



# Arklow Bank Wind Park 2

Environmental Impact Assessment  
Report

Preface

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1.0	03/05/2024	Final (External)	GoBe Consultants	GoBe Consultants	Sure Partners Limited

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# Glossary

Term	Meaning
Arklow Bank Wind Park 1 (ABWP1)	Arklow Bank Wind Park 1 consists of seven wind turbines, offshore export cable and inter-array cables. Arklow Bank Wind Park 1 has a capacity of 25.2 MW. Arklow Bank Wind Park 1 was constructed in 2003/04 and is owned and operated by Arklow Energy Limited. It remains the first and only operational offshore wind farm in Ireland.
Arklow Bank Wind Park 2 – Offshore Infrastructure	“The Proposed Development”, Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements under the existing Maritime Area Consent.
Arklow Bank Wind Park 2 (ABWP2) (The Project)	<p>Arklow Bank Wind Park 2 (ABWP2) (The Project) is the onshore and offshore infrastructure. This EIAR is being prepared for the Offshore Infrastructure. Consents for the Onshore Grid Infrastructure (Planning Reference 310090) and Operations Maintenance Facility (Planning Reference 211316) has been granted on 26<sup>th</sup> May 2022 and 20<sup>th</sup> July 2022, respectively.</p> <ul style="list-style-type: none"> <li>• Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements to be consented in accordance with the Maritime Area Consent. This is the subject of this EIAR and will be referred to as ‘the Proposed Development’ in the EIAR.</li> <li>• Arklow Bank Wind Park 2 Onshore Grid Infrastructure: This relates to the onshore grid infrastructure for which planning permission has been granted.</li> <li>• Arklow Bank Wind Park 2 Operations and Maintenance Facility (OMF): This includes the onshore and nearshore infrastructure at the OMF, for which planning permission has been granted.</li> <li>• Arklow Bank Wind Park 2 EirGrid Upgrade Works: any non-contestable grid upgrade works, consent to be sought and works to be completed by EirGrid.</li> </ul>
Array Area	The Array Area is the area within which the Wind Turbine Generators (WTGs), the Offshore Substation Platforms (OSPs), and associated cables (export, inter- array and interconnector cabling) and foundations will be installed.
Cable Corridor and Working Area	The Cable Corridor and Working Area is the area within which export, inter-array and interconnector cabling will be installed This area will also facilitate vessel jacking operations associated with installation of WTG structures and associated foundations within the Array Area.
Landfall	The area in which the offshore export cables make landfall and is the transitional area between the offshore cabling and the onshore cabling.

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Maritime Area Consent (MAC)	A consent to occupy a specific part of the maritime area on a non-exclusive basis for the purpose of carrying out a Permitted Maritime Usage strictly in accordance with the conditions attached to the MAC granted on 22 <sup>nd</sup> December 2022 with reference number 2022-MAC-002.
Permitted Maritime Usage	The construction and operation of an offshore windfarm and associated infrastructure (including decommissioning and other works required on foot of any permission for such offshore windfarm).
The Application	The full set of documents that will be submitted to An Bord Pleanála in support of the consent.
The Developer	Sure Partners Ltd.

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## Acronyms

Term	Meaning
ABP	An Bord Pleanála
ABWP1	Arklow Bank Wind Park 1
ABWP2	Arklow Bank Wind Park 2
EIAR	Environmental Impact Assessment Report
GW	Gigawatt
HVAC	High Voltage Alternating Current
MAC	Maritime Area Consent
MW	Megawatt
OGI	Onshore Grid Infrastructure
OMF	Operations and Maintenance Facility
OSP	Offshore Substation Platform
SPL	Sure Partners Ltd.
WTG	Wind Turbine Generator

## Units

Unit	Description
km	Kilometre
MW	Megawatt
GW	Gigawatt
kV	Kilovolt

# 1 Preface

## 1.1 Introduction

- 1.1.1.1 Arklow Bank Wind Park 2 (ABWP2) (hereafter referred to as 'the Proposed Development') is a proposed offshore windfarm situated on and around Arklow Bank in the Irish Sea, approximately 6 to 15 km to the east of Arklow in County Wicklow.
- 1.1.1.2 ABWP2 is made up of both onshore and offshore components. The Proposed Development is the offshore infrastructure and comprises the Array Area (the area within which the Wind Turbine Generators (WTGs), the Offshore Substation Platforms (OSPs), and associated cables (export, inter-array and interconnector cabling) and foundations will be installed) and the Cable Corridor and Working Area (the area within which export, inter-array and interconnector cabling will be installed. This area will also facilitate vessel jacking operations associated with installation of WTG structures and associated foundations within the Array Area).
- 1.1.1.3 The Array Area is located on and around the Arklow Bank and covers an area of approximately 63.4 km<sup>2</sup>. The proposed Cable Corridor and Working Area will extend from this area to a landfall approximately 4.5 km to the north of Arklow at Johnstown North (section 1.3).
- 1.1.1.4 An existing windfarm of seven turbines with a capacity of 25.2 MW which were constructed on Arklow Bank in 2003/04 is owned and operated by Arklow Energy Limited (ABWP1). It remains the first and only operational offshore windfarm in Ireland.
- 1.1.1.5 A Maritime Area Consent (MAC) (Ref:2022-MAC-002) was granted in respect of the Proposed Development in December 2022. Sure Partners Ltd (the Developer) have prepared a planning application for the Proposed Development which has been submitted to An Bord Pleanála (ABP) and is accompanied by an Environmental Impact Assessment Report (EIAR).
- 1.1.1.6 The maximum power generation output from the Proposed Development will be 800 MW. This means that the Project will be able to make a significant contribution to Ireland's climate action target of at least 5 GW of offshore wind by 2030, and to Ireland's national and local economy.

## 1.2 SSE plc and SSE Renewables

- 1.2.1.1 Sure Partners Ltd (SPL) is a wholly owned subsidiary of SSE Plc and is the Developer for the Proposed Development. SSE plc is the leading generator of renewable electricity in the UK and Ireland. It develops and operates low-carbon infrastructure supporting the net zero transition, including onshore and offshore wind, hydro power, electricity transmission and distribution grids and efficient gas-fired generation, alongside providing energy products and services for businesses. UK-listed, SSE is a major contributor to the UK and Ireland economies, employs 12,000 people and is real Living Wage and Fair Tax Mark accredited.
- 1.2.1.2 SSE Renewables is part of the SSE plc Group and is a leading developer, operator and owner of renewable energy across the UK and Ireland, with a portfolio of around 4 GW of onshore wind, offshore wind and hydro. Its strategy is to drive the transition to a net zero future through the world-class development, construction and operation of renewable energy assets.
- 1.2.1.3 Since entering the Irish energy market in 2008, SSE have invested significantly in their Irish businesses, with a total economic contribution of over €1.2bn in the last three years, supporting over 2,400 jobs in 2022/23. SSE Renewables owns 726 MW of onshore wind capacity across 27 windfarms on the island and operates a total of over 1,000 MW. This includes Galway Wind Park, Ireland's largest and best performing onshore windfarm (co-owned with Greencoat Renewables).



- 1.2.1.4 SSE Renewables operational offshore wind portfolio consists of two offshore joint venture sites in the UK, Beatrice (588 MW) and Greater Gabbard (504 MW), both of which it operates on behalf of its asset partners.
- 1.2.1.5 SSE Renewables has the largest offshore wind development pipeline in the UK and Ireland at over 6 GW, of which around 3 GW is in construction or consented. It is currently constructing the world's largest offshore windfarm, the 3.6 GW Dogger Bank Windfarm in the North Sea, a joint venture with Equinor. It has also completed building Scotland's largest offshore windfarm, the 1.1 GW Seagreen Offshore Windfarm in the Firth of Forth, which is a joint venture with Total.

## 1.3 Arklow Bank Wind Park 2

- 1.3.1.1 ABWP2 is made up of both onshore and offshore components (Figure 1.1). This EIAR is being prepared for the Offshore Infrastructure. The key onshore and offshore infrastructure is set out as follows:
- Arklow Bank Wind Park 2 – Offshore Infrastructure:
    - The offshore infrastructure will comprise either 56 or 47 Wind Turbine Generators (WTGs) and two Offshore Substation Platforms (OSPs), to which the turbines will be connected by a network of inter-array cabling. The OSPs will transform the electricity generated by the wind turbines to a higher voltage. The power will be transmitted to shore from the offshore substation platforms using two high voltage alternating current (HVAC) offshore export cables.
  - Arklow Bank Wind Park 2 – Onshore Grid Infrastructure:
    - In May 2022, ABP granted planning approval (Case Reference: 310090) to develop the onshore grid connection infrastructure (OGI). The OGI includes a 220 kV substation at Shelton Abbey, with an associated connection from the new substation to the existing National Electricity Transmission Network. The consented development also includes an underground cable route and associated infrastructure connecting the substation to the landfall point at Johnstown North (approximately 4.5 km north of Arklow harbour), where it will meet the proposed offshore export cables connecting to the Proposed Development.
  - Arklow Bank Wind Park 2 – Operational and Maintenance Facility:
    - In June 2022, the Developer received planning permission from Wicklow County Council (Planning Register Reference: 21/1316) to develop an Operations and Maintenance Facility (OMF) at South Dock, Arklow Harbour. The building and associated pontoon and ancillary infrastructure will serve as the support base for the Project throughout its operational lifetime and will support around 80 long term local jobs. This facility will also incorporate a Sustainable Education Centre.



**Figure 1.1: Schematic of Arklow Bank Wind Park 2**

## 1.4 EIAR for the Proposed Development

1.4.1.1 This EIAR for the Proposed Development is presented in three volumes, as follows:

- Volume I: EIAR Non-Technical Summary;
- Volume II: EIAR Main Report; and
- Volume III: EIAR Technical Appendices.