



Councillor
BRENDAN WYSE

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20th September 2021

To Whom It May Concern,

My sincere thanks for the opportunity to provide feedback on your ambitious Ballydermot Wind Farm project at this stage of the development process.

I wish your company the best of success with this project, however I do feel that the consultation which has taken place to date has been less than meaningful. Should this approach continue, a successful outcome for your project will become more difficult to achieve.

The European Commission's 'Guidance Document on Wind Energy Developments and EU nature legislation' recommends a participatory planning approach, where "two-way flow of information and ideas in which the proponent and the public are involved in shared analysis and agenda-setting and the public/stakeholders are voluntarily involved in taking decisions on project design and management through consensus on the main points."

Key points made at the first meeting of elected members with the project team in December 2020, in relation to scenic routes and setback distances, were disregarded entirely. I believe that the success of this project will depend largely on the degree to which your team works with the public and other stakeholders, and a marked improvement will be needed in this regard.

This will become particularly important when proposals for community benefits, protection of biodiversity and the provision of amenities are being discussed.

Thank you,

A handwritten signature in black ink that reads "Brendan". The signature is written in a cursive, flowing style.

Submission on the Draft Proposed Layout for Ballydermot Wind Farm

Cllr. Brendan Wyse

September 2021

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Lullymore Viewpoint

I am extremely concerned with the selection of the location for viewpoint 3, which was taken on the R414, east of Lullymore at Lodge Bog boardwalk (shown to the right).



Viewpoint 3 (looking east): View from the Regional Road (R403) in Lullymore, at the entrance to Lodge Bog Nature Reserve looking east and approximately 1.6km from the proposed development. VP3 on Viewpoint Locations Map.

The R414 from Allenwood to Rathangan is a designated scenic route in our County Development Plan for Kildare

and I brought this to the attention of the project team at our meeting in December 2020.

Viewpoints in a photomontage should present the “worst case (most open) available view”, as set out in the Draft Wind Energy Guidelines 2016. Inexplicably, the two turbines cannot be seen in the image as they are hidden by trees. This viewpoint does not provide the worst case and most open view from this unique view and in fact materially contravenes the guidance given in the guidelines by providing the least open possible view at this point.

In delivering this information in print to the local communities, the developer has not provided the best possible information to those communities. Trust with local residents, which will be an important factor throughout the development process, has been diminished as a result.

The unrestricted view from Lodge Bog to the Hill of Allen is shown in the photograph below, at a location on the R414 scenic route, less than 10 metres to the east of viewpoint 3.



View across Lodge Bog from R414 Scenic Route

Killina Viewpoint

It is noted that the viewpoint at Hamilton's Bridge on the Grand Canal at Killina (as shown below) varies from that used for the same location in the photomontage for the Cloncreen Wind Farm project. The decision to change the viewpoint to one at a lower elevation and where the view is partially restricted by the bridge and raised bank here is questionable.



View from Killina used in Ballydermot Proposal Photomontage

The viewpoint that was used for the Cloncreen photomontage presents the worst case and most open view of the Ballydermot Wind Farm.

Presenting this alternative, partially restricted view to the local community in your online and printed material does little to encourage a greater sense of local ownership in your project. I am respectfully requesting that the viewpoint be moved to the same location as that used for the Cloncreen Wind Farm (shown below).



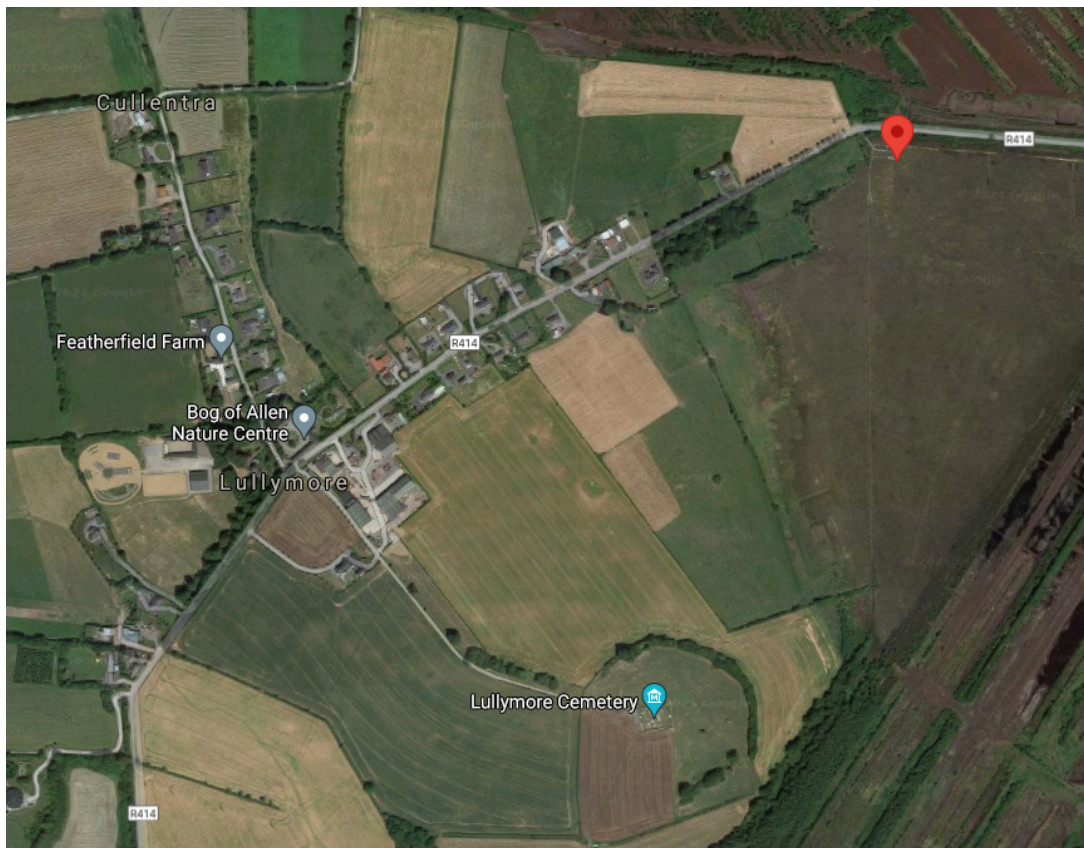
View from Killina used in Cloncreen Wind Farm Photomontage

Proposed Viewpoints

I kindly request the inclusion of the following viewpoints in the final planning application photomontage so as to allow the potential impact on the nearby local amenities and communities to be fully determined.

Lodge Bog Boardwalk

The impact of the two Lodge Bog turbines on the view across the Bog of Allen towards the Hill of Allen from the boardwalk here should be presented clearly by using a photograph taken from the corner of the boardwalk on the raised bog itself. This is representative of the worst case impact that these turbines will have on the landscape in this area.



Google Maps: <https://goo.gl/maps/r1U36ZBrvZKrquGb8>

Hamilton Bridge

As previously described, the location of the viewpoint which your company used from Hamilton Bridge in the photomontage for the Cloncreen Wind Farm, would also be suitable for this project. It would allow the impact on the amenity corridor that is the Grand Canal to be assessed at one of the key viewing points on the canal.

Ticknevin South

A number of homes in south Ticknevin overlook Derrybrennan Bog to the south. These homes are elevated to a good height above Derrybrennan Bog. It would be important to provide a future view of the proposed wind farm from this residential area.

I am recommending that the photomontage includes a viewpoint in Ticknevin from the location shown in the image below.

Google Maps: <https://goo.gl/maps/Zas4ruY9ixKw3JSB7>



View from Ticknevin towards Derrybrennan Bog

Grand Canal Towpath between Ticknevin and Edenderry

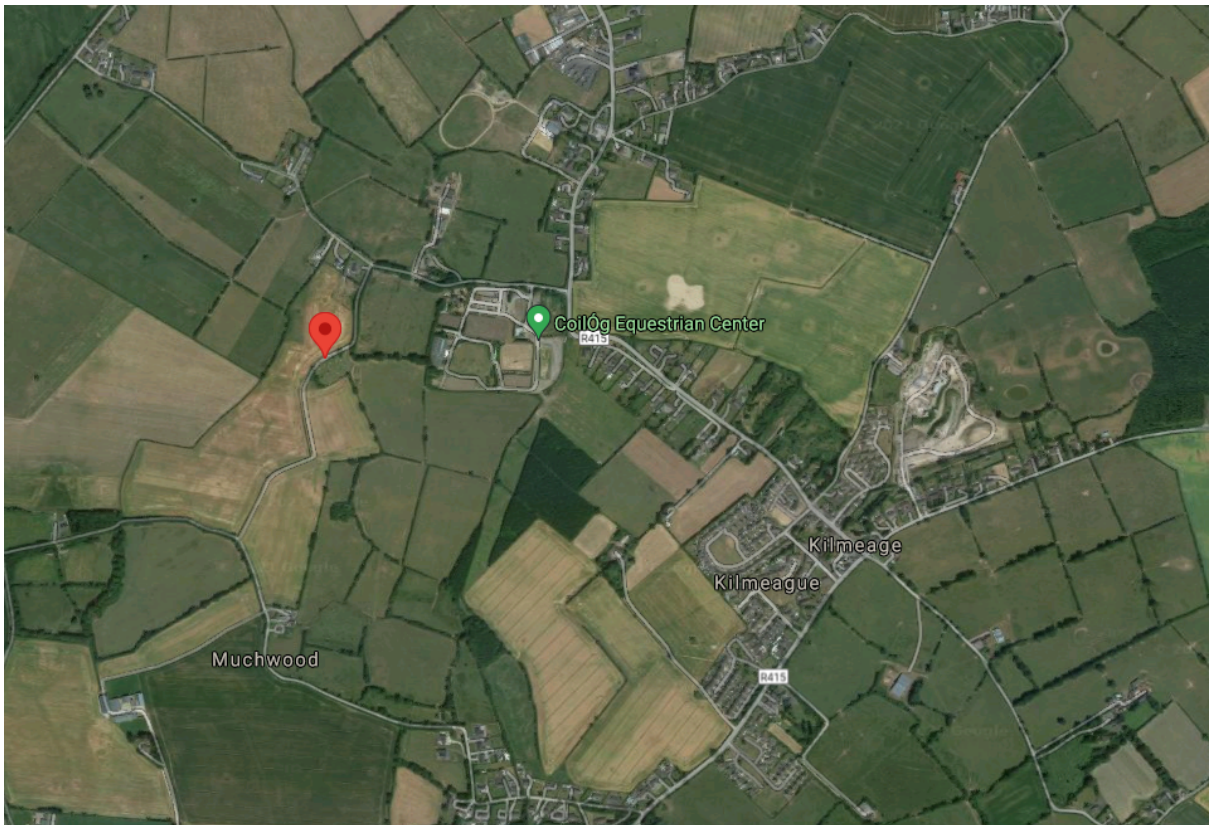
The extent of the towpath on the Grand Canal between Ticknevin and Edenderry, being part of the Grand Canal Greenway, is a popular walking route and one of the very few walking routes in Carbury Parish. The view to the south from the towpath into Ticknevin Bog will no doubt have an impact on this amenity corridor.

In order for that impact to be assessed it is requested that a location on the south bank of the Grand Canal between Ticknevin and Edenderry, with the most open view of the proposed wind farm, be included in the photomontage.

Crosspatrick Hill

Mount Lucas Wind Farm is clearly observable from Crosspatrick Hill. The cumulative impact of Mount Lucas, Cloncreen, Drehid and Ballydermot Wind Farms would need to be assessed by the inclusion of a viewpoint from this hill, at the entrance to the old graveyard.

Google Maps: <https://goo.gl/maps/kknfXaNHPQHoPXEM7>



Hill of Allen

The Hill of Allen is a popular amenity and scenic viewpoint which offers excellent views across the Bog of Allen from the top of Aylmer's Folly. In particular the 'islands' of Lullybeg and Lullymore rising out of the bog are notable from this viewpoint. An image of the proposed wind farm as it would look from the Hill of Allen will be necessary, not only to measure the impact on the unique view of the Bog of Allen, but to assess the cumulative impact of Mount Lucas, Cloncreen, Drehid and Ballydermot wind farms on the overall landscape of West Kildare.

Note that the entrance to the folly may be locked and access must be pre-arranged with Roadstone, who own the land. Please feel free to contact me if assistance is needed with this.

Google Maps: <https://goo.gl/maps/6xtSsVJ3bRB5epbP8>

Grand Canal on the Barrow Blueway at Griffith Aqueduct

The Griffith Aqueduct on the Grand Canal is a notable point of interest on the Barrow Blueway, which dominates the landscape of the Blueway amenity at this location. There is no doubt that most, if not all, of the turbines as proposed would be visible and significantly impact the landscape here. An image taken from the aqueduct, and included in the photomontage, would allow that impact to be adequately assessed and should be provided to allow Waterways Ireland and the local community to understand that impact.



View from Griffith Aqueduct towards Ballydermot

Google Maps: <https://goo.gl/maps/BoxSmkV88tg6iV5g8>

Lullymore Heritage and Discovery Park

Lullymore Heritage and Discovery Park is the most visited tourist attraction in West Kildare. Part of this attraction features a roadway into the peatlands, and an educational centre and boardwalk, all of which offer views across the Bog of Allen.

The project team should liaise with the management team of Lullymore Heritage and Discovery Park to provide a view from their premises which demonstrates the visual impact that the proposed wind farm will have on this unique attraction in our rural area.

Carbury Hill

The landfill facility at Drehid is already clearly visible from Carbury Hill. The proposed Drehid Wind Farm, Cloncreen and Ballydermot will also be visible from this popular scenic viewpoint where the ruins of an old castle remain.



View from Carbury Hill

It is requested that a viewpoint from this hill is also included in the photomontage and that the Drehid and Cloncreen Wind Farms are included alongside the proposed Ballydermot Wind Farm.

Google Maps: <https://goo.gl/maps/fMFAgentXkyNHGBVA>

Lullybeg Wetlands

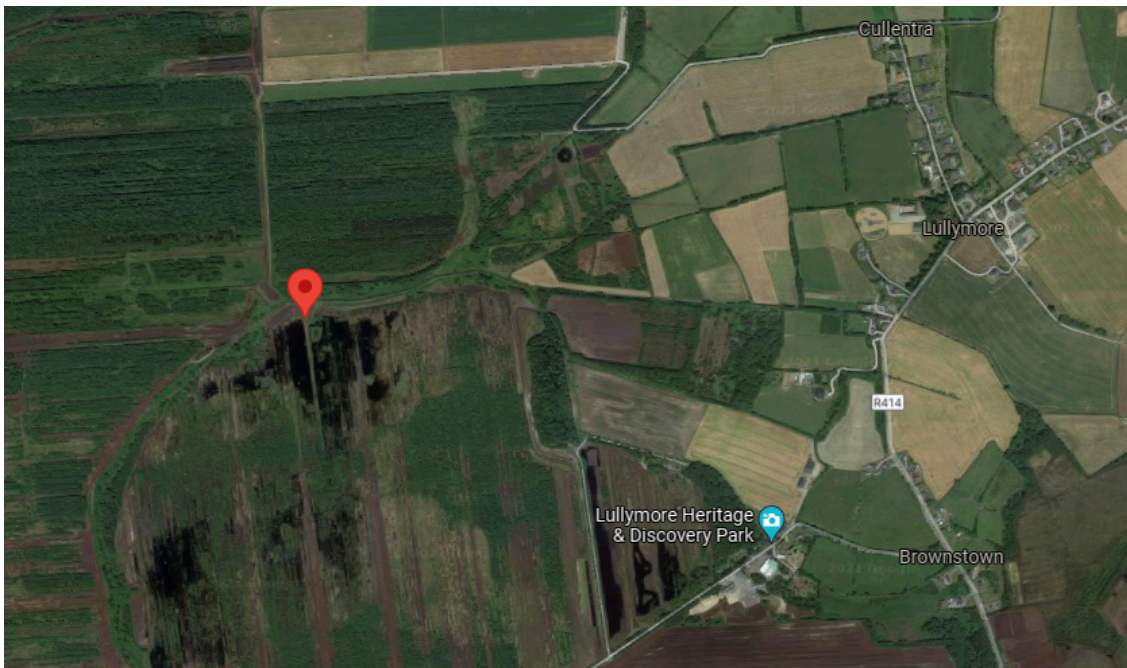
The vast re-wetted area of Lullybeg is already attracting a lot of visitors as it has transformed into a biodiversity hotspot more and more in recent years. Some of the proposed turbines would appear to be very close to the wetlands, and could potentially overshadow the wetlands. This section deals only with the visual impact. The potential impact on biodiversity is described in a later section of this submission.

We can already see that biodiversity is returning to Lullymore and Lullybeg as a result of the great work done by Bord na Móna here. It is essential that the visual impact on this rare amenity in West Kildare is presented so as to allow that impact to be properly assessed by all stakeholders involved in the area, including the Irish Peatland Conservation Council, Butterfly Conservation Ireland and Birdwatch Ireland Kildare Branch.



Lullybeg Wetlands

A regular visiting point is marked on the map below, where there is a short inlet in the lake. It is requested that this inlet be used as a viewpoint in the photomontage.

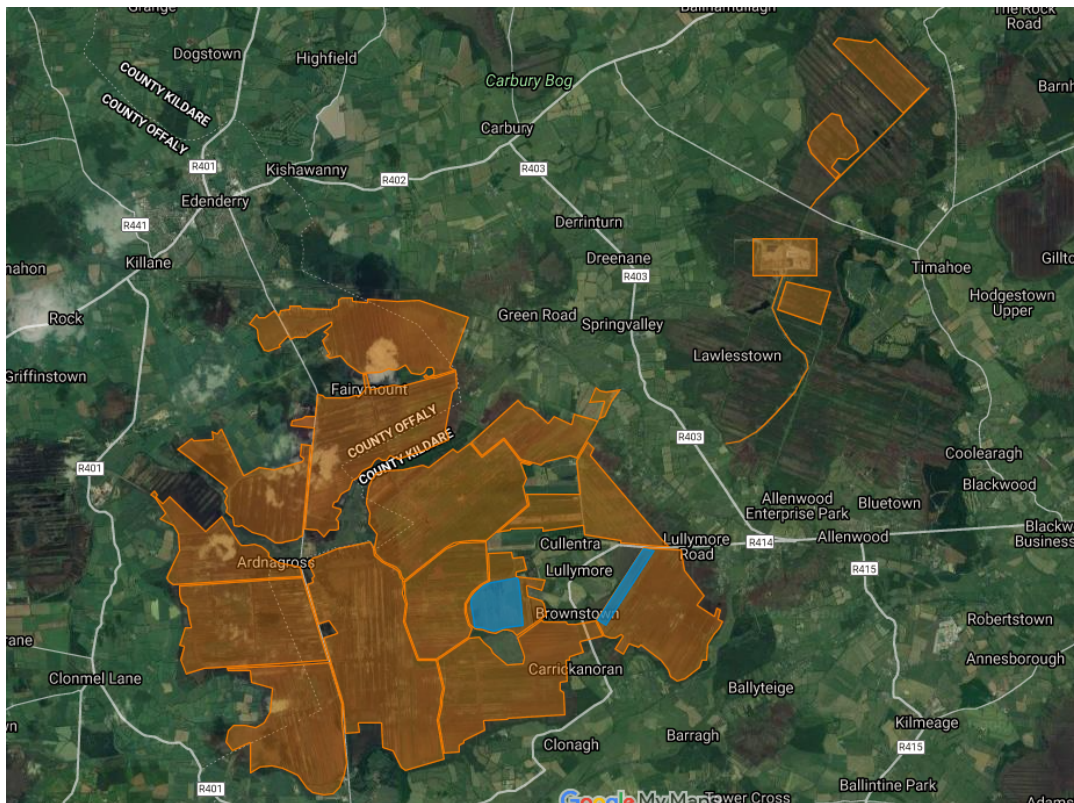


Google Maps: <https://goo.gl/maps/YqhadW9QCNMf1qvy8>

Balanced Development

I have concerns about the potential overdevelopment and excessive exploitation of the peatlands of West Kildare, most of which are managed by Bord na Móna on behalf of the state.

In our neighbouring county of Offaly, peatland development of wind farms and peatland educational and amenity centres, such as Lough Boora Discovery Park and Clara Bog Nature Reserve and Visitor Centre, has been carefully balanced.



The map above shows marked in light brown, from north-east to south-west, the footprint of the Timahoe North Solar Farm for which planning permission has been granted, the existing Drehid Landfill and the yet to be developed Mechanical Biological Treatment plant adjacent to it and the proposed Ballydermot Wind Farm.

The blue areas mark the only known areas in Lullybeg and Lodge Bog where re-wetting has commenced to date.

The extreme extent of the area of the proposed wind farm leaves very little room for a sufficient area of West Kildare peatlands to be left for educational, community and amenity use and wilderness corridors such as the proposed National Peatlands Park or the continued rehabilitation of Lodge Bog.

It is my opinion that the project should be scaled back to provide this balance.

Turbine Locations

Notwithstanding the economical drivers behind the Ballydermot Wind Farm project and consequently the obvious aim to maximise the area to be developed, I welcome the opportunity to provide feedback on areas where the development should be scaled back.

Lodge Bog

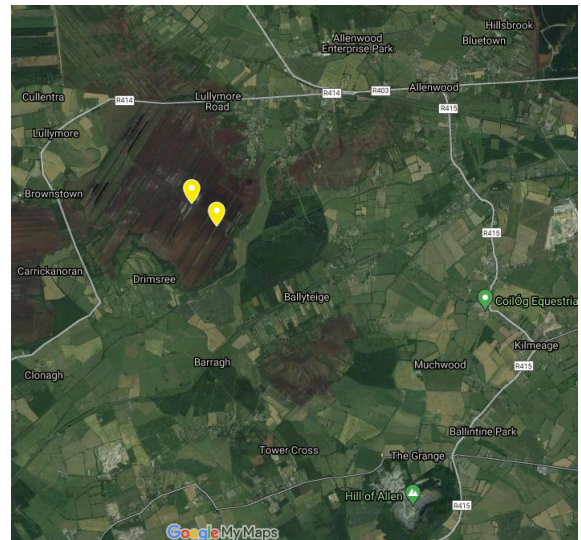
The view from the Lodge Bog boardwalk visitor attraction on the intact raised bog here is a unique selling point in the area, and part of the experience of this attraction, which has been operated and marketed by the Irish Peatland Conservation Council since 2005.

It is impossible to see how the installation of wind turbines on Lodge Bog could be mitigated so as to not have a major negative impact on the landscape and designated scenic route here.

The area is a key biodiversity hotspot with red listed wildlife being monitored in the rewetted area on the west side of the bog unit. Any development which threatens the viability of the raised bog or the progress made on biodiversity by rehabilitation would be strongly challenged.

To date, only minor rehabilitation has commenced on Lodge Bog. Notwithstanding that this bog unit was one of the 82 named under the €108 million PCAS scheme, the construction of access roads, turbine bases and the proposed substation would significantly reduce the potential for further rehabilitation here.

It is recommended to exclude all turbines in Lodge Bog from the final layout and to allow this area to remain for amenity and biodiversity awareness and education. It is acknowledged that a new location for the substation would need to be found also.



Biodiversity Hot Spot

Lodge Bog has a rich diversity of wildlife with over 388 plants, birds and animals finding refuge in it. There is an abundance of *Sphagnum* moss and *Cladonia* lichen, 26 birds including Curlew and Skylark, 12 dragonfly, 61 moths and 16 butterflies, including the Large Heath (*Coenonympha tullia*), and 47 spiders. The spider fauna includes *Hyposisinga albovittata*, which was discovered here in 2005 by Myles Nolan and is a new species to Ireland. You can enjoy a panoramic view of Lodge Bog from the seating area on the boardwalk which looks towards the Hill of Allen.

Volunteer action to conserve Lodge Bog

1. Frog
2. Bog Cotton
3. Sundew
4. Large Heath Butterfly on Cross-leaved Heath
5. Curlew
6. Damselfly
7. *Sphagnum* Moss

Raised bog habitat is a conservation priority within the European Union. We are fortunate that the habitats present on Lodge Bog include active peat forming raised bog, degraded raised bog capable of forming peat with hydrological restoration, high, uncut bog which supports the raised bog habitats and bog woodland. This vegetation map researched and drawn by Miles Newman in 2009.

View from Lodge Bog as presented in IPCC Leaflet

Ticknevin Bog

The Grand Canal is a proposed Natural Heritage Area and an Area of High Amenity and High Landscape Sensitivity in the Offaly County Council Draft Wind Energy Strategy, and for good reason.



The turbines proposed for Ticknevin Bog will dominate the landscape south of the Grand Canal and the Grand Canal Greenway on the towpath from Ticknevin to Edenderry. This is a landscape where the canal itself is currently the main focus, and should remain so.

The impact of these four turbines, and in particular the two most northern turbines, will need to be clearly identified and presented before finalising the project planning application. It is difficult to see, however, how the inclusion of all four of these turbines will not have a significant impact on the Grand Canal amenity corridor.

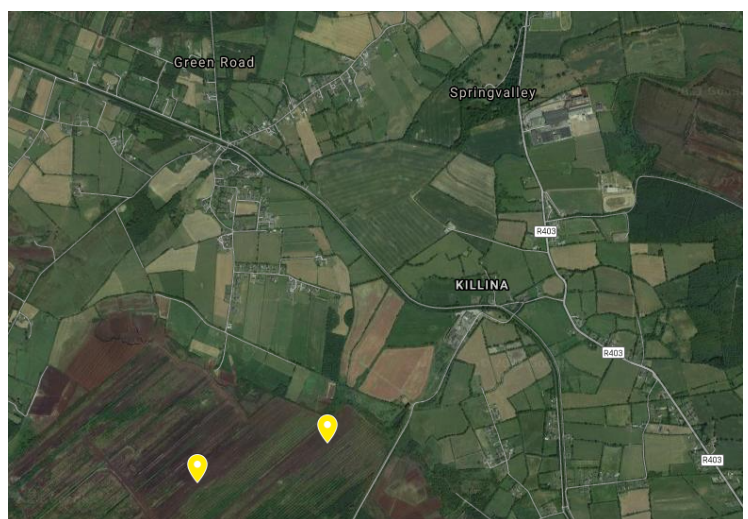
Derrybrennan Bog

The turbines in Derrybrennan Bog, situated close to the residential areas of Ticknevin and Killina, rely heavily on the minimum setback distance of 880 metres. It has already been requested that the setback distance be extended to allow for the flat nature of the land here, and its ability to carry sound further than more uneven terrain.

It would appear that the residences of Ticknevin just north of Derrybrennan will be overlooking the turbines, as the area is considerably more elevated than the cutaway bog itself.

If it is decided to proceed with the two turbines in Derrybrennan Bog then the viewpoint requested from the southern end of Ticknevin will be needed to allow the impact of these turbines to be properly assessed.

It is recommended that participatory consultation with the communities of Ticknevin and Killina takes place before a final decision to include these turbines is taken.



Lullybeg Wetlands

The large re-wetted area of cutaway in Lullybeg is fast becoming a significant biodiversity site. In the future, the lake and surrounding area could potentially become a Special Area of Conservation, similar to Ballynafagh Lake near Prosperous.

North west of the lake, the Crabtree Butterfly Reserve is managed and monitored by Butterfly Conservation Ireland. Signage is provided to educate walkers on the biodiversity living within.

To the north of the lake is the Irish Peatland Conservation Council managed Lullymore West Nature Reserve. Again, signage is provided to increase awareness of the biodiversity present here. The IPCC also markets the area and has produced a leaflet detailing the Nature Reserve.

This area also contains many pleasant grassy and tree-lined trails for walking, forming a loop around the western edge of Lullymore and Lullybeg islands and back through Barnaran and Lodge Bog.

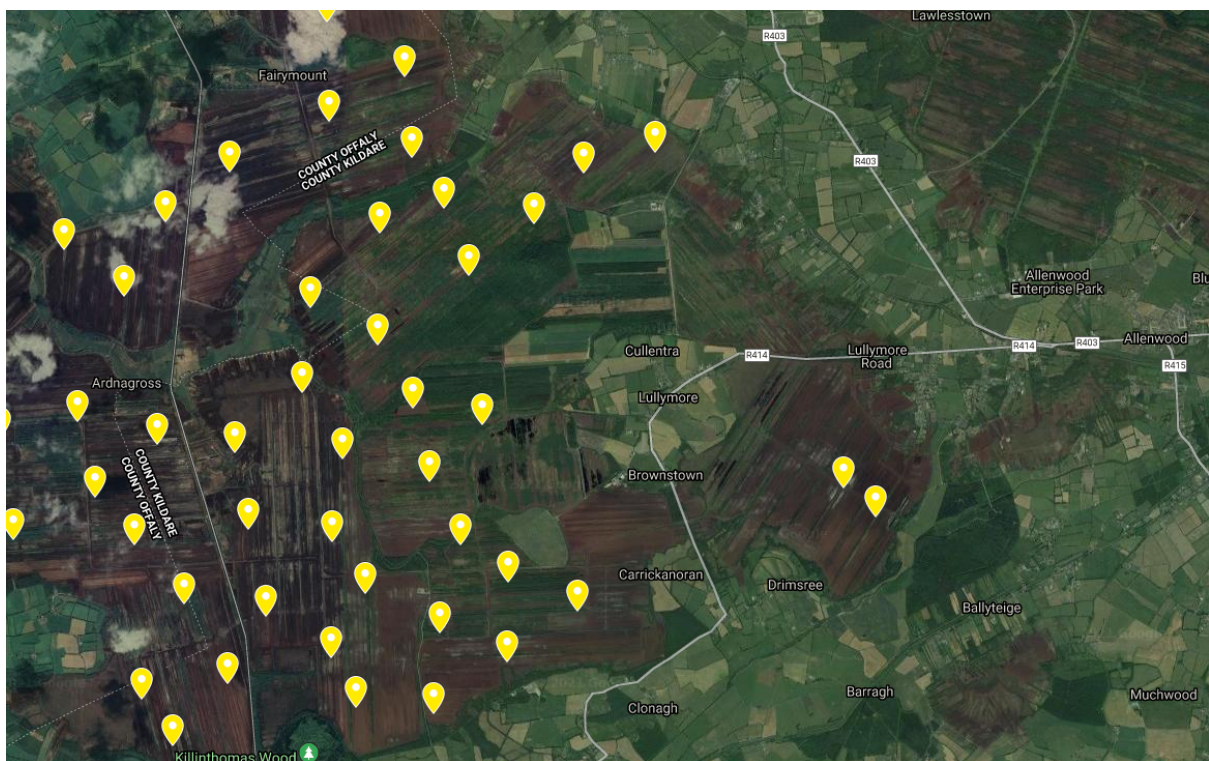
There are four turbines in close proximity to the lake, and I ask the project team to engage with, and listen, to groups such as the Irish Peatland Conservation Council, Butterfly Conservation Ireland and Birdwatch Ireland Kildare Branch regarding the impact these turbines could have on the biodiversity in the Lullybeg Wetlands area.



Mapping Method

Whilst acknowledging that the method of providing turbine locations by overlaying an opaque layer on an Ordnance Survey map has been used by your company for previous projects, I do find the approach quite outdated and not what I would consider to be best practice when working with a development of which the position of the structures in relation to known landmarks on the ground is a key factor.

A more open approach would be to provide a transparent layer over the original map, allowing local rivers, roads and other points of interest to be used as reference points from which the proposed turbine locations can be determined on the ground. The map below was created by using free online tools, in less than a day (<https://b-wy.se/ballydermot-map>).



Proposed Ballydermot Wind Farm mapped using Google MyMaps

I note that a request for the geospatial coordinates of the proposed turbines was refused on the basis that precise coordinates were not available at this stage. It would be useful therefore, if your company can confirm how the positioning of the turbines as used in the photomontage images was obtained and if the accuracy of the same is dependable.

As set out in the EC Guidance on Wind Energy Developments and EU Nature Legislation, “the entire process needs to be transparent and open”, and “data should be made open to the public when requested”.

Community Walkways

Notwithstanding the popularity of the access tracks in Mount Lucas Wind Farm for walking and cycling, the stoney tracks there do not provide the same experience as one gets by walking many of the existing grassy, tree-lined peatland trails in the Ballydermot Bog Group.

The dusty Mount Lucas access tracks are more suited to maintenance and security vehicles and while providing a good view of the turbines, do not provide an authentic peatland visitor experience.



Mount Lucas Access Track

For this reason, it is requested that the trails and tracks along the existing railway lines in the Ballydermot Bog Group be left intact, and maintenance and security access roads are constructed separately and away from these trails.

A community led effort has been ongoing for some time now, with some engagement from Bord na Móna, to see the routes of the old railway lines maintained as walkways through the Bog of Allen.

The development of Ballydermot Wind Farm offers a good opportunity to see those routes upgraded and secured for local amenity use and as part of a tourist attraction for West Kildare.



Old Railway Line in Lullybeg

Working with a group of local volunteers, I provided a draft proposal to your project team on how the walkways could be used as part of a wider West Kildare Biodiversity Trails amenity and would welcome some meaningful discussion on how this could be delivered alongside the wind farm, separately to the necessary maintenance and access roads.

Carbon Calculations

An important aspect of the project proposal will be the calculations to show the total carbon footprint of the development. These calculations will take into account the peatland areas that will not be rehabilitated and will continue to be sources of carbon.

It is requested that these calculations are explained clearly, in layman's terms, and that the time needed to rehabilitate the remaining cutaway peatlands is taken into account. It would be welcomed, if for comparison, calculations were provided outlining the carbon footprint which would be achieved by rehabilitating all the peatlands, and situating a similar sized wind farm on a non peatland area.

Proper, planned rehabilitation has not commenced on many of the bogs which are long since out of production. A detailed report on the work done on each bog unit, and timelines for future work and the project time required to turn these cutaway peatlands around from carbon sources to carbon sinks, would be welcome information alongside the carbon calculations.

Hydrology

It is important that the assessment of water courses and hydrology is proper and complete. I would say, based on local knowledge, that a desktop study alone would be inadequate and that a complete survey on the ground will be required of all water courses in the catchment areas of the proposed development.

Some water courses have been diverted, restricted or blocked completely due to peat extraction activities and I have observed water course maps from Ordnance Survey Ireland and the Environmental Protection Agency to be inaccurate and incomplete at present.

The groundwater hydrology of the particular bog units should also be assessed in detail, and provided for scrutiny so as the potential for flooding and other hydrology related impacts can be adequately assessed.

Floating Access Roads

It is recommended that the development should use floating access roads, rather than digging to the bedrock, where physically feasible. This will ensure the existing hydrology is maintained, which will be particularly important if it is decided to proceed with development of access roads on the Lodge Bog unit, which is isolated and appears to rely on groundwater flowing in a west to east direction towards the silt ponds and pumped drainage system on the eastern edge.

Continued Drainage

The impact of continued drainage should be given detailed attention. The current IPC licence, issued for peat extraction activities, should be assessed for legal compliance for use with the wind farm. A copy of the IPC licence application files should be available as part of the planning application, or ideally earlier.

I have observed the existing drainage system on Lodge Bog malfunctioning to the point where the silt ponds, designed to allow the contaminants in the peat to settle instead of entering the Slate River, are completely bypassed. This not only introduces contaminants into the Slate River, but also causes flooding in local farmlands.

If it is intended to continue with the pumped drainage of Lodge Bog, then the system should be monitored and upgraded to ensure it can handle the increased rainfall that climate change will bring over the lifetime of the wind farm.

It is also noted that planning permission was not obtained for the pumped drainage system control panel and platform, and that this should be sought as part of the development's planning application if continued drainage is required here.

Minimum Setback Distance

The proposed layout is based on a minimum setback distance of four times the tip height of the proposed turbines. It was asked in our December meeting that consideration be given to the flat open landscape of the cutaway peatlands, and the ability for sound waves to travel greater distances here, when determining the minimum setback distances.

The developer will acknowledge that the area available here is possibly the largest extent for any wind farm development in Ireland. Allowing for a minimum setback distance of 1 kilometre, still provides ample space for substantial wind farm development.

Allenwood South Substation

It is noted that in proposals for other wind farm developments, such as Cloncreen, multiple possible locations for the associated substation were provided. A single location for the substation for the Ballydermot Wind Farm has been proposed in Allenwood South.

No detail has been provided to local communities informing them what the substation development fully entails. In addition, the proposed plan does not indicate how access to the proposed substation in Allenwood South would be provided.

Substantially more detail on the typical layout and equipment that is used in the substation, how the station would connect to the electricity grid and how it would be accessed and how often, would be welcomed.

If it is decided to proceed with the substation in Allenwood South, then participatory consultation with the local community should take place regarding the complete design for the substation and how access to it should be obtained.

Cloncreen Wind Farm

It would appear that the turbines of the Cloncreen Wind Farm, which is currently under construction, are included in the photomontage simulated images. I ask that this remains the case for future photomontage images.

Drehid Wind Farm

The Drehid Wind Farm will be visible from many of the elevated viewpoints I am proposing to be used for the final photomontage. In order to assess the cumulative impact of all wind farm developments, it should be included in the modeling also.

National Peatlands Park

It is requested that the project team consider the proposed plans for a National Peatlands Park, and how this can be delivered alongside the Ballydermot Wind Farm, as a high priority factor in the final design.

I have already outlined concerns around the scale of the proposal and the lack of balance between developed areas and biodiversity and amenity areas. Suggestions have been made for how this balance could be achieved through the provision of walkways and wilderness corridors.

These amenities should be taken in conjunction with the bigger concept of the National Peatlands Park as part of a combined long term future plan for the whole peatland area of Ballydermot.

Is essential that the project team engage and work with the key stakeholders of the National Peatlands Park proposal in a participatory manner, at all stages of the wind farm development.

Low Frequency Noise

Section 3.3.2 of the Draft Wind Energy Guidelines provides good solid guidance on how future issues relating to low frequency noise will be dealt with. The Draft Guidelines state that “under some running conditions wind turbines can generate special audible characteristics in the form of amplitude modulation, tonal and low frequency noise at distances of hundreds of metres from the turbine.”

The Draft Guidelines also describe how “the assessment of tonal, low frequency and amplitude modulation characteristics require specific measurement techniques”. Kildare County Council would lack the expertise and equipment at present that would be necessary to investigate such complaints, and would rely on the experience of the developer in this regard.

It would be useful if the project team can outline how reported issues with low frequency noise have been assessed and dealt with in relation to the Mount Lucas Wind Farm or any others owned by the developer.

In order to abate fears over low frequency noise, I recommend that the developer outlines in detail the ways in which the unintended generation of low frequency noise by wind turbines can be mitigated by technical or physical means.