



Awel y Môr Offshore Wind Farm

Category 6: Environmental Statement

Volume 1, Chapter 1: Introduction

Date: April 2022

Revision: C

Application Reference: 6.1.1

Pursuant to: APFP Regulation 5(2)(a)



REVISION	DATE	STATUS/ REASON FOR ISSUE	AUTHOR:	CHECKED BY:	APPROVED BY:
A	August 2021	PEIR	GoBe Consultants	RWE	RWE
B	April 2022	ES	GoBe Consultants	RWE	RWE
C	May 2022	ES with updates	GoBe Consultants	RWE	RWE

www.awelymor.cymru

RWE Renewables UK Swindon Limited

Windmill Hill Business Park
 Whitehill Way
 Swindon
 Wiltshire SN5 6PB
 T +44 (0)8456 720 090
www.rwe.com

Registered office:
 RWE Renewables UK Swindon Limited
 Windmill Hill Business Park
 Whitehill Way
 Swindon

Contents

1	Introduction.....	9
1.1	The Awel y Môr Offshore Wind Farm.....	9
1.2	About the Applicant	9
1.3	Project overview	11
1.3.1	Project background.....	11
1.3.2	Project details	12
1.4	Purpose of the Environment Statement.....	16
1.5	The project team and structure of the ES	16
1.6	Consultation	31
1.7	Document availability	32
1.8	References	34

Tables

Table 1:	Structure of the ES.....	17
Table 2	Development team expertise	29

Figures

Figure 1:	The AyM Order Limits.....	15
-----------	---------------------------	----

Glossary of terms

TERM	DEFINITION
Array area	The area where the Wind Turbine Generators (WTGs), Offshore Substation Platforms (OSPs), associated foundations, inter-array cables, inter-platform cables, export cables (including the Gwynt y Môr offshore wind farm (GyM) interlink cable), a meteorological mast (met mast) (or suitable alternative such as floating LiDAR) and Permanent Vessel Moorings (PVMs) may be located.
AyM	The Awel y Môr Offshore Wind Farm project.
Export Cable Corridor (ECC)	The area where the offshore export cables will be installed, bringing power generated to the onshore cable circuits at landfall between Rhyl and Prestatyn.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS).
Design envelope/ Maximum Design Scenario (MDS)	The maximum design parameters of the combined project assets that result in the greatest potential for change in relation to the impacts assessed.
Environmental Statement (ES)	A document reporting the findings of the Environmental Impact Assessment (EIA) in accordance with the EIA Regulations.

TERM	DEFINITION
Grid connection point	The point at which the ECC connects to the National Grid (i.e. the existing National Grid Bodelwyddan substation).
Landfall	The Landfall denotes the location where the offshore export cables are brought ashore and jointed to the onshore export cables in transition joint bays.
Marine Licence	A licence required under the Marine and Coastal Access Act 2009 for marine works which is administered by Natural Resources Wales (NRW) Marine Licensing Team (MLT) on behalf of the Welsh Ministers.
Onshore Substation (OnSS)	Where the power supplied from the wind farm is adjusted (including voltage, power quality and power factor as required) to meet the UK System-Operator Transmission-Owner Code (STC) for supply to the National Grid substation.
Order Limits	The extent of development including all offshore and onshore works areas.
Preliminary Environmental Information Report (PEIR)	The PEIR was written in the style of a draft Environmental Statement (ES) and formed the basis of statutory consultation. Following that consultation, the PEIR documentation was updated into the final ES that accompanies the applications for the Development Consent Order (DCO) and Marine Licence.
Seascape, Landscape and Visual Impact Assessment (SLVIA)	ES chapter that sets out the results of the likely significant effects on seascape, landscape and visual amenity (application ref: 6.2.10).

Abbreviations and acronyms

TERM	DEFINITION
AfL	Agreement for Lease
AyM	Awel y Môr Offshore Wind Farm
AyMOWFL	Awel y Môr Offshore Wind Farm Limited (the Applicant)
BEIS	Department for Business, Energy and Industrial Strategy
DCO	Development Consent Order
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
ES	Environmental Statement
GyM	Gwynt y Môr
HVAC	High Voltage Alternating Current
HRA	Habitats Regulations Assessment
MW	Megawatt
NSIP	Nationally Significant Infrastructure Project
OSP	Offshore Substation Platform
OnSS	Onshore Substation
PEIR	Preliminary Environmental Information Report
PINS	The Planning Inspectorate
RD	Rotor Diameter
SoCC	Statement of Community Consultation

TERM	DEFINITION
SoS	Secretary of State
TCE	The Crown Estate
WTG	Wind Turbine Generator

Units

UNIT	DEFINITION
km	Kilometre
kV	Kilovolt
m	Metre
MW	Megawatt

1 Introduction

- 1 The Awel y Môr Offshore Wind Farm (hereafter referred to as AyM) is being developed by Awel y Môr Offshore Wind Farm Ltd. (AyMOWFL) (hereafter referred to as 'the Applicant'). This chapter of the Environmental Statement (ES) introduces AyM, the Applicant and the purpose and structure of the ES.

1.1 The Awel y Môr Offshore Wind Farm

- 2 AyM is a proposed sister project to the operational Gwynt y Môr Offshore Wind Farm (GyM) which is located off the coast of north Wales (Figure 1). GyM has been operational since 2015. The developer has invested £90m in Wales during construction, and has since created more than 100 long-term, skilled jobs at the Port of Mostyn in Flintshire, Wales.
- 3 AyM will comprise an array of offshore Wind Turbine Generators (WTGs) with an overall capacity greater than 350 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under Section 15(3B) of the Planning Act 2008. Such projects require a Development Consent Order (DCO) to be granted by the relevant UK Secretary of State (SoS); in this case, the SoS for Business, Energy and Industrial Strategy (BEIS). Marine planning is a matter which is devolved to the Welsh Government, and therefore a marine licence is also required under the Marine and Coastal Access Act 2009. The Applicant is seeking these consents through parallel applications to the SoS for BEIS and Welsh Government, respectively. Further information about the process of these applications can be found in Volume 1, Chapter 2: Policy and Legislation (application ref: 6.1.2).

1.2 About the Applicant

- 4 AyM is being developed under a joint venture arrangement, through the company Awel y Môr Offshore Wind Farm Ltd (AyMOWFL- the 'Applicant'). The project partners of AyMOWFL are RWE (60%), Stadtwerke München (30%) and Siemens Financial Services (10%). RWE is leading the development of the project on behalf of the project partners.

- 5 RWE is already the largest renewable energy operator in Wales, generating one third of all Wales' renewable electricity. As a leading European energy company, RWE has the goal of making a significant contribution towards Welsh Government targets to generate 70% of electricity needs from renewable energy sources by 2030 and to reach net-zero by 2050.
- 6 UK Government targets for offshore wind have been noted as 40GW by 2030 within the draft National Policy Statements (NPS). A revision has been introduced in the April 2022 UK Government Energy Security Strategy to increase this from 40GW to 50GW by 2030, 45GW of which is targeted to be provided by offshore wind.
- 7 RWE's portfolio includes involvement in an installed capacity of 957 MW in Wales. RWE operates the following projects:
 - ▲ Three offshore wind farms off the coast of North Wales:
 - GyM (576 MW);
 - Rhyl Flats (90 MW);
 - and the UK's first large scale offshore wind farm which RWE also built - North Hoyle (60 MW).
 - ▲ Brechfa Forest West Onshore Wind Farm in Carmarthenshire (57.4 MW),
 - ▲ Mynydd y Gwair Onshore Wind Farm north of Swansea (32.8 MW),
 - ▲ Rhyd y Groes Onshore Wind Farm on Anglesey (6.6 MW),
 - ▲ and construction of the Clocaenog Forest Wind Farm (96 MW) in North Wales is underway.
 - ▲ And six hydro sites in and around North Wales:
 - Cwm Croesor Hydro (0.505 MW),
 - Cwm Dyli Hydro (9.87 MW),
 - Dolgarrog Low Head Hydro (15 MW),
 - Dolgarrog High Head Hydro (17 MW),
 - Dilyn Hydro (0.5 MW),
 - Garnedd Hydro (0.5 MW).

- 8 In addition to contributing to reducing carbon emissions and contributing to the decarbonisation of Welsh electricity, these projects have brought significant investment to their neighbouring communities during both the construction and ongoing operational phases.
- 9 RWE is also developing Pen March which completed a community consultation in Spring 2021 (up to 7 turbines; 30 MW) north-east of Merthyr Tydfil), Gaerwen (up to 15 turbines in Denbighshire) and Abertillery (up to 7 turbines, over 10 MW in Blaenau Gwent) which both received EIA Scoping Direction in the autumn, and Alwen Forest (up to 33 MW) which underwent a second round of consultation events in early 2020.
- 10 RWE has also created apprenticeship programmes, which is described in detail in Report 5.1: Consultation Report.

1.3 Project overview

1.3.1 Project background

- 11 As a result of the increasing energy demand and the need to mitigate the causes of climate change, there is an urgent need for renewable energy to achieve a carbon-neutral economy. The need for the project, in the context of climate change and the policy drivers which AyM seeks to meet, is clearly demonstrated in the Planning Statement and Site Selection and Alternatives chapter of the ES (volume 1, Chapter 4) (application refs: 8.1 and 6.1.4 respectively). This urgency is further underlined in the United Nations Framework Convention on Climate Change (UNFCCC) IPCC Working Group 2 Report, and the associated Joint Statement by the COP26 UK Presidency, the COP27 Egyptian Presidency and the UNFCCC secretariat - Response to the report released on the 28th February 2022, which noted that the need is more urgent than ever with the rise in weather and climate extremes already leading to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt (SPM.B.1).

- 12 In February 2017, The Crown Estate (TCE) announced the opportunity for developers to apply for project extensions to operating offshore wind farms. Eight applications were received, including AyM, which met the specified criteria. The 2017 Extensions Round of projects constituted a 'plan' for the purposes of the Habitats Regulations Assessment (HRA), and as such TCE undertook a plan-level HRA.
- 13 In August 2019, TCE published the plan-level HRA which assessed the potential impacts of the proposed projects on relevant nature conservation sites of the European Natura 2000 network. Seven of the eight extension projects, including AyM, proceeded to the award of leasing rights as part of the 2017 extensions round. The Agreements for Lease (AfLs) for these projects were awarded in summer 2019. On 11 June 2020, the Applicant submitted a scoping report (innogy, 2020) for AyM to the Secretary of State (SoS) and received a formal scoping opinion (PINS, 2020) on 22 July 2020. The Applicant produced a Preliminary Environmental Information Report (PEIR) on 31 August 2021 for the basis of statutory consultation. Statutory consultation ran for six weeks and concluded on 11 October 2021. Following the statutory consultation period, responses were collated and considered. In having regard to those responses, the Applicant has incorporated additional information requested into the ES, as well as making design changes to the project. A comprehensive account of consultation undertaken to date can be found in detail in Report 5.1: Consultation Report.
- 14 The Applicant has prepared this ES on the basis of the project information submitted for statutory consultation under Sections 42 and 47 of the Planning Act 2008.

1.3.2 Project details

- 15 AyM is a proposed sister project to the operational GyM off the north-east coast of Wales. GyM consists of 160 WTGs and supplies electricity to approximately 400,000 homes annually.

- 16 AyM will comprise up to 50 WTGs and all associated infrastructure required to transmit the electricity generated to shore, where it will be transmitted by the onshore infrastructure to the existing National Grid Bodelwyddan substation, as well as all infrastructure required to operate and maintain the wind farm. The transmission voltage will be up to 400 kV, with a maximum of two export circuits, and will use High Voltage Alternating Current (HVAC) technology.
- 17 At AyM, offshore WTGs will be connected via subsea cables to Offshore Substation Platforms (OSPs) that will transform the voltage and transmit the power generated via subsea cables within the offshore Export Cable Corridor (ECC) to shore east of Rhyl.
- 18 At this stage in the AyM development process, decisions on exact locations of infrastructure and the precise technologies and construction methods employed cannot be made. Therefore, the project description at this stage sets out the main components and parameters of the project and the design envelope approach (often referred to as the 'Rochdale Envelope') has been used to provide certainty that the final project as built will not exceed these parameters, whilst providing the necessary flexibility to accommodate further project refinement during the detailed design phase post-consent. The design envelope therefore sets a maximum and, where relevant, a minimum realistic worst-case scenario against which environmental effects have been assessed.
- 19 Two indicative WTG scenarios are considered:
- ▲ Larger WTG: The largest WTGs within the design envelope. For the purposes of assessment this is assumed to be up to 34 of the largest possible WTGs with a Rotor Diameter (RD) of up to 306 m; and
 - ▲ Smaller WTG: The greatest number of WTGs within the design envelope. For the purposes of assessment this is assumed to be up to 50 smaller WTGs with a RD of up to 250 m.
- 20 These scenarios are based on the physical dimensions of individual WTGs at either end of the design envelope, which in turn form the MDS values of the assessments presented in the ES. The electrical output of individual WTGs is not fixed against these parameters, however the final design, including the WTG model chosen, will be limited by these parameters as assessed consistently throughout the ES and as defined in the draft DCO (application ref: 3.1).

- 21 For onshore aspects, flexibility is required in terms of options for the number of export circuits, layout and technology requirements for the proposed Onshore Substation (OnSS), precise siting of onshore infrastructure and construction methods.
- 22 Connection to the National Grid will be made at Bodelwyddan in Denbighshire via onshore export cables installed underground between the landfall and the grid connection. The onshore export cable configuration will include up to two cable circuits connecting the offshore substation to the proposed OnSS and existing National Grid Bodelwyddan substations via a Landfall to the east of Rhyl and underground cables within an onshore ECC.
- 23 The Landfall denotes the location where the offshore export cables are brought ashore and jointed to the onshore export cables in Transition Joint Bays. The AyM Landfall location is within Ffrith beach, located to the east of Rhyl and adjacent to Rhyl Golf Club, extending to an area to the south of the railway.
- 24 One OnSS (HVAC) will be required for AyM and will be sited to the west of St Asaph Business Park in order to facilitate ease of connection to the National Grid.
- 25 The onshore cable corridor will be approximately 12 km in length from the Transition Joint Bays to the existing National Grid Bodelwyddan substation.
- 26 More information on the project design and location figures can be found in Volume 2, Chapter 1: Offshore Project Description (application ref: 6.2.1) and Volume 3, Chapter 1: Onshore Project Description (application ref: 6.3.1). The project Order Limits (OL) is presented in Figure 1.

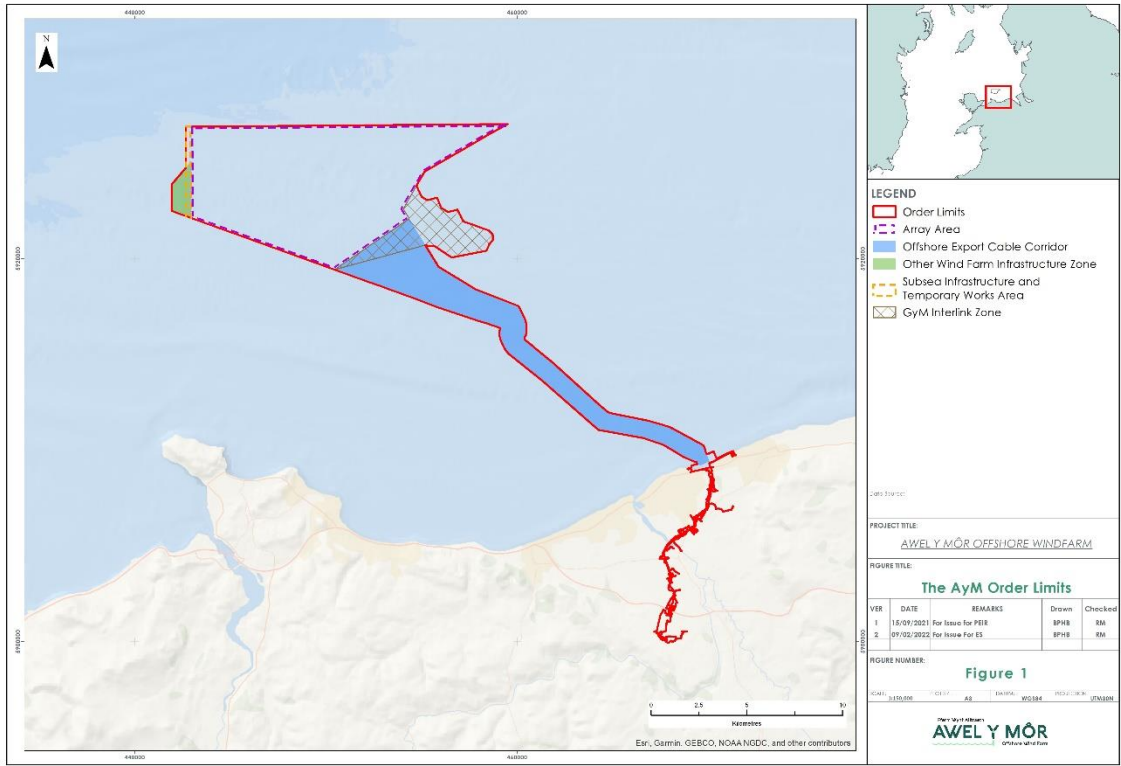


Figure 1: The AyM Order Limits.

1.4 Purpose of the Environment Statement

- 27 This ES sets out the findings of the Environmental Impact Assessment (EIA) to support the DCO and marine licence applications. The focus of the EIA is on the assessment of the effects which are likely to have significant impacts on the environment.
- 28 The ES has been informed by, and its scope is based upon, a scoping opinion received from the Planning Inspectorate (PINS) on behalf of the SoS. It also builds on, and updates information provided in the PEIR. Feedback from the PIER consultation has been considered and has informed both the final design of AyM as well as the content of this ES. Further details on the requirements of the DCO and marine licence applications are provided in Volume 1, Chapter 2: Policy and Legislation (application ref: 6.1.2).

1.5 The project team and structure of the ES

- 29 The AyM development team responsible for the production of this ES, is being led by RWE, with the assistance of lead EIA consultants GoBe Consultants Ltd. and their team of technical specialist sub-consultants. Additionally, Burges Salmon LLP is providing specialist legal advice throughout the process.
- 30 GoBe Consultants' EIA activities are accredited by the Institute of Environmental Management and Assessment under the EIA Quality Mark Scheme, which demonstrates GoBe's commitment to ensuring EIAs are undertaken at a high quality and in accordance with best practice.
- 31 Table 1 identifies the organisations that have contributed to the relevant sections of the assessment alongside the structure of the ES. Table 2 provides a brief summary of the development team and advisors.

Table 1: Structure of the ES.

DOCUMENT	TITLE	LEAD AUTHOR
Volume 1: Introductory Chapters and Annexes		
6.1.1..	Chapter 1: Introduction	GoBe Consultants
6.1.2..	Chapter 2: Policy and Legislation	GoBe Consultants
6.1.3..	Chapter 3: EIA Methodology	GoBe Consultants
6.1.4..	Annex 3.1: Cumulative Effects Assessment	GoBe Consultants
6.1.3.1.	Annex 3.2: Transboundary Screening	GoBe Consultants
6.1.3.2.	Chapter 4: Site Selection and Alternatives	GoBe Consultants
6.1.4.1.	Annex 4.1: SSA Identification of Area of Search Report	Royal Haskoning DHV
6.1.4.2.	Annex 4.2: SSA Shortlisting Outcomes Report	Royal Haskoning DHV
Volume 2: Offshore Chapters		

DOCUMENT	TITLE	LEAD AUTHOR
6.2.1..	Chapter 1: Offshore Project Description	GoBe Consultants
6.2.2..	Chapter 2: Marine Geology, Oceanography and Physical Processes	ABPmer
6.2.3..	Chapter 3: Marine Water and Sediment Quality	GoBe Consultants
6.2.4..	Chapter 4: Offshore Ornithology	APEM
6.2.5..	Chapter 5: Benthic Subtidal and Intertidal Ecology	GoBe Consultants
6.2.6..	Chapter 6: Fish and Shellfish Ecology	GoBe Consultants
6.2.7..	Chapter 7: Marine Mammals	SMRU Consulting
6.2.8..	Chapter 8: Commercial Fisheries	Poseidon Consulting Ltd
6.2.9..	Chapter 9: Shipping and Navigation	Anatec Ltd
6.2.10..	Chapter 10: Seascape, Landscape and Visual Impact Assessment	OP-EN
6.2.11..	Chapter 11: Offshore Archaeology and Cultural Heritage	Wessex Archaeology

DOCUMENT	TITLE	LEAD AUTHOR
6.2.12..	Chapter 12: Other Marine Users and Activities	GoBe Consultants
6.2.13..	Chapter 13: Military and Civil Aviation	Osprey Consulting Services Limited
6.2.14..	Chapter 14: Inter-relationships	GoBe Consultants
6.2.15..	Chapter 15: Offshore Conclusions	GoBe Consultants
Volume 3: Onshore Chapters		
6.3.1..	Chapter 1: Onshore Project Description	SLR Consulting
6.3.2..	Chapter 2: Onshore Landscape and Visual Impact Assessment	OP-EN
6.3.3..	Chapter 3: Socioeconomics	Hatch
6.3.4..	Chapter 4: Tourism and Recreation	Hatch
6.3.5..	Chapter 5: Onshore Biodiversity and Nature Conservation	SLR Consulting
6.3.6..	Chapter 6: Ground Conditions and Land Use	SLR Consulting

DOCUMENT	TITLE	LEAD AUTHOR
6.3.7..	Chapter 7: Hydrology, Hydrogeology and Flood Risk	SLR Consulting
6.3.8..	Chapter 8: Onshore Archaeology and Cultural Heritage	Wessex Archaeology
6.3.9..	Chapter 9: Traffic and Transport	SLR Consulting
6.3.10..	Chapter 10: Airborne Noise and Vibration	SLR Consulting
6.3.11..	Chapter 11: Air Quality	SLR Consulting
6.3.12..	Chapter 12: Public Health	SLR Consulting
6.3.13..	Chapter 13: Onshore Conclusions	SLR Consulting
Volume 4: Offshore Annexes		
6.4.2.1.	Volume 4, Annex 2.1: Physical Processes Baseline Technical Report	ABPmer
6.4.2.2.	Volume 4, Annex 2.2: Physical Processes Model Calibration	ABPmer
6.4.2.3.	Volume 4, Annex 2.3: Physical Processes Modelling Results	ABPmer

DOCUMENT	TITLE	LEAD AUTHOR
6.4.2.4.1	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 1)	Fugro
6.4.2.4.2	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 2)	Fugro
6.4.2.4.3	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 3)	Fugro
6.4.2.4.4	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 4)	Fugro
6.4.2.4.5	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 5)	Fugro
6.4.2.4.6	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 6)	Fugro
6.4.2.4.7	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 7)	Fugro

DOCUMENT	TITLE	LEAD AUTHOR
6.4.2.4.8	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 8)	Fugro
6.4.2.4.9	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 9)	Fugro
6.4.2.4.10	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 10)	Fugro
6.4.2.4.11	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 11)	Fugro
6.4.2.4.12	Volume 4, Annex 2.4: Seafloor and Shallow Geological Results (Array) (Part 12)	Fugro
6.4.2.5.1	Volume 4, Annex 2.5: Seafloor and Shallow Geological Results (Offshore ECC) (Part 1)	Fugro
6.4.2.5.2	Volume 4, Annex 2.5: Seafloor and Shallow Geological Results (Offshore ECC) (Part 2)	Fugro

DOCUMENT	TITLE	LEAD AUTHOR
6.4.2.5.3	Volume 4, Annex 2.5: Seafloor and Shallow Geological Results (Offshore ECC) (Part 3)	Fugro
6.4.2.5.4	Volume 4, Annex 2.5: Seafloor and Shallow Geological Results (Offshore ECC) (Part 4)	Fugro
6.4.3.1.	Volume 4, Annex 3.1: Water Framework Directive Compliance Assessment	GoBe Consultants
6.4.4.1.	Volume 4, Annex 4.1: Offshore Ornithology Baseline Characterisation Report	APEM
6.4.4.2.	Volume 4, Annex 4.2: Offshore Ornithology Displacement	APEM
6.4.4.3.	Volume 4, Annex 4.3: Offshore Ornithology Collision Risk Modelling	APEM
6.4.4.4.	Volume 4, Annex 4.4: Migratory Collision Risk Modelling	APEM
6.4.4.5.	Volume 4, Annex 4.5: Offshore Ornithology Scoping and Consultation Responses	APEM
6.4.4.6.	Volume 4, Annex 4.6: Offshore Ornithology Population Viability Analysis	APEM
6.4.5.1.	Volume 4, Annex 5.1: Benthic Ecology Subtidal Characterisation (Array)	Fugro

DOCUMENT	TITLE	LEAD AUTHOR
6.4.5.2.	Volume 4, Annex 5.2: Benthic Ecology Subtidal Characterisation (Offshore ECC)	Fugro
6.4.5.3.	Volume 4, Annex 5.3: Benthic Ecology Intertidal Characterisation	Fugro
6.4.6.1.	Volume 4, Annex 6.1: Fish and Shellfish Ecology Technical Baseline	GoBe Consultants
6.4.6.2.	Volume 4, Annex 6.2: Underwater Noise Technical Report	Subacoustech
6.4.7.1.	Volume 4, Annex 7.1: Marine Mammal Baseline Characterisation	SMRU Consulting
6.4.7.2.	Volume 4, Annex 7.2: Draft Outline Marine Mammal Mitigation Protocol	SMRU Consulting/GoBe Consultants
6.4.7.3.	Volume 4, Annex 7.3: Marine Mammal Quantitative Assessment Assumptions	SMRU Consulting
6.4.8.1.	Volume 4, Annex 8.1: Commercial Fisheries Baseline Report	Poseidon Consulting Ltd
6.4.8.2.	Volume 4, Annex 8.2: Commercial Fisheries Consultation Record	Poseidon Consulting Ltd

DOCUMENT	TITLE	LEAD AUTHOR
6.4.9.1.	Volume 4, Annex 9.1: Navigation Risk Assessment	Anatec Ltd
6.4.10.1.	Volume 4, Annex 10.1: SLVIA Methodology	OP-EN
6.4.10.2.	Volume 4, Annex 10.2: SLVIA Consultation	OP-EN
6.4.10.3.	Volume 4, Annex 10.3: SLVIA Simple Assessment	OP-EN
6.4.10.4.	Volume 4, Annex 10.4: SLVIA Visibility Data	OP-EN
6.4.10.5.	Volume 4, Annex 10.7: SLVIA Legislation and Policy	OP-EN
6.4.11.1.	Volume 4: Annex 11.1: Offshore Archaeology Desk Based Assessment	Wessex Archaeology
6.4.12.1.	Volume 4, Annex 12.1: Charter Angling Baseline Report	Poseidon Consulting Ltd
6.4.12.1.1	Volume 4, Annex 12.1: Charter Angling Baseline Report Annex B (Confidential)	Poseidon Consulting Ltd

Volume 5: Onshore Annexes

DOCUMENT	TITLE	LEAD AUTHOR
6.5.1.1.	Volume 5, Annex 1.1: Crossing Schedule	SLR Consulting
6.5.2.1.	Volume 5, Annex 2.1: LANDMAP Assessment	SLR Consulting
6.5.4.1.	Volume 5, Annex 4.1: Baseline information relating to recreation resources	Hatch
6.5.4.2.	Volume 5, Annex 4.2: Seaside Tourism Economics Employment Evidence	Hatch
6.5.5.1.	Volume 5, Annex 5.1: Preliminary Ecological Appraisal Report;	Hatch
6.5.5.2.	Volume 5, Annex 5.2: Habitat and Hedgerow Survey Report.	SLR Consulting
6.5.5.3.	Volume 5, Annex 5.3: Wintering Bird Survey Report.	SLR Consulting
6.5.5.4.	Volume 5, Annex 5.4: Reptile Survey Report.	SLR Consulting
6.5.5.5.	Volume 5, Annex 5.5: Otter and Watervole Survey Report.	SLR Consulting
6.5.5.6.	Volume 5, Annex 5.6: Great Crested Newt Survey Report.	SLR Consulting
6.5.5.7.	Volume 5, Annex 5.7: Dormouse Survey Report.	SLR Consulting

DOCUMENT	TITLE	LEAD AUTHOR
6.5.5.8.	Volume 5, Annex 5.8: Breeding Bird Survey Report.	SLR Consulting
6.5.5.9.	Volume 5, Annex 5.9: Badger Survey Report (Confidential and Public).	SLR Consulting
6.5.5.10.	Volume 5, Annex 5.10: Bat Survey Report.	SLR Consulting
6.5.5.11.	Volume 5, Annex 5.11: Noise Modelling for Important Ornithological Features (Onshore)	SLR Consulting
6.5.5.12.	Volume 5, Annex 5.12: Consultation Feedback	SLR Consulting
6.5.7.1.	Volume 5, Annex 7.1: Onshore ECC Flood Consequence Assessment;	SLR Consulting
6.5.7.2.	Volume 5, Annex 7.2: Onshore Substation Flood Consequence Assessment;	SLR Consulting
6.5.7.3.	Volume 5, Annex 7.3: Landfall HDD crossing Groundwater Risk Assessment;	SLR Consulting
6.5.7.4.	Volume 5, Annex 7.4: A525 HDD crossing Groundwater Risk Assessment;	SLR Consulting
6.5.7.5.	Volume 5, Annex 7.5: River Clwyd HDD crossing Groundwater Risk Assessment;	SLR Consulting

DOCUMENT	TITLE	LEAD AUTHOR
6.5.7.6.	Volume 5, Annex 7.6: A55 HDD crossing Groundwater Risk Assessment;	SLR Consulting
6.5.8.1.	Volume 5, Annex 8.1: Archaeological Desk-Based Assessment	Wessex Archaeology
6.5.8.2.	Volume 5, Annex 8.2: Designated Heritage Assets Scoping Exercise	Wessex Archaeology
6.5.8.3.	Volume 5, Annex 8.3: Detailed Gradiometer Survey Report	Wessex Archaeology
6.5.8.4.	Volume 5, Annex 8.4: Outline Onshore Archaeological Watching Brief 2021	Wessex Archaeology
6.5.8.5.	Volume 5, Annex 8.5: Onshore WSI	Wessex Archaeology
6.5.9.1.	Volume 5, Annex 9.1: Traffic and Transport Technical Baseline Report;	SLR Consulting
6.5.9.2.	Volume 5, Annex 9.2: Trip Generation and Distribution Calculations;	SLR Consulting
6.5.9.3.	Volume 5, Annex 9.3: Percentage Impact Calculations and Assessment Screening;	SLR Consulting
6.5.10.1.	Volume 5, Annex 10.1: Sound Level Meter Calibration Certificates.	SLR Consulting
6.5.10.2.	Volume 5, Annex 10.2: Sound Survey Results.	SLR Consulting

DOCUMENT	TITLE	LEAD AUTHOR
6.5.10.3.	Volume 5, Annex 10.3: Construction Plant Sound Levels.	SLR Consulting
6.5.10.4.	Volume 5, Annex 10.4: Operational Substation Noise Modelling Results.	SLR Consulting
Volume 6: Seascape, Landscape and Visual Impact Assessment Annexes		
6.2.2	Annex 2.2: LVIA Figures	OP-EN
6.2.3	Annex 2.3: LVIA Visualisations	OP-EN
6.10.4	Annex 10.4: SLVIA Figures	OP-EN
6.10.5	Annex 10.5: SLVIA Visualisations	OP-EN

Table 2 Development team expertise

Organisation	Role and Expertise
Burges Salmon LLP	Burges Salmon provide planning and consents legal advice to the project; leading the authorship of the draft DCO. Burges Salmon have extensive experience advising on offshore wind NSIPs.
GoBe Consultants	GoBe Consultants provide lead EIA and planning consultant services to the project, in addition to a number of technical areas of expertise, including but not limited to marine ecology, ornithology, and water/sediment quality. GoBe consultants hold the IEMA Quality Mark.

SLR Consulting	SLR Consulting provide onshore EIA project management services to the project, in addition to a number of technical areas of expertise, including but not limited to onshore biodiversity, noise, traffic, and land/air quality. SLR Consulting hold the IEMA Quality Mark.
Optimised Environments (OPEN)	OPEN provide SLVIA and LVIA expertise to the project; leading in the authorship of the associated chapters. OPEN hold Landscape Institute membership.
Wessex Archaeology	Wessex Archaeology provide offshore and onshore historic environment and archaeological expertise to the project; leading in the authorship of the associated chapters. Wessex Archaeology hold Chartered Institute for Archaeology accredited status.
Hatch	Hatch provide offshore and onshore socio economic, and tourism and recreation expertise to the project; leading in the authorship of the associated chapters.
ABPmer	ABPmer provide offshore physical environment and coastal processes modelling expertise to the project; leading in the authorship of the associated chapters and technical reports.
Anatec	Anatec provide offshore shipping and navigation, and navigation risk assessment expertise to the project; leading in the authorship of the associated chapters and technical reports.
APEM	APEM provide offshore ornithology expertise to the project; leading in the authorship of the associated chapters and technical reports. APEM hold NMBAQC and UKAS accreditation
Osprey	Osprey provide aviation and radar expertise to the project; leading in the authorship of the associated chapters and technical reports.
Poseidon Aquatic Resource Management (Poseidon)	Poseidon provide offshore commercial and recreational fishing expertise to the project; leading in the authorship of the associated chapters and technical reports.
SMRU	SMRU provide marine mammal expertise to the project; leading in the authorship of the associated chapters and input to the Habitats Regulations Assessment.
Subacoustech	Subacoustech provide underwater noise expertise to the project; leading in the authorship of the associated chapters and technical reports.

1.6 Consultation

- 32 The PEIR was produced to comply with the Applicant's duty to consult the local community under section 47 of the Planning Act 2008. In having regard to those responses, the Applicant has incorporated additional information requested into the Environmental Statement (ES), as well as enacting design changes to the project.
- 33 As the project design was finalised, and the red line boundary reduced, additional targeted statutory consultation was undertaken with landowners and those with an interest in land between 28 January and 2 March 2022 in which more detail can be found in section 9.2 of Consultation Report (application ref: 5.1).
- 34 Additional non-statutory consultation continued throughout the ES drafting period so that stakeholders could continue to be engaged up until the point of application. In the spirit of effective consultation, this will continue as the project progresses into Examination.
- 35 The Applicant has also consulted with a number of local authorities in drafting and publishing a Statement of Community Consultation (SoCC), setting out the approach used for consulting local communities on the proposed development, and consultation has been conducted in line with that document. A summary of the statutory and non-statutory pre-application consultation undertaken for AyM can be found in the Consultation Report.
- 36 The Applicant also ran an Evidence Plan Process prior to, during and following the statutory consultation period. The AyM Evidence Plan Process sought to extend the 'standard' remit of an Evidence Plan beyond consideration of HRA matters and also included Expert Topic Groups for many technical EIA topics, including marine ecology, ornithology, historic environment, human environment and Seascape, Landscape and Visual Impact Assessment (SLVIA).

37 The Evidence Plan Process was aimed at building agreement between the Applicant and the relevant stakeholders on those matters to be addressed by the EIA and HRA processes, the adequacy of baseline data, methods applied and the assessment conclusions. The Applicant has included an Evidence Plan Report summarising the discussions and agreements reached with its application (application ref: 8.2).

1.7 Document availability

38 The documents described in Table 1 are being made publicly available online. The full ES is available in English language in digital format through the project website and on the PINS' website at:

Awel y Môr Offshore Wind Farm National Infrastructure Planning
(planninginspectorate.gov.uk)
<https://infrastructure.planninginspectorate.gov.uk/projects/wales/awel-y-mor-offshore-wind-farm/>

[www.awelymor.cymru/consultation]

39 The Planning Statement Executive Summary, Consultation Report Executive Summary and the Welsh Community and Linguistic Statement are available in Welsh language.

40 A non-technical summary of this ES provides an overview of all of the technical topic assessments, as well as the site-selection process that has led to the scheme design envelope. The full non-technical summary is available in Welsh and English language through the National Infrastructure Planning project website (<https://infrastructure.planninginspectorate.gov.uk/projects/wales/awel-y-mor-offshore-wind-farm/?ipcsection=overview>).

41 Physical hard copies of the non-technical summary are also available on request by contacting:

▲ **Email:** awelymor@rwe.com

▲ **Telephone:** 0800 1978232

▲ Or write to us at:

Awel y Môr Offshore Wind Farm

RWE Renewables
Baglan Bay Innovation Centre
Central Avenue, Baglan Energy Park
Port Talbot
SA12 7AX

1.8 References

Innogy (2020). Awel y Môr, Environmental Impact Assessment. Scoping Report. March 2020. Revision A.

PINS (2020). PINS Advice Note 12. Transboundary Impacts and Process. December 2020. Version 6.



RWE Renewables UK Swindon Limited

Windmill Hill Business Park

Whitehill Way

Swindon

Wiltshire SN5 6PB

T +44 (0)8456 720 090

www.rwe.com

Registered office:

RWE Renewables UK Swindon Limited

Windmill Hill Business Park

Whitehill Way

Swindon