Q7)	Netherlands	1	Operational	Y	N	N
Projet de parc eolien en mer de Saint Nazaire	France	3	Consented	N	N	N
Projet eolien en mer de la Baie se Saint-Brieuc	France	3	Consented	N	N	N
PROWIND 1	Germany	6	Cancelled	Y	N	N
PROWIND 2	Germany	6	Cancelled	Y	N	N
PROWIND 3	Germany	6	Cancelled	Y	N	N
Race Bank	UK	1	Operational	Y	Y	Y
Race Bank Extension	UK	5	Concept & Early Planning	y	Y	y
Rampion Extension	UK	5	Concept & Early Planning	Y	N	N
Rampion Wind Farm	UK	1	Operational	Y	N	N
Rata Storgrund - phase 1	Sweden	5	Concept & Early Planning	N	N	N
Rata Storgrund - phase 2	Sweden	5	Concept & Early Planning	N	N	N
ReaLCoE	Germany	5	Concept & Early Planning	N	N	N
Rennesoy Marine Energy Test Centre (Metcentre)	Norway	3	Consent Authorised	Y	N	N
RENTEL	Belgium	2	Construction / partial operational	Y	Y	Y
Rhyl Flats	UK	1	Operational	N	N	N
Riffgat	Germany	1	Operational	Y	Y	Y
Rijnveld Noord	Netherlands	6	Failed to gain consent	Y	N	N
Rijnveld Oost	Netherlands	6	Failed to gain consent	Y	N	N
Rijnveld West	Netherlands	6	Failed to gain consent	Y	N	N
Ringkobing Reserved Area	Denmark	6	Development Zone	Y	N	N
Robin Rigg East	UK	1	Operational	N	N	N
Robin Rigg West	UK	1	Operational	N	N	N
Rodsand 2	Denmark	1	Operational	N	N	N
Rønland	Denmark	1	Operational	Y	N	N
Ronne Banke Reserved Area	Denmark	6	Development Zone	N	N	N
Rotterdam Noord-West	Netherlands	6	Failed to gain consent	Y	N	N
Samsø	Denmark	1	Operational	Y	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Sandbank	Germany	1	Operational	Y	N	N
Sandbank Extension	Germany	6	Cancelled	Y	N	N
Sandbank Plus	Germany	6	Cancelled	Y	N	N
Sceidre Rocks	Ireland	4	Application submitted	N	N	N
Scroby Sands	UK	1	Operational	Y		Y
Seaby (Nearshore Tender Area)	Denmark	6	Development Zone	N	N	N
Seagreen Phase One - Alpha Bravo	UK	3	Consented	Y	N	N
Seagreen Phase Three - Foxtrot Golf	UK	5	Concept & Early Planning	Y	N	N
Seagreen Phase Two - Charlie Delta Echo	UK	5	Concept & Early Planning	Y	N	N
Seagull	Germany	6	Cancelled	Y	N	N
SeaStar	Belgium	3	Consented	Y	N	N
SeaStorm I	Germany	6	Cancelled	Y	N	N
SeaStorm II	Germany	6	Cancelled	Y	N	N
SeaTwirl P3	Sweden	0	Decommissioned	N	N	N
SeaTwirl S1	Sweden	1	Operational	Y	N	N
SeaTwirl S2	Norway	5	Concept & Early Planning	Y	N	N
SeaWind III	Germany	6	Cancelled	Y	N	N
SeaWind IV	Germany	6	Cancelled	Y	N	N
Sejerø Bugten	Denmark	6	Cancelled	N	N	N
SEM-REV - SITE D'EXPERIMENTATION EN MER - MARINE TEST SITE	France	1	Operational	N	N	N
Sheringham Shoal	UK	1	Operational	Y	Y	Y
Sheringham Shoal Extension	UK	5	Concept & Early Planning	y	Y	y
Siragrunnen	Norway	6	Failed Proposal	Y	N	N
Site 1 Southern Moray Firth	UK	6	Development Zone	Y	N	N
Site 3 East Aberdeen	UK	6	Development Zone	Y	N	N
Site 5 South East Aberdeen	UK	6	Development Zone	Y	N	N
Site 6 East Shetland Site	UK	6	Development Zone	Y	N	N
Skottarevsprojektet	Sweden	6	Failed Proposal	N	N	N
Skua	Germany	6	Cancelled	Y	N	N
Smalandsfarvandet (Nearshore Tender Area)	Denmark	6	Development Zone	N	N	N
Sodra Midsjobanken	Sweden	4	Application submitted	N	N	N
Sofia (formerly Dogger BankTeesside B)	UK	3	Consented	Y	Y	Y

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
Sørlige Nordsjø I (Category A area)	Norway	6	Development Zone	Y	N	N
Sørlige Nordsjø II (Category A area)	Norway	6	Development Zone	Y	N	N
Spinfloat demo	France	5	Concept / early planning	N	N	N
Sprogø	Denmark	1	Operational	N	N	N
Stadthavet (Category B area)	Norway	6	Development Zone	N	N	N
Stenkalles grund	Sweden	3	Consent Authorised	N	N	N
Stora Middelgrund	Sweden	3	Consent Authorised	N	N	N
Store Middlegrund Reserved Area	Denmark	6	Development Zone	N	N	N
Storgrundet	Sweden	3	Consent Authorised	N	N	N
Strom-Nord	Germany	6	Cancelled	N	N	N
Svenska Bjorn Offshore	Sweden	4	Application submitted	N	N	N
SWAY 1:6 Prototype	Norway	0	Decommissioned	Y	N	N
SWAY 2.6MW Test	Norway	6	Cancelled	Y	N	N
Sydkustens Vind	Sweden	5	Concept & Early Planning	N	N	N
Taggen Vindpark	Sweden	3	Consent Authorised	N	N	N
Teesside	UK	1	Operational	Y	Y	
Test Area Stadt	Norway	3	Consent Authorised	N	N	N
TetraSpar Demo - Metcentre	Norway	3	Pre-construction	Y	N	N
Thanet	UK	1	Operational	Y	Y	Y
Thanet Extension	UK	4	Application submitted	Y	Y	Y
Thornton Bank phase I	Belgium	1	Operational	Y	N	N
Thornton Bank phase II	Belgium	1	Operational	Y	N	N
Thornton Bank phase III	Belgium	1	Operational	Y	N	N
TLPWIND UK	UK	5	Concept & Early Planning	Y	N	N
Træna vest (Category B area)	Norway	6	Development Zone	N	N	N
Trænafjorden - Selvær (Category B area)	Norway	6	Development Zone	N	N	N
Trianel Windpark Borkum Phase 1 (Borkum West II phase 1)	Germany	1	Operational	Y	N	N
Trianel Windpark Borkum Phase 2 (aka Borkum West II phase 2)	Germany	2	Construction	Y	N	N
Triton Knoll phase 1-3	UK	3	Consented	Y	Y	Y
Tunø Knob	Denmark	1	Operational	N	N	N
Utknallen	Sweden	5	Concept & Early Planning	N	N	N
Utposten	Sweden	4	Application	N	N	N

Name of Project	Country	Tier	Status	Within MU		
				HP	GS	HS
			submitted			
Utposten II	Sweden	5	Concept & Early Planning	N	N	N
Utsira nord (Category A area)	Norway	6	Development Zone	Y	N	N
Utsira Phase 1	Norway	6	Dormant	Y	N	N
Vannøya nordøst (Category B area)	Norway	6	Development Zone	N	N	N
Veja Mate	Germany	1	Operational	Y	N	N
Vesterhav Nord	Denmark	3	Consented	Y	N	N
Vesterhav Syd	Denmark	3	Consented	Y	N	N
Vindpark Vanern	Sweden	1	Operational	N	N	N
Walney Extension	UK	1	Operational	N	N	N
Walney Phase 1	UK	1	Operational	N	N	N
Walney Phase 2	UK	1	Operational	N	N	N
West of Duddon Sands	UK	1	Operational	N	N	N
Westermeerwind	Netherlands	1	Operational	Y	N	N
Westermost Rough	UK	1	Operational	Y	Y	Y
Wikinger	Germany	1	Operational	N	N	N
Wikinger Sud	Germany	3	Consented	N	N	N
WIN 2	France	6	Cancelled	Y	N	N
Windpark Fryslân	Netherlands	3	Consented	Y	N	N
Witte Bank	Germany	6	Cancelled	Y	N	N
Zeeuws Offshore Wind Project	Netherlands	6	Cancelled	Y	N	N
Zuid-en Noord-Holland onder het Noordzeekanaal Potentiele Zoekgebieden	Netherlands	6	Development Zone	Y	N	N

Annex 2 - Initial List of UK Wave and Tidal Projects considered within the CIA Screening

Name of Project	Type of project	Distance from NB (km)	Status	Tier	Within Species MU		
					HP	GS	HS
Bardsey Sound	Tidal	1,118	Pre-construction	3	N	N	N
Benera	Wave	960	Cancelled	3	N	N	N
Bluemull Sound	Tidal	892	Operational	1	Y	N	N
Brims tidal array (formerly Cantick Head)	Tidal	742	Cancelled	6	Y	N	N
Brough Head (Aquamarine Power)	Wave	772	Cancelled	6	Y	N	N
Cardiff Tidal Lagoon	Tidal	1,022	Application submitted	4	N	N	N
Costa Head	Wave	780	Cancelled	6	Y	N	N
Duddon Estuary Tidal Lagoon	Tidal	1.283	In development	5	N	N	N
EMEC Aquamarine Power Phase 2	Wave	754	Inactive	0	Y	N	N
EMEC Alstom	Tidal	760	Decommissioned	0	Y	N	N
EMEC Andritz Hydro Hammerfest	Tidal	760	Decommissioned	0	Y	N	N
EMEC Atlantis Resources AK1000	Wave	760	Decommissioned	0	Y	N	N
EMEC Atlantis Resources AR1000	Wave	760	Decommissioned	0	Y	N	N
EMEC - Billia Croo	Wave	769	Operational	1	Y	N	N
EMEC Clean Energy From Ocean Waves (CEFOW) Phase 1	Wave	756	Consented	3	Y	N	N
EMEC Fall of Warness	Tidal	768	Decommissioned	0	Y	N	N
EMEC Flumill	Tidal	755	Decommissioned	0	Y	N	N
EMEC Harris Demo Zone	Wave	1,013	In development	5	N	N	N
EMEC Islay Demo Zone	Tidal	1,226	In development	5	N	N	N
EMEC Laminaria	Wave	743	Consented	3	Y	N	N
EMEC Magallanes	Tidal	756	Decommissioned	0	Y	N	N
EMEC Nautricity Phase 1	Tidal	756	Decommissioned	0	Y	N	N
EMEC Nautricity Phase 2	Tidal	760	Decommissioned	0	Y	N	N
EMEC OpenHydro	Tidal	760	Operational	1	Y	N	N
EMEC Pelamis Wave Power P1	Wave	756	Decommissioned	0	Y	N	N
EMEC Scapa Flow (CorPower Ocean)	Wave	754	Operational	1	Y	N	N
EMEC Scotrenewables SR250	tidal	760	Decommissioned	0	Y	N	N

Name of Project	Type of project	Distance from NB (km)	Status	Tier	Within Species MU		
					HP	GS	HS
EMEC Scotrenewables SR2000	Tidal	756	Operational	1	Y	N	N
EMEC Seatricity	Wave	744	Operational	1	Y	N	N
EMEC Stronsay Firth	Tidal	742	In development	5	Y	N	N
EMEC Sustainable Marine Energy	Tidal	760	Construction	2	Y	N	N
EMEC Tocado Phase 2	Tidal	760	Consented	3	Y	N	N
EMEC Tocado Phase 1	Tidal	760	Decommissioned	0	Y	N	N
EMEC Voith Hydro	Tidal	755	Decommissioned	0	Y	N	N
EMEC Wello Oy	Wave	760	Operational	1	Y	N	N
EMEC Shapinsay Sound	Tidal	757	Operational	1	Y	N	N
Fabtest Fred Olsen	Wave	692	Decommissioned	0	N	N	N
Fabtest OWEL	Wave	692	Pre-construction	3	N	N	N
Fabtest Polygen	Wave	686	Operational	1	N	N	N
Fabtest WaveSub	Wave	686	Construction	2	N	N	N
Fair Head	Tidal	1,262	In development	5	N	N	N
Farr Point	Wave	806	Cancelled	6	N	N	N
Galson	Wave	972	Consented – on hold	3	N	N	N
Harris Demo Zone	Wave	972	In development	5	N	N	N
Holyhead Deep	Tidal	1,130	Construction	5	N	N	N
Humber Pulse Tidal	Tidal	231	Decommissioned	0	Y	Y	Y
Islay Demo Zone	Tidal	1,212	In development	5	N	N	N
Lashy Sound (1&2)	Tidal	772	In development	5	Y	Y	Y
Marwick Head	Wave	792	Cancelled	6	Y	N	N
MeyGen Pentland Firth Phase 1a	Tidal	7289	Operational	1	Y	N	N
MeyGen Pentland Firth Phase 1b	Tidal	729	Consented	3	Y	N	N
MeyGen Pentland Firth Phase 1c	Tidal	729	Consented	3	Y	N	N
MeyGen Pentland Firth Phase 2	Tidal	729	In development	5	Y	N	N
Minesto Strangford Loch	Tidal	1,272	Operational	1	N	N	N
Morecombe Bay Tidal Lagoon	Tidal	1,224	In development	5	N	N	N
Morlais	Tidal	1,142	In development	5	N	N	N
Mull of Galloway	Tidal	1,272	In development	5	N	N	N
Mull of Kintyre Phase 1	Tidal	1,262	Pre-construction	3	N	N	N
Mull of Kintyre Phase 2	Tidal	1,262	In development	5	N	N	N
mWAVE	Wave	934	In development	5	N	N	N

Name of Project	Type of project	Distance from NB (km)	Status	Tier	Within Species MU		
					HP	GS	HS
Ness of Duncansby	Tidal	727	In development	5	Y	N	N
North Devon Demo Zone	Tidal	962	In development	5	N	N	N
North Yell	Tidal	913	Operational	1	Y	N	N
North-West Lewis	Wave	973	Pre-construction	3	N	N	N
Pendeen Array	Wave	853	In development	5	N	N	N
Perpetuus Tidal Energy Centre (PTEC)	Tidal	368	Consented	3	Y	N	N
PLAT-1 Floating Tidal Energy	Tidal	1.152	Construction	2	N	N	N
Pontnahaven	Wave	1,213	Decommissioned	0	N	N	N
Portland Bill Tidal Site	Tidal	493	In development	5	Y	N	N
Ramsey Sound	Tidal	982	Decommissioned	0	N	N	N
Sanda Sound	Tidal	1,263	Decommissioned	0	N	N	N
Scapa Flow	Wave	748	Operational	1	Y	N	N
Scilly Airport WEP	Wave	762	Cancelled	6	N	N	N
Shetland Tidal Array Phase 1	Tidal	860	Operational	1	Y	N	N
Shetland Tidal Array Phase 2	Tidal	860	Consented	3	Y	N	N
Seagen Brough Nesss	Tidal	731	In development	5	Y	N	N
Seagen Kyle Rhea	Tidal	1,043	Cancelled	6	N	N	N
Seagen Anglesey Skerries	Tidal	1,143	Cancelled	6	N	N	N
Seagen Strangford Loch	Tidal	1,272	Operational	1	N	N	N
Seagen Strangford Loch Array	Tidal	1,272	In development	5	N	N	N
Sound of Islay	Tidal	1,212	Pre-construction	3	N	N	N
South Pembrokeshire Demo Zone	Wave	937	In development	5	N	N	N
St Davids Head	Tidal	982	In development	5	N	N	N
Swansea Bay Tidal Lagoon	Tidal	992	ON HOLD	4	N	N	N
Torr Head	Tidal	1,263	In development	5	N	N	N
Wave Hub (Carnegie)	Wave	842	Consented	3	N	N	N
Wave Hub (GWave)	Wave	842	Consented	3	N	N	N
Wave Hub (Fortum)	Wave	842	In development	5	N	N	N
Wave Hub (Seatricity 1)	Wave	842	Operational	1	N	N	N
Wave Hub (Seatricity 2)	Wave	842	Consented	3	N	N	N
Wave Hub (Simply Blue)	Wave	842	In development	5	N	N	N
West Islay Tidal Energy Park	Tidal	1,212	Consented	3	N	N	N
Wave Net Array	Wave	1,111	Operational	1	N	N	N

Name of Project	Type of project	Distance from NB (km)	Status	Tier	Within Species MU		
					HP	GS	HS
West Orkney Middle South	Wave	793	Cancelled	0	Y	N	N
West Orkney South	Wave	793	Cancelled	0	Y	N	N
West Somerset Tidal Lagoon	Tidal	941	In development	5	N	N	N
Westray South	Tidal	771	In development	5	Y	N	N
Wyre Estuary Tidal Barrage	Tidal	1,223	In development	5	N	N	N