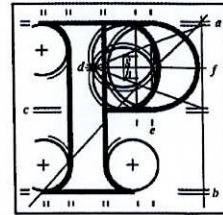


**Our Case Number:** ABP-309770-21

**Planning Authority Reference Number:**



**An  
Bord  
Pleanála**

Jennifer and Gavin Gallagher  
Clonsura  
Castletown-Finea  
Castlepollard  
Co. Westmeath  
N91 F201

**Date:** 24 May 2021

**Re:** Proposed development of up to 15 wind turbines with a tip height of up to 175 metres and laying of approximately 26km of underground electricity cabling to facilitate the connection to the national grid, and all associated site development works  
Townlands of Camagh, Carlanstown, Coole, Clonrobert, Clonsura, Doon, Monktown, Mullagh, Newcastle and other townlands, Co. Westmeath

Dear Sir / Madam,

An Bord Pleanála has received your observation or submission in relation to the case mentioned above and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the Local Authority and at the offices of An Bord Pleanála when they have been processed by the Board.

For further information on this case please access our website at [www.pleanala.ie](http://www.pleanala.ie) and input the 6-digit case number into the search box. This number is shown on the top of this letter (for example: 303000).

Yours faithfully,

Eimear Reilly  
Administrative Assistant  
Direct Line: 01-8737184

BL50A

<b>Tel</b>	<b>Tel</b>	(01) 858 8100
<b>Glaao Áitiúil</b>	<b>LoCall</b>	1890 275 175
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<b>Láithreán Gréasáin</b>	<b>Website</b>	<a href="http://www.pleanala.ie">www.pleanala.ie</a>
<b>Ríomhphost</b>	<b>Email</b>	<a href="mailto:bord@pleanala.ie">bord@pleanala.ie</a>

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902



## Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher

Jennifer and Gavin Gallagher,  
Clonsura,  
Castletown-Finea,  
Castlepollard,  
Co. Westmeath.  
N91 F201.

To An Bord Pleanála, 64 Marlborough St, Dublin 1

<b>AN BORD PLEANÁLA</b>	
LDG- <u>040612-21</u>	
ABP- _____	
17 MAY 2021	
Fee: € <u>50</u>	Type: <u>cash</u>
Time: <u>15:45</u>	By: <u>hand</u>

We wish to make a written submission in relation to the Planning Application by Coole Wind Farm SID (i) the upgrading, reorientation and expansion of an electricity substation in the townland of Camagh, Co. Westmeath. Proposed development of up to 15 turbines with a tip height of up to 175 metres in the townlands of Camagh, Carlanstown, Clonrobert, Clonsura, Doon, Monkstown, Mullagh, Newcastle and other townlands, Co. Westmeath; (ii) the installation of approximately 26km of underground cable between the proposed substation and the national grid at the existing Mullingar 110kV substation in Irishtown, County Westmeath; and (iii) associated site works and ancillary developments.

**An Bord Pleanála Case reference: PA25M.309770:**

**We urge that this Strategic Infrastructure Development be refused for the following reasons:**

### Introduction

The development of an industrial wind farm in the name of Coole Wind Farm SID Limited fails to comply with the Westmeath County Development Plan 2014-2020; Westmeath County Development Plan 2021-2027, the existing 2006 Wind Energy Development Guidelines in relation to shadow flicker and the pending revised Draft Wind Energy Development Government guidelines 2019 in relation to shadow flicker and set back distances to residential properties.

The proposed siting of 15 industrial size wind turbines in cutaway bog that runs close to our property in Clonsura, Castletown Finea, County Westmeath by Coole Wind Farm SID Limited will greatly impact on our quality of life and significantly impinge on our rights<sup>1</sup> as citizens to live free from noise pollution and shadow flicker.

It should be noted that our home will be located approximately 720 metres from the wind turbine marked number 4 on the map submitted in the planning application for CWF SID; that five additional turbines, (numbers 2, 3, 5, 6 and 15) will be located between 1-1.4km from our home and at its furthest point the proposed wind farm will be sited 3km from our property.<sup>1</sup>

### Greenwire: An Bord Pleanála

We note that the proposed Greenwire development, which is currently before An Bord Pleanála, seeks to locate hundreds of industrial wind turbines from the border with the North of Ireland across the Midlands. Coole Windfarm represents the southern extremity of the Greenwire project and the plans for the Coole area are part of a wider strategy to locate clusters of industrial turbines that would if permitted, eventually form part of the Greenwire development. By seeking permission to construct smaller size wind farms in strategic locations in places like Kildare/North Meath, Kinnegad and Coole in County Westmeath Element Power is attempting to circumvent the planning process. The proposed Coole wind farm is part of an overarching strategy to create a network of industrial turbines at strategic sites across the Midlands in advance of a decision being made on the Greenwire development. It will become part of the much larger Greenwire development yet the Coole Wind Farm planning application fails to reference this in their Environmental Impact Assessment.

The board must consider the cumulative effects of the whole Greenwire development when making its decision on the proposed Coole Wind Farm and we contend that Element Power, in failing to identify that the application is part of the Greenwire development in its EIA is in contravention of EU law.

<sup>1</sup> Coole Wind Farm-Eis/EIAR 150939-EIS/EIAR-2017.06.06-F  
Building Locations. Map No: 4.6.



### **The "Consultation Process"**

In a parliamentary reply issued by his department, the Minister for Communications, Energy and Natural Resources Denis Naughten stated: "The introduction of new obligations in relation to engagement with local communities by wind farm developers along with the provision of community benefit measures".<sup>2</sup>

In outlining our opposition to this development, we consider it necessary to highlight the farcical nature of the one to one consultation process embarked upon by CWF SID as CWFL and the failure of their representatives to treat seriously the issues we raised.

Coole Wind Farm SID first came to the notice of those living in north Westmeath as Coole Wind Farm limited. The consultations that happened were during the process of community consultation for Cool Wind Farm Limited in 2013. There have been no community consultations for Coole Wind Farm SID apart from a letter sent to those living within 1.4km of the proposed industrial wind farm in November 2020 and the website which has been operational since New Year 2021.

When CWFL representatives visited our home in 2013 to discuss their plans we were measured in our views and prefaced our objections by acknowledging the importance of developing sustainable energy in order to ensure Ireland complies with EU Directives.

We explained our primary opposition to their plans was the scale of the turbines that's tip height would reach a colossal 175 metres which is close to 60 stories high and 50 metres taller than the Dublin Spire. Coupled with the scale of the wind turbines was their close proximity to our home and the impact they would have on our health, property value and the local environment and landscape.

To illustrate our concerns we cited The Hill of Mael, the highest natural landmark in our locality which is 240 metres from sea level and will be situated about 2km from turbine 4 and 15. Turbine 4 when measured from ground level which is 75m above sea level will be over 10 metres higher than the peak of The Hill of Mael.

When we described the visual impact of these steel monstrosities on the local landscape one of the CWFL representatives laughingly commented: "if you don't like the look of them, sure don't look at them", an observation that was both condescending and inappropriate.

His remark highlighted the farcical nature of the "consultation" process which seemed to be a meaningless tick boxing exercise carried out in order to comply with the Code of Practice for Wind Energy Development in Ireland.

The understandable fears we had expressed as residents expected to live in the shadow of these giant turbines, and whose future health and general wellbeing may well suffer as a consequence of their presence, was dismissed as irrelevant in the wider scheme of things.

### **Devaluation of property**

From our own research and speaking to people who live close to industrial wind turbines, the vicinity of a wind farm of the scale that is being proposed by CWF SID will result in the significant devaluation of our property. We note for example, farm land on which wind turbines are situated has been shown to be devalued by between 30-40%.

While diminished property prices is not formally acknowledged by CWF SID we can personally confirm that residents of homes within that 1,000 metre zone around the edge of the proposed development have been offered substantial sums of money as compensation for the nuisance of living in such close proximity to the turbines they are proposing to erect. When visited by CWFL representatives to explain Element Powers plans in 2013 we were told that when the wind farm was operational, and if we hadn't objected to the development, we could claim €25,000 from CWFL. This in itself is explicit recognition from the developers that there are known problems from living in close proximity to a wind farm and acknowledgement that there will also be serious depreciation to the value of our property. This issue has not diminished in the intervening years. Furthermore, this new application by Coole Wind Farm SID is even bigger than Coole Wind Farm Limited so potentially will decrease the value of our property even more.

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<sup>2</sup> Parliamentary Reply from Minister on the 27<sup>th</sup> June 2017 <https://www.kildarestreet.com/wrans/?id=2017-06-27a.117>



**Visit to Mount Lucas Wind Farm**

During our discussions with the representatives from CWFL in 2013 they suggested we view what they claimed were similar size turbines in Mount Lucas, County Offaly. As reasonable and fair minded people we decided to act on his suggestion and visited Mount Lucas to assess for ourselves the visual aspect of the proposed development. We were hoping that by so doing this would allay our doubts, particularly in relation to the impact these industrial wind turbines would have on our locality. Unfortunately, the visit to Mount Lucas only served to further heighten our fears.

Mount Lucas is situated approximately 18.5 km from Rochfortbridge Co. Westmeath (where Jennifer works as a teacher) and 8 km from Rhode, County Offaly. Approximately 3.5km South East of Rochfortbridge the wind turbines can be clearly seen and within 5km of Rhode they start to completely dominate the flat low lying landscape. Their dominance of the landscape becomes ever more pronounced the closer you get to Mount Lucas and houses and farms in the area are completely dwarfed by their towering presence.

It should be noted that at 150 metre high the turbines in Mt. Lucas are 25 metres smaller than those planned for our locality. The scale of the proposed Coole Wind Farm SID turbines reflects the fact that our locality is classified as a low wind density area making it necessary to construct such massive wind turbines. In referencing the scale of their proposed wind farm in Coole by comparing it to turbines at Mount Lucas we felt the representatives from CWFL were being disingenuous by claiming to have used a comparable benchmark when conducting the impact of their proposed turbines on Coole, Clonsura and the greater north Westmeath area.

To put the additional 25 metres in perspective, the maximum height allowed for new office tower blocks in Dublin is 30 metres, not far off a sixth of the height of the turbines proposed for our area and small planes are permitted to fly at a height of 500 feet (152.4 metres) in non conurbations. As previously mentioned the turbines proposed for Coole Wind Farm SID will reach the height of 175 metres.

**Westmeath County Council Development Plan 2014-2020 and P-WIN 6**

The Policy P-WIN 6 sets out the following minimum separation distances between wind turbines and residential dwellings:

- 1. 500 metres, where the height of the wind turbine generator is greater than 25 metres but does not exceed 50 metres.**
- 2. 1,000 metres, where the height of the wind turbine generator is greater than 50 metres but does not exceed 100 metres.**
- 3. 1,500 metres, where the height of the wind turbine generator is greater than 100 metres but does not exceed 150 metres; and,**
- 4. More than 2,000 metres, where the height of the wind turbine generator is greater than 150 metres.**

Westmeath County Council adopted P-WIN 6 as an amendment to the Westmeath County Development Plan 2014-2020 on 24<sup>th</sup> April 2017. P-WIN 6 was adopted lawfully and was never the subject of a legal challenge by the High Courts or the Minister for Housing, Planning, Community and Local Government. It therefore stands as an integral and important part of the outgoing Westmeath County Development Plan.

In December 2017, Westmeath County Council refused permission for Coole Wind Farm on the basis that it did not comply with the conditions in P-WIN 6. For Coole Wind Farm to suggest that the content of P-WIN 6 or of any part of the current Westmeath County Development Plan is invalid is an unstateable argument. Coole Wind Farm simply lodged the application for their development knowing that P-WIN 6 existed.

It should be also recorded that on the 14<sup>th</sup> March, 2017, Donegal County Council made a material variation (variation number 2) to their County Development Plan stating that there should be "a setback distance from residential dwellings of ten times the height of Industrial Wind Turbines". This policy is similar to P-WIN 6. The Minister of Housing, Planning, Community and Local Government attempted to strike down the adopted variation. A case was brought to the High Court by Councillor John Campbell (Donegal Co. Co.). In John Campbell vs The Minister for Housing, Planning, Community and Local Government the High Court granted an Order of Certiorari quashing the Ministerial direction. In the light of this determination by the



## **Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher**

High Court it is reasonable to deduce that the variation adopted by Westmeath County Council is equally robust.

In the soon to be adopted 2021-2027 Westmeath County Development Plan 2021 -2027 CPO 10.132/10.143 will replace P-WIN 6. It gives the same protection to residents of the county as P-WIN6.

### **Regional Planning Guidelines for the Midlands Region 2010-2022**

The EIAR states that Section 3.3.4.5 of the Midlands Regional plan recognises the potential of the peatlands and associated cutaway bogs to accommodate large scale energy production in the form of wind farms and bio energy fuels.

The Regional Planning Guidelines suggestion as quoted in the applicants EIAR, that the Midlands Region can avail of the opportunity to use its existing power stations to make the transition from peat to renewable energy sources, and that the region has a "strong history of energy production and an extensive transmission network in place" clearly does not apply to the location of the proposed wind farm in Coole.

The bogs around Coole, Clonsura, Doon, Mayne and the other townlands named in the planning application have never been used for energy production. There are no existing power stations which can be converted from fossil fuels to renewable energy. The transmission system is clearly inadequate as demonstrated by the applicants need to go 26.9km to Mullingar to establish a connection to the national grid. Additionally but not exclusively the road network consists of minor rural roads which would require substantial upgrading to accommodate the transport of the massive wind turbine components to onsite.

Statkrafts planning application for an industrial wind farm in Coole should be rejected on the grounds that the Regional Planning Guidelines do not support the proposed Industrial Wind Farm in Coole. This part of The Midlands has no history of energy production and therefore no existing power stations to convert to renewable energy. The application for Coole Windfarm SID should not be granted planning permission on that basis.

### **Site notices**

The public must be properly notified about any proposed development and given proper notice of a planning application being lodged in the local authority and/or An Bord Pleanála. This usually takes place in the form of notices in local papers and site notices onsite, adjacent to a public road. The site notices for Coole Wind Farm SID have not all been placed in the correct locations allowing full public notification and participation. This is in contravention to proper planning and development and for this reason the application for planning permission for Coole Wind Farm SID should be refused.

For example the site notice on Clonsura bog is situated on the junction of two privately owned lanes and a completely overgrown and inaccessible public lane, approximately 600m after a barrier gate and a further 200m before that from an accessible public lane. (see photo montage on page 6).

**The map on page 5 shows the layout of Clonsura Bog and access point which forms part of the CWF SID site.**

**No. 1** Entrance to Clonsura Lane (L57671) from Regional Road.

**No. 3** End of public part of Clonsura Lane and the start of privately owned lane belonging to Declan Butler, local landowner.

**No.4** Position of Barrier gate to Clonsura Bog. Photograph on page 6.

**No. 5** Position of site notice for CWF SID on Clonsura Bog.

Location of photos of the site notice taken on page 6.

Beginning of privately owned lane owned by Cavan Peat.

Junction of the two privately owned lanes referenced above with inaccessible (for two decades) public access lane from the regional road. Photos on page 6.



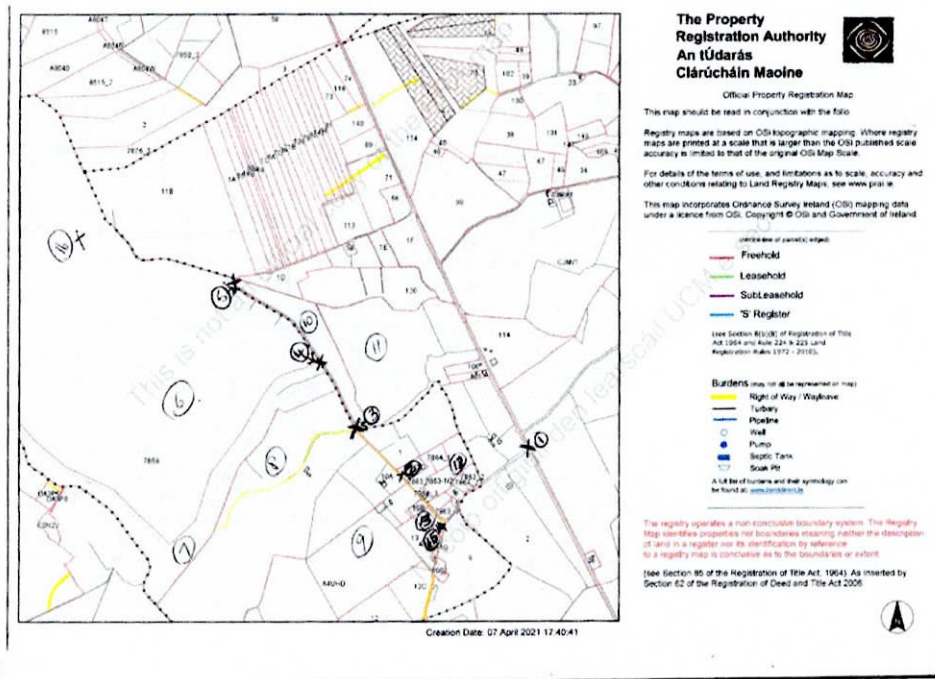
**No. 16** End of privately owned road belonging to Cavan Peat.

**No. 6** Clonsura Bog, owned by Cavan peat, operated by Westland Horticultural Limited.

**No. 7** Coillte forestry.

**Nos. 8,9,10, 11, 12, 13, 14 and 15** Local residents and their farmlands.

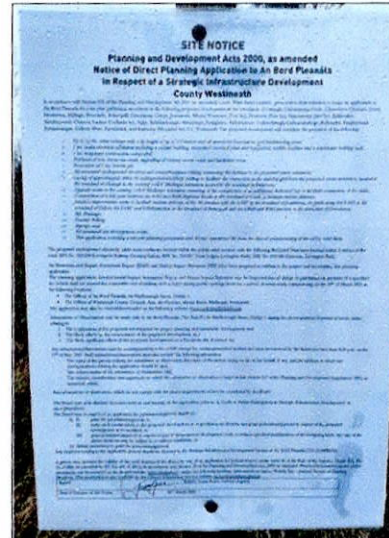
**No. 2.** Jennifer and Gavin Gallaghers residence.



As can be clearly seen from this map the site notice for CWF SID located closest to six proposed turbines (1,2,3,4,5 and 15) has been erected well within private lands, on the edge of private lanes and behind a barrier gate which is a considerable distance from the only entrance onto Clonsura Bog. The only other public access lane has been closed to the public for over 20 years and is completely overgrown with Coillte forestry (behind no.5). We have included photographs of the site notice in situ on page 6 to show how inaccessible this site notice is to the general public. It is possible to drive to the site notice on the privately owned lane, but as it is behind a locked barrier gate, it is only drivable to those who have a key to unlock it: Namely those employed by or contracted to Westland Horticultural Limited, Cavan Peat and now Coole Wind Farm SID. It is only accessible by foot for those who are prepared to walk over 800m on a rough lane to find it, or to those who are prepared to walk a similar distance through brambles, briars, gorse, low branched trees on what was a hard core track from the regional road, but has been overgrown, disused and impassable for decades. This is hardly the correct location for a public notice about a major proposed development. This contravenes planning laws and has denied many people the opportunity to analyse CWF SIDs planning application, send in submissions and involve themselves in the planning process, as they have a right to do. It is against proper planning and development. For this and other reasons CWF SID should be refused planning permission.



## Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher



Above and right: The site notice in situ on an A3 size sign and a close up of the information. The information on the signage is very difficult to read.



The left photo shows the impassible overgrown public access lane behind the site notice as indicated. The second photo is of the same lane facing into the bog. The site notice is to the left as indicated.



The photo on the left is of the privately owned lane which is the only access into the bog with the site notice on the right as indicated. This lane has only one entrance which is blocked to traffic by the gate on the right. The second photo shows the locked gate and where the site notice is located, beyond the trees and bend in the road approximately 800 metres away.



### **Coole Wind Farm SID Chapters 3 and 5-14**

The first part of our submission opposing Coole Wind Farm SIDs application for 15 industrial size turbines on cutaway bog in Coole, County Westmeath deals with Chapter 3 of said application "Consideration of Reasonable Alternatives".

#### **3.1.1 Overview**

"This section of the EIAR contains a description of the reasonable alternatives that were studied by the developer, which are relevant to the proposed project and its specific characteristics, in terms of site location and other renewable energy technologies as well as site layout incorporating size and scale of the project, connection to the national grid and transport route options to the site. This section also outlines the design considerations in relation to the wind farm, including the associated substation, grid connection, construction compound and borrow pit. It provides an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects<sup>3</sup>"

- 1) Chapter 3 details the alternatives within the narrow framework of an industrial wind farm. Moreover, the application clearly states in section 3.1.1 and the conclusion at 3.10 that the alternatives only relate to the scale, output, grid connection route and road haulage routes as they relate to the industrial wind farm. No consideration is given to alternative means of generating clean, green energy through, for example, micro, small and medium scale wind energy alternatives nor are other options such as the generation of energy through solar, bio mass and hydro technologies considered. In summary, the submission is predicated on one predetermined outcome by making the case for only one option – the generation of wind energy through the erection of 175 metre turbines.

#### **3.2 The Do Nothing Scenario**

"An alternative land-use option to developing the Proposed Development would be to leave the site as it is under its current planning permission. As detailed in Section 2.5.1 in Chapter 2 of this EIAR, a wind energy project comprising of 13 turbines and all associated infrastructure has current planning permission on the Proposed Development site. The permitted wind energy project was designed to co-exist and operate independently of land use practices of commercial peat harvesting and forestry to minimise impacts. Whilst there would be a change of land use within the footprint of the Proposed Development, to facilitate the wind turbines and infrastructure, this was found to be an acceptable part of the permitted development<sup>4</sup>."

- 2) The above passage asserts that commercial peat harvesting will continue onsite should CWF be built and operated meaning that there is no chance for the bog to be rewetted, reseeded, regenerated and restored as a fully functioning carbon sink and ecologically valuable wetland.
- 3) Section 3.2 also states that: "As detailed in Section 2.5.1 in Chapter 2 of this EIAR, a wind energy project comprising of 13 turbines and all associated infrastructure has current planning permission on the Proposed Development site". This is incorrect, wilfully misleading and self-serving. The facts are that An Bord Pleanála granted permission for the 13 turbine industrial wind farm, also known as Coole Wind Farm, but that decision is presently before the Commercial High Courts under Judicial Review, as it was at the time of this EIAR being written. Moreover, if planning permission for Coole Wind Farm was not subject to a Judicial Review then very likely that the construction of the 13 industrial turbines would already be under construction, and Statkraft would not be trying to circumvent the planning process and the law by attempting to create CWF SID on the back of the original planning application.
- 4) It should be further noted that in 2017, when CWF first sought planning permission from the local planning authority, Westmeath County Council (WCC), the council's initial response was to seek

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<sup>3</sup> Chapter 3 page 1 3.31

<sup>4</sup> Chapter 3 page 3 3.12



additional information on 53 points contained with CWF's application which in itself illustrates seriously fundamental flaws within their application. In response to WCC's diligence and scrutiny, CWF withdrew the planning application for 13 turbines.

- 5) Later that same year, CWF resubmitted a revised application to WCC which was refused because it contravened PWIN 6, the clause within the County Development Plan that contains a setback distance of ten times the nacelle height from residences. It should be emphasised that only two of the turbines complied with PWIN 6, a fact that CWF have been fully aware of when submitting all of their planning applications for the industrial Windfarm at Coole.
- 6) It should be further noted that in WCC's County Development Plan 2021-27 PWIN 6 has been replaced with CPO 10.132 which is an identical clause designed to prevent the construction of industrial size turbines close to occupied dwellings. Local planning guidelines make it clear that CWF cannot exist in its current or indeed extended state.

### **3.12**

"This EIAR assesses the potential for peat extraction works on the site to continue as a worst-case scenario. The Proposed Development has been designed to operate on this site in conjunction with any peat extraction activities. Should peat extraction cease, a site rehabilitation plan will be required which would be likely to encourage re-vegetation of bare peat areas, with targeted active management being used to enhance re-vegetation and the creation of small wetland areas. Due to the small footprint of the Proposed Development in the context of the entirety of the commercial peat extraction area, a rehabilitation plan where required would take account of the wind farm infrastructure. In doing so, the environmental effects in terms of emissions are likely to be neutral.<sup>5</sup>"

1. In 3.2 CWF state that: "Should peat extraction cease, a site rehabilitation plan will be required which would be likely to encourage re-vegetation of bare peat areas, with targeted active management being used to enhance re-vegetation and the creation of small wetland areas." Is there such a site rehabilitation plan anywhere in the planning application? If not, it would strongly suggest that CWF gives little priority to rehabilitating the proposed site where the majority of the wind turbines are to be located.
2. The planning application plans to include the current peat mining and milling operation on site resulting in continuing industrial peat extraction which will destroy the cutaway bog where the majority of turbines are to be sited. A much better and environmentally friendly option would be to finally bring to an end all industrial peat extraction and milling on the bog and to fully rewet, reseed and regenerate this important natural habitat. This would prevent further carbon losses and, over time, return the peatlands to full functionality which would restart the process of carbon storage and sequestration.
3. Section 3.2 claims that if CWF is refused permission to proceed with its plans "the opportunity to capture an additional part of Westmeath's valuable renewable energy resource would be lost, as would the opportunity to contribute in a more meaningful way to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions. The opportunity to generate additional local employment and investment would also be lost." Again this statement is, at best, disingenuous as there are other ways to contribute to a low carbon economy. As already stated, rewetting and regenerating the bogs would have the effect of soaking up excess atmospheric carbon thus reducing the carbon load in the environment. This would be a very environmentally effective and sensitive way of contributing to meeting Government and EU targets for the reduction of carbon emissions.
4. It makes more sense to focus attention on the production of renewable energy through medium, small and micro producers rather than large scale industrial producers. Encouraging and incentivising local people, schools, public buildings and businesses to produce and sell their own renewable energy would both generate renewable energy and create much needed income streams into rural areas that have suffered years of decline. Moreover, these initiatives

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<sup>5</sup> Chapter 3 page 3 3.3



would greatly contribute to meeting our renewable energy targets by lowering carbon emissions and at the same time stimulate the rural economy. People would feel a genuine ownership of their energy projects, rather than having them imposed on their localities by multinational corporations where profit is the primary motivating factor. This would mark a progressive approach that allows local people to play their part in generating clean, green energy.

5. To illustrate the above point, we cite the 35 acre solar farm on the grounds of Tullyally Castle that has received full planning permission from Westmeath County Council with no objections from local people. When operational, the panels will have the capacity to power half of Castlepollard thus contributing in a meaningful way to meeting Government and EU targets for the production and consumption of electricity from renewable sources whilst at the same time reducing greenhouse emissions. This development is not visible from anywhere except the fields in which it is situated and unlike Coole wind farm its impact on the environment and fragile eco-systems will be minimal.
6. Table 3.1 shows the increased footprint the proposed industrial wind farm will have and its even greater impact on the environment, landscape and visuals, habitat, subsurface archaeology and cultural heritage, water, noise and vibration, birds and biodiversity, population and human health when compared with the slightly less impactful application for 13 turbines. CWF claim that they have mitigated against most of these effects and the visual impact on the landscape by good design. Does this mean that the turbines will enhance the landscape or that they will be so well designed as to be invisible? It is simply ludicrous to suggest that 175 m high turbines can be screened by hedges, bushes and trees and by any objective standard, their impact on local people, some of whom will be forced to live within 700 metres of these giant structures, will be devastating.
7. CWF also claims to be committed to zero shadow flicker which again is simply untrue. In the original application my home was located (distance from turbines and their number) and the expectation was that I would endure a minimum of 47 minutes of shadow flicker a day. The new application allows for two additional turbines, one of which will be situated on land adjoining my lane which can only increase the amount of shadow flicker that will affect where I live yet nowhere in CWF's application do they explain how they will mitigate against this.
8. There are no mitigations referred to in regards to archaeology despite this being an archaeologically rich area. For example, proposed Turbine no.2 is situated adjacent to a crannog and there is nothing in the CWF's application to explain how the integrity of the crannog will be protected. There is also an archaeological ridge situated right beside Turbine no 15 with no mitigations listed to explain how CWF intends to protect this site of historical importance. If this was a planning application for a domestic build a full archaeological dig would be insisted upon prior to any building work commencing so why are CWF exempted from meeting the same criteria?
9. Finally, how do CWF propose to mitigate against the additional noise of turbines with considerably larger blades and two extra turbines? Do silent turbines exist?

### **3.3.1 Strategic Site Locations**

"The process of identifying a suitable wind farm site is influenced by a number of factors. While wind speeds, the area of suitable or available land, and planning policy are all very important, a wind farm project must be commercially viable/competitive, as otherwise it will never attract the necessary project finance required to see it built. The grid connection, or the method by which a proposed wind farm is connected to the national grid to export electricity from the site is of critical importance."

"Sites selected for the development of a wind farm must be suitable for consideration under several criteria, such as: Site location relative to the Westmeath Wind Energy Strategy's classification of areas considered suitable for wind farm development from a planning policy perspective; Access to the national electricity grid possible within a viable distance; Located outside areas designated for protection of ecological species and habitats; Sufficient area of unconstrained land that could potentially accommodate



wind farm development and turbine spacing requirements; Consistently high average annual wind speeds; Low population density; and Visual Amenity<sup>6</sup>."

1. In Section 3.3.1 CWF claim to have chosen this site because of low population density, reasonable access to the Grid network, the availability of unconstrained land, the lack of visual amenity and that the site is located outside areas designated for the protection of ecological species and habitats. What they fail to state is that the proposed location of the turbines contravenes PWIN 6 and its successor clause CPO 10.132 in the pending county development plan which provides for a one in ten setback distance (of the nacelle) for local residences. CWF were fully aware of this important clause that is designed to protect people from the worst effects of industrial wind farms when they began investigations into the possibility of constructing an industrial wind farm in North Westmeath. They pressed ahead with their application despite this being made clear to them on numerous occasions.
2. It is important to state that these clauses in the current and pending county development plans do not prevent the generation of wind energy but merely restrict where industrial turbines can be located in terms of their size and proximity to local residents. In summary, PWIN 6 and CPO 10.132 provide an essential safeguard for occupied dwellings by ensuring adequate separation distances from massive steel structures that can severely impact on people's health and general wellbeing.
3. Moreover, no explanation is provided in CWF's application to explain what constitutes a viable distance to the national grid for a grid connection? Why has such an important point been omitted from their application?
4. While there is only one pNHA onsite on the northern end (Lough Bane) there is another smaller lake on the site just behind proposed Turbine 1 which has not been assessed. There are also several SPAs and SNAs in close proximity to the site. CWF appear to have only assessed the sites located directly on the site of the wind farm site and have conveniently omitted the others affected by their development. Their planning application has also omitted similar sites located along sections of the grid connection route which is undoubtedly a deliberate decision taken to minimise the impact of their proposed development on the landscape.
5. There is not consistently high average annual wind speeds at the proposed wind farm site and if allowed, the turbines will be located on a site that, in keeping with all of Westmeath with the exception of Uisneach (no wind energy) and the Western Lowlands (medium) is a county classed as a low wind energy area.
6. If as CWF claim there is little to no impact on residents then why is low population density an important requirement for the siting of industrial wind farms?
7. Why also does CWF not have photomontages showing the visual impact of the turbines on occupied dwellings located closest to the Windfarm, including my own home which is situated on (Road number) and whose location can be seen on the map on page 6.
8. North Westmeath may lack the visual splendour of the west, northern and southern coasts but that does not mean that it lacks visual amenity. These turbines will destroy any visual amenity that we have, changing our rural landscape into an industrialised one and preventing any future potential to market the area as somewhere worth visiting.

### **3.6.1 Constraints and Facilitators Mapping**

"The design and layout of the Proposed Development follows the recommendations and guidelines set out in the 'Wind Energy Development Guidelines for Planning Authorities' (Department of the, Heritage and

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<sup>6</sup> Chapter 3 pages 4-5 3.3.1



Local Government (DoEHLG), 2006) and the 'Best Practice Guidelines for the Irish Wind Energy Industry'(Irish Wind Energy Association, 2008).

The 'Wind Energy Development Guidelines' (DoEHLG, 2006) are currently the subject of a targeted review. The proposed changes to the assessment of impacts associated with onshore wind energy developments are outlined in the document 'Proposed Revisions to Wind Energy Development Guidelines 2006 – Targeted Review' (2013), the 'Review of the Wind Energy Development Guidelines 2006 –Preferred Draft Approach' (June 2017), and the Draft Revised Wind Energy Development Guidelines, December (2019). Further details on these documents are provided in Section 2.4.3in Chapter 2 of this EIAR."

"The constraints mapping process involves the placing of buffers around different types of constraints so as to clearly identify the areas within which no development works will take place. The size of the buffer zone for each constraint has been assigned using guidance presented in the Department of the Environment, Heritage and Local Government Wind Energy Guidelines (DoEHLG, 2006). As it is considered likely that the new guidelines will be issued during the application process timeframe, current proposed changes were cognisant in the design process. Further details on the Draft Revised Wind Energy Development Guidelines, December (2019) are provided in Section 2.4.3.4."

9. The initial application for Coole Wind Farm in 2017 followed the revised Wind Energy Guidelines for setback distance which were in consultation at the time and came into draft in 2019 as it is widely accepted that the 2006 guidelines are wildly out of date. Now Coole Wind Farm claims to use the 2006 guidelines but is cognisant of the revised 2019 guidelines. This has been done to facilitate the addition of Turbine no 15 which does not conform to the 2019 revised draft guidelines as it is located considerably less than 700m away from occupied dwellings.
10. In summary, CWF SID rationalised the siting of Turbine no 15 by adhering to the outdated 2006 guidelines with the caveat that they were "cognisant" of the revised 2019 guidelines. Conversely, and somewhat tellingly, in the earlier CWF application for construction of 13 turbines they made a virtue of adhering to the oncoming draft 2019 guidelines in an attempt to show they were mindful of the local communities concerns. Now, in their latest application they have referenced both the older and revised set of guidelines in order to justify the planning anomalies that are inherent in their proposed development.

**Figure 3-2 Constraints Map**

- 1) In fig 3-2 we see the constraints map. Lough Bane is a pNHA which also contains a crannog and should have a NHA buffer zone around it which is wider than the 50m buffer zone indicated on map 3-2.
- 2) There is an area of bog behind T1 which contains an unnamed lake. This area of bog is largely untouched. It leads to the edge of the Inny. The area of bog closer to the milled peatland is dryer than the area leading inwards and to the river Inny. . It is rich with various mosses and wildlife and should be protected. I have photos which I took early last August which I will include to back up my points.
- 3) On this map there is a 100m wide buffer zone going across the proposed wind farm site which is for Three Ireland. Internet and Mobile phone reception is dreadful here at the best of times. From CWF SIDs constraints map, fig 3-2 it is obvious that turbines 2, 6, 9 and 13 are in the path of this buffer zone. This goes against sustainable planning and development for north Westmeath, for home workers etc.
- 4) Turbine no 15 is within the 700m residential buffer zone with two homes clearly within the buffer.
- 5) Turbine no 11 is just within the buffer zone of at least one residence.
- 6) This Constraints Map has Clonsura bog completely under forestry which it is not and has never been. This is completely inaccurate and misleading. This bog is capable of being restored and used

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<sup>7</sup> Page 19 3.6.1.



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as a wetlands area and carbon sink. This would be a far more effective use of this area than industrial scale turbines.

"Where specific areas were deemed as being unsuitable for the siting of turbines or roads, etc., alternative locations were proposed and assessed, taking into account the areas that were already ruled out of consideration. The proposed turbine layout was also informed by wind data and the results of noise and shadow flicker modelling as they became available".

- 7) The Wind Data states that this is a low wind area, it is therefore entirely unsuited to Large Scale Industrial Wind Energy production.
- 8) The turbines proposed for this new CWF SID development are of the same height as those for proposed Coole Wind farm Limited, but have much wider blades. These new turbines are over 11% wider. Therefore the modelling done on shadow flickering, noise and visual impact is incorrect. This is a significant issue and goes against proper planning and development.

### **3.6.2 Turbine Layout**

"The development of the final Proposed Development layout has resulted following feedback from the various studies and assessments carried out as well as ongoing negotiations and discussions with landowners and the local community."

- 1) There may have been ongoing discussions with landowners regarding CFW SID, but the "discussions" with the local community amounted to a confidential letter sent out to residences within 1.7km of a turbine in November 2020 and a website which purported to be opened in November 2020 but was for many weeks inaccessible as a link to CWF SIDs new proposed development, instead linking back to Statkraft's main website and old information about CWF Limited 2017. When I (Jennifer) tried to ring the contact locally I got two voice messages and no offer of a socially distanced meeting. The last community open night was in 2013. It is absolutely farcical to describe the above as a negotiation and discussion with people most affected by the proposed industrial Windfarm.

"As outlined in Section 1.1 in Chapter 1 of this EIAR, a 13 No. turbine wind farm at the Proposed Development site was granted by An Bord Pleanála in 2019."

- 2) The above statement is at best misleading. Coole Wind Farm Limited was refused planning permission from Westmeath County Council in 2017. It was granted planning permission by An Bord Pleanála in 2019, however this decision is currently under judicial Review and is still before the courts. An Bord Pleanála should be well aware of the unresolved Judicial Review and Coole Wind Farm SID are certainly aware of basic fact regarding their planning application. This is a deliberate attempt to mislead the planning authorities by CWF SID.
- 3) The turbines in CWF and CWF SID vary hugely. They may be the same height but are not the same width. The diameter of the proposed turbines in CWF is 140m compared to the diameter of the proposed turbines in CWF SID that are 155m. The output is significantly different as is the environmental impact. Each individual footprint of the proposed new turbines is more than 11% bigger and the application is also for 2 additional turbines. These new bigger and wider, turbines should be the subject of a new EIAR.

#### **3.6.2.1**


##### **Proposed turbine iteration No.1**

"Based on the feedback received during consultation with the local community, the local authority and a review of current planning policy, a decision was made to significantly reduce the number of turbines from 25 to 13."



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- 1) It should be noted that the local community and national and local bodies strenuously objected to the earlier Coole Wind Farm Limited proposal that if allowed would have resulted in the construction of 25 turbines. They were subsequently forced to submit an application for 13 turbines yet Statkraft have now decided to add an additional 2 turbines onto the proposed Coole Wind Farm to create the larger and more imposing 15 turbine Coole Wind Farm SID. This poses the question as to why, when CWF Ltd was forced to reduce the number of turbines from 25 to 13 that they now deem it appropriate to increase by two the number of turbines on what is a very contentious development. It should be further noted that these two additional turbines will be sited a significant distance from the main cluster of turbines on Coole Bog after scant consultation with local people<sup>8</sup>. The notice we received is detailed in the letter below.



**STRICTLY PRIVATE AND CONFIDENTIAL**

JENN GALLAGHER  
CLONSURA,  
FINEA,  
MULLINGAR,  
CO. WESTMEATH

RE: Coole Wind Farm update

Dear Resident,

Given the times that we are in, we hope that this letter finds you well. Covid-19 is presenting us all with challenges and this is also true for our consultation team and community liaison officers. Our preference has always been to meet and talk with people on a face to face basis however, currently this would not be appropriate. It is for this reason that we are contacting you via mail, to update you on proposals for the above project.

Since being granted planning permission for the 13 wind turbines that were previously presented for consideration, we have been working to establish the most efficient and effective means of progressing this proposal. During our assessments, along with identifying Mullingar as the most suitable grid connection point, we have identified ways in which a wind energy development in this area could deliver increased renewable energy outputs and increased local return.

It was established that whilst the permitted 13 turbine proposal could deliver significant amounts of renewable energy, a revised proposal, which would add two additional turbines and amend the length of the proposed rotor diameter, could increase the potential output of the wind farm significantly. The location of the 13 permitted turbine locations will remain significantly unchanged in this proposal and the grid connection point at Mullingar would also be included in a new application.

These changes are set out in the following table:

	Permitted	Proposed
Number of turbines	13	15 (2 additional turbines)
Tip Height	175m	175m – No Change
Blade length	Up to 70m	Increased by 7.5m
Output	Up to 50MW	Increased*
Green power to homes	c 36,000	c 66,000
Community Fund	c €300,000 per year	c €500,000 per year

\*The wind farm will have a total power output of greater than 50MW. Based on the turbines currently available, the site is expected to have a total output in the region of 80MW however the final output will be determined prior to construction.

Statkraft Ireland Limited  
Registered Office: Building 4202, Cork Airport Business Park, Cork, Ireland. Eircode T12 02N1 | Company Number: 487713  
Directors: Kevin O'Donnell (Irish), Peter Harris (Irish), Sean Maguire (Irish), Uilleann MacBain (Norwegian), Orlan Holland (Norwegian)

As mentioned above, 13 of the turbine locations will be as previously permitted. The 2 additional turbines will be located, one in the townland of Doon and one in the townland of Carlanstown. The grid route to connect the wind farm to the national grid will be included in this planning application.

In order to provide information on this proposal, and given the restrictions associated with living with Covid-19, we have developed a virtual consultation room which will be available online. This platform provides information on the planning application to be brought forward and can be accessed via the Coole wind farm project website [www.coolewindfarm.ie](http://www.coolewindfarm.ie)

This virtual consultation room will outline the following:

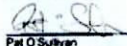
- An introduction to the proposal
- Information on Statkraft
- A proposed project layout map
- A proposed grid route map
- Information in the project EIA/R
- Information on the proposed Community Benefits Fund
- Photomontages of what the project would look like
- Contact details

We would be very appreciative if you were to take the time to visit this consultation room and we would welcome any feedback that you might have on the proposal.

It is hoped that we will be in a position to submit this planning application for consideration before the end of the year. Given that the output of the proposal will be in excess of 50MW, it is envisaged the application will be determined as a Strategic Infrastructure Development (SID) and as such, we will be required to submit the application directly to An Bord Pleanála. Westmeath County Council will have the opportunity to make their submissions in this process.

Should you have any queries, please do not hesitate to contact our community liaison officer George O'Connor on 087 352 1511.

Best regards,

  
Pat O'Sullivan  
Head of Communications  
& Stakeholder Management

Statkraft Ireland Limited  
Registered Office: Unit 1, Building 4202, Cork Airport Business Park, Cork, Ireland | Company Number: 487713  
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Fig 1. Correspondence sent to our home as part of CWF SID's "consultation" process

### 3.6.2.2

"Proposed Layout Iteration No. 2 is the final 13-turbine layout for the permitted Coole Wind Farm and is shown in Figure 3-4."

<sup>8</sup> The "consultation" comprised of a confidential letter (fig 1) and a website that didn't function properly until 2021



- 1) As previously stated, the 13 turbines CWF applied for have not been permitted. When CWF applied to WMCC for planning permission, WMCC initially requested 53 additional pieces of information in order to process the application. Like many other local people we read the application and sent in a submission opposing the proposed development and CWF eventually withdrew its application.

CWF then reapplied with the same application in October of the same year. Again the community responded with over 100 submissions in opposition to this proposed development. Westmeath County Council denied planning permission under their own planning guidance, but in particular in regards to PWIN 6. CWF appealed the decision the case to ABP. The decision on the case was delayed twice and then ABP granted planning permission. However, ABP's decision to overturn WCC's planning refusal is currently under Judicial Review.

In 2020 CWF applied to WMCC for a grid connection to the unpermitted 13 turbine CWF. Again, we and many other local people drafted and paid for another submission in opposition to CWF's grid connection application. For an unknown reason CWF then withdraw their application to WMCC for the grid connection meaning the 13 turbine CWF development is NOT NOR EVER HAS BEEN PERMITTED. Moreover, if it had been allowed to proceed, undoubtedly CWF would be in the process of building its industrial instead of now applying for CWF SID which is clearly a blatant attempt to subvert the local planning and judicial processes.

#### **3.6.2.4**

"Proposed Layout Iteration No.4 is the final layout for the Proposed Development and is shown in Figure 3-6"

"As outlined in Section 1.1 in Chapter 1 of this EIAR, the Proposed Development consists of a 15 no. turbine wind farm. The proposed tip height of the turbine layout is up to 175 metres while the proposed rotor diameter is up to 155 metres. The permitted Coole Wind Farm includes for a rotor diameter of up to 140 meters (blade length of 70 meters). For the Proposed Development a greater rotor diameter is considered/assessed. The use of a greater rotor diameter allows for a greater capture of wind, increasing the efficiency of the Proposed Development and allowing the Proposed Development to contribute further to the Climate Action Plan targets for 2030. The Proposed Development will have an output in excess of 50MW with the exact output determined at pre-construction stage when a turbine model has been successful in a competitive tender process"

- 1) The new proposed turbines with the 11% wider blades have not been assessed in any way. All of the modelling for the EIAR was done using a turbine with a height of 175 m and blades 140m in diameter. The proposed turbines are 175 in height but have 155m blades, 15 metres wider in diameter than what was originally proposed for the Coole site. This is a significant matter that CWF SID fails to address not least because these wider, more impactful turbines have not been assessed in terms of their impact on the environment, wildlife (particularly birds and bats), noise pollution and shadow flicker. Why has a detailed environmental impact study not been taken to assess the implications of turbines that have a significantly increased diameter? The above statement somewhat ambiguously states that the proposed development with a greater rotor diameter is to be "considered/assessed and surely "considering" such a substantial size increase to an already huge structure/s is no substitute for carrying out a proper independent survey?
- 2) How much in excess of 50MW is this CWF SID to be? On the documentation online it states 90MW. Why are they not being specific here?
- 3) What models are proposed? How can this be assessed unless the models are decided?



### **3.6.3 Road layout**

"As detailed in Section 3.6.2.4 above, an alternative option to the current road layout design to proposed turbine T15 was considered, however following site investigations, a raised bank in a rectangular shape was discovered. It was recommended by archaeologists to maintain a 30m buffer from this raised bank as it may be an unrecorded monument and the proposed road layout to T15 was redesigned to maintain the recommended buffer."

- 1) Applicants for planning permission for residences in potentially archeologically rich areas have to do a dig before starting work, regardless of cost or inconvenience. This should be the case here.

"As detailed in Section 2.6.4 in Chapter 2 of this EIAR, during consultation with the local community every reasonable effort was made to understand the views of those living in each household to allow the final project design to take consideration of these views to the greatest extent possible. In response to concerns expressed during the community consultation regarding the use of roads, a commitment was given not to use the local road leading to Clonsura bog from the Finea road (L57671 local road, which adjoins the R394 Regional Road) nor the local road L18266 in front of Coole National School for access purposes (as shown on Figure 4-19 in Chapter 4 of this EIAR). A comparison of the potential environmental effects of constructing an entirely new road network when compared against maximising the use of the existing road network is presented in Table 3-4 below"

- 2) As part of its consultation process in 2013 when contacted by representatives of Coole Wind Farm Limited we both expressed a wish for Clonsura Lane not to be used for the transport of turbine parts onsite. Pat O'Sullivan, who was one of the consultants, said that the road would be unsuitable anyway as the lane was too narrow and homes were in the way of road widening, but he provided a categorical assurance that the lane would not be used for this purpose. Moreover, this lane is used by Wetland Horticulture Limited as their only access point for Clonsura bog for the harvesting and transportation of milled peat off site.
- 3) CWFL and now CWF SID have an arrangement with Westland that peat harvesting will not be affected by the building or operation of their industrial wind farm. This is the real reason why Clonsura lane (L57671) will not be used not the serious concerns of residents who have already had to endure annually hundreds of heavy laden lorries traversing a narrow lane close to their homes.

### **3.6.4.3 Electricity substation**

"The underground cables within the site will follow the route of the wind farm access roads, thereby minimising the amount of ground disturbance required. The proposed substation is located within the Proposed Development site, near to the site entrance and the R396

Regional Road. The substation is located within an area of forestry, which will visually screen it from the surrounding area. An alternative to this was to locate the substation more centrally within the site; however, this would make the substation more visible and increase the footprint of the development on the cutover peat area. Ease of access for maintenance works was also taken into consideration.

- 1) It is somewhat ironic that the above passage makes a virtue out of minimising the visual impact of the substation on a site where the actual turbines will be 175+ m tall and impossible to screen.

"The proposed onsite substation, which forms part of the Proposed Development, is situated at the same approximate location of the previously permitted substation (Iteration No. 2), with a reorientation and expansion of the footprint area"



## **Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher**

- 4) The substation is not permitted as it forms part of Coole Wind Farm Limited which was not granted permission by the local authority. The decision by An Bord Pleanála to grant planning permission is currently under judicial review in the High Court awaiting a decision.
- 5) It is not stated here how much bigger this substation will be and what precisely its size increase is for.

### **3.7 Grid Connection**

"Since this time ongoing consultation with EirGrid on the grid connection approach for the project has taken place through meetings held with EirGrid in June 2019 and the 22<sup>nd</sup> April, 17<sup>th</sup> June and 16<sup>th</sup> September of 2020. At these meetings discussions included the Mullingar substation, its layout and potential connection methods".

- 1) Coole Wind Farm Limited applied to Westmeath County Council in the summer of 2020 for a grid connection. They withdrew their application after submissions opposing the application had been received by WCC.
- 2) In order to connect the energy produced by the wind farm to the national grid the grid connections must go through a number of land holdings. According to The Planning and Development Act 2001 the applicant must submit in writing the written consent of each of the owners of land across whose land the development is being carried out. These written consents have not been sought for or obtained in this application. Statkrafts planning application for an industrial scale wind farm in Coole should be rejected because it is not a valid planning application from Coole Wind Farm SID because written consent from each land holder across whose land the development is being carried out must be sought as it forms part of the development. Written consent has not been sought and received from each land holder and on these grounds An Bord Pleanála should refuse planning permission.

### **3.9 Alternative mitigation measures**

"Mitigation by avoidance has been a key aspect of the proposed project's evolution through the selection and design process. Avoidance of the most ecologically sensitive areas of the site limits the potential for environmental effects...The best practice design and mitigation measures set out in this EIAR will contribute to reducing any risks and have been designed to break the pathway between the site and any identified environmental receptors. The alternative is to either not propose these measures or propose measures which are not best practice and effective and neither of these options is sustainable"

- 1) The area behind turbine 1 is wet bogland (Fig 2 and 3) with mounds of sphagnum moss and lots of hollows. It also has a small lake on it. I know the proposed turbine is not actually going to be in that wet bit of bog, but the drainage to dry the bog around the turbine and roads that will need to be built around the turbine will destroy that bit of beautiful, natural bog which should be left in its natural state.
- 2) Additionally, the crannog and dystrophic lake that is a mere 50m away from turbine 2 will be under threat by the presence of turbine 2 and the drainage, hardstanding and roads infrastructure that will be needed to accommodate turbine 2.
- 3) There is a small lane built of hardcore going from the entrance to Clonsura bog to a couple of hundred metres away from proposed turbine no 2. This will need significant work to bring it to the standard required for building and servicing turbine no 2. A road will also need to be built from the lane to accommodate turbine no 4. Additional roads will have to be constructed to service turbines no 1 and 3. All of these require significant drainage and the insertion of alkaline building materials into the acidic bog. This is damaging to the ecosystem. Additionally the bog will need to be further drained in those areas to support the roads causing further damage to both lakes and their ecosystems.





**Fig 2 and 3 Mounds of sphagnum moss and a view of the bog area at the back of the site of proposed Turbine 1**

### **3.10 Conclusion**

"A description of the reasonable alternatives in terms of project design, technology, location, size and scale, which are relevant to the proposed wind farm and its specific characteristics, and an indication of the main reasons for selecting the chosen option with regard to each, including a comparison of the environmental effects, has been provided in the preceding sections. The consideration and assessment of alternatives has been carried out throughout the project design so as to avoid adverse environmental impact"

- 1) The alternatives only refer to slightly different options within the parameters of an industrial wind farm. This whole chapter only refers to wind energy and the various sizes of the proposed wind farm, the delivery routes, the grid connection, the substation etc. There was no option mentioned for an alternative renewable energy resource, only industrial wind. There was no mention of alternative sites outside of the county either on land or at sea, Westmeath is a low wind energy area. CWF make great mention of the fact that Westmeath has not got any wind farms, this is not without good reason, namely this is a low wind energy county. Coole Wind Farm SID also fails to mention the fact that a solar farm fit to power half of Castlepollard has gotten planning permission in Tullyally with no opposition. Westmeath is not shirking its duty to renewable energy by refusing this industrial wind farm, this industrial wind farm is unsuitable for Westmeath. There are other more suitable areas for the siting of an industrial wind farm.

## **Chapter 5: Population and Health**

This section of the submission deals with the impacts both direct and indirect on human health of the proposed development on people living in its vicinity and further afield and how this development goes against proper planning and sustainable development in Co. Westmeath and adjacent counties.

In 5.1 it is stated that "Human beings as individuals or communities should experience no significant diminution in their quality of life from direct, indirect or cumulative effects arising from construction".



- 1) There are four people with autism living within the blast site alone. It is a known fact that those with autism suffer from a heightened sensitivity to sound. The noise created from rock blasting and breaking alone would be unbearable to those with autism and this would cause huge stress to their families and carers. If permitted, the construction noise would be unbearable and moreover, the noise from the movement of the blades once the turbines are operational would be hugely distressing. This is not short-term but permanent noise as it is envisioned that once permitted there would be always be a wind farm on the proposed site.
- 2) The claims that a wind farm of the size and scale proposed by CWF may not be "a recognised source of pollution" as it is not seen to "have ongoing significant emissions" are incorrect. If this development is allowed to proceed, its construction will require many thousands of tonnes of concrete being poured into the bog for its foundations, hardstanding and the roads constructed to service the turbines. Bogs are acidic by nature. Concrete is alkaline by nature. The fact that the concrete will leach alkaline elements into the bog will change the pH value of the water present in the bog and the organisms, flora and fauna dependant on that acidic water. If after 25 years of operational use the turbines are decommissioned and removed, there is no plan in place for the removal of these massive underground concrete structures. It is planned that they remain in place indefinitely, continuing to leach alkaline substances into the bog.
- 3) The wind farm site is tightly defined as the direct area surrounding the turbines, the hardstanding, the internal roads, the grid connection route and the substation. It has a relatively small footprint in comparison to the impact it will have on the area if permitted and constructed. There may be as claimed in 5.3.2 "no key identified tourist attractions" on the wind farm site itself, but there are many tourist attractions directly adjacent. Some well established such as Tullyally castle, gardens and demesne, Fore Abbey and village and Lough Crew to name but a few; the many lakes some of which many are Natura 2000 sites in the area and Scragh Bog which is a Natura 2000 site of international importance situated along the grid connection route.

There are others which have not been developed to their full potential but which are part of significant funding awarded to the area to further develop Castlepollard and north Westmeath into a recognised tourist, cultural and heritage attraction. These are the ancient bog walkway at Mayne Bog less than 3km from the proposed industrial wind farm; the three Iron Age monuments on top of the Hill of Mael barely 2km from proposed turbine no 15; Lough Bane pNHA with its crannog clearly visible in aerial photos barely 50m from proposed turbine no.2. and many more historical, cultural and ecological areas of importance in the vicinity of the proposed industrial wind farm and grid connection. Allowing CWF SID planning permission goes against proper planning and sustainable development in Co. Westmeath for the reasons mentioned above and many others not yet discussed.

- 4) In 5.7.5.1 the turbine dimensions are discussed. Here it is made clear that no actual turbine model has been chosen and it will not be put out to competitive tender until permission is granted. How can this be in keeping with proper planning and sustainable development? If the turbine has not yet been chosen, then all of the assessments and impact modelling are at best inaccurate and incorrect.

Moreover, the shadow flicker analysis must be discarded and similarly the noise output, visual impact and the significant threat to bats and birds and other wildlife species. With something as large and imposing on the landscape, environment and people and wildlife living there every detail counts. These turbines are proposed to be 175 metres high with 155 diameter blades. To put this in context, a standard GAA football pitch is between 130m and 145m long and between 80m and 90m wide. So CWF SID have not yet decided on the make and model of turbines whose continuously moving blades starting 20 m above ground are proposed to be wider than Croke Park. This completely contravenes proper planning and sustainable development. In home building, a planning application as scant on detail as CWF SID would be rightly rejected yet CWF



deem it acceptable to submit a second rate planning application for a large, imposing and detrimental wind farm that will have significant and far reaching consequences for the countryside and the people living there.

- 5) In 5.7.5.1 it is stated that there is a possibility that "33 out of 55 properties may exceed the DOEHLG guidelines" on shadow flicker. We live in one of these properties and the shadow flicker estimate on our home is over 45 minutes a day. There are similar estimates for our neighbours who live on our lane. This is completely unacceptable as it will mean that we will undoubtedly experience significant "diminution in" our "quality of life from direct, indirect or cumulative effects arising from construction".  
Coole Wind Farms flippant suggestion in 5.9.3.9 that shadow flicker "may not be witnessed if curtains or blinds in the bedroom are closed" not only illustrates the negative impact shadow flicker has on people unfortunate enough to live close to giant wind turbines but the complete lack of genuine concern they have for people are forced to live in close proximity to their wind farms. It is also a reminder that shadow flicker is a daylight issue which will possibly affect those working in the vicinity of the turbines and people suffering from light sensitive epilepsy whose health may be placed at significant risk.
- 6) In 5.7.2 it states that "The DoEHLG Guidelines state that at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low". That being the case, and if CWF SID truly wishes not to adversely impact on our lives and that of our neighbours, then turbines should be situated no closer than ten times the rotor diameter away from homes. That would be in keeping with proper planning and sustainable development of the area and would mean that turbines would have to comply with a 1.55km setback distance and would be in keeping with WMCC PWIN 6 and CPO 10.132.
- 7) How do Coole Wind Farm SID "commit to zero shadow flicker at occupied residential receptors within 10 rotor diameters of the Proposed Development" as claimed in 5.9.3.9? This has not been made clear.
- 8) There are 55 residential properties located within ten rotor diameters of a proposed turbine. That's 55 families affected by the shadow flicker should An Bord Pleanála grant planning permission and this industrial wind farm be built. Out of 55 properties only 2 are part of the proposed development. These are properties no 4 and 5 who are located 638m and 679m from proposed turbine no 15. Both of these individuals have signed agreements with Coole Wind Farm allowing turbine no 15 to be set back less than four times the tip height from their houses. These two owners are brothers. Turbine no. 15 is to be built on their fathers land should CWF SID be given planning permission. Their father is a sitting county councillor. This is hardly in keeping with proper planning and development. No other home owners living within ten rotor diameters of any proposed turbine are involved with CWF SID in this way.

## **Chapter 6 Biodiversity**

- 1) Should planning permission be granted for this 15 turbine industrial wind farm the biodiversity in the area will be adversely affected through the loss of the ecosystem on the bog, in the surrounding area and through the reduction of water quality in the river flowing through the site and the Natura 2000 sites connected to that river and its tributaries.
- 2) The EU water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters. The scale of Coole Wind Farm SID and the sites proximity to a number of protected water bodies will neither protect nor improve water quality as required under the directive.
- 3) Lough Bane pNHA is only 10m from the nearest road infrastructure and 50m from proposed turbine no. 2. Despite this extremely close proximity to the proposed wind farm, CWF SID are claiming there will be no direct effects on this water body and no potential for indirect effects.



- 4) Coole Wind farm SID plan to utilise silt traps and drainage system put in place by the various unregulated and unlicensed peat extraction companies. As can be seen in the photos taken on site recently, many of these are poorly maintained and non-functioning. This has led to deterioration in water quality flowing through and from the water bodies on site over the past two decades. Using the existing silt ponds and traps and drains and adding to their burden will not improve or maintain existing water quality as required by the EU Water Framework Directive (2000/60/EC) but further degrade it.
- 5) Habitat map 6.4 distinctly shows the lack of a buffer zone between the peat harvesting area and the Inny River – this combined with the lack of functioning silt traps is currently contributing to the poor water quality. As stated before, Coole Wind Farm SID intend to allow the various peat extraction companies to continue with their peat extraction for the operational period of the wind farm. This would lead to a cumulative effect potentially reducing water quality even further and consequently having a detrimental effect on biodiversity in the immediate vicinity and downstream.
- 6) A number of protected species were discovered either within the proposed wind farm site, or as in the case of birds and bat species within 10km of the site.
- 7) Five species of bat have been discovered within 10km of the proposed wind farm including Common Pipistrelle, Soprano, Pippistrelle, Leisler's bat, Daubenton's Bat, Brown Long Eared Bat and several records of unidentified bats.
- 8) In previous ecological surveys it was discovered that badgers, Irish hare and otters have been seen or evidence of them has been found of them on the bog site. Red squirrels inhabit the proposed wind farm site and white clawed crayfish have been recently discovered.
- 9) As local residents we have observed hares racing across the bog that will site CWF SID's turbines, to hearing and seeing buzzards, herons and long eared owls flying over the location on many occasions, glimpsing a barn owl twice recently and to hearing, for the first time in decades, cuckoos calling, which is now a regular annual occurrence.
- 10) Our neighbour, who is a keen wildlife enthusiast, has observed a white tailed eagle (one of only eight pairs in the country) flying in the vicinity of the proposed wind farm site and golden plover, newts and frogs are common in Clonsura. Additionally, we have observed geese flying directly across the proposed site during the winter which is hardly surprising considering that the Midlands flock of Greenland White-fronted Geese spend their winter at Lough Iron SPA which is only 14km from the proposed site. Indeed, it is reasonable to consider that these geese may constitute part of that flock and as such would be in danger from the proposed turbines which would be directly in their flight path.
- 11) Many of the fauna mentioned are protected under the Irish Wildlife Acts 1976-2012 and some are also protected under the EU Habitats directive.
- 12) There is a hydrological connection from the River Inny which flows onsite to Lough Derravaragh. The removal of peat to facilitate the siting of the proposed turbines and the development of the roads infrastructure onsite will adversely affect the quality of the water flowing from the Inny to Lough Derravaragh, Peat is a very fine substance and is acidic in nature. These fine peat solids suspended in the water will affect the water quality and plant ecology in Lough Derravaragh. The EIA provided by the applicant has insufficient detail to say with scientific certainty that the drainage of the proposed site area and the removal of peat will not affect Lough Derravaragh which is protected under EU and Irish Law.
- 13) In summary, the applicants EIAR fails to adequately address the impact of the proposed development on the Wildlife and Habitat of the Coole and Clonsura area and therefore Coole Wind Farm should be refused planning permission on that basis.

#### **Marsh Fritillary**

- 1) Marsh Fritillary (*Euphydryas aurina*) has been identified as present in N36, N37, N45 and N36 hectads which are in the footprint of the Coole Wind Farm SID site. These are a protected species.
- 2) Marsh Fritillary (*Euphydryas aurina*) are protected under the EU Habitats Directive and listed as vulnerable. NPWS 2013 states that the population and future prospects are inadequate and the



overall trend for this species of butterfly is declining. Peat extraction, which is to continue onsite should Coole Wind Farm SID be granted planning permission, is deemed a medium threat to its habitat. Anthropogenic reduction of habitat connectivity is ranked as a high threat to Marsh Fritillary habitat. These two activities would have a cumulative negative effect on its habitat which is the cornerstone to the survival of this species in Ireland.

### **Non-volant mammals**

"Evidence of additional non-volant Mammals was not recorded during the site surveys. However it is likely that species such as Pine marten, Irish Stoat, Red squirrel, Pygmy shrew etc. occur within the study area at least on occasion."

- 1) Pine Marten and Pygmy shrew are plentiful in the area. We have both seen Pygmy shrew on the bog road going through the wind farm site near proposed turbines no 2 and 3 and in Coillte lands adjacent to where proposed turbine no 5 will be built. Neighbours have also seen pygmy shrew frequently both on site and in the general vicinity. The fact that Coole Wind Farm SID claim not to have seen any on site would question how rigours their environmental assessment or the honesty of their application. Pine Martens are plentiful and evidence of them is easily found onsite and in the habitats nearby. Possibly due to the healthy population of Pine Marten in the area, the local red squirrel population is increasing. Every effort should be made to ensure available habitats are protected and improved to aid their survival and allow them to flourish.
- 2) The studies conducted for non-volant mammals focused only on the construction phase of the development and have not referred to the operational phase of the wind farm and its effects on non-volant mammals living onsite and adjacent.

Lopucki et al 2017 states that: "Greater weight should be given to the effects of wind farms on non-volant wildlife than is currently the case. Investors and regulatory authorities should always consider and attempt to mitigate the likely impact of wind farms on terrestrial animals during environmental impact assessments. The impact of a wind farm should be considered in terms of not only the construction but also the operational phase...Wind turbines may have a stressful impact on some species of small mammals living in their proximity."(Lopucki et al 2018) The main factors "include permanent exposure to the aerodynamic noise of wind turbines and episodes of mechanical noise. These factors may increase the general vigilance of animals by masking the acoustic warning signals from the environment most of the time and by exposing animals to sudden, unexpected mechanical sounds repeated many times throughout the day." (Lopucki et al 2018)

- 3) Should Coole Wind Farm SID be granted planning permission their wind farm will become a permanent industrial structure in north Westmeath. The impact on non-volant mammals living in the vicinity of a wind farm during its operational phase has not been assessed for this application nor indeed for the earlier planning application for Coole Wind Farm which was refused by the local planning authority, Westmeath County Council. This is not in keeping with proper planning or the correct assessments being made for the impact on the environment.

### **Do nothing effect**

- 1) Coole Wind Farm SID has been: "designed to co-exist and operate independently of land use practices of commercial peat harvesting and forestry to minimise impacts." It is the intention of Coole Wind Farm SID to allow the currently unlicensed and environmentally damaging peat extraction companies to continue with their business unimpeded once the industrial wind farm is constructed, if planning permission is granted. This in itself is not environmentally sound practice.



- 2) "A second potential Do-Nothing scenario exists for this project i.e. assuming that the ...development is not constructed. In this scenario the existing baseline environment will evolve in one of two potential ways, either the peat extraction ceases and a rehabilitation plan is developed or the peat extraction continues and then a rehabilitation plan is developed."  
One of the conditions of an EPA licence is that there is a rehabilitation plan in place for the cutover bog. The construction of the wind farm will eliminate any possibility of rehabilitation of cutover bog which would be a condition of the terms of an EPA licence for peat extraction thus making successful applications for an EPA licence impossible. This means the wind farm and peat extraction cannot co-exist with the previous or currently proposed wind farm developments. So, contrary to CWF SIDs claims this is not an accurate do-nothing scenario and conversely, the better, more environmentally friendly option is to see peat extraction stopped on the bog and a rehabilitation plan put in place that rewets, reseeds and regenerates the bog, allowing it to become a functioning bog, carbon sink and ecologically rich wetlands.

## **References**

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(<http://creativecommons.org/licenses/by/4.0/>)
- Lopucki R, Klich D, Scibior A, Golebiowska D, Perzanowski K. Living in habitats affected by wind turbines may result in an increase in corticosterone levels in ground dwelling animals. *Ecological Indicators*, Volume 84, January 2018, Pages 165-171

## **Chapter 7 Birds**

### **Questionable assessment of bird collision rates**

- 1) The potential mortality rates used in models for predicting the impact of particular wind farms are based on the majority of studies which quote low collision rates and these in turn are based only on found corpses. This has led to a significant under recording of the actual number of collisions.
- 2) Even when collision rates are low this does not necessarily mean the mortality is insignificant. Studies have shown that relatively small increases in mortality rates maybe significant for populations of some birds, especially long lived species with generally low annual productivity rates and notably when their numbers are in decline.
- 3) There are no studies to date comparing risk assessments published in wind farm submissions and the actual mortality rates recorded after a wind farm becomes operational. This lack of pre and post construction mortality comparison is alarming because these prior risk evaluations are an integral part of the procedure of accepting or rejecting permission of new wind farms.

### **Questionable use of 2003 study to assess magnitude and significance of potential impact**

- 1) Coole Wind Farm SID planning application places a total reliance on assessing the magnitude and significance of potential effect on the assessment prepared by *Steve M. Percival. 'Birds and windfarms; A review of potential issues and impact assessment'* prepared in 2003. This was not a scientific study and was not subject to a peer review process. It was a desk-top study of available literature, some of which dated as far back as 1989, on the impact of wind farms on birds from around the world, none of which had been undertaken in Ireland. Whilst some attempt was done to match habitats these did not, in the main, match the bird species in Ireland.  
To use a desktop study with data not generated in Ireland and some eighteen years old cannot be said to represent an accurate assessment relevant to an industrial wind farm with 175m high turbines proposed for the Irish Midlands INCLUDE INCREASED DIAMETER SIZE.



## **Chapter 8: Land Soils and Geology**

### **The Borrow Pit**

In the planning applications for both Coole Wind Farm (2017) and Coole Wind Farm SID (2021) the borrow pit is said to be 6.21ha in size.

251,915 cubic metres of hardcore are proposed to be quarried from the borrow pit for use on the proposed Coole Wind Farm SID. To achieve this, 74,400 cubic metres of top soil will have to be scraped off, stored and put back once the borrow pit is finished with.

In the Coole Wind Farm 2017 planning application 200,000 cubic metres of hardcore was to be quarried from the borrow pit, but only 38,000 cubic metres of top soil was to be cleared and then put back.

- 1) Why almost double the weight of top soil is proposed to be removed when the site is the same size and the amount of hardcore quarried is only a little over 25% more?
- 2) Where is this huge amount of top soil going to be stored during the extraction of the borrow pit?

### **Transport of materials**

Each turbine foundation will require 600 cubic metres of concrete and lean mix. This will be delivered in ready mix lorries, approximately 70 concrete lorries per turbine, making a total of 1,050 concrete lorries entering the wind farm site.

- 1) No delivery route has been planned for the transport of such large quantities of concrete although reference has been made to the L5755 as a possible transport link.
- 2) It will take 17,000 lorry loads to transport 250,000 cubic metres of hardcore from the borrow pit to the various parts of the proposed wind farm site.
- 3) The most direct route from the Borrow Pit to the site and for many of the concrete lorries coming to the site will be along the L5755. This is a single track lane that cannot accommodate 2 large lorries passing each other, let alone 17,000 lorries traversing the road on a daily basis. Nowhere in the application is it mentioned that the L5755 is to be upgraded, widened or made into a road suitable for this amount of traffic.
- 4) A high volume of air pollution, dust, noise and other pollution will be caused by this amount of traffic on a very small, country road.

### **Displacement of peat and water**

- 1) Each proposed turbine base will require 600 metres of concrete and lean mix to construct. While some of the base will be above ground, much of it will not. This concrete, once embedded in the bog will never be removed with the result that continual leaching of alkaline substances will seep into the bog and also displace peat and water causing not only a threat to the acidic nature of the bog but irreversible damage to the water quality and water table.
- 2) It states in this chapter that peat will only be removed from two of the turbine sites. Given that 12 of the proposed turbines are on bog, this seems incorrect and requires additional clarity.



## **Chapter 9: Hydrology**

The River Glore is a tributary of the River Inny. The River Inny runs into Lough Derravaragh which is a Natura 2000 site. Both of these rivers run through Coole Wind Farm SID site. All of the drainage from the proposed Coole Wind Farm SID site runs into these two rivers.

The River Inny is also a boundary for Garraskill bog. This water system runs onto Scragh Bog. These again are Natura 2000 sites.

The current drainage system installed by the peat extraction operators operating on the bog is not fit for purpose. Coole Wind Farm SID propose to use the current drainage system during construction and operation of proposed Coole Wind Farm SID.

- 1) A huge quantity of ground water will be displaced by the turbine foundations, access road, hard stands, and new roads. This water will run into the River Inny and then into Lough Derravaragh, Garraskill bog and Scragh Bog which is a site of European importance. All of these protected areas are NHAs and SPAs.
- 2) In the winter month of 2020 the Inny broke its banks in a number of places with quite extensive flooding in low lying areas. This brought the water level of the silt ponds up to flood level and over the silt traps, allowing peat to flow directly into the river.
- 3) Any rise in water levels by excavation work on the wind farm, any pollution by excess peat, concrete leakage or other chemicals will run through the Inny Basin into Lough Derravaragh, and Garriskill bog, which 'because of its relatively good condition the site is considered to be one of the best remaining examples of a raised bog ecosystem in the eastern half of the country'. This will have a significant environmental impact on the structure of the bog, the water quality of Derravaragh and the surrounding streams and water systems.
- 4) Any work upstream from Garriskill Bog that may upset the Inny River and its relationship with the bog will have a negative effect on the Hydrogeology of Garriskill and Scragh Bogs.
- 5) Lough Derravaragh is considered at risk from acidification and this will become worse if Coole Wind Farm SID is given planning permission and large quantities of peat are moved during construction and acidic peat filled water seeps from the construction site into the tributaries of this lake.

## **Chapter 10: Air and Climate**

In 10.2.4.2. the emissions of exhaust and dust during the construction phase are dismissed as being 'negligible and short term'.

- 1) There is no figure placed on the number of vehicles or the type of vehicle arriving or leaving the site per day. The area of the Coole Wind Farm is very rural and the roads are narrow, and high numbers of lorries will negatively impact the area. This is not in the interests of proper planning and development.
- 2) There are no figures on the duration of the excavation of the Borrow pit or the time needed to reinstate the borrow pit and thus how long the dust will affect the local residents from that alone.
- 3) If the proposed industrial scale wind farm takes between 18-24 months to build then local residents, some of whom have Asthma and at least one of whom has COPD, will be very negatively affected by its construction. Those involved in the construction choose to work in a dust filled environment and are furnished with appropriate masks designed to protect their eyes and lungs and protection for their ears. Those living in the vicinity of the proposed wind farm will not be afforded such protection and will, for up to two years, have their quiet disturbed by significant and damaging noise and their eyes and lungs assaulted by airborne dirt and dust. Coole Wind Farm SID only say that this is negligible because they won't be living in close to where construction work is



taking place. If their directors were forced to live on a giant building site against their will for two years they might have formed a different opinion.

### **Wind Speeds**

In Table 10-9 Data Met Eireann Weather Station at Mullingar from 1978 to 2008 indicates that the average monthly wind speed is 3.8 m/s.

Met Eireann's Annual Average Wind Speed data for 1981 to 2010 has Mullingar (14.1 kph) having the third lowest average wind speeds with only Kilkenny (12.8 kph) and Birr (12.4kph) lower. The average wind speeds at Wexford is 20.6kph for example, this is nearly a 50% increase on average wind speeds to that of Mullingar.

- 1) Why build an industrial wind farm in an area with the third lowest wind speeds in the country?
- 2) It would make more sense to build an industrial scale wind farm on the coast, in particular the East Coast where there are consistently high wind speeds, the population is dense and requires more green energy and the shallow Kish Bank near Dublin allows for economically installed and operated off shore turbines.
- 3) According to Energy Educate from the University of Calgary if the wind speed doubles the power output will increase eight times. This would mean the power generated on the East Coast as in at Wexford would be 4 times that generated in Mullingar. That is a 50% increase in average wind speed which would give 4 times the output of power. The centre of Ireland is not the place to erect industrial wind farms.

### **Carbon Loss Calculations**

The original Planning permission application which is under Judicial Review had very different values for the output for each turbine. In appendices 10.1 carbon calculations for Coole Wind Farm SID 2020, the application has the Power Rating for one Turbine as 5MW to 6MW. In the same appendices in Coole Wind Farm 2017, the power rating of each turbine as 3.6MW to 3.8MW.

- 1) This seems a very large increase per turbine with no qualifying of these figures other than a line in the documents to An Bord Pleanála that the blades on the turbines were to exceed the permitted length but staying below the 175m high blade tip maximum height.

The 2020 figures give output of  $15 \times 5$  to 6MW = 75 MW to 90 MW. The capacity factor is quoted as 35%.

The 2017 figures give output of  $15 \times 3.6$  to 3.8 MW = 54MW to 57 MW. The capacity factor is quoted as 40%

- 2) These figures are the centre pin of the whole application. They allow the 13 turbine Coole Wind Farm, which was already refused planning permission from Westmeath County Council and whose Grid connection application was withdrawn from Westmeath County Council, to apply to An Bord Pleanála as the 15 turbine Coole Wind Farm SID. This amazing improvement in the efficiency and output of the turbines should be explained.
- 3) There are no figures to quantify how the applicants arrive at the figure of carbon loss for manufacturing, constructing and decommissioning the turbines, these should be quantified.

## **Chapter 11 Noise**

### **11.3.3.1. Infrasound/Low Frequency Noise**

In June 2020, a report was released by the Finnish Government presenting the results of a project that investigated the infrasound produced by wind turbines and its effects through surveys, long-term measurements and exposure tests. The surveys identified symptoms subjectively associated with



infrasound from wind turbines. The symptoms associated with infrasound were most commonly experienced from residents living within 2.5 km of the closest wind turbine and the ranges of symptoms experienced were broad. One third of residents with symptoms associated with infrasound were more likely to attribute their symptoms to wind farms and consider wind turbines disruptive health risks.

Long-term measurements were conducted collecting 308 days of data in two areas within 1.5 km of wind turbines operating between 3 to 3.3 MW.

In measurements, infrasound levels were similar to the levels occurring typically in urban environments. The infrasound samples representing the worst-case scenarios were picked out from the measurement data and used in the exposure.

- 1) The turbines subjected to these tests were between 3 and 3.3 MW in output. The proposed turbines (actual design not decided upon yet) are to be between 5 and 6MW in output. How do the tests quoted in Coole Wind Farm SIDs application have any real relevance to the situation in Coole, Clonsura, Clonrobert, Doon, Mayne, Finea, Castletown, Newcastle, Curry, Bigwood and the many other local areas and their residents potentially impacted by noises coming from these giant industrial turbines?
- 2) What tests, if any, were conducted on the impact of noise on residents living between 700m and 1,500m away from 5-6MW turbines as many of us will be?

### **Wind Turbine Syndrome**

One of our fears is Wind Turbine Syndrome, a condition suffered by people living within earshot of the noise made by wind turbine blades as they rotate at speed. The blades are known to make infrasound vibrations that humans cannot consciously "hear" but still have an effect on the inner ear. Symptoms include fatigue, dizziness, headache, difficulty concentrating and insomnia. This syndrome is also known as Vibroacoustic disease.

Moreover, low frequency noise (LFN) is audible and can interfere with sleep and has proven to be more aggravating and difficult to live with than normal sound at the same decibel level and can result in disturbed sleep from distances up to 3km.

In her peer reviewed book, 'Wind Turbine Syndrome', Dr Nina Pierpoint, describes the effect of LFN as: 'deceiving the body into thinking it's moving' and has resulted in some people suffering disrupted sleep, tinnitus, nausea, dizziness, impaired memory and impaired cognitive function.

Her findings are reinforced by a 2012 study published in the British Medical Journal which stated: 'A large body of evidence now exists to suggest that wind turbines disturb sleep and impair health at distances and external noise levels permitted in most jurisdictions.'<sup>9</sup>

In her 2007 report "Wind Turbines, Noise and Health" Dr Amanda Harry, studied the effects of wind farms and concluded that: "it is clearly evident from these cases that there are people living near wind turbines who are genuinely suffering from health effects from the noise produced by wind turbines... the developers say that noise is not a problem. Clearly this cannot be the case."<sup>10</sup>

Dr Chris Hanning, a UK based Consultant in Sleep Disorders has identified the problems associated with sleep disorder that arise when 125 metre turbines (50 metres smaller than those proposed by Coole Windfarm Limited) are located at distances of up to 2km and greater from people's homes.

A Japanese research paper by Yano into the effects of residents specifically assessed the severity of annoyance to residents caused by the noise of wind turbines. Approximately 750 individual dwellings were surveyed and the report concluded that 1.5 km should be a minimum separation distance in order to reduce the "severe annoyance" resulting from the proximity of wind farms from people's homes. Current

<sup>9</sup> Alun Evans, Professor Emeritus Belfast University, Christopher D. Hanning, Honorary Consultant in Sleep Medicine.

<sup>10</sup> [www.windturbinesyndrome.com/.../wtnoise\\_health\\_2007\\_a\\_harry\\_noP](http://www.windturbinesyndrome.com/.../wtnoise_health_2007_a_harry_noP)



and future (larger) turbines should require a correspondingly greater set-back distance. Westmeath's current county development plan has attempted to take note of current medical research in stating that turbines with a hub height of 100m or greater must be situated at least 1,500m from the nearest residence.

In November 2013 the Deputy Chief Medical Officer with the Department of Health Dr. Collette Bonner, responding to a review of international research on the health effects of wind turbine noise concluded that:

"there is a consistent cluster of symptoms related to wind turbine syndrome which occurs in a number of people in the vicinity of industrial wind turbines. There are specific risk factors for this syndrome and people with these risk factors experience symptoms."<sup>11</sup>

### **Noise**

Part of what influenced our decision to move to Clonsura was the peacefulness and quiet of a rural area that has not been blighted by ill conceived ribbon development. Usually the loudest noise we deal with in our home is the dawn chorus of the thousands of birds resident in the hedges in the springtime and the long eared owl hunting at night. An acoustic expert we spoke too estimated that the ambient noise outdoors in our locality would be no higher than 33dB (A).

The noise generated by CWFL's proposed wind farm will undoubtedly impact on our quality of life and will greatly negate the benefits of living in rural North Westmeath.

### **Cork Judgement**

Coole Wind Farm Limited's claims that noise pollution will not affect people living in close proximity to their development lack credibility

In 2017, seven Cork families won an out of court settlement when the operator of wind farm that had turbines smaller in size and scope to those proposed by CWFL admitted liability in a High Court action over noise pollution.

Enercon Wind Farm Services Ireland Ltd admitted liability for nuisance caused to seven families who abandoned their homes in 2011 due to noise caused by industrial wind turbines in a nearby wind farm. In one of the families affected by the noise produced by the wind turbines the youngest child in the family was carried limp from the house such was the effect of the sound produced by the turbines on his health.

The Windfarm developer in this case fully admitted that the noise produced by the turbines caused serious injury to the children in the house. This ill health was caused from noise from turbines which are considerably smaller than the ones proposed for Coole Wind farm and at a similar distance to the distances planned for the turbines closest from our home. We also understand that other affected families will probably take similar court actions. The fact that Enercon Wind Farm Services Ireland Ltd accepted full liability and paid all costs and damages in an out of court settlement suggests that there were serious problems with the wind farm that they wanted to hide from the public.

### **Seminar on Infrasound and low-frequency noise**

On June 30<sup>th</sup> 2017 we attended a talk by scientist, infrasound and low-frequency noise expert and researcher Professor Mariana Alves-Pereira of the Lusofona University, Lisbon, on the health risks associated with exposure to high level of infrasound from living near to an industrial wind farm.<sup>12</sup>

It should be noted that Professor Pereira has been working for over 30 years researching infrasound and low-frequency noise health impacts and she spoke recently at an international conference on Noise in Geneva.

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<sup>11</sup> <http://www.irishexaminer.com/ireland/senior-doctor-defends-wind-turbine-syndrome-conclusions-261026.html>

<sup>12</sup> The Seminar took place in Bridge House Tullamore County Offaly and was attended by people from all over Ireland, some of whom conveyed to the meeting their personal suffering from exposure to infrasound.



## **Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher**

When talking about the infrasound and low-frequency noise emanating from industrial wind turbines the professor painted a very worrying picture, explaining that a major problem when assessing planning applications is the inadequate regulations for monitoring noise.

The current legal regulations, she explained, only require noise to be measured in dB(A) frequency, but to record infrasound and low frequency noise it should be measured in dB(Lin) as the dB(A) measurement is inadequate and out of date for quantifying infrasound and low frequency.

The way the government assesses the impact of turbines on people living in close proximity is, as outlined above, seriously flawed because as Professor Pereira explained, certain noise can be heard in an audible way (dB(A)) but infrasound impacts on the body in a different way.

She illustrated her point by using the analogy of not being able to see radiation but knowing that while an x ray a year causes no ill effects on the body, overexposure to radiation causes cancer. Similarly, a little exposure to infrasound and low-frequency noise will cause no ill effects but higher, constant exposure such as that from industrial wind turbines affects the body in serious ways. Amongst the many health effects explained included thickening of the pericardium sac around the heart and thickening arteries which were shown on screen from a post mortem of an individual exposed to infrasound and low-frequency noise.

Ms Pereira's findings have been supported by a recent groundbreaking study at Pacific Hydro's Cape Bridgewater wind farm in the state of Victoria that was carried out by leading acoustical engineer Steven Cooper.

Mr Cooper found that a unique infrasound pattern, which he had labelled "Wind Turbine Signature" in previous studies, correlates (through a "trend line") with the occurrence and severity of symptoms of residents who had complained of often-unbearable "sensations". These include sleep disturbance, headaches, heart racing, pressure in the head, ears or chest, etc. as described by the residents (symptoms generally known as Wind Turbine Syndrome (WTS), or the euphemism "noise annoyance").

The acoustician also identified "discrete low frequency amplitude modulated signals" emitted by wind turbines and found the wind farm victims were also reacting to those. The Wind Turbine Signature cannot be detected using traditional measuring indexes such as dB(A) or dB(C) and 1/3 Octave bands, concludes his study. Narrowband analysis must be used instead, with results expressed in dB(WTS). He suggests medical studies be conducted using infrasound measurements in dB(WTS) in order to determine the threshold of what is unacceptable in terms of sound pressure level.

These findings are also consistent with the official Kelley studies published in the US more than 30 years ago, which showed that infrasound emitted by early, downwind turbines caused sleep disturbance and other WTS symptoms. These studies were shelved, upwind turbines were designed and the regulatory authorities simply trusted the wind industry's assertion that the new models did not emit dangerous infrasound. The Cooper study now proves they were wrong

Another conclusion of his study is that the Danish method used for measuring low-frequency "noise annoyance" near wind farms is inadequate. So are the wind turbine noise standards applied to wind farms in Victoria, Australia and New Zealand, known as "New Zealand Standard 6808"; just as inadequate are all other standards regulating "annoyance" near wind farms around the world including Ireland. They simply don't take infrasound into account.

We would strongly argue therefore, that when assessing Coole Wind Farm Limited's application, dB(Lin) should be measured down to the lowest possible frequency in order to give a true reading of infrasound. Indeed it should be a legal requirement to measure noise only in dB(Lin) as this will provide an accurate reading of infrasound and low-frequency noise.

A second speaker at event in County Offaly was Dr John Yelland of the UK Independent Noise Working Group INWG who in his presentation reminded the audience of previous examples of corporate greed where human and animal health were disregarded and sacrificed. He cited the asbestos industry and its association with cancers; the past denials over Thalidomide and a drug called pp that has been proven to



cause birth deformities and the tobacco industry that, as recently as 2010, released a statement claiming that there was: "No proven connection between tobacco and lung cancer" .

The wind industry he claimed, was issuing similar denials on the impact turbines have on people's health and he provided a number of examples of how whales, bats, dogs, cows, horses, pigs, mink and sheep suffered deformities, abortion and erratic behaviour as a direct result from infrasound and low-frequency noise.

### **Further Studies**

A study conducted by H Moller and CS Pederson (2011) in cooperation with Delta, a consultancy and official acoustics laboratory for the Danish environmental protection agency found that the spectrum of wind turbine noise moves down in frequency with increasing turbine size.

The relative amount of emitted low frequency noise is higher for large turbines (2.3 – 3.6 MW) than for small turbines. The difference is statistically significant for one-third-octave bands in the frequency range 63-250 Hz. The study concluded that: "It is thus beyond any doubt that the low frequency part of the spectrum plays an important role in the noise at the neighbours."

On the back of these findings, the Danish Government enacted a statutory order in January 2012 setting the indoor limit for low frequency noise to a maximum of 20 dB(A).

We believe therefore, that considering the scale of the turbines proposed for CWF SID the guidelines used by the Danes should be minimum prerequisite before planning is granted and the bench mark for this study should be based on the Danish statutory requirement that low frequency noise would not exceed 20dB (A) inside a dwelling any time of day or night.

Basner et al (2013) in their study noted: "Annoyance is the most prevalent community response in a population exposed to environmental noise. They found that annoyance can result from noise interfering with daily activities, feelings, thoughts, sleep, or rest, and might be accompanied by negative responses, such as anger, displeasure, exhaustion, and by stress-related symptoms. In severe forms, it could be thought to affect wellbeing and health, and because of the high number of people affected, annoyance substantially contributes to the burden of disease from environmental noise". They also note that the particular impacts of environmental noise on children stating that "More than 20 studies have shown environmental noise exposure has a negative effect on children's learning outcomes and cognitive performance".

Inspector Kevin's Moore's 2012 An Bord Pleanála Straboy report (PL 05B.240166) that rejected a planning application for 25 wind turbines in Donegal noted the serious issue of health impacts from wind farms, stating that these need to be addressed in an EIS:

"the issue merits highlighting due evidently to the epidemiological evidence that continues to mount that wind farms cause adverse effects on public health in contrast to the widely held views to the contrary. While being constrained in the ability to assess such an emotive issue, the Board cannot ignore the reality of significant community concern by not addressing this issue which goes to the heart of determining environmental impact on human beings and to the need to fulsomely undertake environmental impact assessment where it applies, as in this instance."<sup>13</sup>

So despite the growing body of peer-reviewed research demonstrating that wind turbines can cause serious adverse health effects in susceptible nearby residents, Coole Wind Farm SID, dismiss and downplay this evidence.

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<sup>13</sup> The Bord Pleanála Straboy report (PL 05B.240166) Page 47



### **11.5.3.1 The Turbine Assessment**

The noise levels:

- 1) In Table 11-22 Review of Predicted Turbine Noise Levels against Relevant Criteria dB LA90 are given at wind speeds up to 9 m/s. Looking at the wind speeds in Table 10-9 there seems to be maximum mean 10-minute wind speeds up to 16.4 m/s. This will give dB LA90 above the 45 dB LA90 levels proposed for this development. These levels will have a significant adverse effect on those of us living near Coole Wind farm SID, if the development is permitted.
- 2) In Appendices 7-5, Table 2-1 Windfarm Parameters at Coole Wind Farm Wind Farm Component Scenario Modelled the differences between the turbines proposed for Coole Wind Farm 2017; thirteen turbines and Coole Wind Farm SID; fifteen turbines are stated. Firstly, in both of the proposed developments, the turbine model is assumed not specific. The key differences are that there are more turbines in the 2021 SID version and the proportions of the turbines themselves. In the 2017 version the hub height is stated as 105 m and the rotor radius is 70m making a total of 175m high with the bottom of the blades 35m above ground. In the 2020 version the hub height is stated to be 97.5 metres and the rotor radius is 77.5m again making a total height of 175m. However in 11.3.7.2.1 Turbine details it states "that for the purposes of this assessment predictions have assumed the source of the noise at the hub height of 100.5m." These noise predictions are therefore inaccurate for both applications as neither of them are at 100.5m. With the proposed turbines for CWF SID at a hub height of 97.5m the source of the noise is closer to the ground than the assessment model and will therefore have more impact.
- 3) Additionally, the blades are to be over 11% bigger than in the Coole Wind Farm 2017 failed planning application. The movement of the blades itself adds to the audible noise produced by the turbines. With the blades being substantially bigger and 20 metres from the ground as opposed to 35 metres above ground, the noise impact on residents living close to any or many turbines (as we will be should this industrial wind farm be permitted and built) will be adverse, significant and damaging to our physical and mental health.

## **Chapter 12: Landscape**

### **12.1 Introduction**

As detailed in Section 2.5.1, Chapter 2 of this EIAR, there is a current grant of permission on the Proposed Development site for a wind farm consisting of up to 13 no. wind turbines with a tip-height of 175 metres, upgrading existing internal access roads, providing new internal access roads, an on-site substation, underground cabling, temporary construction compound, and ancillary infrastructure. An Bord Pleanála issued the decision to grant permission for the wind farm on 27th March 2020".

- 1) The above statement is incorrect and is deliberately misleading. Coole Wind Farm initially applied for planning permission for a 13 turbine industrial wind farm in June 2017. Westmeath County Council sought a further 53 pieces of information from the applicants in order to make their decision. Coole Wind farm then withdrew their planning application, only to reapply with an almost completely identical planning application in the autumn of that same year. Westmeath County Council refused planning permission for the proposed thirteen turbine industrial wind farm called Coole Wind Farm in December 2017 under a clause in their County Development plan called PWIN 6. Coole Wind Farm brought the case to An Bord Pleanála in January 2018. After two delayed decisions, An Bord Pleanála granted planning permission in March 2019. The North Westmeath Turbine Action Group (NWTAG) sought a Judicial Review to challenge the granting of the wind farm which was granted. The case was fully heard in the Commercial High



Courts in March 2020 but no decision has been made to date. Therefore, the grant of planning permission is not currently valid as it is in contention.

Coole Wind Farm makes this deliberately misleading claim throughout its planning application. If permission for the thirteen turbine wind farm had been fully passed in 2019 (not 2020) then the thirteen turbine Coole Wind Farm would be in the construction phase and possibly operational making redundant their efforts to apply for a 15 turbine wind farm in order to acquire SID status in a cynical attempt to avoid the current planning deadlock.

"The location of the wind farm site is primarily on flat peatlands, which are acknowledged within the Wind Energy Development Guidelines - Guidelines for Planning Authorities and the Midland Regional Planning Guidelines, 2010-2022, as having the potential to accommodate large scale energy production in the form of wind farms; The character of the landscape in the area and the absence of any ecological designations on the site"

- 2) The very tightly defined site is itself is on low lying peatlands, but is adjacent to the Northern Hills and lakes which are the highest land masses in the county. The design layout fails to take these important landscape characterisations into consideration.
- 3) The Midland Regional Guidelines 2010-2022 do not insist that industrial wind turbines go on peatlands. The Westmeath County Development Plan 2014-2020 and 2021-2027 both have clauses directing large scale turbines to ten times the nacelle height away from homes. Only two of Coole Wind Farm SIDs fifteen turbines meet this criterion.
- 4) There is a pNHA known as Lough Bane on Clonsura Bog sited within 50m of turbine no 2. Lough Bane also contains a crannog. The road infrastructure surrounding proposed turbine no 2, which will come to 10m away from the Lough during its construction process will impact on the Lough and the crannog.

"The pattern of existing and permitted development in the area"

- 5) There are no large scale industrial buildings or structures of this size anywhere in the area of the proposed industrial wind farm. Homes are single or two storied dwellings. Sheds and farm buildings are low lying and not industrial in scale. There are no large scale factories and the one existing wind mast, that was erected without planning permission has since been removed, was 80m high, 95m lower than the proposed turbines.

"The distance to dwellings and other sensitive receptors from the proposed development"

- 6) Proposed turbine no 15 is situated 638 m from one dwelling and 679 m from another dwelling. This does not conform to the Revised Draft Guidelines for Wind Energy 2019.

The Proposed Development will comprise of 15 No. wind turbines with a tip height of 175 metres, the locations of the permitted 13 turbine layout are unchanged.

The proposed rotor diameter of the 15 Turbines is up to 155m.

- 7) The impact of shadow flicker on homes is greatest within 10 times the rotor diameter of any turbine. Therefore there should not be any homes situated within 1.5km of any turbine.

"The landscape of the area is described in terms of its existing character, including a description of landscape values and the landscape's sensitivity to change. The landscape and visual impact assessment of the Proposed Development uses visibility mapping, representative viewpoints, and photomontages. The potential impacts in both landscape and visual terms are then assessed, including cumulative impacts..."

As outlined in the Westmeath County Development Plan 2014-2020, the Westmeath Wind Energy Strategy has designated the capacity of areas for wind energy development as either 'No Capacity' or 'Low Capacity'.



The site of the Proposed Development is located within an area designated in the Westmeath County Development Plan, 2014-2020 as 'Low Capacity' for wind energy development"

- 8) In the 2014-20 Westmeath County Development plan all areas of the county are designated low wind energy apart from Uisneach which is designated no wind energy. In the 2021-2027 Westmeath County Development Plan one area has been changed from low wind energy to medium wind energy. Statkraft the parent company of Coole Wind Farm are well aware of this change as they sent in a detailed submission regarding Wind Energy in Westmeath during the public consultation process for the oncoming County Development Plans in the Spring and early Summer of 2020.

### **12.2.1 Project Description**

"16.53 hectares of potential replanting lands have been identified for assessment purposes. These lands are located in County Roscommon."

- 1) The forestry cut down in order to accommodate a turbine will not be replanted onsite but in Co. Roscommon.

### **12.2.3 Mitigation by Good Design**

"Through the iterative project design process, informed by early-stage impact assessment work, landscape modelling, zone of theoretical visibility (ZTV) mapping and photomontage preparation, every effort has been made to bring forward the optimum design for the Proposed Development with respect to landscape and visual factors. The final project layout that is the subject of this LVIA, already incorporates the following landscape and visual design considerations for good wind farm design: The turbine layout has been designed to create a coherent cluster, contiguous and connected to each other visually and with consistent spacing. All turbines have been located greater than 4 times the tip height from occupied dwellings not involved in the development in order to protect residential amenity, as per requirement set by the Wind Energy Development Guidelines, (DoHPLG 2019). The internal site road layout makes use of the existing tracks wherever possible (to be upgraded for the delivery of wind turbine components), to minimise the requirement for new tracks within the site; and Felling of existing coniferous plantation is predominantly limited to keyhole felling in localised parts of the site, in keeping with existing practices in the commercial forestry plantation on-site. During the initial site selection process, landscape sensitivity was identified as a key constraint and so landscapes considered to be less sensitive were preferred over sites with more sensitivity to change. The site location and current layout minimises the theoretical potential for visibility and the site visits and assessment tools used in this chapter show that the actual visibility is far less than the theoretical visibility would suggest."

- 2) There are two homes which are not located greater than 4 times the tip height away from occupied dwellings according to the Wind Energy Development Guidelines 2019.
- 3) The turbines are at a height of 175m. Ground level is between 60-70m above sea level on the site itself. The highest local landmark is the Hill of Mael at 240m above sea level. This means that the turbines at 175m high will be level or slightly higher than the highest local landmark.
- 4) The turbines are clustered together and connected to each other visually. The site location is flat with little screening. These industrial scale light grey turbine machines will completely dominate this predominantly green and brown rural landscape and change it forever. Not only ruining it now but setting precedence for further industrialisation to come.



### **12.3.1 Landscape and Visual Impact Assessment Criteria**

"This chapter has been prepared in accordance with the Environmental Protection Agency (EPA) Draft guidance document 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports, 2017, EPA guidance documents. Best practice guidance, such as the "Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, 2013, Landscape Institute (UK) & IEMA" provide specific guidelines for landscape and visual impact assessments. Therefore, a combination of the draft EPA guidelines, the Landscape Institute guidelines and professional experience has informed the methodology for the assessment herein. The Landscape Institute guidelines require the assessment to identify, predict and evaluate the significance of potential effects to landscape characteristics and established views. The assessment is based on an evaluation of the sensitivity to change and the magnitude of change for each landscape or visual receptor. For clarity, and in accordance with best practice, the assessment of potential effects on landscape character and visual amenity, although closely related, are undertaken separately. The assessment acknowledges that landscape and visual effects change over time as the existing landscape external to the Proposed Development evolves and proposed planting establishes and matures. The significance of an effect is determined by two distinct considerations: 1. The nature of the RECEPTOR likely to be affected, namely: The susceptibility of the receptor to the type of change arising from the Proposed Development; and The sensitivity to change is related to the value attached to the receptor. 2. The nature or magnitude of the EFFECT likely to occur, namely: The size and scale of the landscape and visual effect (for example, whether there is a complete or minor loss of a particular landscape element); The geographical extent of the areas that will be affected; The duration of the effect and its reversibility; and The quality of the effect – whether it is neutral, beneficial, or adverse. A detailed description and breakdown of the assessment methodology is outlined in detail in Appendix 12-1, which outlines the consideration in greater detail used in the Landscape and Visual Impact assessment."

- 1) There is no way that any form of planting could possibly screen 175m high industrial turbines on this landscape.
- 2) The nature of this landscape is rural. Some areas are flat running into the rivers and lakes and some areas are hilly. The highest local landmark is 240m above sea level. Imposing industrial turbines on this landscape affects it dramatically and in a very detrimental way.

### **12.3.3 Guidance and other information used in the Landscape and Visual Impact Assessment**

"Ireland signed and ratified the European Landscape Convention (ELC) in 2002, which introduces a pan-European concept which centres on the quality of landscape protection, management and planning. The Department of Arts, Heritage and the Gaeltacht has published a National Landscape Strategy for Ireland in 2015. The Strategy aims to ensure compliance with the ELC and contain six main objectives: developing a national Landscape Character Assessment and Developing Landscape Policies. In 2000, the Department of the Environment and Local Government published 'Landscape and Landscape Assessment: Consultation Draft of Guidelines for Planning Authorities', which recommended that all Local Authorities adopt a standardised approach to landscape assessment for incorporation into Development Plans and consideration as part of the planning process. However, this DoEHLG 2000 guidance remains in draft form"

- 1) While Ireland signed and ratified the European landscape Convention in 2002 the Guidance from The Department remains in draft form and Coole Wind Farm have relied on guidance developed primarily in the UK for Scottish onshore wind farms as referenced in 12-6. Coole Wind Farm has also chosen to dismiss the guidance developed by Westmeath County Council which is the local planning authority. The Scottish landscape which is primarily mountainous and rugged and very sparsely populated in the highlands where most of the wind farms are located has little or no resemblance to the flat gently undulating pastoral landscape in the Irish Midlands. This UK guidance is not fit for purpose in the Midlands of Ireland and should be discarded.



#### **12.3.4.1 Study Area**

"A study area of 20 km radius from the outer turbines of the Proposed Development site has been selected to identify potential significant landscape and visual effects within County Westmeath, Longford, Meath and Cavan (refer to Figure 12-1). The LVIA study area extends to 15 km from the Proposed Development for assessment of effects on landscape character. The study area's extent has been identified through a review of maps, aerial photographs of the Proposed Development site, and subsequently verified during site surveys. It is acknowledged that the Proposed Development may be visible from areas outside the 20km radius. visible from locations beyond the study area, mainly from elevated locations, and as such it is important to note that the 20 km study area defines the area within which potential effects could be significant...Photomontages have been produced to describe and illustrate views from representative viewpoints located within the study area"

- 2) The proposed wind farm will be visible from beyond the 20km radius assessed through ZTV and some photomontages.
- 3) Coole Wind Farm admits that the visual impact on the landscape could be significant. If they are admitting that the visual impact "could be significant" then it is a surety that the visual impact will be adversely significant.

#### **12.3.4.2 Consultation**

"Consultations have been undertaken with Westmeath County Council from an early stage in the Landscape and Visual Impact Assessment (LVIA) process including in 2016 when the original landscape and visual impact assessment was being compiled. A part of a Request for Further Information following the submission of the original application Westmeath County Council requested a number of additional Photomontage Viewpoints to be included in the assessment. These were completed and included in the subsequent application and have been used again in this assessment.

- 1) There are no photomontages of the turbines on the local roads traversing the site where 15 residences are situated between 700m and 1000m of several turbines and two residences are situated less than 700m from a turbine. The visual impact on the families living in such close proximity of this proposed development has not been adequately assessed. This is not in keeping with proper planning and development.

#### **Westmeath County Development Plan 2014-2020**

"The Westmeath County Development Plan 2014-2020 (WCDP) includes policies and objectives relating to landscape character, visual amenity, as well as Wind Energy Development Capacity. The WCDP notes that Lakelands are important, prominent, and unique landscape elements of Westmeath, the plan also notes the diverse range of landscape types such as grasslands, peatlands, wetlands, woodlands, and eskers which contribute to the character and local distinctiveness of landscape within the county. As reported in the WCDP, it is the policy of Westmeath County Council to: P-LCA1 To protect the distinctiveness, value and sensitivity of County Westmeath's landscapes, including the Lakelands and to recognise their capacity to sustainably integrate development within them."

- 2) This is an area of low wind as is much of the county, with the exception of the western lowlands (medium) and Uisneach (no wind).
- 3) This is also a highly scenic part of the county with the potential to improve should the Westmeath Way be extended and with the inclusion of areas due to be restored and conserved.
- 4) After evaluating several chapters of the planning application we are highly aware that it is not possible for this Coole Wind Farm SID to be successfully and sustainably integrated into the landscape of north Westmeath.



- 5) The site area that the proposed turbines are planned for is in the River Inny Lowlands. But immediately adjacent is situated northern hills and lakes which are defined very differently in landscape terms. The turbines are highly visible from this landscape whose landscape character has not been taken note of in the design of the turbine layout. Therefore the design layout is not suitable for this landscape.

#### **12.3.4.4 Effects Scoped Out**

"The Proposed Development will become a permanent feature in the landscape following the completion of construction works"

- 1) Many people are under the false impression that Coole Wind Farm SID, if permitted and constructed, will remain in place for the duration of its operational life and then be decommissioned afterwards. This is a common misconception amongst those living in the vicinity of proposed industrial wind farms due to the way the planning application notices are written for the papers. Coole Wind Farm SID will, if permitted, become a permanent blight on our landscape, environment and on the lives of those living under its shadow for decades to come. It cannot be allowed to be built. Onshore wind farms built on low wind areas are wasteful, especially when off shore wind is now almost as cheap as onshore. If these are to be permanent then they should be suitable and efficient.

"It is acknowledged that there is the potential for visibility of the Proposed Development from locations beyond the study area of 20 km. It is important to note that the 20 km study area defines the area within which potential landscape and visual effects could be significant, rather than defining the extent of visibility. Therefore, landscape designations and visual receptors beyond the 20 km study area have been scoped out. Effects on landscape character beyond a 15 km radius from the Proposed Development have been scoped out of this assessment, where it is judged that potential significant effects on landscape character are unlikely to occur".

- 2) This industrial wind farm if permitted and constructed will not only have a significant and negative impact on those living under its shadow but also on those living within a 20km radius of its site boundaries. This is not in keeping with proper planning and sustainable development.

#### **12.4.1.1 County Westmeath Areas of High Amenity**

"The WCDP identifies six areas which are considered to have high amenity and recreational value. They are all associated with larger lakes in the County, and include areas around the following: Lough Ree area, Lough Lene area, Lough Owel area, Lough Ennell area, Lough Sheelin area and Lough Derravaragh area. These designated areas of High Amenity are denoted in Blue in in the Landscape Baseline Map Figure 12-1 below.

Section 10.5.3 of the current WCDP notes that location of wind energy developments in Areas of High Amenity will not be encouraged. As shown in Figure 12-1 (below), the Proposed Development is not located within an Area of High Amenity. Four Areas of High Amenity are located within the LVIA study Area (to 20 km), Lough Sheelin is the closest, and is located approximately 3 kilometres north of the Proposed Development site at its closest point. High Amenity Areas surrounding Lough Lene, Lough Derravaragh and Lough Owel are located within the LVIA study area to the south of the Proposed Development."

- 1) The site boundary is very tightly drawn around each turbine. The nearest area of high amenity is Lough Sheelin 3km north of the proposed development which would be 3km plus 50 metres away from the nearest turbine. This is far too close to an area of high amenity and goes against Westmeath County Development Plans 2014-20 and 2021-27.
- 2) The proposed development will permanently impact on several areas of high amenity such as Lough Sheelin at 3km, Lough Derravaragh at 5km, Lough Lene at 8km, Lough Ennell and Lough



Owel at approximately 16km. This goes against Westmeath County Council development plans for 2014-2020 and 2021-27 and against proper planning and sustainable development.

#### **12.4.1.2 County Westmeath Landscape Character Assessment**

"The Landscape Character Assessment of County Westmeath identified 11 distinct Landscape Character Areas (LCAs)...The WCDP contains the following policies in relation to Landscape Character:

...To support and manage change and encourage the sustainable planning and management of the landscape and lakes of the County, including the conservation and enhancement of the historic environment and biodiversity."

- 1) The proposed development will have a highly adverse effect on the conservation and enhancement of the historic structures and biodiversity of the landscape and environment. It will, if permitted, also be a permanent fixture on the landscape, so when the damage is done it cannot be reversed.

"The WCDP contains the following relevant objectives relating to the Landscape Character Areas: O-LCA1 To require a Visual Impact Assessment for Proposed Development with the potential to impact on significant landscape features within the County A Wind Energy Capacity Map is included in the WCDP, which assesses the capacity each Landscape Character Area has, to accommodate Wind Energy Development. The assessment is appended as a map, map 5 for reference. It considers that all LCAs with the exception of LCA 9 and LCA 7 have a low capacity for wind energy. LCA 9 has no capacity, with LCA 7 having a medium capacity. Section 10.5 of the Plan states that the Landscape Character Assessment informed this map. However, Section 10.5 of the current Plan states that: "The preferred locations for large scale energy production, in the form of wind farms, is onto cutover cutaway peatlands in the county, subject to nature conservation and habitat protection requirements being fully addressed."

- 2) The plans that Coole Wind Farm SID are referring to are the outgoing, in their words "current" 2014-2020 plan and the 2021-2027 plan which has just been adapted. Coole Wind Farm SID are planning to build an industrial scale wind farm on an area of low wind energy rather than build an industrial wind farm on a site of medium energy in the county. Given that it is planned that this proposed development be a permanent feature once constructed surely it would make more sense to build on an area with a higher wind capacity, if they absolutely have to build onshore. However it would be preferable to build off shore where wind capacity is steadily high. It would be a much more efficient use of their resources and of nature's resources, producing more renewable energy at less cost for the life of this and the next industrial wind farm onsite, onshore or out at sea
- 3) In section 10 of the county development plan it is indeed stated that the preferable location of an industrial wind farm is on cutaway bog, however the county development plan does not insist upon it. This is a recommendation not a law.
- 4) In section 10 of the oncoming development plan CPO 10.143 (CPO 10.132 in the draft plan) insists in a strict set back distance of ten times the wind turbines generator height from residences. This clause was also in the outgoing plan as PWIN 6 which Coole Wind Farm was well aware of when it applied on both occasions for planning permission for Coole Wind Farm in 2017.
- 5) Nature conservation and habitat protection have not been properly addressed in this or previous planning applications by Coole Wind Farm SID.



#### **12.4.1.2.1 Westmeath Landscape Character Areas – Summary**

"WH LCA 2 - Inny River Lowlands The proposed site is located on the north-western boundary of LCA 2 - Inny River Lowlands which is located in the north-western corner of county Westmeath, and is described in the Plan as: "The low-lying ground around the Inny River from Finnea to Ballinacarrigy and the Royal Canal including pastoral landscapes, extensive areas of cutaway bog industrial peat production and conifer plantations." This area also includes the N4 corridor and wetland areas of nature conservation interest. These include Glen Lough, Lough Iron, Lough Garr and Garriskil Bog. The WCDP also notes that the area contains some views including a panoramic view from the N4 near Bunbrosna, panoramic views of Lough Iron and the surrounding countryside and views of Glen Lough. The WCDP also notes the settlements include Lismacaffrey, Streete, Coole, Rathowen and Ballinalack. The area between Lough Iron and Ballinacarrigy is of historical significance with the presence of Tristernagh Abbey dating from the twelfth century and the remains of Kilbixy, which was once a town and now is the location of a Castle remains and a Leper hospital. The development plan also notes a number of historic houses and demesnes in the LCA."

"It is noted that while the Wind Energy Development Capacity Map (Map 5) in the current WCDP indicates that this LCA has a Low Capacity for wind energy development, the LCA is described as having extensive areas of cutaway bog. With reference to the Regional Planning Guidelines for the Midland Region, flat peatlands are considered the preferred location for wind energy developments in County Westmeath."

- 1) The wind energy development capacity map in the 2014-20 and the oncoming 2021-27 County development Plan both state that this area has low capacity for wind energy development. Coole Wind Farm acknowledges this in their own planning application in chapter 12 amongst others. As such it is unsuitable for wind energy production.
- 2) A cutaway bog is surely unsuitable for this CWF SID if, as is the case with Coole Bog, it is sited in a low wind energy area? Moreover, the unsuitability of the location is illustrated by the proposed size and scale of the turbines in CWF SID that will be amongst the highest in Europe. This is fact is obvious to all but the behind CWF SID.
- 3) There is a significant depth of peat still left on the bogs on and immediately surrounding the proposed wind farm site. Instead of being further dried out for the turbines, hardstanding and the roads infrastructure, these should be rewetted, reseeded and regenerated as functioning boglands, wetlands and carbon sinks. Bogs in their functioning state can absorb between 10-15% of atmospheric carbon. This is a far more valuable use of the peat than further drying it out for the purposes of an industrial wind farm.

"LCA 1 - Northern Hills and Lakes This LCA lies in Westmeath's north-eastern corner, adjacent to LCA 2, and approximately 0.5 kilometres east of the Proposed Development site at its closest point. The LCA is described as an area of prominent hills topped with chert, or cherty limestone with enclosed lakes and areas of peat deposits, mostly fen. This LCA is described as a rural landscape of particularly high scenic quality containing a number of lakes with several protected views, including Lough Lene Area of High Amenity and Fore Special Heritage Area. The area is also of high nature conservation value. Afforestation occurs around Finnea and at Fore, and the extensive Beech plantation at Mullaghmeen is also identified. Glacial deposits result in some quarry operations in the area. Settlements within LCA-1 include Finnea, Castlepollard, Collinstown and Drumcree, and the historic settlement of Fore, which is of high cultural significance due to the monastic origins and feature of built and cultural interest around the settlement.

- 4) Within 0.5km of the site boundary there are rural landscape areas of exceptionally high scenic value as acknowledged in the above quotation from the applicant. Given that the site boundary is very tightly drawn directly around the turbines and their hardstanding and access roads it should be clear that this proposed development of fifteen 175 m high industrial turbines is completely at odds with the receiving environment and should not be permitted nor built.
- 5) LCA 1- Northern Hills and Lakes is immediately adjacent to the proposed industrial wind farm. It is a mere 0.5km from the site boundary which, as mentioned before, is very tightly drawn around the



turbines themselves. It is a beautiful area with hills, lakes, rivers, Mullaghmeen Forest and many small villages of historic and scenic value and the largest town in north Westmeath Castlepollard, which is itself of both historic and science value. The highest hill in the area is right beside the proposed development and is called the Hill of Mael, it is 240 m above sea level. The proposed turbines will be 175m high built on land 75m above sea level and thus rising 250m above sea level. Their presence and domination of the skyline will destroy the beautiful landscape of LCA1. Mullaghmeen forest is 258 m above sea level at its highest point. It too will be dwarfed by these industrial scale wind farms. Coole Wind Farm SID will permanently destroy this beautiful part of north Westmeath if it is permitted and allowed to be built.

"WH LCA 4 - Central Hills and Lakes This LCA is located southeast of LCA 2, to the north of central Westmeath, and is located approximately 3.5 kilometres south of the Proposed Development. It is typified by undulating hills and lakes, of which Lough Derravaragh and Lough Owel are most prominent. These lakes are both designated Areas of High Amenity, as well as being SACs and SPAs. The Plan notes that a number of fens also occur, notable Scragh Bog, which is of international importance. A high number of protected views reflect the high scenic quality and amenity value of the area. A number of demesne landscapes and associated areas of semi-natural woodland are found in this LCA, including upland oak areas around Lough Derravaragh, at Knockyoon and Crookedwood. This LCA has a small number of settlements including Crookedwood, Multyfarnham and Castlepollard. This landscape has associations with Bronze Age sites at Lough Derravaragh and at Frewin Hill on Lough Owel, as well as monastic associations of Portloman Abbey, and the Franciscan Friary at Multyfarnham. The lake edges are known as attractive locations for recreation and amenity"

- 6) LCA4 Central Hills and Lakes is a beautiful area of Westmeath and is located a mere 3.5km away from the proposed industrial wind turbine site. It contains several areas of high amenity, a high number of protected views, a number of demesne landscapes and upland oak woods, several small towns and villages. This is an area rich with history and culture with archaeological sites dating from the Bronze Age through to Early Christianity with people and settlements living in this historically and heritage rich area from those historic times to present day. Moreover the lakes are used for a variety of recreational activities that have the potential to be developed and marketed as significant attractions for tourists and recreational sports such as fishing. An industrial wind turbine development so close to this area is in opposition to the aims of Westmeath County Development Plans, current and oncoming in terms of visual impact, nature conservation, ground water quality, archaeology, natural resource tourism ie fishing, boating, walking, cycling, nature trails, archaeology etc.
- 7) This is an area of low wind capacity and as such is unsuitable for large scale industrial wind energy production. This area should never have been considered for an industrial wind farm by Element Power or Statkraft.

#### **12.5.5.1 Landscape Value**

"Table 12-5 Features of Landscape Value Feature Description Landscape Designations No Landscape designations are found on the site itself, however, a number of designations exist in the wider LVIA Study Area...Landscape Quality/Condition This refers to the physical state of the landscape, and the condition of individual elements. The Wind Farm Site itself and the majority of other peatlands are largely modified and degraded.

- 1) The site boundary is tightly drawn around the turbines, their hardstands, internal road access and the grid connection which follows the road corridor. In the above quote CWF SID is most likely referring to the proposed turbine site, rather than the entire site including the grid connection, though this is not clear. 13 out of the 15 proposed turbines are to be built on bog that for years has



been used illegally for peat milling and extraction. So the actual site itself upon which the turbines are proposed to be built upon is relatively plain and unremarkable in its present scarred state. These turbines are 175 m high and if built onsite will stand higher than local natural landmarks. The landscape immediately surrounding the proposed giant turbines is beautiful, as described in LCA4 and LCA1. LCA1 is a mere 0.5KM away and LCA4 a mere 3.5km away. These turbines, if built, will have a devastating effect on both of these landscapes, not only visually but in terms of the present and future recreation activities and impact on the development of tourism.

"Other landscape elements such as areas of woodlands including Demesne landscapes appear in good condition. Aesthetic Qualities The site itself has few notable aesthetic qualities, but has some views to the surrounding hills."

- 2) Not only does this site have some views to the surrounding hills but the hills have views of the site and of the highly scenic landscapes surrounding the site. If permitted, Coole Wind Farm SID would have a highly significant and detrimental impact on this landscape.

"Some views from hills – Lough Crew, Frewin Hill and Mullaghmeen, and views of the Lakelands have high aesthetic quality, and are designated scenic amenity in the relevant County Development Plans."

- 3) As can be seen in photomontages 10, 11 12, 14 and 18 the proposed industrial wind farm development, if permitted, would have a devastating impact on the landscape quality.

"The landscape of the site has been largely modified by industrial peat harvesting, conifer plantation and agriculture, and does not retain many wild qualities. Adjoining deciduous woodland and the wider landscape have areas of wildness and naturalness, including the lakes, hills and woodlands"

- 4) The above definition again validates our points that the site is very tightly delineated around the turbines themselves and that there are many areas of unspoiled beauty, particularly LCA 4 and LCA1 which are within 3.5km and 0.5km from the tightly drawn site boundary. Should CWF SID be given planning permission these natural areas of wild beauty will be spoiled by the industrialisation of the countryside. This is not in keeping with good planning and goes against Westmeath County Development Plan 2014-20 and 2021-27.

"There are no evident cultural associations with the site itself, apart from the general cultural associations with bogs and turf cutting"

- 5) The above statement is only partly valid because the "site itself" compromises only the land that the turbines will be built upon, their foundations and hardstanding and the roads on the site. This is cutaway bog, so the main association is with bogs and turf cutting.

"In the wider landscape, cultural associations exist – the Tain Trail is signposted to the east and south of the site, near Mullaghmeen and Lough Derravaragh, while Lough Derravaragh itself is associated with the legend of the Children of Lir"

- 6) CWF SID reference to the wider area refers to LCA1 and LCA4 which are 0.5km and 3.5 Km from the site which works out at 0.55km and 3.55km from the nearest turbines. This is not what would typically be known as a "wider area" because of the wind farm is exceptionally close to areas rich in culture and history. Additionally, within 50m of proposed turbine no 2 there is a small lake known as Lough Bane which has a crannog on it and is a pNHA. The site boundaries are 50m around each turbine. This lake is almost on site and is on Clonsura Bog which forms part of the site. Mayne Bog, which is less than 3km from the Coole end of the site, has in it a rare and exceptional Bronze Age walkway that is somewhat tellingly not mentioned in this section of CWF SID.



"an objective exists to extend the Westmeath Way through the site. Other trails in the area include the Tain Trail and the Mullaghmeen recreational trails, as well as the Fore Trail (also known as St Feichín's Way)."

- 7) There are plans in the current and pending county development plans to develop the Westmeath Way into the site and link it with the Mullaghmeen and Fore trails. What CWF SID fail to mention is that there are also plans to regenerate the bogs, bringing them back to their full use as carbon sinks and active wetlands and use them in nature trails. Allowing CWF SID permission to build their industrial wind farm will stop this important regeneration and ecological function of the bogs and goes against proper planning for this beautiful and ecologically sensitive part of Westmeath.
- 8) Coole Wind Farm SID in 12.6.4.2 claims that there are no scenic views within 5km of the site. This is clearly a deliberate falsehood. This is a beautiful area typified by an abundance of small fields, hedges, undulating countryside, lakes, rivers, small forested areas and demesne. LCA1 and LCA4 are both beautiful areas and lie within 0.5km and 3.5km for the proposed site. The Hill of Mael and Rock of Curry are less than 2km from the site. They are amongst the most scenic areas in this part of the Midlands and provide stunning views of the locality from the summit which is itself a scenic site.

#### **12.6.5 Route Screening Analysis Results – Roads within 5 Kilometres**

"The presence of roadside screening is particularly important in contexts such as the Proposed Development site, where the site is at a relatively low elevation, and lower than many of the surrounding areas from which it is viewed. When viewed from areas of similar elevation, screening plays an important role in reducing visual effects as turbines bases and towers can be screened, or partly screened. Few roads occur within 1 kilometre of the Proposed Development"

- 1) The narrow road that we live on exists within 630m of the development and on this short stretch of laneway there are seven occupied dwellings, all of which will be less than 800m from one or more of the industrial turbines and less than 1.5km from at least 6 of the turbines. There are several other roads which exist within 1km of the proposed development on the opposite side of the proposed development and one running through the development where a family farm will be surrounded by no less than 5 turbines, one of which is 700m from their door.

"'intermittent screening' category occurring most frequently within 1 kilometre of the proposed turbines. ..Within 1-3 kilometres of the Wind Farm Site, intermittent/partial screening remains the dominant category, interspersed with areas of little/no screening"

- 2) The areas that are closest to the proposed site have the least screening which means that there will be little to no protection for the visual impact of the 175m high turbines.
- 3) There is no screening analysis shown here for the homes and families living less than 1KM from the proposed industrial wind farm.
- 4) There were no photomontages created from the roads closest to the proposed wind farm site where people live less than 1km from any proposed industrial turbine. None on our public road L57671 or on any of the local roads running through or adjacent to the site where families live, and have resided for generations.
- 5) The only part of our road where screening was assessed was on the corner at Hill's family home. The residents here are involved with the wind farm.



- 6) In stating the visible impact of the turbines on these routes, the submission mitigates the impact of the turbines in terms of their distance from roads with scenic views and prospects and the fact that screening provided by vegetation, built form and landform will further lessen their visual impact.
- 7) How exactly will the proposed wind farm be screened as cited above?
- 8) If such screening is deemed important for scenic vantage points located some distance from the proposed wind farm what measures, if any, are to be put in place to protect living in close proximity to the turbines?

## **12.7 Cumulative Baseline**

LCA2"also includes the N4 corridor and wetland areas of nature conservation interest. These include Glen Lough, Lough Iron, Lough Garr and Garriskil Bog. The WCDP also notes that the area contains some views including a panoramic view from the N4 near Bunbrosna, panoramic views of Lough Iron and the surrounding countryside and views of Glen Lough."

- 1) LCA2 is the area where the proposed site, if permitted, will be built. This area as referenced above contains wetlands, areas of conservation interest, NHAs, SCAs, SPAs and Natura 2000 sites as well as beautiful views of the surrounding countryside. It would be detrimental to all of these important sites, from an ecological point of view and from a view of protecting the landscape quality, to grant planning permission to Coole Wind Farm SID. This development should be refused planning permission for this and many other reasons.

"The WCDP also notes the settlements include Lismacaffrey, Streete, Coole, Rathowen and Ballinalack. The area between Lough Iron and Ballinacarrigy is of historical significance with the presence of Tristernagh Abbey dating from the twelfth century and the remains of Kilbixy, which was once a town and now is the location of a Castle remains and a Leper hospital. The development plan also notes a number of historic houses and demesnes in the LCA. The Landscape Character of the proposed site, and the LCAs within 20 kilometres of the Proposed Development is discussed further in Section 12.5.7of this LVIA.

- 2) The above acknowledges the historical significance of Tristernagh Abbey and the remains of Kilbixy as well as a number of historic houses and demesnes. Is it the case therefore that the remainder of the grid connection route etc has no historical significance? If so, how has this conclusion been reached? What efforts have been made to ascertain if the proposed site of the turbines and route of the interconnector are to be located on sites of significant historical importance?

"There are no specific objectives associated with this LCA. It is noted that while the Wind Energy Development Capacity Map (Map 5) in the current WCDP indicates that this LCA has a Low Capacity for wind energy development, the LCA is described as having extensive areas of cutaway bog. With reference to the Regional Planning Guidelines for the Midland Region, flat peatlands are considered the preferred location for wind energy developments in County Westmeath."<sup>14</sup>

- 3) The above section acknowledges that the LCA "has a low capacity for wind energy development" but seems to justify the site as a suitable location primarily on the grounds that "flat peatlands are considered the preferred location for wind energy developments in County Westmeath." The conclusion to be drawn is that the topography of the LCA is inappropriate for wind energy generation and that its only benefit is that it has cutaway bogs where giant turbines can be

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<sup>14</sup> Section taken from page 12-12



erected. It should also be restated that the proposed development contravenes P-WIN 6 in 2014 – 2020 Westmeath County Development Plan and the clause CPO10.132 in the Draft County Development plan for 2021-27 and now CPO 10.143 in the adopted Westmeath County Development Plan 2021-27.

### **Central Hills and Lakes**

“The Plan notes that a number of fens also occur, notable Scragh Bog, which is of international importance.”

- 4) The above section describes the international importance of Scragh Boga Natura 2000 site which runs adjacent to a section of the grid connection route. This internationally important site will be at risk if CWF SID is given planning permission and built.

### **Westmeath Landscape Policies and Objectives Relating to Landscape Character**

“The WCDP contains the following objective relating to LCA 1: O-NHL1: To consider the provision of walkways around Lough Lene, subject to impacts on biodiversity.”

- 1) WCDP consider that walkways around Lough Lene may impact on biodiversity. Surely industrial scale wind turbines that rise to a height of 175 m and require over 60 lorry loads of concrete and lean mix for each base will have a far greater impact on biodiversity than pathways around a lake.

Other general Landscape policies are as follows: P-LLM1: To require that development is sensitively designed, so as to minimise its visual impact on the landscape, nature conservation, archaeology and groundwater quality.

- 2) Some developments sensitively designed or not, are not suitable for certain areas. This is a fact. Coole Wind Farm SID is not a suitable development for north Westmeath. It is an industrial scale development of 15 giant turbines proposed to be sited in a bog in fairly flat countryside, which does not contain any industrial style or scale buildings or industries. The landscape is rural and pastoral. The turbines are industrial and huge. Nothing about this development suits this area.

“The Meath County Landscape Character Assessment (MCLCA) 2007 was carried out as part of the Meath County Development Plan 2007-2012. The County was divided into 20 Landscape Character Areas (LCA)s. Two designated LCAs are located within 15 km of the Proposed Development site (15 km Study Area for effects on Landscape Character) and are illustrated in Figure 12-1.

These are LCA 18 - the Lough Sheelin Uplands and LCA - 19 Loughcrew and Slieve na Calliagh Hills. These LCAs have a landscape value of high and exceptional respectively, they both have a landscape sensitivity of high and a landscape importance defined as regional and national/international respectively. The criteria involved in describing the landscape sensitivity, landscape importance and landscape capacity are described in Section 8 of the MCLCA.<sup>15</sup>

The submission lists the above sites and the supposed lack of visual impact the wind farm development will have on areas that are either classified as having “local, regional or national significance.”

- 3) Sliabh na Calliagh is listed as having “national significance” which in terms of visibility to the proposed development has a “Panoramic view and with ZTV. This can be clearly seen in photomontage no. 11 This development is in contravention of Meath’s County Development

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<sup>15</sup> Chapter 12 page 22



Plan with regard to the proposed development having a significant impact on a site of national significance in cultural, historical and landscape terms.

**'Wind Energy Development Guidelines' (2006)**

"These guidelines offer guidance for the siting and design of wind energy developments in various landscape contexts by defining six landscape character types that represent most situations where wind turbines may be proposed. The guidance is intended to be indicative and general and notes that it represents the 'best fit' solutions to likely situations. The six landscape character types are: Mountain moorland Hilly and flat farmland Flat peatland Transitional marginal land Urban / industrial Coast.

The guidelines note that where a wind energy development is located in one landscape character type but is visible from another, it will be necessary to decide which might more strongly influence the approach adopted for the assessment.<sup>16</sup>

- 1) It should be emphasised that the Wind Energy Development Guidelines date from 2006 and would have been drafted to regulate much smaller turbines than the ones proposed for Coole which will mostly be sited on flat peatland.
- 2) Why is the submission not referencing the draft 2019 Wind Energy Development Guidelines? It should be further noted that the planning application uses the 2019 draft regulation guidelines in relation to 1:4 setback distances for residential amenities.

"The Proposed Development site is located largely on flat, cutover peatland, with some areas of agricultural land and coniferous forestry. Of the 15 turbines, 12 are proposed on flat peatland, two are proposed on forestry and one on agricultural land. The Proposed Development site is predominantly located on cutover bog, a landscape that is best described as Flat Peatland as per the Wind Energy Development Guidelines 2006."

- 3) Turbine no. 15 proposed for agricultural land will be, if permitted, sited away from the other turbines. This turbine is situated in an area of low wind energy and not on peatland. This turbine is one of the new ones proposed for Coole Wind Farm SID. It is also the turbine sited less than the recommended set back distance from the revised Draft Wind Energy Guidelines 2019. For all of these reasons this turbine alone goes against proper planning and development for the area.

"Certain areas in the wider landscape can be described as Flat Farmland, with small areas described as Hilly and Flat Farmland. In certain areas the turbines will be viewed from these landscapes. It is considered however, that in terms of the siting and design, the Flat Peatland landscape type most strongly influences the siting and design of the Proposed Development<sup>17</sup>"

- 4) The criteria for the Coole wind farm is therefore based on the availability of "Flat Peatland" but no reference is made the topography being unsuitable for the generation of wind energy. Moreover, peatlands are described as having "significant potential for future wind energy development" because of their relatively undisturbed and naturalist state" but which if left untouched and allowed to regenerate become wet bogs comprising land cover mostly of heather, wild grasses and bog cotton which are important in the development of wildlife habitats and eco systems etc. The siting of 12 out of the 15 industrial wind turbines on peatlands will negatively impact on the future of the flat peatlands in Coole.

Evidence of human habitation is sparse ... However, evidence of human habitation is evident, not within the site itself but in the wider area. G<sup>18</sup>.

- 5) The above description of human habitation is at best disingenuous. The minimum setback distance for residential dwellings is 4 times the tip height of a turbine which in this case equates to a

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<sup>16</sup> Chapter 12 page 25

<sup>17</sup> Chapter 12 page 25

<sup>18</sup> Chapter 12 page 25



minimum setback distance of 700 metres from each turbine. Two occupied dwellings are located within 700 metres of turbine 15 and approximately 15 occupied homes are located between 700m and 1km of the proposed wind farm.

**The DoEHLG guidelines state the following:**

"Spatial Extent: The vast scale of this landscape type allows for a correspondingly large spatial extent for wind energy developments."

- 6) This is not a vast expansive landscape. Why, if the scale of the landscape is so expansive and suitable, is it that only 12 of the 15 turbines are actually being sited on the bog?

"Spacing: Regular Spacing is generally preferred, especially in areas of mechanically harvested peat ridges."

"Layout: In open expanses, a wind energy development layout with depth, preferably comprising a grid, is more appropriate than a simple linear layout. However, where a wind energy development is located close to a feature such as a river, road or escarpment, a linear or staggered layout would also be appropriate."

- 7) The proposed industrial wind farm layout does not meet any of those descriptions.

"Height: Aesthetically, tall turbines would be most appropriate. In any case, in terms of viability they are likely to be necessary given the relatively low wind speeds available. An even profile would be preferred... Given that the wind energy developments are likely to be extensive and high. It is important that they are not perceived to crowd and dominate the flat landscape<sup>19</sup>."

- 8) This development, if permitted, will completely dominate the flat landscape of the bog itself and the gently undulating hills and pastoral landscape immediately surrounding the site.

"The Proposed Development will address the above guidance in terms of spatial extent, spacing, layout, height and Cumulative effect. The spacing is relatively regular, while the layout can be described as staggered linear, which responds to its setting along the Inny River which lies to the west."

- 9) The spacing of the turbines is neither regular nor does it flow with the curve of the river. It's entirely at odds with the landscape. Turbine no's 14 and 15 are also outside of the main body of the turbine layout.

"In terms of height, the proposed turbines are consistent with the DoEHLG guidance notes that 'aesthetically, tall turbines would be most appropriate' in flat peatland sites."

- 10) Why are tall turbines aesthetically most suited to Flat peatlands? They completely dominate and crowd the landscape.

"It is considered that the Proposed Development site, which comprises of an extensive area of cutover peatland, can accommodate turbines with a tip height of up to 175 metres."

- 11) Who has considered this and how did they come to this decision? This is not a visual decision as it is based purely on the inaccessibility of wind in flat landscapes.

"The Proposed Development will be viewed across areas of extensive peatland from some locations, but it will also be visible from surrounding areas which have a character type best described as mostly Flat Farmland, and some areas which are undulating, characterised by agricultural fields and farms. Therefore, certain aspects of Hilly and Flat Farmland siting and design guidance are considered below, in relation to the wider study area. The key characteristics of landscape type, some of which are relevant to the wider landscape study area, include:

- "Intensively managed farmland, whether flat, undulating or hilly"
- "A patchwork of fields delineated by hedgerows varying in size"
- "Farmsteads and houses are scattered throughout, as well as occasional villages and towns"
- "Roads, and telegraph and power lines and poles are significant components; and A working and inhabited landscape type"

- 12) The above description of the landscape is at best disingenuous. The proposed Windfarm is located in a region that has the most elevated sites in county Westmeath including the Hill of Curry that is



located 2.4km from the turbines. These 175 metre turbines located on a site 70 meters above sea level will dominate the landscape and the many protected views.

### **12.5.2 Drainage**

"The Wind Farm Site is traversed by the Glore River, which drains to the Inny, located within the Shannon drainage catchment. The Inny River runs close to the western boundary of the Wind Farm Site, and forms the County Boundary, flowing between Derragh Lough and Lough Kinale, located approximately 1.9 kilometres north of the Wind Farm Site, and Lough Derravaragh, located approximately 5.7 kilometres south of the Wind Farm Site (see Figure 12-3 above). The Wind Farm Site also features an extensive drainage system associated with the commercial peat harvesting activities. 12.5.3"

- 1) As detailed above the River Glore runs through the site, it is a tributary of the River Inny, an important spawning ground in the area. The River Inny runs just behind the undrained and active bog area behind proposed turbine no 1. It also flows through Derragh Lough, Lough Kinale and Lough Derravaragh. It forms part of the Shannon drainage catchment. All of these watercourses are protected. They should not be further damaged by the increased activity which will occur during the construction of this proposed industrial wind farm.
- 2) The Proposed wind farm will be built onto peatlands which have been used for peat milling and harvesting in recent years. These activities are unlicensed and unregulated. Coole Wind farm SID show in their application that they plan to use the existing drainage systems built and maintained by these peat extraction companies. The drainage and filtration systems are improperly maintained. This can be clearly seen in the photos included which show dirty water filled with peat sediment flowing directly into the River Glore and silt traps and ponds which have been left unmaintained for at least 19 months, allowing peat sediment to flow unimpeded into the water courses flowing through the proposed site and then onwards into the protected watercourses listed in point no. 1 above. While these two photos were taken 19 months apart this particular silt trap has been left this way for at least two years.



**Fig 4**



**Fig 5**



### **Chapter 13: Archaeology**

Castlepollard, Co. Westmeath is less than 7km from the nearest turbine. The town was recently awarded almost €500,000 for regeneration of the town and restoration of the town hall with the intention that the town should become a hub for the generation of tourism in this part of the county. Westmeath County Council stated that the funding was "To regenerate Castlepollard, building on the unique architectural heritage of the Town Square and Green, creating space for the community and visitors alike, restoring the Market House and delivering a Town Park, establishing Castlepollard as base, from where, visitors will explore the many sights of North Westmeath, enhancing the towns critical role as an economic driver for the region".

- 1) This application from Coole Wind Farm Sid for 15 industrial scale wind turbines in this rural landscape will destroy the character of the archaeological and historic sites of the area. It will run contrary to Westmeath County Councils Development Plans both current and oncoming to develop north Westmeath as a tourist destination.

Mullaghmeen Forest was selected recently as the Irish Time's' Westmeath hike of choice for Westmeath<sup>19</sup>. Mullaghmeen is a beautiful area of forest, comprising the largest beech plantation in Ireland, rising above farmland to a height of 258m above sea level with several ancient sites dotted throughout. This forest features on all hiking and outdoor sporting websites, such as Sport Ireland, Coillte<sup>20</sup> and Visit Westmeath.<sup>21</sup>

- 2) The proposed 15-turbine industrial wind farm will reach to almost the height of the Mullaghmeen summit which at 258m high is the highest point in Co. Westmeath. The turbines are proposed to be built on peatland which stands at 75m above sea level. The turbines are 175m high. The turbine tip will therefore reach 250m in height above sea level. These giant turbines will reach almost to the height of Mullaghmeen, dominating and destroying our rural landscape and severely impacting on the further development of tourism in this area.

Fáilte Ireland is the National Tourism Development Authority and has developed an umbrella destination called Ireland's Ancient East, to create an "emotional pull and inspire visitors to travel to this part of the country".

- 3) 15 industrial scale wind turbines will deter tourists from visiting this part of the country and go against Westmeath County Councils and Failte Irelands plans to attract visitors to the area.

The Department for Transport, Tourism and Sport published its strategy in 2015, named "People, place and policy - growing tourism to 2025". It plans for local authorities to take a central role in developing tourism in their counties. The strategy references "protecting key tourism assets" and the "importance of heritage and environment" to tourism and the "protection and promotion" of cultural heritage. It proposes "a major programme of investment of looped walks". Westmeath County Council has already successfully implemented this strategy at Fore.

The strategy further proposes "improvements to the quality of interpretation at a large number of existing visitor attractions". This is already proposed for Mayne Bog near Coole where Ireland's oldest 3000 year-old

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<sup>19</sup> <https://www.irishtimes.com/life-and-style/health-family/fitness/32-great-hikes-around-ireland-one-in-every-county-1.4514690>

<sup>20</sup> <https://www.coillte.ie/site/mullaghmeen-forest/>

<sup>21</sup> <https://www.visitwestmeath.ie/get-outdoors/walks-wilderness/mullaghmeen-forest-trails/>



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Bronze Age walkway has been discovered and is being considered for preservation and interpretation by both Westmeath County Council and the state's National Monuments Service.

- 4) Putting a wind farm in north Westmeath and especially one of such scale will damage the tourism and recreational potential of North Westmeath's heritage, including the Bronze Age roadway.

It is also the objective of Westmeath Development Plan "to protect the context of its rich cultural heritage". Furthermore, the County Development Plan in P-AH1 commits to generally preserve in situ all archaeological remains and sites of importance...their setting and context and zones of archaeological potential. At O-AH1 in the County Development Plan Westmeath County Council commits to control development that may be detrimental to any feature or site of archaeological significance or that may seriously detract from the interpretation and setting of these sites.

Additionally at O-AH8, the Council requires developments above or below ground, to respect the character of archaeological sites and their settings. The reference to protecting "settings" is repeated at CPO 14.6 and CPO 14.7. In P-AH5 of its County Development Plan, Westmeath County Council commits to designate walking routes to important archaeological sites"

- 5) The proposed industrial wind farm, if built, will damage the context, detract from the interpretation and destroy the character of the archaeological and historic sites of the area. This goes against proper planning and sustainable development for the area.
- 6) CWF SID has prepared photomontages purportedly aimed at showing the visual impact of CWF SID on north Westmeath. They claim that these photomontages show the worst case scenario of the visual impact on the landscape, sensitive and scenic viewpoints and archaeology. This is not the case. While the photomontages show some indication of the visual impact and therefore the impact on nature, heritage and nature tourism they are woefully inadequate. There is a lack of consistency between the photomontages and the treatment of the photoshopped turbines on the landscape photos.

For example, in Photomontage no 10 one can clearly see the impact of these giant turbines would have on the landscape if permitted and constructed. I would argue that the turbines have not been accurately represented, but appear smaller than actual size against the landscape. The turbines are 175m high on land 75m above sea level which means they should stand taller than the Hill of Mael at 240m high. In this image they are slightly shorter than the Hill of Mael, which they are not. Turbine no 15, which is much closer to the protected view in this photomontage than the other turbines, should be larger than the ones in the background to it. This photomontage shows that serious damage will be done to this beautiful pastoral landscape, but not the full extent of it.

Photomontage no 14 is from Frewin Hill, a national monument which is located near Lough Owel some 16.3Km from the nearest turbine. Despite this distance the turbines can be seen standing vividly above the landscape and breaking the beautiful skyline. This demonstrates the impact these industrial turbines will have on the landscape as far away as Mullingar if erected.

Photomontage no 18 is from Granard Motte in Co. Longford. The turbines stand clear and clean against the surrounding landscape and higher than the hills in the background. They have also been rendered in mid-dark grey to blend in with the clouds in the sky; a cynical attempt to reduce their visual impact on the landscape in this photomontage.

In Photomontage no 21 which is taken from the Cairn at Mullaghmeen 5.3km away, the turbines are all clearly visible against the landscape and the skyline. They are completely out of place and change the landscape from rural to industrial. This development, if permitted, will prevent the further promotion of tourism in the area and goes against Westmeath County Development Plans 2014-20 and 2021-27 for ecotourism, heritage and culture tourism in the area.

Photomontage no 22 is from Fore. Looking at the images produced by CWF SIDs graphic designers one can hardly see the turbines at all. However, notice where the photo was taken from, it's been taken on the pathway into the monument, not at the full height of the monument which would give a clearer view of the turbines; another disingenuous image.

The archaeological heritage in North Westmeath has significant tourism and community potential. In its current natural state it is a beautiful, unspoiled, rural landscape rich with archaeological finds. Research by



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UCD and the National Museum of Ireland informs us that "Lough Derravaragh" 5km from the nearest proposed turbine "has a rich archaeological landscape, with evidence for lakeshore activities in the Late Mesolithic, the Late Bronze/Iron Age and the early medieval period in particular. There are at least 22 crannogs around the lake, many of which show evidence for activity between the seventh and the eleventh century AD."<sup>22</sup>

- 7) Research at Coolure Demesne Crannog at the north end of Derravaragh, the area closest to the proposed wind farm, has yielded results of national significance showing that this royal crannog was first occupied from circa 850 BC, making it the earliest habitable Irish crannog by two hundred years. Coolure Crannog sits just outside the 5km radius discussed in the EIAR, it therefore has been ignored an important archaeological find by CWF SID.
- 8) On the shore of Lough Derravaragh sits a major royal earthwork. It was possibly a royal site belonging to the Uí Fiachrach Cúile. A very impressive ringfort, it is scheduled for inclusion in the next revision of the RMP. The presence of a large scale industrial wind farm so close to this important monument will detract from its setting and context. This goes against Westmeath County Development Plans for the area and is therefore contrary to proper planning and sustainable development.
- 9) The Ancient Bronze Walkway at Mayne Bog, a hugely significant archaeological site is situated adjacent to the proposed wind farm. This too is scheduled for inclusion in the next edition of the RMP.

There are no photomontages showing the visual impact of the proposed industrial wind farm on Mayne Bog, Collure Crannog or Ringfort in Coole Wind Farm SIDs planning application, this points to CWF SID preferring to show north Westmeath as a wasteland devoid of people, interest, landscape or history and therefore ripe for exploitation.

### **Mayne Bog Bronze Roadway, Coole; Westmeath Heritage Plan**

The National Monuments Service has scheduled the Mayne Bog Bronze Age roadway for inclusion in the next revision of its formal Record of Monuments and Places.

In September 2006 a small-scale investigatory excavation was undertaken on behalf of the State. A carbon 14 date of 1200–820 BC was obtained from the superstructure, making it a remarkable structure of Bronze Age date, earlier than the celebrated Corlea Bog trackway in neighbouring County Longford by 1000 years. This site has significant potential and more work will yield more information. 200 metres of the Bronze Age roadway remain in place beneath the bog. The roadway is less than 3km from the nearest turbine.

Presently, funding is being sought for interpretation and promotion of this ancient pre-historic structure. Arrangements by the State, supported by Westmeath County Council, are under consideration to preserve a section of this amazing 3000 year old, 4-6 metre wide wooden roadway that is one of the best in Europe<sup>23</sup>.

The County Westmeath Heritage Plan 2018-2023 has adopted an objective, 3.11, as follows to "work with all relevant stakeholders to explore and support the most appropriate means and measures for the protection, promotion and interpretation of the Bronze Age wooden road and roadway at Mayne Bog." (Fig 6).

This proposal fits very well into a number of current local strategic actions and supports Fáilte Ireland's Ancient East strategy and branding. It also supports the development of a cluster of heritage products in North Westmeath, such as Fore, Tullynally and the mythology of this area.

10. Who would want to visit an archaeological find such as this on the edge of an industrial wind farm? This proposed development will destroy any attempts at developing this rare find into a tourist attraction and bringing much needed tourists and revenue to north Westmeath.

<sup>22</sup> Coolure Demesne Crannog, Lough Derravaragh : An Introduction to Its Archaeology and Landscapes. Aidan O'Sullivan, Rob Sands Eamon Kelly, 2007.

<sup>23</sup> Public statement by renowned Bronze Age expert, Emeritus Professor of Archaeology, NUIG, Dr. John Waddell.



11. CWF SID has deliberately not created a photomontage of the immediate site surrounding this rare archaeological find and the visual impact of 15 proposed 175 metre high turbines on Mayne Bog. If this omission is accidental, it is an example of poor practice, if deliberate, planning negligence on CWF SIDs part.

The EIAR shows its technical basis in stating that “the receptors” of the cumulative negative impacts are “the archaeological monuments and architectural/cultural heritage sites”.<sup>24</sup>



**Fig 6. Mayne Bog Bronze Age road © Irish Archaeological Consultancy**

The applicant's EIAR also tells us that a total of 212 recorded monuments are present within 5km of the nearest turbine. This further demonstrates the importance of the archaeological landscape that has been unveiled in north Westmeath in recent years. As the EIAR further states “The ZTV shows that the proposed turbines will be theoretically visible from the majority of cultural heritage assets within 5km of the nearest proposed turbine.”<sup>25</sup>

- 12) The setting of a building or monuments is as important as the building or monument itself. While the 15 turbines may not be built upon ancient structures, their presence, scale and proximity will irretrievably damage the potential for tourism and countryside leisure pursuits across a wide area.

#### **Adverse effect on significant archaeology**

The applicant's EIAR states that “No built heritage structures which are subject to legal protection are located within the Wind Farm Site boundary”. Since the site is tightly drawn around the hardstand for the turbines and internal roads access, this is hardly surprising. It also mentions that “Fifty-three protected structures are located within 5km of the nearest proposed turbine”<sup>26</sup>.

The most significant monument is the 15th century castle in Newcastle Td. Newcastle Tower House (and Newcastle House, see below) are two of the fifty three heritage structures located within 5 km of the proposed turbine site boundary. The house is 822 metres from proposed turbine no. 5. The tower house

<sup>24</sup> EIAR Chap13.168

<sup>25</sup> EIAR Chap13.170

<sup>26</sup> EIAR Chap 13.57



type castle is a 15<sup>th</sup> century structure scheduled for inclusion in the next revision of the RMP. This is an important monument built during the Gaelic resurgence after the Black Death weakened the English control in Ireland. It was at this time that Newcastle castle and similar £10 castles were built. Its significance is greater than its modest physical remains.



**Fig 7. Proposed Turbine no 13 if permitted will sit 848 metres from this 15<sup>th</sup> century tower house**

In addition to the castle there is Newcastle House. Newcastle Td. Is a detached three-bay single-storey house over a raised basement house, built c.1830. This building is rated of regional importance and is registered: NIAH registration number, 15400301. Turbine no 5 if permitted will be located a mere 822 metres from Newcastle House. (Fig 8).

- 1) There are no photomontages showing the visual impact on residences or monuments located less than 900m from any turbines.



**Fig 8. Newcastle House.**

**Adverse effect on archaeology and landscape**



- 2) Bigwood Td. and Carlanstown Td. are within 2km or less from the nearest turbine and will be visually impacted by a turbine development of this scale.
- 3) This is also an area of natural beauty and striking views including the prominent North Westmeath landmark and beauty spot of the Hill of Mael/Maol with its remarkable limestone escarpment. There is no photomontage of the impact of the proposed turbines on the landscape or these buildings taken from the Hill of Mael or any photomontage created to show the impact of the proposed turbines on the Hill of Mael. Given the scale of the turbines against this hill I am not surprised. The proposed turbines at 175m high standing on land 75m above sea level will be higher than the hill at 240m above sea level.
- 4) The Hill of Mael holds three archaeological sites all listed for inclusion in the next revision of the RMP. The three sites in Bigwood Td. consist of a Hillfort; WM003-008001, a stonefort; WM003-008. Band a Field system; WM003-008002. These sites in Bigwood Td. are less than 3km from the nearest proposed turbine, no.15. Visitors to these archaeological sites which sits on the Hill of Mael overlooking the proposed wind farm site will have industrial wind turbines in their line of vision at eye level with these monuments.
- 5) Carlanstown House and its adjoining farmyard are enclosed by the bawn wall of Carlanstown Castle are scheduled for inclusion in the next revision of the RMP. In 1641 'Carolanstowne' Castle was the property of Robert Nugent who was listed as an 'Irish Papist' in the 1657 Down Survey map of Lickbla parish (NLI, MS, 723-4). The castle is depicted as a large castellated structure on the 1657 Down Survey map of Fore Barony (ibid.). The setting and context of this remarkable site will undoubtedly be compromised by the wind turbine development of such proximity and scale.



**Fig 9. The 17<sup>th</sup> century Carlanstown Bawn (source Archaeology.ie)**

- 6) Photomontage no 7 is taken from Carlanstown on the road between Castlepollard and Finea. The viewpoint is of 15 turbines on the bog. Carlanstown house and its residents will be looking directly on this scene should CWF SID be permitted.

#### **Mitigation of archaeology**



- 7) The approach to mitigation is inadequate at best. The applicant states that when any archaeology is likely to be found, they will monitor the works. This means that an archaeologist would be present to observe the works and if they spot anything, they would intervene and conduct an archaeological excavation. To quote: "A report on the results of monitoring shall be completed and submitted to the relevant authorities on completion of the project". This is poor practice as the authorities should be informed as soon as anything of archaeological interest is discovered so they have an opportunity to attend onsite before any damage is done.

The adverse effect is not "slight" on nearby archaeology and tourism at Loughcrew, Co. Meath

- 8) Meath County Council submitted a letter to the consultants in which the Council requested that the impact of the Coole Windfarm "does not adversely impact upon the amenity and experience of this important visitor attraction and archaeological site". They express concern on the visibility of the Windfarm from such a major site. The 5000 year old Loughcrew Stone Age Cairns are spread across the hills at Loughcrew and make up one of the three main concentrations of Passage Tombs in Ireland, the others are Brú na Bóinne, Co. Meath and in Co. Sligo. The Equinox sunrise illuminates Cairn T at Loughcrew, similar to the famous Winter Solstice illuminations at Newgrange. This is a major archaeological site and the Windfarm is only 9km distant and visible from the 276m high hills. The applicant's EIAR<sup>27</sup> classifies the sensitivity of the turbine effect on Loughcrew as "High". The same applies to Fore Abbey. Both sites are National Monuments. The EIAR then inexplicably states that the negative impact will be "Slight". The impact of 15 giant industrial wind turbines on this countryside and its heritage will be significant and highly damaging to its cultural, heritage and tourism value.

Photomontage no 11 shows Sliabh na Calliagh, Lough Crew 15.9km east of the proposed industrial wind farm. Here the turbines are rendered in dark grey to make them blend into the skyline and landscape. They are still clearly visible in this photomontage and would be more so in real life standing as tall and taller than the local landmarks and destroying the beautiful countryside in which they should not be located.

### **Photomontages**

The photomontages lack consistency and accuracy. Photoshop and other graphic design packages have been used to underplay the effect these giant turbines will have on the landscape and people of Westmeath, Meath, Cavan and Longford.

In some of the photomontages the turbines have been tinted or their opacity has been reduced to make the turbines appear less vivid and less in contrast with their surroundings.

- 1) In photomontage no 5 the image is developed from photos taken in the townland of Ballywillan which overlooks the bogland and the beautiful Hill of Mael and Rock of Curry, two local landmarks and some of the highest landmasses in the area. In this photoshopped image the turbines are clearly visible in the landscape. They look to be almost the height of the local landmarks, tower above the bogland and break the otherwise unbroken skyline dramatically. This is bad enough. But this image is not at all accurate. Firstly the turbines themselves are 175m high situated on bogland 75m above sea level, making a combined total of 250m above sea level. The Hill of Mael is 240m above sea level. The turbines are to the fore of the Hill, therefore should appear larger than the hill. They do not. Secondly the turbines are a light white-grey colour not a dull light brown as portrayed in these photomontage images. This makes them appear less distinct against the winter landscape in the background. These images are deliberately misleading, disingenuous and inaccurate and are designed to fool local residents and An Bord Pleanála into thinking that the turbines will have a negligible effect on the landscape. This cannot be allowed.
- 2) The images shown in Photomontage no 10 are highly misleading and dishonest. In photomontage no 11 the view from Sliabh na Calliagh at Lough Crew a national monument and protected view the turbines are depicted as being the same colour as the surrounding landscape and blending into the sky. While atmospheric perspective will add a slight bluish hue to the light white-grey turbines

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<sup>27</sup> Chap.13.145



at an extreme distance on a hazy day, it will not obliterate them from view completely as is indicated in these photomontages. This is disingenuous and deliberately misleading.

- 3) In photomontage no 18 composed of photos of the view from Granard Motte, the turbines dominate the landscape and can be seen clearly against the hills and landscape in the background. However the turbines have been depicted as dark grey in colour which they will not be. These turbines are too close to be affected by atmospheric perspective and have deliberately been darkened to diminish their effect on the landscape. This is disingenuous, deliberately misleading and does not give a true representation of the effect these industrial scale turbines will have on this rural landscape. .

The proportions of the wire framed turbine images on the wire frame landscape and the photoshopped turbines on the photomontages are wrong and based on the narrower blade width turbines planned to be used for Coole Wind Farm Limited. In the turbines planned for Coole Wind Farm SID 88.5% of the full turbine height consists of the diameter of the blade The blade size in these images is based on the earlier, narrower turbine where 80% of the full height of the turbine consisted of the diameter of the blade. All of the photomontages are inaccurate and do not show the full impact of the turbines as the width of the turbines has increased by over 11% from 140m to 155m in diameter.

- 4) To prove my point take a look at any of the wire frame images. The 13 turbine Coole Wind Farm images are drawn in green and the 15 turbine Coole Wind Farm images are drawn in blue. The proportions of the blades should have increased by over 11% from the green to the blue wireframe images. They have not.
- 5) The Hill of Mael and Mullaghmeen Forest are the highest landmarks in the county at 240m and 258 m high. In photomontage no 10 we see the protected view from regional road R195 looking towards Lough Glore. In this photomontage the turbines are clearly delineated against the sky and stand tall over the tree tops. However if you look at the size of the turbines it can be clearly seen that they are shown many metres shorter than the hills to their right. This is incorrect. The turbines are 175m high and stand on ground 75m above sea level. That means that they should each look to be 10m taller than the Hill of Mael and 8 m shorter than Mullaghmeen. They do not. This is disingenuous and highly misleading. It gives the false impression that the proposed turbines will have less of a visual impact on the landscape and the people living here.
- 6) The photoshopped images of turbines on the photomontages are not in keeping with the genuine width of the turbine blades and towers. For example in Photomontage 7, images 39-44 the images of the turbines in the photoshopped images are noticeably narrower than in the wire framed images. This is a deliberate attempt to fool people into thinking the turbines will have less of a visual impact on the landscape.
- 7) Photomontage no 3 taken 4.4Km composed of photos from the nearest turbine on the regional road near Lismacaffrey shows the turbines completely dominating the landscape and looming over the hills in the background. This image clearly shows the industrialising effect these giant turbines will have on the rural landscape if built.

In one case the photomontage has not been composed of photos taken from the protected view, but rather in the "vicinity" of the protected view. The protected view is from an area in front of Mullaghmeen Forest, a beautiful beech forest situated a few km from the proposed development. This area is used for recreational purposes, for nature trails, scenic walks, hiking, biking and so on and is recognised as a beautiful area to enjoy such activities. To take the photos used for the photomontage from "the vicinity of" rather than the actual "protected view" is highly inaccurate and misleading as is demonstrated by the photomontage itself.

- 8) Photomontage no 8 has not been composed of photos taken in the actual location of protected view no 51, but in the vicinity of the view, this is highly inaccurate and deliberately misleading. This area is beautiful and the viewpoint would have commanding views of the proposed turbines if permitted, which is not evident in this photomontage.

Other photomontages show the turbines completely dominating the landscape. If this is evident from the tiny and difficult to navigate images onscreen and the A3 images presented in hard copy then what would



the landscape really look like when these miniscule virtual turbines are built to their full and imposing height of 175m?

- 9) Photomontage no 4 taken 4.6 km from the nearest turbine in the townland of Cloonamore shows the turbines clearly over the tree line. This image shows the industrialising effect these turbines would have on our local rural landscape if permitted.
- 10) In photomontage no 21 the view from the cairn at Mullaghmeen (5.3 Km from the nearest turbine) the turbines completely dominate the flat lands of the landscape. They clearly show the industrialising effect these large scale turbines will have on the landscape if allowed to be built.

#### **Chapter 14: Material Assets**

- 1) While the grid connection is being constructed on the road from Coole to Multyfarnham, the road will be closed on two occasions while works are carried out at the crossings of the River Inny. There is no time limit indicated for these closures in CWF SIDs application. This will add 9 miles twice daily to all those who use this road on a daily basis. This affects workers who use the road daily and the teachers and pupils who attend Wilsons Hospital School.
- 2) The L1826 road from Coole to Multyfarnham is not a proper 2 lane road – there are no white lines down the middle of it and if a lorry is passing a car, one of them has to pull over to the verge. These verges are soft as the road is sited on the bog. In many places the grid connection trench will be dug in the middle of the road. The cable joint pits at 2.5metres wide x 6 metres long will be situated in the middle of the road every 500m. Additionally "Approximately 15 truck movements per day to each works area to both remove excavated material and deliver appropriate infill material. A small number of truck movements will be required to deliver cable route components (ducting, membranes, etc) to site." The application states that the road will stay open during most of the grid connection construction work. However, in the main the road is simply not wide enough to sustain a 2.5 metre hole in the middle, plus diggers, tipper lorries and construction traffic to be able to keep the road open. For over 6 months this will cause huge disruption and expense to those that travel to and from Coole every day.
- 3) Three Ireland placed a communications Mast in Coole Village about 15 years ago. This is ignored and not shown on the map of Masts in the region. This is either evidence of incompetence or CWF SID is attempting to con the planning authorities that their proposed development will not affect already poor mobile phone reception in the area.

#### **Impact on property values**

In an extensive study by Professor Steve Gibbons, Director of LSE's Spatial Economics Research Centre London School of Economics, he reviewed more than a million homes that were located within 2km of large wind farms. Conducted over a 12 year period, Dr Gibbon's research found that property values fell by an average of 11 per cent leading him to conclude: 'Wind turbines are slashing the value of homes built nearby.... "Property prices are going up in places where they're not visible and down in the places where they are."<sup>28</sup>

In Denmark Energinet.dk is responsible for operating a scheme whereby if a property loses more than 1 per cent in value due to the erection of new wind turbines, the owner is ensured full compensation for their loss. The owner of the property must notify his claim for compensation for loss of value to Energinet.dk and as the owner of the property you can choose to enter into a voluntary agreement for compensation for the loss of value with the erector of the wind turbine, or you can ask an impartial appraisal authority to make a specific appraisal of the property and determine the scope of your loss.

The claim from the owner of a property affected must be notified before the wind turbine has been erected. The erector of the wind turbine is therefore obligated to visualise the project and prepare other

<sup>28</sup> <http://personal.lse.ac.uk/gibbons/papers/windfarms%20and%20Houseprices%20November%202013%20v5.pdf>



## **Submission opposing Planning Application by Coole Wind Farm, Gavin and Jennifer Gallagher**

material as well as provide information to the citizens affected at a public meeting no later than four weeks before the municipal planning process ends.

We believe that when assessing the application made by Coole Wind Farms Limited that a similar model to Denmark be implemented for our home in light of the significant devaluation of our property.

### **Conclusion**

Our decision to move to Clonsura in north Westmeath in 2011 was greatly influenced by the attraction of living in an unspoilt landscape and a rural environment which had its own unique beauty. North Westmeath is one of the few places left in Ireland that has been left largely unscathed by the type of poor planning that have blighted supposedly more renowned scenic locations where CWF SID would be deemed unacceptable. It is a decision that has brought us much happiness and we have many good friends and neighbours and a quiet lifestyle that brings us much contentment.

However, our move to this part of the Midlands has not been without its challenges. Poor quality broadband and mobile phone services; virtually non-existent public transport links and the lengthy commutes to our places of employment can cause serious inconvenience which was amplified during the Covid pandemic. All of these are worth tolerating for having the opportunity to live in a peaceful rural setting.

The latest attempt by Coole Wind Farm SID to construct 15 giant wind turbines on our doorstep has caused us a good deal of upset and annoyance and their efforts to force this unwanted development onto a completely unsuitable area has been a constant worry for the past number of years. The disdain in which CWF SID has treated us is reflected in their lengthy planning application which even to our untrained eye is littered with lies, inaccuracies, half-truths and distortions of the facts. Moreover, their supposed efforts to consult with us and others whose health and property will be placed at greatest risk and devalued by what is meant to be a progressive method of generating sustainable energy have been contemptible. It seems if you are unwilling to be bought off and bribed then your rights as an Irish citizen to live in a safe and secure environment are to be disregarded.

It is also ironic that the very things that attracted us to Clonsura, the relatively sparse rural population and a natural environment more in keeping with much of what has been lost in modern Ireland is the very reason the Coole site has been chosen for CWF SID. Low wind speeds and the absurdity of constructing monstrous steel structures requiring thousands of tonnes of concrete to capture wind in an area with some of the lowest wind speeds in the country means little to the people behind this planning application. The Midlands it seems, has been ring fenced for the industrialisation of its countryside with wind energy the only option considered for reducing our CO2 emissions and the people living there can put up or shut up.

Hence then the reason for this lengthy and detailed submission which was drafted in our own time with no resources only our determination, along with other local people from all walks of life, to resist the efforts to Statkraft whose primary motivation for persisting with their plans is the generation of profit. We hope that our voice is heard and that this nonsensical application is rejected and consigned to the dustbin of history.

Sincerely,

Jennifer Gallagher

Gavin Gallagher