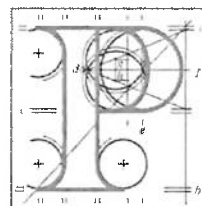


Our Case Number: ABP-317809-23



**An
Bord
Pleanála**

John Fleming
Jericoacoara
Slatt Lower
Wolfhill
Co. Laois
R14 NA06

Date: 11 October 2023

Re: Proposed Coolglass windfarm and related works
In the townlands of Fossy Upper, Aghoney, Gorreelagh, Knocklead, Scotland, Brennanshill,
Monamantry, Coolglass, Crissard and Kylenebehy, Co. Laois.

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development 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.

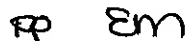
The Board will revert to you in due course with regard to the matter.

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.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned officer of the Board or email sids@pleanala.ie quoting the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,



Evan McGuigan
Executive Officer
Direct Line:

PA04

Tel	Tel	(01) 858 8100
Glao Áitiúil	LoCall	1800 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde Baile Átha Cliath 1 D01 V902	64 Marlborough Street Dublin 1 D01 V902
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John Fleming
Jericoacoara
Slatt Lower
Wolfhill
Co. Laois
R14NA06

To: An Bord Pleanála,
64 Marlborough Street,
Dublin 1, D01V902
03 Oct 2023

Re: Case PA11.317809: Submission to An Bord Pleanála Case PA11.317809 In the townlands of Fossy Upper, Aghoney, Gorreelagh, Knocklead, Scotland, Brennanshill, Monamantry, Coolglass, Crissard and Kilenabehy, Co. Laois.

Proposed Coolglass Windfarm Development and related works.

A Chara,

I am a local resident with a young family living very close to the proposed Coolglass windfarm development. We have recently moved back to the area to live, raise our family and enjoy the beautiful rural countryside. I object to this proposed development by Statkraft and ask you to consider my observations and concerns, some of which I have outlined below.

1. SID decision

- a. The proposed development is described as a windfarm with two distinct clusters. The EIA report (Vol 2 EIAR Chapter 3 Section 3.1.2) states:

"The Proposed Development is divided into two distinct areas identified as the northern cluster and the southern cluster...."

The 2 distinct clusters are in two completely different locations and townlands (Wolfhill and Fossy Mountain). This proposed windfarm development should be classed as not one but two separate windfarms and therefore require two separate planning applications. As the proposed development should be classed as two windfarms, the power output from the southern Wolfhill windfarm (based on the larger 7.2KW turbine) would be 43.2MW which is below the required 50MW threshold for SID. The power output from the northern Fossy mountain windfarm would be 50.4MW, close to the limit for SID. However, the application describes a range of potential turbines 7.2MW and 6.6MW. When the 6.6MW turbines are considered power output for the northern cluster drops to 46.2MW in total which is below the required 50MW threshold for SID. A decision on an SID should not be made on a windfarm where the exact proposed turbine is not known. Therefore, as

the proposed development should be classed as 2 separate windfarms, the power output from each separate cluster alone does not exceed the required threshold of 50MW for SID.

- b. These massive 180m 7.2MW turbines have been available and used in offshore windfarms and are new to the onshore market in Ireland. Based on available data from 16 other countries, the weighted average power rating of onshore wind turbines was 3.3MW. Reference paper *"Data investigation of installed and output power densities of onshore and offshore wind turbines worldwide"* by Peter Enevoldsen, Mark Z. Jacobson, 2020 and Wind Europe 2020. The developer Statkraft have merely put in larger turbines to expedite planning as an SID development. Chapter 3.8 of the EIAR states:

"The total installed capacity of the proposed development is between 85.8 to 93.6MW (please note: the MW output is stated here based on turbines of a 6.6MW and a 7.2 MW output and only for the purposes of assessment of benefits towards climate as set out in Chapter 6"

However, this is not reliable information in which its sole purpose is to justify the project as an SID. The An Bord Pleanála scoping exercise should have noted that while performance is listed as 7.2MW per turbine, the actual performance of turbines is only approx. 38% efficient. Based on this efficiency, the actual performance of the 13 proposed 7.2MW turbines is 35.5MW, well below the required 50MW for SID. The change of the planning act from 100MW to 50MW for SID must be challenged with the actual performance even lower. It is against all planning principles to allow structures of such size and magnitude (manufactured for the offshore markets) to be built onshore and in such proximity to people's homes and communities. This reason alone should refer this application as non-compliant to industry and planning guidelines.

2. Set-back distance

- a. The 500m set back distance from wind turbines to residential properties detailed in the Wind energy Guidelines 2006, were applicable for wind turbines of typically 80m in height at that time. The turbines described in the proposed development are industrial sized 180m tall turbines, **more than double** the typical turbine height from 2006. Therefore, the setback distance of 500m to residential properties in the 2006 guidelines is inadequate for the proposed 180m turbines. The 2006 guidelines are so outdated in relation to the current turbine proposals that it would be contrary to proper planning and sustainable development to apply them to this proposal. At 180m the turbines will be some of the biggest in the country and will have an exponentially greater impact due to greater air displacement, noise, and shadow flicker. They would be completely out of place and totally dominate the landscape which will hugely affect the visual amenity in the area. The residents and communities' concerns need to be taken into consideration.
- b. The application states that the nearest "residential receptors" are located 722m from the nearest turbine. Other sections in the application state that this distance is

720m, another 719m, another 702m and another not more than 700m. Which is it? In fact, all these figures are incorrect as there are residential receptors as close as 676m to T11 turbine blades. This is conflicting and incorrect information from the developer. The draft Wind Energy Guidelines 2019 states the nearest residential receptor must be at least 4 times the turbine tip height which would be 720m in this case for a 180m turbine. This is insufficient for industrial sized turbines of this magnitude and this requirement of 720m to all residential receptors is not met in this proposal.

- c. The application planning report section 2.1 states:

"There are 56 residential properties located within 1 kilometre of the Proposed Development. There are 105 residences within 500m of the cable routes".

Yet Appendix 5.1 'Residential Receptors within 1km of the Proposed Development' has 85 listed.

In addition, there are at least 2 properties within 1km from the proposed development, NOT included in the developers list in Appendix 5.1 'Residential Receptors within 1km of the Proposed Development' including my own residential property (near residential receptor number 27 in Appendix 5.1) which is less than 700m from T11. Another local resident's home, adjacent to residential receptor number 38 in Appendix 5.1, is currently under construction and not on this list of residential receptors.

The noise sensitive receptors in the noise impact assessment are also given different identifying numbers by the developer which has only caused confusion in the application.

There are multiple errors and inconsistencies in relation to residential receptors near the proposed development. Have all receptors impacted been included in the relevant assessments for example, noise sensitive locations, shadow flicker etc? This is not good enough for a development of this magnitude and begs the question how much care and attention were given to the actual assessments required and completed by the developer and their consultants? Clarity is required on this matter.

- d. The turbine blades from T13 in Wolfhill are just 60m from working farmland boundaries where livestock are reared. If this turbine fell it would fall into this landowner's property. This is too close and the farmer has not given consent to have the turbines this close to their land.
- e. The turbine blades from T10 in Wolfhill are 88m from a landowner's site and property. This is too close and unacceptable. This site contains old farmstead dwellings which are unoccupied and in a semi-derelict state. If this turbine fell it would fall into this landowner's property. There is no evidence of contractual agreement to show that the landowner has given consent to have turbines this close to their land. The landowner has kept this site for his son to build a home on. It is also noted that this site is not identified in Statkrafts site location plan (plan 14 of 17).

- f. Section 2.1 of the Coolglass Wind Farm Limited Planning Report states “*The site is accessible from both the north and the south via the R526 Regional Road which is located to the west of the Proposed Development...*”. The R526 is not in Laois.

3. Property devaluation

- a. The application states there is no evidence that wind farms have any influence on property values. However, a peer reviewed paper from the London School of Economics, ‘*Gone with the Wind,*’ by Stephen Gibbons (2014) has clearly shown the negative impact (reduce prices by 12% within 2km), on property values in England and Wales over a 12-year period (2000 – 2012). It is important to note that the average turbine in their extensive sample area was 2.5Mw x 90m high to tip, whereas under the current proposal the turbines are 7.2Mw x 180m tip height and rotor diameter of 162m. Therefore, it is reasonable to assume that the impact on property values will be even worse.
- b. Evidence has shown and as confirmed by local Auctioneers, properties near a wind farm like the proposed development (particularly within 2km) will be devalued by between 30% - 50% depending on location. This will have a serious impact on homeowners, specifically mortgage repayments, obtaining or switching mortgages and ability to sell.
- c. In relation to property devaluation, An Bord Pleanála will be aware that under the Fourth Schedule of the PDA, 2000, Reasons for the refusal of permission which exclude compensation, no.10 (c) states:

*10. In the case of development including any structure or any addition to or extension of a structure, the structure, addition, or extension would -
(c) seriously injure the amenities, or depreciate the value, of property in the vicinity,*

Therefore, a development which results in the depreciation of the value of a property is a standalone ground for refusal of an application.

4. Land sterilisation/ Community and Rural development impact

- a. As a nation we should be bringing people and life back to rural areas of Ireland to aid in community building and regeneration. In recent years many people, including young families and children of local farmers and landowners, have moved back to the area (The Swan/ Wolfhill/ Timahoe and surrounding townlands) where they grew up themselves to raise their own families. New homes built and currently being built in The Swan village for example (which is 1km from the proposed development) will also bring more people into the community. This has brought new life into the area and local community.
- It is noted that the developer references the 2011 and 2016 Census when discussing population trends. This is not the most up to date data. Per the latest 2022 Census results released in May 2023 (cso.ie), the population of Laois grew by 8% to 91,877

and with The Swan population growing by approx. 4% showing that people are moving back to rural areas.

If the proposed development goes ahead, people will not want to return to live in the area they grew up and new people will not want to live in an area with a massive out of place industrial sized Windfarm development looming over them. Living less than 700m from these wind turbines is too close.

- b. Due to difficulties in receiving planning permission for sites near a windfarm, local people, landowners, landowners' sons, and daughters will not be able to develop and build on their own land. Windfarm developers and owners have a history of objecting to local people's requests for planning permission to build their family home on family land. Reference figure 1 below, objection letter from Pinewoods Windfarm Ltd on 10 Aug 2017 as an example.

Stradane
Co. Cavan
Ireland

Planning Department,
Laois County Council,
Ara na Chiontae,
JPL Avenue,
Portlaoise,
Co. Laois.

Your Ref: [REDACTED]
Our Ref: [REDACTED]

10th August 2017

Location: [REDACTED]
Re: Laois County Council Planning Register Reference [REDACTED]

Dear Sir/Madam,

On behalf of our client, Pinewood Wind Limited, we wish to advise the Planning Authority that the dwelling proposed under the abovementioned planning reference number is located within 500m of a wind turbine proposed as part of the Pinewoods Wind Farm (Reg. Ref. 16/260 & An Bord Pleanála Reference PL11.248518).

Accordingly, if permitted and constructed, there could potentially be amenity noise and shadow flicker impacts in excess of the guideline thresholds included in the Wind Energy Development Guidelines for Planning Authorities, 2006.

Please find enclosed the requisite fee of €20.

Yours sincerely,
Simon Carleton
Simon Carleton
Project Planner
for and on behalf of
Galetech Energy Services Ltd.

Galetech Energy Services
Director
10, Abbey
Ln. Carr
Inch
Tel: +353 (0) 87 225 5970
Fax: +353 (0) 87 225 5925

10

Figure 1: Pinewoods Windfarm Ltd Objection Letter

This objection letter states that any such development would be affected by noise and light flicker. How then can a developer turn around and try and persuade the public that this is not the case when their own representatives admit that

this is indeed the case?

5. Wind Speed Data and Wind Mast

- a. Vol 2 EIAR Chapter 3 Section 3.7 states:

“Available wind speed is a key factor in determining the economic viability of potential wind energy locations. The Sustainable Energy Authority of Ireland (SEAI) Wind Mapping System¹ identifies the site as having an average wind speed of....”

However, as stated on the SEAI Wind Atlas website (<https://gis.seai.ie/wind/>) section 1.1 scope (see screenshot in Figure 1 below):

“Use of the provided information is for indicative and general information purposes only. The quality and detail of the information is such that no commercial, legal, or other contractual or developmental decisions should be made on the basis of what is provided herein.”

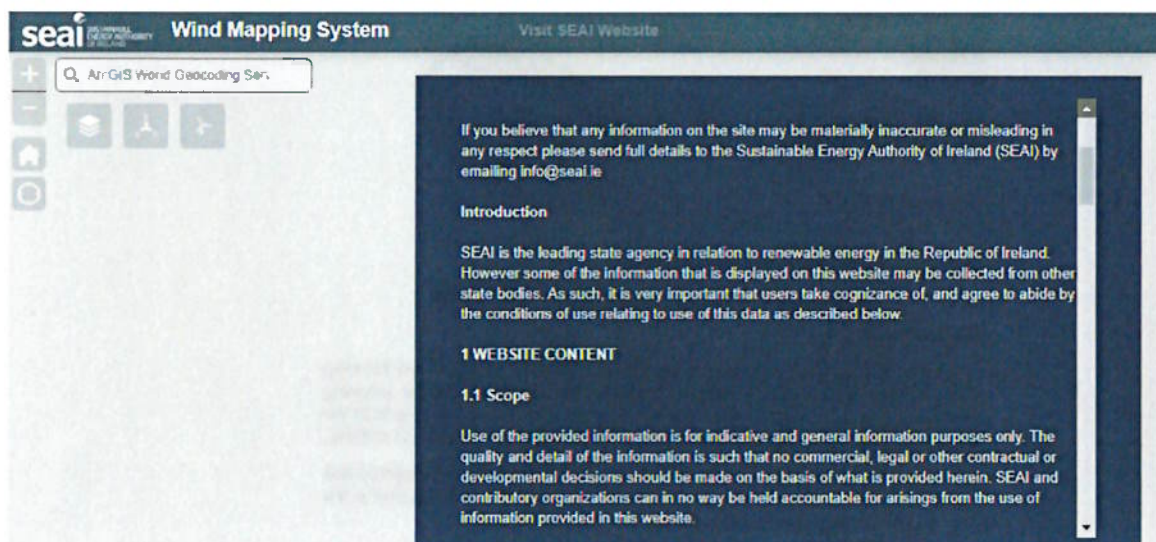


Figure 2: Screenshot from SEAI Wind Mapping System

- b. In addition, as stated in section 4.6 of the 2019 draft Wind Energy Guidelines:

“Whilst the potential location of a wind energy development will be informed by data on wind speeds and directions, it will be necessary to ensure the feasibility of a particular site before detailed work is undertaken. The wind speed at a particular site may be affected by topography, screening (by tall buildings or trees), or even turbulence from existing wind turbines in the area, and therefore in some instances it may be prudent to measure the average wind speed at the site. Planning applications for wind anemometers and measuring masts are generally sought for a limited period only (usually 12 months but might be longer). Permissions should be granted for approximately a two-year period, in consultation with the developer, to allow a wind resource analysis to be carried out.”

There is no evidence that a site wind resource analysis using wind anemometers and measuring masts was carried out for the proposed windfarm.

In addition, as stated in the Laois County Development Plan 2021 – 2027 Appendix 5 Section 7:

“However, at least one year's measured data is required before a project can be developed. This will entail erecting a 40m or 50m wind monitoring mast within the site and recording data for a minimum of 12 months. Planning permission, usually for 2 years, is required for this mast.”

There is no evidence of this measured wind speed data from the proposed site with the application which is therefore contravening the Laois CDP.

- c. Furthermore, as stated in section 4.6 of the 2019 draft Wind Energy Guidelines and section 4.2 of the 2006 Wind Energy Guidelines:

“It would be inadvisable for the planning authority to grant planning permission for a wind measuring mast in an area where there is a presumption against wind energy development in the development plan.”

Per the Laois County Development Plan 2021 – 2027 Appendix 5 Map 3.2, the proposed wind measuring mast is in an area ‘Not Open For Consideration’ for wind farm development. Therefore, it would be inadvisable for the planning authority to grant planning permission for the proposed wind measuring mast.

6. Laois County Development Plan 2021 – 2027

- a. The planning statement in the EIAR states 4 of the southern turbines are within areas ‘Open for consideration’ for wind energy development. This is incorrect information from the developer. Only one turbine, T11, is in an area ‘Open for consideration’. 12 of the 13 proposed turbines are in areas ‘NOT Open for Consideration’ per Map 3.2 in Appendix 5 of the Wind Energy Strategy of Laois County Development Plan 2021 - 2027.

In addition, there are inconsistencies between the maps showing the proposed layout of the development in the EIAR and the planning application drawings. This incorrect information needs to be taken note of by the Bord and needs clarification.

Laois county council are the local authority for the area, have the most knowledge and expertise for county Laois and have performed a thorough assessment with relevant subject matter experts to determine areas open and not open to consideration for wind farm development. The developers EIAR attempts to justify the site by contravening the Laois County Development Plan.

- b. In 2022, a ministerial directive was submitted to Laois County Council to update Appendix 5 of the LCDP 2021 – 2027 to remove the set-back distance of 1.5Km from a residential property to a turbine. The LCDP was subsequently updated and then reviewed and approved by the council and the planning regulator, indicating that the planning regulator was **satisfied** with the content including Laois County Councils assessment in determining areas Not Open For Consideration.

7. Community engagement

- a. There was very poor community engagement from the developer with the local communities that will be impacted by this development. Not all houses in the local area impacted or within 2Km of the development were called to as the developer states in section 5.0 of Coolglass Wind Farm Vol 1 – Non-Technical Summary. Calling unannounced to people's homes without appointment during daily working hours does not constitute meaningful community engagement.
- b. The developer claims feedback was "mostly positive" from the local community. This is questionable as this is not the general feeling amongst the local community impacted. No public group meeting or informational consultation was held in person by the developer with the local community at any stage. The developer was asked when they called to one residents' door unannounced, why a public community engagement meeting is not performed. The response from Statkraft was, they were advised by *An Garda Síochána* not to hold a public meeting due to fears for their safety. There is no evidence of this. Why would Statkraft fear for their safety if feedback was mostly positive? This ultimately shows that Statkraft had truly no intention of completing full meaningful engagement with the local community.
- c. Per the Aarhus Convention, meaningful community and local resident engagement is required prior to applying for planning for a wind farm development. This requirement was not met for this development.
- d. This proposed development has caused nothing but undue stress, great anger, division and splits amongst family, neighbours, and friends in the local communities.

8. Water Supply impact

- a. The Swan Public Water Scheme - The local area and surrounding areas water supply comes from The Swan borehole and Public Water Scheme. The source and catchment for the water supply runs directly through the proposed development. The Swan borehole water supply is currently at Extreme Risk status per the GSI dataset. The Swan public water scheme, also identified by the EPA as being 'vulnerable and without an alternative source' is fed by the entire area of the proposed Wolfhill cluster. Water conservation requests and supply issues are very common with this water supply. This supply provides drinking water to multiple communities and thousands of people. Constructing massive wind turbines on top of

this public water source catchment area and aquifer will pose huge additional risk to this currently vulnerable water supply under extreme risk

- b. Kyle spring and PWS – the proposed substation is currently sitting in the outer catchment area for this spring which is at extreme risk per the GSI dataset. This public water scheme supplies multiple communities including Timahoe, Stradbally, Ballyadams, Luggacurren and Ballylynan. There is potential for chemical contamination from any oils or chemicals used in the transformers and substations.
- c. Evidence has shown that wind turbine blades degrade and shed BPA laden microplastics into the surrounding environment with potential impacts to watercourses and habitats. (Reference '*Leading Edge erosion and pollution from wind turbine blades*,' Solberg, A., Rimereit, B.-E, & Weinbach, J. E. (2021, July)).

There is no assessment with the developer's application on the impact of microplastics shedding from massive turbine blades on the surrounding environment, watercourses, and habitats. This needs to be assessed.

- d. The developer's application has not sufficiently demonstrated that there will be no impact to public water supplies within the proposed development.

9. Landscape/ Visual impact

- a. If the 13 x 180m proposed industrial turbines go ahead, the local and surrounding landscape will be totally dominated and the windfarm will completely detract from the beautiful serene rural landscape.
- b. The ratio of rotor diameter (162m) to hub height (102.5m) is much greater than the 1:1 ratio of a typical in proportion wind turbine. This will lead to the turbines dominating views. The visual clutter and cumulative effect of this development on top of potential other proposed developments must be carefully considered.

- c. EIAR Volume 3 Appendix 1.2 'Projects Considered in the Cumulative Assessment' states for Gortahile Windfarm:
"a ten year planning permission for a renewable energy development with a 40-year operational life (from the date of commissioning of the renewable energy development). The entirety of the development constitutes the provision of a 9-turbine wind farm and all associated works on lands in both Counties Tipperary and Kilkenny". It further states that permission was *"Granted 27/10/2024"*.

Gortahile Windfarm is a windfarm in Co. Laois. Can it be confirmed that the correct project was considered in the cumulative assessment?

- d. The required lighting on top of the turbines, which will essentially flash with the spinning turbine blades, will cause distraction and disturbance to people at night.

- e. It is also noted that in Chapter 7 section 7.4.2, figures 7-1 and 7-2 have the incorrect site layout superimposed on the maps showing Landscape Character Assessment and Views and Prospects. There is concern that the correct assessments for these areas have not been completed for the proposed development.

10. Noise impact

- a. There is serious concern about the constant noise generation from the industrial turbines, not only in the audible sound range but also the infrasound range from blades turning.
- b. The Wind Energy Development Guidelines for Planning Authorities 2006 states that *"An appropriate balance must be achieved between power generation and noise impact. Noise impact should be assessed by reference to the nature and character of noise sensitive locations. In the case of wind energy development, a noise sensitive location includes any occupied dwelling house, hostel, health building or place of worship and may include areas of particular scenic quality or special recreational amenity importance. Noise limits should apply only to those areas frequently used for relaxation or activities for which a quiet environment is highly desirable."*

The DRAFT Wind Energy Development Guidelines for planning Authorities 2019 states that:

"A noise sensitive location is defined, in the case of wind energy development, as any location in which the inhabitants may be disturbed by noise from the wind energy development. This incorporates a dwelling, house, hotel or hostel, health building (providing patient services), nursing/retirement home, educational establishment, place of worship or entertainment, or other facility which may justifiably require for its proper use the absence of noise at levels likely to cause significant effects. This definition may include protected wildlife areas, areas of particular scenic quality or special recreational amenity importance..."

- c. Noise monitoring locations chosen by the developer are insufficient and not worst-case locations.
- d. The closest residential property at Grennan is 676m to T11. Noise monitoring location 6 (NML6), which is almost 1Km from T11, is not representative of residents closer to the turbines at Grennan.
- e. No noise monitoring was completed to the west of the southern cluster around NSR15 and NSR17 and other homes in that area.
- f. No noise monitoring was completed to the east of the northern cluster around or at NSR02.

- g. Wolfhill primary school and Wolfhill Church and graveyard, are just over 1km to the east of the southern cluster and were not identified as noise sensitive locations. No noise monitoring was completed at these locations.
- h. No noise monitoring was completed in the southern cluster where the Swan Loop Walk passes adjacent to T10, T12, T13 and T8. This walk is of particular scenic quality and special recreational amenity importance to the people in the area.
- i. Technical appendix 10.5 to this planning application, Assessment against draft 2019 Wind Energy Guidelines states:

"Table 10.5-7 and Table 10.5-8 confirm that the predicted wind farm noise immission levels do not exceed the daytime, evening or night-time noise limits derived in accordance with the 2019 Draft Guidelines under all wind speeds and at all locations."

This assessment tables only includes a column for 10+m/s and does not include noise levels for windspeeds at 11m/s and 12m/s per the 2019 guidelines. In a lot of instances at different noise sensitive locations the turbine noise immission level is right on the limit per the 2019 guidelines.

- j. It is noted that the developer states in their application:

"The installed wind turbine may not be either of the two candidate turbines but will be within the range of minimum and maximum parameters set out in Table 2-1".

Table 2-1 Candidate Turbine Parameters to be Assessed

Turbine Type	Tip Height (m)	Hub Height (m)	Rotor Diameter (m)	Foundation Size	Hardstand dimensions
Siemens Gamesa SG155	180	102.5	155	25m diameter	50m x 20m
Vestas V162	180	99	162	25m diameter	80m x 30m

Figure 3: Table 2-1 Candidate Turbine Parameters to be Assessed

However, can it be confirmed that the noise levels from other Turbine types not assessed in this application will fall within the required noise limits?

- k. As no proper on-site noise assessments can be assimilated prior to construction of turbines of the scale in the proposed development, the desktop studies prepared by the consultants cannot be relied upon to make decisions for this scale of turbine and the close proximity to surrounding homes where set-back distances are outdated.

11. Grid connection:

- a. There is currently no substation or grid connection for the proposed development. Both options for grid connections detailed in the planning application are currently under review and no works have taken place. How can a Wind Farm development of this magnitude or any windfarm for that matter, be approved for planning if it has no confirmed grid connection. It is also noted that the developer states in their application (Section 2.1 of Coolglass Wind Farm Vol 1 – Non-Technical Summary) that the proposed grid connection substations are “under construction”. This is again incorrect information in this application as the substations are currently not under construction. Connection to the national grid is fundamental to the entire project and the cumulative effect of both must be assessed according to the EIA Directive.
- b. In addition, if the grid connections are approved, it is neither confirmed nor documented in the application that the proposed substations will have the capacity for the electricity that may be generated from the proposed development.
- c. The planning application includes permission sought for an on-site 110 kV substation. Has a site suitability assessment been completed for the proposed location of this substation and all associated works?

12. Tourism impact

- a. Sli na Slainte’s / Walks/ Hikes - The Swan Loop Walk, Slieve Margy Way, Fossy Mountain Hiking Trail are all fantastic peaceful local walkways and hikes with beautiful views used by locals, people in the surrounding area and tourists alike. The proposed turbines will be surrounding the walkways and mere meters from the walkway routes. The walkways would be ruined with people driven away by the noise of the industrial turbines so close to popular walkways. This is unacceptable and would take away this important amenity to the community.
- b. There is huge potential for mountain biking development in the area which would be seriously negatively impacted by the proposed development.
- c. The proposed site is in Irelands ancient east and the development would be contrary to the tourism development plan for County Laois.

13. Archaeological and heritage impact:

- a. The Timahoe round tower and monastic site are very important and historically significant not only in Laois but nationally. For example, people travel to Timahoe annually from all around the country and internationally to attend the Timahoe Heritage Festival for historical learnings and re-enactments. The presence of industrial turbines looming over the heritage village will totally detract from area.
- b. Impact to Fulacht Fiadh’s, Standing Stones, Rathes and Barrows in close proximity to windfarm.
- c. Lime Kiln in Kilenabehy is 125m from T13. The construction and operation of T13 could have a serious impact on this historical structure as the foundations of the turbine would be much closer.
- d. Clopook, Druids Alter, Monamanny Megalithic Structure - These are significant archaeological and historical sites locally, regionally, and nationally, are within close

proximity to the proposed development and their presence could mean that other yet undiscovered sites of similar importance are in the area and close to or in the proposed development. The proposed development would have significant impact on these historical sites. A full archaeological review and survey should take place of the area in and around the proposed windfarm and cable routes. A desktop study alone is not sufficient for an area of this archaeological importance.

14. Religious, cultural, spiritual impact

- a. Numerous churches and graveyards are near the proposed development. Wolfhill church and graveyard is approx. 1.1km from the nearest turbine. People have the right to practice their religion, pray and grieve without any nuisance or interference from massive industrial wind turbines.

It is stated in the Coolglass Windfarm Ltd Planning report that:

"In photomontages shown from Luggacurren, Timahoe, the Swan and within Wolfhill which have been submitted with this planning application, there is no visual evidence of the church in Wolfhill."

In fact, this is again incorrect information from the developer, if they looked at their own photomontages and specifically Viewpoint Ref: VP18A taken from L38581 at Wolfhill National School, Wolfhill church and the graveyard are clearly visible on the right side of the photomontage. VP18A shows how close the proposed turbines will be to the church and the school. It is curious why the developer chose not to include any proper photomontages of Wolfhill church which is, as stated in the Laois County Development plan 2021 – 2027, *"a prominent local landmark"*.

- b. Monamanny Megalithic structure or 'Druids Alter' is not only a national monument but is a sacred, spiritual, and peaceful location which has huge cultural significance. (2003 Unesco Convention for the Safeguarding of the Intangible Heritage). Industrial turbines and windfarm infrastructure in close proximity to the location will completely disturb and detract from the area. People travel from far and wide to experience this sacred location and it is their right to do so without huge disturbance, interruption, and negative impact from wind turbines. This needs to be considered by the Bord.

15. Proximity to schools/ Impact to children

- a. Wolfhill NS, The Swan NS and Timahoe NS are in very close proximity to the proposed development. Wolfhill NS is approx. 1km from the proposed development and will be looking directly out at the both clusters with potential to impact several children including those with learning difficulties or additional needs.
- b. The developer states in Chapter 5 of the EIAR:
"Following a review of literature regarding the potential impact of operational wind farms on human health, it is concluded that there is no scientific consensus to support an association between negative health impacts and responsible wind turbine development."

However, reference "Green Energy Supply" high court case, who in Feb 2020 settled an action for €225,000 over the alleged health effects of living just over 700m from a wind turbine. It is strange that such a settlement should be made in the face of "*no scientific consensus*."

In the proposed development the nearest residential property is 676m from a turbine.

16. Geology and landslide potential

- a. Turbines on sloping hill side with potential for landslides having serious environmental impacts which could impact the local water supply and local landowners.
- b. It is mentioned in the CEMP that Peat will be removed from the area, yet in other sections of the application it states there is no peat in the proposed development site. This is again contradictory information from the developer. Clarification is needed.
- c. Felling of a large area of trees is required for the proposed development. It is unclear if a proper assessment has been completed by the developer on the impact of this tree felling to land, soils, and flood risk at the site and elsewhere.

17. Flicker/ shadowing

- a. Impact of flicker and shadows from the turbines on people's homes. The developer states they have a "zero shadow flicker policy" and the flicker will be minimised by software automatically. There is no evidence of a manual back up system should this automatic system fail.
- b. Inconsistencies detailed in the application for the proposed development in relation to residential receptors impacted need to be confirmed and clarified.

18. Human Health

- a. A lot of people currently work from home in Ireland. In Laois, 10,088 people (aged 15 and over) worked from home at least one day a week in 2022. This represented 25% of the workforce in Laois (cso.ie). There are people working in home offices (including myself less than 700m from T11), farmers and others in the local and surrounding areas of this proposed development. My own home office window looks directly onto the proposed southern cluster and the constant spinning of turbine blades will be a severe distraction.
- b. People have the right to work in a safe and healthy manner and environment without serious nuisance and distraction which the proposed development would pose. Living and working near large wind turbines has potential to impact human physical and mental health and wellbeing.
- c. There is no assessment with the developer's application on the impact of microplastic shedding from turbine blades on human health. Can it be confirmed that there is no impact to human health?

19. Road safety impact

- a. The sheer scale, size, and visual dominance of the proposed development with industrial sized turbines would be a severe distraction and safety concern for motorists in the surrounding areas (especially on the L3858 Wolfhill to The Swan public road) and consequently have safety implications for the many cyclists, walkers, and runners in the area. A road safety impact assessment should be required for this impact.

20. Biodiversity/ Ecological impact:

- a. Birds – There are breeding pairs of Peregrine falcons with established nesting sites close to the proposed development at Slatt which is only meters from the proposed southern cluster of turbines at Wolfhill. These birds hunt for food over the proposed development at Wolfhill and the surrounding areas. These birds must be protected per the EU Habitats Directive. In addition, there are multiple Buzzards which live, feed and breed in the area around Wolfhill and the proposed development site. There have been sightings of Hen Harriers in the fussy mountain area in recent years.
- b. Bats – 8 of the 9 Irish species of bat inhabit the local area and including in or around the proposed development site. The sweep area of the turbine blades of 1 turbine is approximately 5 acres with blade tips sweeping as close as 18m to the ground, 13 turbines of this size will have a devastating impact to the bat (and bird) population in the area. Bat mitigation buffer areas around turbines where trees and vegetation are cleared does not guarantee bats will not be injured or killed by the turbines.

Additionally, the bord needs to consider the cumulative effects of the Coolglass windfarm development in conjunction with other projects within 10 Km of the proposed development on the locally known bat populations and all wildlife in accordance with EU Habitats Directive.

- c. Red squirrels are in the area and have been observed close to the southern Wolfhill cluster and their habitat would be negatively impacted by this development.
- d. Badgers are present in both the proposed clusters and Badgers sets have been found in Fussy area in the proposed development. The development would destroy their natural habitat.
- e. The Pearl Mussel is present in the Nore SAC. Statkraft have not demonstrated or guaranteed zero silt contamination of watercourses in the EIA.
- f. Section 15.3.5 of Chapter 15 Biodiversity states:

"There is the potential for the bee species to be present within the Site, but not marsh fritillary, as there are no habitats supporting Devil's bit scabious Succisa pratensis (the caterpillar foodplant) present."

This is incorrect information from the developer. There are areas close to the forestry plantations within the site development boundary which contain Devil's Bit Scabious Succisa pratensis, the foodplant of the protected Marsh Fritillary butterfly (only Irish insect listed as Annex II protected species). It is noted no specific field study was performed for the Marsh Fritillary butterfly, as from the developer's assessment of desktop data, there are no habitats supporting the butterfly's foodplant. Per the

'maps.biodiversityireland.ie' there have been multiple recordings of the Marsh Fritillary in Coolglass, Wolfhill and The Swan in years. See figure 4 below.
A proper field study should be required due to the presence of *Devil's bit scabious* *Succisa pratensis* at the proposed development site.

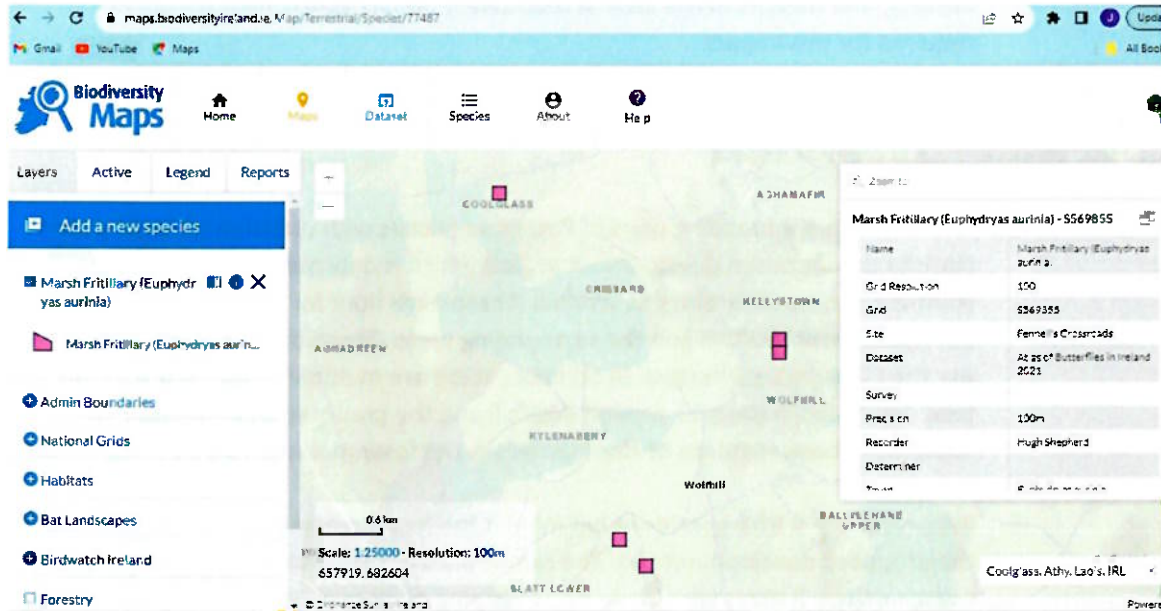


Figure 4: Screenshot from maps.biodiversity.ie website showing Marsh Fritillary recordings

- g. The Proposed Development is located within two river catchment areas: the northern cluster is in the Barrow catchment, while the southern cluster is in the Nore catchment. The River Barrow and River Nore SAC are approximately 8.1km downstream of the northern cluster and approximately 3.3km downstream of the southern cluster.
- h. Turbine foundations and hardstanding areas will remain in the ground forever having a profound environmental and ecological impact on the area.
- i. Drainage: How will drainage water be collected and transported to settlement ponds? (NTS section 3.6) Where are these settlement ponds located and what measures are in place to avoid watercourse contamination?

To conclude, we are a civilised community of local people, all with our concerns of global climate change and willing to play our part. I have PV solar panels at my own home and am doing my bit. However, this is just the wrong location for turbines and windfarms of this magnitude and all I am asking for is proper planning and sustainable development. I respectfully urge that planning permission for this development be refused.

I trust my observations and concerns will be taken into consideration prior to the decision being reached on this planning application. Please note my €50 observation fee was paid directly through the An Bord Pleanála website observation uploader on 03 Oct 2023.

Is mise le meas,
John Fleming

John Fleming