

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Preliminary Environmental Information Report

Volume 5, annex 5.1: Cumulative effects screening matrix



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Final

Image of an offshore wind farm

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Glossary

Term	Meaning
Cumulative effect	A combined effect of the Morgan Generation Assets acting cumulatively with the effects of a number of different projects, on the same single receptor/resource.
Cumulative impact	Impacts that result from changes caused by other past, present or reasonably foreseeable actions together with the Morgan Generation Assets.

Acronyms

Acronym	Description
AtN	Aid to Navigation
CEA	Cumulative Effects Assessment
DAERA	Department of Agriculture, Environment and Rural Affairs
EMODnet	European Marine Observation and Data Network
IMO	International Maritime Organization
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
MOD	Ministry of Defence
NATS	National Air Traffic Services
NRW	Natural Resources Wales
NSTA	North Sea Transition Authority
PEIR	Preliminary Environmental Information Report
PEXA	Practice and Exercise Area
TCE	The Crown Estate
UXO	Unexploded Ordnance
VTS	Vessel Traffic Services

Units

Unit	Description
km	Kilometres

1 Cumulative effects screening matrix

1.1 Background

1.1.1.1 In order to undertake a Cumulative Effects Assessment (CEA), it was necessary to compile a long list of relevant projects, plans and activities with which the Morgan Offshore Wind Project Generation Assets (hereafter referred to as the Morgan Generation Assets) may interact to produce a cumulative effect. These projects, plans and activities are included in the cumulative effects screening matrix, presented below along with figures to show the location of the cumulative schemes.

1.1.1.2 In accordance with the Planning Inspectorate Advice Note Seventeen, which states that *'It is understood that applicants are required to stop assessment work at a particular point in time in order to be able to finalise and submit an application. The applicant should state any assessment cut-off date'* (Planning Inspectorate, 2019), the CEA long list was finalised three months before submission of the PEIR (on 01 January 2023). The CEA long list will be updated for the application for consent where additional data on projects already in the CEA long list or additional projects become available.

1.2 Collating the CEA long list

1.2.1 Data sources

1.2.1.1 The projects, plans and activities for the CEA long list seaward of Mean High Water Springs (MHWS) were identified within search areas as defined in Table 1.1 and through a desktop interrogation of the following data sources:

- The Crown Estate (TCE)
- The Planning Inspectorate National Infrastructure Planning
- Marine Scotland
- Crown Estate Scotland
- The Welsh Marine Planning Portal
- Natural Resources Wales (NRW)
- Irish Government
- Irish Environmental Protection Agency
- An Bord Pleanála
- The Department of Agriculture, Environment and Rural Affairs (DAERA)
- European Marine Observation and Data Network (EMODnet) data
- CEFAS
- The Marine Management Organisation (MMO)
- KIS-ORCA
- Oceanwise

- 4C Offshore
- The North Sea Transition Authority (NSTA)
- National Air Traffic Services (NATS)
- Developers and project proponents.

1.2.2 Search areas

1.2.2.1 The CEA search area extents identified in Table 1.1 were defined based upon the extent over which cumulative effects are likely to occur.

Table 1.1: CEA offshore search area extents.

Project, plan and activity type	CEA search area extent	Justification
Aggregate and disposal including dredging	Up to 130km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 11: Commercial fisheries of the PEIR.
Offshore energy including site investigations, Unexploded Ordnance (UXO) clearance, carbon capture and storage	Up to 500km from the Morgan Array Area	This comprises the mean maximum foraging radius of Northern gannet, which is outlined in volume 2, chapter 10: Offshore ornithology of the PEIR.
Commercial fisheries including aquaculture	Up to 200km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 12: Shipping and navigation of the PEIR.
Oil and gas	Up to 200km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 12: Shipping and navigation of the PEIR.
Cables and pipelines	Up to 130km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 11: Commercial fisheries of the PEIR.
Shipping including Aids to Navigation (AtNs), anchorages, pilot boarding stations, Vessel Traffic Services (VTS) areas, International Maritime Organization (IMO) routing schemes	Up to 200km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 12: Shipping and navigation of the PEIR.
Military, aviation and radar including Ministry of Defence (MOD) Practice and Exercise Areas (PEXAs)	Up to 200km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 12: Shipping and navigation of the PEIR.

Project, plan and activity type	CEA search area extent	Justification
Coastal marine licences	Up to 200km from the Morgan Array Area	This is the maximum distance within which projects, plans and activities were considered for the CEA presented in volume 2, chapter 12: Shipping and navigation of the PEIR.

1.2.3 Data confidence assessment

1.2.3.1 The level of publicly available data for each project, plan and activity included in the CEA long list will be different and dependent on the development stage of the project, plan and activity. Planning Inspectorate Advice Note Seventeen recommends that ‘a level of certainty, reflecting the availability of detail and information necessary for the assessment, is assigned to each development and recorded’ (Planning Inspectorate, 2019). A data confidence assessment has been assigned to each project, plan and activity in the CEA long list and is presented in each cumulative effects screening matrix below. The data confidence categories and definitions are follows:

- High – Data has been obtained from the developer’s website or a consenting authority’s portal
- Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal
- Low – There is a lack of robust data and information in the public domain which is outwith the Applicant’s control.

1.3 Screening

1.3.1.1 Once the CEA long list was collated, all of the included projects, plans and activities were then individually screened with specific reference to each topic of the PEIR. This screening was carried out based on the level of detail available as well as the potential for interactions with the Morgan Generation Assets on a conceptual, physical and temporal basis. Those that were screened in were then carried forward into the CEA undertaken in the relevant topic chapters of the PEIR.

1.3.1.2 Specifically, projects, plans and activities were screened on a topic-specific basis as follows:

- Screened into the assessment because:
 - There is a potential for a cumulative effect to exist due to a conceptual, physical or temporal (or some combination thereof) overlap between the project, plan or activity and the Morgan Generation Assets
 - The project, plan or activity was considered as part of the baseline but has an ongoing impact which has the potential to interact with the Morgan Generation Assets
- Screened out of the assessment because:
 - The project, plan or activity was included as part of the topic baseline

- There is no conceptual or physical effect-receptor pathway between the project, plan or activity and the Morgan Generation Assets
- There is low data availability regarding the project, plan or activity, where the data available is not sufficient to undertake a CEA
- There is no temporal overlap between the project, plan or activity and the Morgan Generation Assets. However, it should be noted that projects, plans or activities are not screened out automatically based on there being no direct temporal overlap (e.g. activities from other projects, plans and activities occurring immediately prior to the Mona Offshore Wind Project) due to the potential for some receptors to be cumulatively effected by repeat impacts across consecutive years.

1.3.1.3 Further information on the screening undertaken is presented in volume 1, chapter 5: Environmental Impact Assessment methodology of the PEIR.

1.3.1.4 All developments that emit, avoid or sequester greenhouse gases (GHGs) have the potential to impact the atmospheric mass of GHGs as a receptor, and so may have a cumulative impact on climate change. Consequently, cumulative effects due to other specific local development projects were not individually considered for the climate change topic. Further information on the CEA undertaken for climate change are presented in volume 2, chapter 18: Climate change of the PEIR.

1.3.1.5 The CEA for the human health topic was based on outputs from the other topic chapters. Therefore, projects were not screened specifically for that topic and do not appear as a separate column in the screening matrices below. Further information on the assessments relied upon for the human health CEA are presented in volume 2, chapter 19: Human health assessment of the PEIR.

1.4 Offshore Cumulative Effects Matrix - Aggregate and disposal - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.4.1.1 The following aggregate and disposal projects, plans and activities are shown in Figure 1.1 and Figure 1.2.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
Annual Maintenance Dredging Peel Harbour Isle of Man	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Capital harbour dredging and maintenance dredging. Extracted amount: 200,136 tonnes.	Operational																		
Bar/Wedge - Derwent OSPAR area	MMO (Marine Management Organisation)	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Port of Workington Maintenance Dredging MLA/2019/00168.	Operational																		
Castletown Bay, Isle of Man	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Maintenance Harbour Dredging, Sea Disposal. Extracted amounts: 249 tonnes.	Operational																		
Catchpit	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Port of Workington Maintenance Dredging MLA/2019/00168.	Submitted but not yet determined																		
Channel - Derwent OSPAR area	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Port of Workington Maintenance Dredging MLA/2019/00168.	Operational																		
Conwy River	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Maintenance harbour dredging. Extracted amount: 2,813 tonnes.	Operational																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Canning Half Tide Dock		website or a consenting authority's portal	navigable channel. Dredging up to 5,000m ³ per year.															
Heysham 1 & 2 dredging activities	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Maintenance at cooling water outflows for nuclear power station. The amount that may need to be removed is approximately 75,000m ³ /year (105,000 dry tonnes/140,000 wet tonnes).	Operational														
Heysham Harbour and Approaches Maintenance Disposal License	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	10 renewal of maintenance disposal licenses for the approaches and harbour of Heysham Port. Dredging at Heysham harbour up to 356,714m ³ of sand and 235,058m ³ of silt. Dredging at the Heysham approaches up to 293,764m ³ of sand. Disposal of silt and sand.	Operational														
Hilbre Swash	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Aggregates site agreements. Area: 21.8km ² .	Operational														
Howth	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Maintenance Dredging, sea Disposal. Extraction amount: 6,400 tonnes.	Submitted but not yet determined														
Liverpool 2 and River Mersey Approach Channel Dredging	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Marine licence for a new ferry terminal and associated infrastructure. Infill of dock area of 20,000m ³ for West waterloo dock and 4,000m ³ for Princes half-tide dock. Installation of linkspan bridge and floating pontoon. Installation of passenger access system. Berthing dolphin (including access walkway & pile). Installation of retaining wall structure. Partial removal of West Waterloo Dock gate. General repairs and maintenance to dock walls. Disposal of dredge material.	Operational														
Liverpool Bay	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Aggregates site agreements. Area: 13.9km ² .	Operational														
Liverpool Bay	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Aggregates site agreements. Area: 64.8km ² .	Operational														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Liverpool Docks Maintenance Disposal	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Disposal of maintenance dredge material for the Mersey estuary. Disposal of up to 36,000m ³ for Seaforth dock, 240,000m ³ for Canada dock, 102,000m ³ for Gladstone dock, 18,000m ³ for Langton dock, 15,000m ³ for Sandon dock. Dredging of 200,000m ³ at Seaforth dock, 80,000m ³ at Birkenhead east float, 200,000m ³ at Canada Dock, 30,000m ³ at Huskisson dock, 50,000m ³ at Langton dock, 15,000m ³ at Sandon dock, 850,000m ³ at Gladstone dock.	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
Liverpool Marina Maintenance Dredging - Sustainable Relocation of Dredged Material to the River Mersey	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Maintenance dredging for the Brunswick and Coburg dock. Dredging of up to 98,000m ³ .	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
Luce Bay disposal site	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Disposal of dredge material at Luce Bay.	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
Maintenance Dredging and Disposal of Garston Approach Channel and Garston Docks	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Dredging to maintain navigation depths required for the approach channel at Garston Docks. Dredging of the approach channel up to 171,873m ³ per year. Dredging in the dock up to 63,461m ³ per year. Disposal of up to 355,000m ³ per year.	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
Maryport South Beach, tidal deposit removals	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	To protect the South pier structure by removing the build-up of gravel/sand grit material away from site.	Operational	Yellow	White	White	White	White	White	White	White	White	White	White	White	White	White
Mersey Channel and River Maintenance Dredge Disposal Renewal	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	This licence is for the disposal only of that material to four designated disposal sites: Mersey Mid river (IS120) 1,500,000m ³ Mersey of Bromborough 2 (IS128) 8,000,000m ³ Site Z (IS140) 21,000,000m ³ & 1,350,000m ³ Site Y (IS150).47,500,000m ³ & 1,350,000m ³ .	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Mostyn Maintenance dredging	Welsh Marine Planning Portal	High – Data has been obtained from the developer's website or a consenting authority's portal	Dredge and/or disposal. 2,700,000m ³ per year.	Operational	Yellow	Yellow	Yellow														
Port of Barrow maintenance dredging disposal licence.	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Dredging is required to maintain the Port of Barrow and its approach channel at its advertised navigational depth for all vessels entering and leaving the port and in particular to allow the nuclear-powered submarines which are constructed in Barrow to safely leave the port.	Operational	Yellow	Yellow	Yellow	Yellow													
Port of Workington Maintenance Dredging 2019 - 2029 (Renewal)	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Dredging to maintain navigation depths required for the Port of Workington. Dredging within the dock up to 66,000m ³ . Dredging of the Turning Basin up to 700,000m ³ . Dredging of the channel up to 800,000m ³ . Dredging of the bar/wedge up to 850,000m ³ . Disposal at Solway firth up to 153,000m ³ per year, Disposal at Workington Anchorage up to 1,080,000m ³ per year. Dredging of catchpit up to 50,000m ³ .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow											
Ribble Link Dredging	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Maintenance dredging along the Ribble Link Canal. Dredging of up to 30,000m ³ .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow											
Ribble River	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Maintenance Harbour Dredging. Sea disposal.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
RNLI Regional Maintenance	Welsh Marine Planning Portal	High – Data has been obtained from the developer's website or a consenting authority's portal	Regional marine licence to undertake low impact maintenance works to RNLI operated lifeboat stations and associated slipways, berths, and other infrastructure, and to RNLI beach lifeguard units and infrastructure.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow											
Routine Marine Structure Maintenance Work	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Maintenance dredging up to 356,714m ³ sand and 235,058 silt in Heysham harbour. Dredging of 293,764m ³ in Heysham approach. Disposal of dredged material.	Operational	Yellow																
Silloth Dredge Licence Renewal	MMO	High – Data has been obtained from the developer's	Dredging and disposal at the Port of Silloth. Dredging of up to 90,000m ³ .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow											

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		website or a consenting authority's portal																
Solway Firth	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Maintenance Dredging. Sea disposal.	Operational														
West of Duddon Sands Pontoon Dredging Marine Licence	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Sedimentation can cause the pontoon edge adjacent to the harbour wall to be raised during spring low tides. The scope of the marine licence application covers dredging which will be required annually based on the current observed rates of accumulation.	Operational														
West of Duddon Sands Pontoon Dredging Marine Licence	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Maintenance dredging up to 12,520m ³ .	Operational														
Wyre River	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Maintenance dredging. Sea disposal.	Operational														

1.5 Offshore Cumulative Effects Matrix - Aggregate and disposal - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Annual Maintenance Dredging Peel Harbour Isle of Man	39.7	Operational	d	c	c	d	d	a	a	d	d	d	d	d
Bar/Wedge -Derwent OSPAR area	68.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Castletown Bay, Isle of Man	29.5	Operational	d	c	c	d	d	a	a	d	d	d	d	d
Catchpit	68.4	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
Channel -Derwent OSPAR area	68.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Conwy River	68.8	Operational	d	d	d	d	d	a	a	d	d	d	d	d
Cross Beck Outfall - Cumbria	86.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Dee River	79.5	Operational	d	d	d	d	d	a	a	d	d	d	d	d
Deganwy Maintenance Dredge	69.1	Operational	d	d	f	d	d	f	f	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
Disposal of dredged material from Kilkeel Harbour	109.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Disposal of Glasson Dock Maintenance Dredging	60.2	Operational	d	d	d	d	d	d	a	a	d	d	d	d	d	d
Disposal of maintenance dredge from nav channels & berths in Fleetwood SHA	45.9	Operational	d	f	f	d	d	d	f	f	d	d	d	d	d	d
Douglas Harbour, Isle of Man	22.7	Operational	d	c	c	d	d	d	a	a	d	d	d	d	d	d
Dredging and disposal activities at Shell Island Lagoon	120.9	Operational	d	d	d	d	d	d	f	f	d	d	d	d	d	d
Dredging the approach to Canning Half Tide Dock	79.8	Operational	d	f	f	d	d	d	d	d	d	d	d	d	d	d
Heysham 1 & 2 dredging activities	47.8	Operational	d	c	c	d	d	d	a	a	d	d	d	d	d	d
Heysham Harbour and Approaches Maintenance Disposal License	48.1	Operational	d	c	c	d	d	d	a	a	d	d	d	d	d	d
Hilbre Swash	53.1	Operational	d	c	d	d	d	d	a	a	d	a	d	d	d	d
Liverpool 2 and River Mersey Approach Channel Dredging	44.5	Operational	d	c	c	a	d	d	a	a	d	d	d	d	d	d
Liverpool Bay	34.3	Operational	d	d	f	d	d	d	f	f	d	d	d	d	d	d
Liverpool Bay	49.6	Operational	d	f	f	d	d	d	f	f	d	d	d	d	d	d
Liverpool Docks Maintenance Disposal	52.2	Operational	d	d	d	d	d	d	f	d	d	d	d	d	d	d
Liverpool Marina Maintenance Dredging - Sustainable Relocation of Dredged Material to the River Mersey	81.5	Operational	d	d	d	d	d	d	a	a	d	d	d	d	d	d
Luce Bay disposal site	96.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Maintenance Dredging and Disposal of Garston Approach Channel and Garston Docks	87.1	Operational	d	d	f	d	d	d	f	f	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Maryport South Beach, tidal deposit removals	76.6	Operational	d	d	d	d	d	f	f	d	d	d	d	d
Mersey Channel and River Maintenance Dredge Disposal Renewal	44.5	Operational	d	c	c	d	d	a	a	d	d	d	d	d
Mostyn Maintenance dredging	76.8	Operational	d	d	f	d	d	f	f	d	d	d	d	d
Port of Barrow maintenance dredging disposal licence.	35.9	Operational	d	c	c	d	d	a	a	d	d	d	d	d
Port of Workington Maintenance Dredging 2019 -2029 (Renewal)	68.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Ribble Link Dredging	68.2	Operational	d	d	d	d	d	a	a	d	d	d	d	d
Ribble River	67.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
RNLI Regional Maintenance	88.4	Operational	d	d	d	d	d	a	a	d	d	d	d	d
Routine Marine Structure Maintenance Work	57.1	Operational	d	d	f	f	d	d	d	d	d	d	d	d
Silloth Dredge Licence Renewal	93.7	Operational	d	d	d	d	d	a	a	d	d	d	d	d
Solway Firth	76.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
West of Duddon Sands Pontoon Dredging Marine Licence	38.4	Operational	d	c	c	d	d	a	a	d	d	d	d	d
West of Duddon Sands Pontoon Dredging Marine Licence	38.4	Operational	d	c	a	a	d	d	a	d	a	d	d	d
Wyre River	51.7	Operational	d	d	d	d	d	d	a	d	d	d	d	d

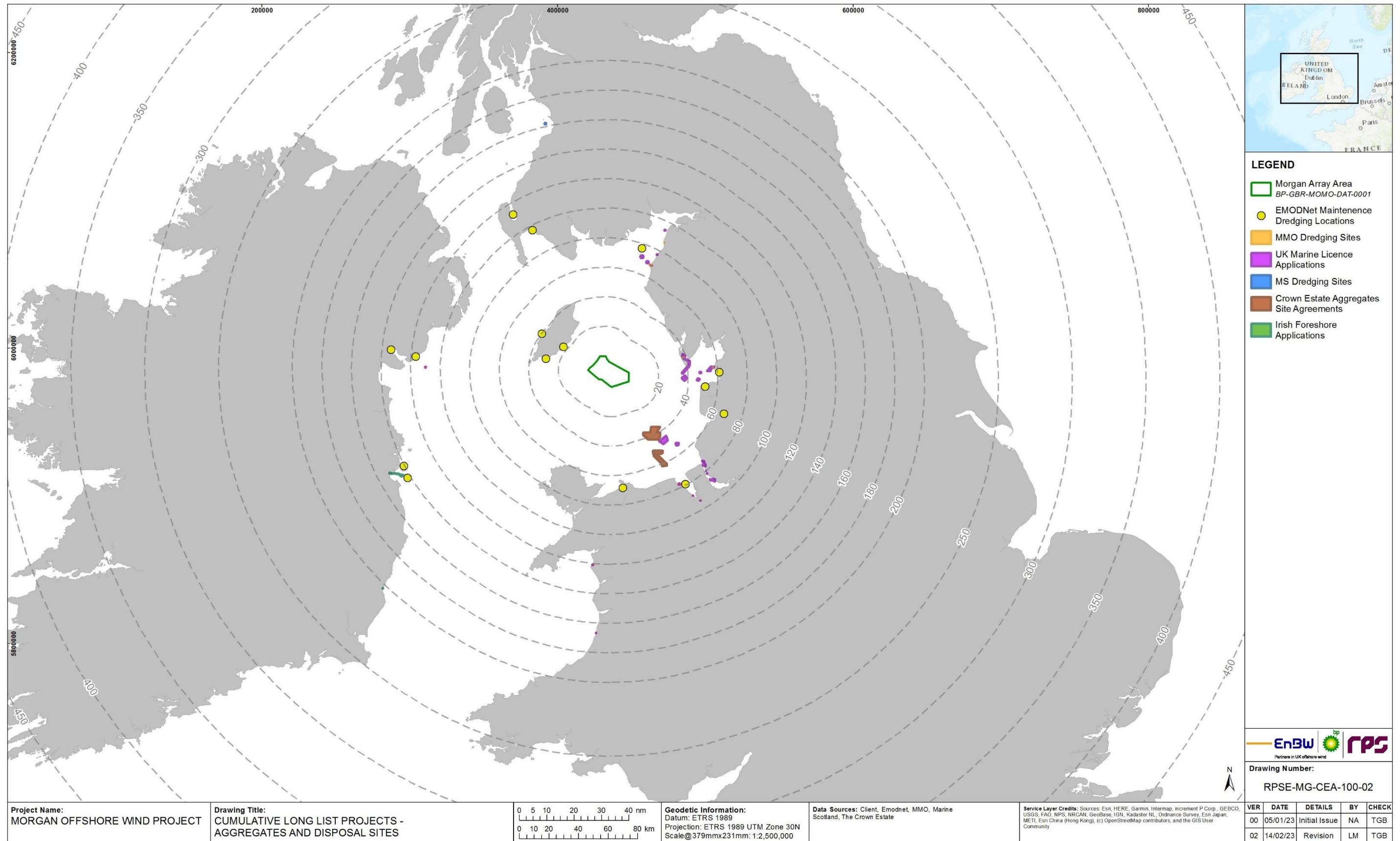


Figure 1.1: Aggregate and disposal projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

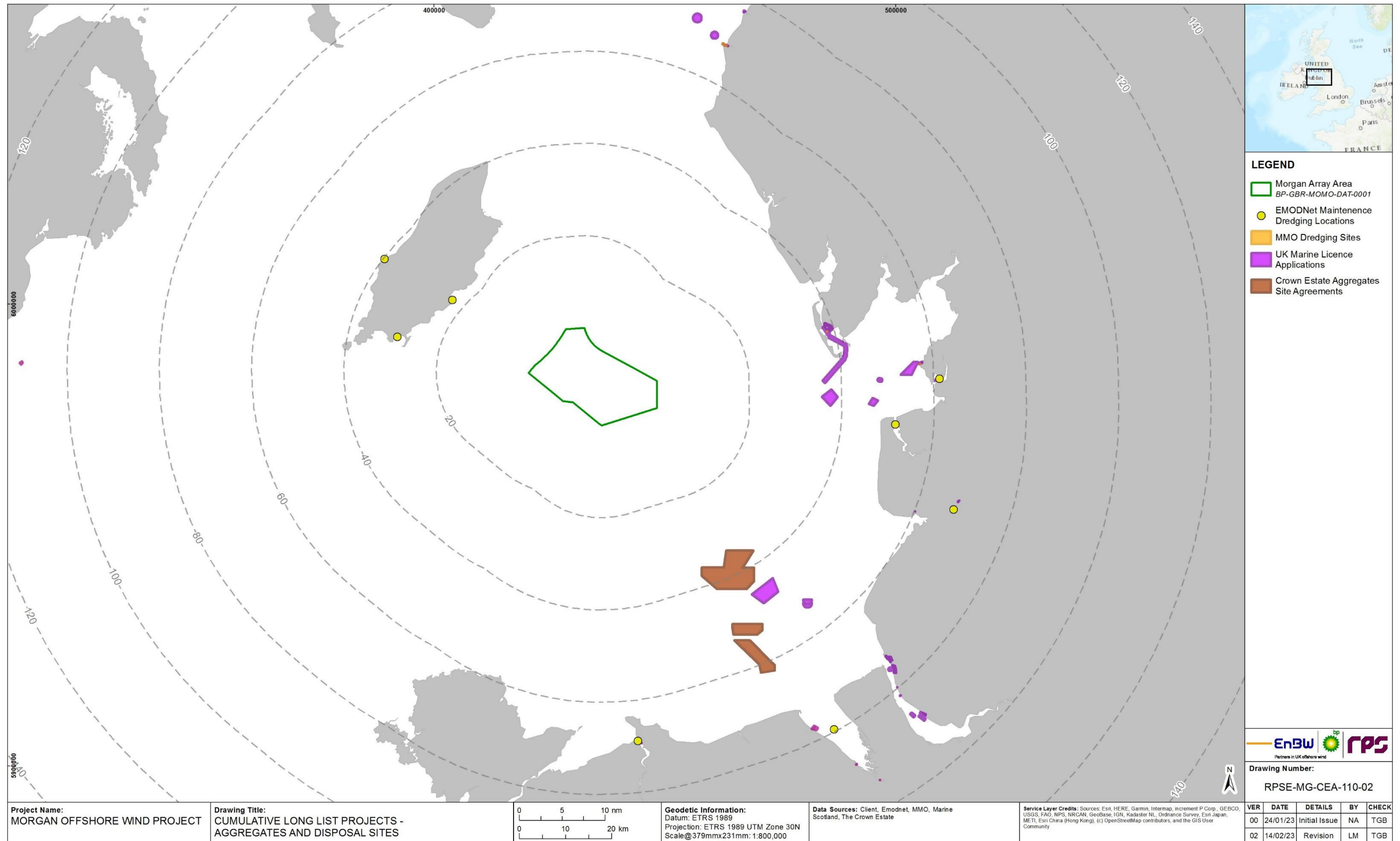


Figure 1.2: Aggregate and disposal projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.6 Offshore Cumulative Effects Matrix - Offshore Energy - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.6.1.1 The following offshore energy projects, plans and activities are shown in Figure 1.3 and Figure 1.4.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Aberdeen Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Total capacity of 96.8MW with 11 wind turbines.	Operational																	
Alderney Race Tidal	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Tidal test site at Alderney.	Pre-application																	
Application for Site Investigation Licence for Windfarm off Helvick Head	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, archaeological, ecological, and oceanographic and meteorological surveys.	Operational																	
Argyll Tidal Demonstrator Project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Consists of a single 500KW Nautricity CoRMaT tidal turbine with contra-rotating rotors. All foundations, moorings, electrical collection system and an export cable connecting the tidal turbine to shore, all as described in the	Permitted but not yet implemented																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
			application. Marine licence granted in 2014 but construction on hold.																				
Arklow Bank Phase 1 Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 25.2MW.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow													
Arklow Bank Wind Park Phase 2	SSE Renewables	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Maximum capacity of up to 800MW.	Pre-application																			
Atlantic Marine Energy Test Site (AMETS) - test area A	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Test Area A at 100m water depth is located some 16km out from Belderra Strand. Test Area A is 6.9km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow													
Atlantic Marine Energy Test Site (AMETS) - test area B	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Test Area B at 50m water depth is located 6km from the strand. Test Area B is 1.5km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow													
Awel y Môr Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 500MW. Applicant expects consent Q3 2023. Construction to commence 2026, commissioned by 2030.	Submitted but not yet determined	Green	Green	Green	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Bardsey Sound	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Nova’s Ynys Enlli Tidal Energy project will involve placing an array of their M100 100kW turbines in Swnt Enlli (Bardsey Sound) between Ynys Enlli (Bardsey Island) and the Llŷn Peninsula mainland in north Wales.	Pre-application																			
Barrow Offshore Wind Farm	The Crown Estate	High – Data has been obtained from	Capacity of 90MW, 30 wind turbines.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow													

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		the developer's website or a consenting authority's portal																			
Barrow Offshore Wind Farm Export Cable Repair and Remediation	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	The proposed works include; <ul style="list-style-type: none"> 5 x cable repair events, with associated jacking-up 10 x cable remediation events (via jetting). 	Operational																	
Barrow Offshore Wind Farm O&M Marine Licence	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to J-tubes, Replacement of access ladders - major component replacement.	Operational																	
Beatrice Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Fully operational, 84 wind turbines, 588MW installed. Operational base in Wick.	Operational																	
Bellrock Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Scotwind area awarded to BlueFloat Energy as part of the ScotWind offshore wind leasing round. 1.2GW	Pre-application																	
Belwind phase 1 Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Belwind Offshore Energy Windfarm is located on the Bligh bank approximately 46-52km offshore to the west of Zeebrugge in the Belgian Economic Zone of the North Sea.	Operational																	
Belwind phase 2 Offshore Wind Farm (Nobelwind) (Zone 1)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Belwind Offshore Energy Windfarm is located on the Blighbank approximately 46-52km offshore to the west of Zeebrugge in the Belgian Economic Zone of the North sea.	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		or a consenting authority's portal																				
Borssele Kavel III Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	731.5MW wind project located 22km offshore the Zeeland province in the Netherlands. Began operations in 2021.	Operational																		
Borssele Kavel IV Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	731.5MW wind project located 22km offshore the Zeeland province in the Netherlands. Began operations in 2021.	Operational																		
Borssele Kavel V Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Two Vestas 9.5MW wind turbines.	Operational																		
bp and EnBW Round 4 Offshore Wind Farm Deep Geotechnical Survey	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	A deep geotechnical survey of the bidding areas (named Morgan and Mona), which will include boreholes and deep Piezo Cone Penetrometer Tests (PCPTs) in the Irish Sea, in both English and Welsh waters.	Operational																		
Braymore Point Offshore Wind Farm	SSE Renewables	High – Data has been obtained from the developer's website or a consenting authority's portal	Proposed offshore wind farm, up to 1GW Capacity. Area: 444km ² .	Pre-application																		
Braymore Point site investigation Ref No. FS006973	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Geophysical, geotechnical, wind resource and metocean, topographic, environmental surveys.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Bridgwater Bay Tidal lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Tidal barrage over Bridgewater bay. Would generate an estimated 2.6TWh of power per year.	Pre-application																	
Broadshore Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Scotwind area awarded to BlueFloat Energy as part of the ScotWind offshore wind leasing round. 500MW capacity.	Pre-application																	
Buchan Deep Demo Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Floating offshore wind farm. Capacity of 30MW.	Operational																	
Burbo Bank Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 90MW. Area – 10km ² .	Operational																	
Burbo bank cable repair and remediation	Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Applicant seeks consent for up to 10 discrete array cable repair or remediation events over the lifetime of the wind farm (25 years).	Operational																	
Burbo Bank Extension Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 258MW. 32 wind turbines. Area - 40km ² .	Operational																	
Burbo Bank Extension - Array cable repair and remediation activities	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Applicant seeks consent for up to 10 discrete array cable repair or remediation events over the lifetime of the wind farm (25 years).	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Burbo Bank Extension - Export cable repair and remediation activities	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Applicant seeks consent for up to 4 discrete export cable repair or remediation events over the lifetime of the wind farm (25 years).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Burbo Bank Offshore Wind Farm - O&M Marine Licence for Export Cable Repair/Remediation Activities	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Applicant seeks consent for up to four discrete export cable repair/remediation events over the remaining lifetime of the wind farm (15 years).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Cailleach Offshore Wind Farm, Wicklow	4C Offshore	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant’s control	Announced offshore wind project. Capacity of 1.6GW. Spread over an area of 317km ² .	Pre-application														
Caledonia Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Scotwind area awarded to Ocean Wind as part of the ScotWind offshore wind leasing round. 1GW capacity.	Pre-application														
CampionWind Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Scotwind area awarded to Shell New Energies as part of the ScotWind offshore wind leasing round. 2GW capacity.	Pre-application														
Cardiff Bay Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Tidal barrage over Cardiff Bay.	Pre-application														
Celtic One Offshore Wind Farm	Offshore Wind.Biz	Low – There is a lack of robust data and information in the public domain	800MW site. Floating offshore wind, Phase 2 of this site is located approximately 27km south of Ballycotton.	Pre-Application														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		which is outwith the Applicant's control																
Celtic Sea Array Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	1.2GW planned capacity.	Submitted but not yet determined	Green	Green	Green	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Celtic Sea RWE Renewables Offshore Wind Farm	RWE Renewables	High – Data has been obtained from the developer's website or a consenting authority's portal	300MW site.	Pre-Application														
Celtic Two Offshore Wind Farm	Offshore Wind.Biz	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant's control	300MW site. 20 wind turbines. Welsh waters in the Celtic Sea, 40 miles off the coast of Pembrokeshire.	Pre-Application														
Clarus Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	400MW site.	Pre-Application	Green	Green	Green	Green	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Clarus Offshore Wind Farm - Site Investigations off Counties Kerry and Clare	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Geophysical, geotechnical, archaeological, wind resource and metocean, ecological surveys. Licence sought for 5 years.	Submitted but not yet determined	Yellow	Yellow	Yellow	Yellow										
Clogher Head Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Planned capacity of 800MW.	Pre-application														
Cluaran Deas Ear Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a	Scotwind area awarded to DEME as part of the ScotWind offshore wind leasing round. 1GW capacity.	Pre-application														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		consenting authority's portal																
Codling Wind Park Extension Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Total area 125km ² . Capacity between 900MW and 1,500MW.	Pre-application														
Codling Wind Park Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Offshore wind, 900MW Planned capacity, off of the coast Wicklow. Spread over an area of 125km ² .	Pre-application														
Codling Wind Park site investigation Ref No. FS007045	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Geophysical, Geotechnical, Fish & Shellfish surveys, Benthic & Intertidal Surveys, Archaeological surveys, Metocean and Floating LiDAR, Marine Mammal Acoustic POD survey. Proposed start date of Q4 2020/Q1 2021 for up to 36 months with a requested licence duration of 5 years.	Operational														
Colwyn Bay Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Tidal barrage over Colwyn Bay.	Pre-application														
Connel Tidal	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	1MW tidal turbine.	Operational														
Cooley Point Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Foreshore Licence application for site investigation works to inform the development of an Offshore Wind Farm. Geophysical, geotechnical, archaeology, ecology surveys.	Pre-application														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Courseulles-sur-mer Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	450MW. 75 wind turbines.	Under Construction	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dieppe - Le Treport Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	2,000GWh of electricity a year from 2021. The estimated operational life of the wind farm is 20 years. 17km off the coast of Dieppe. 110km² area, 62 wind turbines.	Under Construction	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dogger Bank B (Sofia) Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 1.4GW. Area – 593km².	Under Construction	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dogger Bank C (Creyeke Beck) Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 1.2GW. Area of around 560km².	Permitted but not yet implemented	Green	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dogger Bank South (East) Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Area of 493km², 1500MW capacity.	Pre-application																	
Dogger Bank South (West) Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Area of 495km², 1500MW capacity.	Pre-application																	
Dogger Bank Teeside A Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a	Capacity of 1.2GW, Area of around 515km².	Under Construction	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		consenting authority's portal																			
DONG Energy Burbo (UK) Ltd - Operational Marine Licence Inter Array Cable Repair	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	A maximum of 10 inter-array cable repairs or replacements over the remaining lifetime of the project.	Operational																	
Draig y Môr Offshore Wind Farm	Wind Power	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant's control	Mixture of static and floating wind turbines, located off the north coast of county Donegal. Area - 1,324km ² .	Pre-Application																	
Dublin Array Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	600MW offshore wind power project. Area of 54km ² .	Pre-application																	
Duddon Estuary Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Predicted 7-8 million MWh annually.	Pre-application																	
Dudgeon Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Capacity of 402MW - 67 6MW wind turbines.	Operational																	
Dudgeon Extension Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Offshore Wind farm. Joint application with Sheringham Shoal. 402MW	Submitted but not yet determined																	
East Anglia ONE Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a	Offshore Wind farm. 102 wind turbines - 714MW capacity. Area - 300km ² .	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal																				
East Anglia ONE NORTH Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Offshore Wind farm. 800MW Capacity. Area - 208km ² .	Permitted but not yet implemented																		
East Anglia THREE Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Offshore Wind farm. Area - 305km ² .	Permitted but not yet implemented																		
East Anglia TWO Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	900MW capacity. Area - 218.4km ² .	Permitted but not yet implemented																		
Endurance	bp	High – Data has been obtained from the developer's website or a consenting authority's portal	Carbon Capture project. bp, Eni, Equinor, National Grid, Shell and Total have formed the Northern Endurance Partnership to develop the offshore infrastructure to transport and store millions of tonnes of carbon dioxide (CO ₂) emissions safely in the UK North Sea. bp acting as operator.	Submitted but not yet determined																		
Energy Methil Demonstration	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Also known as Forthwind Demonstration. One wind turbine of up to 20MW.	Submitted but not yet determined																		
Erebus Floating Wind Demo	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	100MW test & demonstration project in the Celtic Sea.	Submitted but not yet determined																		
FabTest, Falmouth Bay	The Crown Estate	High – Data has been obtained from	FabTest is a 2.8km ² non grid connected, pre-consented nursery	Operational																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		the developer's website or a consenting authority's portal	test site for the development and testing of marine energy convertors and components as well as Autonomous systems.														
Fair Head	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Proposal for a 100MW tidal array covering an approx. area of 4.2km ² to be built 1km offshore at Fair Head. Phase 1 is up to 10MW but no licence issued to date.	Submitted but not yet determined													
Fair Head Phase 2	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Proposal for a 100MW tidal array covering an approx. area of 4.2km ² to be built 1km off shore at Fair Head. Phase 2 is up to 90MW but no licence issued to date. Lifetime of 25 years.	Pre-application													
Fall of Warness Tidal Test Site	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Capacity of 10MW.	Operational													
Fecamp Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	498MW wind farm located in the English Channel, off the coast of northern France. Area - 67km ² . 22km from shore.	Under Construction													
Five Estuaries Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	149km ² area. Galloper wind farm extension. Capacity of 353MW.	Pre-application													
FS007031 Statkraft North Irish Sea Array (NISA) Site Investigations	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Geophysical survey, Geotechnical survey, metocean device, floating lidar, ecology surveys, archaeology surveys.	Operational													

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
FS007048 Energia Site Investigation off Wexford Coast	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, archaeology, ecological and oceanographic surveys.	Operational	Yellow	Yellow	Yellow	Yellow										
FS007062 SEAI SAIPAM Site Investigation for Floating Offshore Wind testing at AMETS Site Mayo	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Site Investigation for Accelerating market uptake of Floating Offshore Wind Technology testing/demonstrating of Offshore Floating Wind technology. Sub-bottom Profiling and Cone Penetration Testing to inform on the proposed deployment of a turbine of up to 6MW at Atlantic Marine Energy Test Site in partnership with SEAI off the west coast of Co. Mayo. MBES, SSS, SBP, CPT and benthic sampling. SI works were proposed to be undertake between May and September 2020 but no licence granted as of August 2022.	Submitted but not yet determined														
FS007081 DesignPro Cahiracon Quay Tidal Energy Testing	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Test site for a tidal energy device. The test devices proposed for deployment off the pier at Inishmurry (Cahiracon, Co Clare) are 60kW devices.	Submitted but not yet determined														
FS007134 ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	This foreshore application relates to the Site Investigation works only. These activities are required to inform: the overall project feasibility; the conditions at site and along the cable route; the various assessments required to progress the project; and the development of the project.	Submitted but not yet determined	Yellow	Yellow												
FS007136 ESB Wind Development Limited Site Investigations off Waterford and Cork Coasts - Helvick Head Offshore Wind	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, oceanographic and metocean, ecological and archaeological surveys.	Submitted but not yet determined	Yellow	Yellow												

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
FS007138 ESB Celtic Offshore Wind - Site Investigations off Waterford and Cork	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, oceanographic and metocean, ecological and archaeological surveys.	Submitted but not yet determined																		
FS007151 Sunrise Wind Ltd., Site Investigations for the proposed Sunrise Offshore Wind Farm, off Counties Dublin and Wicklow (Applied Dec 2021)	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, oceanographic and metocean, ecological and archaeological surveys.	Submitted but not yet determined																		
FS007163 Wicklow Sea Wind Ltd., Site Investigations for the proposed Wicklow Project offshore wind farm, off County Wicklow	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, archaeology, subtidal benthic, seabed and marine mammal, project and current resource measurement, geotechnical surveys.	Submitted but not yet determined																		
FS007261 Shelmalere Offshore Wind Farm - Site Investigations off Counties Wexford and Wicklow	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Hydrographical, geographical, geotechnical, ecological and geophysical survey activities.	Submitted but not yet determined																		
FS007283 Banba Wind Ltd., Site Investigations for proposed Offshore Wind Farm, off Counties Wicklow and Dublin (Applied Dec 2021)	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The following types of surveys will be carried out: <ul style="list-style-type: none"> • Geotechnical surveys • Geophysical surveys (including archaeology and UXO) • Benthic survey programme on the basis of geophysical data • Wind resource monitoring • Metocean surveys • Bird and marine mammal surveys. 	Submitted but not yet determined																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																					
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055								
FS007354 Kinsale Offshore Wind Ltd., Site Investigations for the proposed Kinsale Project offshore wind farm, off County Cork. (Applied Jan 2022)	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, archaeology, subtidal benthic, seabed and marine mammal, wind and current resource measurement, geotechnical surveys, Duration of deployments is expected to be between 12 and 36 months.	Submitted but not yet determined																						
Fuinneamh Sceirde Teoranta - Site Investigations for the proposed Sceirde Rocks Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Sceirde Rocks Offshore Wind Farm is a fixed bottom offshore wind farm off the West Coast of Ireland. Foreshore licence for site investigations is to determine geotechnical, geophysical, metocean, wind resource and benthic characteristics within the Foreshore Licence Area.	Submitted but not yet determined																						
Galloper Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 353MW, 56 wind turbines.	Operational																						
Greater Gabbard Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Capacity of 504MW, 140 wind turbines.	Operational																						
Green Volt Offshore Wind Farm	Marine Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Expected to be operational by 2026. Scoping report submitted. Capacity of 1GW.	Pre-application																						
Greystones Offshore Wind Farm	Flotation Energy	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Greystones is a 1,000MW fixed offshore wind farm located in the Irish Sea, southeast of Dublin.	Pre-Application																						

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Hibernian Wind Power. Ref No. FS006788 Kilmichael Point site investigation	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, geotechnical, archaeological, ecology surveys. Expected to commence in 2018 for 3 years, licence valid for 5 years.	Operational	Yellow																
Hollandse Kust (West) Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Capacity of 1,400MW. Area - 176km ² .	Pre-application																	
Hollandse Kust D Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Construction scheduled to be complete in 2023. 1.5GW capacity.	Under Construction	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Hollandse Kust F Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Construction scheduled to be complete in 2023. 1.5GW capacity.	Under Construction	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Holyhead Deep-Phase 1	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	First full-scale deployment of Minesto’s tidal energy concept. Capacity of 0.5MW.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Holyhead Deep Project, Safety Zone Application	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Safety zone application for the Minesto deep tidal site.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Hornsea Project 1 Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s	1.2GW capacity, 407km ² area, 174 wind turbines.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		website or a consenting authority's portal																			
Hornsea Project 2 Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	1.3GW capacity, 462km ² area, 165 wind turbines.	Operational																	
Hornsea Project 3 Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	2.4GW capacity, 696 km ² area.	Under Construction																	
Hornsea Project 4 Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Hornsea Four is an offshore wind farm which Ørsted is proposing to develop in the North Sea, approximately 69km off the Yorkshire Coast.	Submitted but not yet determined																	
Humber Gateway Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	219MW capacity, 73 wind turbines. Area - 35km ² .	Operational																	
Ijmuiden Ver Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	62km off the west coast of the Netherlands. An application period is planned for 2025.	Pre-application																	
Inch Cape Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	72 wind turbines, capacity of 1.1GW.	Permitted but not yet implemented																	
Inis Eagla Marine Energy Park Ltd site investigations	Irish Government	High – Data has been obtained from the developer's	Site Investigations relating to a potential offshore wind farm at Inis Eagla, Cork.	Submitted but not yet determined																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
FS006859 (Co. Cork)		website or a consenting authority's portal			Yellow	Yellow												
Inis Ealga Marine Energy Park	4C Offshore	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant's control	Expected to have a capacity of 1GW. Floating offshore wind.	Pre-application	Green	Green	Green	Green	Green	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Inis Offshore Wind Munster	Inis Offshore Wind (https://inisoffshorewind.ie/)	High – Data has been obtained from the developer's website or a consenting authority's portal	100MW site	Pre-Application														
Inner Dowsing Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	97.2MW Capacity	Operational	Yellow	Yellow	Yellow	Yellow										
Innogy Ref No. FS007029 Dublin Array site investigation	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Application for a Site Investigation Licence to carry out geophysical surveys, geotechnical surveys, ecological surveys and wind and metocean surveys	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Irish Sea North Met mast and Geotechnical survey	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Met mast and geotechnical survey	Operational	Yellow													
Isle of Islay Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Islay and Harris development sites, overall capacity of 100MW.	Pre-application														
Isle of Man Offshore Wind Farm lease area	Ørsted A/S	High – Data has been obtained from the developer's	The project is at an early stage of development, and as such its final layout and size are not known.	Pre-application														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

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					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		website or a consenting authority's portal	Subject to investigations, and the outcome of future consenting processes, the wind farm could generate 800MW or more of electricity.															
Kentish Flats Extension Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	49.5MW capacity. Area - 49.5km ² .	Operational														
Kentish Flats Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	90MW capacity.	Operational														
Kilmichael Point Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Concept/early planning offshore wind farm. 500MW capacity.	Pre-application														
Kincardine Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	50MW floating offshore wind farm	Operational														
Latitude 52 Array Offshore Wind Farm	4C Offshore	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant's control	Planned capacity is up to 1GW, spread over 300km ² .	Pre-application														
Lincs Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Capacity of 270MW. Area - 35km ² .	Operational														
Llŷr 1 Offshore Wind Farm	NRW Public Register	High – Data has been obtained from	100MW offshore wind power project. It is planned in Celtic Sea, Wales,	Pre-Application														

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					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Investigations off Tralee FS007375		website or a consenting authority's portal	acoustic monitoring, boat based visual surveys.															
Mainstream, Renewable Power Ltd- Site Investigations off Co, Dublin FS007373	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Foreshore licence for site investigation and survey including geophysical, geotechnical, metocean survey, benthic surveys, fish and shellfish surveys, PAM monitoring and boat based survey for birds and mammals	Submitted but not yet determined														
MarramWind	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Scotwind area awarded to Scottish Power Renewables as part of the ScotWind offshore wind leasing round. 3GW capacity.	Pre-application														
Merlin Offshore Wind Farm	Merlin	High – Data has been obtained from the developer's website or a consenting authority's portal	1,000MW proposed capacity.	Pre-Application														
Mermaid wave	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Wave energy device in Belgium. 600kW.	Operational														
Mersey Tidal Power	City of Liverpool	High – Data has been obtained from the developer's website or a consenting authority's portal	At least 1GW Capacity, 2TWh Annual Generation.	Pre-application														
META Phase 2 demonstration zones	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	META Open Water offers sites for accessible, non-grid connected, real-sea testing. The sites are located within or adjacent to the Milford Haven Waterway enabling lessons to be learnt quickly and cheaply. Warrior Way, Dale Roads and East	Operational														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		consenting authority's portal																
Morwind Offshore Wind Farm	Morwind (https://morwind.co.uk/#mission)	High – Data has been obtained from the developer's website or a consenting authority's portal	Capacity of 300MW. Floating site.	Pre-Application														
Muir Mhòr Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Scotwind area awarded to Vattenfall as part of the ScotWind offshore wind leasing round. 798MW capacity.	Pre-application														
Mull of Galloway Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Proposed offshore wind farm. Area of 3.6km ² .	Pre-application														
Near na Gaoithe Offshore Wind Farm	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Area of 105km ² , capacity of 450MW. Located 15.5km from the Fife coast.	Under Construction														
NEMOS prototype	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Wave prototype, 40 tonne test rig.	Operational														
Newport Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	1,400MW and 1,800MW installed capacity. A tidal lagoon at Newport would harness the power of the Severn Estuary.	Pre-application														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Norfolk Boreas Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	1.4GW capacity. Area - 725km ² .	Permitted but not yet implemented	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Norfolk Vanguard East And West Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	1.8GW capacity. Area - 592km ² .	Permitted but not yet implemented	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Normandie Hydro	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Array of seven tidal turbines with a total capacity of 14MW.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
North Celtic Sea Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Up to 800MW planned capacity.	Pre-application														
North Channel Wind 1 Offshore Wind Farm	North Channel Wind	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Prospective floating offshore wind farm being investigated between 10-25km from the coast of Northern Ireland. Site area of approx. 38km ² area. Using Tension Leg platform. 5-7 wind turbines.	Pre-Application	Green	Green	Green	Green	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
North Channel Wind 2 Offshore Wind Farm	North Channel Wind	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Prospective floating offshore wind farm being investigated between 10-25km from the coast of Northern Ireland. Site area of approx. 38km ² area. Using Tension Leg platform. 5-7 wind turbines.	Pre-Application	Green	Green	Green	Green	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
North Falls Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	504MW capacity. Area - 150km ² . Greater Gabbard extension.	Pre-application														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

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					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
North Hoyle Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	60MW capacity. Area - 10km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	White	White	White	White	White	White	White
North Irish Sea Array Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Proposed offshore wind farm, 500MW capacity.	Pre-application	White	White	White	White	White	White	White	White	White	White	White	White	White
Norther Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	44 wind turbines - maximum capacity of 370MW.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	White
Northwester 2 Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Northwester 2 is Parkwind’s offshore wind farm completed in 2020. Located 51 km from shore in the Belgian North Sea. 23 wind turbines over 11.7km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Northwind Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Offshore wind farm 38km off Belgium. 216MW capacity.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
NWTE Project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	North Wales Tidal Energy Project. Planning to build a world-leading integrated tidal energy impoundment and coastal protection system in North Wales.	Pre-application	White	White	White	White	White	White	White	White	White	White	White	White	White
Ocean Quest	EMODnet	Medium – Data has been obtained from the public domain	1MW tidal turbine.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		but not from the developer's website or a consenting authority's portal															
Operation and maintenance activities at North Hoyle Offshore Wind Farm	Welsh Marine Planning Portal	High – Data has been obtained from the developer's website or a consenting authority's portal	Applicant NWP Offshore Limited Marine Licence Number CML1465. The maintenance operations will take place throughout all assets of the wind farm and will include: Subsea ROV works, and heavy lifting operations.	Operational													
Operation and maintenance activities at Rhyl Flats Offshore Wind Farm	Welsh Marine Planning Portal	High – Data has been obtained from the developer's website or a consenting authority's portal	Operations and maintenance activities including high voltage maintenance work and heavy lift work.	Operational													
Oran na Mara	Crown Estate Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	1600MW capacity tidal energy project.	Pre-application													
Oriel Windfarm Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	375MW capacity. Area - 28km ² .	Pre-application													
Ormonde Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	150MW capacity. Area - 8.7km ² .	Operational													
Ormonde Offshore Wind Farm - Scaffolding	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Cable repair activities at wind turbine B02.	Operational													

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Ormonde Offshore Wind Farm Export Cable Repair and Remediation	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	5 x cable repair events, with associated jacking-up; and 10 x cable remediation events (via jetting).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Ormonde Offshore Wind Farm O&M Marine Licence	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Removal of marine growth and/or guano, replacement of corrosion protection anodes, painting or other coatings, modifications to J-tubes, replacement of access ladders, major component replacement, recovery and repair/replacement of cable section, dredging to remove sediment.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Ossian Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Scotwind area awarded to SSE renewables as part of the ScotWind offshore wind leasing round. 2.6GW capacity.	Pre-application																	
Outer Dowsing Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Area of 499km ² , 1500MW capacity.	Pre-application																	
Paimpol-Brehat	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Tidal demonstration site, two 2MW turbines.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Parc eolien pose au large de la Normandie (AO4)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Wind farm with a capacity of 1GW off the coast of Normandy.	Pre-application																	
Perpetuus Tidal Energy Centre	The Crown Estate	Medium – Data has been obtained from	30MW commercial tidal stream.	Permitted but not yet implemented	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		the public domain but not from the developer's website or a consenting authority's portal			Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Portland Bill	The Crown Estate	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Capacity of 30MW.	Pre-application													
QUB Tidal demonstration test site	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Two surface mounted mono-strut turbines, 1kW.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Race Bank Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	573MW capacity.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Rampion 2 (Rampion Extension) Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Up to 1200MW capacity. Area - 270km ² .	Pre-application	Green	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Rampion Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	400MW capacity. Area - 72km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Rentel Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website	42 wind turbines, capacity of 309MW. Area - 22.72km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
RWE Renewables Ireland Site Investigations FS007188 for the proposed Dublin Array Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm.	Submitted but not yet determined																	
Saint-Brieuc Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	496MW. Construction on the project started in 2019, while commissioning is scheduled for 2023. 62 turbines. A 225kV offshore substation will also be placed on a jacket foundation in the middle of the wind farm.	Operational																	
Sceirde (Skerd) Rocks Offshore Wind Farm	4C Offshore	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant’s control	450MW. Concept early planning.	Pre-application																	
Scroby Sands Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	60MW capacity.	Operational																	
Sea Stacks Offshore Wind Farm	4C Offshore	Low – There is a lack of robust data and information in the public domain which is outwith the Applicant’s control	Proposed offshore windfarm. Expected 800MW Capacity. Area - 160km ² . Off the coast of South Dublin and North Wicklow.	Pre-application																	
Seagreen Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Offshore Wind Project 1.5GW capacity from 150 wind turbines.	Under Construction																	
Seagreen 1A Offshore Wind Farm	Crown Estate Scotland	High – Data has been obtained from the developer’s	Connection of the remaining 36 consented turbines to Seagreen.	Permitted but not yet implemented																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		website or a consenting authority's portal			Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Seagreen Alpha and Bravo Offshore Wind Farms (Optimised Project)	Marine Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	Improved designs for the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms since Project Alpha and Project Bravo were consented in 2014.	Submitted but not yet determined													
Seastar (Seamade) Offshore Wind Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Inaugurated in October 2021. 252MW capacity.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Severn Barrage	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Severn Barrage is a proposed tidal power station to be built across the Bristol Channel. A total of 214 40MW turbines would be built into the barrage.	Pre-application													
Shearwater One Offshore Wind Farm	Shearwater Energy	High – Data has been obtained from the developer's website or a consenting authority's portal	1,000MW site, Floating offshore wind, 70 x 15MW wind turbines.	Pre-Application	Green	Green	Green	Green	Green	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Shelmalere Offshore Wind Farm	4C Offshore	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Expected to have a capacity of 1GW.	Pre-application	Green	Green	Green	Green	Green	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Sheringham Shoal Extension Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	Joint application with Dudgeon Extension. Shared point of connection at the National Grid Norwich Main substation. These extension projects will have a combined generating capacity of 719MW.	Submitted but not yet determined	Green	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Sheringham Shoal Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	317 MW capacity.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Simply Blue Emerald Offshore Wind Farm	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Proposed offshore wind farm with a capacity of up to 1GW.	Pre-application														
Simply Blue Energy (Kinsale) Limited Ref No. FS007139	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Geophysical, benthic sampling, geotechnical, wind resource monitoring, metocean surveys, nearshore and intertidal survey, bird and marine mammal surveys. The intention is to begin Geophysical Survey activities in spring/summer 2021 with a staged series of investigations over the subsequent five years as the project reaches the detailed design stage. No licence issued.	Submitted but not yet determined														
Solway Firth-Venturi Enhanced Turbine Technology	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	100MW Capacity. The Solway Energy Gateway is a sustainable, renewable energy project to create an “electric bridge” across the Solway Firth.	Pre-application														
Sound of Islay Tidal Energy Project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The proposed tidal array will have an installed capacity of up to 10MW. Sound of Islay, between the Isle of Jura and mainland Scotland. Gravity base foundations. The project has full consent, grid and an agreement for lease from the Crown Estate. Atlantis intended to build out the site in 2018, however at the time of writing there has been no further progress in development of the site.	Permitted but not yet implemented														
South Pembrokeshire	EMODnet	Medium – Data has been obtained from	Area - 90km ² . It has the potential to support three wave energy arrays of	Submitted but not yet determined														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Demonstration Zone		the public domain but not from the developer's website or a consenting authority's portal	up to 30MW generating capacity each.															
SSE Renewables Celtic Sea Ref No. FS006983 Celtic Sea (Coast Co. Wexford/Waterford)	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Geophysical, geotechnical, wind resource and metocean, topographic, environmental. Licence expected to start in 2019 but no licence issued.	Submitted but not yet determined														
Strangford Lough	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Testing of a 3m wing tidal turbine.	Operational														
Strangford Lough Array	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Commissioned 2008, 1.2MW capacity. Two 600kW tidal turbines.	Operational														
Strumble Head tidal energy project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Plans to install the first community owned and led tidal flow project in Wales.	Pre-application														
Sure Partners Arklow Bank Wind Park Phase 2 Site Investigations FS007339	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Boreholes, CPT, vibrocores, floating lidar deployment, sediment dynamic measurements, beach trial pits.	Operational														
Teesside Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a	62.1MW capacity. Area - 10km ² .	Operational														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		consenting authority's portal																
Thames at Chiswick	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Energy-generating technology, powered by the tidal Thames.	Pre-application														
Thanet Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	300MW capacity. Area - 13.5km ² .	Operational														
Thornbank OEF (C-Power (Zone B))	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	325MW capacity. Area - 19.84km ² .	Operational														
Torr Head tidal site	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	100MW tidal energy array project. 4-6 turbines.	Operational														
Triton Knoll Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	857MW capacity.	Operational														
Walney 1 Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	183.6MW capacity. Area - 36.5km ² .	Operational														
Walney 1&2 Offshore Wind	MMO	High – Data has been obtained from the developer's	Removal of marine growth and/or guano, replacement of corrosion protection anodes, painting or other	Operational														

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Licence - Inter Array Cable Repair		website or a consenting authority's portal																			
Walney Offshore Wind Farm Operational Marine Licence - Phase 1 Export Cable	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	An operational marine licence is sought for emergency export cable repairs over the operational life time of the Walney Offshore Wind Farm export cables.	Operational																	
Walney Offshore Wind Farm Operational Marine Licence - Phase 2 Export Cable	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	An operation Marine Licence is sought for emergency export cable repairs over the operational life time of the Walney Offshore Wind Farm export cables.	Operational																	
Walney Offshore Wind Farm, Composite Operational and Maintenance (O&M) Marine Licence Application	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	This licence allows for the recovery, repair and replacement of up to 4 breakages over the lifetime of the cable, with each breakage up to 0.2km.	Operational																	
Wave dragon project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	4MW Wave dragon. Milford Haven.	Pre-application																	
Wave net Array	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Wave demonstrator project the Isle of Muck.	Operational																	
WaveHub (Hayle)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	20MW capacity.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
WaveHub Gwave	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	9MW capacity.	Operational																		
West Anglesey Demonstration Zone tidal site	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	35km² area. The application was submitted in the autumn of 2019 consent was awarded in December 2021. 240MW capacity.	Permitted but not yet implemented																		
West Cumbrian Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	A tidal power gateway and road link across Morecambe Bay and the Duddon Estuary. 130 tidal turbines.	Pre-application																		
West Islay Tidal Energy Farm	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	An offshore tidal generating station, known as the West Islay Tidal Energy Park, 6km off the south west coast of Islay, shall have a permitted generating capacity not exceeding 30MW.	Operational																		
West of Duddon Sands Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	389MW capacity.	Operational																		
West of Duddon Sands Offshore Wind Farm O&M Marine Licence	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Removal of marine growth and/or guano, replacement of corrosion protection anodes, painting or other coatings, modifications to J-tubes, replacement of access ladders, major component replacement.	Operational																		
West Somerset Tidal Lagoon	EMODnet	Medium – Data has been obtained from the public domain but not from the	Tidal lagoon and associated electricity generating infrastructure with a generating capacity of circa 2.8GW per annum. A continuous	Pre-application																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
		developer's website or a consenting authority's portal	breakwater wall spanning from Culvercliff in Minehead to Lilstock.														
Westernmost Rough Offshore Wind Farm	The Crown Estate	High – Data has been obtained from the developer's website or a consenting authority's portal	210MW capacity. Area - 35km ² .	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Western Star Wave	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Pre-commercial demonstration wave energy conversion project located 4-6km offshore Co. Clare, starting with 5MW of capacity.	Pre-application													
WestWave Demonstration project	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The WestWave project is a "pre-commercial" or "demonstration" project of 5MW.	Pre-application													
White Cross Offshore Wind Farm	WhiteCross	High – Data has been obtained from the developer's website or a consenting authority's portal	1,000MW site. Planned floating offshore wind farm off the coast of Pembrokeshire.	Pre-Application	Green	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Wyre Barrage	EMODnet	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	90MW/hr Capacity proposed installed capacity	Pre-application													

1.7 Offshore Cumulative Effects Matrix – Offshore Energy – Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Aberdeen Offshore Wind Farm	366.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Alderney Race Tidal	480.0	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Application for Site Investigation Licence for Windfarm off Helvick Head	277.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Argyll Tidal Demonstrator Project	176.1	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Arklow Bank Phase 1 Offshore Wind Farm	176.2	Operational	d	d	d	d	b	d	a	d	d	d	d	d	d
Arklow Bank Wind Park Phase 2	165.3	Pre-application	d	d	d	c	c	d	d	d	d	d	d	c	c
Atlantic Marine Energy Test Site (AMETS) - test area A	396.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
Atlantic Marine Energy Test Site (AMETS) - test area B	388.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Awel y Môr Offshore Wind Farm	47.2	Submitted but not yet determined	d	c	c	c	c	d	c	d	b	c	d	c	d	c
Bardsey Sound	134.9	Pre-application	d	d	f	e	d	d	d	d	d	d	d	d	d	d
Barrow Offshore Wind Farm	30.0	Operational	b	b	a	d	b	a	a	d	a	c	b	d	d	d
Barrow Offshore Wind Farm Export Cable Repair and Remediation	34.7	Operational	d	c	a	d	d	a	a	d	d	d	d	b	d	d
Barrow Offshore Wind Farm O&M Marine Licence	30.0	Operational	d	c	a	d	d	a	a	d	d	d	d	b	d	d
Beatrice Offshore Wind Farm	457.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Bellrock Offshore Wind Farm	385.6	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Belwind phase 1 Offshore Wind Farm	509.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Belwind phase 2 Offshore Wind Farm (Nobelwind) (Zone 1)	508.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Belwind phase 2 Offshore Wind Farm (Nobelwind) (Zone 2)	512.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Berwick Bank Firth of Forth Offshore Wind Farm	268.0	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Blackwater Offshore Wind Farm	266.0	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d	d
Blyth Demo Offshore Wind Farm Phase 1	198.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Blyth Demo Offshore Wind Farm Phases 2&3	203.9	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Borssele Kavel I Offshore Wind Farm	517.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Borssele Kavel II Offshore Wind Farm	524.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Borssele Kavel III Offshore Wind Farm	515.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Borssele Kavel IV Offshore Wind Farm	505.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Borssele Kavel V Offshore Wind Farm	520.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
bp and EnBW Round 4 Offshore Wind Farm Deep Geotechnical Survey	25.6	Operational	d	d	d	d	d	d	d	d	f	d	d	f	d
Braymore Point Offshore Wind Farm	107.6	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Braymore Point site investigation Ref No. FS006973	107.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Bridgwater Bay Tidal lagoon	300.6	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Broadshore Offshore Wind Farm	467.3	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Buchan Deep Demo Offshore Wind Farm	409.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Burbo Bank Offshore Wind Farm	61.6	Operational	d	d	a	d	c	d	a	d	a	c	b	d	d
Burbo bank cable repair and remediation	56.0	Operational	d	d	a	d	d	d	a	d	d	d	d	d	d
Burbo Bank Extension Offshore Wind Farm	56.0	Operational	d	d	a	d	c	d	a	d	a	c	b	d	d
Burbo Bank Extension - Array cable repair and remediation activities	56.0	Operational	d	d	a	d	d	d	a	d	d	d	d	d	d
Burbo Bank Extension - Export cable repair and remediation activities	60.8	Operational	d	d	a	d	d	d	a	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Burbo Bank Offshore Wind Farm - O&M Marine Licence for Export Cable Repair/Remediation Activities	61.6	Operational	d	d	a	d	d	d	d	a	d	d	d	d	d
Cailleach Offshore Wind Farm, Wicklow	160.8	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Caledonia Offshore Wind Farm	445.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
CampionWind Offshore Wind Farm	421.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Cardiff Bay Tidal Lagoon	279.3	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Celtic One Offshore Wind Farm	326.8	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Celtic Sea Array Offshore Wind Farm	260.8	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d
Celtic Sea RWE Renewables	312.7	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Celtic Two Offshore Wind Farm	349.4	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Clarus Offshore Wind Farm	399.0	Pre-Application	d	d	d	e	d	d	d	d	d	d	d	d	d
Clarus Offshore Wind Farm - Site Investigations off Counties Kerry and Clare	377.9	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
Clogher Head Offshore Wind Farm	114.3	Pre-application	d	d	d	e	e	d	e	d	d	d	d	d	d
Cluaran Deas Ear Offshore Wind Farm	353.0	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Codling Wind Park Extension Offshore Wind Farm	144.2	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Codling Wind Park Offshore Wind Farm	141.2	Pre-application	d	d	d	c	c	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Codling Wind Park site investigation Ref No. FS007045	85.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Colwyn Bay Tidal Lagoon	69.1	Pre-application	d	d	e	e	d	d	e	d	d	d	d	d	d
Connel	275.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Cooley Point Offshore Wind Farm	108.2	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Courseulles-sur-mer Offshore Wind Farm	537.3	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
Dieppe - Le Treport Offshore Wind Farm	535.4	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
Dogger Bank B Offshore Wind Farm (Sofia)	355.0	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
Dogger Bank C Offshore Wind Farm (Creyeke Beck)	426.3	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Dogger Bank South Offshore Wind Farm (East)	360.6	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Dogger Bank South Offshore Wind Farm (West)	332.7	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Dogger Bank Teeside A Offshore Wind Farm	361.9	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
DONG Energy Burbo (UK) Ltd - Operational Marine Licence Inter Array Cable Repair	61.6	Operational	d	d	a	d	d	d	a	d	d	d	d	d	d
Draig y Môr Offshore Wind Farm	95.9	Pre-Application	d	d	d	e	e	d	d	d	d	e	d	d	d
Dublin Array Offshore Wind Farm	134.4	Pre-application	d	d	d	c	c	d	e	d	d	d	d	d	d
Duddon Estuary Tidal Lagoon	41.4	Pre-application	d	d	e	e	d	d	d	d	d	d	d	d	d
Dudgeon Offshore Wind Farm	345.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
Dudgeon Extension Offshore Wind Farm	334.2	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
East Anglia ONE Offshore Wind Farm	456.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
East Anglia ONE NORTH Offshore Wind Farm	439.8	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d	d
East Anglia THREE Offshore Wind Farm	455.5	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d	d
East Anglia TWO Offshore Wind Farm	436.0	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Endurance	292.3	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Energy Methil Demonstration	238.0	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Erebus Floating Wind Demo	289.9	Submitted but not yet determined	d	d	d	c	c	d	d	d	d	d	d	d	d	d
FabTest, Falmouth Bay	427.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Fair Head	179.5	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Fair Head Phase 2	181.4	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Fall of Warness Tidal Test Site	566.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Fecamp Offshore Wind Farm	523.3	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Five Estuaries Offshore Wind Farm	451.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007031 Statkraft North Irish Sea Array (NISA) Site Investigations	107.6	Operational	d	d	d	d	d	d	d	e	d	d	d	d	d	d
FS007048 Energia Site Investigation off Wexford Coast	170.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
FS007062 SEAI SAIPAM Site Investigation for Floating Offshore Wind testing at AMETS Site Mayo	383.4	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007081 DesignPro Cahiracon Quay Tidal Energy Testing	359.3	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d	d
FS007134 ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow	127.4	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007136 ESB Wind Development Limited Site Investigations off Waterford and Cork Coasts - Helvick Head Offshore Wind	289.2	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007138 ESB Celtic Offshore Wind - Site Investigations off Waterford and Cork	325.3	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007151 Sunrise Wind Ltd., Site Investigations for the proposed Sunrise Offshore Wind Farm, off Counties Dublin and Wicklow (Applied Dec 2021)	124.7	Submitted but not yet determined	d	d	d	d	d	d	d	e	d	d	d	d	d	d
FS007163 Wicklow Sea Wind Ltd., Site Investigations for the proposed Wicklow Project offshore wind farm, off County Wicklow	149.7	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS007261 Shelmalere Offshore Wind Farm - Site Investigations off Counties Wexford and Wicklow	182.8	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
FS007283 Banba Wind Ltd., Site Investigations for proposed Offshore Wind Farm, off Counties Wicklow and Dublin (Applied Dec 2021)	133.1	Submitted but not yet determined	d	d	d	d	d	d	d	e	d	d	d	d	d
FS007354 Kinsale Offshore Wind Ltd., Site Investigations for the proposed Kinsale Project offshore wind farm, off County Cork. (Applied Jan 2022)	383.0	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d
Fuinneamh Sceirde Teoranta - Site Investigations for the proposed Sceirde Rocks Offshore Wind Farm	382.7	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
Galloper Offshore Wind Farm	443.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Greater Gabbard Offshore Wind Farm	439.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Green Volt Offshore Wind Farm	463.9	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Greystones Offshore Wind Farm	122.9	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Gunfleet Sands Demo Offshore Wind Farm	416.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Gunfleet Sands I Offshore Wind Farm	415.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Gunfleet Sands II Offshore Wind Farm	417.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Gwynt Glas Offshore Wind Farm	315.0	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Gwynt y Môr Offshore Wind Farm	51.5	Operational	d	d	a	a	b	d	a	d	a	c	b	d	d
Harris Demonstration Zone	459.6	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
Haven Offshore Array	247.8	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d	d
Hibernian Wind Power. Ref No. FS006788 Kilmichael Point site investigation	180.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hollandse Kust (West) Offshore Wind Farm	523.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hollandse Kust D Offshore Wind Farm	511.5	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hollandse Kust F Offshore Wind Farm	511.0	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Holyhead Deep- Phase 1	67.7	Operational	d	d	e	d	d	d	d	d	d	d	d	d	d	d
Holyhead Deep Project , Safety Zone Application	86.7	Operational	d	d	d	d	d	a	a	d	d	d	d	d	d	d
Hornsea Project 1 Offshore Wind Farm	366.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hornsea Project 2 Offshore Wind Farm	343.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hornsea Project 3 Offshore Wind Farm	392.6	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Hornsea Project 4 Offshore Wind Farm	308.4	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Humber Gateway Offshore Wind Farm	267.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
IJmuiden Ver Offshore Wind Farm	487.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Inch Cape Offshore Wind Farm	283.0	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Inis Eagla Marine Energy Park Ltd site investigations FS006859 (Co. Cork)	306.1	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Inis Ealga Marine Energy Park	327.0	Pre-application	d	d	d	c	c	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Inis Offshore Wind Munster	383.0	Pre-Application	d	d	d	e	d	d	d	d	d	d	d	d	d
Inner Dowsing Offshore Wind Farm	290.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Innogy Ref No. FS007029 Dublin Array site investigation	134.4	Operational	d	d	d	d	d	d	e	d	d	d	d	d	d
Irish Sea North Met mast and Geotechnical survey	8.4	Operational	d	f	f	f	d	d	f	d	d	d	d	b	d
Isle of Islay	233.3	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Isle of Man Offshore Wind Farm lease area	5.9	Pre-application	e	e	e	e	e	d	e	d	e	e	e	e	d
Kentish Flats Extension Offshore Wind Farm	426.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Kentish Flats Offshore Wind Farm	427.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Kilmichael Point Offshore Wind Farm	180.0	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Kincardine Offshore Wind Farm	348.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Latitude 52 Array Offshore Wind Farm	146.7	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Lincs Offshore Wind Farm	291.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Llyr 1 Offshore Wind Farm	298.5	Pre-Application	d	d	d	c	c	d	d	d	d	d	d	d	d
Llyr 2 Offshore Wind Farm	295.0	Pre-Application	d	d	d	c	c	d	d	d	d	d	d	d	d
Llywelyn Offshore Wind Farm	321.6	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
Loch Garman Offshore Wind Farm	193.8	Pre-Application	d	d	d	f	e	d	d	d	d	d	d	d	d
London Array Offshore Wind Farm	434.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Lynn Offshore Wind Farm	293.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d

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			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Machair Wind	253.7	Pre-Application	d	d	d	f	e	d	d	d	d	d	d	d
Mainstream Renewable Power Ltd - Site Investigations off Tralee FS007375	378.7	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
Mainstream, Renewable Power Ltd- Site Investigations off Co, Dublin FS007373	104.2	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
MarramWind	253.7	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d
Merlin Offshore Wind Farm	375.9	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d
Mermaid wave	504.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Mersey Tidal Power	445.2	Pre-application	d	d	e	d	d	d	e	d	d	d	d	d
META Phase 2 demonstration zones	253.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Mona Offshore Wind Project	5.5	Pre-application	c	c	c	c	c	c	c	d	c	c	c	c
Moray Offshore Wind Farm (East)	447.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Moray Offshore Wind Farm (West)	437.8	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d
Morecambe Bay Tidal Lagoon	420.2	Pre-application	d	d	e	d	d	d	d	d	d	d	d	d
Morecambe Offshore Windfarm Generation Assets	11.2	Pre-application	c	c	c	c	c	c	c	d	c	c	c	c
Morgan and Morecambe Offshore Windfarms Transmission Assets	11.2	Pre-application	c	c	c	c	c	c	c	c	d	c	c	c
Morven Offshore Wind Farm	334.4	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d
Morwind Offshore Wind Farm	358.1	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d
Muir Mhòr Offshore Wind Farm	421.6	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d

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			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Mull of Galloway Offshore Wind Farm	76.9	Pre-application	d	d	d	e	d	d	d	d	d	d	e	d	d
Neart na Gaoithe Offshore Wind Farm	260.8	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
NEMOS prototype	538.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Newport Tidal Lagoon	275.7	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Norfolk Boreas Offshore Wind Farm	445.2	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Norfolk Vanguard East And West Offshore Wind Farm	420.2	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Normandie Hydro	483.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
North Celtic Sea Offshore Wind Farm	277.0	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
North Channel Wind 1 Offshore Wind Farm	134.5	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
North Channel Wind 2 Offshore Wind Farm	106.5	Pre-Application	d	d	d	e	e	d	d	d	d	d	d	d	d
North Falls Offshore Wind Farm	437.4	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
North Hoyle Offshore Wind Farm	61.1	Operational	d	d	a	d	b	d	a	d	a	c	b	d	d
North Irish Sea Array Offshore Wind Farm	107.6	Pre-application	d	d	d	c	c	d	d	d	d	d	d	d	d
Norther Offshore Wind Farm	528.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Northwester 2 Offshore Wind Farm	505.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Northwind Offshore Wind Farm	518.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
NWTE Project	68.5	Pre-application	d	d	e	e	d	d	e	d	d	d	d	d	d
Ocean Quest	557.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d

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			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Operation and maintenance activities at North Hoyle Offshore Wind Farm	61.1	Operational	d	d	a	d	d	d	d	a	d	d	d	d	d
Operation and maintenance activities at Rhyl Flats Offshore Wind Farm	59.8	Operational	d	d	a	d	d	d	d	a	d	d	d	d	d
Oran na Mara	234.8	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Oriel Windfarm Offshore Wind Farm	119.4	Pre-application	d	d	d	c	c	d	e	d	d	d	d	d	d
Ormonde Offshore Wind Farm	23.3	Operational	b	c	a	d	c	d	a	d	a	c	c	d	d
Ormonde Offshore Wind Farm - Scaffolding	25.1	Operational	d	f	f	f	d	d	a	d	a	d	c	d	d
Ormonde Offshore Wind Farm Export Cable Repair and Remediation	26.2	Operational	d	d	a	d	d	d	a	d	d	d	c	d	d
Ormonde Offshore Wind Farm O&M Marine Licence	23.3	Operational	d	c	a	d	d	d	a	d	a	d	b	d	d
Ossian Offshore Wind Farm	352.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Outer Dowsing Offshore Wind Farm	318.8	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Paimpol-Brehat	564.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Parc eolien pose au large de la Normandie (AO4)	488.6	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Perpetuus Tidal Energy Centre	413.6	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Portland Bill	393.8	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
QUB Tidal demonstration test site	96.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Race Bank Offshore Wind Farm	308.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d

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Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Rampion 2 (Rampion Extension) Offshore Wind Farm	425.3	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Rampion Offshore Wind Farm	430.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Rentel Offshore Wind Farm	520.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Rhyl Flats Offshore Wind Farm	60.5	Operational	d	d	a	d	b	d	a	d	a	c	b	d	d
Robin Rigg East Offshore Wind Farm	75.3	Operational	d	d	a	d	c	d	d	d	a	c	b	d	d
Robin Rigg Offshore Wind Farm Operational Marine Licence - Export Cable	72.1	Operational	d	d	a	d	d	d	a	d	d	d	d	d	d
Robin Rigg West Offshore Wind Farm	73.3	Operational	d	d	a	d	c	d	d	d	a	c	b	d	d
Routine operational and maintenance activities at five Offshore Substations (Barrow, Ormonde, Lincs, Westermost Rough, and Gunfleet Sands)	49.9	Operational	d	c	a	d	d	d	a	d	d	d	c	d	d
RWE Renewables Ireland Site Investigations FS007188 for the proposed Dublin Array Offshore Wind Farm	134.4	Submitted but not yet determined	d	d	d	d	d	d	d	e	d	d	d	d	d
Saint-Brieuc Offshore Wind Farm	560.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Sceirde (Skerd) Rocks Offshore Wind Farm	386.4	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Scroby Sands Offshore Wind Farm	397.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Sea Stacks Offshore Wind Farm	121.4	Pre-application	d	d	d	e	e	d	e	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Seagreen Offshore Wind Farm	299.9	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d	d
Seagreen 1A Offshore Wind Farm	301.1	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
Seagreen Alpha and Bravo Offshore Wind Farms (Optimised Project)	299.9	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d
Seastar (Seamade) Offshore Wind Farm	515.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Severn Barrage	282.2	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Shearwater One Offshore Wind Farm	244.9	Pre-Application	d	d	d	f	e	d	d	d	d	d	d	d	d
Shelmalere Offshore Wind Farm	201.4	Pre-application	d	d	d	c	e	d	d	d	d	d	d	d	d
Sheringham Shoal Extension Offshore Wind Farm	330.2	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d
Sheringham Shoal Offshore Wind Farm	333.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Simply Blue Emerald Offshore Wind Farm	359.2	Pre-application	d	d	d	e	e	d	d	d	d	d	d	d	d
Simply Blue Energy (Kinsale) Limited Ref No. FS007139	359.2	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d
Solway Firth- Venturi Enhanced Turbine Technology	108.9	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Sound of Islay Tidal Energy Project	238.0	Permitted but not yet implemented	d	d	d	d	d	d	d	d	d	d	d	d	d
South Pembrokeshire Demonstration Zone	278.2	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
SSE Renewables Celtic Sea Ref No. FS006983 Celtic Sea (Coast Co. Wexford/Waterford)	260.8	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Strangford Lough	95.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Strangford Lough Array	95.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Strumble Head tidal energy project	221.2	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d	d
Sure Partners Arklow Bank Wind Park Phase 2 Site Investigations FS007339	165.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Teesside Offshore Wind Farm	188.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Thames at Chiswick	456.5	Pre-application	d	d	d	d	d	d	d	d	d	d	d	d	d
Thanet Offshore Wind Farm	456.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Thornbank OEF (C-Power (Zone B))	526.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Torr Head tidal site	175.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Triton Knoll Offshore Wind Farm	299.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d
Walney 1 Offshore Wind Farm	15.5	Operational	b	b	a	d	b	d	a	d	a	c	c	d	d
Walney 1&2 Offshore Wind Farms O&M Marine Licence	11.9	Operational	d	c	a	d	d	d	a	d	a	d	d	d	d
Walney 2 Offshore Wind Farm	11.9	Operational	b	b	a	d	b	d	a	d	a	c	c	d	d
Walney 2 Offshore Wind Farm, Composite Operational and Maintenance (O&M) Marine Licence Application	11.9	Operational	d	c	a	d	d	d	a	d	d	c	c	d	d
Walney Extension 3 Offshore Wind Farm	7.6	Operational	b	b	a	d	c	d	a	d	a	c	c	d	d
Walney Extension 4 Offshore Wind Farm	7.6	Operational	b	b	a	d	c	d	a	d	a	c	c	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Walney Extension pontoon/jetty dredging and disposal	35.7	Operational	b	c	a	d	d	d	a	d	d	d	d	d
Walney Extension pontoon/jetty dredging and disposal	38.4	Operational	b	c	a	d	d	d	a	d	d	d	d	d
Walney Offshore Wind Farm Operational Marine Licence - Inter Array Cable Repair	15.5	Operational	d	c	a	d	d	d	a	d	d	d	c	d
Walney Offshore Wind Farm Operational Marine Licence - Phase 1 Export Cable	19.6	Operational	d	c	a	d	d	d	a	d	d	d	b	d
Walney Offshore Wind Farm Operational Marine Licence - Phase 2 Export Cable	16.8	Operational	d	c	a	d	d	d	a	d	d	d	b	d
Walney Offshore Wind Farm, Composite Operational and Maintenance (O&M) Marine Licence Application	19.6	Operational	d	c	a	d	d	d	a	d	d	d	b	d
Wave dragon project	263.1	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d
Wave net Array	332.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
WaveHub (Hayle)	407.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
WaveHub Gwave	414.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
West Anglesey Demonstration Zone tidal site	79.3	Permitted but not yet implemented	d	d	f	c	d	d	d	d	d	d	d	d
West Cumbrian Tidal Lagoon	71.6	Pre-application	d	d	e	e	d	d	e	d	d	d	d	d
West Islay Tidal Energy Farm	237.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
West of Duddon Sands Offshore Wind Farm	15.2	Operational	b	b	a	d	b	d	a	d	a	c	c	d
West of Duddon Sands Offshore Wind Farm O&M Marine Licence	15.2	Operational	d	c	a	d	d	d	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
West Somerset Tidal Lagoon	255.1	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d
Westermost Rough Offshore Wind Farm	255.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Western Star Wave	373.5	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d
WestWave Demonstration project	393.7	Pre-application	d	d	d	e	d	d	d	d	d	d	d	d
White Cross Offshore Wind Farm	319.6	Pre-Application	d	d	d	c	c	d	d	d	d	d	d	d
Wyre Barrage	51.7	Pre-application	d	d	f	f	d	d	e	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

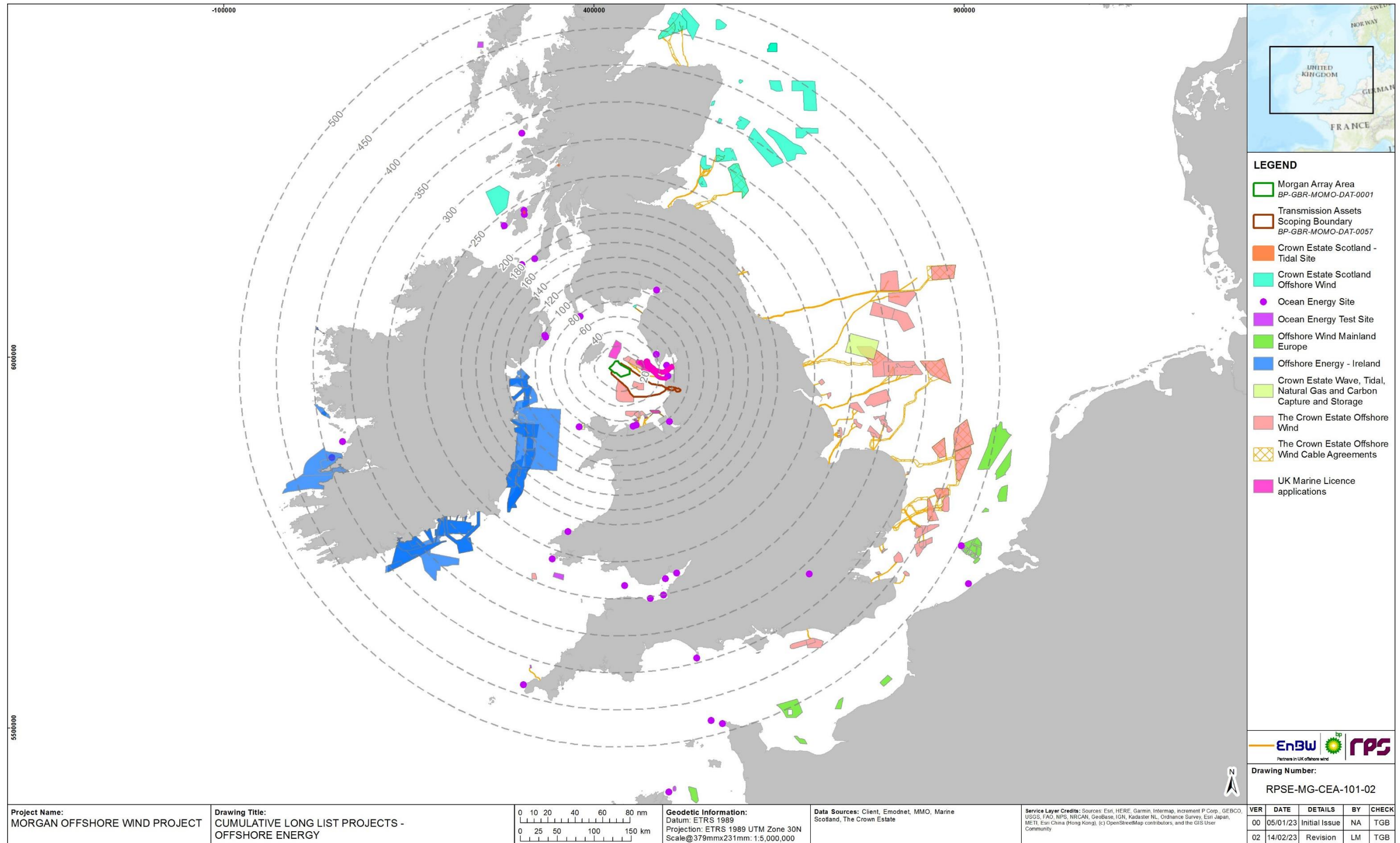


Figure 1.3: Offshore energy projects, plans and activities considered in the Morgan Generation Assets CEA.¹

¹ The Awel y Môr agreement for lease area extends further to the west than the application boundary presented, however Awel y Môr Offshore Wind Farm Ltd. have decided to develop in the area presented.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

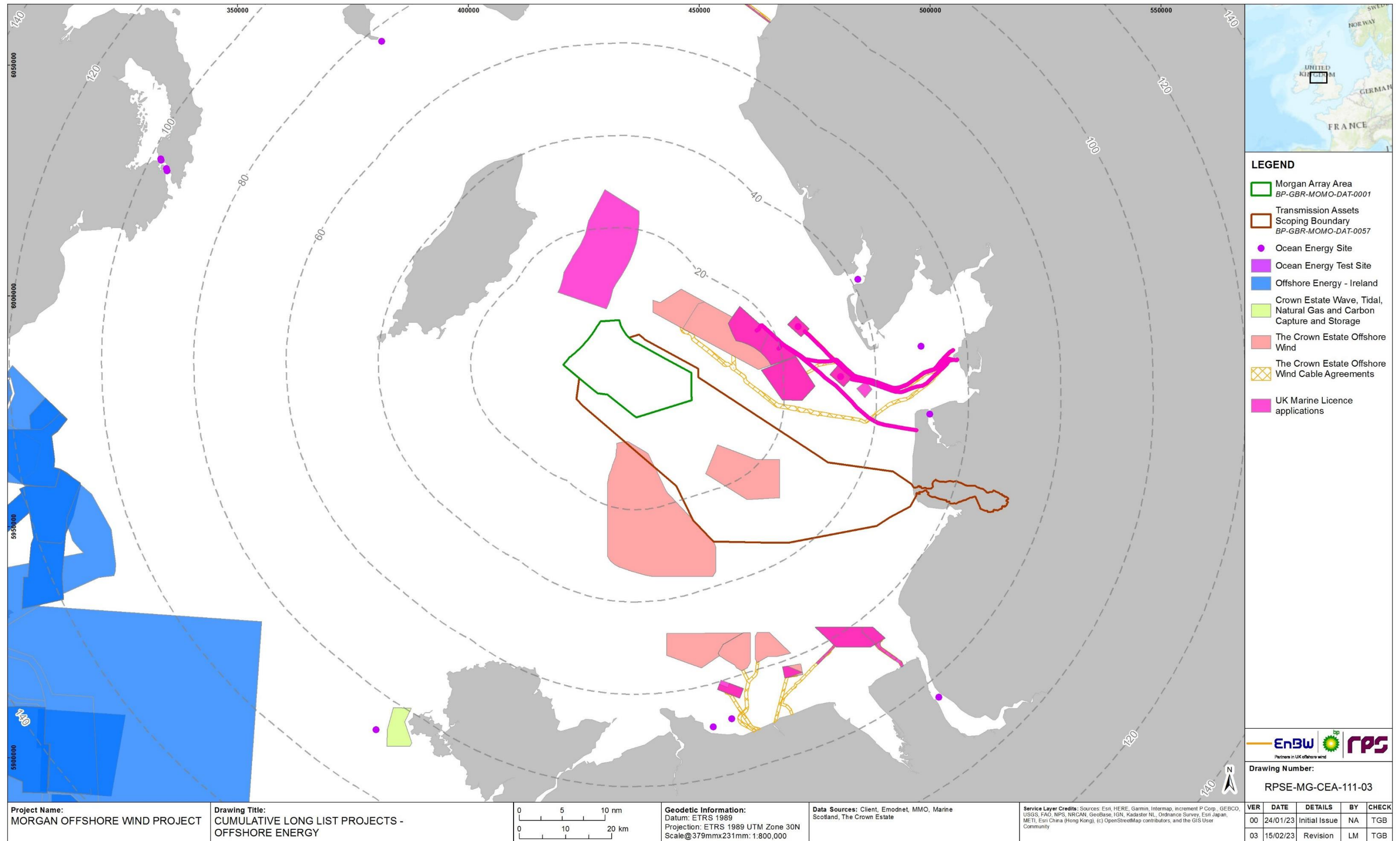


Figure 1.4: Offshore energy projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.8 Offshore Cumulative Effects Matrix - Commercial Fisheries - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.8.1.1 The following commercial fisheries projects, plans and activities are shown in Figure 1.5 and Figure 1.6.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Anglesey - Inland Sea	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels.	Operational																	
Anglesey - Red Wharf Bay	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Cockles.	Operational																	
Burry Inlet	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels.	Operational																	
Conwy	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels.	Operational																	
Dee	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels, Ensis spp, N Oysters, Tapes spp, Cockles, S Solida, M.Varia.	Operational																	
IE_1050	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ireland aquaculture site.	Operational																	
IE_1094	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ireland aquaculture site.	Operational																	
Liverpool Bay - Wirral	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627.	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
Lune	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627.	Operational																		
Menai Straits - West	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels.	Operational																		
Mersey	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU) 854/2004.	Operational																		
Morecambe Bay	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627: C.Edule, Mytilus spp, C gigas.	Operational																		
Morecambe Bay - Roosebeck	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627: C.Edule, Mytilus spp, C gigas.	Operational																		
Morecambe Roosebeck	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627: C.Edule, Mytilus spp, C gigas.	Operational																		
Ribble	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Classified as bivalve Mollusc Production areas under Regulation (EU)2019/627.	Operational																		
Silloth	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Shellfishery: Mussels, Cockles, and Pacific Oyster classification zones.	Operational																		
Swansea	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Mussels.	Operational																		
T01/004 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/008A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/009 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
T01/012 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																		
T01/018A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster, Manila Clam.	Operational																		
T01/018B (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster, Manila Clam.	Operational																		
T01/019 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/020 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/021 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/023A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/024 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/025A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/025C (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/026A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																		
T01/029B (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																		
T01/043A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
T01/043B (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster, Manila Clam.	Operational																			
T01/043C (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																			
T01/044A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																			
T01/044B (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																			
T01/050C (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			
T01/056D1 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ireland aquaculture site.	Operational																			
T01/059A1 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																			
T01/060A1 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			
T01/061A1(Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			
T01/064 (Knockbridge)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Sea Trout, Atlantic Salmon.	Operational																			
T01/066A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			
T01/070A1 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			
T01/071A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																			

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
T01/072B1 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																	
T01/074A2 (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Carlingford Lough aquaculture site.	Operational																	
T01/102A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																	
T01/105A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																	
T01/120A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ireland aquaculture site.	Operational																	
T01/121A (Carlingford Lough)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Pacific Oyster.	Operational																	
T29/002 (Rathvilly)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																	
T32/003 (Annamoe)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																	
T32/004 (Coatsbridge, Woodenbridge)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Rainbow Trout.	Operational																	
T32/005 (Coatsbridge, Woodenbridge)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Rainbow Trout.	Operational																	
T32/012 (Aughrim)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Rainbow Trout.	Operational																	
T32/027A (Clogga Bay)	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Blue Mussel.	Operational																	
Three Rivers	CEFAS	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Cockles.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
UK_0008	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																		
UK_0011	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																		
UK_0012	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																		
UK_0014	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0015	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0016	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0020	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0023	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0030	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																		
UK_0032	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	England Aquaculture site.	Operational																		
UK_0038	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Welsh aquaculture site.	Operational																		
UK_0160	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Scotland aquaculture site.	Operational																		
UK_0236	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Oysters, Pacific cupped oyster - Crassostrea gigas.	Operational																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
			Production method: Trestles or Trays.																			
UK_0273	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Oysters: European Flat Oyster - Ostrea eduli. Production: Beds.	Operational																		
UK_0740	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Freshwater Aquaculture: Trout and Salmon. Production: Egg, Fry and Fingerling. Production level: 4 Million fish annually.	Operational																		
UK_0766	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Freshwater Aquaculture: Trout and Salmon. Production: Egg, Fry and Fingerling. Production level: 4 Million fish annually.	Operational																		
UK_0767	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Production: Sea Trout, Trout, Smelts, Grow out for human consumption.	Operational																		
UK_0791	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Production: Atlantic Salmon (Various Stages), European Smelt (Various Stages), Brown Trout and Sea Trout.	Operational																		
UK_0797	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Trout Aquaculture.	Operational																		
UK_0801	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Trout farm based: supplying rainbow trout.	Operational																		
UK_0802	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Atlantic Salmon Breeding Centre.	Operational																		
UK_0810	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Brood Stock, Hatchery in Ponds: Salmons, Trout, Smelts.	Operational																		
UK_0889	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Brood Stock, Hatchery in Ponds: Salmons, Trout, Smelts.	Operational																		
UK_0892	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Brood Stock, Hatchery in Ponds: Salmons, Trout, Smelts.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
UK_0921	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Atlantic Salmon, Salmons, Trout, Smelts. Grow out for human consumption.	Operational																		
UK_0931	EMODnet	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Sea Trout, Salmons, Trout, Smelts. Grow out for human consumption.	Operational																		

1.9 Offshore Cumulative Effects Matrix - Commercial Fisheries - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Anglesey - Inland Sea	78.0	Operational	d	d	a	d	d	a	d	d	d	d	d	d
Anglesey - Red Wharf Bay	66.6	Operational	d	d	a	d	d	a	d	d	d	d	d	d
Burry Inlet	247.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Conwy	67.1	Operational	d	d	a	d	d	a	d	d	d	d	d	d
Dee	72.3	Operational	d	d	a	d	d	a	d	d	d	d	d	d
IE_1050	124.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
IE_1094	128.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Liverpool Bay - Wirral	70.8	Operational	d	d	a	d	d	d	d	d	d	d	d	d
Lune	49.2	Operational	d	a	a	d	d	d	d	d	d	d	d	d
Menai Straits - West	83.1	Operational	d	d	a	d	d	a	d	d	d	d	d	d
Mersey	73.1	Operational	d	d	a	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Morecambe Bay	51.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Morecambe Bay - Roosebeck	42.8	Operational	d	a	a	d	d	d	d	d	d	d	d	d
Morecambe Roosebeck	41.4	Operational	d	a	a	d	d	d	d	d	d	d	d	d
Ribble	53.3	Operational	d	d	a	d	d	d	d	d	d	d	d	d
Silloth	85.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Swansea	254.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/004 (Carlingford Lough)	128.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/008A (Carlingford Lough)	128.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/009 (Carlingford Lough)	128.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/012 (Carlingford Lough)	128.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/018A (Carlingford Lough)	125.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/018B (Carlingford Lough)	125.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/019 (Carlingford Lough)	127.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/020 (Carlingford Lough)	127.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/021 (Carlingford Lough)	125.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/023A (Carlingford Lough)	128.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/024 (Carlingford Lough)	127.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/025A (Carlingford Lough)	126.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/025C (Carlingford Lough)	124.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/026A (Carlingford Lough)	126.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
T01/029B (Carlingford Lough)	132.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/043A (Carlingford Lough)	126.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/043B (Carlingford Lough)	127.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/043C (Carlingford Lough)	126.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/044A (Carlingford Lough)	126.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/044B (Carlingford Lough)	127.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/050C (Carlingford Lough)	131.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/056D1 (Carlingford Lough)	130.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/059A1 (Carlingford Lough)	126.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/060A1 (Carlingford Lough)	126.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/061A1(Carlingford Lough)	133.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/064 (Knockbridge)	147.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/066A (Carlingford Lough)	132.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/070A1 (Carlingford Lough)	132.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/071A (Carlingford Lough)	129.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/072B1 (Carlingford Lough)	128.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
T01/074A2 (Carlingford Lough)	132.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/102A (Carlingford Lough)	125.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/105A (Carlingford Lough)	129.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/120A (Carlingford Lough)	127.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T01/121A (Carlingford Lough)	125.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T29/002 (Rathvilly)	206.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T32/003 (Annamoe)	173.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T32/004 (Coatsbridge, Woodenbridge)	189.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T32/005 (Coatsbridge, Woodenbridge)	187.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T32/012 (Aughrim)	190.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
T32/027A (Clogga Bay)	189.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Three Rivers	239.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0008	85.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0011	46.6	Operational	d	a	a	d	d	d	d	d	d	d	d	d
UK_0012	38.1	Operational	d	a	a	d	d	d	d	d	d	d	d	d
UK_0014	78.6	Operational	d	d	e	d	d	e	d	d	d	d	d	d
UK_0015	258.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0016	75.0	Operational	d	d	e	d	d	e	d	d	d	d	d	d
UK_0020	85.3	Operational	d	d	e	d	d	e	d	d	d	d	d	d
UK_0023	255.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0030	45.1	Operational	d	a	a	d	d	d	d	d	d	d	d	d
UK_0032	40.0	Operational	d	a	a	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
UK_0038	84.5	Operational	d	d	e	d	d	e	d	d	d	d	d	d
UK_0160	171.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0236	175.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0273	112.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0740	124.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0766	122.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0767	148.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0791	90.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0797	122.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0801	139.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0802	113.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0810	113.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0889	146.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0892	145.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0921	90.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d
UK_0931	174.0	Operational	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

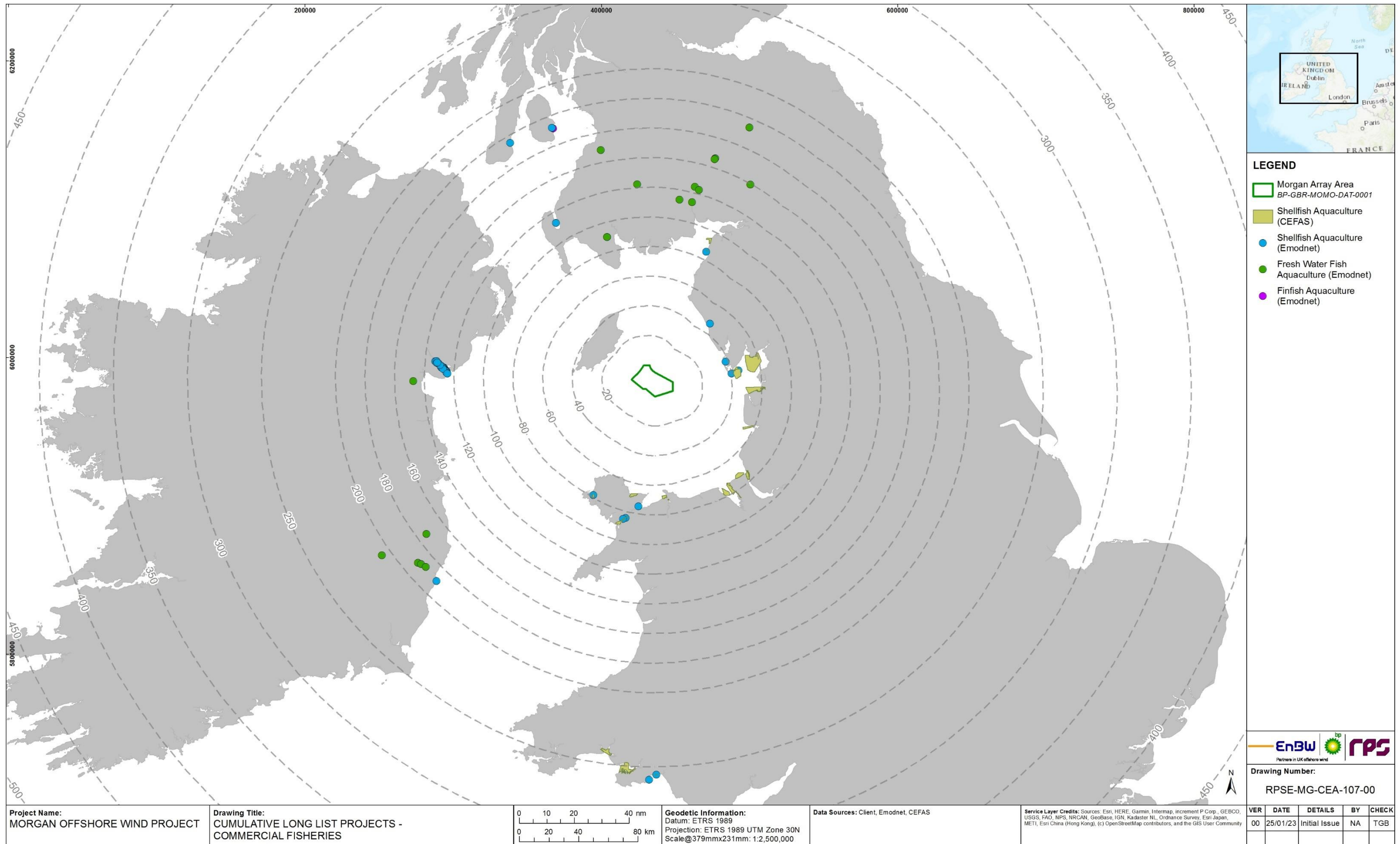


Figure 1.5: Commercial fisheries projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

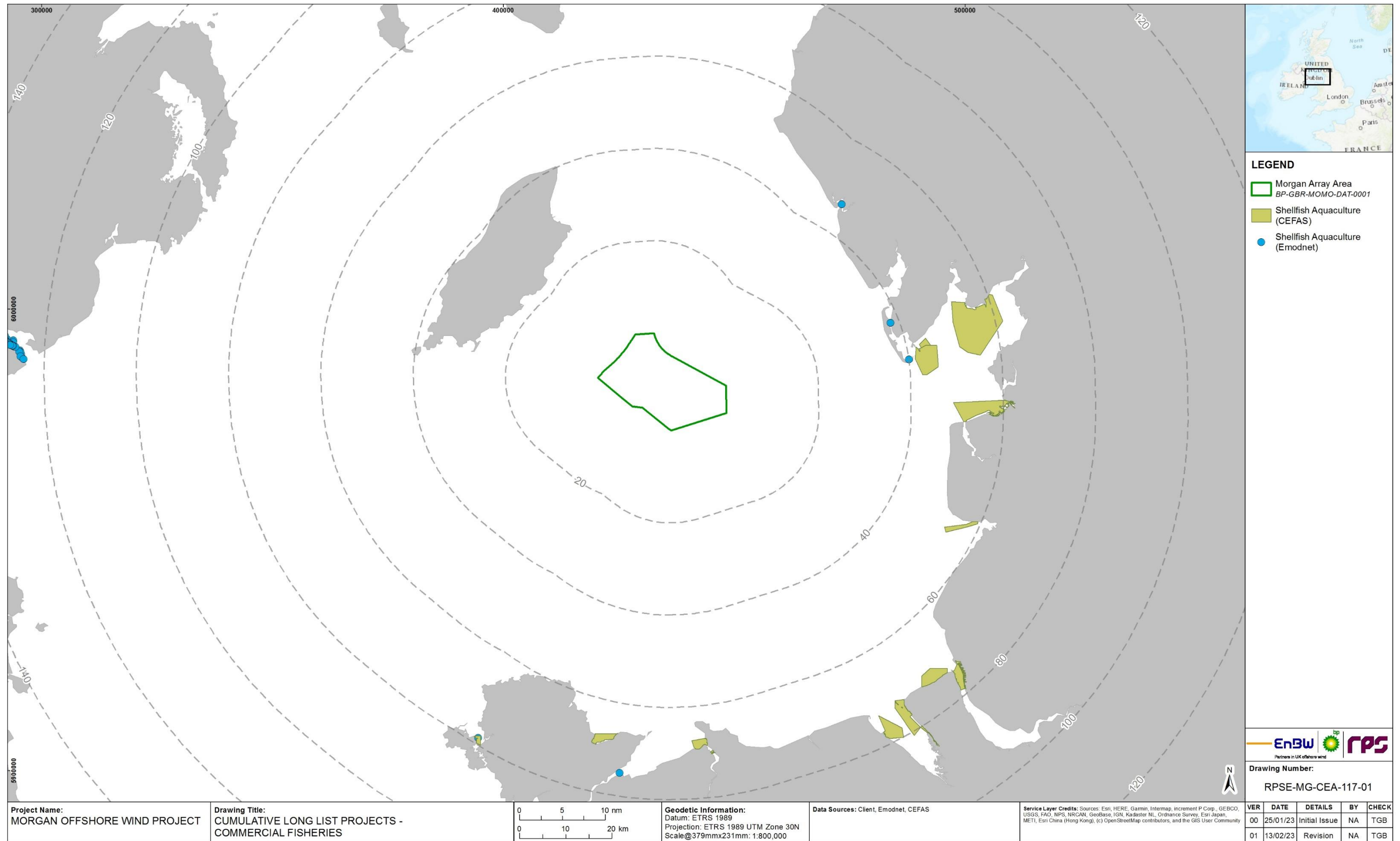


Figure 1.6: Commercial fisheries projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.10 Offshore Cumulative Effects Matrix - Oil and Gas - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.10.1.1 The following oil and gas projects, plans and activities are shown in Figure 1.7 and Figure 1.8.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
110/12a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (2007 - 2033).	Operational																	
110/13a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (1989 - 2025).	Operational																	
110/13b	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (1989 - 2025).	Operational																	
110/14a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational																	
110/14c	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
110/15a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (1991 - 2027).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White
110/2a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
110/2b	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (1989 - 2025).	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
110/2c	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (1989 - 2025).	Operational	Yellow	Yellow	Yellow	White	White	White	White	White	White	White	White	White	White	White
110/3a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
110/4a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block (2019 - 2048).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
110/7a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
110/8a	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Currently licenced UKCS block.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
110/8c	NSTA	High – Data has been obtained from the	Currently licenced UKCS block.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
		developer's website or a consenting authority's portal																					
110/9c	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Currently licenced UKCS block.	Operational																			
113/26a	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Currently licenced UKCS block.	Operational																			
113/27a	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Currently licenced UKCS block.	Operational																			
113/27b	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Currently licenced UKCS block (2007 - 2033).	Operational																			
33rd Offshore Round Block: 110/6	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/6. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																			
33rd Offshore Round Block: 110/7b	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/7b. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																			
33rd Offshore Round Block: 110/8b	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/8b. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																			
33rd Offshore Round Block: 110/9a	NSTA	High – Data has been obtained from the developer's website or a	Block reference 110/9a. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																			

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal																				
33rd Offshore Round Block: 113/24	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 113/24. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
33rd Offshore Round Blocks: 110/1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/1. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
33rd Offshore Round Blocks: 110/2d	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/2d. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
33rd Offshore Round Blocks: 110/3b	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 110/3b. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
33rd Offshore Round Blocks: 113/26c	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 113/26c. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
33rd Offshore Round Blocks: 113/27c	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 113/27c. Block on offer as part of the oil and gas licensing round expected to conclude in the second quarter of 2023. With the deadline for applications on Thursday the 12th of January 2023.	Pre-Application																		
Isle of Man Crogga Licence: 112/25	UKCS	High – Data has been obtained from the developer's website or a consenting authority's portal	Block reference 112/25. Within Isle of Man territorial waters. 266km ² area offshore the northeast coast of the Isle of Man.	Operational																		
BARROW-IN-FURNESS GAS TERMINAL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	BARROW-IN-FURNESS GAS TERMINAL.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
BRAYMORE POINT TERMINAL	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	BRAYMORE POINT TERMINAL.	Operational																			
CALDER	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Calder platform.	Operational																			
CENTRAL PRODUCTION PLTFM CPP1	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Central production platform.	Operational																			
CONWY PLATFORM	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Conwy field development comprises three production wells, two water injection wells, and a Not Permanently Attended Installation (NPAI) platform.	Operational																			
CORSEWALL POINT TERMINAL	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Terminal off Dumfries and Galloway.	Operational																			
DOUGLAS DA	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	DOUGLAS DA.	Operational																			
DOUGLAS DP	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Douglas drilling platform.	Operational																			
DOUGLAS DW	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Douglas drilling well.	Operational																			

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Larne Lough	The Crown Estate	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The licence shall refer to the creation of seven underground caverns in the Permian salt deposits below Larne Lough.	Operational																	
DUNROD POINT	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	DUNROD POINT.	Operational																	
GLEN MOOAN	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	19km pipeline to supply natural gas to existing Manx Gas customers in Kirk Michael, Ballaugh and Ramsey.	Operational																	
HAMILTON	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Hamilton gas platform.	Operational																	
HAMILTON NORTH	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Hamilton north gas platform.	Operational																	
ISLAND MAGEE TERMINAL	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	ISLAND MAGEE TERMINAL.	Operational																	
LENNOX	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Lennox oil platform.	Operational																	
LIVERPOOL BAY BUOY: KFB 07/2012	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	LIVERPOOL BAY BUOY: KFB 07/2012.	Operational																	
LIVERPOOL BAY SMART BUOY	NSTA	High – Data has been obtained from the	LIVERPOOL BAY SMART BUOY KFB20/2012 AREA5.	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
KFB20/2012 AREA5		developer's website or a consenting authority's portal																				
LOUGHSHINNY	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	LOUGHSHINNY platform.	Operational																		
MILLOM WEST PLATFORM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom west field platform	Decommissioning																		
NORTH MORECAMBE PLATFORM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	NORTH MORECAMBE PLATFORM.	Operational																		
NORTH MORECAMBE DPPA	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	North Morecambe drilling and production platform.	Operational																		
OSI (OFFSHORE STORAGE INST.)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Storage barge connected to the Douglas platforms.	Operational																		
POINT OF AYR GAS TERMINAL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	The Point of Ayr Gas Terminal is a gas terminal situated on the Point of Ayr in Flintshire, Wales. It takes gas from eni's Liverpool Bay Development.	Operational																		
SEL1/07	Irish Government	High – Data has been obtained from the developer's website or a consenting authority's portal	Oil and gas active area in Ireland.	Operational																		
SOUTH MORECAMBE AP1	NSTA	High – Data has been obtained from the developer's website or a	South Morecambe accommodation platform 1.	Operational																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal																				
SOUTH MORECAMBE CPP1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe central processing platform.	Operational																		
SOUTH MORECAMBE DP1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe drilling platform 1.	Operational																		
SOUTH MORECAMBE DP3	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe drilling platform 3.	Decommission																		
SOUTH MORECAMBE DP4	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe drilling platform 4.	Decommission																		
SOUTH MORECAMBE DP6	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe drilling platform 6.	Operational																		
SOUTH MORECAMBE DP8	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe drilling platform 8.	Operational																		
SOUTH MORECAMBE FL1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	South Morecambe flare.	Operational																		

1.11 Offshore Cumulative Effects Matrix - Oil and Gas - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
110/12a	33.2	Operational	d	a	e	a	d	a	a	d	a	d	a	d
110/13a	36.1	Operational	d	f	f	f	d	f	d	d	a	d	f	d
110/13b	43.7	Operational	d	f	f	f	d	f	a	d	a	d	f	d
110/14a	44.4	Operational	d	a	a	a	d	a	c	d	a	d	a	d
110/14c	50.8	Operational	d	a	a	a	d	a	c	d	a	d	a	d
110/15a	49.4	Operational	d	a	a	a	d	a	d	d	a	d	a	d
110/2a	3.5	Operational	d	a	a	a	d	a	d	d	a	d	a	d
110/2b	3.6	Operational	d	a	f	f	d	f	d	d	a	d	a	d
110/2c	0.0	Operational	d	a	f	f	d	f	d	a	a	d	a	d
110/3a	12.2	Operational	d	a	e	a	d	a	d	d	a	d	a	d
110/4a	26.8	Operational	d	a	e	a	d	a	d	d	a	d	a	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
110/7a	14.0	Operational	d	a	e	a	d	a	d	d	a	d	a	d
110/8a	17.3	Operational	d	a	e	a	d	a	d	d	a	d	a	d
110/8c	25.9	Operational	d	a	e	a	d	a	d	d	a	d	a	d
110/9c	28.2	Operational	d	a	e	a	d	a	d	d	a	d	a	d
113/26a	0.0	Operational	d	a	e	a	d	a	d	a	a	d	a	d
113/27a	0.0	Operational	d	a	e	a	d	a	d	a	a	d	a	d
113/27b	6.2	Operational	d	a	e	a	d	a	d	d	a	d	a	d
33rd Offshore Round Block: 110/6	8.4	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Block: 110/7b	11.4	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Block: 110/8b	21.5	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Block: 110/9a	34.5	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Block: 113/24	31.6	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Blocks: 110/1	0.0	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Blocks: 110/2d	0.0	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Blocks: 110/3b	12.2	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Blocks: 113/26c	0.0	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
33rd Offshore Round Blocks: 113/27c	3.2	Pre-Application	e	e	e	e	e	e	e	e	e	e	e	e
Isle of Man Crogga Licence: 112/25	7.7	Operational	e	e	e	e	e	e	e	e	e	e	e	e
BARROW-IN-FURNESS GAS TERMINAL	41.2	Operational	d	d	d	a	d	a	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
BRAYMORE POINT TERMINAL	138.5	Operational	d	d	d	a	d	d	d	d	d	d	d	d
CALDER	17.1	Operational	a	b	b	a	d	a	a	d	a	d	d	d
CENTRAL PRODUCTION PLTFM CPP1	17.3	Operational	a	b	b	a	d	a	a	d	a	d	d	d
CONWY PLATFORM	35.9	Operational	a	b	b	a	d	a	a	d	a	d	d	d
CORSEWALL POINT TERMINAL	121.0	Operational	d	d	d	a	d	d	a	d	d	d	d	d
DOUGLAS DA	47.2	Operational	d	b	a	a	d	a	a	d	a	d	b	d
DOUGLAS DP	47.2	Operational	d	b	a	a	d	a	a	d	a	d	b	d
DOUGLAS DW	47.2	Operational	d	b	a	a	d	a	a	d	a	d	b	d
Larne Lough	134.1	Operational	d	d	d	a	d	d	d	d	d	d	d	d
DUNROD POINT	77.0	Operational	d	d	d	a	d	d	a	d	d	d	d	d
GLEN MOOAN	38.1	Operational	d	a	a	a	d	a	a	d	d	d	d	d
HAMILTON	47.3	Operational	d	b	b	a	d	a	a	d	a	d	d	d
HAMILTON NORTH	38.8	Operational	d	b	b	a	d	a	a	d	a	d	d	d
ISLAND MAGEE TERMINAL	136.8	Operational	d	d	d	a	d	d	a	d	d	d	d	d
LENNOX	53.1	Operational	d	d	d	a	d	a	a	d	a	d	d	d
LIVERPOOL BAY BUOY: KFB 07/2012	53.6	Operational	d	d	a	a	d	a	a	d	d	d	d	d
LIVERPOOL BAY SMART BUOY KFB20/2012 AREA5	53.9	Operational	d	d	a	a	d	a	a	d	d	d	d	d
LOUGHSHINNY	134.4	Operational	d	d	d	a	d	d	d	d	d	d	d	d
MILLOM WEST PLATFORM	0.7	Decommissioning	f	f	f	f	f	f	f	f	f	f	f	f
NORTH MORECAMBE PLATFORM	7.6	Operational	a	b	b	a	d	a	a	d	a	d	d	d
NORTH MORECAMBE DPPA	7.6	Operational	a	b	b	a	d	a	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
OSI (OFFSHORE STORAGE INST.)	33.0	Operational	d	a	a	a	d	a	a	d	a	d	d	d
POINT OF AYR GAS TERMINAL	72.0	Operational	d	d	a	a	d	a	a	d	d	d	d	d
SEL1/07	228.1	Operational	d	d	d	a	d	d	d	d	d	d	d	d
SOUTH MORECAMBE AP1	17.2	Operational	a	b	a	a	d	a	a	d	a	d	d	d
SOUTH MORECAMBE CPP1	17.3	Operational	a	b	a	a	d	a	a	d	a	d	d	d
SOUTH MORECAMBE DP1	17.3	Operational	a	b	a	a	d	a	a	d	a	d	d	d
SOUTH MORECAMBE DP3	20.5	Decommission	g	g	g	g	g	g	g	g	g	g	g	g
SOUTH MORECAMBE DP4	16.6	Decommission	g	g	g	g	g	g	g	g	g	g	g	g
SOUTH MORECAMBE DP6	14.2	Operational	a	b	a	a	d	a	a	d	a	d	b	d
SOUTH MORECAMBE DP8	12.2	Operational	a	b	a	a	d	a	a	d	a	d	b	d
SOUTH MORECAMBE FL1	17.2	Operational	a	b	a	a	d	a	a	d	a	d	b	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

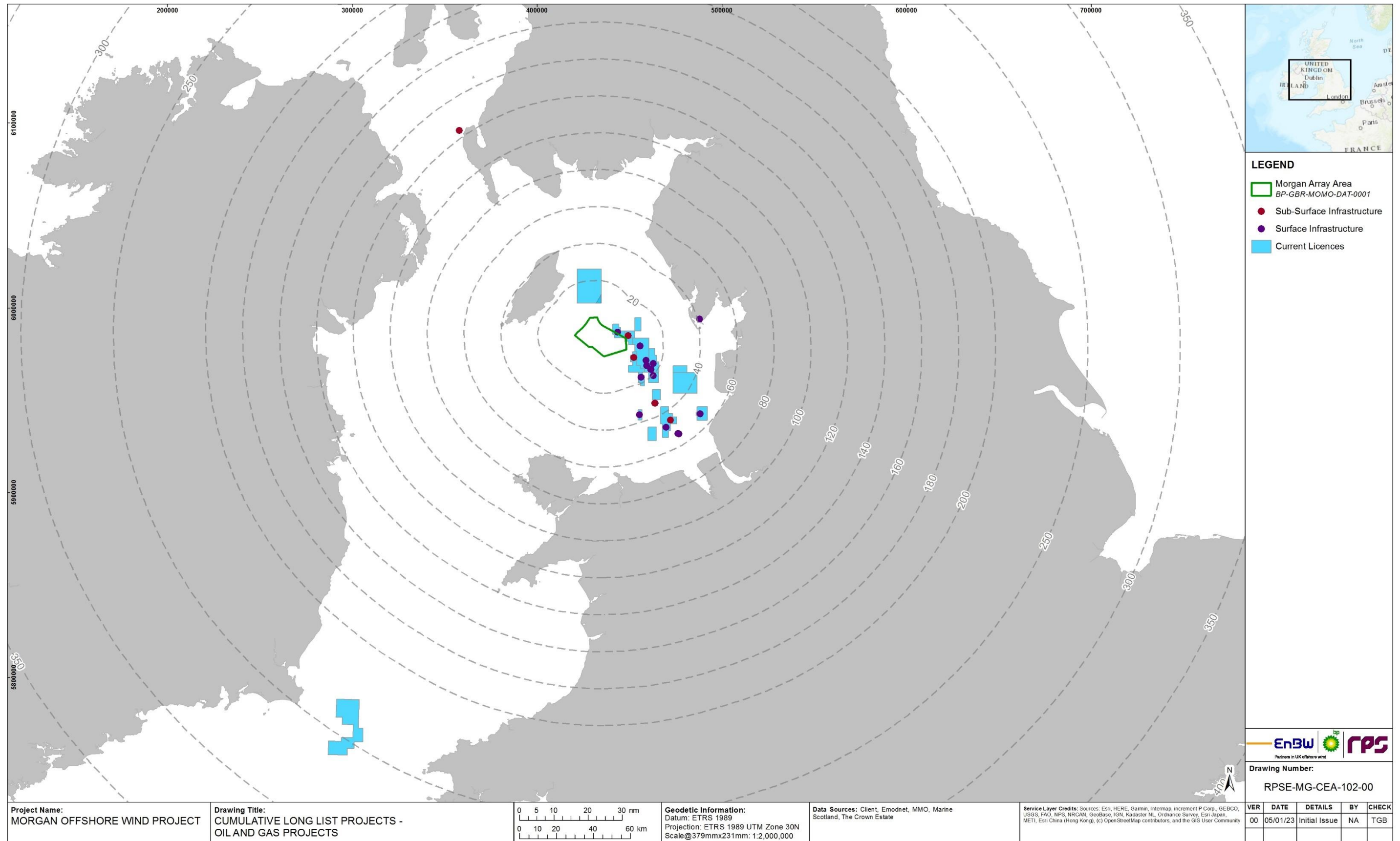


Figure 1.7: Oil and gas projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

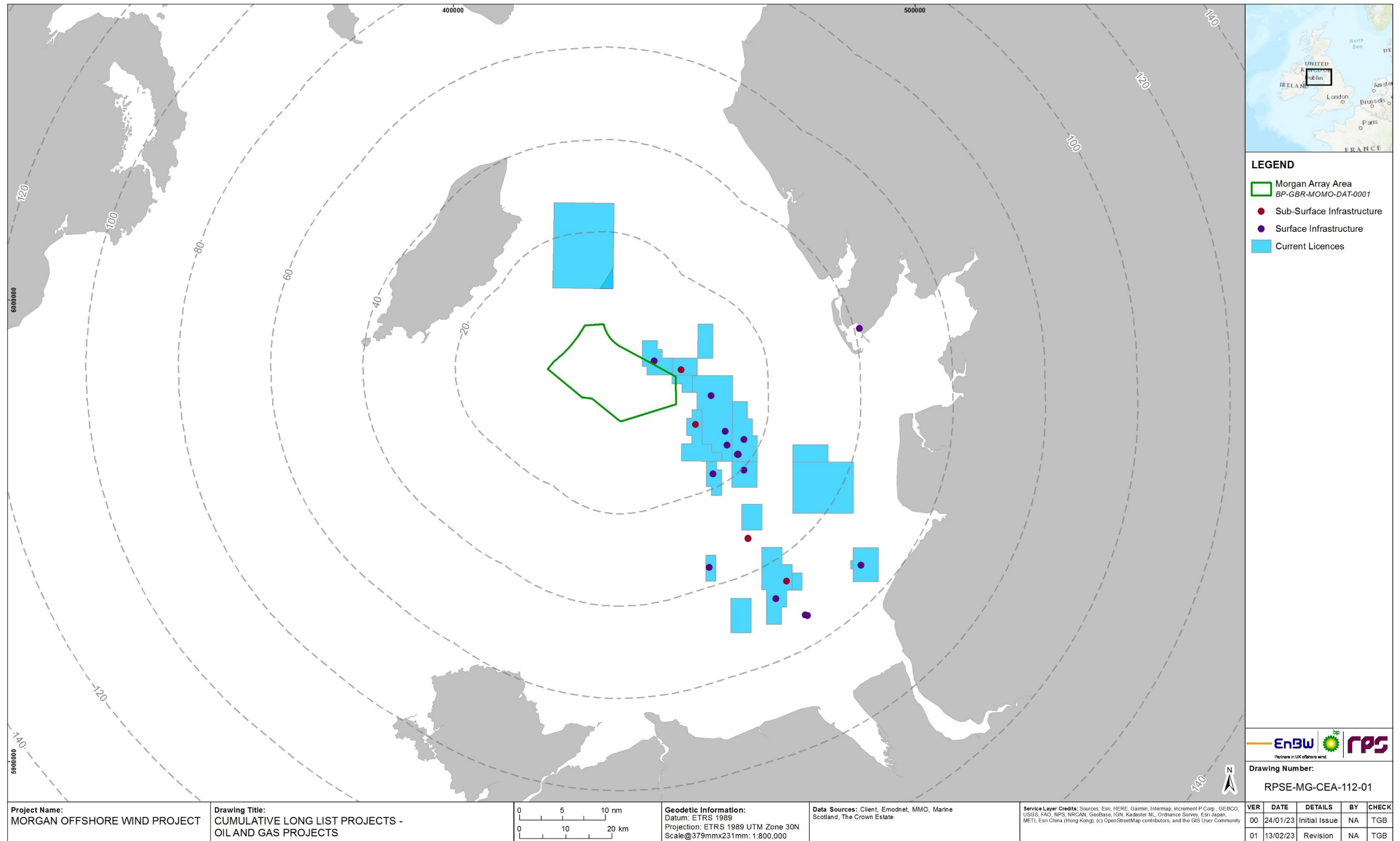


Figure 1.8: Oil and gas projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.12 Offshore Cumulative Effects Matrix - Cables and pipelines - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.12.1.1 The following cable and pipeline projects, plans and activities are shown in Figure 1.9 and Figure 1.10.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
ARDNEIL AND WIRRAL 2	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The Western Link project consists of installing two 600kV DC submarine cables in the Irish Sea from Ardnail (Scotland) to Wirral (England). The cable has a total length of about 387km.	Operational																		
ARDNEIL TO WIRRAL 1	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The Western Link project consists of installing two 600kV DC submarine cables in the Irish Sea from Ardnail (Scotland) to Wirral (England). The cable has a total length of about 387km.	Operational																		
BELFAST LOUGH CROSSING (BLC)	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Belfast Lough Crossing Pipeline (BLC), a 24” 75bar rated steel transmission pipeline subsea pipeline running from Torytown AGI across Belfast Lough and terminating at Knocknagoney AGI.	Operational																		
BT-MT1	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The fibre optic submarine telecommunications cable system BT-MT-1 became ready for service around 1990. The system has a length of 80km and is owned and/or operated by a consortium consisting of BT, Manx Telecom.	Operational																		
BT-TE1	Irish Government	High – Data has been obtained from the developer’s website or a	BT telecommunications cable.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)															
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055		
		consenting authority's portal																		
CALDER TO RIVERS ONSHORE TERMINAL (PL1945)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	CALDER TO RIVERS ONSHORE TERMINAL 24IN GAS LINE.	Operational																
CELTIXCONNECT	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The fibre optic submarine telecommunications cable system CeltixConnect became ready for service around January 2012. The system has a length of 136km and is owned and/or operated by Aqua Comms.	Operational																
CONWY TO DOUGLAS OIL EXPORT (PL2939)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Project type: Offshore oil field development. Location: east Irish Sea, UK.	Operational																
DALTON PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Dalton Pipeline End Manifold.	Operational																
DALTON PLEM TO DALTON WELLHEAD R1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Dalton gas field Pipe Line End Manifold to Dalton Wellhead.	Operational																
DALTON PLEM TO DALTON WELLHEAD R2	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Dalton gas field Pipe Line End Manifold to Dalton Wellhead.	Operational																
DALTON PLEM TO DPPA	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Dalton gas field Pipe Line End Manifold to North Morecambe Drilling and Production Platform.	Operational																
DALTON WELLHEAD R1 TO DALTON PLEM	NSTA	High – Data has been obtained from the developer's website or a	Dalton gas field wellhead to Dalton Pipe Line End Manifold.	Operational																

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal																				
DD-POA GAS EXPORT (PL1030)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Liverpool Bay Asset. Gas Export from Douglas. Length: 32.1km.	Operational																		
DOUGLAS TO CACM (PL1031)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas to CACM Barge.	Operational																		
DOUGLAS TO CONWY CONDENSATE INJECTION	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Conwy condensate injection.	Operational																		
DOUGLAS TO CONWY UMBILICAL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Conwy umbilical cable.	Operational																		
DOUGLAS TO CONWY WATER INJECTION (PL2940)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Conwy water injection pipeline.	Abandoned																		
DOUGLAS TO HAMILTON (PL1040)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Hamilton platform pipeline.	Operational																		
DOUGLAS TO HAMILTON NORTH	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Hamilton north pipeline.	Operational																		
DOUGLAS TO LENNOX CHEM LINE (PL1037)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Douglas field to Lennox chemical pipeline.	Operational																		

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
DOUGLAS TO LENNOX CHEM LINE (PL1038)	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Douglas field to Lennox chemical pipeline.	Operational																			
DOUGLAS TO LENNOX GAS LINE (PL1036A)	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Douglas field to Lennox gas pipeline.	Operational																			
EAST WEST INTERCONNECTOR	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The East West Interconnector is a 500MW High Voltage direct current submarine and subsoil power cable which connects the Irish and British Electricity markets. The project was developed by the Irish National grid operator EirGrid.	Operational																			
EMERALD BRIDGE	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The fibre optic submarine telecommunications cable system Emerald Bridge Fibres became ready for service around December 2012. The system has a length of 120km and is owned and/or operated by a consortium consisting of ESB Telecoms, Zayo Group.	Operational																			
EMERALD BRIDGE ONE	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The fibre optic submarine telecommunications cable system Emerald Bridge Fibres became ready for service around December 2012. The system has a length of 120km and is owned and/or operated by a consortium consisting of ESB Telecoms, Zayo Group.	Operational																			
ESAT 2	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The fibre optic submarine telecommunications cable system ESAT-2 became ready for service around 2000. The system has a length of 245km and is owned and/or operated by Esat BT.	Operational																			
HAMILTON EAST MANIFOLD	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Hamilton east pipeline end manifold.	Operational																			
HAMILTON EAST PIPELINE	NSTA	High – Data has been obtained from the developer’s website or a	Hamilton east pipeline.	Operational																			

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal																				
HAMILTON EAST UMBILICAL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Umbilical pipeline for Hamilton east.	Operational																		
HAMILTON TO DOUGLAS GAS LINE (PL1039)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Gas line from Hamilton to Douglas.	Operational																		
HAV 1.2	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Type: Telecom The Havhingsten cable system is a 940km submarine cable system connecting the UK to the Nordics, with landings in Ireland, the Isle of Man, Blackpool and Newcastle in England, and Denmark.	Submitted but not yet determined																		
HAV 1.3	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Type: Telecom The Havhingsten cable system is a 940km submarine cable system connecting the UK to the Nordics, with landings in Ireland, the Isle of Man, Blackpool and Newcastle in England, and Denmark.	Submitted but not yet determined																		
HAV 1.4	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Type: Telecom The Havhingsten cable system is a 940km submarine cable system connecting the UK to the Nordics, with landings in Ireland, the Isle of Man, Blackpool and Newcastle in England, and Denmark.	Submitted but not yet determined																		
HAV 1.5	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Type: Telecom The Havhingsten cable system is a 940km submarine cable system connecting the UK to the Nordics, with landings in Ireland, the Isle of Man, Blackpool and Newcastle in England, and Denmark.	Submitted but not yet determined																		
HIBERNIA ATLANTIC SEG.A	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	EXA Atlantic (formerly GTT Atlantic, Hibernia Atlantic) is a 12,200 km private transatlantic submarine cable system in the North Atlantic Ocean, connecting Canada, the United States, Ireland and the United Kingdom. The EXA Atlantic consists of EXA South and EXA North cables.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
HIBERNIA ATLANTIC SEG.C	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	EXA Atlantic (formerly GTT Atlantic, Hibernia Atlantic) is a 12,200 km private transatlantic submarine cable system in the North Atlantic Ocean, connecting Canada, the United States, Ireland and the United Kingdom. The EXA Atlantic consists of EXA South and EXA North cables.	Operational																			
INTERCONNECTOR 1 SCOTLAND TO IRELAND IC1	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	UK-Ireland Interconnector, known as Interconnector 1 or IC1, is a gas pipeline running between Scotland and Ireland. A reverse flow, bi-directional development of the pipeline is proposed. Length: 204km.	Operational																			
INTERCONNECTOR 2 SCOTLAND TO IRELAND IC2	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	IC2 is a natural gas pipeline in Scotland and Ireland. The subsea pipeline is 195 km long and start in Ireland in the city of Gormanston. It ends up in Beattock, Scotland in Irish Sea, Europe (North).	Operational																			
IOM UK INTERCONNECTOR	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Spans a distance of 104km and is the world’s longest AC power interconnector, linking the Isle of Man to the UK National Grid. Connects Isle of Man to Bispham on the Lancashire coast. Installed September 2000.	Operational																			
ISLE OF MAN CONTROL UMBILICAL (IOMCU)	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	72.80mm hydraulic umbilical cable.	Operational																			
ISLE OF MAN SPUR (IOMS)	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	273.00mm gas pipeline.	Operational																			
LANIS 1	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The system has a length of 113km and is owned and/or operated by Vodafone.	Operational																			
LANIS 2	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer’s website or a	The system has a length of 67km and is owned and/or operated by Vodafone.	Operational																			

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
		consenting authority's portal																					
LARNE LOUGH CROSSING	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	The Larne Lough Crossing Pipeline, an 8" 19 bar rated steel transmission pipeline from Larne AGI subsea across Larne Lough to Curran Point PRS.	Operational																			
LENNOX TO DOUGLAS GAS LINE	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Gas line from Lennox to Douglas.	Operational																			
LENNOX TO DOUGLAS OIL LINE	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	LENNOX PLATFORM TO DOUGLAS COMPLEX 16IN GAS LINE.	Not in use																			
MANX-N.IRELAND	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	BT telecommunications cable.	Operational																			
MaresConnect	Maresconnect	High – Data has been obtained from the developer's website or a consenting authority's portal	MaresConnect is a proposed 750MW subsea and underground electricity interconnector system linking the electricity grids in Ireland and Great Britain.	Pre-application																			
MILLOM EAST PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom east pipeline end plem.	Operational																			
MILLOM PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom pipeline end plem.	Operational																			
MILLOM PLEM TO DPPA	NSTA	High – Data has been obtained from the developer's website or a	Millom pipeline end manifold to North Morecambe Drilling and Production Platform.	Operational																			

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		consenting authority's portal																			
MILLOM PLEM TO MILLOM WELLHEAD Q1	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom pipeline end manifold to Millom Wellhead.	Operational																	
MILLOM PLEM TO MILLOM WELLHEAD Q3 CHEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom pipeline end manifold to Millom Wellhead chemical line.	Operational																	
MILLOM PLEM TO MILLOM WEST	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Millom pipeline end manifold to Millom West.	Operational																	
MILLOM WELLHEAD Q1 TO MILLOM PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	MILLOM WELLHEAD Q1 TO MILLOM PLEM 8IN GAS.	Operational																	
MILLOM WELLHEAD Q2 TO MILLOM PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	MILLOM WELLHEAD Q2 TO MILLOM PLEM 8IN GAS.	Operational																	
MILLOM WELLHEAD Q3 TO MILLOM PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	MILLOM WELLHEAD Q3 TO MILLOM PLEM 8IN GAS.	Operational																	
MILLOM WEST TO MILLOM PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	MILLOM WEST TO MILLOM PLEM 12IN GAS LINE.	Operational																	
MORECAMBE CPP1 TO DP6	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	MORECAMBE CPP1 platform TO DP3 2IN LINE.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
MORECAMBE CPP1 TO DP8	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE CPP1 platform TO DP8 2IN LINE.	Operational																		
MORECAMBE DP1 TO BAINS	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE DP1 TO BAINS WELLHEAD CHEMICAL.	Operational																		
MORECAMBE DP6 TO CPP1	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE DP6 TO CPP1 24IN GAS LINE.	Operational																		
MORECAMBE DP8 TO CPP1	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE DP8 TO CPP1 24IN GAS LINE.	Operational																		
MORECAMBE DPPA TO DALTON PLEM	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE DPPA TO DALTON PLEM CHEMICAL.	Operational																		
MORECAMBE DPPA TO MILLOM PLEM	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	MORECAMBE DPPA TO MILLOM PLEM CHEMICAL.	Operational																		
NMT METHANOL	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	NORTH MORECAMBE 3IN METHANOL.	Operational																		
NMT TRUNKLINE	NSTA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	NORTH MORECAMBE 36IN GAS TRUNKLINE.	Operational																		
NorthConnect HVDC Cable	Marine Scotland	High – Data has been obtained from the	The NorthConnect (also known as Scotland–Norway interconnector) is a proposed 665km	Under Construction																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		developer's website or a consenting authority's portal	1,400 MW HVDC interconnector over the floor of the North Sea.																		
PLEM AT OSI	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	Pipeline end manifold at OSI.	Operational																	
POA-DD CONDENSATE	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	3 INCH POA-DD CONDENSATE PIPELINE.	Operational																	
POA-DD METHANOL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	3 INCH POA-DD METHANOL PIPELINE.	Operational																	
RHYL-DPPA CONTROL/CHEM INJ UMBILICAL	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	RHYL-DPPA IMPORT PRODUCTION FLEXIBLE PIPELINE.	Operational																	
RHYL-DPPA IMPORT PRODUCTION FLEX PIPE	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	RHYL-DPPA IMPORT PRODUCTION FLEXIBLE PIPELINE.	Operational																	
RIVERS ONSHORE TERMINAL TO CALDER	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	RIVERS ONSHORE TERMINAL TO CALDER 3IN CHEMICAL.	Operational																	
ROCKABILL	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Rockabill project (also know as Super Highway 1) is a new combination of submarine cable and terrestrial links that connect Dublin to London and Lowestoft, on the eastern coast of the UK. Cable Length: 221km. Owners: euNetworks.	Operational																	
SCOTLAND TO N IRELAND PIPELINE (SNIP)	NSTA	High – Data has been obtained from the developer's website or a	The Scotland-Northern Ireland Pipeline is a 24in, 135km long natural gas pipeline which runs from	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		consenting authority's portal	Twynholm, Scotland to Islandmagee in Northern Ireland.																		
SIRIUS SOUTH	KIS-ORCA	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Interconnector connecting Ireland and England.	Operational																	
SMT TRUNKLINE	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	SOUTH MORECAMBE 36IN GAS TRUNKLINE.	Operational																	
SNIP Scotland – Northern Ireland pipeline (SNIP)	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	The Scotland-Northern Ireland Pipeline is a 24in, 135km long natural gas pipeline which runs from Twynholm, Scotland to Islandmagee in Northern Ireland.	Operational																	
WELLHEAD R2 TO DALTON PLEM	NSTA	High – Data has been obtained from the developer's website or a consenting authority's portal	WELLHEAD R2 TO DALTON PLEM 8IN GAS LINE.	Operational																	
Western Isles to Mainland Scotland HVDC Interconnector	Marine Scotland	High – Data has been obtained from the developer's website or a consenting authority's portal	1800MW HVDC submarine power cable to connect the Isle of Lewis to the Scottish mainland.	Under Construction																	

1.13 Offshore Cumulative Effects Matrix - Cables and pipelines - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
ARDNEILL AND WIRRAL 2	48.6	Operational	d	a	a	a	d	a	a	d	a	d	d	d
ARDNEILL TO WIRRAL 1	9.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
BELFAST LOUGH CROSSING (BLC)	127.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d
BT-MT1	1.2	Operational	d	a	a	a	d	a	a	a	a	d	d	d
BT-TE1	82.4	Operational	d	a	a	a	d	a	a	d	d	d	d	d
CALDER TO RIVERS ONSHORE TERMINAL (PL1945)	17.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
CELTIXCONNECT	82.4	Operational	d	a	a	a	d	a	a	d	d	d	d	d
CONWY TO DOUGLAS OIL EXPORT (PL2939)	35.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DALTON PLEM	6.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
DALTON PLEM TO DALTON WELLHEAD R1	6.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DALTON PLEM TO DALTON WELLHEAD R2	6.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DALTON PLEM TO DPPA	5.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DALTON WELLHEAD R1 TO DALTON PLEM	6.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DD-POA GAS EXPORT (PL1030)	47.4	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO CACM (PL1031)	33.0	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO CONWY CONDENSATE INJECTION	35.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO CONWY UMBILICAL	35.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO CONWY WATER INJECTION (PL2940)	35.9	Abandoned	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO HAMILTON (PL1040)	44.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO HAMILTON NORTH	38.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO LENNOX CHEM LINE (PL1037)	44.7	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO LENNOX CHEM LINE (PL1038)	44.7	Operational	d	a	a	a	d	a	a	d	a	d	d	d
DOUGLAS TO LENNOX GAS LINE (PL1036A)	44.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
EAST WEST INTERCONNECTOR	43.5	Operational	d	a	a	a	d	a	a	d	a	d	d	d
EMERALD BRIDGE	87.4	Operational	d	a	d	d	d	a	a	d	d	d	d	d
EMERALD BRIDGE ONE	87.4	Operational	d	a	d	d	d	a	a	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
ESAT 2	17.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HAMILTON EAST MANIFOLD	45.2	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HAMILTON EAST PIPELINE	38.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HAMILTON EAST UMBILICAL	38.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HAMILTON TO DOUGLAS GAS LINE (PL1039)	44.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HAV 1.2	39.9	Submitted but not yet determined	d	a	a	e	d	a	d	d	d	d	d	d
HAV 1.3	31.7	Submitted but not yet determined	d	e	e	e	d	a	d	d	d	d	d	d
HAV 1.4	21.4	Submitted but not yet determined	d	e	e	e	d	a	d	d	d	d	d	d
HAV 1.5	12.9	Submitted but not yet determined	d	e	e	e	d	a	e	d	d	d	d	d
HIBERNIA ATLANTIC SEG.A	6.7	Operational	d	a	a	a	d	a	a	d	a	d	d	d
HIBERNIA ATLANTIC SEG.C	15.7	Operational	d	a	a	a	d	a	a	d	a	d	d	d
INTERCONNECTOR 1 SCOTLAND TO IRELAND IC1	53.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d
INTERCONNECTOR 2 SCOTLAND TO IRELAND IC2	49.4	Operational	d	d	a	a	d	d	d	d	a	d	d	d
IOM UK INTERCONNECTOR	0.0	Operational	d	a	a	a	d	a	a	a	a	d	d	d
ISLE OF MAN CONTROL UMBILICAL (IOMCU)	38.9	Operational	d	a	a	a	d	a	d	d	a	d	d	d
ISLE OF MAN SPUR (IOMS)	38.9	Operational	d	a	a	a	d	a	d	d	a	d	d	d
LANIS 1	2.2	Operational	d	a	a	a	d	a	a	a	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
LANIS 2	42.0	Operational	d	a	a	a	d	a	d	d	a	d	d	d
LARNE LOUGH CROSSING	136.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
LENNOX TO DOUGLAS GAS LINE	44.6	Operational	d	a	a	a	d	a	a	d	a	d	d	d
LENNOX TO DOUGLAS OIL LINE	44.7	Not in use	d	a	a	a	d	a	a	d	a	d	d	d
MANX-N.IRELAND	39.5	Operational	d	d	a	a	d	a	d	d	a	d	d	d
MaresConnect	48.2	Pre-application	d	c	c	c	d	e	c	d	c	d	d	d
MILLOM EAST PLEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM PLEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM PLEM TO DPPA	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM PLEM TO MILLOM WELLHEAD Q1	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM PLEM TO MILLOM WELLHEAD Q3 CHEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM PLEM TO MILLOM WEST	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM WELLHEAD Q1 TO MILLOM PLEM	0.7	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM WELLHEAD Q2 TO MILLOM PLEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM WELLHEAD Q3 TO MILLOM PLEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MILLOM WEST TO MILLOM PLEM	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MORECAMBE CPP1 TO DP6	0.7	Operational	d	a	a	a	d	a	a	a	a	d	d	d
MORECAMBE CPP1 TO DP8	14.2	Operational	d	a	a	a	d	a	a	d	a	d	d	d
MORECAMBE DP1 TO BAINS	12.2	Operational	d	a	a	a	d	a	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
MORECAMBE DP6 TO CPP1	17.3	Operational	d	a	a	a	d	a	a	d	a	d	d	d
MORECAMBE DP8 TO CPP1	14.2	Operational	d	a	a	a	d	a	a	d	a	d	d	d
MORECAMBE DPPA TO DALTON PLEM	12.3	Operational	d	a	a	a	d	a	a	d	a	d	d	d
MORECAMBE DPPA TO MILLOM PLEM	5.9	Operational	d	a	a	a	d	a	a	d	a	d	d	d
NMT METHANOL	1.9	Operational	d	a	a	a	d	a	a	a	a	d	d	d
NMT TRUNKLINE	7.6	Operational	d	a	a	a	d	a	a	d	a	d	d	d
NorthConnect HVDC Cable	399.0	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d
PLEM AT OSI	33.0	Operational	d	a	a	a	d	a	a	d	a	d	d	d
POA-DD CONDENSATE	7.6	Operational	d	a	a	a	d	a	a	d	a	d	d	d
POA-DD METHANOL	47.3	Operational	d	a	a	a	d	a	a	d	a	d	d	d
RHYL-DPPA CONTROL/CHEM INJ UMBILICAL	47.3	Operational	d	a	a	a	d	a	a	d	a	d	d	d
RHYL-DPPA IMPORT PRODUCTION FLEX PIPE	7.6	Operational	d	a	a	a	d	a	a	d	a	d	d	d
RIVERS ONSHORE TERMINAL TO CALDER	17.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d
ROCKABILL	18.8	Operational	d	a	a	a	d	a	a	d	a	d	d	d
SCOTLAND TO N IRELAND PIPELINE (SNIP)	121.1	Operational	d	d	d	d	d	d	d	d	d	d	d	d
SIRIUS SOUTH	20.4	Operational	d	a	a	a	d	a	a	d	a	d	d	d
SMT TRUNKLINE	17.3	Operational	d	a	a	a	d	a	a	d	a	d	d	d
SNIP Scotland – Northern Ireland pipeline (SNIP)	123.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
WELLHEAD R2 TO DALTON PLEM	6.1	Operational	d	a	a	a	d	a	a	d	a	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of Project/Plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Western Isles to Mainland Scotland HVDC Interconnector	136.5	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

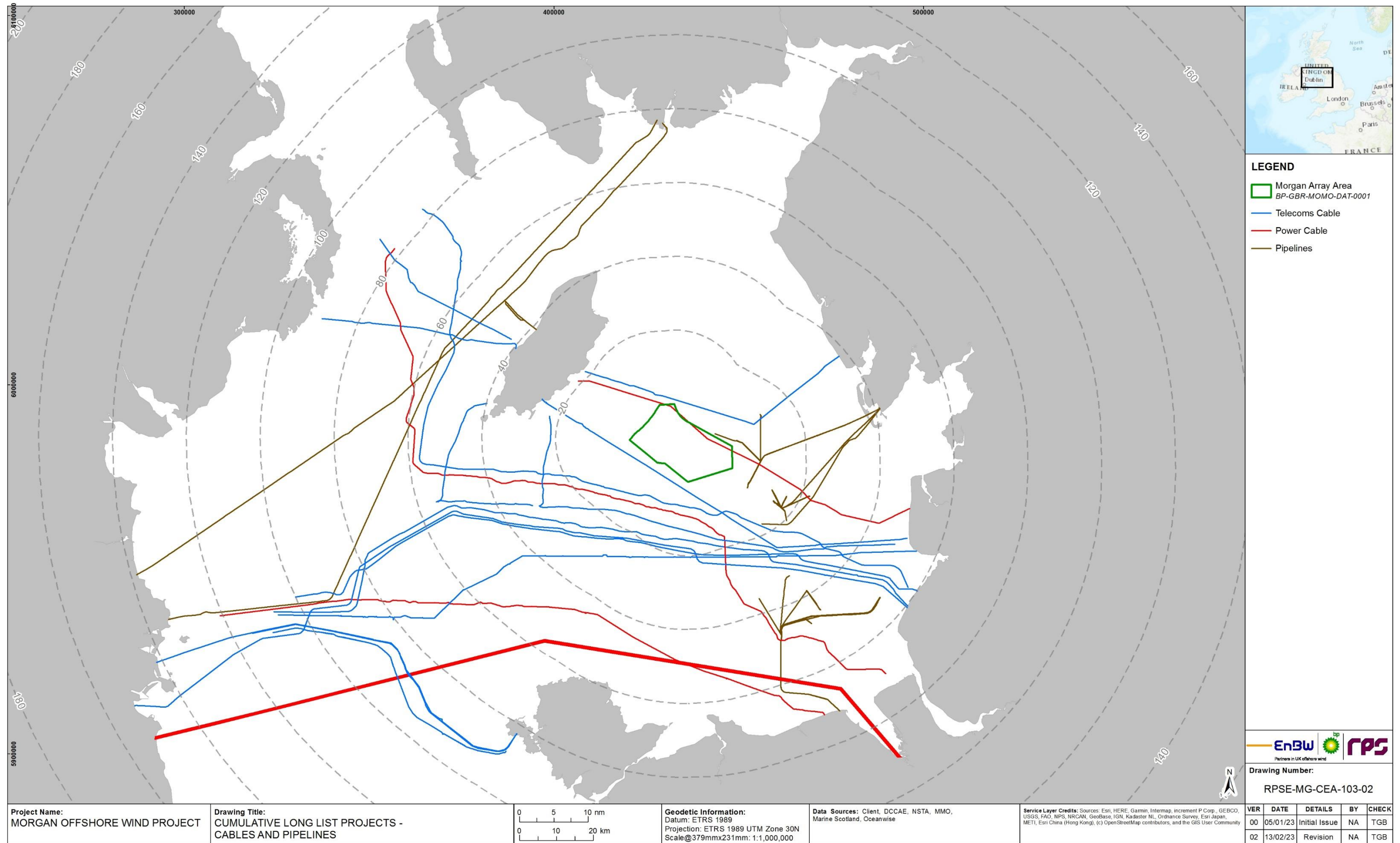


Figure 1.9: Cable and pipeline projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

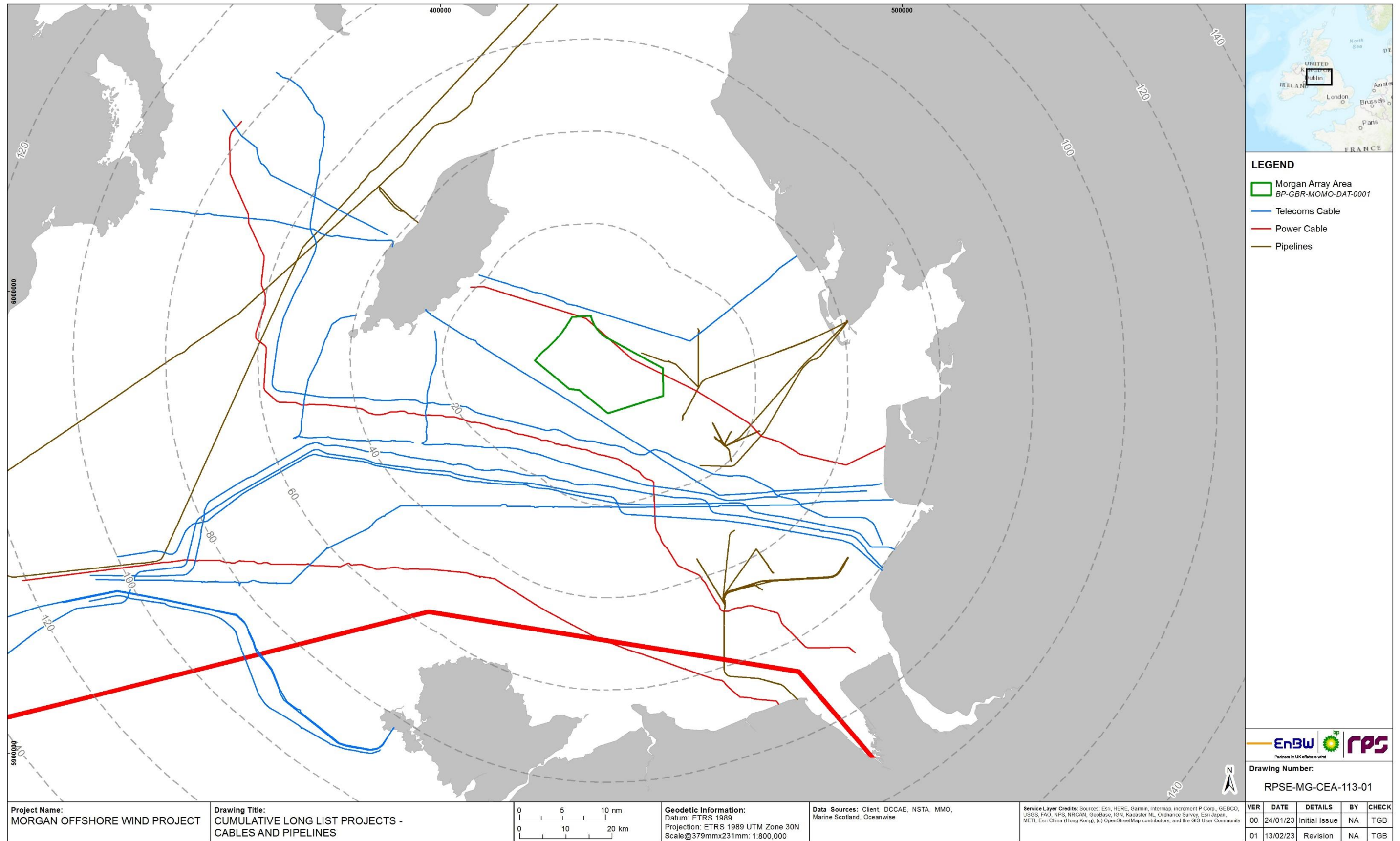


Figure 1.10: Cable and pipeline projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.14 Offshore Cumulative Effects Matrix - Shipping and Navigation - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.14.1.1 The following shipping and navigation projects, plans and activities are shown in Figure 1.11 and Figure 1.12.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Anchorage areas	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Various anchorage areas in the Irish Sea.	Operational																	
Belfast Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Belfast Harbour is a major maritime hub in Belfast, Northern Ireland, handling 67% of Northern Ireland’s seaborne trade and about 25% of the maritime trade of the entire island of Ireland.	Operational																	
Caernarfon Harbour Limit	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Caernarfon Harbour Trust harbour limits are bounded by the Menai Suspension Bridge and Caernarfon Bay. It is also the Competent Harbour Authority responsible for the provision of pilotage throughout the Menai Strait.	Operational																	
Carlingford Lough Harbour Authority	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Harbour authority for Carlingford Lough.	Operational																	
Castletown Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a	Castletown is a heritage harbour consisting of outer and inner drying harbours. It is mainly used by	Operational																	

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																	
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055				
		consenting authority's portal	inshore fishing vessels, local and visiting pleasure craft and occasional coasters.																			
Conwy Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	500 pontoon berths.	Operational																		
Dee Conservancy	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Harbour area for the Dee Estuary.	Operational																		
Derbyhaven Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	A shallow water bay sheltered by an island breakwater, Derbyhaven's southeast position makes it ideal for leisure craft, but not suitable for commercial vessels.	Operational																		
Donaghadee Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Ards and North Down Borough Council. Leisure and fishing port.	Operational																		
Douglas Harbour Vessel Control Limit	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Douglas Harbour Vessel Control Limit.	Operational																		
Drogheda Port Company Pilotage District	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Drogheda Port Company Pilotage District.	Operational																		
Dublin Port Company	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a	Dublin Port Company.	Operational																		

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																						
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055									
		consenting authority's portal																									
Dundalk Port Company	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Dundalk Port Company.	Operational																							
Dundalk Port Company Pilotage District	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Dundalk Port Company Pilotage District.	Operational																							
Garlieston Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Garlieston Harbour is the base for a few small fishing vessels with several pleasure craft also mooring in the harbour area.	Operational																							
Heysham Port	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Heysham Port.	Operational																							
HOLYHEAD HARBOUR	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	A commercial and ferry port in Anglesey, Wales, handling more than 2 million passengers each year.	Operational																							
Howth Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Fishing village harbour.	Operational																							
Isle of Whithorn Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a	Dumfries and Galloway. High commercial fisheries importance. Pleasure craft.	Operational																							

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																						
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055									
		consenting authority's portal																									
Lancaster Port	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Lancaster Port.	Operational																							
Laxey Bay Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	A small port on the east coast half way between Douglas and Ramsey. It is used by a small number of leisure craft and inshore fishing vessels.	Operational																							
Loch Ryan Port	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Loch Ryan Port is operated by Stena Line Ports Ltd., who are the statutory Harbour Authority.	Operational																							
Loch Ryan/Stranraer Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Stranraer Harbour is one of the busiest ports in the region due to ferry traffic and fishing vessels.	Operational																							
Mostyn Docks	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	The Port of Mostyn Ltd is located in the central Irish Sea where it has been a significant trading point between the UK and Ireland.	Operational																							
New Cruise Liner Terminal Construction at Princes Jetty Site, Liverpool - Application for Marine Management Licence	MMO	High – Data has been obtained from the developer's website or a consenting authority's portal	Liverpool City Council proposes to construct a new Cruise Passenger Terminal at the existing Princes Jetty Site to cater for the year on year increase in passenger numbers since the opening of the existing cruise terminal in 2008.	Operational																							

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																							
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055										
Peel Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Traditionally a major fishing port which used to host a huge fishing fleet, Peel remains the most active fishing port on the Isle of Man.	Operational																								
Pilot boarding place	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Various pilot boarding places in the Irish Sea.	Operational																								
Port Erin	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Port Erin is a seaside village/port in the south-west of the Isle of Man.	Operational																								
Port of Barrow	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Port of Barrow.	Operational																								
Port of Cairnryan	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Port of Cairnryan Ltd is the statutory harbour authority governing the operation of Cairnryan port. The company is wholly-owned by Larne Harbour Ltd. part of the P&O Ferries group. P&O Ferries operate a passenger and freight service from Cairnryan to Larne in Northern Ireland. This route is the shortest, fastest commercial ferry crossing between Great Britain and Ireland. There are up to 16 scheduled ferry sailings daily.	Operational																								
Port of Fleetwood	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Port of Fleetwood.	Operational																								
Port of Garston	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Port of Garston.	Operational																								

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
		consenting authority's portal																
Port of Kirkcudbright	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Kirkcudbright Harbour is the busiest commercial fishing harbour in Dumfries and Galloway with much of the landed catch being processed locally.	Operational														
Port of Larne	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Can handle vessels up to 185m long.	Operational														
Port of Liverpool	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Port of Liverpool.	Operational														
Port of Manchester	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Port of Manchester.	Operational														
Port of Workington	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Port of Workington.	Operational														
Port Saint Mary	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Port St Mary is a port in the southwest of the Isle of Man.	Operational														
Port William Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a	On the coast of Luce Bay in Galloway.	Operational														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																		
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055					
		consenting authority's portal																					
Ramsey Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	This is a well sheltered, tidal (+/- 2 ½ hours HW) port. The harbour is busy with commercial vessels dealing with regular lo-lo services from the United Kingdom and Ireland and is the only Manx port with facilities to handle imports of bulk cement.	Operational																			
Stranraer East Pier	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	East pier within Stranraer harbour.	Operational																			
Warrenpoint Harbour Authority	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Harbour authority for Warrenpoint.	Operational																			
Whitehaven Harbour	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Whitehaven Harbour.	Operational																			

1.15 Offshore Cumulative Effects Matrix - Shipping and Navigation - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Anchorage areas	N/A	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Belfast Harbour	124.1	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Caernarfon Harbour Limit	77.1	Operational	d	d	a	a	d	a	a	d	d	d	d	d
Carlingford Lough Harbour Authority	119.2	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Castletown Harbour	27.4	Operational	d	a	a	a	d	a	a	d	d	d	b	d
Conwy Harbour	67.7	Operational	d	d	a	a	d	a	a	d	d	d	d	d
Dee Conservancy	72.2	Operational	d	d	a	a	d	a	a	d	d	d	d	d
Derbyhaven Harbour	26.7	Operational	d	a	a	a	d	a	a	d	d	d	b	d
Donaghadee Harbour	110.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Douglas Harbour Vessel Control Limit	16.9	Operational	d	d	a	a	d	d	a	d	d	d	b	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Drogheda Port Company Pilotage District	132.7	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Dublin Port Company	140.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Dundalk Port Company	126.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Dundalk Port Company Pilotage District	130.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Garlieston Harbour	78.7	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Heysham Port	49.9	Operational	d	a	a	a	d	a	a	d	d	d	d	d
HOLYHEAD HARBOUR	75.1	Operational	d	d	a	a	d	a	a	d	d	d	d	d
Howth Harbour	139.7	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Isle of Whithorn Harbour	68.8	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Lancaster Port	51.3	Operational	d	d	d	a	d	a	a	d	d	d	d	d
Laxey Bay Harbour	16.9	Operational	d	a	a	a	d	a	a	d	d	d	b	d
Loch Ryan Port	115.7	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Loch Ryan/Stranraer Harbour	108.3	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Mostyn Docks	64.7	Operational	d	d	a	a	d	a	a	d	d	d	d	d
New Cruise Liner Terminal Construction at Princes Jetty Site, Liverpool - Application for Marine Management Licence	79.8	Operational	d	f	f	a	d	d	d	d	d	d	d	d
Peel Harbour	38.7	Operational	d	d	d	a	d	a	a	d	d	d	b	d
Pilot boarding place	N/A	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Port Erin	36.8	Operational	d	d	d	a	d	a	a	d	d	d	b	d
Port of Barrow	36.2	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Port of Cairnryan	112.7	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Port of Fleetwood	46.9	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Port of Garston	87.3	Operational	d	a	a	a	d	a	a	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Port of Kirkcudbright	77.7	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Port of Larne	130.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Port of Liverpool	46.6	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Port of Manchester	88.0	Operational	d	a	a	a	d	a	a	d	d	d	d	d
Port of Workington	67.5	Operational	d	a	d	a	d	a	a	d	d	d	d	d
Port Saint Mary	33.4	Operational	d	d	d	a	d	a	a	d	d	d	b	d
Port William Harbour	80.8	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Ramsey Harbour	27.3	Operational	d	d	d	a	d	a	a	d	d	d	b	d
Stranraer East Pier	108.3	Operational	d	d	d	a	d	d	a	d	d	d	d	d
Warrenpoint Harbour Authority	131.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Whitehaven Harbour	57.7	Operational	d	a	d	a	d	a	a	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

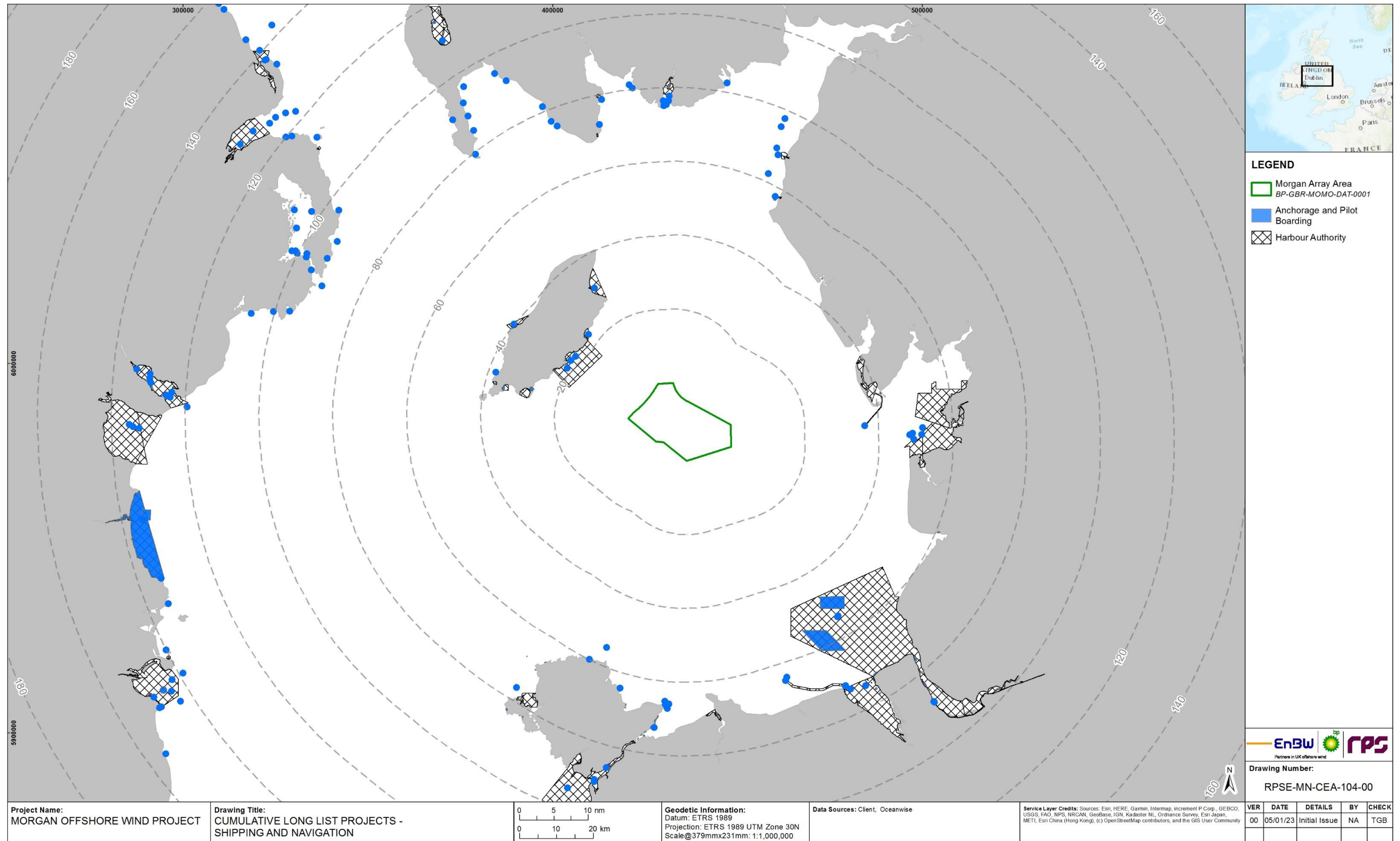


Figure 1.11: Shipping and navigation projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

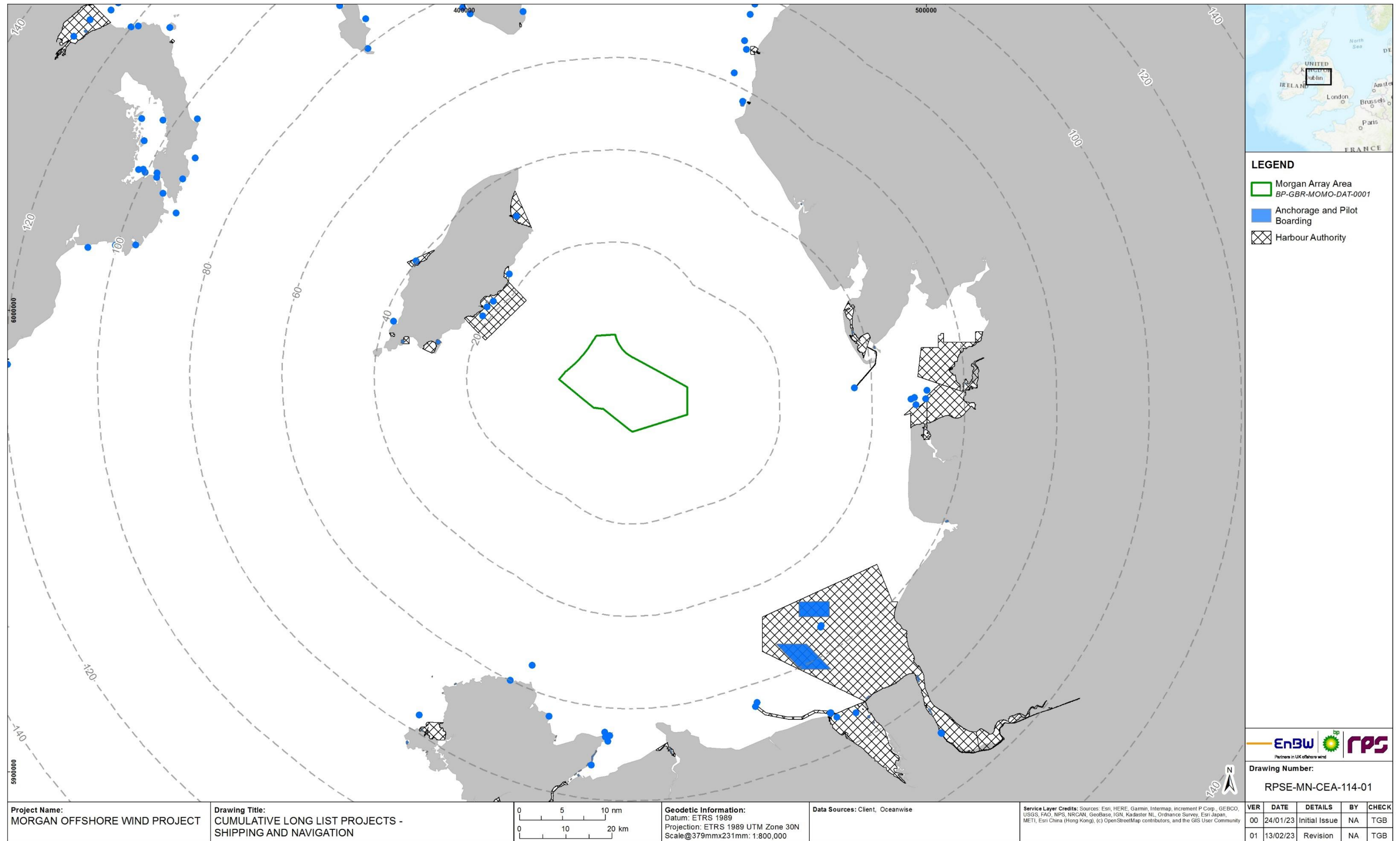


Figure 1.12: Shipping and navigation projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.16 Offshore Cumulative Effects Matrix - Military, Aviation and Radar - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.16.1.1 The following military, aviation and radar projects, plans and activities are shown in Figure 1.13 and Figure 1.14.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																			
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055						
D201B: ABERPORTH	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ranges, danger and exercise areas. Aberporth is a test and evaluation range where missile-firing takes place.	Operational																				
D201D: ABERPORTH	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Activity: Live Firing, Bombing, Pilotless Target Aircraft, Unmanned.	Operational																				
D201H: ABERPORTH	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Ranges, danger and exercise areas. Aberporth is a test and evaluation range where missile-firing takes place.	Operational																				
D401: BALLYKINLER	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	The range, D401, is used for small arms up to Mortar and Anti Tank weapons.	Operational																				
D402A: LUCE BAY (N)	Oceanwise	Medium – Data has been obtained from the public domain but not from the	Bombing training facility.	Operational																				

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		developer's website or a consenting authority's portal																			
D402B: LUCE BAY (N)	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Bombing training facility.	Operational																	
D402C: LUCE BAY (N)	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Demolition of Unexploded Ordnance.	Operational																	
D403: LUCE BAY	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Air to air firing, bombing.	Operational																	
D403A: LUCE BAY	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Demolition of Unexploded Ordnance, surface explosions.	Operational																	
D405: KIRKCUDBRIGHT	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Demolition of Unexploded Ordnance, firing.	Operational																	
D406: ESKMEALS	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Live weapons test and evaluation range.	Operational																	
D406B: ESKMEALS	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a	Live weapons test and evaluation range.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
		consenting authority's portal																			
D406C: ESKMEALS	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Live weapons test and evaluation range.	Operational																	
D509: CAMPBELTOWN	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Military danger area for High & Low Angle Gunnery, HM Ships, Pilotless Target Aircraft, Surface to Surface Firing, Torpedo Firing.	Operational																	
Isle of Man	NATS	Low – there is a lack of robust data and information and/or data quality is out with the Applicants control	Also known as Ronaldsway airport. Main civilian airport on the IoM. One 2,110m asphalt/concrete runway and one 1,255m asphalt runway.	Operational																	
X5306: Altcar	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Grenade and rifle firing range.	Operational																	
X5402: ARDGLASS	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Air General, HM Ships, submarine exercises.	Operational																	
X5403: PEEL	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Military activity area for Air General, HM Ships, Submarine Exercises.	Operational																	
X5406: JUNIPER ROCK	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer's website or a consenting authority's portal	Military activity area for Air General, HM Ships, Submarine Exercises.	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
X5407: MAGEE	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Air General, HM Ships, submarine exercises.	Operational																	
X5408: BEAUFORT	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Military activity area for Air General, HM Ships, Submarine Exercises.	Operational																	
X5525: BALLANTRAE	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Military activity area for Air General, HM Ships, Submarine Exercises.	Operational																	
X5526: CORSEWALL	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Military activity area for Air General, HM Ships, Submarine Exercises.	Operational																	
X5527: MAIDEN	Oceanwise	Medium – Data has been obtained from the public domain but not from the developer’s website or a consenting authority’s portal	Air General, HM Ships, submarine exercises.	Operational																	

1.17 Offshore Cumulative Effects Matrix - Military, Aviation and Radar - Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
D201B: ABERPORTH	86.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D201D: ABERPORTH	125.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D201H: ABERPORTH	113.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D401: BALLYKINLER	104.6	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D402A: LUCE BAY (N)	76.7	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D402B: LUCE BAY (N)	103.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D402C: LUCE BAY (N)	109.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D403: LUCE BAY	73.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D403A: LUCE BAY	96.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
D405: KIRKCUDBRIGHT	50.6	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
D406: ESKMEALS	15.3	Operational	d	a	e	a	d	d	d	d	d	d	d	d	d
D406B: ESKMEALS	9.8	Operational	d	a	e	a	d	d	d	d	d	d	d	d	d
D406C: ESKMEALS	6.4	Operational	d	a	e	a	d	d	d	d	d	d	d	d	d
D509: CAMPBELTOWN	125.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Isle of Man	28.4	Operational	d	d	d	d	d	a		d	d		d	d	d
X5306: Altcar	64.9	Operational	d	a	e	a	d	d	d	d	d	d	d	d	d
X5402: ARDGLASS	71.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5403: PEEL	43.7	Operational	d	a	a	a	d	d	d	d	d	d	d	d	d
X5406: JUNIPER ROCK	117.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5407: MAGEE	96.4	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5408: BEAUFORT	85.2	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5525: BALLANTRAE	125.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5526: CORSEWALL	125.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
X5527: MAIDEN	128.7	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

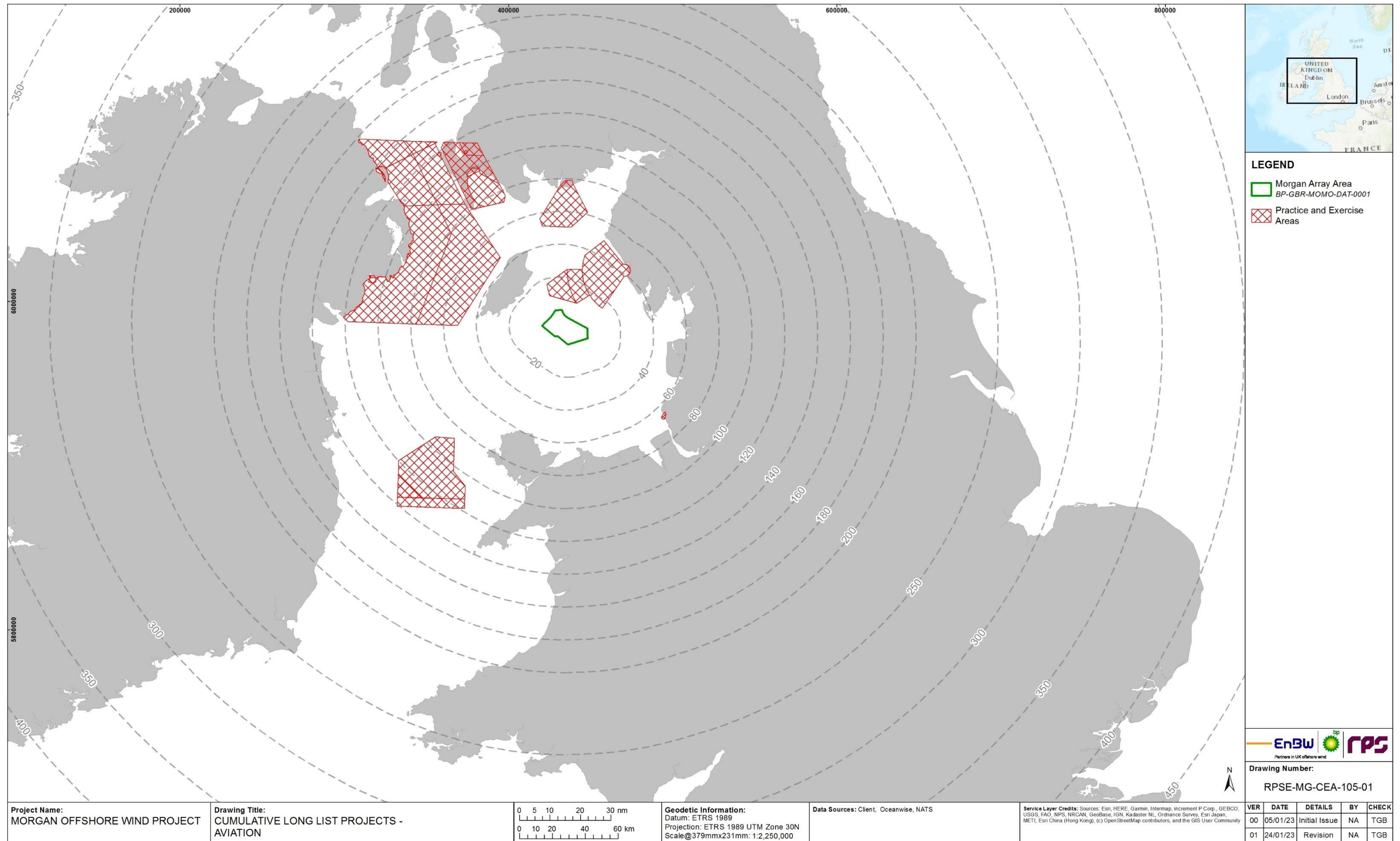


Figure 1.13: Military, aviation and radar projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

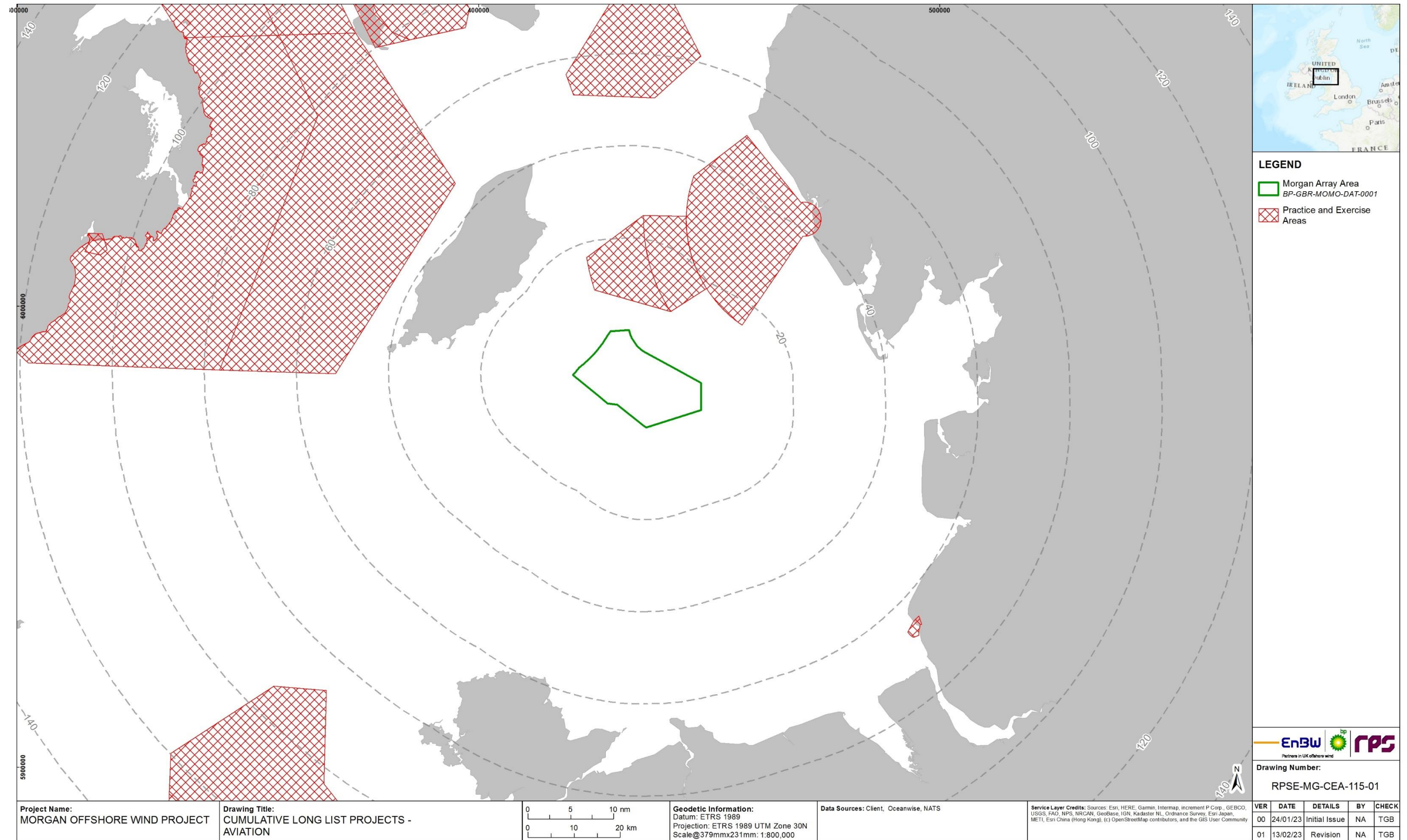


Figure 1.14: Military, aviation and radar projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the Irish Sea).

1.18 Offshore Cumulative Effects Matrix – Coastal - Temporal

	Consenting/Pre-Construction
	Construction
	Operations and Maintenance
	Decommissioning

1.18.1.1 The following coastal projects, plans and activities are shown in Figure 1.15 and Figure 1.16.

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)															
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055		
304888: Dublin Port, off Jetty Road and Breakwater Road South, Terminal Road South, Alexandra Road Extension, Alexandra Road, Tolka Quay Road and Promenade Road, Dublin 1 and 3.	An Bord Pleanála	High – Data has been obtained from the developer’s website or a consenting authority’s portal	15 year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings.	Operational																
727 - Simulated oil spill spraying operations	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The scheme consists of refurbishing the remaining eastern section of the inner flood embankment (approximately 2km) and then breaching the outer embankment at four locations to allow the land in-between to revert back to intertidal habitat.	Operational																
Belfast Flood Alleviation Scheme	DAERA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	There will be a 215m stretch of in-river piling works required along the existing Ravenhill Quay Wall. The existing quay wall has visible structural impairments. Sheet piles will be installed at a distance of between 5-10m from existing wall and backfilling behind this will stabilise the quay wall.	Submitted but not yet determined																

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)												
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Bord Gais Networks Dublin. Ref No. FS006104	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for a gas pipeline trenchless crossing of River Tolka, Dublin.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Bridle Footbridge Replacement	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Bridle footbridge carries bridleway 37 and 79 along the south bank of the River Ribble crossing a tributary. The existing 12m span bridge was demolished following flood damage in February 2020. This scheme is for the replacement of this bridge. A 20m span, 3.5m wide bridge will be installed at a minimum of 1.3m higher than the pre-existing.	Operational	Yellow												
Broadmeadow Way Greenway PL06F.304624 (FS006909)	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Fingal County Council proposes to develop the Broadmeadow Way, a new greenway (shared footpath and cycleway).	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
CBC1 W16107 Leven Viaduct	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Leven Viaduct site comprises two approach embankments on either side of Leven Viaduct span. This project is required to protect the railway embankment from further erosion to ensure the stability of the railway line. The works include a section of new stone armour, re-pointing and repairs to existing pitching.	Operational	Yellow	Yellow											
CBC1 W170100 Threadlow Point Embankment	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The defence comprises an embankment variously protected by roughly dressed masonry pitching, rock armour and gabion baskets. Carry out essential repairs to enhance the resilience of the defence to maintain the upkeep of the asset and public safety.	Submitted but not yet determined	Yellow												
CBC1 W21050 Parton to Harrington Sea Wall No 3	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Parton to Harrington Sea Wall No. 3 is a 0.45km section of coastal defence. Preventative works are required to maintain the operational railway line and mitigate against a potential wash out. UTX needs to be repaired.	Operational	Yellow	Yellow	Yellow	Yellow									

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
CBC1 W6158 Meathop Embankment	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Meathop Embankment is a sea defence between Arnside and Grange over Sand station. Areas with missing masonry or open joints will be raked out before being mortar filled to match the existing, the joints will be fully filled and trowelled off level with the pitching.	Operational	Yellow	Yellow	Yellow											
CBC1 W630675 Calder Viaduct and Approaches	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The project’s aim is to repair the existing defences to prevent further erosion and ensure the continued stability of the railway.	Operational	Yellow	Yellow												
CBC1/W670350 Nethertown - St Bees Sea Walls	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	It is proposed to reduce the height of the beach cliff by approximately 1m by removing material. It is also proposed to repair the existing stepped concrete and rock armour defence to the north of the unprotected section. This involves concrete repairs, the removal of the existing rock armour and the installation of new rock armour.	Operational	Yellow	Yellow												
CBC2 W30150 Parton - Harrington Sea Walls No.5 (157998)	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Parton - Harrington Sea Walls No.5 is a 1.3km section coastal defence. The project’s aim is to repair the existing sea defences to prevent further erosion and ensure the continued stability of the railway.	Operational	Yellow	Yellow												
Clearance of Seawater Intake at BAE Systems (Barrow)	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Seawater clearance.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow						
Coastal defence repair and Improvement at Barmouth Bay Holiday Village	The Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction, Flood defence scheme. The flood defence would prevent overtopping during 1 in 100 year fluvial and 1 in 1000 year tidal events.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow						
Coastal Monitoring Wave Buoy Network	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The national network of regional coastal monitoring programmes of England (NNRCMP) consists of 6 regional programmes who monitor coastal processes in support of coastal management and research.	Operational	Yellow	Yellow	Yellow											

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Construction of new berthing facilities at D3, Belfast Harbour	DAERA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction of new berthing facilities at D3 dock in Belfast Harbour for project cargo, break bulk, and dry bulk during the cruise ship off season	Submitted but not yet determined																	
Cumbria Coastal Activities Centre Slipway	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction of a marine slipway to allow craft associated with the Activity Centre to access the beach and water from the quayside. The slipway will be approximately 38m long by 4.5m wide. The slipway is to be constructed of steel sheet piles, suitable fill material and a concrete deck as a result of the local conditions.	Operational																	
Devonshire Dock Quay	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	BAE Systems’ site at Barrow-in-Furness is to be the subject of a major facilities investment programme over the next 10 years, known as the Site Redevelopment Programme (SRP).	Operational																	
Dublin City Council Cycleway Ref No. FS006503	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction of approximately 2km of segregated pedestrian and cyclist facilities.	Submitted but not yet determined																	
Dublin Port Company MP2 Project	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore application in respect of the construction of a new Ro-Ro Jetty (Berth 53), the re-orientation of the already consented Berth 52, the lengthening of Berth 50A, the redevelopment of Oil Berth 3, the construction of passenger terminal buildings and a heritage zone, dredging and ancillary site works.	Submitted but not yet determined																	
Dubmill Point Repairing of Groynes	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Cumbria County Council proposes to undertake a series of maintenance works to the existing coastal defences at Dubmill Point, near Allonby, Cumbria. The groynes require maintenance and repairs.	Operational																	
Duddon Estuary pipeline remediation works	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Remediation works for a section of exposed gas pipeline crossing the Duddon Estuary. Deposit of frond mattress,	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Dun Laoghaire Bath refurbishment Ref No. FS005832	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore lease application for the refurbishment of the dilapidated baths site.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dun Laoghaire Harbour Company. Ref No. FS006713	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore Licence application for the provision and maintenance of existing moorings within Dun Laoghaire Harbour.	Submitted but not yet determined														
Dun Laoghaire Rathdown County Council - Corbawn Lawn Ref No. FS006826	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The proposed works involve the transport to site of rock across the foreshore at Corbawn Lane Beach Access, Shankill, Co Dublin.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow			
Dun Laoghaire. Removal of the Linkspan FS006433	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore application for decommissioning works to facilitate the removal of the Linkspan. It is proposed to dismantle the linkspan using a pontoon and harbour mobile crane. The linkspan will be separated for lifting ashore and then processed on shore by manually cutting the steelwork. The four piles supporting the restraining system are to be burnt off just above the seabed.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow							
Eastham Hydropower Project	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The proposal is to install two Archimedean Screws in the currently disused lock at Eastham.	Operational	Yellow	Yellow	Yellow											
Fingal County Council. Ref No. 301458	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction of a storm water outfall to facilitate a residential development and public infrastructure.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Frazer Ferries Foreshore lease application for construction of a slipway and associated landing facilities for a Car	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore lease application for construction of a slipway and associated landing facilities for a car ferry.	Submitted but not yet determined														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Ferry Reg No. FS005705																		
FS006806 Dublin Port Company Pontoon at Berth 50	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore lease application for the provision of a new Pontoon at Berth 50 to accommodate Dublin Port Company Tug Boats.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Greater Dublin Drainage Project Ref No. PC0152	An Bord Pleanála	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Greater Dublin Drainage Project comprising of a Regional Waste Water Treatment Plant and Associated Orbital Drainage Network and Marine Outfall and a new Regional Bio-solids Storage Facility.	Permitted but not yet implemented														
Harbour reclamation	Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Undertaking of marine development works comprising the reclamation of 2.6ha area of the harbour (including 1ha already consented in License 10/07/ML/2) and the construction of a 270m solid quay.	Operational	Yellow	Yellow	Yellow											
Hesketh Out Marsh East (HOME) Management Realignment Scheme	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Saltmarsh recreation by managed realignment at Hesketh Out Marsh.	Operational	Yellow													
Howley Weir	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The proposal comprises a single Archimedes screw turbine, a turbine house building, trash screening, access improvements, an electrical substation and underground cabling. The scheme is expected to generate a peak power output of 160kW and an average annual energy production of 0.5GWh.	Under construction	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Independent Pipeline Company Ltd. Ref No. FS005704	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for an aviation fuel pipeline under the River Tolka.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Irish Water – Arklow Ref no. 300304 (FS006614)	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for marine site investigation works associated with the construction of a proposed waste water treatment plant in Arklow.	Submitted but not yet determined														

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)																
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055			
Irish Water- Dun Laoghaire. Ref No. FS006543	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for extending the storm water outfall out to the sea below MLWS.	Submitted but not yet determined																	
Irish Water Greater Dublin Drainage Outfall FS006843	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Application for a Foreshore Licence to enable the construction of a 5.2km marine section of a total 5.9km outfall pipeline, including a multipoint marine diffuser, as part of the Greater Dublin Drainage Project.	Submitted but not yet determined																	
Irish Water Omeath Sewerage Scheme. Ref No. FS006575	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for the purpose of extending an existing outfall pipe and associated works in connection with the proposed Omeath Waste Water Treatment Plant.	Operational																	
Irish Water- Swords. Ref No. FS005738	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application to replace existing outfall for Swords waste water treatment expansion.	Operational																	
Irish Water- Loughshinny. Ref No. FS005749	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for change of use of existing septic tank outfall to an emergency outfall for the proposed new sewage pumping station.	Operational																	
Irish Water-Lusk. Ref No. FS005745	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore licence application for an emergency outflow pipe for the pumping station at Lusk waste water treatment plant.	Operational																	
Isle of Man Interconnector Cable - Cable Protection Remedial Works	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	<ol style="list-style-type: none"> Cooling water intake and coarse screen removal and cleaning. Desilting of the drumscreen chambers. Fitting and removal of stop log gates. Removal of residual debris from the drumscreen chambers once they are dewatered. Diving activities to inspect coarse screen runners and replace sacrificial anodes. Fitting and removal of the Armfield gates 	Operational																	

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Isle of Man to UK Interconnector Cable - Maintenance and Repair	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Coarse screen removal, cleaning and reinstallation and the cooling water intake. Stop log gate installation and removal, Drumscreen forebay dewatering and cleaning, Drumscreen maintenance, inspection and testing. Marine outfall Sea plug installation and removal	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Kirkby-in-Furness Down	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The project aim is to replace 388yds of running rails on one of the two sets of track at the location, which includes a small viaduct over a tidal channel known as Kirkby Pool.	Operational	Yellow													
Liverpool South Dock Wall Repairs	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The Liverpool south dock wall (River Walk) runs adjacent to the Albert dock complex, over a period of time voids have developed on the seaward side of the main retaining dock wall. This project aims to repoint and fill these voids with new stone to help support the remainder of the wall avoiding major costly works in the near future.	Operational	Yellow													
Llandudno Firework display	The Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Marine licence application for explosives below MHWS - firework display.	Operational	Yellow	Yellow												
Lune Viaduct Spans 8 to 10	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Network Rail have instructed AmcoGiffen to provide a core report for the foundations of Piers 2 and 3 of the Lune Viaduct (SD 47150 62340) in order to prove foundation depths and the underlying material composition.	Operational	Yellow													
Marker buoy placement: Ormonde Dropped Object	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Marker boy for dropped objects (a rotor and three wind turbine blades) at the Ormonde Offshore Wind Farm.	Operational														
Middleton Wastewater Treatment Works Long Sea Outfall - Maintenance	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Maintenance activities.	Operational	Yellow	Yellow	Yellow											

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
National Grid Transmission	Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Construction, deposit, removal.	Operational	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow								
Navigation Marker Framework	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Inspection, maintenance and repair of United Utilities Navigation Markers.	Operational	Yellow	Yellow												
Network Rail - Brantsy to Parton	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Repairs to Brantsy to Parton sea wall - a 1.65km long coastal defence located adjacent to the town of Whitehaven in Cumbria. The defence commences north of Whitehaven station and ends at Tanyard Bay, south of Parton station.	Operational	Yellow													
Opening of Afon Dysynni channel for internal drain ditches and flood risk	The Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Deposit and removal.	Operational	Yellow	Yellow												
Preston & South Ribble Flood Risk Management Scheme - Phases 1 and 2	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The main objective is to reduce the high level of flood risk to 4,778 properties (which includes 517 businesses) in Preston & South Ribble. The Scheme runs to the south of Preston City Centre, along a 4.5km stretch of the Ribble, extending upstream from Liverpool Road Bridge to Walton-Le-Dale. It also includes a 4km stretch of the Darwen from the confluence with the Ribble up to Higher Walton.	Operational	Yellow	Yellow												
Project Neptune Natural Revetment	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Associated British Ports (ABP) Fleetwood is proposing to undertake works to a suspended quay and part of the dock walls in Fish Dock, Port of Fleetwood. The proposed works will involve the removal of the derelict suspended quay and sheet piled wall and the creation of an ecologically favourable landscaped revetment in its place.	Operational	Yellow													
Rathdown Upper and Rathdown	An Bord Pleanála	High – Data has been obtained from the	Integrated harbour/marina mixed development at Rathdown Upper and	Operational	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)														
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055	
Lower/Greystones Harbour and North Beach, Greystones, Co. Wicklow		developer’s website or a consenting authority’s portal	Rathdown Lower/Greystones Harbour and North Beach, Greystones, Co. Wicklow																
Ravensburg Ltd. Ref No. FS006433	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore application for the construction of a public boardwalk with a reinforced glazed flood defence wall on top of the quay wall.	Submitted but not yet determined															
Revetment Repairs, Belfast	DAERA	High – Data has been obtained from the developer’s website or a consenting authority’s portal	215m Stretch of in-river piling to prevent further collapse of Ravenhill Quay Wall. Installation of sheet piles.	Operational															
RNLI North Division - Regional Licence for Low Impact Maintenance Works	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	1. Maintenance to Moorings 2. Maintenance to Pontoon Berths (and associated pilings, link-spans, quay walls and approach structures) 3. Minor beach re-profiling works 4. Maintenance to Lifeboat Station Boathouses, slipways & launch ramps 5. Maintenance Activities associated with safety of lifeboat launch and recovery 6. Maintenance to beach lifeguard units 7. Navigational Dredging	Operational															
Rock armour maintenance work at Caldy Golf Club	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Maintenance of existing rock armour coastal defences on the banks of the River Dee.	Operational															
Routine maintenance, inspection and testing at Heysham 2 power station	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Themed inspection examining control and supervision of operations and maintenance.	Operational															
SID Ref: 306177: Seabank, Castlebellingham, Co. Louth and Salterstown,	An Bord Pleanála	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Coastal protection works at two locations within the Dundalk Bay SAC and SPA.	Operational															

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
Annagassan, Co. Louth.					Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Techworks Marine Foreshore Lease/Licence application for placement of monitoring buoys. Ref No. FS006758	Irish Government	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Foreshore Lease/Licence application for placement of monitoring buoys.	Operational														
The People's Project - Bramley-Moore Dock	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Everton Stadium Development Limited are applying to Liverpool City Council ('LCC') for full planning permission for the development of a stadium with associated facilities and infrastructure on the site of Bramley-Moore Dock (BMD), Regent Road, Liverpool.	Operational	Blue	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Tintern Wireworks Bridge Refurbishment	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Tintern Wireworks Bridge refurbishment. The proposed works are for refurbishment and strengthening of the bridge to reinstate vehicle access up to three tonnes and adequate pedestrian access.	Operational	Yellow													
Trial seaweed farm	The Welsh Marine Planning Portal	High – Data has been obtained from the developer’s website or a consenting authority’s portal	Trial seaweed farm. Will be the first community owned Seaweed and Shellfish farm in Wales.	Operational	Yellow	Yellow	Yellow											
Walney Channel Sewer Maintenance	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The sewer in the Walney Channel, Barrow suffers from ingress and we are proposing to carry out minor maintenance works to remove the existing manhole covers, carry out CCTV to confirm the condition of the sewer and then replace the covers including any concrete repairs on a like for like basis as required.	Operational	Yellow													
Walney Island Causeway Remedials	MMO	High – Data has been obtained from the developer’s website or a consenting authority’s portal	The causeway connects Barrow in Furness with Walney Island. These works would include pre-fabricating 4 x reinforced concrete posts and 1 x 6ftx3ft concrete slab and storing them close off	Operational	Yellow													

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Data source	Data confidence assessment	Capacity/scale/description	Status of project/plan	Temporal overlap with the Morgan Generation Assets (blue line denotes the Morgan Generation Assets construction window)													
					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2035-2055
			site until low tide so they can be installed at the appropriate time.															

1.19 Offshore Cumulative Effects Matrix – Coastal– Spatial

a	Included as part of the topic baseline and hence not considered within the cumulative effect assessment.
b	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative effect assessment: Screened in to assessment.
c	Potential cumulative effect exists: Screened in to assessment.
d	No conceptual or physical effect-receptor pathway: Screened out of assessment.
e	Low data availability: Screened out of assessment.
f	No temporal overlap: Screened out of assessment.
g	Project has been withdrawn from development or operation.

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
304888: Dublin Port, off Jetty Road and Breakwater Road South, Terminal Road South, Alexandra Road Extension, Alexandra Road, Tolka Quay Road and Promenade Road, Dublin 1 and 3.	143.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
727 - Simulated oil spill spraying operations	0.0	Operational	d	a	e	a	d	d	d	a	d	d	d	d
Belfast Flood Alleviation Scheme	128.3	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
Bord Gais Networks Dublin. Ref No. FS006104	151.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Bridle Footbridge Replacement	74.4	Operational	d	d	d	a	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Broadmeadow Way Greenway PL06F.304624 (FS006909)	141.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d
CBC1 W16107 Leven Viaduct	53.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d
CBC1 W170100 Threadlow Point Embankment	53.4	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
CBC1 W21050 Parton to Harrington Sea Wall No 3	51.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
CBC1 W6158 Meathop Embankment	62.5	Operational	d	d	d	a	d	d	d	d	d	d	d	d
CBC1 W630675 Calder Viaduct and Approaches	48.9	Operational	d	f	d	a	d	d	d	d	d	d	d	d
CBC1/W670350 Nethertown - St Bees Sea Walls	51.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d
CBC2 W30150 Parton - Harrington Sea Walls No.5 (157998)	62.7	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Clearance of Seawater Intake at BAE Systems (Barrow)	38.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Coastal defence repair and Improvement at Barmouth Bay Holiday Village	126.6	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Coastal Monitoring Wave Buoy Network	39.2	Operational	d	d	d	a	d	a	a	d	d	d	b	d
Construction of new berthing facilities at D3, Belfast Harbour	128.5	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d
Cumbria Coastal Activities Centre Slipway	57.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Devonshire Dock Quay	38.5	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Dublin City Council Cycleway Ref No. FS006503	146.8	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening													
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics		
Dublin Port Company MP2 Project	141.5	Submitted but not yet determined	d	d	d	d	d	d	d	e	d	d	d	d	d	d
Dubmill Point Repairing of Groynes	86.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Duddon Estuary pipeline remediation works	42.5	Operational	d	f	f	f	d	d	d	d	d	d	d	f	d	d
Dun Laoghaire Bath refurbishment Ref No. FS005832	149.5	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d	d
Dun Laoghaire Harbour Company. Ref No. FS006713	148.8	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Dun Laoghaire Rathdown County Council - Corbawn Lawn Ref No. FS006826	151.9	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Dun Laoghaire. Removal of the Linkspan FS006433	149.5	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Eastham Hydropower Project	88.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Fingal County Council. Ref No. 301458	143.2	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Frazer Ferries Foreshore lease application for construction of a slipway and associated landing facilities for a Car Ferry Reg No. FS005705	123.5	Submitted but not yet determined	d	d	d	d	d	d	d	d	d	d	d	d	d	d
FS006806 Dublin Port Company Pontoon at Berth 50	150.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Greater Dublin Drainage Project Ref No. PC0152	138.0	Permitted but not yet implemented	d	d	d	f	d	d	d	d	d	d	d	d	d	d
Harbour reclamation	76.8	Operational	d	d	f	a	d	d	d	d	d	d	d	d	d	d
Hesketh Out Marsh East (HOME) Management Realignment Scheme	64.5	Operational	d	a	d	f	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening												
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics	
Howley Weir	101.1	Under construction	d	d	d	a	d	d	d	d	d	d	d	d	d
Independent Pipeline Company Ltd. Ref No. FS005704	151.8	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Irish Water – Arklow Ref no. 300304 (FS006614)	183.6	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
Irish Water- Dun Laoghaire. Ref No. FS006543	149.4	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
Irish Water Greater Dublin Drainage Outfall FS006843	138.0	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d	d
Irish Water Omeath Sewerage Scheme. Ref No. FS006575	134.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Irish Water- Swords. Ref No. FS005738	144.5	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Irish Water-Loughshinny. Ref No. FS005749	133.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Irish Water-Lusk. Ref No. FS005745	139.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Isle of Man Interconnector Cable - Cable Protection Remedial Works	6.8	Operational	d	c	d	a	d	d	a	d	a	d	c	d	d
Isle of Man to UK Interconnector Cable - Maintenance and Repair	0.0	Operational	d	d	d	a	d	d	d	a	a	d	c	d	d
Kirkby-in-Furness Down	47.7	Operational	d	f	d	a	d	d	d	d	d	d	d	d	d
Liverpool South Dock Wall Repairs	79.8	Operational	d	d	f	f	d	d	d	d	d	d	d	d	d
Llandudno Firework display	65.2	Operational	d	d	f	f	d	d	d	d	d	d	d	d	d
Lune Viaduct Spans 8 to 10	64.6	Operational	d	d	d	a	d	d	d	d	d	d	d	d	d
Marker buoy placement: Ormonde Dropped Object	25.4	Operational	d	f	f	f	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Middleton Wastewater Treatment Works Long Sea Outfall - Maintenance	55.6	Operational	d	d	f	f	d	d	d	d	d	d	d	d
National Grid Transmission	109.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Navigation Marker Framework	59.6	Operational	d	d	d	a	d	f	d	d	d	d	d	d
Network Rail - Brantsy to Parton	59.4	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Opening of Afon Dysynni channel for internal drain ditches and flood risk	145.0	Operational	d	d	d	f	d	d	d	d	d	d	d	d
Preston & South Ribble Flood Risk Management Scheme - Phases 1 and 2	73.8	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Project Neptune Natural Revetment	50.6	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Rathdown Upper and Rathdown Lower/Greystones Harbour and North Beach, Greystones, Co. Wicklow	155.3	Operational	d	d	d	d	d	d	d	d	d	d	d	d
Ravensburg Ltd. Ref No. FS006433	152.9	Submitted but not yet determined	d	d	d	f	d	d	d	d	d	d	d	d
Revetment Repairs, Belfast	127.7	Under Construction	d	d	d	d	d	d	d	d	d	d	d	d
RNLI North Division - Regional Licence for Low Impact Maintenance Works	74.3	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Rock armour maintenance work at Caldy Golf Club	77.0	Operational	d	d	f	f	d	d	d	d	d	d	d	d
Routine maintenance, inspection and testing at Heysham 2 power station	57.2	Operational	d	d	d	a	d	d	d	d	d	d	d	d
SID Ref: 306177: Seabank, Castle Bellingham, Co. Louth and Salterstown, Annagassan, Co. Louth.	138.4	Operational	d	d	d	d	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Project, plan or activity name	Distance from Morgan Array Area (km)	Status of project/plan	Morgan Generation Assets topic screening											
			Physical Processes	Benthic Ecology	Fish Ecology	Marine Mammals	Offshore Ornithology	Commercial Fisheries	Shipping and Navigation	Marine Archaeology	Other Sea Users	Aviation and radar	SLVIA	Socio-economics
Techworks Marine Foreshore Lease/Licence application for placement of monitoring buoys. Ref No. FS006758	142.0	Operational	d	d	d	a	d	d	d	d	d	d	d	d
The People's Project - Bramley-Moore Dock	76.9	Operational	d	d	d	a	d	d	d	d	d	d	d	d
Tintern Wireworks Bridge Refurbishment	260.4	Operational	d	d	d	f	d	d	d	d	d	d	d	d
Trial seaweed farm	244.3	Operational	d	d	d	f	d	d	d	d	d	d	d	d
Walney Channel Sewer Maintenance	37.7	Operational	d	f	f	f	d	d	d	d	d	d	d	d
Walney Island Causeway Remedials	37.9	Operational	d	f	d	a	d	d	d	d	d	d	d	d

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

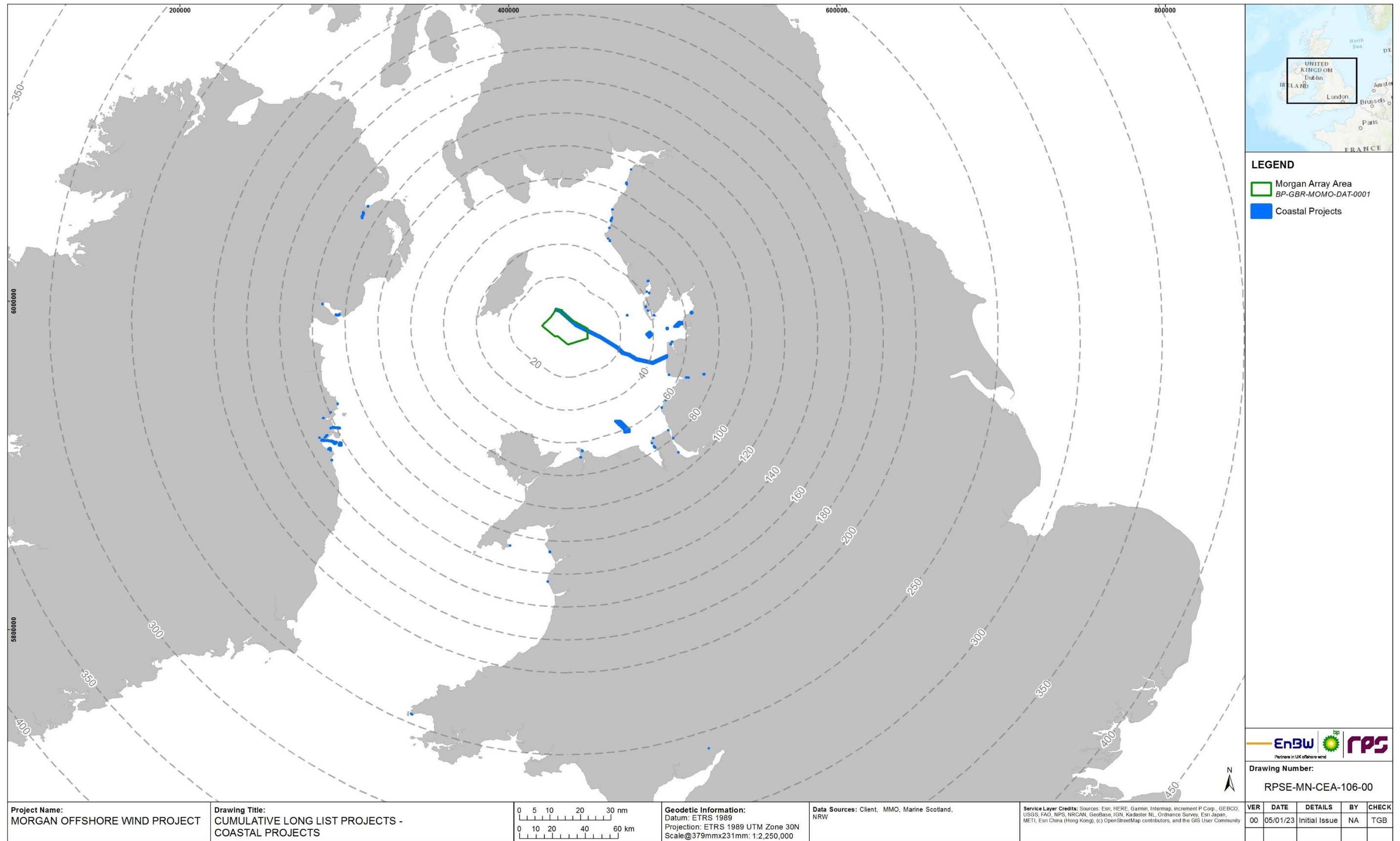


Figure 1.15: Coastal projects, plans and activities considered in the Morgan Generation Assets CEA.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

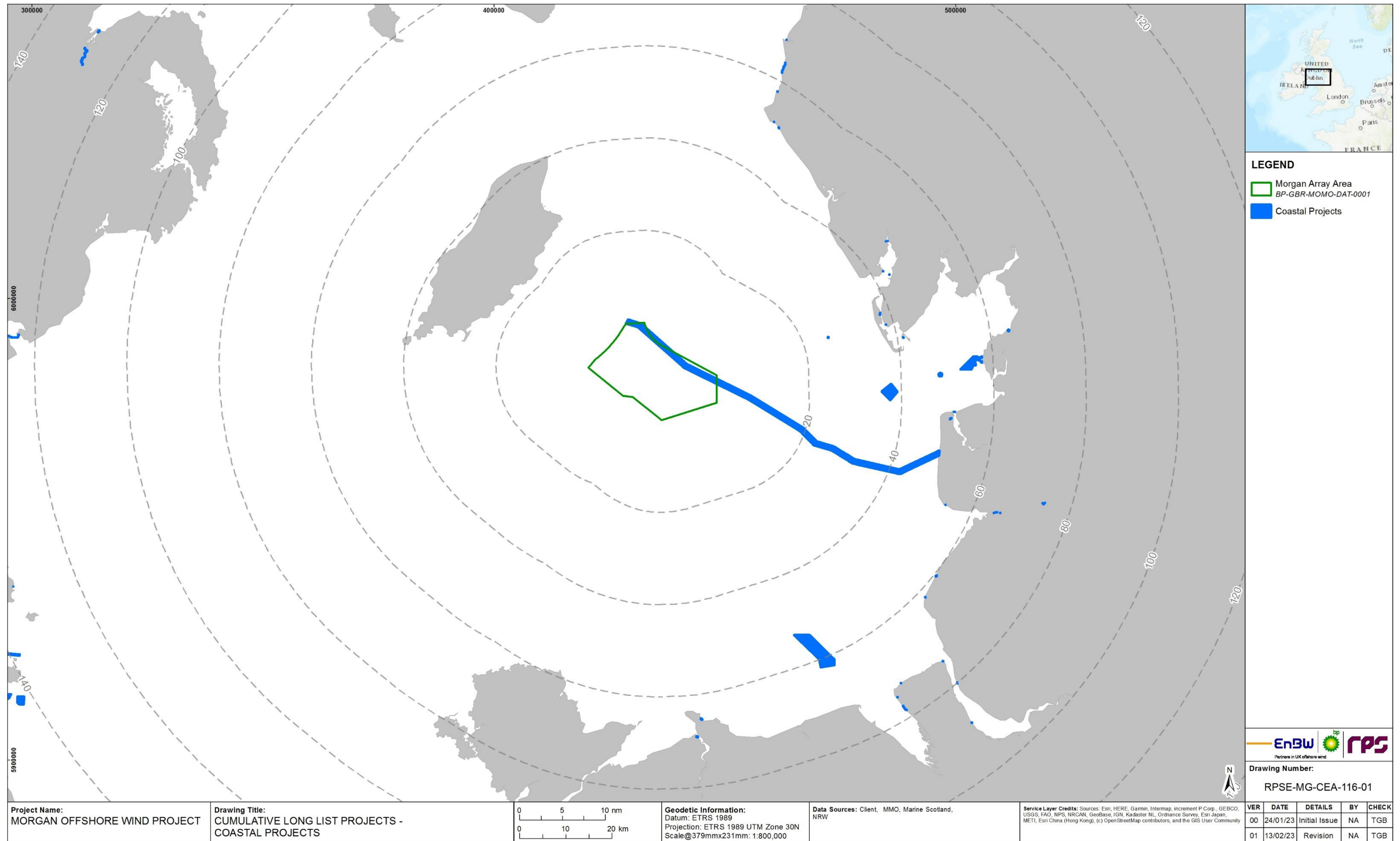


Figure 1.16: Coastal projects, plans and activities considered in the Morgan Generation Assets CEA (zoomed to the east Irish Sea).

1.20 References

Planning Inspectorate (2019) Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects, version 2. Available:
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/>. Accessed January 2023.