

Validation Checklist

Lodgement Number : **LDG-073608-24**
Case Number: **ABP-320354-24**
Customer: **EDF Renewables Ireland Limited**
Lodgement Date: **01/08/2024 15:14:00**
Validation Officer: **Daniel O'Connor**
PA Name: **Carlow County Council**
PA Reg Ref: **2460122**
Case Type: **Normal Planning Appeal PDA2000**
Lodgement Type: **Appeal**



An
Bord
Pleanála

Validation Checklist	Value
Confirm Classification	Confirmed - Correct
Confirm PA Case Link	Confirmed-Correct
Confirm ABP Case Link	Confirmed-Correct
Fee/Payment	Valid – Correct
Name and Address available	Yes
Agent Name and Address available (if engaged)	Yes
Subject Matter available	Yes
Grounds	Yes
Sufficient Fee Received	Yes
Received On time	Yes
3rd Party Acknowledgement	Not Applicable
Eligible to make lodgement	Yes
Completeness Check of Documentation	Yes
Valid Lodgement Channel	Yes

BP01 to issue to Appellant/Applicant with receipt

Digital BP07 to issue to Planning Authority with copy of appeal

PA Notified

EIAR sticker to be added on file cover

Please Keep a copy of the letters for the file

Run at: 02/08/2024 10:22

Run by: Daniel O'Connor

Lodgement Cover Sheet - LDG-073608-24

Details

Lodgement Date	01/08/2024
Customer	EDF Renewables Ireland Limited
Lodgement Channel	In Person
Lodgement by Agent	Yes
Agent Name	John Wiloughby
Correspondence Primarily Sent to	Agent
Registered Post Reference	

Categorisation

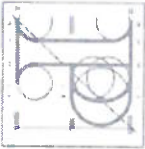
Lodgement Type	Appeal
Section	Processing

Fee and Payments

Specified Body	No
Oral Hearing	No
Fee Calculation Method	System
Currency	Euro
Fee Paid	3000.00
Refund Amount	0.00

Appeal

ASR-320354-24
DD-019398-24



An Bord Pleanála

Lodgement ID	LDG-073608-24
Map ID	
Created By	Óran Holland
Physical Items Included	No
Generate Acknowledgement Letter	
Customer Ref. No.	
PA Reg Ref	2466122

PA Name	Carlow County Council
Case Type (3rd Level Category)	

Observation/Objection Allowed?	
Payment	PMT-057253-24
Related Payment Details Record	PD-057118-24

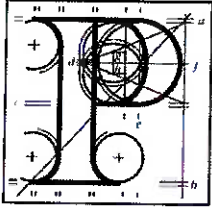
Decision - refused

Decision date - 5/7/24

Last day - 1/8/24

PA Case Decision Manual	
PA Case Number	
PA Decision	
PA Decision Date	
Lodgement Deadline	
Development Description	
Development Address	

Appeals Type	
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An
Bord
Pleanála

AN BORD PLEANÁLA
LDG- 073608-14
ABP- _____
01 AUG 2024
Fee: € 3000.00 type: card
Time: 16.52 By: hand

Planning Appeal Form

Your details

1. Appellant's details (person making the appeal)

Your full details:

(a) Name

EDF Renewables Ireland Limited

(b) Address

3 Dublin Landings, North Wall Quay, Dublin,
Ireland, D01C4E0

Agent's details

2. Agent's details (if applicable)

If an agent is acting for you, please **also** provide their details below. If you are not using an agent, please write "Not applicable" below.

(a) Agent's name

John Willoughby

(b) Agent's address

MKO, Tuam Road, Galway, H91 VW84

Postal address for letters

3. During the appeal we will post information and items to you **or** to your agent. For this appeal, who should we write to? (Please tick ✓ one box only.)

You (the appellant) at the address in Part 1

☐

The agent at the address in Part 2

☒

Details about the proposed development

4. Please provide details about the planning authority decision you wish to appeal. If you want, you can include a copy of the planning authority's decision as the appeal details.

(a) Planning authority

(for example: Ballytown City Council)

Carlow County Council

(b) Planning authority register reference number

(for example: 18/0123)

24/60122

(c) Location of proposed development

(for example: 1 Main Street, Baile Fearainn, Co Ballytown)

A c. 70.37ha site in the townlands of Ridge, Agharue, Coolnakisha, and Seskinrea, Co. Carlow

Appeal details

5. Please describe the grounds of your appeal (planning reasons and arguments). You can type or write them in the space below or you can attach them separately.

Please refer to the First Party Appeal Report enclosed which sets out the Grounds of Appeal

Supporting material

6. If you wish you can include supporting materials with your appeal.

Supporting materials include:

- photographs,
- plans,
- surveys,
- drawings,
- digital videos or DVDs,
- technical guidance, or
- other supporting materials.

Acknowledgement from planning authority (third party appeals)

7. If you are making a third party appeal, you **must** include the acknowledgment document that the planning authority gave to you to confirm you made a submission to it.

Fee

8. You **must** make sure that the correct fee is included with your appeal. You can find out the correct fee to include in our Fees and Charges Guide on our website.

Oral hearing request

9. If you wish to request the Board to hold an oral hearing on your appeal, please tick the “yes, I wish to request an oral hearing” box below.

Please note you will have to pay an **additional non-refundable fee** of €50. You can find information on how to make this request on our website or by contacting us.

If you do not wish to request an oral hearing, please tick the “No, I do not wish to request an oral hearing” box.

Yes, I wish to request an oral hearing

☐

No, I do not wish to request an oral hearing

☒

NALA has awarded this document its Plain English Mark

Last updated: April 2019.





AN BORD PLEANÁLA
LDG- _____
ABP- _____
01 AUG 2024
Fee: € 3000.00 Type: card.
Time: 14.52 By: hand

An Bord Pleanála,
64 Marlborough St,
Dublin 1,
D01 V902

Our ref: 220246
Your ref: N/A

Date: 1st August 2024

Re: First Party Appeal Against Refusal of Permission – Carlow County Council Pl. Ref. 24/60122

Dear Sir/Madam,

MKO of Tuam Road, Galway, H91 VW84 have been instructed on behalf of our client, **EDF Renewables Ireland Limited of 3 Dublin Landings, North Wall Quay, Dublin**, to prepare and lodge this First Party Appeal against the decision by Carlow County Council made on the 5th of July 2024 to refuse permission on Pl. Ref. 24/60122. Under this application, permission was sought for a 7 no. turbine wind farm and associated works in County Carlow.

Please find enclosed the completed Planning Appeal Form, along with the First Party Appeal Report, which sets out the Applicant's Grounds of Appeal against each of the reasons for refusal given by Carlow County Council in their decision to refuse permission.

The description of the development in question, as set out on the public notices is as follows:

'We, EDF Renewables Ireland Limited, intend to apply for a ten-year planning permission for development at this site in the townlands of Ridge, Agharue, Coolnakisha, and Seskinrea, Co. Carlow.

The development will consist of:

- (i) *The construction of 7 no. wind turbines with the following parameters:*
 - a. *Total tip height range of 179.5m – 180m,*
 - b. *Rotor diameter range of 149m – 155m,*
 - c. *Hub height range of 102.5m – 105m,*
- (ii) *Construction of associated foundations, hardstand and assembly areas;*
- (iii) *All associated wind farm underground electrical and communications cabling connecting the turbines and meteorological mast to the proposed onsite electrical substation including road crossing at L30372, Co. Carlow;*
- (iv) *Construction of 1 no. permanent 38kV electrical substation compound including a single-story control building with welfare facilities, all associated electrical plant and equipment, security fencing, entrance on to the access track, all associated underground cabling, wastewater holding tank and all ancillary works in the townland of Seskinrea, Co. Carlow;*
- (v) *A permanent Battery Energy Storage System within the electrical substation compound in the townland of Seskinrea, Co. Carlow;*

MKO, Tuam Road, Galway, H91 VW84
+353 (0)91 735 611 | mkoireland.ie | info@mkoireland.ie

Dublin - MKO, 9C Beckett Way, Park West Business Park, Dublin, D12 XN9W
McCarthy Keville O'Sullivan Ltd t/a MKO. Registered in Ireland No: 462657. VAT No: IE9693052R

- (vi) All works (within County Carlow) associated with the connection of the proposed wind farm to the national electricity grid, via underground 38kV electrical cabling predominantly within the public road corridor from the proposed onsite electrical substation in the townland of Seskinrea, Co. Carlow to the existing 110kV Kilkenny substation;
- (vii) Provision of 2 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route;
- (viii) Reinstatement of the road and track surfaces above the cabling trench along existing roads and tracks;
- (ix) 1 no. meteorological mast of c. 36.5m in height, and associated foundation and hard-standing area in the townland of Ridge, Co. Carlow;
- (x) The permanent upgrade of 1 no. existing site entrance off L3037 for the provision of construction and operational access;
- (xi) The provision of 1 no. new permanent site entrance and the upgrade of 1 no. existing site entrance off the L30372;
- (xii) Upgrade of existing tracks/roads and provision of new site access roads, 2 no. clear span bridge crossings, junctions and hardstand areas;
- (xiii) 2 no. temporary construction compounds with temporary offices and staff facilities in the townland of Ridge and Seskinrea, Co Carlow;
- (xiv) Carriageway strengthening works at 'Black Bridge' on the L1835 / L3037 (Protected Structure: Kilkenny RPS Ref. D84);
- (xv) Peat and Spoil Management;
- (xvi) Tree Felling to accommodate the construction and operation of the proposed development;
- (xvii) Operational stage site signage; and
- (xviii) All ancillary apparatus and site development works above and below ground, including soft and hard landscaping and drainage infrastructure.

A 10-year planning permission and 35-year operational life of the wind farm from the date of commissioning of the entire wind farm is sought.

A concurrent planning application for works within Co. Kilkenny including junction accommodation works, bridge strengthening works and the 38kV underground grid connection to the existing 110kV Kilkenny substation will also be lodged to Kilkenny County Council.

A design flexibility opinion issued by Carlow County Council on 14th March 2024 accompanies this application. The details unconfirmed in this application are the turbine tip height, rotor diameter and hub height. The range of parameters under which the turbine dimensions will fall are specified on this site notice and in the design flexibility opinion that accompanies this application.

The proposed development includes bridge strengthening works within the curtilage of a Protected Structure (Black Bridge – Kilkenny RPS Ref. D84).

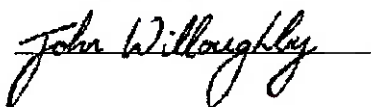
An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and will be submitted to the planning authority with the application.'

The First Party Appeal Report is enclosed which also includes the following appendices:

- Appendix 1 – CCC Notification of Decision to Refuse Permission
- Appendix 2 – Road Safety Audit, carried out by Traffico

The sum of €3,000 (the application included an EIAR and NIS) will be paid by card upon submission of this appeal.

Yours faithfully,



John Willoughby, BA, MSc, MIPI
Project Planner
MKO

Enclosed

- Completed Appeal Form
- First Party Appeal Report

MKO, Tuam Road, Galway, H91 VW84
+353 (0)91 735 611 | mkoireland.ie | info@mkoireland.ie

Dublin - MKO, 9C Beckett Way, Park West Business Park, Dublin, D12 XN9W
McCarthy Keville O'Sullivan Ltd t/a MKO. Registered in Ireland No: 462657. VAT No: IE9693052R

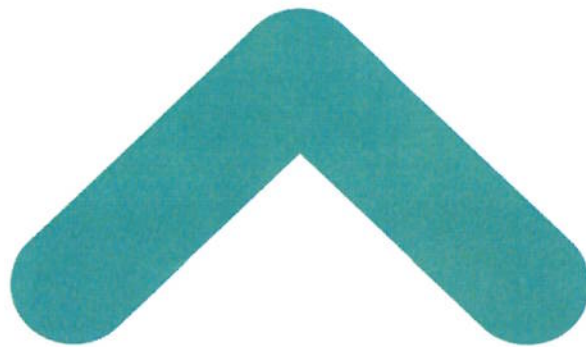


Planning and
Environmental
Consultants

First Party Appeal

Seskin Wind Farm, Co.
Carlow

Carlow Pl. Ref: 24/60122





DOCUMENT DETAILS

Client: **EDF Renewables Ireland Limited**

Project Title: **Seskin Wind Farm, Co. Carlow**

Project Number: **220246**

Document Title: **First Party Appeal**

Document File Name: **220246 - Seskin WF First Party GOA Report F - 2024.07.30**

Prepared By: **MKO
Tuam Road
Galway
Ireland
H91 VW84**



Rev	Status	Date	Author(s)	Approved By
01	Draft	26/07/2024	RD	JW
02	Final	30/07/2024	RD	JW

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INTRODUCTION

Background

MKO have been appointed by EDF Renewables Ireland Limited of 3 Dublin Landings, North Wall Quay, Dublin, to prepare and lodge this First-Party appeal against the decision by Carlow County Council (the Planning Authority) to refuse permission for a 7 no. turbine wind energy development and associated works (the Proposed Development) at Seskinrea and surrounding townlands, c. 3.1km northwest of Old Leighlin, Co. Carlow. Carlow County Council refused permission on the 5th of July 2024. The deadline for the submission of this appeal to An Bord Pleanála is the 1st of August 2024.

The planning application was lodged with Carlow County Council on the 13th of May 2024 and was assigned the planning reference Pl. Ref. 24/60122. A concurrent application was lodged with Kilkenny County Council in relation to the development of those elements of infrastructure for the project which were proposed within the functional area of Kilkenny County Council (the majority of the grid connection) – (Kilkenny Pl. Ref 24/60210). Both planning applications were accompanied by an Environmental Impact Assessment Report (EIAR), Natura Impact Statement (NIS) along with all required statutory planning application documentation. Kilkenny County Council issued a Further Information Request on the 27th June 2024.

This First Party Appeal document sets out the background to the project, the planning policy context relevant to the Proposed Development, each reason for refusal issued by Carlow County Council and subsequently sets out the Applicant's Grounds of Appeal (GOA). The GOA provides a response and rebuttal to each reason for refusal, demonstrating that the Proposed Development is appropriate in terms of proper planning and sustainable development, and therefore Carlow County Council's decision should be overturned, and planning permission granted by An Bord Pleanála. The refusal issued by the Planning Authority is attached to this Grounds of Appeal in **Appendix 1** for reference.

Proposed Development

The Proposed Development remains that as set out in the public notices as follows:

We, EDF Renewables Ireland Limited, intend to apply for a ten-year planning permission for development at this site in the townlands of Ridge, Agharue, Coolnakisha, and Seskinrea, Co. Carlow.

The development will consist of:

- (i) *The construction of 7 no. wind turbines with the following parameters:*
 - a. *Total tip height range of 179.5m – 180m,*
 - b. *Rotor diameter range of 149m – 155m,*
 - c. *Hub height range of 102.5m – 105m,*
- (ii) *Construction of associated foundations, hardstand and assembly areas;*
- (iii) *All associated wind farm underground electrical and communications cabling connecting the turbines and meteorological mast to the proposed onsite electrical substation including road crossing at L30372, Co. Carlow;*
- (iv) *Construction of 1 no. permanent 38kV electrical substation compound including a single-story control building with welfare facilities, all associated electrical plant and equipment, security fencing, entrance on to the access track, all associated underground cabling, wastewater holding tank and all ancillary works in the townland of Seskinrea, Co. Carlow;*
- (v) *A permanent Battery Energy Storage System within the electrical substation compound in the townland of Seskinrea, Co. Carlow;*
- (vi) *All works (within County Carlow) associated with the connection of the proposed wind farm to the national electricity grid, via underground 38kV electrical cabling predominantly within the*

- public road corridor from the proposed onsite electrical substation in the townland of Seskinrea, Co. Carlow to the existing 110kV Kilkenny substation;
- (vii) Provision of 2 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route;
 - (viii) Reinstatement of the road and track surfaces above the cabling trench along existing roads and tracks;
 - (ix) 1 no. meteorological mast of c. 36.5m in height, and associated foundation and hard-standing area in the townland of Ridge, Co. Carlow;
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 - (xiv) Carriageway strengthening works at 'Black Bridge' on the L1835/L3037 (Protected Structure: Kilkenny RPS Ref. D84);
 - (xv) Peat and Spoil Management;
 - (xvi) Tree Felling to accommodate the construction and operation of the proposed development;
 - (xvii) Operational stage site signage; and
 - (xviii) All ancillary apparatus and site development works above and below ground, including soft and hard landscaping and drainage infrastructure.

A 10-year planning permission and 35-year operational life of the wind farm from the date of commissioning of the entire wind farm is sought.

A concurrent planning application for works within Co. Kilkenny including junction accommodation works, bridge strengthening works and the 38kV underground grid connection to the existing 110kV Kilkenny substation will also be lodged to Kilkenny County Council.

A design flexibility opinion issued by Carlow County Council on 14th March 2024 accompanies this application. The details unconfirmed in this application are the turbine tip height, rotor diameter and hub height. The range of parameters under which the turbine dimensions will fall are specified on this site notice and in the design flexibility opinion that accompanies this application.

The proposed development includes bridge strengthening works within the curtilage of a Protected Structure (Black Bridge – Kilkenny RPS Ref. D84).

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and will be submitted to the planning authority with the application.

1.3

Policy Overview

The following section provides a summary of the planning, renewable energy and climate policy context relevant to the Proposed Development. It is clear from the policies outlined below that the Proposed Development is strongly supported in principle by policy at all levels, with the exception of the unfavourable wind energy zoning that applies to the subject site. The following section contains a synopsis of the current policies in place and their relevance to the Proposed Development. Further detailed discussions on these policies are included in the GOA (section 4) and in this regard the planning rationale report submitted as part of the planning application is also relevant.

The Proposed Development sits within a policy framework characterised by several recent crises, which have significantly influenced policy changes in recent years. These crises have heightened the

imperative to transition towards a renewable energy-focused electricity grid and have emphasised the necessity for diversifying our energy sources.



Figure 1-1: Main climate and renewable energy policy drivers

Paris Agreement

On an international level, Ireland is a signatory of the Paris Agreement, a global initiative adopted in 2015 that aims to address climate change by limiting global warming to well below 2 degrees Celsius above pre-industrial levels, with efforts to limit the increase to 1.5 degrees Celsius. Under the Paris Agreement, countries submit Nationally Determined Contributions (NDCs), outlining their individual climate action plans and commitments. Ireland's contribution comes under the European Union's (EU) NDCs targets and is based on the European Union's 2030 emissions reductions targets.

Sustainable Development Goals

Also in 2015, Ireland became a signatory to the United Nations Sustainable Development Goals (SDGs), which frame national agendas and policies to 2030. The SDGs inform the strategic outcomes of Irish policy documents, such as Project Ireland 2040: National Planning Framework. SDG 7 seeks to achieve 'Affordable and Clean Energy'.

European Green Deal

On a European level, the European Green Deal, initially introduced by the European Commission in December 2019, sets out the 'blueprint' for a transformational change of the 27-country bloc from a high- to a low-carbon economy. The European Green Deal is intended to work through a framework of regulation and legislation setting clear overarching targets, e.g. a bloc-wide goal of net zero carbon emissions by 2050 and a 55% cut in emissions by 2030 (compared with 1990 levels). This is a substantial increase compared to the existing target, upwards from the previous target of at least 40% (2030 Climate & Energy Framework), and furthermore, these targets demonstrate the ambition necessary to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C as per the Paris Agreement.

The EU Fit for 55

The EU Fit for 55 package was published in late 2021 with the aim of reducing EU emissions by at least 55% by 2030 compared to 1990 levels and making the EU carbon-neutral by 2050. This EU package is a

set of proposals to revise all existing EU acts on climate and energy and increase the EU target for renewables in the overall energy mix from 32% in 2030 to 40%.

Renewable Energy Directive & REPowerEU

In November 2023, a revision of the Renewable Energy Directive¹ (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to at 42.5%, with an ambition to reach 45% by 2030. This increase comes following the Russian invasion of Ukraine and the publication of REPowerEU plan in May 2022. REPowerEU aims to make Europe independent from Russian fossil fuels including oil and gas by rapidly transitioning to renewable energy. The plan aims to accelerate the scale up of renewables by speeding up the permitting process and placing renewable energy developments in the category of overriding public interest.

Climate Action and Low Carbon Development Act 2015 (as amended)

At a national level, the Climate Action and Low Carbon Development Act 2015 (as amended) brought into law for the first time the requirement for the State to reduce its carbon emissions by 51% by 2030 and climate neutrality by 2050. Under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended), public bodies are required to, in so far as practical, perform its functions in a manner consistent with the Climate Action Plan 2024, the National Energy & Climate Plan 2021 – 2030 and other national climate mitigation and adaptation plans.

Climate Action Plan

Originally published in 2019 and subsequently revised in 2021, 2023, and 2024, the Climate Action Plan (CAP) underscores the growing imperative to increase the presence of renewable energy generators on the national grid. Under CAP 24, the state has committed to achieving 6 GW of onshore wind energy by 2025 and 9GW by 2030. To achieve emissions abatement targets, CAP 24 has identified that an approximate eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030.

Project Ireland 2040

'Project Ireland 2040' comprises the National Planning Framework (NPF) and the National Development Plan (NDP) 2021 – 2030, both of which stress the urgency required to decarbonise Irish society. This is reflected in the NPF through National Strategic Outcome 8: *"Transition to a low carbon and climate resilient economy"*. The NDP emphasises the importance of addressing climate change, stating *"The next 10 years are critical if we are to address the climate crisis and ensure a safe and bright future for the planet, and all of us on it"*. The NDP sets out a Renewable Electricity Share (RES-E) target of 80% by 2030, calling for an *"unprecedented commitment to the decarbonisation of electricity supplies"*.

The first draft of the revised National Planning Framework, published in July 2024, includes national policy objectives that support the accelerated roll-out of the renewable electricity and the development of national electricity grid infrastructure. The draft revision also includes regional renewable electricity allocations, for which the southern region has an allocation of installing a further 978MW of onshore wind energy by 2030.

¹ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)

National Energy Security Framework

The National Energy Security Framework (NESF), adopted in 2022, and implements many of the aims and objectives of REPowerEU on a national level, reinforcing the State's requirement to urgently diversify away from imported fossil fuels and accelerate the roll out of renewables. The NESF is supported by the recently published Energy Security Package 'Energy Security in Ireland to 2030'. The Energy Security Package provides further long-term energy security measures which includes the prioritisation of achieving a renewables-led energy system.

Regional and Economic Spatial Strategy for the Southern Region

On a regional level, the Regional and Economic Spatial Strategy (RSES) for the Southern Region, supports the implementation of the national plans and policies outlined above. The RSES recognises the need for and the benefits of renewable energy for the climate and for the economic development of the region. The RSES advocates for the development of wind energy at appropriate locations in the region.

Carlow County Development Plan 2022 - 2028

The Carlow County Development Plan 2022-2028 ("CCDP") was adopted in July 2022 and sets out Carlow County Council's policies and objectives for the proper planning and sustainable development of the County.

The policies and objectives set out within the CCDP are supportive of the development of renewable energy within the county. Addressing climate change is a key underlying aim of Carlow County Council. The CCDP aims to *"to combat climate change and its impacts in the County by promoting and supporting policies and objectives which contribute towards a transition to a low-carbon and climate resilient future, and which focus on reducing greenhouse gas emissions and energy demands through appropriate and effective climate mitigation and adaptation measures."*

The CCDP includes a Renewable Energy Strategy (RES) which is underpinned by the following vision for renewable energy development in the County. *"To encourage and support the transition of Carlow to a sustainable county through community engagement, energy efficiency and the sustainable development of renewable energy, whilst providing environmental and economic benefit at a local and national level, and in accordance with all relevant planning and environmental considerations"*.

The RES includes a wind energy strategy map which designates areas as 'Not Normally Permissible'. The 'Not Normally Permissible' zoning is based on the Landscape Character Assessment, which identifies upland areas in Co. Carlow as sensitive landscapes. It is for this reason alone, that all 'Uplands' landscape character type areas are designated as 'Not Normally Permissible'.

The 'Not Normally Permissible' zoning conflicts with other policies in the CCDP, namely the designation of the Killeshin Hills as having a moderate capacity for wind energy development, along with Policy LA. P7, which facilitates developments that have a functional and locational requirement to be situated on steep or elevated sites, such as wind farms. Conflicting policies within the CCDP is discussed in further detail in section 4.2.1.1 below.

The CCDP also includes policies and objectives relating to Climate Change, Renewable Energy, Wind Energy, Natural Heritage, Biodiversity, Green Infrastructure, Landscape, Archaeology, Hydrology, Flooding, Noise, and Soils and Geology. A statement of consistency demonstrating the Proposed Wind Farm's compliance with the CCDP is provided in Table 3 of the Planning Report, submitted as part of the planning application.

2.

LOCAL PLANNING AUTHORITY DECISION

Carlow County Council issued a Notification of Decision to Refuse permission for the Proposed Development dated 5th July 2024, with three reasons for refusal as set out below.

Reason for Refusal 1: Landscape and Wind Energy Policy

1. *The proposed wind farm development is located in the Killeshin Hills Landscape Character Area and Uplands Landscape Type, as designated in the Carlow County Development Plan 2022-2028 and accompanying County Landscape Character Assessment and Schedule of Protected Views. The Killeshin Hills Landscape Character Area has key characteristics including being open to views from a wide area within the County, the distinct prominence of the Castlecomer Plateau as a backdrop to the area, a tapestry of small to medium scale fields, and designated protected scenic routes and views, and the Uplands Landscape Type is assigned the highest landscape sensitivity rating of 5. Policy WE. P4 in the Plan states that wind energy development is not normally permissible in the Uplands Landscape Type, and Policies LA. P1, LA. P2, LA. P3 and LA. P11 seek to protect and maintain the overall integrity of the County's landscape by recognising its capacity to sustainably integrate and absorb appropriate development, by ensuring development does not have a disproportionate landscape or visual impact in sensitive upland areas, by adopting a presumption against developments on elevated or visually exposed sites or areas, and by protecting the aesthetic attributes of views and prospects. It is considered that the proposed wind farm development, incorporating 7 no. wind turbines with a maximum blade tip height of 180 metres and maximum rotor diameter of 155 metres, by itself and in combination with adjoining permitted wind farm developments, would have disproportionate and adverse landscape and visual impacts on the Killeshin Hills Landscape Character Area and Uplands Landscape Type, would be out of scale with and result in overbearing impacts on the receiving landscape, would unduly detract from those characteristics which contribute to its landscape value, scenic quality and sensitivity, and would negatively impact on the established appearance and aesthetic attributes of protected scenic route numbers 4, 5, 6, 7, 8, 9 and 9 and protected view numbers 27, 28, 31, 32, 33, and 34 as identified in the Carlow County Landscape Character Assessment. Accordingly, to permit the proposed development would be contrary to Policies WE. P4, LA. P1, LA. P2, LA. P3 and LA. P11 in the Carlow County Development Plan 2022-2028 and would therefore be contrary to the proper planning and sustainable development of the area.*

Reason for Refusal 2: Impact on Local Road Network

2. *The proposed wind farm development is located in an upland area which is predominately served by a local road network of restricted width and capacity. Having regard to the site location and the condition of the existing road network proposed to access the site during the construction period, it is considered that the submitted plans and particulars, including the Environmental Impact Assessment Report, have failed to satisfactorily demonstrate that the local road network is of adequate capacity and design to accommodate the volume and frequency of HGV traffic along the proposed haul routes. Accordingly, to permit the proposed development would likely result in significant adverse impacts on the local road network, would endanger public safety by reason of a traffic hazard and obstruction of road users, and would therefore be contrary to the proper planning and sustainable development of the area.*

Reason for Refusal 3: Noise

3. *From an assessment of background noise levels and predicted cumulative noise levels for night-time noise detailed in Chapter 12 of the Environmental Impact Assessment Report, it has not been demonstrated to the satisfaction of the Planning Authority, due to the submission of insufficient information, that the predicted increase in the cumulative noise environment for*

the operational phase of the proposed wind farm development would not give rise to adverse impacts on local residents. Therefore, to permit the proposed development in the absence of this information would be prejudicial to public health and the protection of the residential amenities of the area and would therefore be contrary to the proper planning and development of the area.

2.2

Carlow County Council's Decision

The Carlow County Council's (CCC) Planner's Report provides a description and assessment of the Proposed Development under the following headings; site location and description, proposed development, relevant planning history, summary of public participation process and consultations, internal and prescribed body submissions, observations and submissions, representations, planning policy overview, planning appraisal, appropriate assessment and conclusions and recommendation. The planning appraisal included an assessment of compliance with policy review, an evaluation of the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS). A summary of the relevant sections of CCC's Planner's Report and a response to the concerns raised by the Planning Authority are provided below.

Policy Conclusions

CCC's Planner's Report, in its assessment of the planning application against the provisions of the Carlow County Development Plan 2022-2028, makes the following observations:

- The Proposed Development is located in the 'Uplands' Landscape Area Type within the Land Character Area of the Killeshin Hills. Despite the identified moderate capacity for wind energy developments, the visual impact of the Proposed Development is not adequately mitigated against and therefore would be contrary of Policy WE. P4 of the Carlow County Development Plan.
- The Proposed Development, if permitted would adversely interfere with the character of the landscape and would contravene the 'County Carlow Landscape Character Assessment and Schedule of Protected Views' within the Carlow County Development Plan 2022-2028. Therefore, the Proposed Development would be contrary to Policies LA. P1, LA. P2, LA. P3, and LA. P11 of the Carlow County Development Plan.

EIAR Conclusions

CCC's Planner's Report and the accompanying EIA, in its assessment of the EIAR submitted as part of the application, makes the following observations:

General comment on EIAR:

The Council have raised concern over the length of the EIAR, suggesting that it is a barrier for effective public consultation and public engagement in the planning process. Concerns are expressed on whether the EPA's Guidelines have not been observed.

Applicant's Response:

The EIAR submitted complies with the EIA Directive as amended by Directive 2014/52/EU, the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations (as amended). In preparing the EIAR due regard has been given to the provisions of the 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency (EPA) in May 2022 (hereafter the 'EPA Guidelines').

In preparing the EIAR regard has also been taken of the provisions of the ‘*Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment*’, published by the Department of Housing, Planning and Local Government (DHPLG) in August 2018 to the extent these guidelines are relevant having regard to the enactment of the revised EIA Directive.

The European Commission also published a number of guidance documents in December 2017 in relation to Environmental Impact Assessment of Projects (EIA Directive) including ‘*Guidance on Screening*’, ‘*Guidance on Scoping*’, ‘*Guidance on the preparation of the Environmental Impact Assessment Report*’ and ‘*Guidance on integrating climate change and biodiversity into environmental impact assessment*’. MKO has prepared the EIAR in accordance with these guidelines also.

As set out in the EPA Guidelines, the purpose of this EIAR is to document the current state of the environment on and in the vicinity of the Proposed Development site and to quantify the likely significant effects of the Proposed Project on the environment. 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 negative impacts arising from the Proposed Development.

The EPA Guidelines state that ‘*excessive length can be a considerable barrier to effective public participation. It is best to keep supplementary or detailed information out of the main volume of the EIAR and present it as an appendix, separate to the main EIAR document.*’ The EIAR submitted uses the grouped structure method to describe the existing environment, the potential impacts of the Proposed Development thereon and the proposed mitigation measures. Volume 1 of the EIAR provides this information and is supported by detailed Appendices included in Volume 3.

The EIAR also includes a Non-Technical Summary, which is a condensed and easily comprehensible version of the EIAR document. The non-technical summary is laid out in a similar format to the main EIAR document and comprises a description of the Proposed Development followed by the existing environment, impacts and mitigation measures presented in the grouped format.

During the preparation of the EIAR, the Applicant has carried out significant public consultation with local residents and engaged with both Carlow County Council and Kilkenny County Council. A Community Report with the details of this consultation is provided as Appendix 2-2 of the submitted EIAR, this report details the public consultation carried out to date by the Applicant, including door knocking/leaflet drops, the provision of a dedicated Community liaison Officer (CLO), a drop-in information clinic in 2022 and a public consultation event in 2023. A pre-application meeting was held with Carlow County Council on 22nd August 2023 and with Kilkenny County Council on 13th September 2023.

Furthermore, a scoping report, providing details of the Proposed Project, was prepared by MKO and circulated in December 2022 on behalf of the Applicant. Table 2-7 in Chapter 2 of the submitted EIAR provides a list of all consultees contacted as part of scoping, as well as a list of responses and where each element was addressed in the EIAR. As such, it is considered that the Applicant has carried out extensive public engagement with regards to the Proposed Project, all of which has been clearly presented in the EIAR.

The submitted EIAR has supplied extensive mitigation measures in line with the EPA Guidelines objective of identifying and detailing mitigation measures to address potential adverse environmental impacts. Chapter 18 of the submitted EIAR provides a collated list of all mitigation and monitoring measures relating to the pre-commencement, construction, operational and decommissioning phases of the Proposed Project. The mitigation measures have been grouped together according to their EIAR Chapter and Proposed Project phase to provide an easy to audit list that can be reviewed and reported on during the future phases of the Proposed Project.

In summary, the Proposed Project is a large renewable energy infrastructure project and under the requirement of the EIA Directive, the EIAR submitted presents a comprehensive report that documents the current state of the environment on and in the vicinity of the Proposed Project site, identifies and

details mitigation measures to address potential adverse environmental impacts, and quantifies the likely significant effects of the Proposed Project on the environment. The purpose of this comprehensive EIAR is to provide the relevant authority the relevant information to enable the EIA to be carried out.

Reasonable Alternatives:

The case for site selection, the alternatives presented, and the iterative design process were deemed to be generally satisfactory by the Planning Authority. However, in terms of alternative models and designs the Planning Authority believes there to be a 'limited analysis', however it notes that model selection is further detailed in Ch 4 Section 4.4.1.

Population and Human Health:

From review of the EIAR, the Planning Authority consider that the Population and Human Health Chapter lacks information in relation to the following:

- The EIAR sets out that as there are currently no tourism attractions or amenity walkways located within the Proposed Development site, there are no impacts associated with the operational phase of the development and it is not considered that the development would have an adverse impact in tourism infrastructure in the vicinity. The report has not given due consideration to the value of the designated scenic routes and viewpoints particularly those in the immediate area with regards to their value as a tourism asset.
- More detail is required on the cumulative assessment of potential direct and indirect effects of the proposed and adjoining permitted wind farms on human health and population. In particular with regards to noise impacts, which have been considered in the report received from EHS. The submission received from the EHS notes that 'an examination of the background noise levels and predicted cumulative noise levels for night-time noise indicated an increase of more than 10dBA at a number of noise assessment locations at varying wind speeds. The predicted increase in the cumulative noise environment above the background level indicates a significant change in the night-time noise environment at a number of sensitive receptors. This change in the noise environment, even at low noise levels, could have an adverse effect on health. It is recommended that the applicant carries out further assessment and proposes possible mitigation measures to ensure that noise levels do not have an adverse impact on local residents.
- The report has not given sufficient consideration to the potential impacts to the residential amenity from the disproportionate and adverse landscape and visual impacts the Proposed Wind Farm will have on the local rural area

Applicant's Response:

The impact of wind farms on tourism is detailed in Section 5.4 of Chapter 5 'Population and Human Health' of the EIAR. Whilst it is acknowledged that the varied natural landscape and scenic amenity of the area may provide opportunities for general outdoor recreation, it is noted that there are no identified tourist attractions pertaining specifically to the site of the Proposed Development itself. The Department of the Environment, Heritage and Local Government's Wind Energy Development Guidelines for Planning Authorities 2006 state that 'the results of survey work indicate that tourism and wind energy can co-exist happily'. It is not considered that the Proposed Project would have an adverse impact on tourism infrastructure in the vicinity. Renewable energy developments are an existing feature in the surrounding landscape, which will assist in the assimilation of the Proposed Development into this environment.

The concerns expressed by the Planning Authority in relation to Noise and Landscape and Visual are comprehensively considered in section 4.4.1 and 4.3.2 of the report.

Biodiversity:

Chapter 6 of the EIAR - Biodiversity was reviewed by Blackstaff Ecology on behalf of the Planning Authority who deemed the Chapter to be comprehensive and to contain a fully supported assessment. Blackstaff provided a report with a recommendation that further information is sought regarding some minor details in the chapter which included the following points:

- The applicant should submit details of the experience of the field survey team;
- Clarify which field mapping application (app) was used when mapping habitats;
- What buffer zone was applied in relation to surveys for Badger;
- As suitable amphibian breeding habitat was described, confirmation of whether a Habitat Suitability Index (HSI) and/or crepuscular newt surveys were carried out or eDNA samples were taken with regard to Smooth Newt and, if so, what the results were; and
- As suitable habitat was described for Common Lizard, confirmation of whether dedicated lizard surveys were carried out and if so, what the results were.
- The assessment found that of the five structures along the proposed grid route which had the potential to support roosting bats, one had High Suitability with others being assessed as Low or Negligible, but no mention is made as to whether any crepuscular surveys were carried out and, if so, what the results were.

Applicant's Response:

In response to the recommendations supplied by Blackstaff Ecology (on behalf of the Planning Authority) with regards to Chapter 6 of the EIAR (Biodiversity), please see the below information.

Chapter 6 Biodiversity which formed part of the submitted EIAR was completed by Corey Cannon, a Project Director (Ecology) at MKO. The relevant experience of Corey and her team are detailed in Section 6.1.3 of Chapter 6 and Section 1.8.2 of Chapter 1; the educational qualifications of the MKO Ecology team members who completed site surveys is also provided in Section 6.1.3 of Chapter 6.

In response to the query in relation to the application utilised when mapping habitats, all data collected in the field was collated in the ArcGIS Field Maps application and subsequently transferred into QGIS for mapping purposes and figure outputs. Furthermore, as detailed in Section 6.2.3.1, multi-disciplinary walkover surveys comprehensively covered the entire EIAR Site Boundary (defined as the 'study area' in Chapter 6). Where signs of badger were recorded, additional surveys were undertaken to identify the status of any potential setts. Details on the dedicated badger surveys that were undertaken are provided in Section 6.5.2.1 of Chapter 6 Biodiversity.

Section 6.5.2 of Chapter 6 of the EIAR details all the information relating to fauna recorded in the existing environment of the Proposed Wind Farm site. Detail in relation to amphibians is outlined in Section 6.5.2.7 of Chapter 6 of the EIAR. Crepuscular or eDNA surveys were not required as no significant suitable breeding habitat for amphibian species was identified on the Proposed Wind Farm site. In relation to Habitat Suitability Index (HSI) this is a survey methodology that was developed for use in the UK specifically for evaluating the suitability of ponds for great crested newt. It is not a recognised survey methodology for smooth newt in Ireland.

In Section 6.5.2.7 of Chapter 6 Biodiversity, it is identified that common frog, smooth newt and common lizard have all be recorded within hectad S66 in which the Proposed Wind Farm site is located. No observations of common lizard or smooth newt were made during the ecological surveys at the site. An incidental record of common frog was noted during the surveys, however, no significant suitable breeding habitat (ponds) for amphibians were recorded. Section 6.5.2.7 of Chapter 6 of the EIAR further goes on to state that in relation to common lizard, although not recorded on site during the surveys there is suitable habitat for this species in the form of scrub and stone walls. The Common

lizard hibernates throughout October to March, often in groups². They have a preference for sheltered frost-free spots, under rubble or stones, or old tree roots and in hedge banks³. Stone walls in particular can provide suitable hibernation sites for common lizard. Heavily vegetated stone walls were recorded within the Proposed Wind Farm site and as such could provide suitable hibernation sites for this species. This species is unlikely to occur in any significant numbers within the site, however, mitigation measures have been prescribed in Section 6.6.2.2.4 of Chapter 6 on a precautionary basis to mitigate any potential impacts on this species should they be present and should works to remove stone walls be required in the winter months when this species is at its most vulnerable.

Chapter 6, Section 6.5.1.12 flags the need for infrastructure works at the Black Bridge, an assessment was carried out at this location to determine its potential to support a bat roosts. Ground assessment and endoscope surveys were undertaken in February 2023 which identified suitable roosting features, no bats were observed at the time of survey. No works are proposed to the arch of the bridge and therefore there will be no loss of roosts if present. However, to ensure no disturbance is caused during the construction phase, Table 6-19 of Chapter 6 (Section 6.6.2.2.5) states that works at Black Bridge will be undertaken to avoid sensitive life cycle periods for bats, namely deep hibernation (December – February) and the maternity season (May-August), as disturbance at these times can cause mortality. A pre-commencement bat survey will also be undertaken prior to works to assess bat usage of the Black Bridge. The function of this survey will be to reassess the baseline environment since the time of undertaking the assessment in 2024, and to identify bat presence at the time of works. If a bat roost is identified within the bridge, a bat derogation licence to disturb bats will be obtained from the NPWS, prior to works and the works will be supervised by a qualified ecologist.

Birds:

The Birds (Ornithology) chapter of the EIAR was reviewed by Blackstaff Ecology on behalf of the Planning Authority. The subsequent report from Blackstaff noted some areas with perceived limitations and inconsistencies with regard to survey methodology. Further information was recommended by Blackstaff on the points reproduced below:

- *There are some limitations in the performance of the surveys. In particular, the breeding bird survey is limited in scope and does not extend across the entire site - see Survey Methodology for comments. VP watches are carried out at the appropriate time of year and are spread across the relevant seasons as is required by SNH methodology. However, there is a relative lack of survey data from early and late in the day, which may bias the observations of target species.*
- *Although stipulated within Appendix 7-6, Table 7-6-1, target species are not mentioned within this section of Chapter 7, which hampers the readers' ability to interpret figures 7-6 to 7-8 and figure 7-11; these should be included for clarity.*
- *Examination of I-WeBS data found that while no I-WeBS site exists which covers the site, in order to estimate bird populations at the County level I-WeBS sites from within a 25km radius were identified as KORs and an online link is provided for these datasets, allowing for ease of cross-referencing. Of eight I-WeBS sites identified only one had data available online. This could constitute a limitation of the study but is not mentioned within the Limitations section of the Chapter.*
- *There is a lack of clarity on what the Zol is and as a result there appears to be some overlap between those species within 7-9, which are said to occur within the Zol, and those in Table 7-10 which all appear to occur beyond 4km from the site. The Zol needs to be clearly defined at the start of the Field Survey Results section and based on its value, the species within Tables 7-9 and 7-10 need to be re-arranged accordingly. Clarification is also required on how the Zol figure was determined.*

² <https://wtt.ie/wp-content/uploads/2017/09/WL42-Lizards-eng.pdf>

³ <https://www.arguk.org/info-advice/ad-guides/529-dragons-in-the-hills-the-amphibian-and-reptiles-of-northern-ireland/file>

- While species accounts are provided for ten of the target species, an additional nine target species are listed within Appendix 7-1, Table 7-1-1; no mention is made of these species within this part of the report. Even if none of the additional nine target species were recorded during the two years of survey effort, this should be clearly stated within the report in order for the text herein to be consistent with the aforementioned appendix table.
- Notably, the Field Survey Results section of Chapter 7 refers only to ten target species which were encountered within the survey area over the two-year survey period; no summaries are provided for the non-target bird species recorded during the breeding and wintering walkover surveys e.g. how many species were recorded, in what numbers, and what is their conservation status and how many were regarded as confirmed / probable / possible breeders, or non-breeding?
- Appendix 7-3, Table 7-3-8 lists the non-target bird species recorded; the table format allows for presence/absence of each species by month across all survey years, however no indication is given of estimated numbers for each species. It is suspected that these records were obtained from all survey types, although this is not clarified within Chapter 7 or within Appendix 7-3. It would also be helpful to have an additional column for each species denoting its conservation status according to the relevant BoCCI (Birds of Conservation Concern Ireland) report so that the reader can determine the relative importance of the site for various species, particularly those which are amber- or red-listed.

Applicant's Response:

In response to the recommendations supplied by Blackstaff Ecology of Chapter 7 Ornithology, please see the below information.

In relation to the duration and extent of surveys, the species targeted in breeding walkover surveys (i.e. adapted Brown & Shepperd and O'Brien & Smith standard methodologies) typically comprise breeding waders. The site consists of largely commercial forestry habitat which is not suitable breeding habitat for these species and no evidence of breeding wader activity was recorded during all surveys. Areas of the site not covered by breeding walkover transects were not accessible during the survey period. Section 7.2.4.2.2 of Chapter 7 of the EIAR states that *'transect routes were devised to ensure the required coverage of different habitats was achieved within the survey area. Transects were selected to ensure all areas of suitable breeding/foraging habitat were approached to within 100m, where access allowed.'* Given the cumulative effort of breeding bird surveys completed to date on the Proposed Wind Farm site there is no doubt that the presented information represents comprehensive coverage of the site, resulting in a complete suite of breeding surveys (i.e., Vantage point surveys, walkover surveys, woodcock surveys, breeding raptor surveys).

Vantage point surveys completed between September to May inclusive were carried out with dawn/dusk periods included (i.e. one hour before sunrise / one after sunset), as these months comprise the main wintering and migration period when birds can typically be active outside of daylight hours. Appendix 7-2 of Chapter 7 of the EIAR flags the date, time the survey began, and the total duration of the survey beginning on 16/04/2020 and ending on 16/03/2022; surveys took place throughout all hours of the day, including dawn and dusk periods.

Appendix 7-6 details the Bird Monitoring Programme and provides a timeframe and monitoring schedule for the bird population, with a focus on Key Ornithological Receptors (KORs) of the Proposed Wind Farm site during the construction and post-construction phase of the Proposed Project. The figures referenced in the Blackstaff report (i.e., Figure 7-6 through Figure 7-8 and Figure 7-11) are the survey area figures for walkover survey transect (Figure 7-6 and Figure 7-7), breeding raptor survey locations (Figure 7-8), and waterbird distribution locations (Figure 7-11) and are therefore not relevant to the Bird Monitoring Programme supplied in Appendix 7-6.

Target species for the Proposed Wind Farm site are detailed in Chapter 7, Section 7.3.6 with a definition supplied in Section 7.2.3. Target species included Annex I species, SCI species of SPAs within 15km, red-listed birds of conservation concern and raptors and any other species particularly sensitive to wind farm developments.

Section 7.3.4 of Chapter 7 details that the Proposed Wind Farm site is not covered by an I-WeBS site and the nearest site is located approximately 5km east of the Proposed Wind Farm site – i.e., the River Barrow (Goresbridge-Maganey Bridge). Owing to the geographical location of the Proposed Wind Farm site, at the meeting point of three counties (Co. Carlow, Co. Kilkenny and Co. Laois), data from I-WeBS sites within 25km of the site has therefore been used to estimate populations at the ‘county’ level for wintering waterbirds identified as KORs. A footnote supplied in this section states the following *‘[t]he limitations of using this data to estimate a county population is acknowledged, e.g. as all the counts in a given year were not undertaken on the same day typically there is the potential for under or over estimates, however this is the best available information.’* Therefore, the limitations of I-WeBS data were included in Chapter 7.

The Zone of Influence (ZoI) is defined in Section 7.1 of Chapter 7 as the area within which potential effects are anticipated. ZOIs differ depending on the sensitivities of particular species and were assigned in accordance with best available guidance (SNH, 2016 and McGuinness *et al.*, 2015), adopting a precautionary approach. Detail on how the ZoI was set up for the Proposed Project can be found in Section 7.3.1 of Chapter 7.

In relation to the bird species detailed in Table 7-9 (target species recorded in the potential ZoI of the Proposed Project) and Table 7-10 (target species recorded outside the potential ZoI of the Proposed Project) no bird species overlap between these tables. Species in Table 7-9 were recorded at Proposed Wind Farm site and those in Table 7-10 were only recorded greater than 4km from the site and therefore discounted.

In relation to the nine target species listed in Appendix 7-1 Table 7-1-1 which are not provided with detailed species accounts, the four non-passerine target species (i.e. kingfisher, little egret, whooper swan and curlew) are described in Table 7-10 and discounted based on no observations within a minimum 4km of the Proposed Wind Farm site. An additional four of the nine target species comprise passerines (i.e. grey wagtail, meadow pipit, redwing and swift) and are listed in Table 7-11. Teal which is listed in Appendix 7-1 Table 7-1-1 is included in error, this species was not recorded during surveys.

Details on how the list of target species for the Proposed Wind Farm was determined is located in Section 7.2.3 of Chapter 7, this includes red-listed species from the Birds of Conservation Concern in Ireland (BoCCI), therefore the conservation status of target species has been clarified. The total number of observations of target species at the Proposed Wind Farm site are included in Appendix 7-3 Summary Data. Total number of observations on non-target species was not included as these species were not subject to dedicated species-specific surveys as they were outside the ZoI.

Table 7-11 within Chapter 7 notes that *‘[a]s per NatureScot guidance, it is generally considered that passerine bird species are not significantly impacted by wind farms due to their ecology. As such, the potential for direct habitat loss, disturbance/displacement and collision risk are limited and there is no evidence to suggest that the development will significantly impact this species. Furthermore, commercial forestry, the dominant habitat within the Proposed Wind Farm site, is of limited ecological value to the red-listed passerine species recorded in the locality during surveys, i.e. grey wagtail, meadow pipit, redwing and swift.’* This NatureScot guidance informed the exclusion of amber-listed passerines from further assessment. Information on the identified, red-listed passerines is also included in Table 7-1-1 in Appendix 7-1. As red-listed passerines were determined not to be KORs, their inclusion in earlier sections of the EIAR Chapter was deemed not necessary.

Land, Soils & Geology:

The Planning Authority's assessment of Chapter 8 'Land, Soils & Geology' expresses the concerns below in relation to this chapter. It is noted that the Environment Section expressed no serious concerns and recommended a grant of permission subject to conditions.

- Site Investigations for foundation footings not sufficiently detailed and local bedrock assessment too general.
- Foundation location boreholes required to determine each turbine location, considered necessary at the consent stage rather than post consent as proposed.
- Queries whether an alternative location for T5 should be considered to avoid peat.
- Cumulative assessment not adequately carried out.

Applicant's Response:

The site investigations carried out to date provides full comprehensive coverage of the Proposed Wind Farm site relating to land soils and geology.

The methodology for cumulative assessment is included in Section 2.9.1 of Chapter 2 of the EIAR. The cumulative assessment boundary for this discipline is contained within the EIAR Site Boundary due to the subsurface nature of the proposed works. As stated in Section 8.6.7 of Chapter 8 '*due to the localised nature of the proposed construction works, which will be kept within the Proposed Project site, there is no potential for significant cumulative effects in-combination with other local developments on the land, soils and geology environment. The only way the wind farm proposal can have in combination effects with other off-site projects and plans is via the drainage and off site surface water network, and this hydrological pathway is assessed in Chapter 9 Water.*' Information on potential cumulative effects in Chapter 9 are provided in Section 9.5.7.

Water:

Chapter 9 'Hydrology' of the EIAR assess the impact of the Proposed Development on hydrology and hydrogeology. The Chapter was reviewed by the Council's Environment Section who raised no serious concerns and provided conditions to be attached in the event of a grant of permission. Similarly, the EHS submission expressed no serious concerns and considered that the mitigation measures were appropriate. The Planning Authority conclude that the content of Chapter 9 was satisfactory, and no further amendments were required.

Applicant's Response:

Despite the fact that Chapter 9 was considered satisfactory by the Planning Authority, a submission on the application, made by the Save Our Hills community group, raises a number of concerns regarding the Chapter 9 of the EIAR. Hydro-Environmental Services (HES), who prepared Chapter 9 of the EIAR, provided the response below to address the concerns raised in the Save Our Hills Submission.

This response has been prepared by Michael Gill of Hydro Environmental Services (HES).

The Hydro-G Report raises several geological, hydrological and hydrogeological concerns. These are addressed below.

Peat Stability

A Geotechnical and Peat Stability Risk Assessment (GPSRA) was completed by AFRY Ireland Limited for the Proposed Project. The assessment was completed in accordance with the best practice guidelines for geotechnical / peat stability risk assessments as given in Peat Landslide Hazard and Risk Assessments: Best Practice for Proposed Electricity Generation Developments (PLHRAG, 2nd Edition

2017) and in the Guidelines for the Risk Management of Peat Slips on the Construction of Low Volume/Low Cost Roads over Peat (MacCulloch, (2005).

AFRY's GPSRA included both a quantitative and qualitative assessment. The qualitative assessment found that:

"the probability, or the likelihood of peat slide occurrence at all locations is deemed as LOW, except along the spur road to T5, where it has been assessed as MEDIUM".

This was based on peat depths, lower shear strength, shallow slopes and previous dry periods.

Meanwhile, the quantitative assessment, concluded that:

"the probability of the likelihood of peat slide occurrence within the Proposed Development site is deemed as LOW."

Furthermore, following implementation of the proposed mitigation measures AFRY state that the risk rating will be reduced to low at all development locations. Overall, the GPSRA concluded that the Proposed Project site has an acceptable margin of safety and is suitable for the wind farm development.

In paragraph 15 of the Hydro-G report, attempts are made to compare the Meenbog Wind Farm site, Co. Donegal with the site of the proposed Seskin Wind Farm development. The Proposed Wind Farm site is not in any way comparable to an upland blanket bog site such as at Meenbog for the following reasons:

- No extensive or significant areas of deep peat are present at the Proposed Wind Farm site;
- As detailed in Section 8.3.3 of the submitted EIAR, the nature of the soils and subsoils at the site have been characterised by detailed site investigations including the completion of walkover surveys and geological mapping, 314 no. peat probes, gouge cores, 8 no. trial pits, 6 no. dynamic probes, 28 no. hand vane tests and laboratory analysis of recovered soil samples;
- The site investigations revealed that peat is not widespread at the site;
- A total of 40% of the peat probes did not encounter any peat whilst 96% encountered peat depths of less than 1m;
- Where present the shallow peat soils, often present as a peaty organic topsoil, are located in drained forested areas;
- There are no areas of intact blanket bog;
- There are no areas of quaking bog;
- No sign of instability was recorded during site walkover surveys completed by HES and AFRY; and,
- There are no historic landslides recorded in the local area.

Therefore, based on the lack of any significant peat deposits at the Proposed Wind Farm site, combined with the results of the GPSRA which has been completed in accordance with best practice guidelines, and with the implementation of the mitigation measures prescribed in the GPSRA, there is no risk of peat instability at this site.

Zone of Contribution to the Paulstown PWS

A comprehensive impact assessment with respect to Public Water Supplies (PWS) is presented in Chapter 9 of the submitted EIAR and utilises all available which informs the assessment.

The impact assessment does not identify any source protection areas within or in the immediate vicinity of the Proposed Wind Farm site. The closest source protection area is the Paulstown PWS, located ~3.1km to the south of the Proposed Wind Farm site. As discussed in the Section 9.3.16.1 of the

submitted EIAR, the Proposed Wind Farm site is located in a separate surface water catchment to this PWS. The Proposed Wind Farm site and all associated infrastructure are located in the River Nore regional surface water catchment and drain to the west, towards the Dinin River via the Coolcullen River and its tributaries. Meanwhile, the source of the Paulstown Spring is located in the catchment of the Barrow River, with Bernaugh Hill on the Castlecomer Plateau forming the watershed. Furthermore, given the nature of the bedrock at the Proposed Wind Farm site (Poor and Locally Important Aquifers), groundwater flowpaths will be short, will follow surface topography and will discharge into local surface watercourses which drain to the west. Therefore, there is no potential for effects on the Paulstown PWS associated with activities at the Proposed Wind Farm site.

The submitted EIAR identifies a section of the Proposed Grid Connection Route which is located in the Barrow surface water catchment and within the catchment of the Monefelim River, which contributes to the source of the Paulstown Spring (the GSI's source protection area report for the Paulstown Spring states that this is a minor contribution). However, given the transient and minor nature of the proposed works in combination with the prescribed mitigation measures and considering that the Monefelim River does not form a significant contribution to the overall source protection area, it was concluded that there will be no significant effects on the Paulstown PWS.

In the submission, Hydro-G state that the Zone of Contribution (ZoC) used in the impact assessment is outdated, and they imply HES knowingly understated the potential impacts. We submit that this is untrue, and that any potential for impact is not significant for the following reasons:

- Whilst the ZoC associated with the Paulstown Spring was delineated by the GSI more than 20 years ago, the geology which underpinned the GSI's assessment is hundreds of millions of years old. The local/regional geology has not changed in the course of that intervening 20 years.
- The main rock types in the vicinity of the Paulstown source comprise of Dinantian limestones, Namurian shales and sandstones and Westphalian shales and sandstones. The Namurian, Westphalian and Dinantian stages are subdivisions of the Carboniferous period and occurred between 307 to 359 million years ago.
- Therefore, geological data which underpinned the GSI's ZoC assessment remains unchanged.
- In any event, the additional abstraction proposed at Gorwan would be derived mainly from the Regionally Important Karstified Aquifer to the east of the Castlecomer Plateau rather than the Poor and Locally Important Aquifers below the Proposed Wind Farm site (which drain in a different direction anyway i.e. to the west).
- The proposed Gowran wells are located within the current boundaries of the Paulstown Spring SPA.
- Nevertheless, HES summarise as follows:
- The Proposed Wind Farm site and the source of the Paulstown Spring are located in different surface water catchments. The Proposed Wind Farm site drains to the Dinin River to the west;
- The Proposed Wind Farm site is underlain by a Poor and Locally Important Aquifers, formed from the sequence of Namurian beds of the Castlecomer Plateau. These rocks are 300/400m thick, and have relatively low bulk permeability, and have no karstification. The GSI's groundwater flow model for these rocks is that flowpaths will be short (in the order of 30/300m) and groundwater flow will follow local topography and emerge to local downstream watercourses over those short flowpaths. Regional groundwater flow systems are not generally observed.
- The Proposed Wind Farm site is distant from the Paulstown source and ~7.5km from the inner source protection area;
- The catchment area to Paulstown spring was conservatively derived ~20 years ago based on a set of criteria that have not changed: the geology remains the same; and the topography that drains water in the Monefelim and Acore river has not changed. While the proposed abstraction volumes may vary over time, i.e. less water from the

- spring, and more water from groundwater at the proposed Gowran wells, the SPA from which that water is derived has not changed in the last 20 years and will not change over the course of the lifetime of the Proposed Wind Farm development.
- The only elements of the Proposed Project with the potential to impact the Paulstown source is a section (~720m, but remote from the outer source protection area by ~600m) of the Proposed Grid Connection underground cabling route which is located in the Barrow surface water catchment.
 - This section of works will occur in the Monefelim River catchment, and as noted in the source protection area report for the Paulstown Spring, the Monefelim River (also known locally as the Mountfelim River) is only a minor contribution to the Paulstown spring flows. This detail was presented in Section 9.3.16.1 (Receiving Environment – Water Resources) and Section 9.5.2.17 (assessment of potential effects on the Paulstown PWS) of the submitted EIAR. For clarity, the GSI's source protection area report states the following:
 - "In the Mountfelim sub-catchment, only a portion of surface and groundwater flow from the Plateau recharges groundwater upstream of the Paulstown springs at certain times of the year. Consequently, it is considered over-conservative to incorporate the whole of the Mountfelim sub-catchment within the ZOC of the Paulstown springs. Instead, a nominal strip 15 m on either side of the channel is included".
 - Therefore, we correctly concluded that no potential effects will occur on the Paulstown PWS.

Zone of Contribution to the Castlewarren GWS

The preliminary source protection area associated with the Castlewarren Group Water Scheme (GWS) is mapped ~900m east of the Proposed Grid Connection Route at its closest point and ~3.6km southwest of the Proposed Wind Farm site. The zone of contribution to the BHs associated with the GWS is shown on EIAR Figure 9-12 as delineated by IE Consulting in 2017.

No significant effects will occur on this GWS for the following reasons:

- No works are proposed in the zone of contribution to this GWS; and,
- Mitigation measures for the protection of surface and groundwater water quality will be implemented during the Construction Phase along the Proposed Grid Connection Route.

Drinking Water Risk Assessment on the Catchment Scale – Castletomer GWB

A Water Framework Directive Compliance Assessment for Seskin Wind Farm was appended to the submitted EIAR as Appendix 9-4. Section 2.6.5 of this assessment stated that all Groundwater Bodies (GWBs) which underlie the Proposed Project site are listed as Drinking Water Protected Areas (DWPA's). The preceding sections identified those GWBs which underlie the Proposed Project site. These included the Castletomer, Shanragh, Ballingarry, Kilkenny, Clifden and Newtown GWBs, all of which are listed as DWPA's.

Subsequent sections of the WFD Compliance Assessment detail the potential effects that the Proposed Project may have on the qualitative and quantitative status of these GWBs in an unmitigated scenario. Mitigation measures for the protection of groundwater quality and quantity are then detailed, as prescribed in the EIAR. The WFD Compliance Assessment concludes that there will be no change in GWB status resulting from the Proposed Project. There will be no change in quantitative (volume) or qualitative (chemical) status of the underlying GWBS. Therefore, contrary to the Hydro-G submission the overall impact of the Proposed Project on the GWB DWPAs has been assessed.

The concerns raised in the Hydro-G submission have been addressed and assessed comprehensively in the submitted EIAR.

Air Quality:

Chapter 10 'Air Quality' presents the potential impact of the Proposed Development on air quality. The Chapter was reviewed by the Council's Environment Section who expressed no concerns with the contents of the assessment and did not request any further amendments. The EHS submission also expressed no concerns regarding this chapter.

Climate:

Chapter 11 'Climate' relates to the impact of the Proposed Development on the climate in terms of greenhouse gas emissions. In the Planning Authority's assessment of the Chapter, the assessment presented was deemed to be satisfactory.

Noise and Vibration:

The Planning Authority, in their assessment of the Chapter 12 'Noise and Vibration', were not satisfied that the Proposed Development would not have a significant adverse impact on residential properties arising from noise. The Planning Authority concurred with the EHS submission that further assessment would be required. The Planning Authority's and the EHS's concerns are comprehensively addressed in the response to refusal point 3 in section 4.4.1 of this report.

Cultural Heritage:

Chapter 13 'Cultural Heritage' was referred to the Development Application Unit (DAU) of the Department of Environment, Local Government and Heritage. The DAU's submission did not express any concerns with regard to the scale and location of the proposed development. The DAU concurred with the archaeological mitigation strategy proposed in Chapter 13. The Planning Authority concurred with the DAU submission and did not express and further concerns.

Landscape and Visual:

The Planning Authority, in their assessment of the LVIA's findings (Chapter 14), raise concerns over the impact of the Proposed Development on the landscape and on designated scenic routes and protected views. In their conclusion, the Planning Authority consider that if permitted, the Proposed Development would contravene policies WE P4, LA P1, LA P2, LA P3 and LA P11 of the CCDP. A detailed response to the concerns of expressed by the Planning Authority is provided in section 4.2.3 of this report.

Material Assets:

The Planning Authority's assessment of Chapter 15 'Material Assets' raised concerns regarding traffic and transport. The main concerns raised by the Planning Authority relate to the cumulative impact of the Proposed Development along with other permitted and proposed wind energy projects in the area. Chapter 15 was referred to the Council's Transportation Department for comment. The Transportation Department raised concerns in relation to the capacity of the road network to accommodate construction traffic. The Planning Authorities concerns, along with the issues raised in the Transportation Report, are comprehensively addressed in section 4.3.1 of this report.

Major Accidents and Natural Disasters:

In the Planning Authority's assessment of the Chapter 16 'Major Accidents and Natural Disasters', the Planning Authority concurs with the conclusion that, subject to all mitigation detailed in the EIAR, the Proposed Development will not give rise to significant residual effect(s) associated with the construction, operation and decommissioning of the Proposed Development.

Interactions

The interactions between the various environmental factors presented in the EIAR are considered to be adequately addressed in Chapter 17 'Interactions'.

3.

AN BORD PLEANÁLA'S LEGAL OBLIGATIONS

An Bord Pleanála will be aware of certain legal obligations in respect of the processing of certain planning applications and appeals for renewable wind energy developments, in particular:

1. Certain obligations under the Climate Action and Low Carbon Development Act 2015 (as amended) (the "Climate Act") imposed on An Bord Pleanála (the "Board") when exercising its decision-making functions in relation to planning applications for renewable wind energy developments;
2. Certain discretionary powers under the Planning and Development Act 2000 (as amended) (the "Planning Act") which must be exercised subject to the mandatory obligations set out in the Climate Act when the Board is exercising its decision-making functions in relation to planning applications for renewable wind energy developments;
3. The specific circumstances in which the Board has a discretion to grant permission for a wind farm development which materially contravenes a development plan, which discretion must be exercised subject to the mandatory obligations set out in the Climate Act.

The Government's Climate Action Plan 2024 requires an increase in the proportion of renewable electricity in Ireland to 80% by 2030. For onshore wind energy, a target of 6GW – from the current installed capacity of 4.5 GW – has been set for 2025, and a target of 9GW for 2030. More broadly, Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions emphasises the importance of decarbonising the electricity sector by taking advantage of Ireland's significant renewable energy resources while ensuring affordability and security in the national energy supply. Significant numbers of onshore wind farm developments such as the Proposed Development, are required to meet these targets and objectives.

In this context, Carlow County Council's Development Plan sets a target of a mere 6MW of new wind energy up until 2028, which, it is submitted, is not consistent with the Climate Action Plan.

Obligations under the Climate Act and the Planning Act

When exercising its decision-making powers under the Planning Act, An Bord Pleanála is obliged to perform its decision-making function (in so far as practicable) in a manner consistent with:

- the most recent approved climate action plan,
- the most recent approved national long term climate action strategy,
- the most recent approved national adaptation framework and approved sectoral adaptation plans,
- the furtherance of the national climate objective, and
- the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

Specifically, Section 15(1) of the Climate Act provides that:

"A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

- a) the most recent approved climate action plan,*
- b) the most recent approved national long term climate action strategy,*
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,*
- d) the furtherance of the national climate objective, and*

- e) *the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.” (the “National Climate Policies and Objectives”)*

The above requirement is a mandatory obligation.

The National Climate Policies and Objectives all support the development, and by implication the consenting, subject to proper planning, of wind farm developments.

The mandatory obligation of An Bord Pleanála to exercise its decision-making functions “*in a manner consistent with*” National Climate Policies and Objectives takes precedence over the lesser obligation to merely “*have regard to*” the policies and objectives set out under Section 143(1) of the Planning Act.

Section 143(1) of the Planning Act provides that:

“The Board shall, in the performance of its functions (other than functions conferred by Chapter III of Part XXI), have regard to—

- (a) the policies and objectives for the time being of the Government, a State authority, the Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural,*
- (b) the national interest and any effect the performance of the Board’s functions may have on issues of strategic economic or social importance to the State, and*
- (c) the National Planning Framework and any regional spatial and economic strategy for the time being in force.”*

Further, the mandatory obligation of An Bord Pleanála to exercise its decision-making functions “*in a manner consistent with*” the National Climate Policies and Objectives also takes precedence over the lesser obligation to merely “*have regard to*” inter alia the “*policies and objectives for the time being of planning authorities*”⁴. These policies and objectives are set out in their development plans. In effect, this means that the Climate Act requires the National Climate Policies and Objectives set out therein to take precedence over the policies and objectives of planning authorities set out in development plans.

In practical terms, this means that where An Bord Pleanála is determining whether or not to grant consent to a wind farm development, it is obliged to make its decision in a way in which is consistent with the National Climate Policies and Objectives where a wind farm development complies with these policies but contravenes a development plan.

This is in a context where a development plan is mandated by the Planning Act to be consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development (insofar as is practicable)⁵ and where local authorities have an obligation under the Climate Act to exercise their development-plan making functions “*in a manner consistent with*” the National Climate Policies and Objectives (as far as practicable).

More broadly, An Bord Pleanála is obliged to have regard to the national interest and any effect the performance of its decision-making functions may have on issues of strategic economic or social importance to the State⁶. The accelerated deployment of renewable energy developments is precisely such an issue of strategic economic and social importance to the State.

⁴ Section 143(1)(a) of the Planning Acts.

⁵ Section 9(6) of the Planning Acts.

⁶ Section 143(1)(b) of the Planning Acts.

Material Contraventions on Appeal

Where an appeal is before An Bord Pleanála, it has the discretion to grant permission for a project that materially contravenes a development plan in certain specific circumstances. This is notwithstanding a planning authority having decided to refuse permission because a development materially contravenes the development plan.

In this regard, Section 37(2)(a) of the Planning Act provides that: *“... the Board may in determining an appeal under this section decide to grant a permission even if the proposed development contravenes materially the development plan relating to the area of the planning authority to whose decision the appeal relates.”*

While Section 37(2)(b) of the Planning Act sets out specific limited scenarios where the Board can grant permission for a proposed development where the planning authority refused permission on the grounds that it materially contravenes the development plan, it is noted that the Notification of Decision to Refuse permission by Carlow County Council for the Proposed Development does not state anywhere that the Proposed Development ‘materially contravenes’ the development plan. As such, it is submitted that Section 37(2)(a) of the Planning Act applies, and the limitations of Section 37(2)(b) do not apply.

Notwithstanding the above, the Proposed Development meets all of the criteria of Section 37(2)(b) of the Planning Act, and so these are set out below for completeness.

The specific circumstances where permission may be granted by the Board notwithstanding a refusal by a Planning Authority due to a material contravention of the development plan, are set out in section 37(2)(b) of the Planning Act, which provides that:

“Where a planning authority has decided to refuse permission on the grounds that a proposed development materially contravenes the development plan, the Board may only grant permission in accordance with paragraph (a) where it considers that—

- (i) the proposed development is of strategic or national importance,*
- (ii) there are conflicting objectives in the development plan or the objectives are not clearly stated, insofar as the proposed development is concerned, or*
- (iii) permission for the proposed development should be granted having regard to regional spatial and economic strategy for the area, guidelines under section 28, policy directives under section 29, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister or any Minister of the Government, or*
- (iv) permission for the proposed development should be granted having regard to the pattern of development, and permissions granted, in the area since the making of the development plan.”*

When An Bord Pleanála is deciding whether or not it considers that notwithstanding a material contravention it should grant permission, it is under a mandatory obligation to make its decision in a manner consistent with the National Climate Policies and Objectives.

Unlike other types of development, renewable wind farm developments as a matter of principle are supported by, and support, all of the National Climate Policies and Objectives.

Therefore, in light of the following:

- a) The mandatory obligation imposed on the Board to exercise its decision-making functions in a manner consistent with National Climate Policies and Objectives under Section 15 of the Climate Act;
- b) The mandatory obligation on the Board to have regard to the national interest and any effect the performance of its decision-making functions may have on issues of strategic economic or social importance to the State, such as achievement of the State's National Climate Policies and Objectives, under section 143(1)(b) of the Planning Act;
- c) The mandatory obligation on the Board to exercise its decision-making functions "*in a manner consistent with*" the National Climate Policies and Objectives taking precedence over the lesser obligation to merely "*have regard to*" inter alia the "*policies and objectives for the time being of planning authorities*";
- d) The mandatory obligation on local authorities to exercise their development-plan making functions "*in a manner consistent with*" the National Climate Policies and Objectives (as far as practicable);
- e) The mandatory requirement that a development plan be consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development (insofar as is practicable); and
- f) The compliance in principle of renewable wind farm developments with the National Climate Policies and Objectives;

subject to the consideration of An Bord Pleanála of what constitutes proper planning and sustainable development in light of the above, it is entitled to exercise its discretion to afford a presumption in favour of granting permission for wind energy developments such as the Proposed Development, notwithstanding any material contravention of a local development plan.

Section 37(2)(b)(i)

As set out in national policy, wind farm developments such as the Proposed Development, are of strategic importance for Ireland to meet its binding renewable energy targets.

A wind farm development need not be considered a Strategic Infrastructure Development (SID) under the thresholds established in the 7th Schedule of the Planning Act (i.e. those for wind farm developments with fewer than 25 turbines or an output less than 50MW) to fully meet the requirements under this provision. It is sufficient that the project be strategic insofar as it contributes to Ireland meeting its climate, renewable energy and energy security targets.

This is particularly the case, where land, environmental and grid constraints dictate that in certain areas onshore wind farm developments with a relatively small number of turbines are required to meet the targets.

Section 37(2)(b)(ii)

In the Carlow County Development Plan 2022 – 2028, there are clear policy objective contradictions with regard to wind energy policy in the area in which the Proposed Development is located. The conflicting policies within the County Development Plan are detailed further in section 4.2.1 of this Grounds of Appeal document.

The conflicting policies of Carlow County Council for wind energy at this location have been previously acknowledged by An Bord Pleanála in the case of the White Hills Wind Farm SID

application (Ref: ABP-315365-22). Section 5.3.7 of the Inspector's Report for the White Hills Wind Farm SID application states as follows:

"I consider that there may be some conflict between the landscape policies and the renewable energy strategy in the 2022 Carlow County Development Plan, which is noted to accord with regional and national policies and objectives in terms of climate action and was evaluated by the Office of the Planning Regulator for such compliance. On one hand, the subject site area is identified as an area with viable wind speeds in the RE strategy, but this does not take into account landscape or visual capacity constraints. The Plan would further advise that wind energy projects in the uplands landscape in which the site lies would not normally be permissible. While the area of Killeshin Hills is noted to be uplands, the CDP also acknowledges that subject to appropriate mitigation measures, the area is described as having a moderate capacity for wind farming. In this context, I am satisfied that the Board can conclude that the principle of the proposed development at this location does not, as suggested, materially contravene the principle of policy WE P4 of the recently adopted Carlow County Development Plan."

It is submitted that the same context applies to the Proposed Development and that the Proposed Development does not materially contravene the Carlow County Development Plan.

Section 37(2)(b)(iii)

Under Section 37(2)(b)(iii) An Bord Pleanála may consider that permission should be granted notwithstanding a material contravention of a local development plan having regard to:

- a) regional spatial and economic strategy for the area,
- b) guidelines under section 28,
- c) policy directives under section 29,
- d) the statutory obligations of any local authority in the area, and
- e) any relevant policy of the Government, the Minister or any Minister of the Government.

In relation to (d) above, it should be noted that statutory obligations of any local authority in the area are *inter alia* to:

- a) Exercise their development-plan making functions "in a manner consistent with" the National Climate Policies and Objectives (as far as practicable);
- b) Make their development plans consistent with such national plans, policies or strategies as the Minister determines relate to proper planning and sustainable development (insofar as is practicable); and

In relation to (e) above, it should be noted that wind farm developments in principle comply with National Climate Policies and Objectives.

Discretion to refuse permission

An Bord Pleanála also has the discretion to refuse permission. However, in exercising its discretion it must weigh the competing interests where a project is supported by and supports the achievement of the National Climate Policies and Objective but materially contravenes the policies and objectives of a local development plan.

In weighing those competing interests, it must have regard to *inter alia*:

- the key findings in Ireland's Greenhouse Emissions Projections 2023 - 2050⁷, inter alia, that Ireland is not on track to meet the 51% emissions reduction target by 2030, with the first two carbon budgets (2021 -2030) projected to be to be exceeded by a significant margin of between 17 and 27 per cent;
- the Renewable Energy Directive III published in the Official Journal of the EU on 31 October 2023;
- the fact that it took on average, 82 weeks for An Bord Pleanála to determine the 12 planning appeals on onshore wind farms determinations made from January 2022 to June 2024 inclusive;
- that wind farms can only enter an "enduring connection process" (ECP) to apply for a grid connection after planning permission has been granted, and since 2018, the opportunity to make applications in the ECP process has only opened for a one month period each year; and
- the typical 18 – 24 months period it takes for a wind farm development to be built and energised.

Should An Bord Pleanála be minded to exercise its discretion to refuse permission, in doing so, it must in light of its obligations under the Climate Act in particular, first consider whether inviting further information and / or modified plans from the applicant would enable permission to be granted and if it considers that it would not, provide its reasons as to why it is of that opinion. In this regard, An Bord Pleanála has the discretion to require an applicant to submit further information.⁸ An Bord Pleanála may make such requests "*in its absolute discretion*."⁹

Should An Bord Pleanála be minded to exercise its discretion to refuse permission having arrived at the opinion that further information and / or modified plans would not enable permission to be granted, in doing so, it must in light of its obligations under the Climate Act in particular, provide its reasons as to why it considers that a refusal would not be in breach of the National Climate Policies and Objectives, including in particular, the Climate Action Plan 2023 target of delivering 6GW of onshore renewable wind energy by 2025 and 9GW by 2030.

⁷ <https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/irelands-greenhouse-gas-emissions-projections-2023-2050.php>

⁸ Section 132 of the Planning Act.

⁹ Section 132 of the Planning Act.

4. GROUNDS OF APPEAL

4.1 Introduction

The first-party grounds of appeal, which the Applicant wishes to raise in respect of the refusal by Carlow County Council are set out in this section below. The Grounds of Appeal are set out against each of the reasons for refusal which can be summarised as follows:

- Refusal Reason 1: Wind Energy and Landscape Planning Policy
- Refusal Reason 2: Traffic and Transport
- Refusal Reason 3: Cumulative Noise Impact.

4.2 Reason for Refusal 1 – Policy

Carlow County Council's first reason for refusal is stated as follows:

1. *The proposed wind farm development is located in the Killeshin Hills Landscape Character Area and Uplands Landscape Type, as designated in the Carlow County Development Plan 2022-2028 and accompanying County Landscape Character Assessment and Schedule of Protected Views. The Killeshin Hills Landscape Character Area has key characteristics including being open to views from a wide area within the County, the distinct prominence of the Castlecomer Plateau as a backdrop to the area, a tapestry of small to medium scale fields, and designated protected scenic routes and views, and the Uplands Landscape Type is assigned the highest landscape sensitivity rating of 5. Policy WE. P4 in the Plan states that wind energy development is not normally permissible in the Uplands Landscape Type, and Policies LA. P1, LA. P2, LA. P3 and LA. P11 seek to protect and maintain the overall integrity of the County's landscape by recognising its capacity to sustainably integrate and absorb appropriate development, by ensuring development does not have a disproportionate landscape or visual impact in sensitive upland areas, by adopting a presumption against developments on elevated or visually exposed sites or areas, and by protecting the aesthetic attributes of views and prospects. It is considered that the proposed wind farm development, incorporating 7 no. wind turbines with a maximum blade tip height of 180 metres and maximum rotor diameter of 155 metres, by itself and in combination with adjoining permitted wind farm developments, would have disproportionate and adverse landscape and visual impacts on the Killeshin Hills Landscape Character Area and Uplands Landscape Type, would be out of scale with and result in overbearing impacts on the receiving landscape, would unduly detract from those characteristics which contribute to its landscape value, scenic quality and sensitivity, and would negatively impact on the established appearance and aesthetic attributes of protected scenic route numbers 4, 5, 6, 7, 8, 9 and 9 and protected view numbers 27, 28, 31, 32, 33, and 34 as identified in the Carlow County Landscape Character Assessment. Accordingly, to permit the proposed development would be contrary to Policies WE. P4, LA. P1, LA. P2, LA. P3 and LA. P11 in the Carlow County Development Plan 2022-2028 and would therefore be contrary to the proper planning and sustainable development of the area.*

4.2.1 Grounds of Appeal against Refusal Reason 1

It is considered by Carlow County Council that the Proposed Development would be contrary the policy and objectives of the Carlow County Development Plan 2022-2028, specifically Policy WE. P4, LA. P1, LA. P2, LA. P3 and LA. P11.

4.2.2 Compliance with Policy WE. P4

It is acknowledged that the Proposed Development is located on lands identified as an area 'Not Normally Permissible' for wind energy development within the Carlow Renewable Energy Strategy (RES). Despite this wind energy classification, the conclusions of the EIAR demonstrate that the Proposed Development site is eminently suitable for wind energy development. It is also worth noting the fact the 'Not Normally Permissible' classification does not entirely preclude wind energy development in this area.

Misalignment with National Wind Energy Policy and Targets

It is also considered that, as demonstrated in the Planning Report which was included in the planning application, the wind energy zoning and associated Policy WE. P4 and the wind energy target of 6MW of new wind energy is not in compliance with renewable energy policy at a national level. Given that the country has an ambitious target of reaching 9GW of onshore wind energy by 2030, it is clear that a 6MW target for new wind energy capacity is not aligned with the national target. If this approach was to be adopted by all counties, there would be a significant shortfall below the 9GW national wind energy.

In the wind energy capacity assessment carried out as part of the Planning Report prepared by MKO submitted with the application, it is also demonstrated that there is an insufficient quantum of viable land outside of the 'Not Normally Permissible' zoning designation for County Carlow to adequately contribute to the national wind energy target of 9GW by 2030. The wind energy capacity assessment identified that the vast majority of the unconstrained land available for wind energy development is located in the 'Uplands' landscape character type and therefore are classified as 'Not Normally Permissible'. The wind energy capacity assessment found that only 0.04% (0.39km²) of County Carlow;

- is not restricted by the unfavourable zoning as set out in the RES (Not Normally Permissible),
- has adequate wind speeds (>7.6m/s), and,
- has potential for wind energy development when project level constraints are applied.

If the "Not Normally Permissible" zoning is strictly enforced, it would impede all commercial wind energy development in County Carlow. Without the 'Not Normally Permissible' classification of upland areas, County Carlow would have the capacity to deliver approximately 150MW of wind energy by 2030. This figure is more closely aligned with the national wind energy target.

The wind energy capacity assessment also demonstrates that the proposed wind farm site is one of a small number of sites remaining in the county which are unconstrained, and therefore, should be brought forward for wind energy development. In order to achieve the national wind energy target of 9GW by 2030, every viable site brought forward for wind energy development must be systematically evaluated based on its individual merit and appropriateness for wind energy development.

The Climate Action Plan 2024 found that to achieve the necessary emissions abatement, an approximately eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030. To achieve this level of renewable energy deployment, three areas delaying renewable energy rollout are identified for acceleration – grid connection, planning and route to market. Furthermore, CAP 24 identifies the issue of local and national policy alignment as a critical issue to be resolved to enable Ireland to reach its renewable energy targets.

'As importantly, greater alignment between local plans and renewable energy targets at national and regional level to support investment in and delivery of onshore wind and solar renewable energy is also critical.'

The recently published draft revision to the National Planning Framework (NPF) includes a significant revision that will align local renewable energy policy with regional and national renewable energy

policy. The draft revised NPF includes Regional Renewable Electricity Capacity Allocations, which allocates a number of MWs to be delivered by each region for onshore wind energy by 2030. The Southern Region is assigned a MW allocation of 978 MW. The Regional Assemblies will be required to identify allocations for each local authority, based on the national and regional targets. Local Authorities will be required to plan for the delivery of these 'Target Power Capacity (MW)' allocations through County and City Development Plans. Therefore, it is likely that Carlow County Council's 6MW target for new wind energy will be amended to align with the regional and national target. It is observed that, at the time of this appeal, the revised NPF remains in draft form. However, should the revised NPF be adopted during the period in which An Bord Pleanála is assessing this appeal, the Regional Renewable Electricity Capacity Allocations and other National Policy Objectives should be taken into consideration.

The draft revised NPF takes into account the considerable revisions to renewable energy policy at an EU level, most notably the Renewable Energy Directive (RED) III, which entered into force in November 2023. RED III increases the EU-wide renewable energy target from 32% to a minimum of 42.5% by 2030, with an indicative target of 45%. Central to measures included to achieve this target is the fast-tracking of the renewable projects through environmental and planning processes. One of these measures is the identification of designated 'renewable acceleration areas', which will be introduced into the Irish policy context through the revision of the NPF and the allocation of renewable energy targets outlined above, which are to be incorporated into Regional Renewable Electricity Strategies and County Development Plans.

RED III also reinforces the position of renewable energy projects being in the 'overriding public interest'. The presumption of planning and construction of renewable energy projects being in the 'overriding public interest' was introduced in the Council Emergency Regulation (EU) 2022/2577 of 22 December 2022. Article 3 of Regulation (EU) 2022/2577 states that *"Member States shall ensure, at least for projects which are recognised as being of overriding public interest, that in the planning and permit-granting process, the construction and operation of plants and installations for the production of energy from renewable sources and the related grid infrastructure development are given priority when balancing legal interests in the individual case...."* (emphasis added). Further clarification is provided in Recital 14 of Regulation (EU) 2024/223, which states that Article 3 of Regulation (EU) 2022/2577 *"requires Member States to promote those renewable energy projects by giving them priority when dealing with different conflicting interests beyond environmental matters in the context of Member States' planning and the permit-granting process"*. Up until the introduction of RED III, this had been a temporary measure, however, under RED III, the presumption of renewable energy projects being 'overriding public interest' will remain in place until climate neutrality is reached.

It is clear that policy WE. P4 of the Carlow County Development Plan 2022-2028 is not aligned with national and European policy and legislation. WE. P4 hinders all commercial wind energy development in County Carlow, energy development that is crucial to achieve legally binding emissions reduction targets. It is fact to say that if Ireland continues to make permitting decisions based on local policies that are clearly out of sync with national and European renewable energy objectives, the CAP24 9GW wind energy target and by association our carbon budgets, our 51% emission reduction target and other critical climate objectives will not be met.

Conflicting Policies

Conflicting policy objectives exist within the Carlow County Development Plan 2022 – 2028. Although the Proposed Development is located in an area designated as 'Not Normally Permissible' by WE. P4, there is support for the wind energy projects at this location elsewhere in the plan.

The conflicting policies are summarised below:

- **Policy WE. P4 and the wind energy capacity of the Killeshin Hills**
Policy WE. P4 states that wind farm development will not normally be permissible in the

Uplands Landscape Type. However, the CDP (Table 9.2) also identifies that the Killeshin Hills have a moderate capacity for wind farming, subject to appropriate mitigation measures.

➤ **Policy WE. P4 and Policy LA. P7**

Policy LA. P7 aims to facilitate where appropriate, developments that have a functional and locational requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunication masts or wind energy structures) where residual adverse visual impacts are minimised or mitigated. This policy is contradicted by WE. P4, which states that wind farm development will not normally be permissible in the Uplands Landscape Type.

The policies above demonstrate sufficient support for the principle of wind energy development at this location in Co. Carlow. It is submitted that the Proposed Development should be considered acceptable at this location and in general, in compliance with the policies and objectives of the Carlow County Development Plan 2022- 2028.

4.2.3 Compliance with Landscape Policy

4.2.3.1 Spatial planning of Landscape Designations and Wind Energy Zoning in Co. Carlow; Geospatial Analysis of Viable Areas

A geospatial analysis of viable areas for wind energy development was conducted within Co. Carlow taking considerations of spatial planning of landscape designations. Co. Carlow designates 'Upland' Landscape Character Types (LCTs) as being high sensitivity landscapes and 'not normally be permissible' for wind energy development.

Figure 4-1 (below) shows a map illustrating all the 'upland' LCTs in Co. Carlow in Yellow. All other LCTs are shown in Blue and include landscape types such as Rolling Rough Grazing, Narrow River Valley, Farmed Ridges, Farmed Lowland, Built Up Areas and Broad River Valley. It was determined during this exercise that the upland region of Co. Carlow consisted of 22.4% of the overall County while all other LCTs made up the remaining 77.4%.

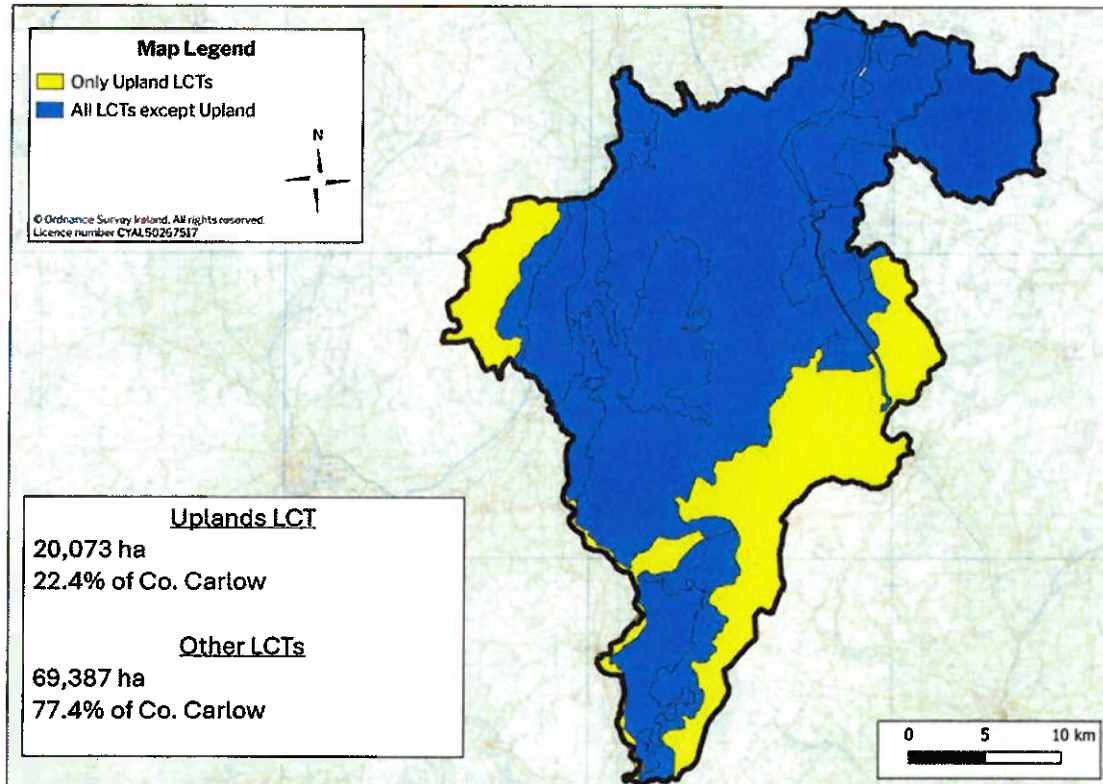


Figure 4-1 Map of Uplands and all other LCT's within Co. Carlow.

From a Landscape and Visual Impact Assessment perspective, a key consideration in the selection of suitable sites for the development of wind energy is finding relatively remote and sparsely populated landscapes with appropriate set back from large population centres, thereby eliminating potential for significant visual effects on large numbers of visual receptors. Potential for significant visual impacts on local residential amenity in local rural communities is also a key consideration in site selection for wind energy developments, and where possible avoidance and set back from the greatest number of residences is a key constraint during site selection and project design. Figure 4-2 below, shows an indication of population density relative to the LCTs in Co. Carlow using Eircode data from 2023.

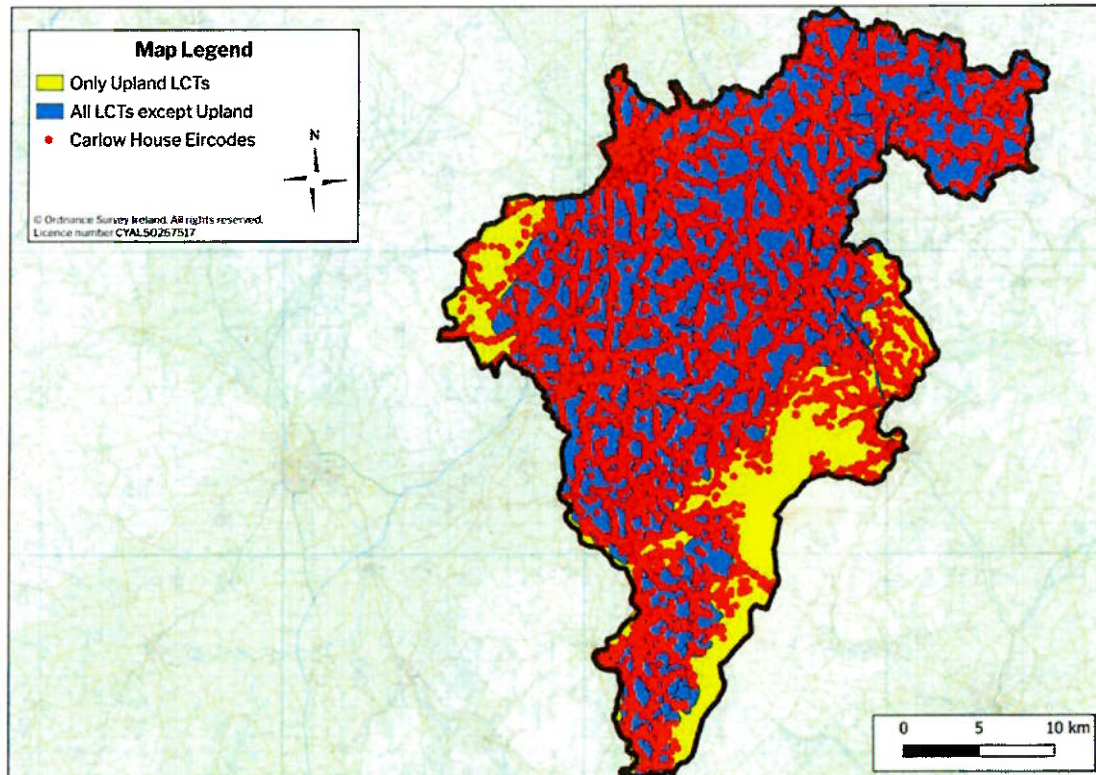


Figure 4-2 Co. Carlow Eircode's.

In Ireland it is standard to set turbines back from residential properties at a distance equating to four times the tip height of a turbine. The four times tip height set back from residential receptors is widely adopted as best practice in accordance with The Draft Revised Wind Energy Development Guidelines for Planning Authorities (Department of Housing Planning and Local Government, 2019) – Hereafter referred to as the 'Draft Revised WEDGs (DoHPLG, 2019)'. Turbines of modern commercial wind farms would typically have a tip height of approximately 175 metres, see section 7.1 of the Planning Report submitted as part of the application for full rationale. A 4 x tip height set back buffer from a turbine at 175 metres tall equates to 700 metres from residences. A 700 metre (4 x tip height) set back distance was applied to the Eircode's in County Carlow and is overlain the LCT map below – Figure 4-3. The area in red in Figure 4-3 includes all lands within a 700 metre (typical 4x tip height) set back distance from residences.

Figure 4-4 below outlines the remaining areas within Co. Carlow after the set back from residential visual amenity has eliminated areas of the landscape. This **single** constraint (residential visual amenity) leaves only 4.52% of Co. Carlow remaining as viable for wind energy development, importantly 3.9% of that area being located in the Uplands LCT. It is worth noting that there are a number of other environmental and planning constraints that further restrict wind energy in County Carlow. These factors are considered in the wind energy capacity assessment in the Planning Report submitted as part of the application.

The set back from residential amenity eliminates the viability of developing wind energy in the vast majority of other landscape types in County Carlow which are not 'Upland'. As illustrated by Figure 4-3 below, it was determined that only 0.62% (areas in Blue in Figure 4-3) of suitable areas remained in Co. Carlow across all other LCTs.

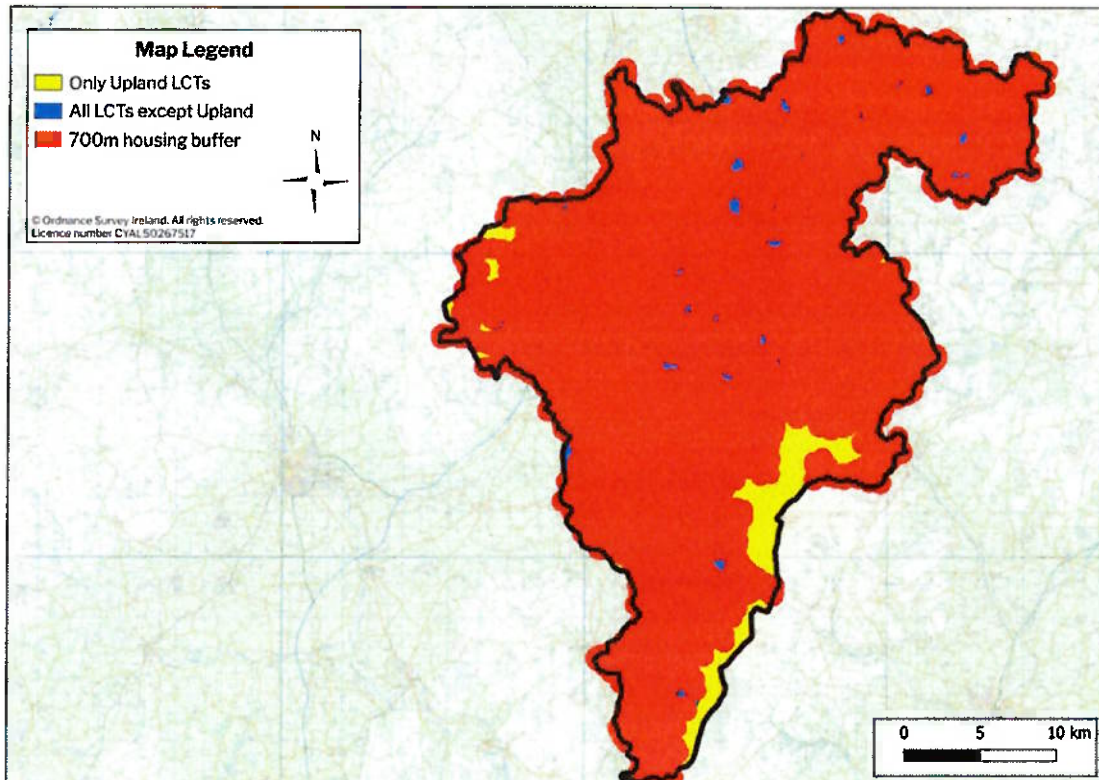


Figure 4-3 700m set back from residential visual amenity across Co. Carlow.

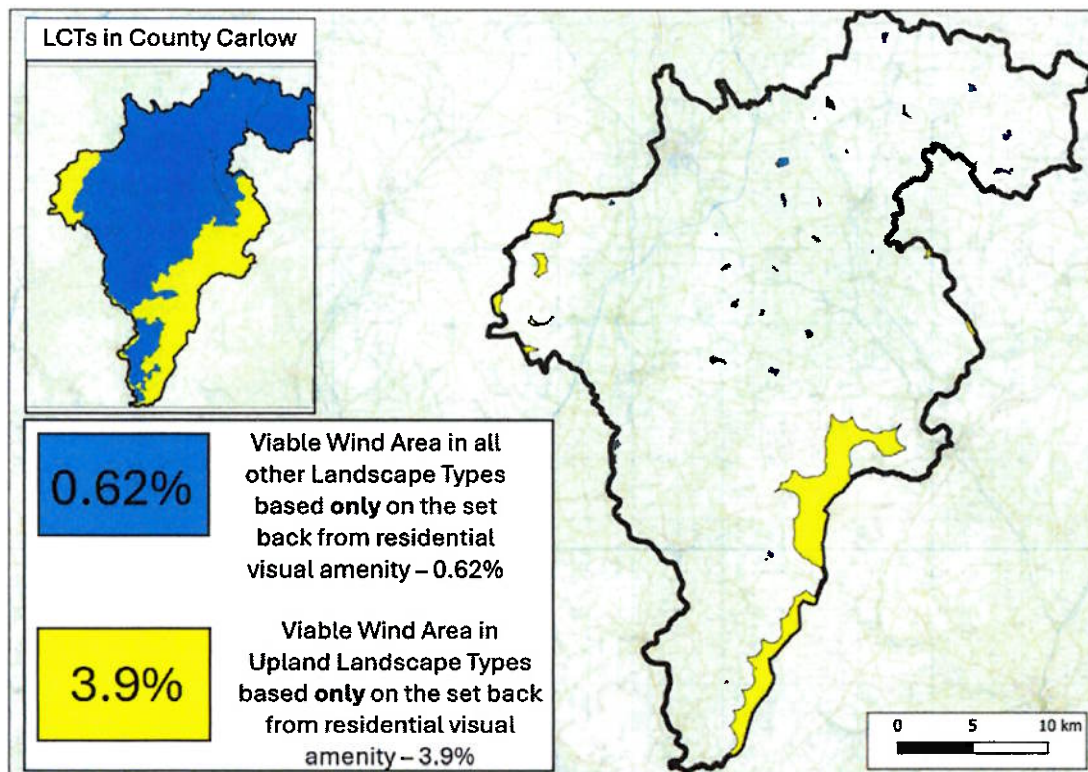


Figure 4-1 Remaining areas after set back from residential visual amenity.

Suitable average wind speeds are another key factor determining the viability of a location for wind energy development. The areas within Co. Carlow designated as having viable wind speeds were extracted from the CCDP- 2022-28 and can also be seen in figure 7.7 of the CCDP. This identifies areas >7.6 m/s for wind speeds and this determined that 21.77% of Co. Carlow had viable wind speeds. If we

take this one other factor (e.g. as per figure 7.7. of the CCDP) and consider in the context of the maps above, the non-upland LCTs (Blue) are reduced from 0.62% to comprise only 0.08% of County Carlow.

The above geospatial analysis shows that the wind zoning and landscape zoning within the CCDP 2022-28 which are not congruent and are essentially not fit for purpose. The analysis reveals that only 0.08% of the area of all other LCT's within Co. Carlow have potential as being suitable locations for wind energy development. All remaining areas of other LCTs marked in blue are also closer to large population centres which is generally not suitable from a landscape and visual impact perspective.

This geospatial analysis only considers 2 constraints, wind speed and typical set back from residential visual amenity. However, the basic analysis and statistics clearly show that the Uplands landscapes within Co. Carlow have the most capacity for wind energy infrastructure with respect to wind speed and set back from residences.

A large proportion of the viable area (4.52% of County Carlow) from this analysis comprises the Uplands region of the Blackstairs mountain range. The Blackstairs Mountain range has several very specific protections in the local planning policy, for example it is stated in the CCDP 2022-28 as "*the most important character area in the county*". Mount Leinster is located in the Blackstairs Range and is a relatively unique landform and would be known as a distinctive landscape receptor in this area of Ireland, therefore holding value in a national context. Mount Leinster and the Blackstairs range are therefore considered to be the most protected landscape areas within Co. Carlow and the Uplands area of the Blackstairs mountain would be considered of high landscape sensitivity. On account of these sensitivities, the uplands of the Blackstairs range are considered a less viable upland landscape for wind energy development.

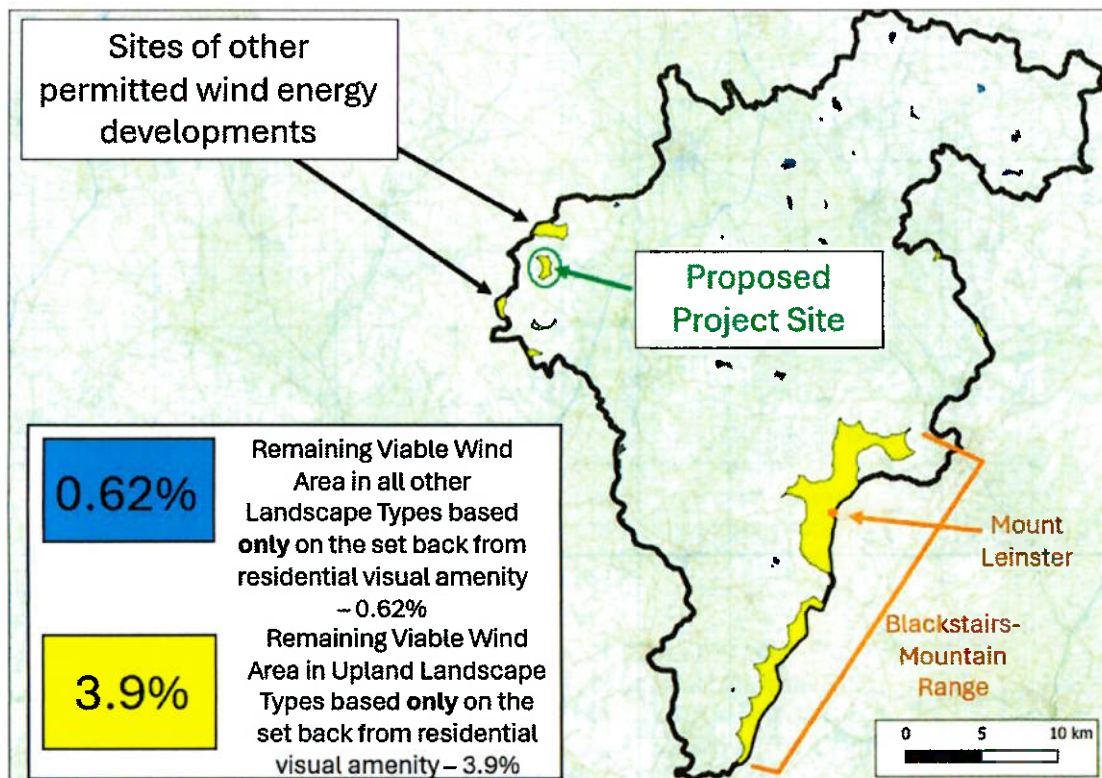


Figure 4-5 Remaining areas after the set back from residential visual amenity with locations of the Proposed and Permitted Wind Farms in the Killeshin Hills.

If the landscape sensitivity restricts the development of wind in the Blackstairs mountains, the viable area within the county becomes even smaller. The geospatial analysis shows approximately 5 no. smaller viable areas in upland landscapes in the west of the county in the Killeshin Hills, one of which is the site of the Proposed Development – as illustrated in Figure 4-5 above. The CCDP 2022-28 describes the Killeshin Hills as "*this area is almost entirely rural agricultural landscape*". This would

suggest that this upland landscape does not hold the same unique sensitivities and qualities as the upland region of the Blackstairs Mountain Range, and the rural working landscape of the site itself where the Proposed Development is located would be the next most suitable location as it comprises of agricultural land and commercial forestry. It is also noted in the CCDP 2022-28 and within the LVIA in section 14.4.1.4 that the Killeshin Hills has a ‘moderate’ capacity for wind farming unlike the Blackstairs mountain range which has a ‘low’ capacity. As is comprehensively reported throughout Chapter 14 of the EIAR, the landscape and visual impact assessments determined that both the site and the landscape of the Killeshin Hills are eminently suitable for accommodating wind energy such as the Proposed Development. These sentiments are also reflected by the planning history in this area, as two other wind energy developments have been given consent (Bilboa Wind Farm was subsequently appealed to ABP) for planning permission in the Killeshin Hills to the north (Bilboa ABP Ref: 318295) and south (White Hills Ref: 315365) of the Proposed Development site in County Carlow. These locations are shown as two viable areas (yellow) in the Carlow upland landscape identified in Figure 4-5 above.

The spatial analysis illustrated above, and statistics reported in this section unequivocally shows that the spatial zoning for landscape and wind energy in County Carlow are incongruent and are not fit for purpose. In this regard, in the context of landscape and visual impacts, the applicant requests the Board consider the site on its own merits from an LVIA perspective and consider the comprehensive landscape and visual impact assessment included in Chapter 14 and associated appendices of the EIAR. Whilst addressing several specific topics noted by the planning authority in their refusal, the following sections of this appeal highlight and summarise some of the key points reported within Chapter 14 which support the development of wind at this site and upland landscapes in general from an LVIA perspective, and which have evidently been overlooked by the planning authority.

4.2.3.2 Suitability of Upland Landscapes and the Proposed Development site for Wind Energy Development

The LVIA in Chapter 14 acknowledges that the Proposed Development falls within the ‘Uplands’ Landscape Character Type in County Carlow, which is designated as being ‘Most Sensitive’ to change within the local planning policy. However, as clearly illustrated in the geospatial analysis above (Section 4.2.3.1), Upland landscape types comprise most of the only viable sites for wind energy development in the county. Therefore, the ‘high’ sensitivity and ‘not normally permissible’ zoning for upland landscape types are deficient in the context of national policy which supports the development of wind energy in Ireland (as set out in Section 4.2.2 of this appeal). The LVIA in Chapter 14 set out to determine the value and sensitivity of the Proposed Development site and its wider upland landscape setting (including the Killeshin Hills LCA) and its capacity to accommodate the Proposed Development independently of the incongruent zoning and policies in the local planning policy (CCDP). The baseline descriptions and impact assessments reported in the Chapter 14 LVIA were guided by findings obtained through desk studies, multiple site visits and the use of a variety of best practice and objective LVIA tools and methods, including: GIS analysis; ZTV mapping; drone survey; a Route Screening Analysis, and production of photomontages. The methodology used to complete the assessments in Chapter 14 and consider the suitability of the site and its setting follow a series of contemporary best practice guidance for LVIA and for the landscape and visual assessment of wind energy developments specifically.

Notwithstanding the sensitivity designations in Carlow County Council’s local planning policy, Section 14.4.1.4 of Chapter 14 states the following in relation to the general suitability of Upland landscapes for the development of wind energy:

“There are also several other key attributes and factors which make upland landscapes highly suitable for accommodating wind energy developments from an LVIA perspective, for example:

- Upland landscapes are typically of a large scale where commercial scale wind farms can be effectively absorbed.

- Marginal areas of upland landscapes (e.g. The Proposed Development site) regularly comprise environments that are highly modified by commercial activities such as forestry, these are large unpopulated areas of relatively low landscape sensitivity (e.g. degradation from historic human intervention) which are proven to be very suitable for accommodating all of the physical infrastructure required for a wind energy development (compared with other upland environments such as pristine peatland).
- Upland landscapes are typically areas of low population density with open expanses of unsettled land which provide adequate space for wind farms enabling appropriate set back (e.g. 4 x tip height in Draft DoHPLG 2019 Guidelines) from residential receptors and large population centres.
- Strategic geographic siting of turbines in relation to well defined landforms and topographical features existent within upland landscapes can substantially reduce the visual exposure of a wind farm development in its wider landscape setting and therefore eliminate visual effects on larger number of receptors.”

Section 14.4.2 of Chapter 14 includes 12 no. pages describing the character of the landscape of the site itself, including maps, ground based photos and drone imagery. The LVIA characterises the site as a rural, modified working landscape strongly influenced by commercial forestry and low intensity agricultural land uses. Whilst it is a rural site, human activities have shaped the character and value of the landscape, with no designated areas of conservation, recreational amenities, or cultural associations relating to the site itself. Table 14-5 of Section 14.4.3 in Chapter 14 dissects the site and considers a variety of factors which would contribute landscape value to the site. Following best practice guidance for LVIA (GLVIA 3, LI & IEMA, 2013), landscape value is considered in combination with the susceptibility of the site to change, change being wind farm development in this case, to give an overall sensitivity of the landscape of the site. The site itself is on balance deemed to be of ‘Low’ sensitivity. Section 14.4.3 states the following rationale:

Rationale: The landscape value of the site was deemed to be ‘Low’ considering the high degree of modification on the land, an absence of any specific landscape receptors of high sensitivity or unique or distinctive characteristics relating to the site itself. The site is deemed to have a ‘medium’ susceptibility to change in mind of the land zoning in local planning policy and the protected scenic amenity designations in close proximity to the Proposed Wind Farm site. The determination of ‘medium’ takes into account the analysis reported previously in Section 14.4.1.4 – Policy Analysis and Suitability of Upland Landscapes. Overall, the sensitivity of this landscape is deemed to be ‘Low’

The determination of landscape sensitivity quoted above relates to the receiving landscape of the site itself where direct landscape effects will occur. At a local scale, referring to the site itself, it is a highly suitable receiving environment for the infrastructure of a wind farm development.

CCC’s Planner’s Report states:

“...and the submitted assertion that the local landscape has a low landscape value and low sensitivity is disputed. This assertion disregards and is contrary to the assessment and landscape value and sensitivity assigned to the Killeshin Hills in the County Development Plan and County Landscape Character Assessment”

The LVIA in Chapter 14 did not just consider the impact of the Proposed Development upon the lands of the site itself, but many other landscape and visual receptors in the 20km LVIA Study Area (to be discussed later in this appeal). The impact assessment included the effects on the Killeshin Hills LCA, the Landscape Character Area where the Proposed Development is sited itself. The LVIA in Chapter 14 of the EIAR attributed a ‘Medium’ sensitivity to the Killeshin Hills LCA in the impact assessment of this LCA. The specific detailed impact assessment of the Killeshin Hills LCA is included in Appendix 14-2 and is summarised in Section 14.7.3.1.2 of Chapter 14.

4.2.3.3 Suitability of the Upland Area within the Killeshin Hills LCA to absorb the Proposed Development

The potential landscape and visual impacts on the Killeshin Hills and the Uplands landscape type within the Killeshin Hills forms a key basis for Carlow County Council's refusal of the Proposed Development. This topic was also raised within the commentary in CCC's Planner's Report, specifically Pages 25 and 26. This section of the appeal responds to this element of the refusal and the commentary within CCC's Planner's Report. The response firstly evaluates the policy in the CCDP and highlights some of the relevant landscape policy analysis, which is included in Chapter 14 of the EIAR, as well as impact assessments reported in Chapter 14 of the EIAR. Finally, this section will detail how the Proposed Development can be effectively absorbed and integrated within the upland landscape of the Killeshin Hills by highlighting key evidence reported within Chapter 14 and shown in the photomontages, as well as reviewing siting and design guidance for siting of wind farms in the Wind Energy Development Guidelines.

Landscape Policy Analysis – General Landscape Policy, Landscape Sensitivity, Killeshin Hills LCA and Wind Energy Zoning

The Landscape Policy Context in County Carlow is included in Section 14.4.1.1 of Chapter 14 in relation to the Carlow County Development Plan 2022-2028 (CCDP) where general landscape policy and objectives are reported.

The refusal references the following general landscape policies as a basis for refusal:

“Policy WE.P4 in the Plan states that wind energy development is not normally permissible in the Uplands Landscape Type, and Policies LA.P1, LA.P2, LA.P3 and LA.P11 seek to protect and maintain the overall integrity of the County’s landscape by recognizing its capacity to sustainably integrate and absorb appropriate development...” – (Carlow Refusal)

Firstly, as demonstrated previously in the geospatial analysis, the not normally permissible zoning in Upland Landscape Types is not fit for purpose. Secondly, policies LA P1, P2, P3, and P11 are general landscape protection policies which relate to all development types. A key policy of Note in the CCDP is ‘LA. P7’. The following is extracted from Chapter 14 and LA.P7 from the CCDP:

“The landscape policies above (LA P1; P2; P3; P4; P5; and P6) indicate that upland landscapes are not generally suitable for development, however, it is key to note that the following policy (LA. P7 reported below) qualifies and acknowledges that developments such as wind farms have a functional and locational requirement to be sited in steep and elevated sites (upland landscapes) (Chapter 14 -EIAR).”

“LA. P7: Facilitate, where appropriate, developments that have a functional and locational requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunication masts or wind energy structures) where residual adverse visual impacts are minimised or mitigated (CCDP)”

Section 14.4.1.2.4 of Chapter 14 reports landscape sensitivity designations in the CCDP. Section 14.4.1.2.4 acknowledges that ‘upland landscape types’ are designated as ‘most sensitive’ to development. Chapter 14 then states:

“The LT sensitivity ratings (Table 9.2 of the CCDP) have been devised to consider general landscape sensitivity in the context of all development types (and land uses), where upland landscapes would potentially be more sensitive to development such as housing, transport routes or other commercial development. Whilst the Proposed Wind Farm is sited in the Upland LT with a

sensitivity rating of '5- Most' in Table 9.1 of the CCDP, it is also located in the Killeshin Hills LCA. Table 9.2 – Land Use Capacity Matrix is immediately below Table 9.1 in the CCDP and considers that the Killeshin Hills LCA has a 'Moderate' capacity to the Land Use 'Wind Farming'. Table 9.2 of the CCDP is reproduced below in Figure 14-1..... The table above shows Land Use Capacity of different LCAs within County Carlow, which are classified as having either Low, Moderate, or High capacity to different land uses. As seen in Figure 14-1, all LCAs within County Carlow have a 'Moderate' capacity for 'Wind farming', except for Mount Leinster – Blackstairs LCA, which has a 'Low capacity for 'Wind farming'. The table above shows Land Use Capacity of different LCAs within County Carlow, which are Mount Leinster – Blackstairs LCA is not located within the 15km LCA Study Area for effects on landscape character, which means that the entirety of the LCA Study Area for effects on landscape character is designated as having a 'Moderate' capacity for 'Wind farming'. This is the most supportive classification for wind energy development within any LCA in County Carlow, with no LCA classified as having 'High' capacity.

As highlighted above (from Chapter 14 and CCDP), the Killeshin Hills has a 'Moderate Capacity for Wind Farming' in the CCDP, and no other Landscape Character Area in Co. Carlow has a 'High Capacity' with Mount Leinster and the Blackstairs Mountains afforded highest protections and the lowest capacity for wind energy development in the CCDP (aligning with discussion relating to the geospatial analysis in the previous section of this appeal).

The applicant would like to draw the attention of the board to Section 14.4.1.4 of Chapter 14 - *Policy Analysis & the Suitability of Upland Landscapes (The Proposed Project site) for Wind Energy Development*. This Section of Chapter 14 highlights the inconsistencies involved in the blanket designation of Uplands LTs as 'not normally permissible' for wind energy development and the discrepancy with county and national policy relating to wind energy development. Section 14.4.1.4 of Chapter 14 highlights extracts from Section 6.1.5.1 of the Carlow Renewable Energy Strategy, notably the following:

"In the western area of the county, in the Killeshin Hills landscape character area, close to border with County Kilkenny, the wind speeds are favourable and there are no environmental designations that preclude wind farm construction. This landscape sensitivity in the area is '5', and 'moderate capacity' for wind farms is indicated in the LCA (2015). However, the constraints mapping suggests that it may be difficult to meet separation distances between wind turbines and dwellings, due to the dispersed settlement pattern in the area. (CCDP CCRES)"

The above quote from the CCRES indicates that the western portion of Killeshin Hills LCA is the most suitable location within the LCA for wind energy development, where the Proposed Development site is located. The following excerpt from the CCRES is included in Chapter 14 as well as CCC's Planner's Report.

"Subject to appropriate mitigation measures there may also be moderate scope to absorb extractive industry and wind farming. Overhead cables and masts would have to be selectively located, for example on farmed secondary ridges where the primary ridge would form the backdrop, or in the lowland farming area. Likewise, wind turbines could be similarly sited subject to appropriate conditions relating to mitigation measures. (CCDP CCRES)"

In their refusal and in CCC's Planner's Report, CCC suggest that the upland area of the Killeshin Hills is unsuitable for wind energy development as the Proposed Development cannot be visually absorbed in the landscape, primarily due to the absence of a 'primary ridgeline' to form a backdrop to the Proposed Development. CCC's Planner's Report states the following in relation to the policy quote above:

"Within the general landscape classification there is scope to accommodate Wind Farm development where appropriately located on farmed secondary ridges where the primary ridge forms a backdrop and it can be demonstrated the any potential impact will not be significant." (CCC-Planners Report)

From an LVIA perspective, it is questionable to suggest that viewing turbines against a backdrop is advantageous and beneficial in mitigating visual impacts. This topic is comprehensively addressed later in this appeal in relation to best practice guidance in the Wind energy Development guidelines (see section - *The Suitability of an Upland Plateau in the Killeshin Hills for accommodating the Proposed Project*). However, it is first important to consider landscape types such as 'Farmed Ridges' in County Carlow which are the only locations where such a scenario could potentially occur. CCC's Planner's Report correctly notes that the Killeshin Hills comprises a mosaic of Landscape Types including 'Farmed Ridges' (as well as Broad, River Valley; Farmed Lowlands; 'Built up Areas and Uplands).

Figure 4-6 below shows the viable areas in the Killeshin Hills LCA (Yellow and Blue areas in the figure) which were the result of the geospatial analysis shown previously in Section 4.2.3.1. The map illustrate that the Proposed Development is sited in one of the few viable areas in the Killeshin Hills (and Co. Carlow in general) where there is adequate set back from residential receptors. The map below illustrates that the Farmed Ridges landscape type has a very small area which has any capacity to absorb wind energy based only on set back from residential visual amenity. The geospatial analysis (based off the one 4x tip constraint) determined that only 0.25% of Co. Carlow comprises viable areas in the landscape type 'Farmed Ridges'. These viable areas were also highly fragmented in very small plots of land, most of which would be unsuitable for wind development. Analysis of wind speeds in the Killeshin Hills also indicates that the uplands area at the west of the LCA has greater capacity than the lower lying land areas, including the farmed ridges.

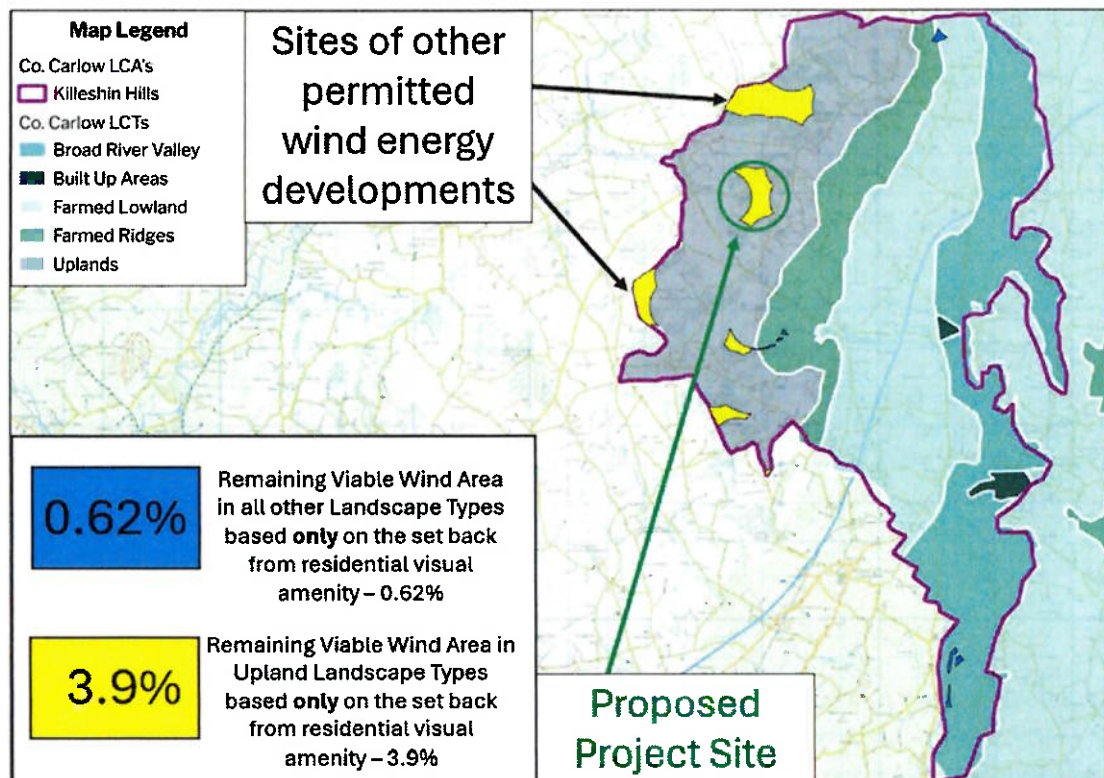


Figure 4-6 Landscape Types in the Killeshin Hills LCA, as well as Viable Wind Areas in Co. Carlow calculated from only one constraint - 4 x tip height set back from residential visual amenity

Principle of Planning in the Uplands Landscape of the Killeshin Hills.

As shown in Figure 4-6 above, two other viable areas (yellow) in the Killeshin Hills are sites of other existing and permitted wind energy developments. As stated in Chapter 14:

“The existing Gortahile, permitted Bilboa Wind Farm and permitted White Hill Wind Farm located adjacent to the Proposed Wind Farm site in the same Killeshin Hills LCA and Uplands LT (which is also noted on Figure 6.3 of the CCRES), demonstrating the acceptability of wind energy development within this landscape from a high-level planning perspective.

An Bord Pleanála recently granted permission for the White Hill Wind Farm adjacent to the south-east of the Proposed Wind Farm site. The inspectors report (Ref: ABP-315365-22) addresses the incongruency of the local planning policy for wind energy and landscape with respect to zoning in County Carlow, specifically the Killeshin hills. Section 5.3.7 of the inspectors report (Ref: ABP-315365-22) states the following:

“I consider that there may be some conflict between the landscape policies and the renewable energy strategy in the 2022 Carlow County Development Plan, which is noted to accord with regional and national policies and objectives in terms of climate action and was evaluated by the Office of the Planning Regulator for such compliance. On one hand, the subject site area is identified as an area with viable wind speeds in the RE strategy, but this does not take into account landscape or visual capacity constraints. The Plan would further advise that wind energy projects in the uplands landscape in which the site lies would not normally be permissible. While the area of Killeshin Hills is noted to be uplands, the CDP also acknowledges that subject to appropriate mitigation measures, the area is described as having a moderate capacity for wind farming. In this context, I am satisfied that the Board can conclude that the principle of the proposed development at this location does not, as suggested, materially contravene the principle of policy WE P4 of the recently adopted Carlow County Development Plan”.

The excerpt above indicates that the principal of windfarm development in the upland landscape of the Killeshin Hills is acceptable from a planning perspective.

The principle of planning of wind farm developments in the uplands LT of the Killeshin Hills LCA is acceptable, notwithstanding the incongruent wind and landscape zoning and policies in the CCDP. The following section of this appeal addresses what constitutes ‘appropriate mitigation measures’ and the specific factors which demonstrate how the Proposed Development and the proposed turbines specifically is effectively absorbed within the landscape from a visual perspective.

LVIA Mitigation by Design

Many of the relevant renewable energy strategy policies in the CCDP note the term mitigation, for example LAP7 states that siting of wind developments on elevated sites is suitable ‘*where residual adverse visual impacts are minimised or mitigated*’ (CCDP)”. With respect to landscape and visual impacts of wind energy developments, mitigation is predominantly something considered at the site selection and wind farm design stage. Section 14.4.1 of Chapter 14 - *Mitigation by Design*, sets out the following:

“The final design of the Proposed Project and strategic siting of the Proposed turbines in the landscape was informed by extensive early-stage impact assessment work conducted by the authors throughout 2023, including assessment of various turbine layouts and turbine models. The evolution of the Proposed Wind Farm

layout included omission of turbines from the project and careful micro-siting of turbines aimed at preventing the potential for significant landscape and visual effects. The final design of the Proposed Project is also considered in the context of siting and design guidance stated in the 'Wind Energy Development Guidelines for Planning Authorities' published by the Department of Environment, Heritage and Local Government in 2006 – Hereafter referred to as the 'DoEHLG 2006 Guidelines' (DoEHLG, 2006). Siting and design guidance was also considered from 'Draft Revised Wind Energy Development Guidelines for Planning Authorities' published by the Department of Housing, Planning and Local Government in 2019 – Hereafter referred to as the 'Draft DoEHLG 2019 Guidelines' (DoHPLG, 2019).

The Proposed Wind Farm layout that is the subject of this LVIA already incorporates the following landscape and visual design considerations for good wind farm design, with a particular focus on site selection:

- "The turbine layout has been designed to create a coherent cluster of turbines, contiguous and connected to each other visually and with consistent spacing in line with the guidance for design and siting of wind farms within the 'Transitional Marginal Landscape Character Type' in the DoEHLG 2006 Guidelines;
- There has been strategic siting in an upland plateau, a landscape capable of effectively absorbing a wind energy development. The Proposed turbines are inset from the primary ridgeline to the east where landform falls away to the Barrow Valley. The topographic characteristics immediately surrounding the site provide visual containment, reducing visibility and visual effects from local receptors in close proximity and generally reduce visual impacts on local receptors in the immediate landscape setting;
- As illustrated by ZTV mapping, visual containment provided by the upland plateau where the Proposed turbines are sited eliminates visibility (areas of no theoretical visibility) and therefore landscape and visual effects in a vast proportion of the LVIA Study Area, particularly to the north, west and south.
- The Proposed Development is strategically sited within a modified, upland working landscape of low landscape value and sensitivity where there is either limited visibility and/or large set-back distance from large population centres.
- The Proposed turbines have been strategically sited to ensure they are visually balanced within the landscape when they are visible, as demonstrated by most of the photomontages the visible turbines are most often arranged neatly in a linear array upon an elevated ridgeline when viewed from prominent receptors in the Barrow Valley to the east where most visibility occurs.
- Siting of Proposed turbines adheres to the minimum 500m set-back distance in the DoEHLG 2006 Guidelines and the 4-times-tip-height set-back distance explicitly set out for residential visual amenity prescribed by the Draft DoHPLG 2019 Guidelines;
- The Proposed Grid Connection Route to the national electricity grid is underground, thereby eliminating potential landscape and visual effects during the operational phase.
- The existing Kilkenny 110kV substation is sited within the 15km to 20km buffer near Kilkenny City and will connect to the onsite 38kV substation, which will be included in the assessment.
- The internal site road layout makes use of the existing forestry tracks within the site wherever possible, with 2.8km of existing road to be upgraded for construction and the delivery of wind turbine components, to minimise the requirement for new tracks within the site (2.7km of proposed new road)."

As reported above (from Chapter 14) every effort has been made to bring forward the optimum design for the Proposed Development to mitigate the potential for significant landscape and visual impacts – in line with the relevant planning and landscape policies in the CCDP.

No Requirement for a Backdrop when Viewing Turbines

As stated previously, CCC's Planner's Report states that there is a moderate capacity to absorb wind in the Killeshin hills but only when a primary ridgeline is the backdrop. CCC's Planner's Report notes that there are no peaks or ridges in the upland plateau at Killeshin Hills (forming part of the Castlecomer Plateau) and therefore nothing to form a 'backdrop' when viewing the turbines. This relatively comprehensive discussion around the use of a 'backdrop' in the CCC's Planner's Report completely relates to one paragraph from County Carlow's Renewable Energy Strategy (RES), for clarity this is reported again below:

"Subject to appropriate mitigation measures there may also be moderate scope to absorb extractive industry and wind farming. Overhead cables and masts would have to be selectively located, for example on farmed secondary ridges where the primary ridge would form the backdrop, or in the lowland farming area. Likewise, wind turbines could be similarly sited subject to appropriate conditions relating to mitigation measures. (CCDP RES)"

This excerpt is open to interpretation. Firstly, the sentence relating to the locational siting of infrastructure on farmed secondary ridges using primary ridges as a backdrop explicitly relates to overhead cables and masts. Not necessarily wind turbines. The following sentence states that wind turbines **could** be sited in similar locations and scenarios, although subject to mitigation measures. The CCC's Planners report have interpreted this text to mean that it is a preferable requirement to site turbines so they are viewed against a ridgeline with landform as a backdrop and a core point leant upon by CCC in their refusal on landscape and visual grounds.

Considering best practice guidance for the siting and design of wind farms (WEDGs DoEHLG, 2006; and Draft WEDGs, DoHPLG, 2019) viewing turbines against a backdrop (e.g. a ridgeline) is not typically considered a preferable visual aesthetic from an LVIA perspective. Whilst viewing turbines against a distinct landform can be acceptable, the preference for doing this is typically to strategically position turbines within the enclosure of a landform feature to provide visual screening from sensitive receptors. When considering the suitability of 'backdrops', the context of the landscape and landscape type needs be taken into account, considering characteristics such as the complexity or simplicity of landcover.

From an LVIA perspective, it is generally considered best practice and preferable to design scenarios where the blades and hubs of wind turbines are viewed above the horizon so that the moving components are viewed against the sky. When the moving parts of turbines are viewed against the clutter and complexity of the visible landscape, this can cause visual confusion and would not be preferable from an LVIA perspective. The suitability of this depends on the landscape type and nature of landcover. For example, a landscape type such as farmland ridges ('Hilly and Flat Farmland' Landscape Type in the WEDGs) would typically comprise a busy arrangement of field patterns, boundary vegetation interspersed with occasional farms and residential developments, as well as other man made features such as overhead power lines. This type of landscape (Farmland) is commonly considered to be relatively complex and busy, particularly compared to other landscape types such as a 'Mountain Moorland' Landscape Type or even a 'Transitional Marginal' Landscape Type which comprise commercial forestry where there is a simplicity to the landcover and landform. Several excerpts are reported below from the siting and design guidance for different landscape types in the WEDGs (DoEHLG, 2006) and Draft Revised WEDGs (DoHPLG, 2019) as they relate to this topic:

- "As wind energy developments, for reasons of commercial viability, will typically be located on ridges and peaks, a clear visual separation will be achieved from the complexity of lower ground." (p.59 WEDGs; P111 Draft WEDGs – Guidance for Transitional Marginal Landscape Types)
- "Location on ridges and plateaux is preferred, not only to maximise exposure, but also to ensure a reasonable distance from dwellings" (p.52 WEDGs; P104 Draft WEDGs - Guidance for Hilly and Flat Farmland Landscape Types)

- “elevated locations are also more likely to achieve optimum aesthetic effect” (p.52 WEDGS; P104 Draft WEDGs - Guidance for Hilly and Flat Farmland Landscape Types)
- “It may be acceptable to locate wind energy developments on ridges and peaks” (p.52 WEDGS; P104 Draft WEDGs - Guidance for Mountain Moorland Landscape Types)
- “where the upper ground is relatively open and visually extensive, taller turbines may be more appropriate” (p.61 WEDGS; P113 Draft WEDGs – Guidance for Transitional Marginal Landscape Types)

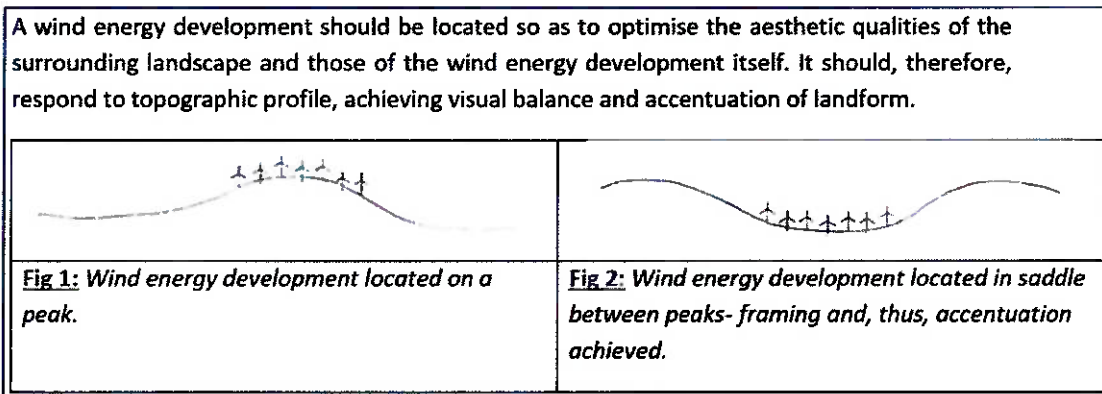


Figure 4-7: Turbine siting with regard to topographic profile - extracted from Draft WEDGs, p.93.

Absorption of the proposed turbines in the upland plateau of the Killeshin Hills

As is comprehensively reported in Chapter 14 and as is illustrated in the drone view below, the Proposed Development is located within an upland plateau adjacent to the west of the Barrow Valley. The Proposed Development is inset from a primary ridgeline demarking the western extent of the Barrow Valley. The upland area of the Killeshin Hills is also located at the very eastern extent of a larger elevated landscape area known as the Castlecomer Plateau which extends far into County Kilkenny and County Laois.

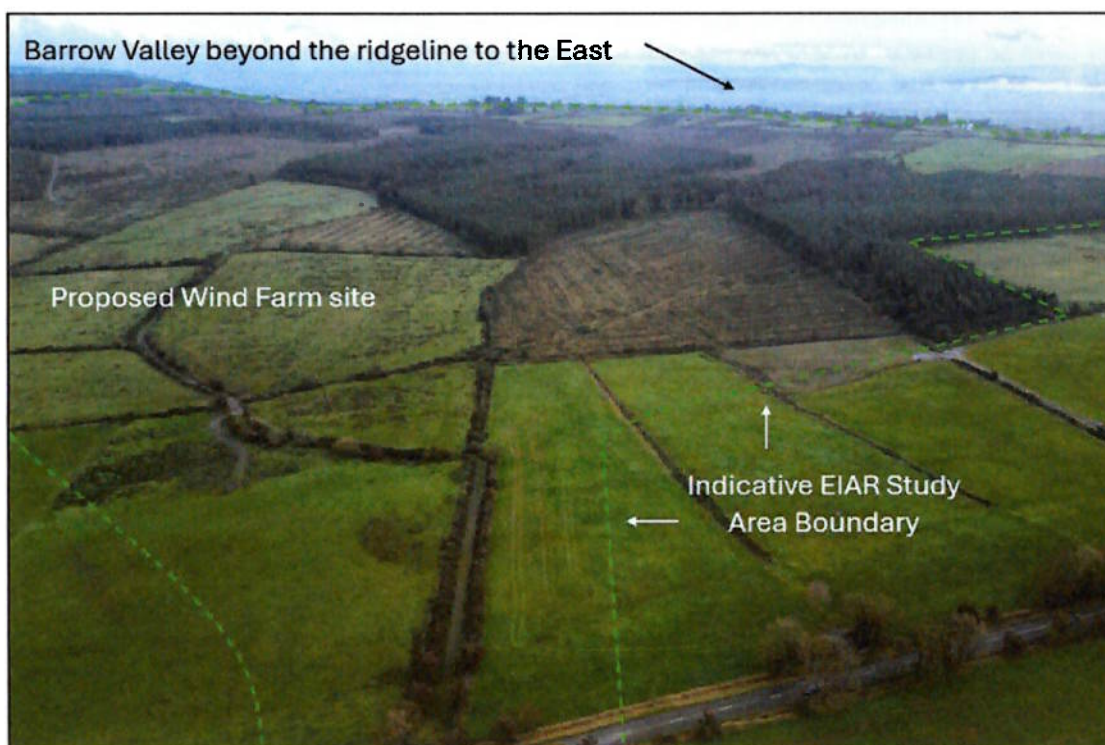


Plate 4.1 Drone View to the North-East from the west of the site adjacent to the Proposed Wind Farm site entrance reproduced from the EIAR.

Central Lowlands to the East: The proposed turbines are experienced from within the landscape from 2 key perspectives. Firstly from down in the lowlands of the Barrow Valley to the east where they are viewed as a staggered linear array above the primary linear ridgeline, and this mostly occurs at a substantial set back distance (>5km).

With regards to views from the central lowlands to the east, the CCC's Planners Report states:

"The main body of the Wind Farm development site is located on an elevated area which unlike other upland areas is an unbroken area of upland that is highly visible to views from the central lowlands. The upland plateau at Killeshin Hills is unique that there are no peaks or ridges to form a backdrop."

In mind of the guidance in the WEDGs and discussion previously in this appeal, it is considered that the absence of a backdrop when viewing the proposed turbines from the central lowlands is advantageous as this eliminates potential for visual confusion and ultimately reduces the magnitude of visual effects. CCC's Planner's Report indicates several times that the upland plateau at Killeshin Hills is 'unique' on account of the absence of ridges and peaks. Alternatively, it is argued that the absence of ridges and peaks make the upland area of the Killeshin Hills relatively unremarkable, as there are no distinctive features along the linear ridgeline. In this regard, the upland plateau and ridgeline where proposed turbines are seen (from the central lowlands) is not considered a distinct and recognisable landmark. Whilst the ridgeline and upland area may be valued locally, it does not have any cultural or recreational associations and is would not be considered sensitive in a National and Regional context, particularly when compared to features such as Mt. Leinster in the south-east of Co. Carlow.

Section 14.7.3.2.3 of Chapter 14 describes the visual effects and visual characteristics of the proposed turbines when viewed from sensitive receptors in the central lowlands to the east of the Proposed Development including the following:

"The staggered linear layout (in accordance with the DoEHLG 2006 Guidelines) and alignment with the ridgeline ensures that the Proposed turbines read coherently within the landscape when viewed from the east. As illustrated by photomontages and photowires in this direction, the Proposed turbines are generally seen as a linear array with relatively ordered and even spacing, with very limited instances of visual stacking. As a group, the Proposed turbines all have a similar vertical profile (little difference in the base elevation of the Proposed turbines) and are consequently seen to correspond well with the defined linear ridgeline where they are seen. The Proposed turbines are always viewed above the horizon from the central lowlands in the east and do not obscure landscape views. The Proposed Wind Farm is generally well balanced within the landscape with a layout and profile is sympathetic to the well-defined linear landform of the Killeshin Hills."

As illustrated by the photomontage visualisations the proposed turbines are seen in the background of views above and beyond the primary ridgeline. Contrary to the opinions of the planning authority, it is submitted that the Proposed Development is appropriately sited and scaled within the upland landscape of the Killeshin Hills when viewed from receptors to the east. This includes the potential for cumulative visual effects with other existing and permitted wind farms. Section 14.7.3.3.2 of Chapter 14 discusses cumulative visual effects and page 14—118 specifically addresses in-combination effects when viewed from the central lowlands to the east, including the following:

The Proposed Project is always seen to be located in the centre, flanked on either side by the other developments, which is predominantly the permitted White Hill Wind Farm to the left (South) and the permitted Bilboa Wind Farm to the right (North). Due to its positioning between these other developments the Proposed

Project does not extend the horizontal extent of turbines within the view. In most instances there is clear spatial and visual separation between the three wind farms (the Proposed Project, the permitted White Hill Wind Farm and the permitted Bilboa Wind Farm). The three developments are generally viewed together as an intermittent linear array of turbines seen across the uplands.

As reported previously in Section 14.7.3.2.3, the even profile, ordered spacing and staggered linear layout of the Proposed Project is aligned with the prominent linear ridgeline forming the western side of the Barrow Valley when seen from receptors located in the lowland plains to the east. Consequently, the Proposed Project to be seen as a linear array of turbines which read coherently in the landscape from easterly perspectives. These beneficial aesthetic characteristics of the Proposed Project and its location centred between the other developments provides a sense of balance when cumulative in combination effects occur from receptors to the east and the Proposed turbines effectively assimilate with the other wind energy developments.

Castlecomer Plateau to the North, West and South: There is a degree of enclosure provided by landform features of the Castlecomer plateau which surround the site to the north, west and south. This enclosure provides substantial visual screening of the proposed turbines from a vast proportion of the LVIA Study Area to the north, west and south. This is evident and reported throughout Chapter 14 both through the use of ZTV mapping and photomontage visualisations. In this regard, most visual effects of the proposed turbines from the north, east and west are experienced by local receptors, within shorter range views within 5km) from the sparsely settled landscape of the uplands area at the eastern extent of the Castlecomer Plateau. The impact assessments in Chapter 14 are informed by photomontage visualisations and site visits, as well as a route screening analysis. The analysis and assessments determined that there is in actual fact very limited visibility of the proposed turbines from a large proportion of the upland area within the Killeshin Hills, and far less than indicated by ZTV mapping.

The following two key points are evident in all photomontages showing the proposed turbines where they are visible from northern, western and southern perspectives within the Killeshin Hills:

- No location was found where the proposed turbines obscure or intrude upon any high quality scenic amenity from the upland plateau. For example, no instances where the turbines impact expansive landscape views to the east of the Barrow Valley and Central Lowlands or Mount Leinster.
- In all instances (from the north, east and south), the proposed turbines are viewed within relatively short ranging views of a modified landscape of commercial forestry and low intensity agricultural land;

Appendix 14-2 includes a specific detailed impact assessment of the Killeshin Hills LCA, it determining a 'Medium' Sensitivity, a 'Moderate' Magnitude of Change and ultimately Long term direct 'Moderate' Landscape effect. The assessments in Chapter 14 (and Appendix 14-2) determined that the proposed turbines **do not significantly impact any of the key landscape and visual sensitivities of the Killeshin LCA**. In this regard, it is considered that the Proposed Development is appropriate and effectively absorbed in the upland landscape of the Killeshin Hills and would **not** have a '*disproportionate and adverse landscape and visual impact on the Killeshin Hills Landscape Character Area and Uplands Landscape Type*', as is cited as part of the CCC refusal.

The following section of this appeal addresses commentary relating to designated scenic amenity in the CCC Planer's Report and the CCC refusal.

4.2.3.4 No Significant Impacts on the Key Scenic Sensitivities of Designated Scenic Routes and Views

The LVIA in Chapter 14 identified all designated scenic amenity designations within a 20km LVIA Study Area. Chapter 14 first identifies all scenic amenity designations in Section 14.5 – *Visual Baseline*. Designated scenic amenity designations were then either scoped in or scoped out from assessment pending preliminary analysis using ZTV mapping and information gathered during site visits. All scenic views and prospects scoped in for assessment were assessed with the aid of photomontage visualisations or photowire visualisations. In some instances, a nearby representative photomontage or photowire would be used to represent views from a receptor. A visual impact assessment was conducted for all photomontage viewpoints and views and visual receptors scoped in for assessment.

The impact assessments were conducted using a methodology grounded in best practice guidance for LVIA which is comprehensively set out and detailed in Appendix 14-1 of the EIAR. The methodology used for the visual impact assessment considers receptor sensitivity and the magnitude of change arising as a result of the Proposed Development to the specific receptors or view. These are then combined and considered with mitigating factors to arrive at a residual visual effect. Contrary to the opinions of CCC's Planner's report, the assessments in Chapter 14 determined that there would **not** be any 'significant' residual visual effects on any visual receptors or designated scenic amenity designations. The following sub-sections of this appeal address specific commentary in CCC's Planner's Report relating to the visual impact on the following Co. Carlow designated scenic routes and protected views which are located in close proximity to the Proposed Development.

- Scenic Routes 6, 7, 8 and 9;
- Protected views 31, 32,

All of these designations were comprehensively assessed in Chapter 14 using best practice methods and tools for Landscape and Visual Impact Assessment. Particularly Section 14.7.3.2.2 of Chapter 14 - '*Co. Carlow Designated Scenic Amenity within 5km of the site: Discussion of Visual Effects*' which includes discussion, mapping figures, photowire visualisations and images captured on site. Therefore, the response to the refusal (cited above) and CCC's Planner's report will draw upon the information reported in Chapter 14 and its associated appendices.

CCC's Planner's Report states, "*The applicant has identified that there will be very significant impacts on designated views and scenic routes as well on the wider landscape*". This was never stated in Chapter 14, and it indicates that the LVIA in Chapter 14 and its associated impact assessment appendices were not read in their entirety by the planning authority. The following sub-sections highlight the evidence based conclusions made in Chapter 14 (following best practice guidance for LVIA), which in many cases show there are very limited visual impacts, and no instances where significant residual visual effects were deemed to arise on the key scenic amenities of the designations.

The refusal suggest that the proposed turbines will '*negatively impact on the established appearance and aesthetic attributes*' of the designated views. Chapter 14 acknowledges that the proposed turbines will be visible from some areas of these scenic views, However, a **key conclusion** of the visual impact assessments included in Chapter 14 was that **the Proposed Development will not significantly impact the key scenic sensitivities of any designated scenic amenity designations** (scenic routes and views).

Designated Protected Views 31 and 32

CCC's Planner's Report states, "*Designated Protected View 31 and 32 are also within 2km of the site and whilst these views and scenic routes are noted for their aspect over the central plains and to the east these views are not limited to a single angle*". As stated in the CCDP 2022-28, Carlows Designated Scenic View 31 is directed "*east across central plain to Blackstairs*". This is the opposite direction from the proposed turbines. Carlows Designated Scenic View 32 again faces to the east "*From the Killeslin Hills across the central plain to Blackstairs*". This again is the opposite direction than towards the

proposed turbines. Although the Planner's Report states that these are not limited to a single view, the views in the direction of the Proposed Development comprise short range views of roadside vegetation which are of limited scenic quality. From multiple site visits during the course of the LVIA reported in Chapter 14, it was determined that the Designated Protected Views 31 and 32 have open panoramic views in easterly directions across the central plains. As stated in Section 14.7.3.2.2 of Chapter 14, the site visits determined that there will be extremely limited visibility of the proposed turbines from these locations due to local undulations and mature roadside vegetation providing visual screening to the west in the direction of the Proposed Development. Views directed towards the Proposed Development from locations from these scenic views can be seen below in Plate 4-2 and Plate 4-3. This was ground-truthed multiple times including during site visits and the route screening analysis exercise. In both instances (view 31 and 32), the proposed turbines and Wind farm Site is located to the west, in the opposite direction. Therefore, there is no high value scenic amenity in the direction of the proposed turbines and there is likely to be very limited visibility. **The Proposed Development will not significantly impact the key scenic sensitivities of Protected Views 31 and 32.**



Plate 4-2 View towards the Proposed Development from Co. Carlow Scenic View 31 reproduced from the EIAR.



Plate 4-3 View west toward the Proposed Development from Co. Carlow Scenic View 32 reproduced from the EIAR.

Scenic Route 6, 7, 8 and 9

Section 14.7.3.2.2 of Chapter 14 is called 'Co. Carlow Designated Scenic Amenity within 5km of the site: Discussion of Visual Effects'. This discussion discusses the visual effects arising from Designated Scenic Routes 6, 7, 8 and 9.

Scenic Route 6

As stated in the LVIA:

"A photowire (early-stage photomontage) was produced from Co. Carlow Scenic Route 6 – PWVP-A presented in Appendix 14-5. PWVP-A shows a view towards the site as northbound users of the local road (SR-6) exit the settlement cluster at the Ridge Crossroads. The Proposed turbines will not be significant from this

location or the location of any residents within the enclosed area around the Ridge Cross-Roads, nor will it affect the key scenic sensitivities of Scenic Route 6. 'No Significant' visual effects will occur on these scenic amenity designations – Scenic Route 6”.

It should also be noted that this photowire viewpoint is representative of one of the only areas with views towards the proposed turbines on the scenic route. This is supported below where the route screening analysis identified the roadside vegetation percentages which lead to visual screening.

CCC's Planner's Report states “*Scenic Route 6 has the potential to be most impacted*” but it is presumed that this is an error within CCC's Planner's Report, and they intended this text for Co. Carlow Scenic Route 7. The Proposed Development is to the north and west of Scenic Route 6 and not the east which CCC's Planner's Report stated. Irrespective of this mistake, Scenic Route 6 will not be subjected to significant effects and in reality, the proposed turbines will have limited visibility from this scenic route. The Route Screening Analysis exercise provided information on the nature of visual screening along the local road network surrounding the site. It was determined that along Scenic Route 6 there would be 57% dense roadside vegetation, 23.5% Intermittent roadside vegetation and 10.5% clear views. CCC's Planner's Report states “*Would be informed by views of the turbines and not the panorama for which it is designated*”. This is not the case along Scenic Route 6 as there is very limited clear views north and west towards the Proposed Development. Like Protected View 31 and 32, views are directed to the east from scenic route 6 where there are open panoramas across the Barrow Valley and central plains to the east, the opposite direction of the Proposed Development. highly unlikely to have a panoramic view along this route. In this regard, **the Proposed Development will not significantly impact the key scenic sensitivities of scenic route 6.**

Scenic Route 7

The Proposed Development will have the greatest visual impact on Designated Scenic Route 7, where all proposed turbines and some ground level infrastructure will be visible from several occasional locations at the southern end of the route (shown by Viewpoint 14 and 15 in the photomontage booklet). As reported in Chapter 14, there is dense roadside screening along much of the route, and in general limited visibility of the proposed turbines from most locations. The protected scenic amenity from this routes is described in the CCDP as views directed across the ‘*central plain*’ which is the lowlands of the Barrow Valley to the East of the site. The Proposed Development is therefore located between the scenic route and the Central plains and there was potential for the proposed turbines to obstruct and intrude upon views of the central plains.

Multiple site visits were conducted, and the road of the scenic route was driven multiple times. These visits did not identify any vantage points permitting open views of the central plains in combination with the proposed turbines.

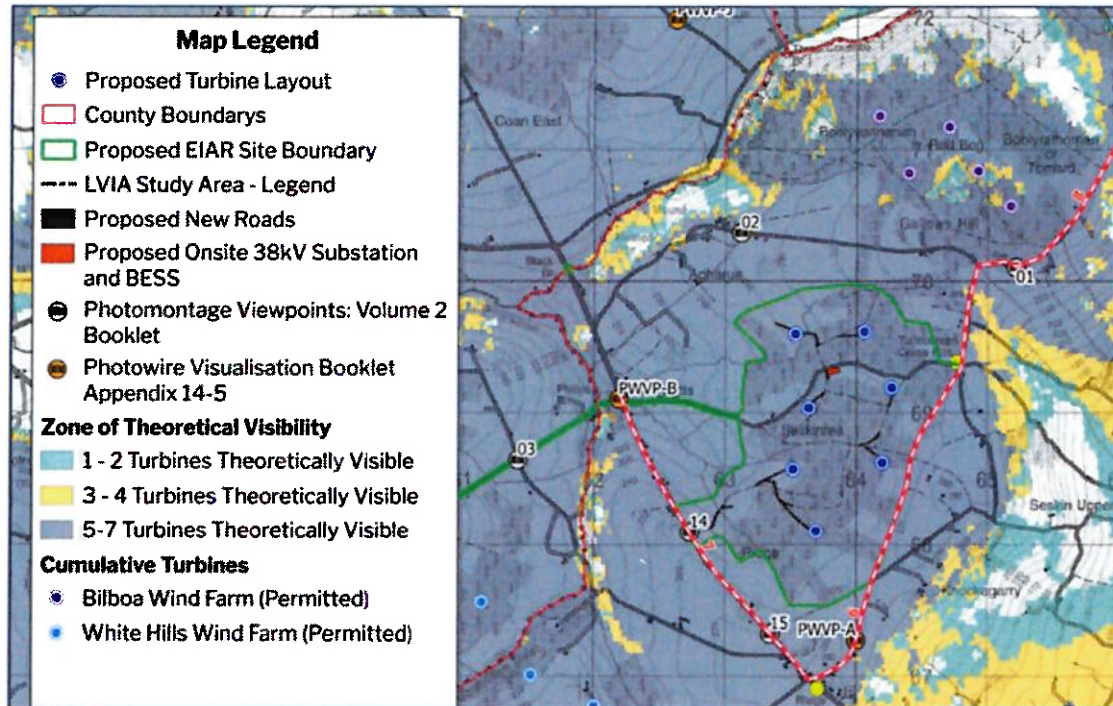


Figure 4-8 Extract from mapping Figure 14-17 in Chapter 14 of the EIAR

The map above is an extract from Chapter 14 – Figure 14-17. The map shows the location of viewpoints 14 and 15 which are located on Scenic route 7, to the south-west and south of the Proposed Development. Viewpoint 14 and 15 were two of the only locations on scenic route 7 identified with clear open views of the Proposed Development. Geographically, VP14 had the greatest potential to impact views of the central plain from Scenic Route 7 considering its location south-west of the Proposed Development and the location of the central plains to the east. A 360-degree image from viewpoint 14 is shown below in Figure 4-9 including the extracted 90 degree photomontage shown for Viewpoint 14 in the photomontage booklet.



Figure 4-9 360 View from Viewpoint 14 and the 90 degree photomontage extracted from the Volume 2 photomontage Booklet

As shown in the image above, the following text is reported in Chapter 14 and in the viewpoint impact assessment appendix (Appendix 14-3):

“Although this is a designated scenic route, this is a relatively short-range view of a working landscape comprising fields and commercial forestry and does not include distinctive or unique landscape features”.

Whilst there is a visual impact of the Proposed Development, and they might 'inform' some occasional views (from this scenic route) they are not intruding upon any scenic amenity of the central plains. Instead, the proposed turbines are visible in a landscape of commercial forestry and agricultural fields. The Barrow Valley and the central plains are not visible from this viewpoint. A full and comprehensive visual impact assessment of both Viewpoint 14 and Viewpoint 15 is included in Appendix 14-3 which supports Chapter 14. The impact assessments follow best practice methods for assessment of visual effects and include and consider potential for cumulative effects with other wind energy developments. Taking account of many mitigating factors, the resultant residual impacts of both Viewpoint 14 and 15 were deemed to be 'Moderate'. For some of the reasons highlighted above (amongst others), the LVIA determined that there will not be a significant impact on the key scenic sensitivities of Scenic Route 7 which are the protected views across the 'central plain'.

Scenic Route 8

As shown in the mapping figure above, scenic route 8 is located to the north-east of the Proposed Development and the description of the protected views from the route in the CCDP is 'Panorama to the south-east'. Viewpoint 1 was captured from this scenic route, although it is to be noted that Viewpoint 1 was captured from one of the only locations where the Proposed Development will be visible, a bend in the road at the southern extent of the scenic route. The figure below shows the full 360 degree view from viewpoint 1 and the location of the proposed turbines, and then the open panoramic views across the central plains to the south-east towards the Blackstairs mountains and Mt Leinster in an alternative field of view.

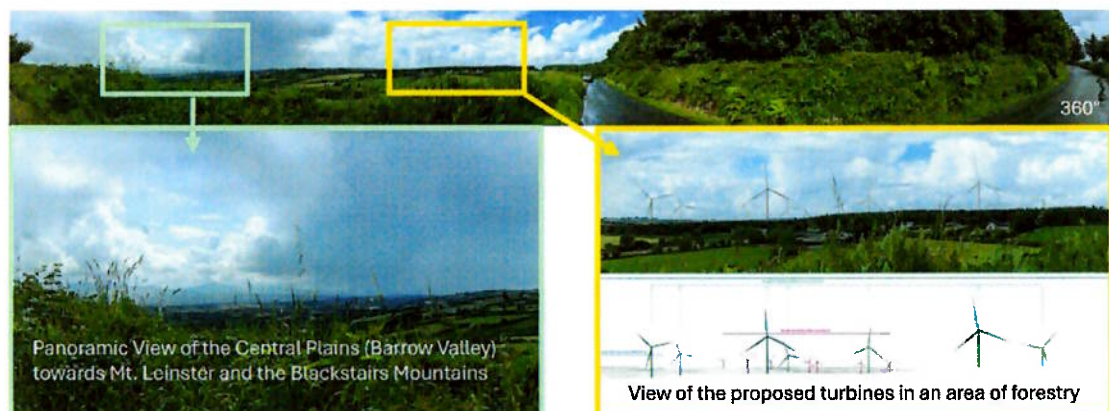


Figure 4-10: View from PWVP-D and the 90 degree photowire extracted from the Volume 14-5 Photowire Booklet

The full comprehensive impact assessment of Viewpoint 1 is included in the impact assessment Appendix 14-3 which supports Chapter 14. The proposed turbines are visible from this route and the magnitude of change was considered 'Moderate' (accounting from some potential cumulative impacts). However, the following key points are made in relation to the impact assessment of views from Viewpoint 1:

- "There are open and expansive panoramic views across the Barrow Valley of high scenic quality in an easterly and south-easterly direction from Co. Carlow scenic route 8. This viewpoint was captured from a small bend in the scenic route which permits open views to the south-west towards the Proposed Development. There will be very limited visibility of the Proposed turbines from many other areas of the designated scenic route.
- Within the CCDP, the view of the designated Scenic Route SR-8 is described as a panorama to the South-East, looking away from the Proposed turbines. Both the description and appraisals during site visits determined that the main focus of the views from this scenic route is towards the Barrow Valley rather than the medium

range view towards the area of commercial forestry that comprises the Proposed Development;

- Whilst SR-8 is a designated scenic route, it is a local road of low traffic density, and it is unlikely this route is highly valued for its tourism amenity.
- The Proposed turbines do not significantly impact upon the key scenic sensitivities of this area and the designated scenic route, which are considered to be the expansive panoramic views to the east and south-east, in a different direction to the Proposed turbines.
- The Proposed turbines are evenly spaced and read coherently within the landscape;
- From this location, the Proposed turbines comprise only a narrow horizontal spatial extent of the view.
- Siting of Proposed turbines adheres to the recommended 500m set-back distance in the DoEHLG 2006 Guidelines and also the 4-times-tip-height set-back distance set out for residential visual amenity prescribed by the Draft DoHPLG 2019 Guidelines;
- Residential receptors, such as those visible in the foreground of the photomontage have their primary scenic amenity focused across the Barrow Valley to the east and south-east, not in the direction of the Proposed turbines."

As reported in Appendix 14-3 and Chapter 14, a residual visual effect of 'Moderate' was determined from Viewpoint 1. The LVIA determined that there will not be a significant impact on the key scenic sensitivities of Scenic Route 8.

Scenic Route 9

The LVIA in Chapter 14 states the following in relation to scenic route 9:

"There will be limited visibility of the Proposed Project from Scenic Route 9. This was determined by visibility appraisals which identified that visual screening would occur from vegetation and undulating topography and verified by a photowire captured on the route PWVP-D, as shown below in Plate 14-28. No Significant visual effects are likely to occur from this scenic route".

For clarity, photowire PWVP-D is reproduced again below, as was included in Chapter 14 in Plate 14-28. Photowire PWVP-D was also presented in A3 within the photowire booklet included in Appendix 14-5 of the EIAR.



Plate 14-4 Extracted from Chapter 14 of the EIAR: 'Proposed turbines will be screened from view by localised landform and mature vegetation on Co. Carlow Scenic Route 9. Full photowire presented in A3 in Appendix 14-5 reproduced from the EIAR.'

4.2.3.5 Acceptability of visual impacts when viewed from the East (Including Cumulative effects)

Response to CCC's Planner's Report – Viewpoints to the East

Potential for visual impacts from scenic amenities in the Barrow Valley to the east of the Proposed Development were highlighted in CCC's Planner's Report. The CCC Inspectors Report states:

"the selected viewpoints from the east are limited in extent and as such the full extent of potential has not been fully examined"

The CCC planners report also stated that there were specific areas along the M9 and outside of the LVIA Study Area where a photomontage was not captured.

Firstly, it is to be noted that it is not possible to produce a photomontage from every receptor in the LVIA Study Area and that other tools such as ZTV mapping and information gathered during site visits are also used to determine potential landscape and visual effects. As well as specific receptors, photomontages or photowires can be used to represent the views from general areas. For instance, views from the east looking towards the Proposed Development from the Barrow Valley show the proposed turbines to have a similar form above the distant ridgeline of the Killeshin Hills. In the LVIA, views from easterly perspectives were represented by a total of 20 No. photomontages and photowire viewpoints from a variety of geographical perspectives and receptors, including from the north-east, east and south-east.

The following text was stated in Chapter 14 of the EIAR:

"Photomontages are just one of the tools employed during the LVIA that was conducted in order to inform the assessment of landscape and visual effects. It would be a disproportionate measure to include an individual photomontage from every residential dwelling and this is not required to conduct a thorough and robust assessment of landscape and visual effects. In line with the guidance laid out in the GLVIA (2013), the viewpoints selected for the LVIA conducted were informed by a range of factors including the "ZTV analysis, by fieldwork, and by desk research" (para 6.18, GLVIA 2013). Furthermore, the GLVIA (2013) states that representative viewpoints are "selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ" (para 6.19 GLVIA, 2013). It is submitted that the large number of viewpoints used in the conduct of the LVIA particularly in very close proximity to the proposed turbines are sufficient to represent the residential receptors within the LVIA study area, including the "distribution of population" (para 6.18, GLVIA 2013)".

Imagery was captured from a total of 20 No. viewpoints in the Barrow valley to the east of the Proposed Development. 7 No. locations were included as Viewpoints in the Volume 2 Photomontage Booklet – VP06 and VP13 from the north-east; VP VP12 and VP04 from the east; and, VP 05, VP07 and VP11 from the south-east. 13 No. viewpoints were also included as photowires in Appendix 14-5 from easterly perspectives (PWVPs C; PWVP D; PWVP E; PWVP F; PWVP G; PWVP H; PWVP K; PWVP L; PWVP M; PWVP N; PWVP O; PWVP P; PWVP Q and PWVP T).

Contrary to the statements in the CCC Planners report, the 20 No. visualisations are deemed sufficient to appropriately assess the full extent of visual effects from receptors to the east of the LVIA Study Area, which also includes 1 photomontage viewpoint and two photowire viewpoints representing the M9 motorway.

Acceptability of the Proposed Turbines in Combination with other Wind Energy Developments when viewed from the East

Chapter 14 discusses how the Proposed Development is effectively absorbed within the Upland Landscape of the Killeshin Hills when viewed from the East, including in combination with other existing and permitted wind energy projects. This is also highlighted previously in this report on Pages 41, 43 and 44 in Section 5.2.3.3. Whilst the Proposed Development is visible, it is well absorbed in the background of distant views in the upland landscape centred between the Permitted White Hills Wind Farm (to the south) and Permitted Bilboa (currently at appeal with ABP) and Existing Gortahile Wind Farms (to the north). In mind of the existing and permitted developments, the introduction of the Proposed Development does not bring a novel element to this area of the landscape and due to its positioning between the other developments it does not extend the horizontal extent of wind energy seen from the east.

The photomontages illustrate that the staggered linear form of the Proposed Development is coherent and balanced with the linear form of the ridgeline when viewed in the landscape from the east. Discussion throughout Chapter 14 also highlights the alignment of the Proposed Development with the siting and design guidelines set out in the WEDGs (DoEHLG, 2006) and Draft WEDGs (DoHPLG, 2019). From the east, the moving components of the turbines (the blades) are visible above the horizon, causing separation from the complexity of the landcover on the farmed ridges of the Barrow Valley, therefore eliminating the potential for visual confusion to occur. As detailed throughout Chapter 14, the proposed turbines were strategically sited to be 'inset' to the west of the primary ridgeline of the upland area. This therefore causes partial screening of lower tower elements when seen from the east and reduces the visual prominence of the proposed turbines when viewed from the east.

The following text is stated in Section 14.7.3.3.1 of the LVIA in Chapter 14:

"In general, the Proposed Project is not adding new novel elements to this area of the landscape, the Proposed turbines are generally viewed in combination with the other existing, permitted, and proposed projects. The assessments in this LVIA have determined that this upland area has the capacity to absorb additional wind energy development without significant effects on the character of the landscape".

Considering the set-back distances and the coherent form of the Proposed Development upon inset beyond the distant ridgeline considered that there will **not be any significant impact on key scenic sensitivities of views from the east** and the proposed turbines are effectively absorbed in one of the only viable areas for wind energy development in County Carlow (see geospatial analysis previously in Section 4.2.3.1).

4.2.3.6 Response to Other Feedback on the LVIA in the CCC Planner's Report

LVIA Study Area

CCC's Planners Report suggests that a larger study area could have been used. As detailed in Section 1.4.1 of the Appendix 14-1 – *LVIA Methodology*, the use of a 20km buffer from the proposed turbines for the LVIA Study Area was considered appropriate for the assessment of the Proposed Development as it adheres to best practice guidance - (Draft DoHPLG 2019 Guidelines (p. 152), DoEHLG 2006 Guidelines (p.94)). 20km is generally considered as appropriate as significant landscape and visual effects are unlikely to occur from receptors located greater than 20km from turbines.

No Direct views of turbines 3, 4 and 5

CCC's Planner's Report states:

"It is also noted that none of the selected close-range viewpoints include direct views of turbines 3, 4 or 5. direct views of turbines 3, 4 and 5 which are positioned in close proximity to the public road with limited set-back"

Viewpoint 1 in the Photomontage Booklet provides a relatively direct view of turbines 3 which is one of the closest to the viewpoint. It is to be noted that isolated rural local roads are not representative of High sensitivity receptors, particularly the local road which traverses through the site near to turbines 3, 4 and 5. Viewpoint selection prioritised locations nearby local residential properties, as well as the designated scenic routes which represent higher sensitivity receptors. Also, as shown in the route screening analysis mapping, there is dense mature vegetation lining a large proportion of the local road network surrounding the site and photomontages were not captured from the local road where there would be no views in the direction of the proposed turbines, particularly the local road immediately east of the site near turbine T03 and T05.

Landscape and Visual Assessment of Turbine Range

CCC's Planner's Report Stated the following:

"Whilst maximum tip height and hub height has been allowed for this assessment it is noted that a medium rotor diameter of 150m has been applied and not the maximum agreed parameter of 155m"

The Planner's Report is correct in relation to the primary module used for assessment in the LVIA, however the maximum rotor was also addressed and included in the assessment. Section 14.1.3.2 of Chapter 14 discusses the range of turbine dimensions assessed in the LVIA. The model used for all ZTV mapping photomontage visualisations was:

- > Maximum Tip Height: 180m;
- > Maximum Hub Height: 105m;
- > Rotor Diameter: 150m;

The turbine configuration above was selected within the proposed range for inclusion for all viewpoints within the photomontage booklet (and all photowires in Appendix 14-5). The basis for this selection was that this combination is likely to show the greatest extent of the entire turbine structure (hub, blades and tower) and is likely to be the most visible from the Viewpoints assessed in this LVIA. The hub (or 'Nacelle') of a turbine is a prominent focal point and the visual prominence of a turbine is typically increased if the hub is viewed above a landscape feature, rather than below. Therefore, the turbine configuration above (Tip Height 180; Hub Height 105m; Rotor Diameter 150m) which incorporates the maximum hub height and maximum tip height is likely to increase the visual prominence of turbines and represents a precautionary scenario for likely significant landscape and visual effects within the range proposed. This turbine configuration constitutes the tallest height for the purposes of modelling HalfBlade Zone of Theoretical Visibility (ZTV) Maps and was the model used for all ZTVs in in Chapter 14 Chapter. The ZTV map generated from the proposed turbines is presented and discussed in Section 14.3.

A turbine model comprising the largest rotor diameter of 155 metres was also assessed – termed 'Maximum Scenario 1' which includes a turbine model with maximum rotor and maximum tip height. This model was included in two photomontage visualisations from the two viewpoints in closest proximity to the turbines (Viewpoints 14 and 15). These were considered in the impact assessment tables in Appendix 14-3, and a conclusion is included in relation to turbine range in Section 14.7.3.4, which states:

"The photomontage visuals show that there is barely a discernible difference between the different ranges. The difference is only just evident with the aid of a comparative wireline (the alternative turbine envelope overlain the Median

Scenario used for all Viewpoints). Irrespective of which range is used, the determination of likely significant residual visual effects will not be altered."

4.2.4

Summary of Response Refusal Reason 1

Due to the contradictory policies within the County Development Plan, and the fact that policy objective WE. P4, along with the associated wind energy zoning and target, is not consistent with national and regional renewable energy policy, it is submitted that the proposed Seskin Wind Farm neither material contravenes nor is contrary to the proper planning and sustainable development of the area, as suggested in Carlow County Council's refusal.

As outlined in Chapter 14 of the EIAR and detailed in this appeal document, the following key points justify the permission of the Proposed Development from an LVIA perspective and are contrary to the landscape and visual refusal reasons cited in Carlow in their refusal and in CCC's Planner's Report:

- From a landscape perspective, the uplands region of the Killeshin Hills comprises some of the only viable areas for wind energy development in Co. Carlow as is comprehensively detailed and illustrated by mapping outputs from a geospatial analysis in Section 4.2.3.1. The mapping exercise and analysis of policy in this appeal has shown local planning policy and zoning for both wind and landscape are deficient, incongruent and not fit for purpose, particularly in mind of national planning policy which supports the development of wind energy in Ireland.
- Upland landscape types in general and the Proposed Development site itself is an eminently suitable landscape for absorbing the infrastructure of a wind energy development;
- The upland area of the Killeshin Hills LCA and wider area within the visual envelope of the Proposed Development can effectively accommodate and absorb the Proposed Development without compromising the key sensitive landscape characteristics of County Carlow.
- The mitigation measures implemented as part of the iterative design of the Proposed Development are as effective as is possible with regards to reducing, as is feasibly possible, potential for landscape and visual effects of a wind farm, therefore in line with many local landscape planning policies.
- The Proposed Development will not have any significant impacts on the key scenic sensitivities of designated scenic routes or protected views;
- The Proposed Development is effectively absorbed within the landscape when seen in combination with other existing and permitted wind energy development from sensitive receptors in the Barrow Valley to the East of the site.

In mind of the factors addressed in this section of the report and summarised in the points above, it is clear that refusal of the Proposed Development on wind energy policy and landscape and visual grounds would eliminate the opportunity to generate renewable energy in one of the very few (if not the only) suitable sites for the development of commercial wind project in County Carlow. Refusal would therefore be contrary to the proper planning at a national level with national policy directives in place to support Ireland achieve its climate and carbon emission targets. It is reminded that the Board, as a public body, in so far as practical, perform its functions in a manner consistent with the Climate Action Plan 2024, the National Energy & Climate Plan 2021 – 2030 and other national climate mitigation and adaptation plans.

Should An Bord Pleanála, in its assessment of the application, consider that the Proposed Development does materially contravene the policies or objectives of the County Development Plan, it is reminded that under Section 37(2)(a) of the Planning Act, An Bord Pleanála may grant permission even if the proposed development contravenes materially the County Development Plan. The circumstances which would make it appropriate for An Bord Pleanála to exercise its discretion under Section 37(2)(a) (or indeed Section 37(2)(b) of the Planning Act are outlined in Section 3 above.

4.3

Reason for Refusal 2 - Traffic and Transport

Carlow County Council's second reason for refusal is stated as follows:

2. *The proposed wind farm development is located in an upland area which is predominately served by a local road network of restricted width and capacity. Having regard to the site location and the condition of the existing road network proposed to access the site during the construction period, it is considered that the submitted plans and particulars, including the Environmental Impact Assessment Report, have failed to satisfactorily demonstrate that the local road network is of adequate capacity and design to accommodate the volume and frequency of HGV traffic along the proposed haul routes. Accordingly, to permit the proposed development would likely result in significant adverse impacts on the local road network, would endanger public safety by reason of a traffic hazard and obstruction of road users, and would therefore be contrary to the proper planning and sustainable development of the area.*

4.3.1

Grounds of Appeal against Refusal Reason 2

This response was prepared by Alan Lipscombe Traffic and Transport Consultants Ltd, whom, together with MKO, prepared Chapter 15.1 – Traffic and Transport, of the Environmental Impact Assessment Report (EIAR) and the Appendix 15-2 of the EIAR – Traffic Management Plan.

It is noted that the Reason for Refusal 2, set out above, is extracted from the summary of the CCC Transportation Report. The issues raised by the Transportation Report are addressed below. Further issues were raised within CCC's Planner's Report and are addressed in Section 4.3.1.2 of this response.

4.3.1.1

Issues Raised in Internal Transportation Report

It is noted that the conclusion of the internal Transportation Report is extracted as Refusal Reason No. 2 and is addressed in this section. Additional points of detail raised in the Transportation Report, together with the Applicant Team Responses are as follows.

The existing road network and potential damage resulting from the construction of the Proposed Development

The following concerns were raised

- The local road network providing access to the development consists of the L-30372, L-3037, L-7123 and the L-1837, which are legacy roads that have neither been designed or constructed to carry the loads proposed by the development during the construction phase as outlined in EIAR Chapter 15.
- Existing open drains run adjacent to significant lengths of these roads which make the road structure additionally vulnerable to damage from both the heavy loads and also the laying of the underground cables to facilitate the grid connection.
- It is noted that the applicant proposes a pre-condition survey of the roads prior to construction to record the condition of the roads, which it is presumed in the CCC Internal Transportation Report, that it will record the lack of structure to the network.
- It is further anticipated in the CCC Internal Transportation Report that given the likely composition of the soil layer significant heavy loads will cause significant rutting and dips as roads are "floating" roads on boggy type lands. The report further suggests that given the high volume of HGVs with heavy loads it is anticipated that significant reconstruction of the local road network will be required and there is insufficient information with regards to proposals post construction on the network with regards to both the road structure and adjacent open drains.

Applicant Response

Of the local roads highlighted by CCC, as set out in Section 15.1.4.1 of the EIAR, it is not proposed to use the L-30372 or its junction with the L-3037 for the delivery of materials during the construction of the Proposed Development. During the construction phase the L-30372 will only be used as a crossing point between from the southern part of the Proposed Wind Farm site (Turbines 3 to 7) to the northern section (Turbines 1 and 2), and not used as a construction haul route for the Proposed Wind Farm.

Similarly the L-7123 is a local secondary road that runs to the south of the Proposed Wind Farm site and will not be used as a construction haul route for the Proposed Wind Farm.

As detailed in Section 15.1.3.3 of the EIAR, in order to facilitate the construction of the Proposed Development, all concrete, rock and hardcore material that will be required during the construction will be sourced from local, appropriately authorised quarries. The potential routes for general construction materials for the purposes of the EIAR assessment, is as per the routes identified in Figure 15-1 of the EIAR considered for the turbine components via the N78, L-1834, L-1835, L-3037 (road in which the site entrance is located as identified in Figure 4-22a) with the additional route from the north of Leighlinbridge via the R448¹⁰ and L-3037 (road in which the site entrance is located). The L-3037 road where the site entrance is located, along with the L-1834 and L-1835, is a road network that has speed limits of 80 kph and provides for two-way traffic with grass verges. This road network provides access to the N78 and R448 for the turbine delivery component and construction materials haul routes. As identified above, and in the interest of clarity, the L-30372 and L-7123 will not be used as a construction haul route for the Proposed Development.

The Proposed Grid Connection route cabling is proposed within the L-30372 and there will be construction taking place along a 1.8km section of this road for a short duration (estimated 19 days). The Traffic Management Plan included as Appendix 15-2 of the EIAR, and Figure 15-7f identifies the proposed diversion route of 4.7 kms for the duration of these construction works along the L-7123. As identified above, and in the interest of clarity, the L-7123 will not be used as a construction haul route for the Proposed Development but as diversion route for the Proposed Grid Connection Route works for a short duration (19 days).

A detailed Traffic Management Plan, included as Appendix 15-2 of the EIAR, will be finalised and confirmatory detailed provisions in respect of traffic management measures will be developed in detail and submitted for agreement with Carlow County Council and Kilkenny County Council and An Garda Síochána prior to construction works commencing.

While it is proposed that the delivery stage of the Proposed Development will include the delivery of abnormally large loads, the loads are not abnormal in terms of their weight, with all axle loadings being within accepted national limits, as set out in Table 15-1 of the EIAR, which addresses scoping issues raised by Transport Infrastructure Ireland. It is also noted that all HGVs delivering materials to and from the Proposed Development site, including the Proposed Wind Farm site and the Proposed Grid Connection Route, will be made by standard HGVs, trucks and cement mixers. All of these vehicle types currently use the L-3037, L-1834 and L-1835 local road network.

While it would be expected that the existing local road network, that will provide access to and from the Proposed Wind Farm site and the Proposed Grid Connection Route, should be capable of providing for standard HGV deliveries, as set out in Section 15.1.12.5.2 of the EIAR, a commitment is made to undertake a pre-condition survey of all haulage routes associated with the Proposed Development prior to construction commencement to record the condition of the roads, and the location and status of existing bridges and culverts. A commitment is also made by the Applicant to repair any damage to roads or other structures as a result of the Proposed Development and to undertake a post construction survey when the work is complete to ensure full reinstatement of

¹⁰ Incorrectly referenced on page 15-14 in Chapter 15 as N52

roads/structures to their original condition. The timing and format of these surveys will be agreed with the local authority prior to commencement of construction. The Applicant can also commit to put in place a road reinstatement bond with the local authority prior to commencement, if additional security is required.

The traffic management plan will incorporate details of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of roads, bridges, culverts or other structures to be traversed, as may be required. The plan will also contain details of how the developer intends to engage with and notify the local community in advance of the delivery of oversized loads. Any works, including reinstatement works, to existing junctions on the national road network will comply with Transport Infrastructure Ireland (TII) standards as outlined in TII Publications and shall be subject to Road Safety Audit as appropriate.

Potential impacts at Black Bridge

It is noted in the CCC Internal Transportation Report that the Black Bridge located on the boundary of the L-3037 and L-1837 will require to be strengthened to carry the construction traffic and the abnormal loads. While it is acknowledged that a strengthening proposal was submitted as part of the EIAR based on a visual inspection, it was considered in the CCC Internal Transportation Report that it would not be appropriate to make a grant of planning permission for these works in the absence of a full structural assessment and complete design of the bridge having due consideration of the heritage of the bridge, load bearing capacity and the hydrological capacity (including the possible impact of the proposed development on surface water flows and retention in the area and climate considerations).

Applicant Response

The applicant is collaborating with the developer of the White Hills Wind Farm (White Hills Wind Limited) (ABP Ref: 315365-22) with regard to strengthening works at Black Bridge. If permitted, it is the intention of the Applicant to continue collaborating during the undertaking of the proposed bridge strengthening works. For clarity, the proposed strengthening works at Black Bridge are the same works as those previously permitted by the Board for the White Hills Wind Farm SID application.

It is noted that concerns were raised by Kilkenny County Council in response to the White Hills Wind Farm application in relation to the proposed works at Black Bridge while Carlow County Council raised no objections to the proposed strengthening works in the White Hills Wind Farm application. The design clarification and commitments provided in the response to submissions by White Hill Winds Limited have been incorporated into this application.

The proposed strengthening works were granted by the Board on the 21st November 2023, with the associated condition:

16 'All works shall be carried out to Black Bridge, Protected Structure or Crettyard Bridge shall be carried out under the supervision of a qualified professional with specialised conservation expertise and in accordance with best conservation practice as detailed in "Architectural Heritage Protection: Guidelines for Planning Authorities" issued by the Department of the Environment, Heritage and Local Government in 2011. An Architectural Impact Assessment shall be submitted for the written agreement of the Planning Authority prior to the commencement of any works.

Reason: *To ensure that the character and integrity of the protected structure and NIAH listed structures is maintained and protected from unnecessary damage and loss of fabric.'*

It is evident from the above that the Board came to the conclusion that all of the issues raised with regards to the permitted works at Black Bridge could be dealt with by condition.

However, in order to address the concerns raised by CCC as part of the subject application, the following topics relating to the Black Bridge are addressed hereunder.

Heritage of the bridge

As identified in Section 13.4.3.5 in Chapter 13 of the EIAR (Cultural Heritage), the raising of the parapet walls will be carried out in consultation with the Planning Authority, specifically with regard to the use of appropriate materials and finishes which should be in keeping with the character and appearance of the Protected Structure D84, Black Bridge. A comprehensive parapet wall construction works plan (to be prepared by a suitably qualified historic building consultant or conservation architect) will be undertaken and will detail construction methodologies to be followed, materials to be utilised and finishes to be applied to ensure consistency and conformity with the existing parapet walls. The potential residual effect after the implementation of the mitigation measures is likely to be Not Significant.

Load bearing capacity and proposal based on visual inspection

A preliminary structural assessment on the Black Bridge has been conducted by Jennings O'Donovan & Partners Limited which is included as Appendix 4-5 of the EIAR, '*Bridge Crossing Structural Assessment Report*'. The assessment of the masonry arches of the Black Bridge has been carried out in accordance with BA 16/97: *The Assessment of Highway Bridges and Structures* which incorporates the modified MEXE method which determines the capacity of masonry arches in terms of allowable axle weights. The assessment utilises measurements taken onsite at the Black Bridge in the modified MEXE method, and identifies the required strengthening works to reinforce the bridge. The upgrade works, which has been informed by the assessment, are for the provision of a 175mm thick reinforcing concrete slab on the road carriageway/bridge deck, over the existing road surface and involves the raising of the parapet walls from c. 1200mm to 1250mm, and road surface dressing.

Hydrological capacity:

As identified in Section 9.3.6 in Chapter 9 (Water), a Flood Risk Assessment for the Project has been carried out by HES and included as Appendix 9-4. National Indicative Fluvial Flood Mapping

Fluvial flood zones are mapped along the Dinin River at Black Bridge, however, there is an existing watercourse crossing at this location and the works will result in no displacement of floodwaters. Further to this, it is identified in Section 9.5.2.14 that no significant effects will occur as all works are relatively minor and localised and cover very small areas; the excavation/earthworks will all be small scale, these works are distributed over a wide area; and all works are temporary in nature.

The potential for the release of suspended solids to watercourse receptors is a risk to water quality and the aquatic quality of the receptor. Proven and effective measures to mitigate the risk of releases of sediment have been proposed and will break the pathway between the potential sources and the receptor. The residual effect will be negative, imperceptible, indirect, short term, unlikely effect on down gradient rivers, water quality, and dependant ecosystems.

Detailed Construction Environmental Management Plan

A CEMP has been prepared for the Proposed Development and is included in Appendix 4-4 of this EIAR. Section 2.3.15 of the CEMP identifies the construction methodology for the works to be carried out at the Black Bridge. The CEMP also states that a detailed Architectural Assessment will be carried out by the Project Archaeologist/Conservation Architect prior to any construction works, and agreed with the Local Authorities, and that the Black Bridge carriageway strengthening works will be carried out to the specifications of the OPW bridge design guidelines '*Construction, Replacement or Alteration of Bridges and Culverts - A Guide to Applying for Consent under Section 50 of the Arterial Drainage Act, 1945*', and in consultation with Inland Fisheries Ireland.

In the event planning permission is granted for the Proposed Development, a pre-construction survey on the Black Bridge will be undertaken, and detailed arrangements for the protection of roads, bridges, culverts or other structures to be traversed, as may be required. Similarly, the CEMP will be updated prior to the commencement of the development, to address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned and will be submitted to the Planning Authority for written approval.

Conclusion of the CCC Internal Transportation Report, which is also Refusal reason No 2 provided by CCC

Refusal Reason 2 is as follows:

The proposed wind farm development is located in an upland area which is predominately served by a local road network of restricted width and capacity. Having regards to the site location and the condition of the existing road network proposed to access the site during the construction period, it is considered that the submitted plans and particulars, including the Environmental Impact Assessment Report, have failed to satisfactorily demonstrate that the local road network is of adequate capacity and design to accommodate the volume and frequency of HGV traffic along the proposed haul routes. Accordingly, to permit the proposed development would likely result in significant adverse impacts on the local road network, would endanger public safety by reason of at traffic hazard and obstruction of road users, and would therefore be contrary to the proper planning and sustainable development of the area.

Applicant Response

While it is considered that many of the points set out in the Conclusion of the CCC Transportation Report (and Refusal Reason No 2) are addressed in the responses to specific points raised in the report and addressed above, the following additional issues highlighted in Refusal Reason No 2, together with Applicant's responses are provided below.

Geometric capacity of road network

While the structural capacity of the network is addressed in the paragraphs above, the capacity in terms of traffic volumes is considered below.

Applicant Response

An assessment of the capacity of the road network to accommodate the additional traffic volumes generated during the construction of the Proposed Development is addressed in detail in Section 15.1.6 Traffic Effects During Construction, Operation and Decommissioning of the EIAR.

Link capacity

In terms of the link carrying capacity of the routes accessing the Proposed Development, the additional traffic volumes are forecast to peak on the 7 days that the 80 loads of concrete will be delivered to the site per day. On these days, if approaching the site from the north, it is forecast that the increase in traffic volumes will range from +10.4% on the N78 eastern arm from the direction of Athy (Link 1), to +46.7% on the L-1834 between the N78 and the Proposed Wind Farm site access (Link 2). If approaching from the south it is forecast that traffic flows on the R448 just north of Leighlinbridge (Link 3) will increase by 4.9% and on the L-3037 travelling towards the Proposed Wind Farm site access (Link 4) by 16.2%.

In terms of link capacity the busiest link is forecast to be the R448 (Link 3) which is estimated to operate at 79% of capacity without the additional traffic forecast to be generated by the Proposed Development. For this road it is forecast that during the 7 foundation pouring days the level of capacity

will increase to 83% (or 4% points above base) before reducing to a maximum of 81% capacity (or 2% points above base).

For the L-1834 (Link 2) travelling south toward the site access junction on the L-3037 is forecast to operate at 19% of link capacity in the construction year without any development generated traffic. It is forecast that during the 7 foundation pouring days the level of capacity will increase to 29% (or 10% points above base) before reducing to a maximum of 23% capacity (or 4% points above base).

Based on this assessment it is established that the network will continue to operate within capacity during the construction of the Proposed Development.

Junction capacity

Junction capacity tests were undertaken for the N78 / L-1834 / L-5872 junction and the proposed wind farm access junction on the L-3037. Both of these junctions were established to operate well within capacity with the former established to operate at a maximum of 18.0% capacity and the later 4.2% capacity, during the construction of the Proposed Development. With up to 85% capacity considered to be an acceptable level of operation in accordance with TII guidelines, it is considered that these junctions will operate will within capacity during the construction of the Proposed Development.

Road safety

The following statement forms part of the Refusal Reason No 2;

Accordingly, to permit the proposed development would likely result in significant adverse impacts on the local road network, would endanger public safety by reason of at traffic hazard and obstruction of road users, and would therefore be contrary to the proper planning and sustainable development of the area.

Applicant Response

As established in this response the following summary points contradict this statement;

- As demonstrated in Chapter 15 of the EIAR, the highway capacity and junction capacity are more than adequate to provide for the additional traffic volumes that will be generated during the construction of the Proposed Development, and
- A Stage 1 Road Safety Audit was subsequently undertaken for the Proposed Development as set out in Section 3 below. The Audit identified 2 minor issues for which the design team responses were accepted by the auditors.

In summary, the Applicant disagrees that the Proposed Development represents a traffic hazard or will result in an obstruction to road users.

4.3.1.2 Additional Roads and Transportation Issues Raised in the CCC Planner's Report

While the majority of the roads and transportation related issues raised in the Planner's Report prepared by CCC are common to those set out in the CCC Transportation Report, additional issues raised in the section titled "Traffic/Roads Impacts" in pages 30 to 33 of the Planner's report, together with the Applicant's responses, are summarised as below.

Insufficient consideration given to potential cumulative impacts with neighbouring permitted wind farm developments

There are concerns that sufficient consideration has not been given to the cumulative impacts from the potential simultaneous construction of Bilboa Wind Farm and White Hills Wind Farm and the subject development on the local road network. The contention that the construction phase of the subject development will be scheduled, where possible, to avoid the construction phases of these permitted wind farm developments is vague and it is unclear how timelines for construction could effectively be agreed with developers.

Applicant's Response

The potential for cumulative impacts with the neighbouring Bilboa and White Hill Wind Farms is assessed in Section 15.1.12.7 of the EIAR. While it is acknowledged that the Applicant does not have control of the scheduling of the construction of these developments, it will clearly benefit all developments if agreement is reached by the various developers to phase the constructions of the development in order to minimise the impacts on the common sections of the delivery routes. The Applicant has already been collaborating with the White Hills wind farm developer regarding turbine delivery works and the proposed upgrades to the Black Bridge. The traffic management plan will incorporate details of the road network to be used by construction traffic, and identify in consultation with the Local Authority, a construction schedule that is cognisant of any other construction work and traffic management plans that is before or to be agreed by the Local Authority at that time. In the event that the construction phase for the Proposed Development overlaps with either of the permitted development or proposed development, the cumulative impacts of this scenario are set out in Section 15.1.12.7 of the EIAR, and are established to be negative, short-term and slight to moderate, based on the potential overlap of TDRs and associated traffic generation.

Potential conflicts of interest with the permitted White Hills Wind Farm in relation to remedial works for Black Bridge

The Planning Authority also note that there is an extant planning permission for road strengthening works as part of the White Hills proposal to Black Bridge, which raises concerns regarding any potential conflicts of interest or different requirements that may have been stipulated as part of the proposal. The cumulative assessment has focused only on the traffic impacts from potential simultaneous construction of the adjoining wind farm developments and has not considered the detailed design of these proposals (for example the proposed strengthening works to Black Bridge) and any potential conflict that may arise with the current proposal.

Applicant's Response

The proposed strengthening works at Black Bridge are the same as those permitted for the White Hills Wind Farm. The Applicant for the Proposed Development engaged with the developer for the White Hills project on the turbine delivery route works and have proposed the same required works in order to reduce any additional construction work on the N78/L1835 temporary link road and Black Bridge. The structural assessment report for the Black Bridge produced by Jennings Donovan Partners is the same as that submitted as part of the Further Information Response for the White Hills planning application to An Bord Pleanála (ABP Ref: 315365-22).

Road Safety Audit

A Road Safety Audit was not carried out as part of the assessment and it is stated that this will be undertaken at the detailed design stage.

Applicant's response

Traffico Road Safety Engineering Consultants Ltd were commissioned to undertake a Stage 1 Road Safety Audit for the access arrangements for the Proposed Wind Farm site, in accordance with GE-STY-01024 Road Safety Audit Guidelines, TII, December 2017. The Stage 1 Road Safety Audit Report is included in appendix 2 of this report.

As documented in the Audit Report, the Audit Team identified 2 potential Problems. For each Problem identified the Design Team are required to provide a response, as documented in Appendix A, Road Safety Audit Feedback Form of the Stage 1 Road Safety Audit Report. The 2 problems identified, together with the Design Teams response and whether the response was accepted by the Audit Team are set out below.

Problem 2.1 – Impact of Stream Crossing on Abnormal Load – Location 5, Temporary Access, Stream to East of Local Road L1834

The Audit Teams notes that failing to make suitable provision for the stream crossing could lead to the abnormal loads grounding and becoming trapped. It could also lead to flooding on the L1834.

The Audit Team recommends that Appropriate measures should be set in place to facilitate the stream crossing of the abnormal load.

The Design Team Response is as follows – During the period that the temporary access is in use during the delivery of the abnormally sized loads measures will be put in place to ensure that the egress onto the L1834 at this location is flat and that the flow of the existing stream is maintained by means of a temporary culvert.

The Design Team response was accepted in in the Road Safety Audit Feedback Form included as Appendix A of the Audit Report.

Problem 2.2 – Sightlines Partially Obscured by Field Boundary – Location 7, Access junction A, Field Boundary

Sightlines to the left appear to be partially obscured by the existing field boundary, which includes ditch, foliage and some trees. This could lead to side impact type collisions within the access junction's conflict zone.

The Audit Team recommends that the ditch should be modified to ensure that an appropriate sightline is provided at the location described.

The Design Team Response is as follows – It is confirmed that all existing obstructions that are currently located within the required visibility splays shown in Figure 15-12 of the EIAR, including the existing field boundary and foliage / trees are within the control of the applicant and will be removed during the construction of the Proposed Wind Farm. The visibility splays will be kept clear during both the construction and operational stages of the proposed development.

The Design Team response was accepted in in the Road Safety Audit Feedback Form included as Appendix A of the Audit Report.

Summary of Stage 1 Road Safety Audit - The Audit Team raised 2 potential road safety problems. The Design Team agreed with each problem and each recommendation suggested by the Audit Team and provided a detailed solution describing each mitigation measure proposed. It is confirmed that each solution was to the satisfaction of the RSA Team.

Refusal Reason 3 - Noise

Carlow County Council's second reason for refusal is stated as follows:

3. *From an assessment of background noise levels and predicted cumulative noise levels for night-time noise detailed in Chapter 12 of the Environmental Impact Assessment Report, it has not been demonstrated to the satisfaction of the Planning Authority, due to the submission of insufficient information, that the predicted increase in the cumulative noise environment for the operational phase of the proposed wind farm development would not give rise to adverse impacts on local residents. Therefore, to permit the proposed development in the absence of this information would be prejudicial to public health and the protection of the residential amenities of the area and would therefore be contrary to the proper planning and development of the area.*

Grounds of Appeal against Refusal Reason 3

This response was prepared by TNEI, whom, together with MKO, prepared Chapter 12 – Noise, of the EIAR. The EIAR chapter is supported by three Technical Appendices (which are referred to collectively as 'the noise assessment'):

- Appendix 12-1: Construction Noise Report;
- Appendix 12-2: Wind Turbine Operational Noise Report; and,
- Appendix 12-3: BESS Operational Noise Report.

The following response has been prepared by James Mackay, Director of Environment & Engineering at TNEI Services Limited (TNEI), an energy consultancy specialising in the planning and development of energy generation and energy infrastructure projects. James holds the degree of Bachelor of Science in Environmental Science, a Diploma in Acoustics and Noise Control and is a full Member of the Institute of Acoustics in the United Kingdom (UK).

Background

The noise assessment was reviewed by the HSE Environmental Health Department who provided a consultation response to the CCC Planning Section dated 14th June 2024. It is evident that the conclusions of the HSE submission formed the basis of the Planning Authority's third refusal point. In relation to noise, the submission concluded that:

'7. The applicant has predicted that there will be no significant noise effects during the construction phase, however, a number of locations have been identified where exceedances of levels outlined in BS5228 may occur during particular periods of construction. It is recommended that the applicant notifies the local receptors who may be impacted during these periods of construction, they should be advised of the period of time and the level of disruption which may be expected. General guidance for controlling construction noise through the use of good practice given in BS 5228 should be followed. During construction of the proposed wind farm, operations should be limited to working times incorporated in any planning permission.

8. An examination of the background noise levels and predicted cumulative noise levels for night time noise indicates an increase of more than 10dBA at a number of noise assessment locations at varying wind speeds. The predicted increase in the cumulative noise environment above the background level indicates a significant change in the night time noise environment at a number of sensitive receptors. This change in the noise environment, even at low noise levels, could have an adverse effect on health. It is recommended that the applicant carries out further assessment and proposes possible mitigation measures to ensure that noise levels do not have an adverse impact on local residents.

9. The NEHS recommends that the operators are compelled by conditions of planning permission, should it be granted, to manage the construction, operation and decommissioning of the proposed wind farm in a manner which ensures local residents are not exposed to excessive noise, the applicant should be required to comply with relevant best practice, legislation and guidelines. It is recommended that the mitigation measures outlined in Section 12.7.2 of the EIAR should be included as a condition of planning permission should it be granted.'

It is noted that that the response does not include a specific objection in relation to noise, rather, the information in points 7 and 9 discusses the need for appropriate noise related planning conditions (which are discussed further below in Section 4.4.1.5), whilst point 8 recommends that further assessment is undertaken, and that consideration is given to possible mitigation measures. To reiterate, the response does not provide any specific reason or recommendation for refusal on the grounds of noise.

CCC did not request further information as recommended in in point 8 of the HSE Environmental Health Departments submission. On the 5th of July 2024, CCC decided to refuse permission on three grounds, the third of which related to noise: *'3. From an assessment of background noise level and predicted cumulative noise levels for night-time noise detailed in Chapter 12 of the Environmental Impact Assessment Report, it has not been demonstrated to the satisfaction of the Planning Authority, due to the submission of insufficient information, that the predicted increase in cumulative noise environment for the operational phase of the proposed wind farm development would not give rise to adverse impacts on local residents. Therefore, to permit the proposed development in the absence of this information would be prejudicial to public health and the protection of residential amenities of the area and would therefore be contrary to the proper planning and development of the area.'*

Each of the points raised above is considered in the sections below.

4.4.1.2 Noise limits and noise assessment methodology

The operational noise assessment (presented in Appendix 12-2) considered cumulative wind turbine noise impacts in detail. The assessment presented the results of a background noise survey and set out suitable noise limits that need to be met by the combined operation of all wind turbines in the area (referred to hereafter as 'the Total WEDG Noise Limits'). The assessment concluded that, subject to the adoption of suitable mitigation measures¹¹, predicted cumulative noise levels would comply with the proposed noise limits that were set in accordance with the relevant guidance ('Wind Energy Development Guidelines, 2006' ('WEDG 2006'))¹².

As set out in Appendix 12-2, the WEDG 2006 are the current guidelines for setting noise limits for wind energy developments (and the guidelines were referenced on page 12 of CCC's Planner's Report). The information relating to noise in the WEDG 2006 is very limited, though it is widely agreed that the limits proposed in the WEDG 2006 were drafted to broadly align with the UK guidance ETSU-R-97 'The Assessment and Rating of Noise from Wind Farms'¹³. In 2013, the UK guidance was supplemented by a document produced by the Institute of Acoustics 'A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise' (IOA GPG). Throughout the operational noise assessment¹⁴, reference was made to guidance contained in ETSU-R-97 and the IOA GPG to supplement the WEDG 2006.

¹¹ This involves operating turbines in low noise mode. This involves restricting the rotor speed with a corresponding reduction in noise emissions and electrical power generation.

¹² Department of Environment, Heritage and Local Government (DoEHLG).

<https://www.gov.ie/en/publication/14106-wind-energy-development-guidelines-2006/>. Wind Energy Development Guidelines. [Online] 2006.

¹³ ETSU for the DTI (Department of Trade and Industry. The Working Group on Noise from Wind Turbines ETSU-R-97 The Assessment and Rating of Noise from Wind Farms'. 1996.

¹⁴ REF: Institute of Acoustics. Good Practice Guidance on the application of ETSU-R-97 for wind turbine noise assessment. 2013.

The use of the WEDG 2006 to set noise limits and assess proposed wind energy developments is consistent with the approach adopted in recent appeals including the Fahy Beg Wind Farm (ABP-317227-23), which was granted permission in a Board Direction dated 20-02-2024, and Strategic Infrastructure Development (SID) applications including the Sheskin South Wind Farm (ABP-315933), which was granted permission on 13th March 2024.

The Total WEDG Noise Limits are set 5 dB above the existing background noise levels but are subject to fixed minimum limits when background noise levels are low. The concept of fixed minimum limits is discussed in ETSU-R-97, which states on page 60, that:

'Applying the margin above background approach to some of the very quiet areas in the UK would imply setting noise limits down to say 25-30dB(A) based upon background levels perhaps as low as 20-25dB(A). Limits of this level would prove very restrictive on the development of wind energy. As demonstrated below, it is not necessary to restrict wind turbine noise below certain lower fixed limits in order to provide a reasonable degree of protection to the amenity.'

ETSU-R-97 then goes on to consider what fixed minimum limits might be appropriate for the night time period and concludes:

'The Noise Working Group recommends that an appropriate fixed limit for the night-time is 43dB(A).'

The approach set out in ETSU-R-97 to setting night time fixed minimum limits was also adopted in the WEDG 2006, which states:

'Separate noise limits should apply for day-time and for nighttime. During the night the protection of external amenity becomes less important and the emphasis should be on preventing sleep disturbance. A fixed limit of 43dB(A) will protect sleep inside properties during the night.' Neither the WEDG 2006 nor ETSU-R-97 include a maximum allowable difference between background noise and predicted turbine noise and instead rely on the use of fixed minimum limits when background noise levels are low. Accordingly, the appropriate test to be applied when considering operational noise from the proposed development is whether noise meets the proposed noise limits, which incorporate the appropriate fixed minimum limits. The fixed minimum limits used in the noise assessment are set out in Section 2.5 of Appendix 12-2 of the EIAR. As stated in Section 0, the predicted noise levels will meet the noise limits set in accordance with the WEDG 2006.

In addition, it should be noted that the Total WEDG Noise Limits have already been established for a number of noise sensitive receptors in the area and these limits are set out in the noise conditions attached to nearby previously consented wind farms, for example Bilboa Wind Farm (ABP Ref: 318295). In particular, this includes limits for properties to the north of the proposed development (some of which were referenced in the HSE Environmental Health Departments consultation response). It is noted that the approach adopted to setting noise limits in the operational noise assessment for the previously consented Bilboa Wind Farm are consistent with those used in the noise assessment for the proposed development.

Whilst not repeated here, it should be noted that the operational noise assessment did consider the draft update to the WEDG (in Section 2.5 of Technical Appendix 12-2), as published for consultation in 2019, and the references in that document to World Health Organisation guidance published in 2018 in respect of wind turbine noise. The operational noise assessment concluded that it was appropriate for the assessment to continue to follow the guidance contained within WEDG 2006, supplemented by ETSU-R-97 and the IOA GPG.

Notwithstanding the fact that predicted cumulative noise levels meet the relevant noise level limits, the HSE's Environmental Health Department requested that the applicant carries out further assessment and proposed possible mitigation measures to ensure that noise levels do not have an adverse impact on local residents. This is considered in the sections below.

4.4.1.3 Background noise levels and predicted cumulative noise levels

The HSE's Environmental Health Department's consultation response provided a comparison of the background noise levels measured at Noise Monitoring Location (NML) 1 and compared them to predicted cumulative noise levels at Noise Assessment Location (NAL4)¹⁵ and concluded (on PDF page 8 of 10) that:

'An example of a direct comparison of the background night time noise levels with the predicted cumulative noise levels as shown in the tables below would indicate an increase of more than 10 dBA at wind speeds of 4-7m/s at NAL4. A number of similar predicted cumulative noise level increases over the background level were noted at varying wind speeds.'

Table 1 below provides a comparison of the relevant data at NAL4. The data in row 2 does show that the predicted cumulative levels (including the proposed development) are more than 10 dB above the background noise levels, however, it should also be noted that the cumulative noise levels excluding the proposed development (row 4) are already 10 dB above the background noise levels i.e. the addition of the proposed development is not increasing the cumulative noise level by 10 dB, as may be construed in the above text.

Table 1 - Comparison of background noise and predicted noise levels at NAL4 (dB LA90, 10 minutes)

		Wind speed (ms-1) as standardised to 10 m height											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Background Noise (night time)	18.6	18.6	18.8	20.6	23.6	27.4	31.7	36	40.1	43.4	45.8	46.6
2	Predicted Cumulative Noise (including the proposed development)	-	-	30.3	33.4	37.6	40.6	41.3	41.4	41.6	41.6	41.6	41.6
3	Difference (2-1)			11.5	12.8	14	13.2	9.6	5.4	1.5	-1.8	-4.2	-5
4	Predicted Cumulative Noise (excluding the proposed development)	-	-	27.9	30.9	34.8	37	37.6	37.8	38.1	38.2	38.2	38.2
5	Difference (4-1)			9.1	10.3	11.2	9.6	5.9	1.8	-2	-5.2	-7.6	-8.4
6	Increase associated with the proposed development (2-4)			2.4	2.5	2.8	3.6	3.7	3.6	3.5	3.4	3.4	3.4

The appropriate test to be considered in relation to noise is whether the proposed development can operate in accordance with the relevant guidelines (the noise level limits established in accordance with

¹⁵ Background noise monitoring was undertaken at a representative sample of NMLs, and these were used to set noise limits at each of the NALs (the data was NML1 was used to assess NAL4).

the WEDG 2006) and the EIAR has demonstrated that this can be achieved, and this should be sufficient to protect residential amenity and no additional mitigation is therefore proposed.

As set out in Section 12.8.2 in the EIAR, it is acknowledged that operational noise associated with the proposed development would be audible at the closest properties under certain wind speeds and wind directions. Audibility, however, is not a threshold of acceptability, nonetheless, it is however important to ensure that suitable planning conditions are attached to any consent to ensure that the amenity of local residents is protected, and this is discussed further in Section 4.4.1.5 below.

4.4.1.4 Concerns raised by Consultees and third parties

The CCC Planner's Report also summarised points raised by third parties. In relation to noise the Planner's Report notes (on Page 8 of 42) that submissions objected to / raised concerns regarding the proposed development on the following grounds:

'Adverse noise impacts from the proposed development including low frequency noise. Impact of vibrations is not quantified or surveyed.'

Low Frequency Noise

Low Frequency Noise (LFN) and infrasound were discussed in Section 3.2 of the operational noise report (Technical Appendix 12-2). The term infrasound can be defined as the frequency range below 20 Hz, while low frequency noise (LFN) is typically in the frequency range 20 – 200 Hz. An average young healthy adult typically has an audible frequency range from 20 Hz to 20,000 Hz, although the sensitivity of the ear varies with frequency and is most sensitive to sounds with frequencies between 500 Hz and 4,000 Hz.

As noted in the Technical Appendix the WSP BEIS report¹⁶ considered a number of studies which investigated claimed links between adverse health symptoms and infrasound emissions from wind turbines. The report notes, on page 116, that:

'It has been demonstrated in controlled experiments, including the involvement of participants self-reporting to be sensitive to wind turbine infrasound, that exposure to infrasound at levels representative of wind turbine emissions at dwellings is not associated with physiological or psychological health effects, whereas the expectation of effects from being exposed to wind turbine infrasound, and positive or negative messages influencing that expectation, can affect health symptom reporting.'

Overall, the findings from the existing evidence base indicate that infrasound from wind turbines at typical exposure levels has no direct adverse effects on physical or mental health, and reported symptoms of ill-health are more likely to be psychogenic in origin.

It is expected that further evidence from ongoing studies into wind turbine infrasound effects will emerge soon, in particular from the NHMRC studies in Australia. However, based on the existing scientific evidence, it does appear probable that the above findings will not be contradicted by newer evidence.'

Since the publication of the WSP BEIS report, the study that was granted funding by NHMRC (the National Health and Medical Research Council of Australia) was published in the Environmental Health Perspectives (EHP) journal which is published by the United States National Institute of Environmental Health. The study aimed to test the effect of exposure to 72 hours of infrasound (designed to simulate a wind turbine infrasound signature) exposure on human physiology, particularly sleep. The study concluded that:

¹⁶ 'A review of noise guidance for onshore wind turbines' a report commissioned by (the former) UK Government Department for Business, Energy & Industrial Strategy (BEIS).

'Our findings did not support the idea that infrasound causes WTS. High level, but inaudible, infrasound did not appear to perturb any physiological or psychological measure tested in these study participants.'

The exclusion of an assessment to consider LFN / infrasound is consistent with the findings in the WSP BEIS report which stated on page 201 that:

'It has been noted in the evidence review that the weight of evidence appears to indicate that wind turbine infrasound has no adverse effects on human health at typical exposure levels. In the stakeholder engagement it was suggested that a clear guiding statement on the relevance of infrasound to wind turbine noise assessments would be helpful for assessors and decision takers to understand the appropriate scope of noise assessments. At present it appears that an evidence based statement could be robustly justified, with the effect that considering wind turbine infrasound would not normally be necessary when determining development applications, until such time that the position is reviewed against newly emerging evidence.'

In relation to the need to control LFN, the WSP BEIS report states, on page 129, that:

'controls on A-weighted wind turbine sound levels are expected to be sufficient to control the effects of low frequency noise.'

The operational noise related planning condition proposed by the Applicant (which is discussed in more detail below) controls the A-weighted noise levels and, as such, additional controls are not necessary.

Vibration

Vibration associated with the operation of the proposed development was discussed in Section 3.2 of Technical Appendix 12-2 which outlines why an assessment of vibration was not necessary.

With regards to vibration associated with the construction phase, the various formulae that have been developed empirically and presented in BS 5228 to predict vibration levels at a receiving point do not take into account variability of ground strata, the source/ soil interaction process, coupling between the ground and the foundations, etc. Predictions can, therefore, only provide a first assessment of whether or not vibrations emanating from a site are likely to constitute a problem once the influence of these factors has been assessed, however, vibration levels from typical construction activities would only ever be noticeable if the activity was occurring very close to a property e.g. with a few meters. With regards to blasting, which could generate higher levels of vibration, an assessment can only be achieved after calibration of the site, i.e. after test blasting has taken place to establish a site-specific formula, and no assessment can be undertaken until works progress on site. Once test blasts have been conducted, it is then possible to design the blasts such that vibration levels will remain below any vibration limits that have been set for the nearest sensitive receptors.

Should An Bord Pleanála be minded to grant consent a condition could be included to account for vibration during the construction phase, this is discussed further below.

4.4.1.5 Planning conditions

Should An Bord Pleanála be minded to grant permission for the Proposed Development, it would be appropriate to include suitably worded noise related planning conditions to control noise during construction and operation.

In relation to construction noise, it may be appropriate to include a condition that limits construction hours, as suggested by the HSE's Environmental Health Department. Such limits should apply to noise generating activities but should exclude emergency works and turbine erection works and allow for

deviations to be agreed with the Council as required. Deviations may be required to allow specific tasks to be completed (e.g. it may not be practical or safe to cease work mid-way through a turbine tower erection), whilst it may also be preferable to undertake some work at other times, e.g. it may be appropriate to agree that some abnormal loads should be delivered outside of periods of peak traffic flow. Such a condition could be worded as follows:

'(1) Subject to paragraph (2), during the construction and decommissioning phases, works on the Site shall only take place between the hours of 07.00 to 19.00 Monday to Friday inclusive and 07.00 to 13.00 on Saturdays, with no construction work taking place on a Sunday or on national public holidays.

(2) Outwith the hours specified in paragraph (1), works on the Site shall be limited to work that is generally and reasonably regarded as being quiet (such as abnormal load deliveries, and lifting and installing turbine components), or where carrying out works is necessary due to weather conditions and/or health and safety requirements. In addition, access for security reasons, emergency responses or to undertake any necessary environmental controls is permitted outside these hours.

An operational noise related planning condition was proposed in Annex 9 of Technical Appendix 12-2. The condition uses a format which is commonly adopted in the United Kingdom, which has developed over time and represents an evolution of the example condition included in the IOA GPG. The condition is comprised of several elements including the main condition (which is split into paragraphs), tables of noise limits (for daytime and night-time) and a set of Guidance Notes. The purpose of each element is described below:

- Paragraph A requires submission and agreement of a list of suitably qualified consultants who would be able to undertake an assessment to determine compliance with the condition;
- Paragraph B details a requirement for the operator to undertake compliance monitoring in the event of a request from the Council;
- Paragraph C details how the noise limits for a given property should be determined;
- Paragraph D requires agreement of a method to determine compliance if measurements are undertaken close to the wind turbines¹⁷ (rather than at a dwelling);
- Paragraph E requires the submission and approval of an assessment protocol detailing the conditions to be considered in any compliance assessment;
- Paragraph F details a requirement for the submission of a report detailing the findings of any compliance monitoring that is undertaken;
- Paragraph G details submission timescales should a more detailed assessment be required to calculate the noise rating levels¹⁸;
- Paragraph H details the data that the Operator should log to enable compliance with the conditions to be evaluated;
- The Tables detail the Noise Limits applicable at each location. The Site Specific Noise Limits are those set out in Technical Appendix 12-2; and

¹⁷ This approach has been included as per paragraph of IOA GPG Supplementary Guidance Note 5 which notes that: 'where noise limits are less than ETSU-R-97 limits (e.g. apportionment of noise impacts due to cumulative impacts) compliance measurements may need to be undertaken in closer proximity to the wind farm to ensure background noise levels do not unduly influence the readings.'

¹⁸ The noise rating level is determined in accordance with Guidance Note 4 and is calculated by subtracting the measured level with the wind farm off from the measured level with the wind farm on. Where appropriate the rating level includes a tonal penalty calculated in accordance with Guidance Note 3.

- Guidance Notes provide further technical detail regarding the methodology to be used in the event that compliance monitoring is required. The guidance notes cover; the collection of data to inform the assessment, analysis of data, calculation of a tonal noise penalty should it be required and the calculation of noise rating levels.

The operational noise related planning condition as proposed by the Applicant sets clear and enforceable noise limits, includes a mechanism for the Council to request compliance monitoring in the event of a complaint, and sets out the methodology that should be used should an assessment be required.

4.4.2

Summary of Response to Refusal Reason 3

The HSE's Environmental Health Department did not formally object to the proposed development in relation to noise. The Department's consultation response did, however, recommend that the Applicant should carry out further assessment and propose possible mitigation measures to ensure that noise levels do not have an adverse impact on local residents.

For completeness, further information has been presented that compares predicted cumulative wind turbine noise levels to background noise levels, however, it should be noted that a comparison of those data in isolation is inappropriate given the low background noise levels. In such circumstances wind farm noise assessments consider suitable fixed minimum limits (as originally discussed in the UK guidance ETSU-R-97 and set out in the WEDG 2006). Suitable Total WEDG Noise Limits have been set in accordance with the relevant guidance and, following the implementation of suitable mitigation, predicted cumulative wind turbine noise levels meet the limits at all locations. The noise assessment also presented suitable site specific noise limits that would apply to the proposed development and a robust noise related planning condition has also been proposed to ensure that the compliance can be assessed and enforced as required.

The Applicant continues to rely on the information submitted within the EIAR. Subject to the imposition of suitable noise related planning conditions, the Applicant is of the opinion that there is no reason that consent should be refused on noise grounds.

5.

CONCLUSION

This First Party Appeal is being lodged in respect of the decision issued by Carlow County Council to refuse planning permission for the Seskin Wind Farm proposed under Pl. Ref.24/60122. This First Party Appeal document has set out Carlow County Council's reasons for refusal; a summary of their assessment of the Proposed Development with responses to issues raised provided by the Applicant where appropriate; An Bord Pleanála's obligations and a detailed Grounds of Appeal.

The Proposed Development, if permitted, will contribute towards national wind energy target of 9GW.

In summary, the Proposed Development is strongly supported by the following:

European & National Energy and planning policy, guidance and legislation, including

- REPowerEU and Renewable Energy Directive III,
- Project Ireland 2040 National Planning Framework (including the Draft Revised NPF),
- National climate and energy policy including the CAP 24, with regard to the acceleration of renewable energy roll-out and greenhouse gas emissions reductions,
- The Climate Act, which requires public bodies to carry out their functions in accordance with the national climate policies and objectives,
- The provisions of the Wind Energy Development Guidelines, Guidelines for Planning Authorities issued in 2006, and the Draft Wind Energy Guidelines issued in 2019,
- The National Energy Security Framework and Energy Security in Ireland to 2030 – Energy Security Package.

Regional and Local Level Policy, including:

- The Regional Spatial and Economic Strategy,
- The policies of the planning authority as set out in the Carlow County Development Plan 2022-2028 in relation to achieving national climate and renewable energy targets and addressing climate change.

Other Matters, including

- Carlow County Council's assessment of the EIAR and NIS, highlights that the site is considered to be acceptable for wind energy across a number of key material considerations. Any other perceived deficiencies have been instead in the contents of this first party appeal report. The refusal reasons issued by Carlow County Council in relation to wind energy policy, landscape and visual, traffic and transport, and noise have been comprehensively addressed in this report.
- Carlow's RES, in particular policy WE. P4, do not align with and does not reflect the ambition of national policy.

In response to refusal reason 1, it has been demonstrated that the policy WE. P4 is not aligned with national planning policy, nor is the County Carlow's wind energy target. There are also policies within the County Development Plan that support wind energy developments at this location, contradicting policy WE. P4. The landscape and visual impact of the Proposed Development is also assessed in further detail including its impact on scenic routes and protected views. It is concluded that the landscape can accommodate the Proposed Development and will not have any significant impacts on the key scenic sensitivities of designated scenic routes or protected views.

In response to refusal reason 2, further clarity has been provided to address the comments of the Transportation Section and the Planning Authority. It is concluded that the road network has the

capacity to accommodate the Proposed Development during the construction and operational phases and will not cause traffic hazard or result in an obstruction to road users. A Road Safety Audit has been undertaken and is appended to this report. The Audit identified 2 minor issues for which the design team responses were accepted by the auditors.

In response to refusal reason 3, further information has been provided that compares predicted cumulative wind turbine noise levels to background noise levels, however, it should be noted that a comparison of those data in isolation is inappropriate given the low background noise levels. In such circumstances wind farm noise assessments consider suitable fixed minimum limits (as originally discussed in the UK guidance ETSU-R-97 and set out in the WEDG 2006). Suitable Total WEDG Noise Limits have been set in accordance with the relevant guidance and, following the implementation of suitable mitigation, predicted cumulative wind turbine noise levels meet the limits at all locations. The noise assessment also presented suitable site specific noise limits that would apply to the proposed development and a robust noise related planning condition has also been proposed to ensure that the compliance can be assessed and enforced as required.

Ultimately, it is considered that this Proposed Development is in accordance with the provisions of proper planning and sustainable development and should be granted planning permission in respect of the suitability of the site and the need for renewable energy development. It is the policy of the government to rapidly accelerate the roll-out of renewable energy technology. However, if suitable sites are ruled out due local wind energy policy that is clearly not aligned with national policy, it is unlikely that any acceleration will be seen.

To combat the effects of climate change, Ireland must decarbonise its economy by 2050. There is no "silver bullet" to do so. It will take hundreds, if not thousands, of individual renewable energy projects to decarbonise the Irish economy. The scale of the challenge we face to decarbonise the Irish economy is enormous, but the climate change implications of not doing so are even greater. There is no other way to decarbonise a modern society except through renewable energy projects such as the Proposed Development.

Therefore, it is respectfully requested that the Board overturn this reason for refusal and resultingly grant planning permission for this development in accordance with the provisions of proper planning and sustainable development.



APPENDIX 1

CARLOW COUNTY COUNCIL REFUSAL DECISION

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CARLOW COUNTY COUNCIL
PLANNING AND DEVELOPMENT ACTS 2000 (AS AMENDED)
NOTIFICATION OF DECISION TO REFUSE

TO: EDF Renewables Ireland Limited
c/o MKO Planning and Environmental Consultants,
Tuam Road,
Galway,
H91 VW84.

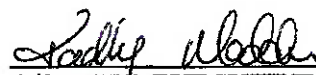
Planning Register Number: 24/60122
Valid Application Received: 13/05/2024
Further Information Received Date:

In pursuance of the powers conferred upon them by the above-mentioned Acts, Carlow County Council has by Order dated 05/07/24 decided to REFUSE TO GRANT PERMISSION for development of land, namely:-

(i) The construction of 7 no. wind turbines with the following parameters: a. Total tip height range of 179.5m–180m, b. Rotor diameter range of 149m–155m, c. Hub height range of 102.5m–105m, (ii) Construction of associated foundations, hardstand and assembly areas; (iii) All associated wind farm underground electrical and communications cabling connecting the turbines and meteorological mast to the proposed onsite electrical substation including road crossing at L30372, Co. Carlow; (iv) Construction of 1 no. permanent 38kV electrical substation compound including a single-story control building with welfare facilities, all associated electrical plant and equipment, security fencing, entrance on to the access track, all associated underground cabling, wastewater holding tank and all ancillary works in the townland of Seskinrea, Co. Carlow; (v) A permanent Battery Energy Storage System within the electrical substation compound in the townland of Seskinrea, Co. Carlow; (vi) All works (within County Carlow) associated with the connection of the proposed wind farm to the national electricity grid, via underground 38kV electrical cabling predominantly within the public road corridor from the proposed onsite electrical substation in the townland of Seskinrea, Co. Carlow to the existing 110kV Kilkenny substation; (vii) Provision of 2 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route; (viii) Reinstatement of the road and track surfaces above the cabling trench along existing roads and tracks; (ix) 1 no. meteorological mast of c. 36.5m in height, and associated foundation and hard-standing area in the townland of Ridge, Co. Carlow; (x) The permanent upgrade of 1 no. existing site entrance off L3037 for the provision of construction and operational access; (xi) The provision of 1 no. new permanent site entrance and the upgrade of 1 no. existing site entrance off the L30372; (xii) Upgrade of existing tracks/roads and provision of new site access roads, 2 no. clear span bridge crossings, junctions and hardstand areas; (xiii) 2 no. temporary construction compounds with temporary offices and staff facilities in the townland of Ridge and Seskinrea, Co. Carlow; (xiv) Carriageway strengthening works at 'Black Bridge' on the L1835/L3037 (Protected Structure: Kilkenny RPS Ref. D84); (xv) Peat and Spoil Management; (xvi) Tree Felling to accommodate the construction and operation of the proposed development; (xvii) Operational stage site signage; and (xviii) All ancillary apparatus and site development works above and below ground, including soft and hard landscaping and drainage infrastructure; A 10-year planning permission and 35-year operational life of the wind farm from the date of commission of the entire windfarm is sought. A concurrent planning application for works within Co. Kilkenny including junction accommodation works, bridge strengthening works and the 38kV underground grid connection to the existing 110kV Kilkenny substation will also be lodged to Kilkenny County Council. A design flexibility opinion issued by Carlow County Council on 14th March 2024 accompanies this application. The details unconfirmed in this application are the turbine tip height, rotor diameter and hub height. The range of parameters under which the turbine dimensions will fall are specified on this notice and in the design flexibility opinion that accompanies this application. The proposed development includes bridge strengthening works within the curtilage of a Protected Structure (Black Bridge – Kilkenny RPS Ref. D84). An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and will be submitted to the planning authority with this application AT the townlands of, Ridge, Agharue, Coolnakisha, and Seskinrea, Co. Carlow IN ACCORDANCE WITH THE PLANS SUBMITTED WITH THE APPLICATION.

For the 3 reasons set out in the Schedule hereto.

Signed on behalf of CARLOW COUNTY COUNCIL


A/SENIOR EXECUTIVE OFFICER

Date: 5/7/24

An appeal against a decision of a Planning Authority may be made to An Bord Pleanála.

THE APPLICANT FOR PERMISSION OR ANY OTHER PERSON may appeal within four weeks beginning on the date of the making of the decision by the Planning Authority. Appeals should be addressed to An Bord Pleanála, 64 Marlborough Street, Dublin 1, and be accompanied by a fee of :-

- (a) €4,500 (appeal against a decision of a planning authority on a planning application relating to commercial development, made by the person by whom the planning application was made, where the application includes the retention of development. (€9,000 if EIS or NIS involved)
- (b) €1,500 (appeal against a decision of a planning authority on a planning application relating to commercial development, made by the person by whom the planning application was made, other than an appeal mentioned at (a) (€3,000 if EIS or NIS involved)
- (c) €660 (in the case of an appeal made by the person by whom the planning application was made, where the application includes the retention of development other than an appeal mentioned at (a) or (b))
- (d) €220 (appeal other than an appeal mentioned at (a), (b) or (c))
- (e) €50 for an oral hearing, submissions or observations.

Appeals submitted without the appropriate fee will be invalid. An appeal by the applicant for permission should be accompanied by this form. In the case of an appeal by any other person, the name of the applicant, particulars of the proposed development or of the structure proposed to be retained and the date of the decision should be stated.

PL Ref: 24/60122
Refusal

Planning Permission for (i) The construction of 7 no. wind turbines with the following parameters: a. Total tip height range of 179.5m–180m, b. Rotor diameter range of 149m–155m, c. Hub height range of 102.5m–105m, (ii) Construction of associated foundations, hardstand and assembly areas; (iii) All associated wind farm underground electrical and communications cabling connecting the turbines and meteorological mast to the proposed onsite electrical substation including road crossing at L30372, Co. Carlow; (iv) Construction of 1 no. permanent 38kV electrical substation compound including a single-story control building with welfare facilities, all associated electrical plant and equipment, security fencing, entrance on to the access track, all associated underground cabling, wastewater holding tank and all ancillary works in the townland of Seskinrea, Co. Carlow; (v) A permanent Battery Energy Storage System within the electrical substation compound in the townland of Seskinrea, Co. Carlow; (vi) All works (within County Carlow) associated with the connection of the proposed wind farm to the national electricity grid, via underground 38kV electrical cabling predominantly within the public road corridor from the proposed onsite electrical substation in the townland of Seskinrea, Co. Carlow to the existing 110kV Kilkenny substation; (vii) Provision of 2 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route; (viii) Reinstatement of the road and track surfaces above the cabling trench along existing roads and tracks; (ix) 1 no. meteorological mast of c. 36.5m in height, and associated foundation and hard-standing area in the townland of Ridge, Co. Carlow; (x) The permanent upgrade of 1 no. existing site entrance off L3037 for the provision of construction and operational access; (xi) The provision of 1 no. new permanent site entrance and the upgrade of 1 no. existing site entrance off the L30372; (xii) Upgrade of existing tracks/roads and provision of new site access roads, 2 no. clear span bridge crossings, junctions and hardstand areas; (xiii) 2 no. temporary construction compounds with temporary offices and staff facilities in the townland of Ridge and Seskinrea, Co. Carlow; (xiv) Carriageway strengthening works at 'Black Bridge' on the L1835/L3037 (Protected Structure: Kilkenny RPS Ref. D84); (xv) Peat and Spoil Management; (xvi) Tree Felling to accommodate the construction and operation of the proposed development; (xvii) Operational stage site signage; and (xviii) All ancillary apparatus and site development works above and below ground, including soft and hard landscaping and drainage infrastructure; A 10-year planning permission and 35-year operational life of the wind farm from the date of commission of the entire windfarm is sought. A concurrent planning application for works within Co. Kilkenny including junction accommodation works, bridge strengthening works and the 38kV underground grid connection to the existing 110kV Kilkenny substation will also be lodged to Kilkenny County Council. A design flexibility opinion issued by Carlow County Council on 14th March 2024 accompanies this application. The details unconfirmed in this application are the turbine tip height, rotor diameter and hub height. The range of parameters under which the turbine dimensions will fall are specified on this notice and in the design flexibility opinion that accompanies this application. The proposed development includes bridge strengthening works within the curtilage of a Protected Structure (Black Bridge – Kilkenny RPS Ref. D84). An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and will be submitted to the planning authority with this application.

For: EDF Renewables Ireland Limited

1. The proposed wind farm development is located in the Killeshin Hills Landscape Character Area and Uplands Landscape Type, as designated in the Carlow County Development Plan 2022-2028 and accompanying County Landscape Character Assessment and Schedule of Protected Views. The Killeshin Hills Landscape Character Area has key characteristics including being open to views from a wide area within the County, the distinct prominence of the Castlecomer Plateau as a backdrop to the area, a tapestry of small to medium scale fields, and designated protected scenic routes and views, and the Uplands Landscape Type is assigned the highest landscape sensitivity rating of 5. Policy WE. P4 in the Plan states that wind energy development is not normally permissible in the Uplands Landscape Type, and Policies LA. P1, LA. P2, LA. P3 and LA. P11 seek to protect and maintain the overall integrity of the County's landscape by recognising its capacity to sustainably integrate and absorb appropriate development, by ensuring development does not have a disproportionate landscape or visual impact in sensitive upland areas, by adopting a presumption against developments on elevated or visually exposed sites or areas, and by protecting the aesthetic attributes of views and prospects. It is considered that the proposed wind farm development, incorporating 7 no. wind turbines with a maximum blade tip height of 180 metres and maximum rotor diameter of 155 metres, by itself and in combination with adjoining permitted wind farm developments, would have disproportionate and adverse landscape and visual impacts on the Killeshin Hills Landscape Character Area and Uplands Land Character Type, would be out of scale with and result in overbearing impacts on the receiving landscape, would unduly detract from those characteristics which contribute to its landscape value, scenic quality and sensitivity, and would negatively impact on the established appearance and aesthetic attributes of protected scenic route numbers 4, 5, 6, 7, 8, and 9 and protected view numbers 27, 28, 31, 32, 33, and 34 as identified in the Carlow County Landscape Character Assessment. Accordingly, to permit the proposed development would be contrary to Policies WE. P4, LA. P1, LA. P2, LA. P3 and LA. P11 in the Carlow County Development Plan 2022-2028 and would therefore be contrary to the proper planning and sustainable development of the area.
2. The proposed wind farm development is located in an upland area which is predominately served by a local road network of restricted width and capacity. Having regard to the site location and the condition of the existing road network proposed to access the site during the construction period, it is considered that the submitted plans and particulars, including the Environmental Impact Assessment Report, have failed to satisfactorily demonstrate that the local road network is of adequate capacity and design to accommodate the volume and frequency of HGV traffic along the proposed haul routes. Accordingly, to permit the proposed development would likely result in significant adverse impacts on the local road network, would endanger public safety by reason of a traffic hazard and obstruction of road users, and would therefore be contrary to the proper planning and sustainable development of the area.
3. From an assessment of background noise levels and predicted cumulative noise levels for night-time noise detailed in Chapter 12 of the Environmental Impact Assessment Report, it has not been demonstrated to the satisfaction of the Planning Authority, due to the submission of insufficient information, that the predicted increase in the cumulative noise environment for the operational phase of the proposed wind farm development would not give rise to adverse impacts on local residents. Therefore, to permit the proposed development in the absence of this information would be prejudicial to public health and the protection of the residential amenities of the area and would therefore be contrary to the proper planning and development of the area.



APPENDIX 2

ROAD SAFETY AUDIT



Seskin Wind Farm, County Carlow

Stage 1 Road Safety Audit

EDF Renewables Ireland Limited

July 2024

Seskin Wind Farm, County Carlow

Stage 1 Road Safety Audit

July 2024

Notice

This document and its contents have been prepared and are intended solely for EDF Renewables Ireland Limited's information and use in relation to the Seskin Wind Farm, County Carlow.

Traffico assumes no responsibility to any other party in respect of or arising out of or in connection with this document and / or its contents.

Document History

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Revision	Purpose Description	Originated	Checked	Reviewed	Authorised	Date

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1. Introduction

1.1 Report Context

This report describes the findings of a Stage 1 Road Safety Audit associated with the proposed Seskin Wind Farm, County Carlow.

The Audit has been completed by Traffico on behalf of EDF Renewables Ireland Limited.

1.2 Details of Site Inspection

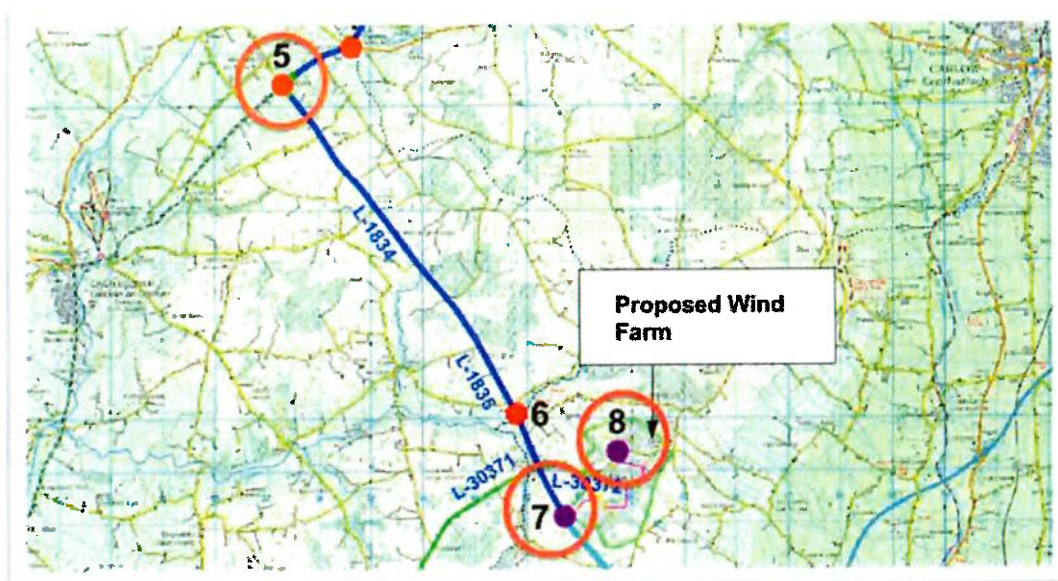
Date	Daylight / Darkness	Weather & Road Conditions
Sunday 5 th May 2024	Daylight	Sunny skies with dry roads.

Table 1.1 – Site Inspection Details

1.3 Locations Considered for This Road Safety Audit

The following locations along the abnormal load delivery route were examined as part of the audit (5,7 & 8).

Figure 1.1 – Locations Considered for Road Safety Audit (Extract from ALT&TC Figure 15-2a)



1.4 The Road Safety Audit Team

The members of the Road Safety Audit Team have been listed following:

Status	Name / Qualifications	TII Auditor Reference No:
Audit Team Leader (ATL)	Martin Deegan BEng(Hons) MSc CEng MIEI	MD101312
Audit Team Member (ATM)	John Ryan BEng CEng MSc BE	JR*101

Table 1.2 – Audit Team Details

1.5 Design Information Examined as Part of the Audit Process

The following drawing(s) were examined as part of the Road Safety Audit (RSA) process:

Drawing No.	Drawing Title	Revision
Figure 15-2a	Turning delivery route assessment locations and access junctions	-
Figure 15-8	Location 6 - N78 / L-1834, proposed temporary access road for abnormally sized loads during construction phase	-
Figure 15-9	Location 6 - N78 / L-1834, proposed temporary access road for abnormally sized loads – blade extended artic	-
Figure 15-10	Location 6 - N78 / L-1834, proposed temporary access road for abnormally sized loads – tower extended artic	-
Figure 15-11	Location 8 – Access junction A – Proposed access junction off L-3037	-
Figure 15-12	Location 8 – Access junction A – Proposed access junction off L-3037 – visibility splays	-
Figure 15-13	Location 8 – Access junction A – Proposed access junction off L-3037 – blade extended artic	-
Figure 15-14	Location 8 – Access junction A – Proposed access junction off L-3037 – tower extended artic	-
Figure 15-15	Location 8 – Access junction A – Proposed access junction off L-3037 – standard large HGV	-
Figure 15-16	Location 9 – Access junction B – Proposed access junction off L-30372	-
Figure 15-17	Location 9 – Access junction B – Proposed access junction off L-30372 – visibility splays	-
Figure 15-18	Location 9 – Access junction B – Proposed access junction off L-30372 – blade extended artic	-
Figure 15-19	Location 9 – Access junction B – Proposed access junction off L-30372 – tower extended artic	-
Figure 15-20	Location 9 – Access junction B – Proposed access junction off L-30372 – standard large HGV	-

Table 1.3 – Designers Drawing List

1.6 Road Safety Audit Compliance

Procedure and Scope

This Road Safety Audit has been carried out in accordance with the procedures and scope set out in TII publication number GE-STY-01024 - Road Safety Audit.

As part of the road safety audit process, the Audit Team have examined only those issues within the design which relate directly to road safety.

Compliance with Design Standards

The road safety audit process is not a design check, therefore verification or compliance with design standards has not formed part of the audit process.

Minimizing Risk of Collision Occurrence

All problems described in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and minimise the risk of collision occurrence.

2. Road Safety Issues Identified

2.1 Problem: Impact of Stream Crossing on Abnormal Load

Location: Location 5, Temporary Access | Stream to East of Local Road L1834

Failing to make suitable provision for the stream crossing could lead to the abnormal load grounding and becoming trapped. It could also lead to flooding on the L1834.

Figure 2.1 – Stream to East Side of Local Road which Abnormal Load Must Traverse



Recommendation

Appropriate measures should be set in place to facilitate the stream crossing of the abnormal load.

2.2 Problem: Sightlines Partially Obscured by Field Boundary

Location: Location 7, Access Junction A | Field Boundary

Sightlines to the left appear to be partially obscured by the existing field boundary, which includes ditch foliage and some trees. This could lead to side impact type collisions within the access junction's conflict zone.

Figure 2.2 – Section of Field Boundary Impacting Upon the Left-Hand Sightline



Recommendation

The ditch should be modified to ensure that an appropriate sightline is provided at the location described.

3. Audit Team Statement

3.1 Certification & Purpose

We certify that we have examined the drawing(s) listed in Chapter 1 of this Report.

Sole Purpose of the Road Safety Audit

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design which could be removed or modified to improve the road safety aspects of the scheme.

3.2 Implementation of RSA Recommendations

The problems identified herein have been noted in the Report together with their associated recommendations for road safety improvements.

We (the Audit Team) propose that these recommendations should be studied with a view to implementation.

Audit Team's Independence to the Design Process

No member of the Audit Team has been otherwise involved with the design of the measures audited.

3.3 Road Safety Audit Team Sign-Off

Martin Deegan

Audit Team Leader

Road Safety Engineering Team

traffico

Signed:



Date:

16th May 2024

John Ryan

Audit Team Member

Road Safety Engineering Team

traffico

Signed:



Date:

16th May 2024

4. Designers Response

4.1 How the Designer Should Respond to the Road Safety Audit

The Designer should prepare an Audit Response for each of the recommendations using the Road Safety Audit Feedback Form attached in Appendix A.

When completed, this form should be signed by the Designer and returned to the Audit Team for consideration. See flow-chart following for further description.



Figure 4.1 – Road Safety Audit Sign-Off and Completion Process

4.2 Returning the Completed Feedback Form

The Designer should return the completed Road Safety Audit Feedback Form attached in Appendix A of this report to the following email address:

- Email address: martin@traffico.ie

The Audit Team will consider the Designer's response and reply indicating acceptance or otherwise of the Designers response to each recommendation.

Triggering the Need for an Exception Report

Where the Designer and the Audit Team cannot agree on an appropriate means of addressing an underlying safety issue identified as part of the audit process, an Exception Report must be prepared by the Designer on each disputed item listed in the audit report.

Appendix A

A.1 Road Safety Audit Feedback Form

Road Safety Audit Feedback Form

Scheme: Seskin Wind Farm, County Carlow

Audit Stage: Stage 1 Road Safety Audit

Audit Date: 16th May 2024

Problem Reference (Section 2)	Designer Response Section			Audit Team Response Section
	Problem Accepted (yes / no)	Recommended Measure Accepted (yes / no)	Alternative Measures or Comments	Alternative Measures Accepted (yes / no)
2.1	Yes	Yes	During the period that the temporary access is in use during the delivery of the abnormally sized loads measures will be put in place to ensure that the egress onto the L1834 at this location is flat and that the flow of the existing stream is maintained by means of a temporary culvert.	Designer comment noted & accepted.
2.2	Yes	Yes	It is confirmed that all existing obstructions that are currently located within the required visibility splays shown in Figure 15-12 of the EIAR, including the existing field boundary and foliage / trees will be removed during the construction of the Proposed Wind Farm. The visibility splays will be kept clear during both the construction and operational stages of the proposed development.	Designer comment noted & accepted.

**The Designer should complete the Designer Response Section above, then fill out the designer details below and return the completed form to the Road Safety Audit Team for consideration and signing.*

Designer's Name: Alan Lipscombe

Designer's Signature: 

Date: 25/07/24

Employer's Name: John Conaghan

Employer's Signature: 

Date: 31/07/2024

Audit Team's Name: Martin Deegan

Audit Team's Signature: 

Date: 26/07/2024



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