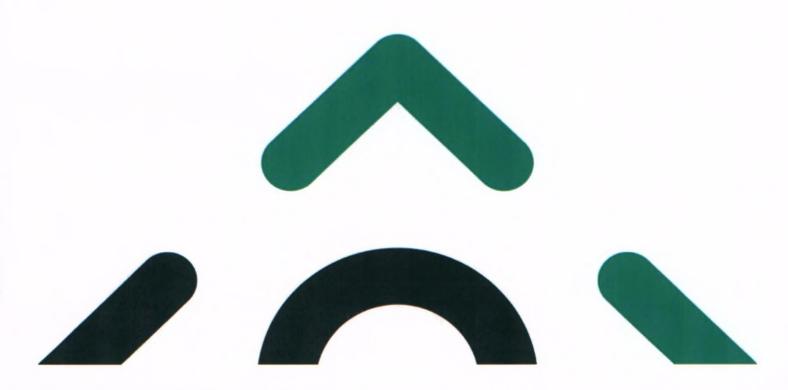


# **Environmental Impact Assessment Report**

Castledockrell Wind Farm Extension of Operational Life

Volume 1: Non-Technical Summary and Environmental Impact Assessment Report (Chapter 1 to 17)





WEXFORD COUNTY COUNCIL
Castledocurell Wind Farm ERECON VOR Council Life

1 9 MAR 2025

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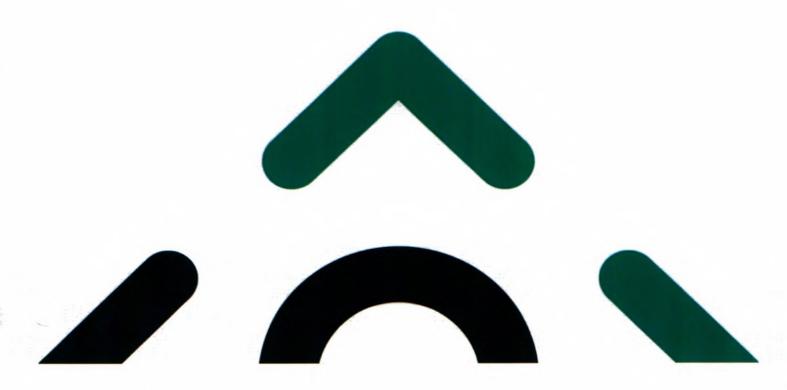


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## Environmental Impact Assessment Report (EIAR) Non-Technical Summary

Castledockrell Wind Farm Extension of Operational Life





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## **NON-TECHNICAL SUMMARY**

## Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by MKO on behalf of Castledockrell Wind Group Ltd (the Applicant), who intend to apply to Wexford County Council (WCC) for planning permission to extend the operational period of the existing Castledockrell Wind Farm for an additional 20 years to 2045 after the expiry of its current planning permission in 2025.

The existing Castledockrell Wind Farm is located 8.1km west of Ferns and 6.5km south of Bunclody, Co. Wexford, in the townlands of Kilcullen, Ballynelahillan, Carranroe, Tomatee, Knockduff and Sroughmore.

The Proposed Development, which will be described as the 'Castledockrell Wind Farm Extension of Operational Life' is being brought forward in response to local, national, regional and European policy regarding Ireland's transition to a low-carbon economy, associated climate change policy objectives and to reduce Ireland's dependence on imported fossil fuels for the production of electricity.

There are 3 no. planning permissions within the existing Castledockrell Wind Farm site, however, the Proposed Development is made up of 2 no. of these applications, namely WCC Ref 04/4702 and ABP PL26.211725 (11 no. turbines, foundations, hardstands, access roads, internal site cabling and substation, and all ancillary infrastructure), and WCC 2005/3945 (amendment to the substation as permitted under the above application). Both of these permissions have expiry dates, in which the existing wind turbines and associated infrastructure need to be decommissioned. The expiry dates for these elements are the same, i.e. 2025.

No construction activities, alterations to the existing wind farm or works of any kind are proposed as part of this planning application, beyond the continued routine maintenance of the turbines and electrical infrastructure during the operational phase of the Proposed Development.

This EIAR complies with the EIA Directive 2011/92/EU as amended by Directive 2014/52/EU. The Environmental Impact Assessment (EIA) of the Proposed Development will be undertaken by Wexford County Council, as the competent authority.

#### Applicant

The Applicant for the Proposed Development is Castledockrell Wind Group Ltd, which is registered in Wexford, Ireland. Castledockrell Wind Group Ltd is jointly owned by: (i) a number of local landowners who all live in the vicinity of the windfarm; and (ii) Lanber Group which is a Wexford registered investment company active in the renewable energy industry for more than twenty years.

## Brief Description of the Proposed Development

Planning permission is being sought for the continued operation of 11 no turbines which are operating on the existing Castledockrell Wind Farm as permitted by Wexford County Council under planning ref WCC 04/4702 and PL26.211725 and for a further period of 20 years from the date of expiry ( $16^{th}$  August 2025) per Condition no. 7 of the original planning consent issued, with decommissioning of the wind farm at the end of the proposed extension period.

It is also proposed to permanently extend the existing onsite 110kV substation (permitted under WCC 04/4702, PL26.211725 and subsequently amended under 05/3945).

The existing wind farm comprises:



- 11 no. existing 2.3 MW wind turbines with an overall tip height of 120m and associated hardstands:
- I no. existing 110kV Substation including I no. single story control building, all associated electrical plant and equipment, security fencing and all ancillary infrastructure;
- All existing underground electrical and communication cabling connecting the existing wind turbines to the onsite Castledockrell 110kV Substation;
- 4. Existing internal access tracks; and,
- 5. All existing ancillary infrastructure.

The existing grid connection, which travels from the existing onsite 110kV substation via underground 110kV electrical cabling to the existing Lodgewood 220kV substation via the L2009 Local Road, the R745 Regional Road, the L6742 Local Road, as well as some off-road sections, does not form part of this application, and will instead be assessed cumulatively.

There are no alterations to the Existing Castledockrell Wind Farm proposed as part of this Planning Application and EIAR.

#### Need for Development

Ireland faces significant challenges to its efforts to meet EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. Further detail can be found in Chapter 2 of this EIAR.

The Proposed Development therefore represents an opportunity to continue to harness Ireland's significant renewable energy resources, with valuable benefits to air quality and in turn to human health. The consumption of fossil fuels for energy results in the release of particulates, sulphur dioxide and nitrogen dioxide to our air. The use of wind energy, by providing an alternative to electricity derived from coal, oil or gas-fired power stations, results in emission savings of carbon dioxide ( $CO_2$ ), oxides of nitrogen ( $NO_x$ ), and sulphur dioxide  $SO_2$ , thereby resulting in cleaner air and associated positive health effects.

### **Economic Benefits**

In addition to helping Ireland avoid significant fines and reducing environmentally damaging emissions, the Proposed Development will have significant economic benefits.

The Proposed Development will be capable of providing power to over 15,830 households every year, using the calculated electricity as produced by the Proposed Development based on the average Irish household using 4.2 MWh of electricity, therefore produce sufficient electricity for the equivalent of approximately 27% of all households in Co. Wexford. At a Regional Level, the Proposed Development will help to supply the rising demand for electricity, resulting from renewed economic growth.

The Proposed Development will continue to have long-term benefits for the local economy including income to local landowners, job creation, work opportunities for local businesses and service providers, local authority commercial rate payments and a Community Benefit Scheme.

Should the Proposed Development be granted planning permission, the Applicant intends to increase funding for these groups.

Should be Proposed Development not receive planning permission and be decommissioned in 2025 as per current planning conditions, this opportunity for funding local community groups and organisations would be lost.



## Purpose and Structure of this EIAR

The purpose of this EIAR is to document the current state of the environment in the vicinity of the Project and to quantify the likely significant effects of the continued operation of the Proposed Development and the Project on the environment and in accordance with the requirements of the EIA Directive, as amended. The compilation of this document served to highlight any areas where mitigation measures may be necessary in order to protect the surrounding environment from the possibility of any significant negative impacts arising from the Proposed Development.

The EIAR project team comprises a multidisciplinary team of experts with extensive experience in the assessment of wind energy developments and in their relevant area of expertise. Each chapter of this EIAR has been prepared by a competent expert in the subject matter.

The chapters of this EIAR are as follows:

- 1. Introduction
- 2. Background and Policy
- 3. Consideration of Reasonable Alternatives
- 4. Description of the Project
- 5. Population and Human Health (including Shadow Flicker)
- 6. Biodiversity
- 7. Birds
- 8. Land, Soils, and Geology
- 9. Water
- 10. Air & Climate
- 11. Noise and Vibration
- 12. Cultural Heritage
- 13. Landscape and Visual
- 14. Material Assets (including Traffic and Transport, Telecommunications and Aviation)
- 15. Major Accidents and Disasters
- 16. Interaction of the Foregoing
- 17. Schedule of Mitigation Measures

## **Background and Policy**

This section of the EIAR sets out the energy and climate change related policy and targets along with the strategic, regional, and local planning policies relevant to the Proposed Development. It also summarises EIA scoping undertaken, and the cumulative impact assessment process undertaken.

The policies and targets which have been put in place at the various levels of Government in relation to renewable energy and climate change illustrate the urgent need for renewable energy developments such as the Proposed Development to assist Ireland in meeting its national targets and European commitments in relation to climate change and decarbonisation.

The Proposed Development comprises the extension of operational life of the 11. no. turbine Castledockrell Wind Farm and the permanent continued operation of the Castledockrell 110kV Substation. The turbines at the existing Castledockrell Wind Farm currently generate renewable energy and provides it for use onto the national grid.

The need to decarbonise the economy and reduce emissions has always been imperative, however in recent years the urgency involved has become clearer to all stakeholders. The latest Climate Action Plan 2024 (CAP) published by the Irish Government sets out the detail for taking action to deliver the decarbonisation required under the carbon budgets and sectorial emissions ceilings. Central to this is the set of measures set out to increase the proportion of renewable electricity to up to 80% by 2030 and a target of 9GW from onshore wind. The CAP places front and centre the facts that without urgent



action, global warming is likely to be more than 2°C above pre-industrial levels, threatening the health and livelihoods of people across the globe. Urgency of action is also a key focus of the CAP. All sectors will have to further their efforts if the core and further measures are to be achieved.

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real change happens. Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland is heavily dependent on the importation of fossil fuels to meet its energy need. 81.6% of energy used in Ireland is imported from abroad, higher than the EU average of almost 57.5% (National Energy Security Framework 2023). This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for energy security and price stability.

The Climate Action and Low Carbon Development Act 2015 (as amended) commits Ireland to a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). To ensure that climate targets are met, Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) requires all public bodies to exercise their functions in a manner consistent with, in so far as practicable, the national climate objective and the latest climate policy. The proposed Castledockrell Wind Farm extension of operational life is key to helping Ireland achieve these legally binding climate targets as well as addressing the country's over-dependence of imported fossil fuels.

#### **Local Planning Policy**

It is submitted that the Proposed Development is consistent with the policies and objectives of the Wexford County Development Plan (CDP) 2022-2028.

#### Wexford County Development Plan 2022 - 2028

In Chapter 2 of the CDP, Wexford County Council outlines the council's vision to facilitate a transition to a low carbon economy. Objective CA01 aims to enable 'the decarbonisation of the county's economy and reduces the county's carbon footprint in support of national targets for climate mitigation and adaptation objectives as well as targets for greenhouse gas emissions reductions'. It is recognised that renewable energy developments play a key role in the County's transition to a low carbon economy. Objective CA16 seeks 'to support change across business, public and residential sectors to achieve reduced greenhouse gas emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture' (emphasis added).

Objective CA04 aims to 'implement the Energy Strategy contained in Volume 10 of the Wexford County Development Plan to facilitate the transition to a low carbon county'. The vision of the Energy Strategy is 'to maximise Wexford's renewable energy potential and its transition to becoming a more energy secure, low carbon county in line with national energy targets whilst balancing the need to protect the environmental, social and heritage assets of the county'.

## Wexford County Council Energy Strategy

Volume 10 of the current CDP comprises an 'Energy Strategy' which details the policies and objectives for the County relating to renewable energy, including wind, for the period of the Development Plan. It includes an energy expectation for the County to 2027 which includes "A reduction in demand for non-renewable energy sources, such as coal, oil and gas, and an increased demand for electricity from all sectors, leading to cleaner, more sustainable energy usage across the county." Onshore wind is noted as the main source of renewable energy within the County. The Strategy acknowledges the role repowering will play in meeting targets. The most pertinent objectives are Objective ES07, ES08, ES0, ES10, ES15.



The Energy Strategy also sets out a renewable energy target, based on national targets:

RES-E: The Strategy sets a target of 100% renewable energy by 2031 which is to be met
through a combination of renewable energy developments. To achieve this target, it is
projected that county Wexford would need to have an installed onshore wind energy capacity
of 193.09 MW by 244.22 MW by 2031. As of 2021, the county had an installed capacity of
182.46MW.

The Castledockrell Wind Farm site is currently zoned as 'Not Normally Permissible' under the CDP. However, in relation to this zoning in the north of the County, where the Castledockrell Wind Farm is located, the Energy Strategy states that "due to the number of existing wind farms, and having regard to the areas open for consideration for wind farm development in adjoining counties, it is considered that the north-west of the county has reached capacity in terms of wind farm development. Further wind farm development in this area may have potential adverse cumulative impacts. This area is also designated as 'Uplands' in the Landscape Character Assessment and is identified as having limited capacity to absorb development. The north-east of the county is also mainly designated as 'Uplands' and there are a number of settlements in this area which make it less suitable for wind farm development. The north of the county has therefore been included in the Not Normally Permissible area".

With regards to the re-powering and the extension to existing Wind Farms in areas identified as 'Not Normally Permissible', the Energy Strategy states that applications will be assessed on a 'case-by-case basis' and will be subject to the development management standards contained in Section 5.7 of the Energy Strategy. Further, the Energy Strategy states that 'any such applications should include details of how best available techniques are to be used to keep noise impacts to a minimum'.

With regard to the designation of the area as 'Not Normally Permissible', it is clear that the underlying reason for this designation is that the north-west of the county is deemed to have reached its wind energy capacity. Given the fact that the Castledockrell Wind Farm is an existing wind farm, there is no potential for new cumulative effects to arise.

The Proposed Development also complies with the Wind Farm Development Management Standards set out in the Energy Strategy and furthermore letters of support from dwellings within 500m are also included with the application.

Therefore, the Proposed Development is considered to be compliant with the relevant provisions of the Wexford County Development Plan 2022-2028.

#### Wind Energy Development Guidelines

The relevant considerations under the 'Wind Energy Development Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government (DOEHLG, 2006) hereafter referred to as 'the Guidelines', have been taken into account during the preparation of this EIAR.

The aim of these guidelines is to assist with the proper planning of wind energy projects in appropriate locations around Ireland. The Guidelines highlight general considerations in the assessment of all planning applications for wind energy. They set out advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. They contain guidelines to ensure consistency of approach throughout the country in the identification of suitable locations for wind energy development. Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Furthermore, Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. While the Guidelines remain the relevant guidelines in place at the tie of lodgement, and decision makers (An Bord Pleanála and Local Authorities) are required to have regard to them, they are not bound to apply their provisions and they can (and do), where there is sufficient justification, consider updated standards/requirements/specifications in assessing impacts and the proper planning and sustainable development of the area.



The Department of Housing, Planning and Local Government published the Draft Wind Energy Development Guidelines in December 2019 and they remain in draft at the time of writing. The Draft Guidelines note that potential impacts of wind energy development proposals on the landscape, including the natural and built environment, must be considered along with the legitimate concerns of local communities. The design of the Proposed Development has been designed in accordance with the Guidelines and has also been developed with regard to the Draft (for example in relation to 4 times turbine tip height set back distance from sensitive properties).

#### Planning History

A planning search was carried out through the Wexford County Council's online planning portal in March 2025 for relevant planning applications within the red line planning application site boundary. The existing 11 no. turbine at Castledockrell Wind Farm and associated infrastructure are permitted under Wexford County Council Pl. Ref. 2004/4702, ABP Pl. Ref. PL26.211725 and amended by Pl. Ref. 2005/3945. The planning search also found 14 no. wind energy applications within 25km of the site. Planning applications in the wider area primarily consist of residential and agricultural applications.

## Scoping and Consultation

Section 2.7 presents detail of the EIA Scoping undertaken with regards the Proposed Development. A scoping report, providing details of the Proposed Development, was prepared by MKO, and circulated in August 2023 and again in November 2023. MKO requested the comments of the relevant personnel/bodies in their respective capacities as consultees with regards to the EIAR process. Chapter 2 includes a list of scoping consultees and responses received, with full copies of all scoping responses received set out in Appendix 2-1 of the EIAR.

Community engagement has been undertaken by the Applicant, details of which can be found in Appendix 2-2 of this EIAR. In summary, the report was prepared to record the consultation carried out with the local community in respect of the Proposed Development. The applicant has carried out consultation in relation to the Proposed Development with local residents and interested parties in the wider community. The objective of the consultations was to ensure that the views and concerns of all were considered as part of the Proposed Development EIA process.

Section 2.8 of this EIAR also includes details of the pre-planning meetings undertaken with Wexford County Council prior to the planning application being lodged.

### Cumulative Impact Assessment

The EIA Directive and associated guidance documents state that as well as considering any direct, indirect, secondary, transboundary, short-, medium-, and long-term, permanent and temporary, positive and negative effects of a proposed development or project (all of which are considered in the various chapters of this EIAR), the description of likely significant effects should include an assessment of cumulative impacts that may arise. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to a proposed development or project. The factors to be considered in relation to cumulative effects include population and human health (including Shadow Flicker), biodiversity, ornithology, land, soil, water, air, climate, noise and vibration, material assets, landscape, cultural heritage and major accidents and natural disasters as well as the interactions between these factors.

To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIA process being undertaken by the consenting authority, each relevant chapter within this EIAR includes a cumulative impact assessment where appropriate.

The potential for cumulative impacts arising from other plans and/or projects has therefore been fully considered within this EIAR. The cumulative impact assessment of projects has three principle aims:



- To establish the range and nature of existing and approved plans and/or projects within the cumulative impact study area of the Proposed Development.
- To summarise the relevant plans and/or projects which have a potential to create cumulative impacts.
- To identify the plans and/or projects that hold the potential for cumulative interaction within
  the context of the Proposed Project and discard plans and/or projects that will neither directly
  or indirectly contribute to cumulative impacts.

Assessment material for this cumulative impact assessment was compiled on the relevant plans and/or projects within the various study areas of each discipline for the Proposed Development. The material was gathered through a search of relevant online Planning Registers, reviews of relevant EIAR (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future plans and/or projects, their activities and their environmental impacts.

Geographical boundaries within which there may be potential for cumulative impacts to arise, relative to each individual EIAR topic (i.e. each chapter) is set out within the Chapter. To gather a comprehensive view of cumulative impacts within the cumulative study area and to inform the EIA process being undertaken by the competent authority, each relevant chapter within the EIAR addresses the potential for cumulative effects where appropriate and within the context of their identified cumulative study area.

A long list of projects considered (i.e. the largest cumulative study boundary of 25km list) across all disciplines in their cumulative impact assessment is included in Appendix 2-3. Smaller cumulative assessment studies have considered all projects within their specific boundary which fall within the long list in Appendix 2-3.

## **Consideration of Reasonable Alternatives**

This chapter of the EIAR contains a description of the reasonable alternatives that were studied by the developer, which are relevant to the Proposed Development and its specific characteristics and provides an indication of the main reasons for the option chosen, taking into account the environmental effects. The consideration of alternatives includes alternative design, technology, size and scale. A 'Do-Nothing Scenario', i.e., an outline of what is likely to happen to the environment, should the Proposed Development not be implemented, is also included.

The initial design of the existing Castledockrell Wind Farm, prior to its construction and commencement of operations in 2011, was an informed and collaborative process, involving designers, developers, engineers, environmental, hydrological and geotechnical, archaeological specialists and traffic consultants. This proposal for the extension of operation of the wind farm was informed by site-specific information and experience gained during the operational history of the wind farm.

The proposed extension of the operation of the wind farm does not include any significant alterations to the existing site design or layout. The aim of the current multidisciplinary Project Team in extending the lifespan of the wind farm is to continue from the past successful operation of the wind farm, whilst ensuring that any new processes or methods to reduce the potential for environmental effects are incorporated into the future operation.

It is considered appropriate to extend the operational phase of the existing wind energy development at the current site for a number of reasons including the successful operational history at its current location since 2005. The site has proven to have reliably good wind speeds and maintained a good generating capacity. In addition, the existing wind turbine models can continue to operate efficiently for a further 20 years without a significant loss in the total generating capacity of c.25 megawatts (MW).

The existing wind farm infrastructure on the site, including the substation and site roads, can continue to be used for the extended operational period, which reduces environmental effects when compared to



an undeveloped greenfield site, particularly in relation to landscape and visual effects and effects on locally important habitats. The existing wind farm site entrance can continue to be used without any alterations or road works required.

While the turbine technology on the site is dated, it has been demonstrated by the Applicant that the existing 11 no. Enercon E70 model turbines can continue to operate effectively for a further 20 years without a significant loss in total generating capacity of 25.3 MW.

The Proposed Development can contribute to the achievement of national energy targets and can continue to provide significant social and economic benefits for the local area (direct and indirect employment, community development fund, recreational amenity) and the wider region.

Having been previously permitted, the principle for wind energy development at this site is already well established and has been proven to be in accordance with the proper planning and sustainable development of the area.

It is noted that the total current wind farm site, i.e. the EIAR Site Boundary as shown on figures, is approximately 97 hectares (ha). The existing development footprint therefore accounts for approximately 3.23 ha or approximately 3.3% of the total site area. The remainder of the site is used primarily for agricultural activities, split between pastural and arable land.

## **Description of the Proposed Development**

This section of the Environmental Impact Assessment Report (EIAR) describes the development and its component parts which is the subject of a proposed application for planning permission to Wexford County Council ('the Proposed Development').

The Proposed Development does not comprise any alterations or modifications to the existing operational wind farm. The Proposed Development encompasses the continued operation of the wind farm, which comprises:

- 11 no. existing 2.3 MW wind turbines with an overall tip height of 120m and associated hardstands;
- 1 no. existing 110kV Substation including 1 no. single story control building, all
  associated electrical plant and equipment, security fencing and all ancillary
  infrastructure;
- 3. All existing underground electrical and communication cabling connecting the existing wind turbines to the onsite Castledockrell 110kV Substation;
- 4. Existing internal access tracks; and,
- 5. All existing ancillary infrastructure.

All elements of the Proposed Development are pre-existing and it is not proposed to make any alterations to the current site layout, wind turbines or associated infrastructure as part of this application.

Planning permission is being sought for the continued operation of 11 no. of the 12 no. turbines which make up the existing Castledockrell Wind Farm as permitted under 3 no. planning applications, however, the Proposed Development relates to only 2 no. of these planning applications, as detailed above. It is proposed to extend the operational life of 11 no. of the existing turbines by 20 years from the date of their proposed decommissioning in August 2025, a per Condition 7 of the WCC 2004/4702 and ABP Ref PL26.211725 planning permissions. It is also proposed to permanently extend the operation of the existing onsite 110kV substation, which is also proposed to be decommissioned in August 2025. Detailed site layout drawings of the Proposed Development are included in Appendix 4-2 to this EIAR.



The Proposed Development is limited to an extension of the operational life of the existing wind farm. As such, there are no changes proposed to the existing development components. The various elements of the existing wind farm will remain in their current condition and will be subject to ongoing routine maintenance. The existing wind farm connects into the 220kV Lodgewood Substation, which feeds into the ESB National Grid Transmission and Distribution System. The existing grid connection is assessed cumulatively in this EIAR.

The existing wind turbines have a tip height of 120m, rotor diameter of 71m, a hub height of 84.5m and a lowest swept path of 49m. The wind turbines that are installed on the site are conventional three-blade turbines, that are geared to ensure the rotors of all turbines rotate in the same direction at all times. The existing wind turbines at the Castledockrell Wind Farm were manufactured by leading turbine manufacturer, Enercon, with 12 no. E70 models installed at the existing Castledockrell Wind Farm. Each turbine is capable of producing 2.3MW of electricity resulting in an estimated installed capacity of 25.3 MW. The 66,490 MWh/yr of electricity produced by the Proposed Development would be sufficient to supply approximately 15,830 Irish households with electricity per year, based on the average Irish household using 4.2MWh of electricity.

Each wind turbine is secured to reinforced concrete foundation that has been installed below the finished ground level. The turbine foundation transmits any load on the wind turbine into the ground. The existing turbine foundations are typically circular in plan with an average area of  $227m^2$ .

Hardstanding areas consisting of levelled and compacted hardcore are in place around each turbine base, to facilitate access and maintenance and generally provide a safe, level working area around each turbine position. The hardstanding area is intended to accommodate a crane if necessary during maintenance works. There will be no changes to the existing hardstanding areas as part of the Proposed Development. The existing hardstanding areas vary slightly at each of the 12 no. turbines, with an average area of approximately  $815\text{m}^2$ .

No changes are proposed to the existing site access roads of approximately 3.8km in total length, which provide vehicular access to all turbines from the main entrance gate at the north of the site. Site roads are constructed of consolidated gravel with an average running width of 4.5m. Access to the site is from the L2012 Local Road, running in a north-south direction along the western boundary of the site. The L2012 Local Road connections to the R745 Regional Road at the Monalee Cross Roads and to the L2007at Bola Beg. No changes to the site entrance are proposed.

There are no groundworks involved in the operational phase of the Proposed Development, and therefore no existing natural drainage features will be altered and there will be no direct or indirect discharges to natural watercourses. During decommissioning of the wind farm, it is intended to limit groundworks other than to rehabilitate constructed areas such as turbine bases and hardstanding areas. this will be done by covering with topsoil to encourage vegetation growth and reduce runoff and sedimentation. Electrical cabling connecting the site infrastructure to the onsite substation will be removed, while the ducting itself will remain in-situ instead of excavating and removing it. The turbines components will be removed and transported offsite, and the turbine concrete bases will remain in the ground and backfilled. The existing Castledockrell Wind Farm is connected to the National Grid via the existing onsite 110kV substation, which connects via underground 110kV cable to Lodgewood 220kV Substation, which is located approx. 6.3km southeast of the Proposed Development. There are no changes to the existing substation, control buildings or grid connection proposed as part of the Proposed Development.

The length of the cable connecting the onsite 110kVsubstation to Lodgewood 220kV Substation is approximately 8km long. The underground grid connection travels mostly through the public road network, with smaller sections of the cable travelling through private farm access roads and agricultural fields. The existing underground 110kV underground electrical cabling travels from the existing onsite 110kV internal substation off-road through agricultural land for approximately 640m, then along the L2009 Local Road for approx. 2.8km, before going off-road again through agricultural lands, crossing the River Slaney, and joining the R745 for approx. 1.7km. The underground electrical cabling then