

WADSWORTH PARISH COUNCIL

WADSWORTH PARISH COUNCIL RESPONSE TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION

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7 June 2026

Wadsworth Parish Council's response to Calderdale Energy Park's statutory consultation is written by the Peatland Alliance - a coalition of three local voluntary environmental groups: Ban the Burn, Forus Tree and Upper Calderdale Wildlife Network with input from Wadsworth Parish Cllrs.

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This response to the statutory consultation on the preliminary environmental information report (PEIR) has been compiled by unpaid parish councillors without expert knowledge, members of Upper Calder Valley voluntary environmental groups, Ban the Burn, ForusTree and Upper Calder Wildlife Network, and Upper Calder Valley residents, and to a very tight time deadline considering the massive amount of information in the PEIR. They have brought a breadth of skills and knowledge to this response, which they have made with the utmost seriousness. This shows the high value that Wadsworth parishioners, together with residents of the Upper Valley, place on Walshaw Moor as an ecosystem and wild place that would not survive the imposition of major infrastructure.

I am proud that they have been able to produce such a high-quality response in the limited time available. The generally accepted Gunning Principles recommend a 12-week minimum period for public consultations, but this consultation period has only had nine weeks allocated, the first four of which were during a pre-election period.

Despite numerous requests to extend the consultation period CEP have refused to allow more time for respondents to consider the proposal. In addition, the wrong email address was published in official literature for people to respond to by email, which means that some responses by email may be lost. In a survey of our parishioners 94% said that they were against the proposal to build a wind farm on Walshaw Moor, despite 82% being in favour of wind power in general.

Jon Kimber 7 June 2026

STATUTORY CONSULTATION TOPICS WE HAVE RESPONDED TO:

We have limited our response to statutory consultation topics that are about the proposed development's impacts on Walshaw Moor as a highly protected ecosystem- including flood risk.

We also respond to the statutory consultation's omission of any consideration of the new national policy context, inasmuch as it has introduced protections for peatland in relation to proposed developments for big onshore windfarms on English peatland.

We have not had time to respond to other topics. Our silence about them should not be taken for approval or agreement.

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OVERVIEW OF OUR RESPONSE TO THE PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

1. Wadsworth Parish Council responded to the Sept 2025 Scoping Report with the view that Walshaw Moor Estate should not be the location for a wind farm. The PEIR has not given us reason to change our mind

We were - and remain - at a loss as to why a huge windfarm should be put on the most highly environmentally protected land in the country, when both the non-statutory consultation and the Scoping Report fail to demonstrate convincing climate or nature reasons for it.

The PEIR seems like a further waste of time. It has failed to provide the required justification for the need to site infrastructure on peatland, which the 2025 National Policy Statement for Renewable Energy EN-3 requires applicants to provide:

Where developments are proposed on peatlands, including deep peat... applicants must provide justification of the need for infrastructure to be sited on peatland. (*2025 National Policy Statement EN-3, 2.12.78*)

This is a fundamental omission.

It is more than an omission. The PEIR has failed to mention ANY aspects of the 2025 National Policy Statement for Renewable Energy EN-3 that provide additional protections for peatland. Its misrepresentation of the national policy context for NSIP onshore windfarm developments on peatland amounts to censorship. We explain this in 3, below.

We do not count Calderdale Energy Park's misleading quantification of alleged carbon emissions savings as any such justification for the decision to site the proposed windfarm on blanket bog. With regards to future electricity baselines, the applicant is still comparing the wind farm with natural gas, both with and without CCS. This is missing the point that this natural gas generation is being built as back up for when the wind is NOT blowing – this development should be being compared to other wind farms, both onshore and offshore, solar, and nuclear power, large scale or SMR. This will give a more meaningful indication of how green the proposed development is.

Current carbon intensity of new renewable energy sources in the UK: -

Onshore wind	11g/kWh
Offshore wind	6g/kWh
Solar farms	20g/kWh

Nuclear 8g/kWh
Nuclear (SMR) 15g/kWh (estimated)

Obviously, to calculate the carbon intensity figure for the proposed development involves making a lot of assumptions, as the developers already have. We explain their mistaken assumptions in our Response to PEIR Carbon and Climate Change - summarised in 6.6 below.

Peatland Alliance therefore entirely rejects the proposed development.

2. We regard the PEIR as a post-truth document that creates confusion among the public and their elected representatives.

The PEIR's radical shortcomings mean it doesn't seem to fulfil the purpose intended for it in Planning Inspectorate Guidance:

“Provision of PEI may assist in the identification of potential issues, enabling these to be addressed at an earlier stage in the pre-application consulting process.”

On close inspection - which it is unreasonable to expect the public to do - baseline surveys are often evidently inadequate.

So there is no real basis for:

- The preliminary environmental impact assessment work in the PEIR
- Restoration proposals as part of the design of the Proposed Development, and
- Mitigation/compensation environmental measures for inclusion in the Environmental Statement, that are claimed to reduce the predicted impacts to "residual" levels.

Even if the PEIR presented this information clearly and concisely - which it doesn't - it would be misleading because of the errors it is based on.

Assessment of likely impacts on the baseline environment is equally tendentious and unsatisfactory. (7, below)

3. The PEIR has censored key National Policy Statement information that applies to proposed Nationally Significant Infrastructure Project windfarms on peatland.

It has failed to justify why they need to build a windfarm on peatland, and to show that they first ruled out other locations before choosing a peatland location.

But they must meet these government requirements, that are spelled out in the 2025 December 2025 National Policy Statement for Renewable Energy Infrastructure (EN-3), paras 2.12.76-2.12.78,

3.1 It is clear that NSIP onshore wind farm applicants must “justify the need for infrastructure to be sited on peatland,” and “should rule out other locations before siting developments on peatland”

This is part of the government's effort to give English peatland some protection from NSIP onshore windfarms. It received overwhelming public support in the 2024 public consultation on how to balance ‘Supporting green energy and the environment.’

We think the statutory consultation should acknowledge this reality of the policy context for their proposed development.

Instead, Calderdale Energy Park act as if the sole issue is achieving Net Zero. It isn't, and there is widely accepted peat science evidence that putting windfarms on peatland is likely to undermine the green transition, not help it.

3.2 PEIR censorship of peatland protections in National Policy Statements

Calderdale Energy Park's statutory consultation and PEIR appear to have censored any mention of the peatland protection measures in NSIP onshore windfarm National Policy Statements.

It has also ignored Natural England's Scoping Response request for “a robust assessment of alternatives” to demonstrate why Calderdale Energy Park had selected the proposed site, “particularly given its complex environmental constraints.”

PEIR Chapter 5, Alternatives and Design Evolution 5.2.5 omits the peatland-related guidance in its mention of Section 2.12 of the NPS for Renewable Energy Infrastructure EN-3. It selectively alludes to its generic guidance on factors influencing site selection, layout design and the appearance of onshore wind farm infrastructure, In relation to “design evolution and the consideration of alternatives.”

In this way, the Biodiversity PEIR evades justifying the need for infrastructure to be sited on peatland, although this is a DESNZ requirement. It also avoids giving evidence that they first ruled out other locations before siting developments on peatland.

3.3 Money makes the turbines go round

Christian Egal eventually admitted at the Denholme consultation event that the selection of Walshaw Moor is about money.

(Additional info in Biodiversity Response, 3.1)

Is corporate profitability a good reason to damage the ecological integrity of irreplaceable, red-listed blanket bog, interconnected protected peatland habitats and breeding assemblages of red-listed birds? We don't think so.

More info in Biodiversity Response, Section 3.

4. The Statutory Consultation misrepresents public feedback to the non-statutory consultation last year as “concerns about locating turbines in areas of deep peat.”

This was not the case. It was not and is not about deep peat, it was and is about any and all peat.

The united campaign groups' response last year was to say NO to windfarms on protected peatland. And we advised people to respond likewise, by telling Calderdale Energy Park that they were aware that "Protected peatland like Walshaw Moor is NOT the right place for a windfarm and I reject the Calderdale Energy Park proposal in its entirety."

We have not fallen into the Statutory Consultation trap of focussing rejection of the proposed development on its impact on deep peat.

First, this would miss the point that the proposed windfarm's impact on shallow peat would be damaging - and in some ways worse. Shallow peat may be more vulnerable to the hydrological impacts of infrastructure. Shallow peat is a significant carbon store - any given area of it holds as much carbon as the same area of tropical rainforest. And it can be a more probable location for peat slides than deep peat.

Second, a focus on deep peat would feed the statutory consultation spin that Calderdale Energy Park has taken account of your previous feedback by micro-siting several turbine positions "to avoid deepest peat and blanket bog, ensuring their design better aligns with best-practice peatland protection and restoration principles."

5. ‘Competent experts’ appear to lack peat ecohydrology knowledge and competences.

So you're not going to get appropriate hydrology baseline surveys and data, and nothing will work that follows from that data - including flood risk modelling and mitigations, as well as habitat conditions assessment and peatland habitat restoration plans.

We say this on the basis that:

- The competent biodiversity experts do not appear to include a peat ecologist.
- The competent flood and hydrology experts don't have experience of working with peat or knowledge of working with an ecohydrology approach. But they say this is ok because they are working with the competent peat expert.
- The competent peat expert is a geoscientist who admits to not knowing about peat ecohydrology but says that's ok because he works with a competent biodiversity expert. He is also the author of a contentious Welsh renewables industry paper advocating a "tiered, condition-based framework for peatlands", in place of the Welsh government's policy of protection for all peat, whether designated or not. Aspects of the PEIR indicate Calderdale Energy Park's covert adoption of this position. The paper has been rebutted by the Director of the IUCN UK Peat Programme. We are equally unimpressed. More info below, s7, in our Biodiversity Response and our Peat, Hydrology, Hydrogeology and Geology Response.

6. The statutory consultation and the Preliminary Environmental Information Report on Biodiversity, and Peat, Hydrology, Hydrogeology and Geology are full of errors, omissions and inconsistencies

In several significant instances, key technical sections of the PEIR reject, ignore or fail to consider Scoping Opinion feedback about the sources of information, data collected and the scope of the EIA.

We therefore doubt the claim that: "The feedback received through the Scoping Opinion has informed this PEIR, in particular the sources of information consulted, data collected and the scope of the EIA." (PEIR Chapter 7, Methodology, 7.4.2)

6.1 Apparent breach of Regulation 14(3)(a) of the EIA

It appears that the PEIR is in breach of Regulation 14(3)(a) of the EIA This states that the Applicant's ES should "be based on the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)...

"It is for the Applicant to demonstrate how an ES submitted as part of an application for development consent meets this requirement, and to justify any deviation from the SoS's Scoping Opinion due to the evolution of the project or methodologies."

As the Preliminary Environmental Impact Report is the basis for the Environmental Statement, we'd expect it to comply with Regulation 14(3)(a) of the EIA and either follow the Scoping Opinion or justify why it hasn't. Instead the PEIR

routinely fails to even consider key Scoping Opinion advice. We only know this because Wadsworth Parish Council made a detailed Scoping Response last September and later checked the Planning Inspectorate's published Scoping Opinion carefully. It is unreasonable for Calderdale Energy Park to assume such prior knowledge on the part of the public. And it is not our job to tell the public what's missing from the Statutory Consultation, it is Calderdale Energy Park's job to provide adequate information for consultees to make an intelligent response to the proposed development.

That includes an assessment of the applicant's team's competence to safely and lawfully develop the proposed wind farm. We think it is problematic that none of the competent peat, hydrology and hydrogeology experts has qualifications or competences in peat ecology.

In addition, competent experts are required to exercise their professional judgement with an impartial regard to evidence. We think the competent peat expert may be in a position of conflict of interest, as the author of a position paper that advances an industry agenda. The IUCN UK Peat Programme Director has criticised it as presenting flawed evidence. At the very least we think there should be a conflict-of-interest statement in his bio in Appendix 1-1 Statement of Expertise.

(More information in Response to Peat, Hydrology, Hydrogeology and Geology, Chapter 10, s1.2, 3.2)

6.2. The PEIR Chapter 10 and Appendix 10-9 seem materially incomplete for flood-risk assessment purposes.

Calderdale Energy Park has not acted on Scoping Opinions from the Planning Inspectorate, the Environment Agency and Natural England which advised the Preliminary Environmental Information Report to generate accurate baseline data for the preliminary assessment of habitat loss, degradation and subsequent changes to habitats. We think these data are key to an ecohydrological assessment of the flood risk from the proposed development on Walshaw Moor to downstream Hebden Bridge.

The fact that no such data exist is a big problem for the draft flood model that Calderdale Energy Park has sent to the Environment Agency for their feedback. But at consultation events, members of the public have been told that the Environment Agency is happy that the draft model will show that, with mitigations, there will be no increased flood risk to Hebden Bridge.

How can they be making this claim? When it seems that the necessary baseline data to run the model is lacking, and there is no clarity about how Calderdale Energy Park's draft 'direct rainfall runoff flood model' would estimate the flood risk impact of the proposed development on Walshaw Moor - and hence to Hebden Bridge.

The competent flood expert told a Parish Councils Forum meeting with Calderdale Energy Park that the draft model would estimate the flood risk impact of the proposed development on Walshaw moor - and downstream - on the basis of estimates of how the proposed development would change the blanket bog topography - and so, the runoff.

There is nothing about this in the PEIR Preliminary Flood Risk Assessment, and at the Parish Councils Forum meeting with Calderdale Energy Park the flood expert didn't say how they intend to model the changes to Walshaw Moor's topography. Our contention is that realistically, it must be on the basis of data from a preliminary assessment of habitat loss, degradation and subsequent changes to habitats. Since that is what causes topographical change to Walshaw Moor's blanket bog.

Without accurate data about topographical change to Walshaw Moor caused by the proposed development, there can be no accurate assessment of the flood risk to Hebden Bridge. So if and when it comes to the Environmental Statement, it seems that it will be in breach of the 2025 National Policy Statement EN-1 paragraph 5.8.12, which states that development should be designed to ensure "there is no increase in flood risk elsewhere,"

As a result, PEIR Chapter 10 and Appendix 10-9 seem materially incomplete for flood-risk assessment purposes. There are well-founded anxieties in Hebden Bridge about increased flood risk from the proposed development, which Hebden Bridge Flood Alleviation Scheme has not been designed to mitigate - and why should it?

We cannot accept PEIR Chapter 10 and Appendix 10-9 as an adequate basis for statutory consultation. We do not see why we should have to wait anxiously for the Examination Stage to see if the Environmental Statement provides enough accurate evidence that there would be no increase in flood risk in Hebden Bridge. We further contend that the PEIR is not an adequate basis for a passable Environmental Statement and we hope the Planning Inspectorate will refuse to accept it and the Development Consent Order application for examination, when the time comes.

6.3 Examples of substantive Preliminary Environmental Information Report errors and omissions

In the key technical sections of the PEIR that we have read, there is an unacceptably large number of substantive errors, omissions and inconsistencies. For the sake of brevity, a few examples are given below.

There are also annoying and time-wasting clerical errors that frustrated and confused us as we tried to follow threads of information across the complex documents. We identify

some of these in our detailed response to various PEIR topics (*More info in Response to Peat, Hydrology, Hydrogeology and Geology, Chapter 10, s3.1*)

The whole PEIR seems designed to put people off reading it and making informed replies. (*More info in Response to Peat, Hydrology, Hydrogeology and Geology, Chapter 10, s3.2*)

The restoration proposals seem largely limited to the questionable proposition in the Outline Peat Management Plan, that reusing excavated peat is an effective peatland restoration measure. There are good reasons to be sceptical of this claim. *More info in 7, below.*

We therefore question the PEIR claim that the current wind farm design has anything to do with best-practice peatland protection and restoration principles.

Pretty much all the peat, hydrology, habitats and habitat condition assessment baseline survey work that depends on defining peat has been compromised by:

- field study errors,
- the use of inappropriate definitions of peat, as a result of the PEIR failure to consider Natural England's Scoping Response recommendation to use the 2025 English definition of peat, i.e. Definition of Favourable Conservation Status of Blanket Bog.

As the basic error about peat definitions is one detail among thousands of pages, people are confused and frustrated about the opaqueness of the PEIR in terms of:

- What peat definition it uses when,
- How this affects baseline data about the peat
- Claims about changes to the proposed development design since the non-statutory consultation and Scoping Opinion.

No information about the PEIR's pick and mix approach to peat definitions has been clearly presented in the PEIR. It took us ages to figure out the PEIR's inconsistent approach to defining peat, what definitions it was using where, and how this practice has enabled misleading under-estimates in the quantification of wind farm environmental and climate impacts - and, we believe, flood risk assessment both for the Walshaw Moor turbines area, and from the Walshaw Moor turbines area to Hebden Bridge.

(More info in 6.5.2 below; Response to Peat, Hydrology, Hydrogeology and Geology, Chapter 10, s3; and Response to the Preliminary Flood Risk Assessment, s3)

Examples of SUBSTANTIVE ERRORS AND OMISSIONS

6.4 Appendix 10-9 (Preliminary Flood Risk Assessment) has failed to consider the Planning Inspectorate's Scoping Response advice about the flood study area and Hebden Bridge Flood Alleviation Scheme

As outlined above in section 6.2 the PEIR Preliminary Flood Risk Assessment does not provide enough accurate, consistent information to allow anyone to see if it is adequate preparation for the work of doing the Flood Risk Assessment that has to be completed by November, which the Applicant has said is the intended date for submitting the Environmental Statement, HRA and DCO.

For this reason, the PEIR Preliminary Flood Risk Assessment is inadequate for consultation since it omits to say what data its flood risk assessment models will run on when it finally gets round to making it. A model is only as good as the data it runs on, and we need to know.

Following some intensive focussed questioning of the competent flood expert at Trawden consultation event and a request from the Parish Councils' Forum, on 12th May the competent flood expert gave a presentation on the Direct Pluvial Runoff Flood Model that is to be the basis of the Flood Risk Assessment. The model and its data inputs seem to be inappropriate as they give no consideration to peat ecohydrology.

There is additional info in our detailed response to Appendix 10-9 (Preliminary Flood Risk Assessment)

6.5. Peat depth surveys

Site peat depth surveys undertaken to date have comprised 8,263 probe hole locations. As a headline number this may seem impressive. However, it is a very simple screening method that has been used, that yields very little quantitative data.

6.5.1 Peat cores have only been taken at 0.1% of probe locations and there is no record of groundwater monitoring

To understand groundwater-surface water interaction within the blanket bog, it is necessary to combine installation of a groundwater monitoring piezometer network, and many more peat cores than the 8 that have been carried out. Calderdale Energy Park state that as a result of their walkover surveys they have an understanding of where water tables drop or flow paths are disrupted, but this is purely based on surface observations and not actual water table data which will vary through the year and seasonally.

The main thing peat probing allows is to provide a reasonable first estimate of peat thickness. CEP has stated that probing results were verified by representative coring. However, this was only completed at 8 locations, <0.1% of probe locations and equivalent to one core per 278 hectares of the proposed Turbine Site. (PEIR Appendix 10-2.) We consider this a wholly inadequate dataset.

It is not verification; rather a first look at peat and superficial deposit geology.

It is not the basis for establishing the spatial distribution of peat across the PEIR boundary.

But the PEIR seems to think that it is enough to comply with National Policy Statement for Renewable Energy, (EN-3), 2.12.151, that requires: “The Secretary of State should be satisfied that areas of deep peat within a PEIR Boundary have been avoided through development design.” (PEIR Chapter 11 Carbon and Climate Change 11.8.31)

Calderdale Energy Park must be joking.

The probe hole information has been taken by Calderdale Energy Park and the “feel” of each probe hole used to estimate superficial geology underlying the peat. They have tabulated more than ten subsoil geology types based on this feel. This is pure guess work, literally a stab in the dark, and it significantly overstates the ability of a probing technique to understand such a thing. At best one might be able to sense if the underlying geology is soft or hard and whether the presence of bedrock is indicated.

Baseline survey and associated monitoring work has been inadequate on several other fronts. For hydrology, hydrogeology, geology and peat aspects, the following have not been completed to a sufficient degree, meaning that our ability to evaluate environmental aspects of the proposed development has been severely constrained so far:

- Detailed characterisation of the peat moorland
- Understanding of the character and properties of superficial deposits underlying the peat
- Understanding of depth to bedrock and local aquifer properties
- Variation in groundwater and surface water levels and flows
- Residual contamination levels in the peat
- Groundwater Dependent Terrestrial Ecosystems.

6.5.2 The PEIR uses a mish mash of peat definitions - but not the one Natural England's Scoping Response advised

They used the 2017 Scottish peat definition (i.e. deep peat is 1.0m+) in the following peat surveys (PEIR Chapter 10 Peat, Hydrology, Hydrogeology, Geology (Section 10.4.4)

- Phase 1 Peat depth survey (2022): a total of 1,854 probing locations were completed on a 100m grid for the original peat survey area by TNEI;
- Phase 2 (September, October and November 2025): infilling of 100m grid across the Peat Survey Area, at 50m intervals with 10m offset probes
- along all proposed and existing access tracks; and across the footprint of
- proposed infrastructure on a 20m grid and probing within a 50m buffer area on a 20m grid. This totalled 6,409 probes and eight cores.
- Appendix 10-4 Preliminary Peat Landslide Hazard Risk Assessment (PPLHRA) (Updated): Walkover surveys of the proposed infrastructure locations in July and October 2025 to verify the site geomorphology and other relevant mapping related to the assessment of peat landslide risk.
- Flood Risk and Hydrology Walkover: A site walkover was completed on 27 October 2025 to gain baseline information with regards to flood risk and the site's existing hydrological regime. That was the objective, but we can't see that it will have provided any ecohydrological baseline information.

They also used the 1980 Soil Survey Classification for England and Wales. (PEIR Chapter 10, s10.5.70). This has served to exclude any probe locations with <0.3m from their quantification of peat on the Walshaw Moor Turbine Area: "A peat model interpolated from both the Phase 1 and Phase 2 data confirms the presence of peat (>0.3m by the Soil Survey of England & Wales definition) over much of the Turbine Area, with depths generally greater than 1.0m and several areas >3.0m in depth. The interpolated peat depth map and probing locations are shown in Figure 10-11"

In other words, anything less than 0.3m deep is soil, according to the PEIR - not peat.

If they had followed Natural England's Scoping Response and used the 2025 English definition of peat, which is not depth based, areas of Walshaw Moor <0.3m would probably be categorised as shallow peat - unless coring showed the areas were soil through lack of sufficient organic material. The 17% or so of the Walshaw Moor Turbine Area that the PEIR categorises as soil not peat would probably be a lot less.

At the Hebden Bridge Statutory Consultation event, we specifically asked the competent peat expert for evidence that the field intended for the proposed substation was not peat. The field is a popular breeding ground for red-listed, protected birds and there is no obvious reason for putting the proposed substation there, particularly since it would require a very long underground export cable across Walshaw Moor to the site exit at its eastern boundary, on the way to the Bradford West substation where the applicant is waiting for a decision on accepting their application for connection. We assume the proposed location is because it is outside the Special Area of Conservation and they claim it is not peatland.

The peat expert said that coring showed which locations of shallow depth were shallow peat and which were soil. However, a look at the map that includes the 8 coring locations shows that none were in the proposed substation field, and none were in locations with a probed depth of <0.3m

In terms of Calderdale Energy Park's design of the wind farm, using the Scottish definition of peat seems to allow them to claim to be avoiding areas of deep peat when they are avoiding anything 1.0m deep or more. As a result, Christian Egal told the Parish Councils Forum that the 2026 version of the Proposed Development has redesigned the turbines' layout on shallow peat.

Christian Egal's claim was challenged on the grounds that Appendix 10-3: Outline Peat Management Plan, Table 4.2 shows that only 1 of the 34 turbines is on shallow peat (defined by Natural England as up to 0.3m) and the rest are on deep peat (0.3m +), with a range between 0.34m-1.13m.

Despite this, Appendix 10-1 Good Practice Methods makes the misleading claim: Peat Habitat and Deep Peat Avoidance: The layout has been designed to avoid good quality peat habitats and areas of peat (>0.3m) where possible. This has been conducted, and through probing and coring [sic] to establish the spatial distribution of peat across the PEIR Boundary as discussed in Appendix 10-2: Peat Survey Report and presented in Figure 10-10: Depth of Penetration and Probe Locations and Figure 10-11: Estimated Peat Depth.

As mentioned in 6.3 above, **the PEIR has a totally inadequate dataset for coring which does not provide the basis for establishing the spatial distribution of peat across the PEIR boundary. So, there is no evidence that probe measurements of up to 0.3m are soil not peat, as the PEIR claims.**

6.6 PEIR Chapter 11 Carbon and climate change radically underestimates predicted CO₂ emissions from Walshaw Moor's peat caused by the proposed windfarm's impact.

This response is only to the section on greenhouse gas emissions of the proposed development (Part A pages 13 to 41) and concentrates on emissions from peat and how the carbon savings are calculated.

This chapter was incredibly difficult to read, mainly because the assumptions made in it are so outrageous, both in oversimplification and outright misinformation. It is also padded out with pointless comments and specious arguments based on out-of-date thinking. They have vastly oversimplified and underestimated the effect of the development on carbon emissions from peat, and vastly overcomplicated the 'baselines'.

The main errors/omissions are that they have: -

- Used an out-of-date definition of peat, and classified all areas with a depth < 30cm as soil,
- Ignored peat loss in the on-site cable trenches, and access and cable corridor routes,
- Used a very low estimate of volume of peat lost during storage,
- Used a lower than accepted figure for the carbon content of peat,
- Completely ignored the effects of drainage of peat on emissions,
- Completely ignored the fact that the baseline for future emissions should be that of a fully restored bog WITHOUT the development, compared to WITH the development.
- Overestimated the generating lifespan of the development,
- Used a much higher value for energy generated than given online and in their promotional brochures.

The upshot of all these errors and omissions is a gross underestimation of the CO₂e emissions of peat impacted by the proposed development. Their (single) estimate of 8,208 tonnes CO₂e bears no resemblance to our estimates of a range from 161,000 tonnes to well over 1,000,000 tonnes. Their estimate of the carbon intensity of electricity produced is also grossly underestimated, their figure of 6.58g CO₂e/kWh bears no resemblance to our figures which range from 18g at best to a worst case of 121g, with an average of 49.4g CO₂e/kWh, above the target for grid intensity for 2030, let alone 2032.

Therefore, we do not believe that this development has been proven to be 'low carbon' or a "Critical National Priority" project. In particular their methodology for calculating emissions from peat has fallen well short of best practice. We therefore cannot see that there is an Imperative Reason of Overriding Public Importance for the Secretary of State to derogate the Habitats Regulations which the Applicant is seeking, as a pre-condition for his approval of the Development Consent Order application.

Recent research has suggested that the effects of drainage on blanket bog may reach much further than the 10m zone of influence used in the PEIR outline Peat Management Plan: 100m or more, Prof Joseph Holden's research found 400m, and up to 900m in extreme cases.

More info in our detailed response to PEIR Carbon and Climate Change

6.7 PEIR 8 Biodiversity

6.7.1. The Biodiversity PEIR has omitted key aspects of Natural England's Scoping Response regarding the Special Area of Conservation

That:

- Calderdale Energy Park should assess most areas of semi-natural vegetation on upland peat >0.3m as active or degraded blanket bog.
- All blanket bog is considered to be restorable.
- Based on local experience, there are peat forming species across large areas of the site, in which case the habitats would be considered blanket bog.

More info in our detailed response to PEIR Biodiversity

6.7.2. There is no evidence given about whether or how Calderdale Energy Park used the Ecosystem Approach to define the hydrological units that were the basis for identifying priority areas for its baseline habitats surveys. (*PEIR Biodiversity App 8-3 Habitat Baseline Report (2023-2025), 2.4.3 -2.44*)

It seems unlikely.

This is about how Calderdale Energy Park has identified priority areas for NVC survey alongside a Bespoke Habitats Condition Assessment as part of its baseline habitats surveying. This involved dividing the Walshaw Moor Turbine Area into hydrological units which were based on analysis of topography and known watercourses.

To do this using the ecosystem approach, which Natural England's Scoping Response advised, Calderdale Energy Park competent experts would have had to define functional units of analysis that reflect the spatial and temporal linkages of peatland elements through hydrological connections.

(Wawrzyczek_etal_blindedmanuscript_11march2018_accepted-changes - final submitted version-1.pdf)

Whenever we have asked about use of the ecosystem approach in the PEIR hydrology work, it has been hard to find who the appropriate competent expert might be.

Talk to the competent flood expert, and they say peatland ecohydrology is not part of their skillset, but it's ok because they're working with a peat expert.

Ask the peat expert, as a Wadsworth Parish Councillor did, and he replied along the lines that it was not his area of expertise, but he was working with a peat ecologist. And "there was someone in Natural England who is very keen on the ecosystem approach."

Peatland Alliance and Wadsworth Parish Council have so far not found a peat ecologist to question.

7. Are likely significant effects of the windfarm on different aspects of the environment fairly assessed?

The competent peat expert advocates for a "tiered, condition-based framework for peatlands". This involves consigning Walshaw Moor's degraded blanket bog to low sensitivity, low significance.

Our response to the PEIR on blanket bog is that all blanket bog should be protected to the highest level possible, as the Habitats Regulations require. The UK's contribution to the climate crisis must be as much about protecting what natural climate-regulating systems we have, as the greening of our energy supply infrastructure.

The Preliminary Environmental Information Report is using the fact that Walshaw Moor blanket bog has been previously drained and degraded, in order to reduce its perceived value and give it a low sensitivity classification. Eg peat >1m to 2m thick in densely drained, eroded terrain been given a LOW sensitivity categorisation in their methodology for assessment! (PEIR Chapter 10, Table 10.7; Plate 10.1)

7.1 Systematic quantification issues with preliminary environmental impact assessments

To make an assessment of the low significance of degraded blanket bog, in relation to the proposed development's impacts, its low sensitivity is then combined with a misleadingly low calculation of the area of peat on Walshaw Moor.

This underestimate results from the application to the baseline peat depth survey data, of the old 1980 Welsh and English soil survey definition of peat, which defines peat as over 0.3m deep, and anything less as soil. (See 6.2.2 above)

As a result the area of Walshaw Moor's peatland that the PEIR has calculated is limited to where the peat depth probes, and the interpolations based on them, identify areas with depth measurements greater than 0.3m. This area is almost certainly smaller than it would be if:

- They had acted on Natural England's Scoping Response advice to use the 2025 English definition of peat, which is not depth-based
- And identified which areas 0.3m or less might be soil, by taking core samples.

As it is, the peat depth surveys only took 8 core samples out of over 8,000 peat depth probes - and none of them was on shallow probes of 0.3m or less. This is not an adequate basis for establishing the spatial distribution of peat across Walshaw Moor. (More info in our Response to PEIR Appendix 10-2, Peat Depth Surveys, s4. Simple peat depth baseline surveys are not the basis for establishing the spatial distribution of peat across the PEIR boundary. But this is what the PEIR has used them for.)

Regardless, the PEIR combines blanket bog's low sensitivity with an unrealistically smaller blanket bog and the competent peat expert's "professional judgement" wild card (see below) and comes up with the assessment that degraded blanket bog is of low significance. And therefore, of little account.

It seems to us that this contestation of the extent and significance of baseline blanket bog is not an example of impartial and professional surveying and assessment.

7.2 Trying to impose a tier-based system of blanket bog protection on the South Pennine Moors Special Area of Conservation

The PEIR fails to consider that - whatever its condition - all the designated blanket bog on the South Pennine Moors Special Area of Conservation is equally protected, regardless of its condition.

Instead, the PEIR assigns already-degraded blanket bog to a lower "tier",

This move reproduces the competent peat expert's recent challenge to Welsh government policy changes that give all peatland the same protection as designated blanket bog. His contentious Welsh renewables industry paper, "Peatlands and

Renewable Energy – The Developer Position” advocates for a “tiered, condition-based framework for peatlands”.

(More info in 1.1, Our Response to PEIR Peat, etc)

We knew back in 2023, when we responded to the first Scoping Report, that the Applicant would try and do this. We just weren’t sure *how* they’d do it.

7.3. First, they radically under-represented the extent of Walshaw Moor’s blanket bog, then they partially remedied this...

Last year, by means of misusing the UK Hab code, there was almost no blanket bog shown on the Walshaw Moor Habitats Map for the non-statutory consultation — but in October 2025 the Planning Inspectorate, Natural England, Peatland Alliance and Wadsworth Parish Council Scoping Responses called Calderdale Energy Park out on this.

As a result, the PEIR has partially remedied this under representation of blanket bog. PEIR Appendix 8-3 Habitat Baseline Report, Fig A1-10 now shows most of Walshaw Moor is degraded blanket bog, with significant areas of dry heath and upland heathland. Fig A1-II shows nearly all of Walshaw Moor is habitats of very high or high distinctiveness.

But there doesn’t seem to be any map that aligns peat depth and National Vegetation Classification, as Natural England’s Scoping Response recommended.

This recommendation is in order to specifically identify where what may look like heath is in fact degraded blanket bog, and more generally to establish that the habitat classification should be underpinned by the recorded peat depths, rather than relying on the vegetation characteristics alone, which may lead to under-reporting/misrepresentation of Special Area of Conservation designated features, e.g. blanket bog.

Nor does the PEIR seem to have taken on board Natural England’s Scoping Response advice, that:

- Most areas of semi-natural vegetation on upland peat >30 cm should be assessed as active or degraded blanket bog (except where other specific habitats are present, such as upland flush or fen).
- All degraded blanket bog is considered as restorable.

The habitats mapping/classification is now better than it was, but the PEIR still includes incompatible descriptions of Walshaw Moor’s habitats in different topics.

For example, although Walshaw Moor is mostly blanket bog, the Outline Peat Management Plan unaccountably claims:” The habitat is mainly rotationally burned upland heath... with areas of rough grazing (predominantly for sheep)” (*PEIR OPMP* 3.4).

The competent peat expert is the author of the of Outline Peat Management Plan, as far as we can see. Judging from its description of Walshaw Moor's habitat, he seems unwilling to admit that the extent of blanket bog on Walshaw Moor is a lot bigger than the applicant first claimed.

Could it be a consequence of seemingly having been forced to concede that Walshaw Moor is mostly blanket bog, that the PEIR has downplayed the sensitivity and significance of already degraded blanket bog on Walshaw Moor? And is thereby trying to impose a tier system in place of the Special Area of Conservation's impartial protection for all blanket bog?

At the Hebden Bridge consultation event we asked the peat expert why the PEIR doesn't include local knowledge about the state of Walshaw Moor's degraded blanket bog. We know a lot of Walshaw Moor blanket bog is degraded because of industrial pollution from nearby cities, followed by decades of poor land management. We know it is capable of restoration to active peat-forming condition, since much of it is what MoorLife categorises as Stage 5 blanket bog - one stage down from active blanket bog.

The Natural England Scoping Response confirms that local experience is that this degraded blanket bog is still peat-forming, because it still contains peat forming habitats other than sphagnum.

We think Calderdale Energy Park should revisit their sensitivity/significance categorisation of Walshaw Moor's blanket bog and fully take on board Natural England's Scoping Response about habitat classification aligned with peat depth data, based on the 2025 English definition of peat.

(See also Response to Hydrology, Hydrogeology and Geology, s 6.)

8. PEIR Questionable effectiveness of proposed mitigations

The blanket assertion of the effectiveness of mitigations is unconvincing. We have no confidence that they would leave Walshaw Moor's Special Area of Conservation effectively undamaged - apart from 'residual impacts' that CEP intends will be disregarded through a derogation of the Habitats Regulations by the Secretary of State

8.1. Proposed mitigations - including Biodiversity Net Gain - won't mitigate enough damage because of the PEIR's under-estimates of the extent and significance of environmental impacts on Walshaw Moor's (inadequately surveyed) baseline environment.

For a start, if Calderdale Energy Park had acted on Natural England's Scoping Response advice, to assess most areas of semi-natural vegetation on upland peat >0.3m as active or degraded blanket bog,, they would have had to identify that the predicted loss and degradation of the blanket bog, as a direct and indirect result of the proposed wind farm, would affect a much bigger area than they currently calculate.

This is before taking account of the flawed baseline surveys and unevidenced assumptions the PEIR has used in predicting the proposed windfarm's likely impact on the existing peatland environment. But these problems are clear from the Preliminary Environmental Information Report.

Many of the baseline habitat, peat and hydrology surveys and resulting data are flawed and inadequate. And the methodology for predicting the impact on existing habitats, peat and hydrology and hydrogeology is not impartial and evidence based as it is legally required to be.

The result is a self-serving under-counting of just about every factor that defines the impact of the proposed development on Walshaw Moor:

- The "zone of influence" of its hydrology impact, and hence the area of irreplaceable habitat loss and degradation.
- The volume of peat excavated for infrastructure construction.
- The carbon emissions from the disturbance and degradation of the peat habitats.

More info in our detailed response to PEIR Biodiversity and PEIR Peat, Hydrology, Hydrogeology and Geology.

8.2 Another problem with proposed mitigations is that they themselves may well have damaging side effects or impacts on the peat and its protected habitats.

For example, a hydrological impact of the proposed access track and array tracks between turbines would be to drain/dry out the blanket bog on the downhill side of the track. This is because the track would break the blanket bog's hydrological connectivity.

A proposed mitigation is to provide drainage under the tracks to restore the "diffuse" down slope flow of the uphill water that would be blocked/pooled above the tracks. But evidence from where this has been done is that replacing the natural seepage of the water downhill by concentrated drainage of the uphill water erodes the peat where it

gushes downhill and causes further problems of peat degradation and habitat loss. There is also a problem of subsidence associated with this process that goes unmentioned in the PEIR.

Taken together, the proposed development's underestimated impacts on peat and habitats, and the damaging unintended consequences of proposed mitigations put in question the PEIR's assumption that proposed mitigations would really take care of all but "residual impacts" on Walshaw Moor and the access track and export cable areas. Particularly since these areas' current extent and condition are likely to be misrepresented as a result of flawed baseline studies.

More info in our detailed response to PEIR Biodiversity, PEIR Ornithology and PEIR Landscape and Visual Assessment

9. The Statutory Consultation's restoration proposals for Walshaw Moor's already-degraded blanket bog assume that reusing excavated peat is an effective peatland restoration measure

The PEIR Appendix 10-3, Outline Peat Management Plan, includes a number of measures for reusing 559,645m³ excavated peat in order to reinstate and restore degraded peat on Walshaw Moor. (*Outline Peat Management Plan 2.2.3*)

It identifies these measures as potential mitigation for habitat loss and potential carbon dioxide emissions from the excavated peat.

We do not find this proposition credible. But PEIR Outline Peat Management Plan, Section 5 Reuse - and in fact the whole Outline Peat Management Plan - depends on it to avoid consigning the excavated peat as waste, which would need to be trucked off site to landfill.

Achieving peat mass balance requires finding ways of using all the excavated peat to either reinstate temporary excavations or to restore degraded blanket bog - while maintaining the ecosystem functions of the displaced peat and the peat surrounding an excavated area. This is unlikely, given that peat readily disintegrates when excavated from the water table.

Our response to the PEIR Outline Peat Management Plan identifies the following problems with the PEIR's peat reuse proposal:

- The peat mass balance is only achieved by dumping an excess 99,386m³ of excavated peat (18% of the total) in a created peat storage area that has largely lost its peat.

- The peat area and the volume of excavated peat are almost certainly underestimates due to the use of an old 1980 peat depth definition. It defines areas probed as up to 0.3m deep as soil. But the simplistic baseline peat depth survey methods are not up to the task of accurately distinguishing between shallow peat and soil.
- There are good reasons to be sceptical about the claim that reuse of excavated peat would restore already-degraded blanket bog and other peatland habitats designated by the Special Area of Conservation.
- Peat Reinstatement proposals get a thumbs down from Natural England's Scoping Response, which advised against reinstating peat in cutover areas. Nature Scot Guidance says peat reinstatement cannot be considered as offsetting or enhancement.

Any so called peat restoration projects that involve moving peat with the intention of preserving it, are likely to have been carried out in the recent past. What evidence is available that has measured their success over a significant length of time, given the complexities involved?

PEIR Appendix 10-3, Outline Peat Management Plan admits they've not calculated "in detail" the split of the total volume of excavated peat into acrotelmic and catotelmic peat. But catotelmic peat is very watery and less fibrous so more likely to disintegrate on excavation.

Peat is about 95% water, they treat it as a solid but it's a body of liquid held on a hill. Treating it as a solid leads to incorrect solutions. What holds this body of liquid together is that peat is highly fibrous. It forms a tangled geomatrix that holds the whole thing together and stops the water going anywhere. If you remove the water, eg by excavating the catotelm, it is likely to disintegrate. it collapses and oxidises.

So you can't reuse it effectively because the geomatrix structure will have been broken and it will be far more prone to be washed away.

The Viking wind farm seems to be their poster child for peat reuse. A member of the Mytholmroyd Facebook group said that at the Hebden Bridge consultation event, Calderdale Energy Park told her there is some unpublished research from there which suggests peat reuse can work.

A more detailed response to the PEIR's peat reuse and restoration proposal is in our Response to PEIR Appendix 10-3 Outline Peat Management Plan.

10. This is not the half of it

We haven't yet even touched on the proposed windfarm's impact on the red-listed breeding birds on the Phase 2 Special Protection Area, the internationally significant CHEGD fungi, or the failure of the Landscape and Visual Impact Preliminary Environmental Information Report to mention that the S Pennine Moors Landscape Character Area is a landscape of peat that would be put at risk of becoming a windfarm landscape by this precedent-setting proposed windfarm. With the attendant loss of the entire South Pennine Moors blanket bog's vital ecosystem services.

More info in our response to PEIR Ornithology, and PEIR Landscape and Visual Impact.

11. The Statutory Consultation should provide facts not spin

We have already commented that we see the Statutory Consultation materials as post-truth documents that create ignorance and confusion in their readers.

A year ago, in response to the non-statutory consultation the Save and Restore Walshaw Moor campaigns said, "We strongly object to the lack of accurate information and our resulting inability to comment and feedback on matters which are of critical importance to local people."

It feels like Ground Hog Day. For the Statutory Consultation, Calderdale Energy Park is again consulting on Biodiversity spin - not biodiversity facts.

Biodiversity seems to be of little account in the Statutory Consultation. The Statutory Consultation Brochure bundles it in with ornithology in a one-page generic Ornithology and Ecology section (Brochure, p 48.)

Walshaw Moor's internationally significant peatland habitats - the most highly protected in the country - get three sentences. This first one is misleading. There is no "may" about it.

The Statutory Consultation Spin:

"Our initial assessments show that some habitats within the South Pennine Moors may be affected during construction."

"As we complete final surveys, we are refining our understanding of how dust, hydrology, nitrogen and other factors may influence habitats, which will be confirmed in the Environmental Statement."

“A long-term land management and monitoring strategy is being developed to help species adapt and to ensure habitats improve over time.”

The facts we're not being consulted on:

Walshaw Moor's blanket bog, wet and dry heath are protected as priority habitats by the South Pennine Moor's Special Area of Conservation. It is illegal to damage their ecological integrity. Calderdale Wind Farm Ltd, the company behind the Proposed Wind farm, has admitted since 2023 that the development would not be able to avoid damaging the integrity of these interconnected peatland habitats. Calderdale Energy Park are applying to the Secretary of State to derogate the legislation that forbids damage to their ecological integrity.

There is a considerable and growing body of peat science knowledge about how dust, disruption of peatland hydrology and other consequences of building infrastructure on peatland habitats cause damage over a long duration. It is already established that the hydrology impacts of drainage can outlast not only the life of a wind farm, but human lifespans. This knowledge is a work in progress and so in many cases is not definitively quantifiable. Therefore the precautionary principle applies.

The united campaigns drew this to the attention of Calderdale Energy Park in their response to the non-statutory consultation last year. Calderdale Energy Park has not acknowledged this in their report on the non-statutory consultation, or in PEIR Chapter 5, which refers to non-statutory consultation feedback that informed successive changes to the Proposed Development design.

On the basis of current research about the extent of peat hydrology impacts of infrastructure on peatland, almost the whole of Walshaw Moor's 9 square miles could suffer habitat loss or degradation if the wind farm went ahead.

Instead, the Biodiversity Preliminary Environmental Report predicts the following habitat loss and degradation:

- 67.2 ha as a direct result of the infrastructure footprint
- 80.8 ha as an indirect result of hydrological impacts (the drainage effect)
- 421.71 ha as an indirect result of construction impacts

This is a tiny fraction of the potential habitat loss and degradation predicted by current peat science research. Even so, the Applicant has admitted that offsite compensation would be required for damage done to the Special Area of Conservation. But you can't compensate for damage to irreplaceable blanket bog.

There is nothing that we can see in the Biodiversity Preliminary Environmental Information Report about a long-term land management and monitoring strategy and no recognition that biodiversity impacts could extend well after decommissioning of the windfarm.

12. Taken all together these points mean the statutory consultation has been inadequate

We hope and expect that after that Statutory Consultation is over, the host Local Planning Authorities will report on the many inadequacies of the Statutory Consultation in their 'Adequacy of Consultation' Reports to the Planning Inspectorate. Please include this in your statutory consultation response.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**BIODIVERSITY
(PEIR CHAPTER 8 AND APPENDICES 8-1, 8-2, 8-3)**

Here we are responding to:

- PEIR Chapter 8, Biodiversity
- PEIR Appendices 8-1 Desk Study Report, 8-2 Terrestrial Ecology Baseline, 8-3 Habitat Baseline.

Aspects of:

- PEIR Chapter 4 Non-Technical Summary
- PEIR Chapter 5 Alternatives and Design Evolution
- PEIR Chapter 7 Methodology for the Preliminary Environmental Information
- PEIR Appendix 1-1 Statement of Expertise
- PEIR Appendix 04-01 Draft Commitments register
- PEIR Appendix 10-1 Good Practice Methods
- The Statutory Consultation Brochure and FAQs Booklet.

Our Response to the PEIR on biodiversity is long because it includes our response to three Biodiversity Appendices, as well as our response to the PEIR Chapter 8, but also.

There is also an analysis of aspects of PEIR Chapter 4, Alternatives and Design Evolution, from a Biodiversity point of view. (Section 3, below - in particular 3.3, 3.4)

This is because the mandatory alternative site selection process is defined by the new 2025 National Policy Statement for Renewable Energy EN-3, which includes additional protections for peatlands faced with Critical National Priority onshore wind farm developments, like Calderdale Energy Park.

The peatland protections are about the government's international commitment to protect and restore biodiversity, through the legally binding Kunming-Montreal Treaty.

When referring to the new NPS EN-3 in the context of the alternative site selection process, the PEIR is silent about the new protections for peatland to the point that we regard its evasiveness as censorship.

1. Competency of expert/s

Appendix 1-1 lists the qualifications and experience of the two Biodiversity Consultants including the (Terrestrial Ecology) Lead. It is not clear whether either has experience in assessing peatland habitats. Both are listed as having many years experience as planning consultants, including BNG.

This may mean that 1.3.2 Regulation 14(4) (a) of the EIA Regulations may not have been met.

Our response to PEIR Chapter 10, Peat, hydrology, hydrogeology and Geology refers to the competency of the Competent Peat Experts and the Competent Hydrology Experts (Section 1)

2. Has the PEIR acted upon Scoping Response recommendations?

Biodiversity PEIR Tables 8-2, 8-3 fail to consider important Planning Inspectorate and Natural England Scoping Opinion feedback about, data collected and the scope of the EIA.

We therefore doubt the PEIR claim that: “The feedback received through the Scoping Opinion has informed this PEIR, in particular the sources of information consulted, data collected and the scope of the EIA.” (PEIR Chapter 7, Methodology, 7.4.2)

We are concerned that the Biodiversity PEIR’s disregard of Scoping Opinion feedback has permitted:

- Flawed baseline surveys
- Warped methodology for predicting likely impacts from the proposed windfarm on the existing, baseline environment
- Inadequate quantification of their extent.

Such errors, spin and misleading information make the PEIR document seem designed to baffle, frustrate and discourage consultees. We think because this is such a common feature of the PEIR, the consultation is inadequate.

More info in the WPC Response - Overview, s 6, s 6. 4
And 2.4, 2.7 - 3.1 and 3.2, below

We are particularly concerned that the Biodiversity PEIR has omitted key aspects of Natural England’s Scoping Response regarding the Special Area of Conservation - that:

- Calderdale Energy Park should assess most areas of semi-natural vegetation on up-land peat >0.3m as active or degraded blanket bog.
- All blanket bog is considered to be restorable.
- Based on local experience, there are peat forming species across large areas of the site, in which case the habitats would be considered blanket bog.

And we have been unable to find any evidence that Calderdale Energy Park has used the Ecosystem Approach to define the hydrological units that were the basis for identifying priority areas for its baseline habitats surveys. (PEIR Biodiversity App 8-3 Habitat Baseline Report (2023-2025), 2.4.3 -2.44)

SPECIFIC FAILURES TO ADEQUATELY CONSIDER PLANNING INSPECTORATE AND NATURAL ENGLAND SCOPING OPINIONS

2.1. PEIR TABLE 8.2 Planning Inspectorate Scoping Opinion Ref 3.2.7: Where the Applicant has not been able to collect data for the whole of the Proposed Development, the ES needs to provide details of where surveys were restricted and demonstrate how gaps in the assessment have been filled, such as through other data collection means, and agreeing an approach to data collection with relevant consultation bodies. The ES should also set out how data collection has affected the design.

PEIR Chapter 8 consideration: “The preliminary assessment identifies limitations in data collection and how this will be addressed through further survey and/or analysis. This is provided in Section 8.8. Limitations across baseline data collection will be identified and reported in the ES.

Our response:

We think the PEIR should have explained provision for proper assessment of pollution risks, particularly from horizontal directional drilling. Independent impartial information, which it should be the task of the PEIR to provide, is compromised by Calderdale Energy Park’s belittling the significance of land contamination, and the apparent failure to give an account of contaminants that might be released during construction or maintenance.

Relatedly, there is no PEIR provision for assessment of the risk that habitat loss and degradation caused by the Proposed Development would mobilise heavy metals and organic compounds such as Polycyclic Aromatic Hydrocarbons that the Walshaw Moor peat has stored since the industrial revolution. The potential environmental and human health impacts associated with release of contamination stored in the peat should be included in the PEIR. (We have commented further on this in our response to the Peat, Hydrology, Hydrogeology and Geology PEIR.

2.2. Planning Inspectorate Scoping Opinion ref 3.2.8: “The Applicant should seek to agree habitat classifications with relevant consultation bodies to inform assessments. Clear figures depicting these should be provided in the ES.”

PEIR consideration: The approach to habitat surveys has been discussed with Natural England through consultation. Advanced habitat surveys (National Vegetation Classification (NVC)) have been completed in 2025 and will be continued in 2026. The current habitat baseline and approach to survey and analysis are presented in Appendix 8-2: Terrestrial Ecology Baseline (2023-2024). The final set of data will be presented in the ES.

Our response:

- i. We are disappointed with the inadequate advanced habitat surveys (National Vegetation Classification) that were completed before the 2025 Scoping Report and criticised by Natural England. (2. 9, below).
- ii. We are unhappy with how the PEIR has used the habitat survey results in the assessment of Walshaw Moor blanket bog’s condition, sensitivity and significance. Please see sections 5,6 and 7 (below) and PA’s response to the Peat, hydrology, hydrogeology and geology PEIR.
- iii. The Biodiversity PEIR notes that “The baseline has changed since the first habitat assessments were carried out. The current assessment shows a significantly increased area of degraded blanket bog previously classified as dry heath.” Is this a result of acting on the Planning Inspectorate’s Scoping Opinion that CEP should seek to agree habitat classifications with relevant consultation bodies, following Natural England’s criticism of the UK Hab survey that was the basis of the inaccurate classification map in the non-statutory consultation?

2.3 Planning Inspectorate Scoping Opinion ref:3.2.9: The ES should consider the potential for the construction, operation and decommissioning of the Proposed Development to change habitat presence and composition, for example as a result of dewatering of peat. The ES should assess the consequential impact of altering supporting habitat for species within the red line boundary.

PEIR consideration: “Habitat degradation and subsequent changes to habitats was identified as a potential effect for assessment and will be included within the ES. Preliminary assessment of habitat loss and degradation includes consideration of hydrological, pollution and air quality impacts alongside direct loss of habitat. This is included in Section 8.8.”

Our response:

We have responded in more detail to these issues in sections 5-7, below, and in our response to PEIR Peat, Hydrology, Hydrogeology and Geology, and PEIR Appendix 10-9, Preliminary Flood Risk Assessment.

Briefly:

- i. The PEIR preliminary assessment of habitat loss, degradation and subsequent changes to habitats is based on inadequate habitat, peat and hydrology/hydrogeology baseline surveys and data. The implausibly tiny 10m zone of influence the PEIR has identified as the basis for assessing the draining/dewatering effects of the proposed infrastructure is unsupported by the best current peat science.
- ii. We also wonder if the 1km zone of influence for pollution is enough.
- iii. Biodiversity PEIR Chap 8, makes the preliminary prediction that likely significant environmental effects of the Proposed Development on biodiversity will occur during the construction, operational and maintenance and decommissioning phases. It doesn't acknowledge that current peat science predicts that such effects are likely to continue well beyond the lifetime of the proposed windfarm and even beyond a human lifetime.
- iv. Somewhere the PEIR says the proposed windfarm would be repowered after 20 years. The technology will have radically changed by then. Wind turbines are likely to be bigger. It would be impossible to put new bigger turbines on the existing foundations, so repowering would basically mean a repeat of the construction process. Quite likely the access road and array tracks would also need re-engineering for transport of the new bigger kit. To assess the likely environmental impacts of the repowering, including carbon emissions from further peat excavation and disturbance, a future baseline survey would be necessary. The PEIR needs to account for how the Environmental Statement will deal with the proposed repowering. Particularly since NPS EN-3 2.12.45 states: Applicants must submit a new consent application for any repowering of an existing site, and this must comply with the relevant application requirements such as EIA and HRA.

2.4 PEIR Biodiversity Chap 8, 8.3.2, Table 8-3 Detailed Scoping Responses from Natural England

PEIR Table 8-3 records Natural England's criticism of the Scoping Report's assessment of hydrological impacts: "the assessment of hydrological impacts needs to sufficiently ac-

count for the functional extent of the peatland system across the site. Natural England considers that the current scoping report does not demonstrate that a sufficient level of detail will be provided in the ES to ensure the ecohydrology of the wider ecosystem function will be assessed.”

But it omits Natural England’s Scoping Response on how to remedy the poor-quality hydrology work it has criticised:

“The applicant should use the 2025 English definition of peat in undertaking detailed assessment of the hydrological function of the Proposed Development site, in particular the turbine area and associated search areas (where associated with SAC/SSSI features), using an integrated natural ecosystem function approach for understanding impacts of the proposal on the hydraulic function of the site, which underpins healthy blanket bog development and related processes.”

Biodiversity PEIR’s consideration is “Further hydrological survey and assessment will be completed and presented in the ES.”

Our problems with this consideration are outlined in our response to PEIR Peat Hydrology, Hydrogeology and Geology.

2.5 Biodiversity Net Gain: Natural England’s Scoping Response includes:

BNG can only be delivered within a terrestrial designated site via enhancement of non-designated feature. (So presumably that rules out blanket bog, wet heathland and dry heath.)

BNG should be delivered alongside other mitigation and compensation (for designated sites or protected species).

The purpose of specific measures should be clear and the amount of statutory mitigation or compensation required should be calculated before BNG calculations are agreed.

Assessing the designated site impacts and other ecological impacts should be the initial priority.

CEP’s response includes: The approach to BNG has been outlined as part of this preliminary assessment (as provided in Section 8.6)

The approach to BNG will be reviewed... and will be consulted upon further with Natural England and other relevant stakeholders, including the Local Planning Authorities.

Our response - We don’t understand how BNG is supposed to work and the PEIR is opaque about it. The statutory consultation should explain it sufficiently for people to be able to form an intelligent view of it. But neither the Statutory Consultation Brochure nor

the FAQs Booklet mention it. There is a single sentence in PEIR Chap 4 Non-Technical Summary. There are a few paragraphs in PEIR Chap 8 Biodiversity (8.6.5-8.6.10) This is not adequate info. What is statutory mitigation or compensation, that Natural England has told them they must calculate? It comes up again in 2.8 below. We think it is to do with the Habitats Regulation Assessment. More on Restoration and Mitigation in sections 7.5 and 8, below.

Also how can Calderdale Council Planning Department carry out its responsibility to engage with Calderdale Energy Park on BNG (or anything else) when it doesn't have the necessary resources because Calderdale Energy Park has refused to agree the Planning Performance Agreement and provide the necessary funding for Calderdale Council Planning Department to take on the huge amount of work its role requires for an NSIP DCO pre-application stage?

2.6 Irreplaceable Habitat

Natural England's Scoping Response advises that Irreplaceable Habitats should be avoided, with any impacts permitted only in exceptional circumstances. Avoidance of adverse impact of these key habitats is key. Where there are impacts to Irreplaceable Habitats, enhancement of Irreplaceable Habitats cannot form part of the BNG calculation.

CEP/PEIR response: BNG calculations will only be completed following agreement of compensation/mitigation approaches for designated sites and protected species. The FAQs Booklet announces there will be a 10% Biodiversity Net Gain.

Our response: We are dismayed that the PEIR has downplayed Walshaw Moor's irreplaceable habitats through undercounting the area of irreplaceable blanket bog, the area of irreplaceable habitat that would be lost or degraded because of various impacts from the proposed development, and the significance of these impacts on irreplaceable blanket bog. The PEIR has achieved this through use of inappropriate quantification, flawed habitats and habitat condition surveys, and methods for assessing blanket bog sensitivity and the significance of the proposed windfarm's impact on it that undercount the area of irreplaceable habitat that would be lost or degraded (More info in our Overview Response s 7)

2.7 South Pennine Moors SAC

PEIR Table 8-3 only provides a bald summary of Natural England's Scoping Response on the Special Area of Conservation (already mentioned above under 2, for different aspects on Natural England's Scoping Opinion feedback than here.) It mentions their identification of "multiple impact pathways" and refers to full details in the Scoping Report.

The PEIR consideration was that the methodology for collection and interpretation of data relating to habitats within the Special Area of Conservation is in Appendix 8-2 Terrestrial Ecology Baseline 2023-2024.

Our response: The PEIR produces public ignorance by failing to acknowledge Natural England's criticism of the habitat surveys, as follows:

"Currently, the peat depth surveys and UK Hab results presented in 7.4.13-7.4.15 of the EIA Scoping Report do not align. For example, where peat is deeper than 30 cm, this should not be mapped as heath. Therefore, Natural England advises that the habitat classification results should be revisited to check classification of habitat type recording. We recognise limitations in the UKHab survey definitions and advise that more detailed surveys are required to assess fine-scale habitats. We welcome that further detailed NVC surveys are being carried out and advise that these inform the re-classification of habitat types." (More info on post-Scoping Report Habitat surveys, data and classification in Overview Response, s7.3)

These habitat surveys were one of the subjects of our formal complaint to both Calderdale Energy Park and, on the advice of the Planning Inspectorate, to Calderdale Council, following the non-statutory consultation.

3. Errors, Omissions and Inconsistencies

3.1 The PEIR account of the alternative site selection process for the proposed windfarm is misleading and amounts to the deliberate production of ignorance among the public and other consultees.

It describes the alternative site selection process as if Calderdale Energy Park were a proposed development on mineral soil, not peatland. (PEIR Alternatives and Design Evolution 5.2.5, Alternative Selection of Sites, 5.5.4, 5.5.8)

It censors the fact that the relevant December 2025 National Policy Statement for Renewable Energy EN-3 requires Calderdale Energy Park to follow an alternative site selection process specifically for proposed NSIP onshore wind farms in England ON PEAT: "Applicants should rule out other locations before siting developments on peatland". (NPS-EN3, 2.12.77)

We're responding to this as a Biodiversity topic, because NPS EN-3, 2.12.77 is explicitly in place because of the need to protect the sensitivity and importance of peatland habitats. (NPS EN-3, 2.12.76)

3.2 Another significant omission in the Biodiversity PEIR is the failure to explain how mitigation/restoration/compensation works with regard to the Special Area of Compensation and Phase 2 Special Protection Area.

In other words, in relation to the application to the Secretary of State to derogate the Habitats Regulations.

We know that this is a separate, parallel process from the DCO application and Environmental Impact Assessment, but we think Calderdale Energy Park should inform us of the principles and contents of its Habitats Regulation Assessment. This is dealt with in section 8, below.

3.3 Censorship of government policy to support and restore biodiversity

The Alternative Site Selection PEIR also contributes to the production of ignorance by presenting a very one-sided account of the national policy context for the proposed windfarm: “the Proposed Development is clearly aligned with national policy and contributes to meeting the identified urgent and unprecedented national need for new low carbon generation capacity as set out in the NPSs. (5.3.7)

Calderdale Energy Park may be aligned with national clean power policy - although we think it overstates its case. And in order to make that case (which depends on getting the Secretary of State to derogate the Habitats Regulations), it appears to cheat on a fair amount of baseline environmental data and predicted extent of likely environmental impacts,

But the PEIR censorship of the national policy to support and restore biodiversity puts an unjustifiably positive spin on the proposed development, amounting to misinformation.

It spreads ignorance about the National Policy Statement’s aim of providing extra protection for English peatland in the face of NSIP onshore wind farm development. This was supported by 90% of respondents to the government’s 2024 public consultation on this question. The only group that said no was developers.

The national biodiversity policy is embodied in the international, legally binding Kunming-Montreal Treaty. The Environmental Improvement Plan sets out the national policy vision for halting overall biodiversity loss in England by 2030 and then reversing loss by 2042. The December 2025 Overarching National Policy Statement for Energy EN1 (5.4.2), warns NSIP energy project applicants that: “Failure to address this challenge will result in significant adverse impact on biodiversity and the ecosystem services it provides.”

Back in February, with reference to the December 2025 National Policy Statement EN-3, paras 2.12.75-77, Wadsworth Parish Council asked Calderdale Energy Park how they justify the need to build this proposed development on peatland. In a written answer, the Applicant noted, “Need to check whether we answer this directly. It is more an answer about government need for onshore wind infrastructure at scale.” It absolutely is NOT.

3.4 Misleading account of alternative site selection process

PEIR 5.5.6 misleadingly ignores the fact that Calderdale Energy Park's alternative site selection is retrospective.

PEIR 5.5.8 claims that CEP has been carrying out a "structured, multi-stage approach...consistent with NPS EN-1, which requires applicants to demonstrate that they have considered 'reasonable alternatives' and have 'selected sites that represent the most appropriate balance between environmental, social, and technical factors.'

PEIR 5.5.8 swerves the fact that the appropriate NPS requirement is the peatland-protective NPS EN-3, para 2.12.77. It also omits to mention that their "approach" to considering "reasonable alternatives" is shutting the stable door after the horse has bolted.

This is because the peatland-protective National Policy Statement EN-3 2.12.77 was only introduced in the April 2025 Draft NPS EN-3, para 2.12.74 - at least 3 years after Calderdale Windfarm Ltd choose Walshaw Moor Estate as its intended location.

When we asked about it at the Hebden Bridge non-statutory consultation event last year, the Project Team member said they had all been told to give a straight answer that this was the biggest windiest site available, and we should talk to Sarah.

Sarah told us that their obligation to look at alternative non-peatland sites, as stated in the draft National Policy Statement Energy-3, was a draft so they were still looking at this. They were looking at sites that can "deliver the same energy level in the same time scale" and they were looking at "Macro level" as well as site level (not quite sure what was meant here) and they were "still in the process of looking at sites."

That was a year ago and they seem to have kicked the can down the road instead of retrospectively justifying their choice of a peatland site. Instead, the PEIR spins that "A Statement of Need will be presented in the DCO Application and will set out further details on why the Proposed Development is required at the proposed location and scale to contribute towards meeting the unprecedented urgent and continuing national need for new low carbon generation. (5.3.9)

Except that there is no need for the windfarm to be built on Walshaw Moor's protected peatland, as the 2024 RSPB study demonstrated.

3.5 The PEIR ignores reliable research that found there is no need to build wind farms on protected peatland or any other designated site

We put this point to CEP Project Director Christian Egal at the Denholme statutory consultation event, and asked where else they had looked for a site. He said they had explored the area south of the Scottish border - he thought it had been in Northumberland - but it had been a desk exercise and no other sites had been visited.

Christian Egal's justification for choosing the Walshaw Moor site was that it is windy. But the PEIR says one of their candidate turbines has been designed to work well in low winds. So it looks as if high winds aren't necessary for Calderdale Energy Park.

Christian Egal explained that manufacturers have designed turbines to work well in low winds because Germany and other mainland Europe countries have much lower wind speeds than England.

We were about to suggest that what's good enough for Germany is good enough for us, when he quickly added that the selection of Walshaw Moor and high winds is about money.

PEIR Alternative Sites, 5.4.1 refers to NPS EN-1, para 4.3.27: "...alternative proposals that are not commercially viable can be excluded,"

We would therefore like CEP to say:

- What counts as commercially viable for the proposed windfarm - eg what projected rate of profit would be necessary to bring investors into the project for its build and operation stages.
- Whether they are using the Treasury Green Book in their economic and financial analysis.

3.6 PEIR overstates the case for the presumption of consent

PEIR 5.3.4 does admit that there are exceptions to the presumption of consent that applies to Critical National Priority Nationally Significant Infrastructure Project infrastructure that is needed to meet the government's Clean Power 2030 Mission, and the Secretary of State can apply them. But it doesn't say what the exceptions are.

Basically, the 2025 National Policy Statements EN 1 and EN3 (for energy overall, and renewable energy infrastructure in particular) rule that an unacceptable risk to, or interference with, irreplaceable blanket bog or flooding could stop Calderdale Energy Park in its tracks.

In admitting there **are** exceptions to the presumption of consent, PEIR 5.3.4 is slightly better than the non-statutory consultation and the Scoping Report. They both lacked independence and objectivity - heavily emphasising the presumption of consent for Critical National Priority infrastructure projects - but omitting policies that qualify or override this presumption on environmental grounds.

We think the PEIR should have been much clearer about what the exceptions are.

Last year, the non-statutory consultation brochure presented a misleading account of the presumption of consent. This created the disempowering impression for the public and Councillors (we know, some told us) that environmental protections for irreplaceable habitats like Walshaw Moor have been kicked aside and we would all be powerless bystanders during the rest of the pre-application stage.

Members of the public have been telling us they are cross that the Statutory Consultation is still creating the same misleading impression.

We would like the Statutory Consultation to provide information about Calderdale Energy Park's work with Natural England on the Habitats Regulations Screening. (Please see section 10, below)

And we would like more and much better information about how and whether the competent Peat, Peat Ecology and Flood experts are using the ecosystems approach to predicting the hydrological impacts of the proposed windfarm and in particular whether and how this is embodied in their direct rainfall run off flood model they are using in the Preliminary Flood Risk Assessment. Because as far as we can see, this isn't the case and there is such a lack of information that the Preliminary Flood Risk Assessment is an inadequate basis for the Environmental Statement. (Please see our response to Appendix 10-9).

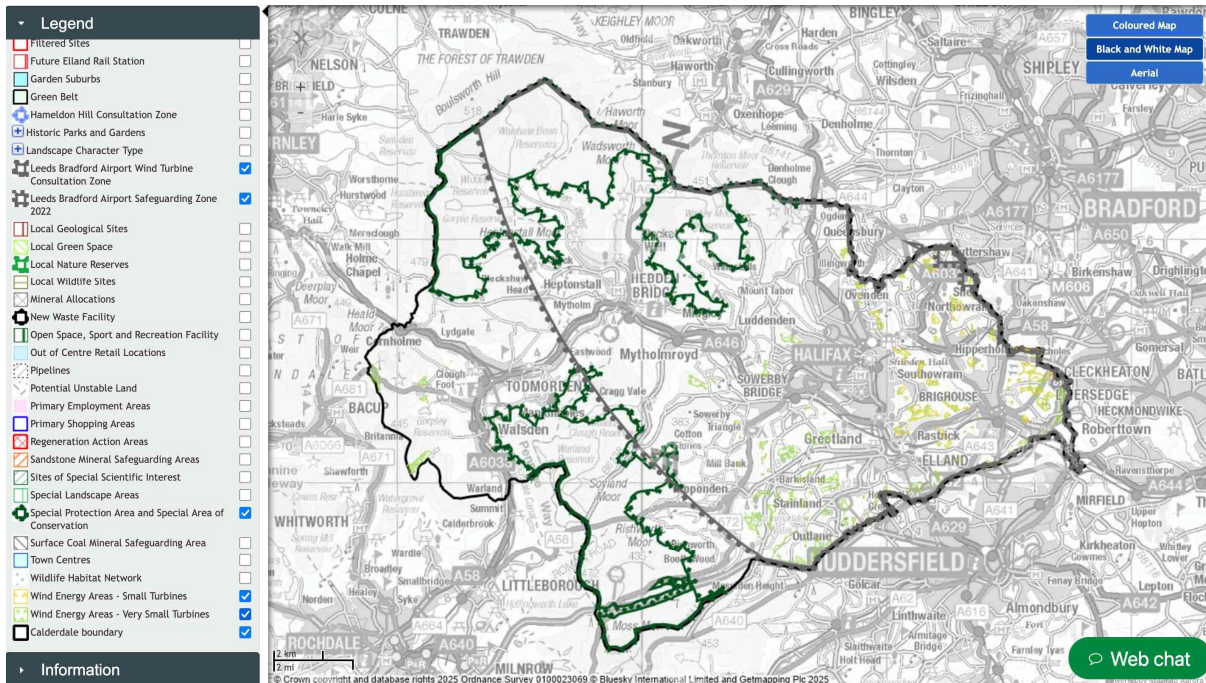
3.7 The Statutory Consultation and PEIR overstate the case for Calderdale Energy Park's alignment with national clean power policy:

The first issue is that the PEIR's methodology for calculating emissions from peat in particular has fallen well short of best practice. Its method of calculating the carbon savings is equally inappropriate. There is every chance that rather than helping the drive to Net Zero, this development could actually hinder it. The claim that it is a low carbon generating source has not been proven. (More info in our Response to PEIR Chapter 9, Carbon and Climate Change.)

Then there is the claim in Statutory Consultation Brochure that: "Calderdale Energy Park is located in an area identified as being suitable for further onshore wind generation." It links to a 2017 document, "Assessment of Areas of Suitability for Wind Development in Calderdale" commissioned by Calderdale Council. This is not the appropriate document.

The Appropriate document is the Calderdale Local Plan. The 2024 updated Calderdale Local Plan Map, filtered for wind energy areas, is below. It shows that Calderdale Local Plan has no wind energy areas deemed suitable for large or medium wind turbines.

The map is not the greatest but it shows the only wind energy areas in Calderdale's Local Plan are for very small turbines (the pale green splodges) and small turbines (the pale yellow splodges)



Even if that is the case, the government renewable energy database now shows over 18.5GW of recent onshore wind projects either in planning, consented or under construction, so even if a quarter of those still in planning were refused, that still means the government's target of doubling onshore wind will easily be met, and there are still plenty of viable places to build wind farms in England which are not on peat.

4. The bit of Biodiversity PEIR that particularly shocked us

We were gobsmacked to find that not only had the Biodiversity PEIR failed to consider Natural England's Scoping Opinion on ecohydrology - it had done exactly what the Scoping Opinion had warned Calderdale Energy Park not to do.

The Scoping Opinion advised that Calderdale Energy Park should sufficiently account for the functional ecohydrological extent of the peatland system across the whole site, rather than solely focusing on immediate and/or buffered areas that relate to the Proposed Development itself. (More info in Section 2, above)

But the Biodiversity PEIR prescribes a 10m hydrology impact/drainage effect buffer for Construction Phase Effects on Walshaw Moor's irreplaceable blanket bog and other protected habitats and upland plant assemblages. (We've found no basis for calculating likely operational stage hydrology impacts.) (Table 8-14)

It states: "assessments for hydrology have assumed functional loss of 10m of additional habitat beyond all infrastructure." Biodiversity PEIR 8.6.16

This has no basis in peat science and the effect is to radically underestimate the area of irreplaceable blanket bog likely to be lost or degraded as a result of the drainage effect of the proposed windfarm infrastructure.

4.1 The Biodiversity PEIR justifies this off the peg estimate by saying there is "regulator acceptance" in Scotland of this assumption.

This turns out to be one of the PEIR's many examples of misleading and confusing misinformation.

158 paragraphs later (8.8.164 - 8.8.166) there is a broken link to the "regulator". (Nature Scot's document 'Advising on peatland habitats and carbon-rich soils in development management')

On finding a link that works it turned out that:

- i. Nature Scot says its guidance is not for protected peatland.

- ii. “There is stronger protection for peatland which is part of the interest of a protected area and different tests apply, for example within a Special Area of Conservation (SAC)... where Habitats Regulations Appraisal (HRA) must be considered.” In other words, Walshaw Moor and the S Pennine Moors Special Area of Conservation.
- iii. “There is no standard width” for the buffer/ Zone of Influence for impacts of developments on peatland: “Topography, drain size and depth, and the presence of other drainage factors can have an influence on the impact and will vary the buffer width. For example, the Peatland Code considers peatland within 30m of an artificial or natural drain (e.g. from a hagg or gully) as drained (in a carbon context), therefore the impact would be the drain plus, a minimum of 30m either side.”
- iv. The Biodiversity PEIR 158 paras on from the first mention of the 10m buffer is inconsistent about the extent of the buffer - it gives a range 10m-30m but calculations of the area of “indirect” habitat loss and damage from the drainage effect of the infrastructure continue to use the 10m buffer Table 8-18 Summary of Zones of Influence applied to construction activities for Activities which Result in Indirect Habitat Loss or Degradation)
- v. That is also the case over in the outline Peat Management Plan where there is another reference to the “regulator acceptance”. Except here the OPMP said they had accepted a 10m -30m buffer. Despite this, the outline Peat Management Plan calculations of habitat loss still used the 10 m figure.

In addition, CEP wrote to Wadsworth Parish Council on 20th April that: “There is relatively little empirical evidence for a standard (or even variable) buffer distance for infrastructure. Water in the catotelm (lower, more humified peat) is far more 'locked in' than in the upper fibrous acrotelm, and drawdown of water tables in the catotelm (most of the depth of the peat) is not typically expected.” What are they saying? That there is NO hydrological impact on peat from the infrastructure, because there is little movement of groundwater in the catotelm?

4.2 So CEP has not chosen appropriate guidance for Walshaw Moor,

Its peatland interest protected by the South Pennine Moors Special Area of Conservation means it is outside the scope of the Nature Scot guidance.

The PEIR selection of the 10m hydrology impacts buffer seems to have been a serious error.

Current peat science anyway tells us that a 10m zone of Influence is inappropriate for changes in surface and sub-surface peatland hydrology that result in degradation and/or loss of habitat.

Peatland is mostly water, and water flows, so peatland is interconnected through its surface and subsurface hydrology. This means the drainage effect from infrastructure can extend to considerable distances. This is the reason for Natural England's Scoping Opinion, which the PEIR has ignored.

Prof Joseph Holden's research has found the zone of unintended blanket bog drainage can extend up to 400m from any given infrastructure component. On that basis almost the whole of Walshaw Moor's 9 square miles could suffer habitat loss or degradation as a result of the drainage effect of the infrastructure if the wind farm went ahead.



This is because Irreplaceable blanket bog and priority protected wet heathland require a high-water table. If drainage occurs these habitats can be lost or degraded.

4.3 But damage to irreplaceable blanket bog is illegal because it is one of the designated habitats in Walshaw Moor's Special Area of Conservation.

Calderdale Energy Park's Development Consent Order can only go ahead if the Secretary of State agrees to derogate the Habitat Regulations and so permit otherwise illegal damage to the irreplaceable blanket bog.

He can only do this for “wholly exceptional” reasons like the presumption of consent for Critical National Priority NSIP energy projects like Calderdale Energy Park.

But biodiversity protection and restoration are imperative reasons too. (More info in s 3, above.)

Approval of Calderdale Energy Park’s Development Consent Order application hinges on whether its otherwise illegal damage to Walshaw Moor’s irreplaceable blanket bog can be derogated. So we surmise that the PEIR is using an unevidenced 10m zone of Influence/buffer for drainage effects from construction areas, because it provides the basis for calculating a minimal area of irreplaceable blanket bog loss and degradation as a result of the proposed windfarm.

4.4 The 10 m buffer translates into 80.8 ha of indirect hydrological impacts (the drainage effect)

This compares to the predicted almost whole-site (2,227 ha) habitat loss and damage if Prof Joe Holden’s research is used as the basis for this calculation,

In addition, the Biodiversity PEIR predicts:

- 67.2 ha as a direct result of the infrastructure footprint
- 421.71 ha as an indirect result of construction impacts

Of these areas, only a fraction is irreplaceable blanket bog and other designated habitats protected by the Special Area of Conservation. Natural England commented in the Scoping Response on how baseline habitat surveys didn’t align with peat surveys and that where upland peat was >0.3m they should assess most areas of semi-natural vegetation on upland peat as active or degraded blanket bog.

Their PEIR should say what they did with this advice in assessing habitat loss and damage as a result of construction impacts and infrastructure footprint. If they didn’t act on it, how would it have affected the extent of the impact on blanket bog if they had?

Even though this is a tiny fraction of the potential habitat loss and degradation predicted by current peat science research, the Applicant has admitted that offsite compensation would be required for damage done to the Special Area of Conservation. But you can’t compensate for damage to irreplaceable blanket bog.

4.5 The Statutory Consultation has brushed biodiversity under the carpet.

The Brochure bundles it in with ornithology in a one-page generic Ornithology and Ecology section (Brochure, p 48.) It’s as if they don’t want people to think about it.

Walshaw Moor's internationally significant peatland habitats - the most highly protected in the country - get three sentences. The first one is misleading and we can find nothing to support the third one in the Biodiversity PEIR:

"Our initial assessments show that some habitats within the South Pennine Moors may be affected during construction."

"As we complete final surveys, we are refining our understanding of how dust, hydrology, nitrogen and other factors may influence habitats, which will be confirmed in the Environmental Statement."

"A long term land management and monitoring strategy is being developed to help species adapt and to ensure habitats improve over time."

5. Has the baseline biodiversity survey work been completed and is it adequate?

5.1 Baseline biodiversity surveys and data are still incomplete.

Calderdale Energy Park is inevitably making slow progress because of all the "environmental constraints" associated with the South Pennine Moors Special Area of Conservation, Phase 2 Special Protection Area, and Site of Special Scientific Interest.

Walshaw Moor's unsuitability in terms of transport access, gradients and areas of peat instability has also thrown several spanners in the works and caused the proposed development to chop and change. Baseline surveys have still not been carried out in the proposed access road and export cable areas.

Also since October 2025 have had to do a lot of extra work responding to feedback in the Scoping Opinion, as the Scoping Report was so rubbish.

It is an inappropriate site, and they could and should find somewhere on mineral soil where it's easier to build.

5.2 The baseline biodiversity surveys in the PEIR are inadequate.

PEIR Appendix 8-3 Habitat Baseline Report (2023-2025) summarises the habitat surveys completed regarding the Proposed Development. It reports on the methodologies and results of surveys and analysis completed between 2022 and 2025.

The habitats surveys up to June 2024 were clearly inadequate. In August 2025 Peatland Alliance sent our concerns to PI, CEP and CMBC about the habitat surveys that had been

reported in the April -June 2025 non-stat consultation. Here: Statement of concerns about Calderdale Energy Park's non-statutory consultation sent to Calderdale Council Planning Department

The key point of our Concerns re biodiversity baseline data was the inaccurate habitats survey map that Calderdale Energy Park produced for the non-statutory consultation brochure. It omitted nearly all the blanket bog as defined by Natural England, and by the Joint Nature Conservation Committee in its designation of the South Pennine Moors Special Area of Conservation.

5.3 Natural England's September 2025 Scoping Response on how to improve Walshaw Moor habitats surveys (More info in 2.9, above):

"Currently, the peat depth surveys and UKHab results presented in 7.4.13-7.4.15 of the EIA Scoping Report do not align. For example, where peat is deeper than 30 cm, this should not be mapped as heath. Therefore, Natural England advises that the habitat classification results should be revisited to check classification of habitat type recording. We recognise limitations in the UKHab survey definitions and advise that more detailed surveys are required to assess fine-scale habitats. We welcome that further detailed NVC surveys are being carried out and advise that these inform the re-classification of habitat types.

"Areas of blanket bog should be identified in line with Natural England's Definition of Favourable Conservation Status for Blanket Bog.

"Natural England advises that the definition of blanket bog should use a peat depth of 30 cm based upon ecological factors. We advise that most areas of semi-natural vegetation on upland peat >30 cm should therefore be assessed as active or degraded blanket bog (except where other specific habitats are present, such as upland flush or fen). We also consider all degraded blanket bog as restorable. Also note that, based on local experience, we understand there to be peat-forming species including cotton- grass and sphagnum across large areas of the site, in which case the habitats would be considered active blanket bog."

The National Vegetation Classification habitats surveys and peat condition surveys carried out since the September 2025 Scoping Report therefore have to be evaluated against that Natural England Scoping Response.

Other biodiversity baseline surveys were all carried out before the Scoping Response:

- September 2024 UK Habitat Classification Survey
- September-October 2024 National Vegetation Classification (NVC) survey – eastern section of site only.

- August 2025 National Vegetation Classification survey – extensive coverage within Turbine

Area and partial coverage of the western access route.

(Source: Table 1-1: completed habitat surveys between 2023 and 2025)

5.4 Is the Aug 2025 National Vegetation Classification survey fit for purpose?

We doubt the validity of the August 2025 NVC survey, for reasons given below.

The August 2025 NVC survey sampled areas of habitat of high sensitivity which would be directly impacted by the Proposed Development. (PEIR App 8-3, 2.4.2) 1

We have questions about how the PEIR defines the sensitivity of habitats, when elsewhere it identifies Walshaw Moor's degraded blanket bog as of low sensitivity. (More info in our Overview Statutory Consultation Response, s 7)

Presumably by direct impact they mean the actual footprint of the infrastructure, where peat would be excavated for construction of the infrastructure, or else turned into a so-called floating track.

Did the survey cover the area of the extensive cable trenches that would have to connect each turbine to an onsite substation, unaccountably located at great distance from the exit point on the eastern border of the Walshaw Moor site, in a field that is home to endangered breeding curlews and other birds that return there year after year?)

5.4.1. Identification of priority areas for survey

We find this account extremely confusing when taken together with:

- Other PEIR statements about defining the sensitivity and significance of Walshaw Moor's blanket bog
- Natural England's Scoping Response feedback about ecohydrology and the Special Area of Conservation's irreplaceable blanket bog.

We wonder if the various competent peat, hydrology, and biodiversity experts know what each other is doing, and whether anyone on the Project Team has an adequate overview. Wadsworth Parish Councillors have got the impression from the Parish Councils Forum and Calderdale Energy Park meetings that the answer to those questions is No.

5.4.2 Was the ecosystem approach used in defining hydrological units?

They say the hydrological units were based on analysis of topography and known water-courses. (PEIR Appendix 8-3, 2.4.3)

It doesn't sound like an ecohydrological approach, which Natural England's Scoping Response recommended in order to understand impacts of the proposal on the hydraulic function of the site. (PEIR Chapter 8, Table 8-3: Consideration of Natural England Scoping Opinion Response)

We know that this advice was not followed in Phase 2 peat depth surveys reported in PEIR App 10-3 outline Peat Management Plan, nor in Phase 1 peat depth surveys reported in PEIR Chapter 10, Peat, Hydrology, Hydrogeology, Geology. (Please see section 2.2 in Response to Peat, Hydrology, Hydrogeology, Geology)

The consequences of CEP ignoring Natural England's Scoping Response advice on using the 2025 English definition of peat are outlined in Response to PEIR Peat, Hydrology, Hydrogeology, Geology, sections 3, 4, 5 and 6.

By ignoring/rejecting Natural England's guidance, the Preliminary Environmental Report is not complying with its own claim that: "The feedback received through the Scoping Opinion has informed this PEIR, in particular the sources of information consulted, data collected and the scope of the EIA." (PEIR Chap 7, PEIR Methodology, 7.4 Scope of the EIA, s7.4.2)

There is no evidence that the hydrological units were defined using functional units of analysis that reflect the spatial and temporal linkages of peatland elements through hydrological connections.

(Useful information about the ecosystem approach to peat hydrology:
Wawrzyczek_etal_blindedmanuscript_11march2018_accepted-changes - final submitted version-1.pdf)

5.4.3 What UK Habitat classification data did they use?

The hydrological units were overlaid with the UK Habitat Classification data, to identify likely habitat types within each hydrological unit, and further divided them.

Was this the original data from the September 2024 UK Habitat Classification Survey?
The one which Natural England's Scoping Response said Calderdale Energy Park should "revisit to check classification of habitat type recording."?

In our 2025 Statement of Concerns to the Planning Inspectorate, Calderdale Energy Park and Calderdale Council, we had made a formal complaint about the survey's massive under-representation of the presence of blanket bog, which made most of Walshaw Moor look like habitats of no distinctiveness.

5.4.4 What notice did they take of Natural England's Scoping Response advice about Permanent loss of Special Area of Conservation habitat?

Namely, that "Areas of blanket bog should be identified in line with Natural England's Definition of Favourable Conservation Status for Blanket Bog.

"Natural England advises that the definition of blanket bog should use a peat depth of 30 cm based upon ecological factors...most areas of semi-natural vegetation on upland peat >30 cm should therefore be assessed as active or degraded blanket bog (except where other specific habitats are present, such as upland flush or fen). We also consider all degraded blanket bog as restorable. Also note that, based on local experience, we understand there to be peat-forming species including cotton- grass and sphagnum across large areas of the site, in which case the habitats would be considered active blanket bog."

We guess that they didn't take this advice on board.

5.5.5. Apparent contradictions in PEIR about blanket bog's sensitivity and significance

As noted, there is an apparent contradiction between the PEIR Appendix 8-3, which says that areas of blanket bog are high priority locations, and PEIR Chap 10 saying that degraded blanket bog is of low sensitivity (and of low significance. (PEIR Chap 10 Peat Receptors, Plate 10-1, Peat Sensitivity, Chap 10 Assessment of Magnitude of Potential Impact, Table 10-8 Magnitude of Potential Impacts)

To prioritise NVC survey locations, the subdivided hydrological units were classified according to whether they were high, medium or low priority locations, and overlaid with proposed turbine layouts (at that point in time).

The priority of locations was defined as follows:

- High Priority Locations - Areas of impact in habitats designated or identified within the designation for the South Pennine Moors Special Area of Conservation (SAC) (by which they must mean blanket bog, wet and dry heath and transition mires) within the identified hydrological units;
- Moderate Priority Locations - Areas of impact in other habitats (as defined by the UKHab survey) of moderate biodiversity value, including purple moor grass and rush pasture, neutral and acid grassland within the identified hydrological units;

- Low Priority Locations - Areas impact in low value habitat such bracken or coniferous woodland.

5.6 Bespoke Habitat Condition Assessment

5.6.1 Claim to use “Peat Bog Condition Matrix” to enable assessment of blanket bog condition

The PEIR says: “A bespoke Habitat Condition Assessment (HCA) was completed for each habitat polygon alongside the National Vegetation Classification in the field. This was designed to enable assessment of Peat Bog Condition using the “Peat Bog Condition Matrix included in Lindsay (2025) - Lindsay, R.A. (2025). Manual for the Peat Bog Condition Matrix. London: University of East London.”

We were pleased to see Calderdale Energy Park’s apparent use of this Manual. Richard Lindsay is an internationally recognised peat ecologist. We have been banging on for the last two years about the need to do such a survey as the basis for understanding Walshaw Moor’s hydrology and hydrogeology.

5.6.2 The bespoke Habitat Condition Assessment doesn’t use the Peat Bog Condition Matrix methodology

Once we looked closely at Calderdale Energy Park’s bespoke Habitat Condition Assessment alongside the Peat Bog Condition Matrix, it turned out to have nothing to do with the Peat Bog Condition Matrix methodology:

- They claim to have mapped hydromorphological units but we don't see a map of these.
- In 4.3.4 they state: "The majority of the assessed photographs showed vegetation consistent with degraded tussock communities as defined by the classification published in Lindsay (2025)" but it is not clear what part the process of 'photographic assessment' played in their condition assessment - rather than using the method set out in the Condition Matrix Manual.
- The Matrix doesn't provide or 'define' a classification - it merely records the assemblage of features present, and it is possible to have assemblages that include tussocks but are still in favourable condition.
- They say that they've used the Peat Bog Condition Matrix but what they present does not represent the matrix output at all - they have taken one or two concepts from it and instead used these to create their own set of assessment criteria.
- They use only Green, Amber and Red for their condition coding, these latter two being the worst condition classes, and ignore the Turquoise (Degraded Recovering)

and Pink (Degraded Unfavourable - mild) condition categories, thus immediately biasing their results towards the worst condition-states.

- They don't provide details of vertical zonation at all (e.g. T2 High ridge, T1 Low ridge) - other than a single comment about 'T3 hummocks' and 'micro-erosion', plus use of 'bog pools', yet the zones are fundamental components of the Condition Matrix in terms of identifying microtopographic elements combined with vegetation to indicate condition. There's no evidence that they tried to identify the various zones as required by the Condition Matrix methodology and then display the resulting assemblages in any way.
- They use the presence of bog pools as a criterion of condition with the absence of pools being a negative feature, but bog pools would not be a natural feature of many (if any) parts of this site, so they are setting up a condition designed to fail regularly.
- Indeed they claim to have completed 134 condition assessments but don't present a single matrix sheet as evidence - only their own weird version that uses their own set of condition criteria that don't really reflect the Peat Bog Condition Matrix in any shape or form.
- We wonder about the method they used for assessing the presence of any peat pipes or flows. The PEIR records that for each polygon the conditions recorded did not include any peat pipes or flows. (Appendix 08-3 Habitat Baseline Report s2.4.11) It seems unlikely that there are no peat pipes or flows on Walshaw Moor, and it obviously matters whether and where they are present or absent. The Condition Matrix does not record such features, but they have instead incorporated signs of piping into their own weird set of criteria mentioned above. - it's nothing to do with the Condition Matrix.
- It is also worth pointing out that "absence of evidence is not evidence of absence" - so the fact that they didn't see any evidence of peat piping using their survey approach perhaps tells us more about the limitations of their method than it does about the presence or absence of peat piping.

In summary, they claim to have used the Peat Bog Condition Matrix but, from the evidence presented here, almost the only part they have used is the name and the concept of a traffic light

5.6.3 Why have they made no use of their Blanket Bog Condition Survey in creating their pluvial and fluvial hydraulic model?

Is it as weird as it seems to us, that they go to the trouble of designing and carrying out this Bespoke Habitat Condition Assessment survey, and then seem to have made no use of it to inform their understanding of Walshaw Moor's hydrogeology and hydrology, and feed this into their pluvial and fluvial hydraulic model? (More info in our Response to PEIR Preliminary Flood Risk Assessment.)

5.6.4 What use *have* they made of the bespoke Habitat Condition Survey?

For reasons given above we think the bespoke Habitat Condition Survey is not a valid or secure basis for whatever use they may have made of the data.

When the PEIR reduced the perceived value of blanket bog that has been previously drained and degraded, by giving it a low sensitivity classification and low significance as a receptor of potential impact from the proposed development, we wonder if it was on the basis of the bespoke Habitat Condition Survey. Because they must surely have used *some* data as the basis for making that assessment of the significance of already degraded blanket bog. (Chap 10 Peat Receptors, Plate 10-1, Peat Sensitivity, Chap 10 Assessment of Magnitude of Potential Impact, Table 10-8 Magnitude of Potential Impacts criteria)

For more info, please see our Overview Response to the Statutory Consultation, Section 7.

5.6.5 It is misleading to say the degraded blanket bog in the Special Area of Conservation is of low significance, in terms of the potential impact from the proposed development.

We think the PEIR overstates the degree of degradation of Walshaw Moor's blanket bog. We think it is largely stage 5, in the Moors for the Future classification of stages of blanket bog health and activity. One step down from healthy blanket bog.

And Natural England's Scoping Response notes local experience that the peat is still active even where it's not rich in sphagnum, with plenty of other peat forming plants.

Just because it's already damaged, doesn't mean it's not vulnerable to further damage. But this is what its 'low sensitivity' classification assumes. This is to misunderstand the fact that in the Special Area of Conservation, all grades of irreplaceable blanket bog are equally protected. The aim and requirement is to restore them all to favourable conservation status, to the extent that is possible. (More info in our Overview Response, s 7)

5.6.6 A stealth attempt at turning the Special Area of Conservation protection for all blanket bog, into a tier system

The inappropriate PEIR method of assessing the potential impact on the blanket bog as of low significance looks like a stealth attempt to replace the Special Area of Conservation protection for all irreplaceable blanket bog, with a tier system.

This is what the competent peat expert advocates in his contentious December 2025 paper 'Peatlands and Renewable Energy – The Developer Position', which was prepared for the Welsh renewables industry organisation, Renewables UK Cymru.

Based on the industry position that it's ok to degrade or lose blanket bog because it's not irreplaceable, it's restorable, the competent peat expert's paper was promptly rebutted by the Director of the IUCN UK Peat Programme.

More info in our Overview Response to the Statutory Consultation, section 7, and our Response to PEIR Peat, Hydrology, Hydrogeology and Geology, Section 1.1

6. Are likely significant environmental effects fairly assessed?

6.1 We think the methodology outlined by the PEIR for assessing environmental impacts leads to misleading outcomes. This is an example of why we think the PEIR is a document designed to spread ignorance and confusion - and so is inadequate for a statutory consultation.

The PEIR Non-Technical Summary s 3.3 is clear enough about the general method the PEIR uses to assess environmental impacts. It also says this "varies slightly depending on the environmental aspect" so "the expert judgement of the team undertaking the EIA are also considered."

But the PEIR Methodology Chapter 7, section 7 'Identification of Sensitive Receptors' says nothing useful about how they have identified which aspects of Walshaw Moor's biodiversity they think are worth carrying out an environmental impact assessment for.

From PEIR Chap 8, section 8.4 Assessment Methodology, we were able to grasp the PEIR method of assessing likely significant biodiversity effects:

- Define the sensitivity of the "receptor",
- Predict the extent of the impact (which, among other determinants, depends on how they define the zone of influence of each likely significant Effect in table 8-14), and
- Combine them both to give the likely significant impact on the "receptor".
- And then assume the mitigations will work and there will be no significant impact - only, at worst, a residual impact.

It seems that the scope to use "professional judgement" means that the process can be quite subjective. This could introduce bias instead of the required impartial, evidence-based process.

6.2. We have questions about how the PEIR Assessment Methodology has been applied, as follows.

6.2.1. The zone of influence for the drainage effect on peat of the proposed infrastructure as 10m is ridiculously low

Professional judgement seems to have gone AWOL here. The 10m zone of influence has no relationship to the likely range of zones of influence identified by the best current peat science research.

But this is what's being used to assess habitat loss as a result of the peat hydrology/hydrogeology impact of the proposed windfarm infrastructure. And also to predict the carbon emissions of excavated peat. (More info in 4, above)

6.2.2. For toxic pollution/sediments, the PEIR has a 1km zone of influence.

It justifies this on the grounds of this being typical for pollution control, plus professional judgement. It identifies the likely effect as the introduction of toxic pollutants or sediments into the environment resulting in changes, loss or damage to terrestrial or freshwater environments and the species they support.

But the PEIR has so far not considered the likely main risk for pollution - mobilisation of the heavy metals and polycyclic aromatic hydrocarbons stored in shallow peat from industrial-urban emissions over Walshaw Moor since the Industrial Revolution. Therefore they are just considering possible releases during the development and wind farm operation (possible point sources like oil losses etc.) and their professional judgement will be wrong (not based on all risk factors). The potential for sediment runoff from disturbed contaminated peat is a much more widespread risk factor, and potential impact to watercourses should not be restricted to 1km.

Also, we would suggest there is no such generic term as 'typical for pollution control', as every site must be assessed individually. With respect to groundwater, assessing risk is all about understanding where it is used at local farms, etc and the distance they are from the source of pollution, not some arbitrary distance.

6.3 There is no baseline for assessing the impact of the proposed development on groundwater

Groundwater vulnerability to pollution can only be risk assessed based on detailed investigation of the peat and underlying geology, superimposed on details of the proposed development footprint and infrastructure design. None of which has been provided to date. The arbitrary 1km for surface water is for lateral movement of surface water contamination

which is typical immediate/quick. Lateral movement of groundwater is much slower over such distances (years plus typically), so the main risk associated with groundwater is vertical migration of contamination down into an aquifer from surface activities. As far as we can see there has been no appropriate ground investigation

6.4 Flawed baseline studies are a questionable basis for deciding which ecological features to include in environmental impact assessment

Biodiversity PEIR, 8.4.13 states that the baseline data are the starting point for determining which of the identified ecological features are 'important' at the level of the project and should be taken through to environmental impact assessment.

This means the quality of the baseline data directly determines the accuracy of the predicted impacts of the proposed development.

But the PEIR biodiversity baseline surveys have been generally inadequate or at least questionable. And so have the Peat, Hydrology, Hydrogeology and Geology baseline surveys, which obviously relate to the baseline Biodiversity surveys

6.5 The PEIR methodology for deciding what ecological features to include in the environmental impact assessment seems to serve the interests of the applicant, not the environment.

It is not properly impartial and evidence-based.

PEIR 8.4.14 says it is ok if the Proposed Development were to damage a relatively small local example of a protected habitat or species identified in baseline data - if nationally, the habitat or population is still relatively large, even though declining or red-listed. In this case, the habitat or species in question would not be included in the environmental impact assessment.

We disagree. Just because a protected or red-listed habitat or species still has a reasonable presence nationally doesn't mean it's ok for the proposed development to trash a relatively small local example. It's like saying it's ok to pick bluebells in a local bluebell wood because there are plenty of others elsewhere, so it doesn't matter if this one is depleted or damaged. This is the habitual defence of vandals.

6.6 How fairly does the PEI take account of the various characteristics of environmental change?

PEIR 8.4.16 lists the characteristics of environmental change that the PEIR has taken into account when considering likely significant effects on ecological features. We have observed that the PEIR seems to have misused some of these characteristics.

The characteristics include:

- Extent – the spatial or geographical area over which the environmental change may occur;
- Magnitude – the size, amount, intensity or volume of the environmental change – as defined in Table 8-8;
- Duration – the length of time over which the environmental change may occur. The PEIR's definitions of duration are notably short term and ignore current peat science research on the long-term nature of impacts of infrastructure on peat hydrology and habitats.
- Frequency – the number of times the environmental change may occur;
- Timing – the phases of the proposed development during which an environmental change may occur. Because of the PEIR's generally short-term definition of Duration, this means Timing is often limited to the Construction stage. And there is no long-term monitoring after the lifetime of the proposed windfarm, that we can see.
- Reversibility – whether the environmental change can be reversed through restoration actions. The competent peat expert seems to have transferred to the CEP PEIR the assumption in his contentious December 2025 renewable industry paper, that blanket bog is not irreplaceable since it can be restored. The IUCN UK Peat Programme Director has rebutted this paper and we rebut its apparent application to the PEIR too. (More info in Response to PEIR Chapter 10, Peat, Hydrology, Hydrogeology and Geology HG PEIR, section 1.1)

6.7 Slippery method of defining the significance of an effect

First the PEIR says the significance of an effect is the combination of the magnitude of change, which ranges between High and Negligible, and the geographic importance of the ecological feature affected. We think by this they mean the geographic extent. (PEIR 8.4.18 - 8.4.19, Table 8.8

Then it qualifies this with reference to whether and how the environmental impact would alter the conservation status of the ecological feature. We think this is the defence of vandals used in 8.4.14: that it's ok to pick bluebells in one bluebell wood because there are plenty of others. CEP need to clarify if this is what they mean here.

The PEIR has used 'professional judgement' to decide if the impact of the proposed development will alter the conservation status of an ecological feature (PEIR 8,4,21)- while

drawing on baseline information and assessment of how each feature is likely to be affected by the Proposed Development. As we have seen, both these deciding factors in the PEIR lack due impartiality.

6.8 These contortions may explain the weird definition of the sensitivity of degraded blanket bog as low:

The PEIR has defined a large area of blanket bog as already degraded, but we contest that this classification is correct. (Please see Overview Response, s 7.3.) It then has given the degraded blanket bog a low sensitivity rating, which means it is categorised as low significance. Despite the fact that all blanket bog in the Special Area of Conservation is equally protected, regardless of whether it is active or degraded, or degraded but still peat-forming. (See 5.5.6, above., and Overview Response s 7.)

6.9 The PEIR applies the ‘defence of vandals’ to the South Pennine Moors Special Area of Conservation, Special Protection Area and Site of Special Scientific Interest:

PEIR 8.4.22 states: A similar procedure as outlined in 8.4.21 is used where designated sites may be affected by the Proposed Development, except that the focus is on the effects on the integrity of each designated site, defined as:

“The coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified”

PEIR 8.4.23 The assessment of effects on integrity draws upon the assessment of effects on the conservation status of the features for which the site has been designated.

This is very worrying. The Habitats Regulations make it unlawful to damage the ecological integrity of the South Pennine Moors Special Area of Conservation and Phase 2 Special Protection Area. But the approach in 8.4.22-8.4.23 means that CEP are using their self-serving, biased methodology to underestimate the significance of the proposed development’s likely significant environmental effects of the on the overall ecological coherence and integrity of the protected sites.

Presumably Calderdale Energy Park think this will dupe the Secretary of State in the hope that he will then find it easier to derogate the Habitats Regulations.

We guess this is also where proposed mitigations come in. But we shouldn’t have to guess. More info in s8, below.

We note that the ‘competent peat expert’s’ contentious industry paper (see Overview Response s 7) appears to use this justification for his agenda of imposing a tiered, condition-based framework for peatlands based on the proposition that already-degraded peat is of

low sensitivity and of low significance in relation to the impact of proposed onshore wind-farms. His industry position statement says that peatlands are 'a relatively common' habitat, and proposes to sacrifice degraded blanket bog to host renewable projects, on the fallacious grounds that peatlands can't be considered irreplaceable because they can be restored.

7. Flawed baseline surveys and environmental impact assessments preclude good design decisions for the proposed development

Nothing in the PEIR gives us reason to change our view that the only good design decision for the proposed development is that the first step of the mitigation hierarchy should be applied. This is to avoid building it on the internationally significant South Pennine Moors SAC and Phase 2 SPA, and the nationally significant South Pennine Moors SSSI which is designated for upland plant assemblages - including internationally significant, endangered CHEGD fungi.

We point out wherever applicable in our Statutory Consultation response, that Calderdale Energy Park has not fulfilled the National Policy requirement, that they must justify the need for infrastructure on peatland.

7.1 The PEIR misleadingly claims: The layout has been designed to avoid good quality peat habitats and areas of peat (>0.3m) where possible. (PEIR Appendix 10-1 Good Practice Methods, section 3. Peat Habitat and Deep Peat Avoidance)

The outline Peat Management Plan makes it clear that this has only been possible for one out of 34 proposed turbines. And the access and array tracks are mostly on areas of high-sensitivity deep peat.

7.2 Even if it had been possible, the goal of "avoiding good quality peat habitats" is inappropriate. The goal should be to avoid *all* irreplaceable blanket bog.

In Scoping Response advice that the PEIR appears to have ignored, Natural England said that to avoid all irreplaceable blanket bog:

- Calderdale Energy Park should assess most areas of semi-natural vegetation on upland peat >0.3m as active or degraded blanket bog.
- Based on local experience, there are peat forming species across large areas of the site, in which case the habitats would be considered blanket bog.

Natural England's Scoping Response also added that all blanket bog is considered to be restorable.

7.3 The PEIR admits that the proposed development would breach the Habitats Regulations and they are currently going through the Habitats Regulations Assessment Screening process.

But they don't seem willing or able to justify their decision to build on peatland:

- The Biodiversity PEIR has censored the government requirement that Calderdale Energy Park must justify the need for the proposed windfarm to be sited on peatland. (This is in the December 2025 National Policy Statement for Renewable Energy (EN-3) - more info in our Overview Response to the Statutory Consultation, s 3),
- The PEIR has ignored Natural England's Scoping Response that they would welcome a robust assessment of alternatives to demonstrate why the proposed site has been selected, particularly given its complex environmental constraints. This has not been presented in the PEIR.
- When Wadsworth Parish Council asked for their justification of the need to build the proposed development on peatland, CEP's written answer was: "Need to check whether we answer this directly."

If they thought their proposal to build the proposed windfarm on Walshaw Moor's protected peatland was justifiable, they would surely have justified it. As it is, they evaded the question. Please see section 3.1, above.

7.4 The PEIR doesn't provide an appropriate basis for design decisions for the proposed development, much less for derogation of the Habitats Regulations. (More info below in 10, Are there grounds for IROPI?)

Please see our Overview Response to the Statutory Consultation, section 7.1. It's inappropriate that the Preliminary Environmental Information Report is using the fact that the blanket bog has been previously drained and degraded, in order to reduce its perceived value and give it a low sensitivity classification Eg in their methodology for assessment, peat >1m to 2m thick in densely drained, eroded terrain been given a LOW sensitivity categorisation.

This is an example of the PEIR's widespread failure to use impartial, evidence-based methodology for predicting and assessing environmental impacts.

It fails to consider that all blanket bog in the Special Area of Conservation is equally protected and deemed restorable.

We think the PEIR should say if design decisions for the proposed development this classification have been based on this environmental impact assessment.

7.5. The proposed restoration programme is supposed to be a key part of the proposed development

We have found it hard and time-consuming to get a picture of the proposed restoration programme from the Biodiversity PEIR.

It seems to largely boil down to reuse of excavated peat to support habitat restoration, enhancement and creation (e.g. through patch repair of bare ground, restoration of eroded gullies and reinstatement of peat in cutover areas). (PEIR 8.8.36)

We do not find this habitat restoration proposal evidence-based or convincing. (More info in our response to PEIR Appendix 10-3, Outline Peat Management Plan).

The Biodiversity PEIR also states: Peatland restoration opportunities will be identified within the Turbine Area to improve the quality of peatland undisturbed by the Proposed Development. (8.8.36) That's a vague statement of intent, nothing more. See section 9, Next steps, below.

The Statutory Consultation and PEIR don't help us understand how Biodiversity Net Gain would work, but it seems key to whatever the restoration plan might be. So there should be information about it.

8. Mitigation/restoration/compensation with regard to the Special Area of Conservation and Phase 2 Special Protection Area

Where does the Statutory Consultation explain how mitigation/restoration/compensation works with regard to the Special Area of Conservation and Phase 2 Special Protection Area?

Apart from where the PEIR Chapter 8 admits that offsite compensation would be required for habitat loss and degradation from the direct and indirect impacts of the proposed development. But you can't compensate for damage to irreplaceable blanket bog, so what would happen then?

Omitting this info means we can't form an intelligent view about this important topic that has a bearing on the Habitats Regulation Assessment.

8.2 Proposed mitigations are largely unevidenced

PEIR Appendix 04-1, Draft Commitments Register is a scattershot statement of intended mitigations for all the potential environmental impacts of the proposed development. But the proposed mitigations are unevidenced, eg the reuse of excavated peat, and the attempt to justify the ridiculous 10m zone of influence for hydrology impacts on blanket bog. More info in our Response to PEIR Appendix 10-3, Outline Peat Management Plan, sections 5 - 8.

The Biodiversity PEIR waffles that a comprehensive mitigation and compensatory package to address the predicted impacts will be developed and submitted as part of the Environmental Statement (ES).

PEIR Chapter 5, Para 5.1 2, more waffle: “refinement of environmental measures and additional mitigation will be undertaken following consultation” (PEIR Chapter 5, 5.1 2,)

8.3 Generation of ignorance and confusion

What on earth does Calderdale Energy Park intend by way of mitigation and compensation? Do they even know themselves? Either way, why aren't they telling us?

We can only assume that the lack of information is a deliberate exercise in the manufacture of confusion, ignorance and doubt.

9. Next steps before submission of the Environmental Statement

As part of the DCO Application, CEP will submit a Habitat Mitigation and Compensation Strategy. This is to fulfil its commitment to avoid, reduce and where unavoidable, compensate for direct land take and land use change resulting in degradation and/or loss of habitat. But nearly all of its proposed environmental measures are about the SPA/SSSI bird populations. What about the blanket bog?

The PEIR has left us little reason to trust anything it says. That includes ritualistic declarations that missing baseline biodiversity, groundwater, ground investigation, ornithology and visual impact studies and impact assessments will be carried out in time for inclusion in the ES.

Many steps have been left undone and we doubt that it is feasible to complete them to the required standard in the time Calderdale Energy Park has allowed themselves.

So what's the rush to submit the DCO and Environmental Statement by November, when there's so much still to do?

The Statutory Consultation should explain what the rush is.

Our informed response is that on the basis of the PEIR, the next steps are likely to be as unpromising as the previous steps.

10. They will claim there are Imperative Reasons of Overriding Public Importance for the Sec of State to allow them break the law protecting Walshaw Moor's endangered habitats and birds.

The Biodiversity PEIR states: "As the Proposed Development overlaps with two European Sites, the South Pennine Moors Special Area of Conservation (SAC) and the South Pennine Moors Phase 2 Special Protection Area (SPA), any mitigation or compensation will need to ensure that requirements under The Conservation of Habitats and Species Regulations 2017 (the 'Habitat Regulations')² are met. The Proposed Development is subject to a separate Habitats Regulations Assessment (HRA), which is under preparation. (8.1.7)

10.1. Calderdale Energy Park are currently screening their Habitats Regulation Assessment with Natural England.

They have admitted that the Proposed Development would inevitably damage the ecological integrity of the Special Area of Conservation and Phase 2 Special Protection Area.

We would like the Statutory Consultation to provide information about Calderdale Energy Park's work with Natural England on the Habitats Regulations Screening.

We know it is a separate process, parallel to the submission of the Development Consent Order and Environmental Statement. The public right to early involvement in decisions about the environment is guaranteed by the Aarhus Convention and we contend that this covers the Habitats Regulations Screening.

10.2 Imperative Reasons of Overriding Public Importance.

They are aiming for a derogation of the Habitats Regulations by the Sec of Sec. This can only be granted for Imperative Reasons of Overriding Public Importance.

Calderdale Energy Park will misleadingly claim that its mitigation of climate change, by producing a nationally significant amount of clean energy, is an Imperative Reason of Overriding Public Importance.

We think that this claim doesn't stand up for these reasons:

- The PEIR calculations of greenhouse gas emissions from the peat as a result of the proposed development are a joke. And so is its quantification of alleged carbon savings from replacing other methods of electricity generation with wind powered electricity. (More info below, and in our Response to PEIR Carbon and Climate Change)
- The protection and restoration of nature is also an Imperative Reason of Overriding Public Importance and this is given effect in protections for peatland in the December 2025 National Policy Statement for Renewable Energy EN-3. The PEIR censors any mention of this. (More info in our Overview Response, Section 3, and Section 3 above.
- There is enough evidence in our Response to the PEIR, that the Applicant's Habitats Regulation Assessment must be insupportable

10.3 There is an Imperative Reason of Overriding Public Importance to protect nature

As well as a climate change Imperative Reason of Overriding Public Importance, biodiversity/nature protection and restoration are also an Imperative Reason of Overriding Public Importance. It is given effect in the UK government's commitment to the international, legally-binding Kunming-Montreal Treaty.

The Environmental Improvement Plan sets out the national policy vision for halting overall biodiversity loss in England by 2030, and then reversing loss by 2042. The December 2025 overarching National Policy Statement for Energy EN-1 (para 5.4.2) warns NSIP energy applicants that: Failure to address this challenge will result in significant adverse impact on biodiversity and the ecosystem services it provides.

Section 3, above, outlines how the PEIR has censored any mention of government policy to support and restore biodiversity, despite (or because of) its applicability to the proposed development. In this way, the PEIR and the Statutory Consultation produce public ignorance, not the knowledge needed to make an informed response to the proposed development.

10.4. Unreliability of PEIR information about baseline data and environmental impact assessment/ habitats regulation assessment

The baseline surveys are generally inadequate and this casts doubt on the accuracy of the environmental impact assessments - and the parallel Habitats Regulation Assessment.

Quantification of baseline ecological features and of the proposed development's impacts on them are not evidence-based or impartial. Instead it serves to underestimate the proposed development's environmental impacts.

There is no justification in the PEIR for the decision to site the proposed windfarm on peatland, as required by the 2025 NPS EN-3, Paras 2.12.76 - 2.12.78

Key aspects of Natural England's Scoping Response on ecohydrology and SAC have been ignored so there is no data or understanding of Walshaw Moor's ecohydrology and no indication that the competent experts have the necessary skills and competences to remedy this. This applies to the Preliminary Flood Risk Assessment, which is of vital importance to Hebden Bridge and the Hebden Bridge Flood Risk Scheme.

The attempts to find alternative solutions in the infrastructure design and layout are hopeless and claims that the turbines are sited on shallow peat are false. Only one out of 34 is.

The Biodiversity PEIR applies what we have called the 'defence of vandals' (see s 6.10, above) to the South Pennine Moors Special Area of Conservation, Special Protection Area and Site of Special Scientific Interest. It proposes to qualify Calderdale Energy Park's assessment of the significance of the proposed development's impacts on the coherence of the SAC and SPA ecological structure and function across the whole area (8.4.22-8.4.23), with a judgement that is analogous to the judgement (8.4.21) about whether an environmental impact on an ecological feature would alter its conservation status. Eg it's ok to kill sparrows locally because it wouldn't have a significant impact on their national population. We can't exactly see how that principle would apply to the designated sites' ecological coherence, but it doesn't seem appropriate. And it seems sneakily related to the attempt to consign degraded blanket bog to low sensitivity, low significance (Overview Response, section 7.1) and to impose a "tiered, condition-based framework for peatlands" on the South Pennine Moors Special Area of Conservation. (Overview Response, section 7.2)

The statutory consultation overstates how Calderdale Energy Park is aligned with the Northern Powergrid's delivery of the government's Clean Power mission, as a Critical National Priority NSIP onshore wind farm. First, it has misleadingly claimed that Calderdale Council's Local Plan identifies Calderdale as an area appropriate for a big onshore wind farm, even though this misinformation was corrected by a member of the public at the Oxenhope consultation event.

Second, its claim to help National Powergrid meet its need for an additional 1,900 MW of onshore wind electricity by 2030 seems more or less irrelevant. If the proposed windfarm were consented, it would not be onstream until 2032. And on 17.2.2026, Northern Powergrid's Dashboard graph showed it has 1,300 MW onshore wind connected and 500 MW accepted to connect. So it may be only 100W short of its target. Presumably the "accepted

to connect” proposed developments have a Gate 2 offer on the basis of a realistic prospect of DCO approval, if they’re less crazy than Calderdale Energy Park. Although probably not on stream by 2030. But that may be more about the unrealistic target time than about the connected to accept projects.

In addition, our response to PEIR Chapter 9 Carbon and Climate Change shows:

The calculation of the carbon emissions from degradation of the blanket bog and other peatland habitats is unrealistically low, and there is no calculation of the loss of the blanket bog’s carbon emissions capture as an effect of the proposed development.

The calculation of the windfarm’s counterfactual carbon emissions savings is based on the choice of an inappropriate comparator, gas-turbine generation, although this is likely to be minimal as the grid decarbonises. This calculation has produced a very exaggerated result.

WADSWORTH PARISH COUNCIL RESPONSE TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION

ORNITHOLOGY (PEIR CHAPTER 9)

1. Competency of expert

UCWN have no comment on the competency of the ornithological team, their qualifications appear appropriate as far as we are able to discern.

2. Have comments made in the scoping report on landscaping been acted upon in the PEIR?

2.1 Lack of survey for the Bradford West Cable Corridor (BWCC)

We expressed concern in the scoping response that no survey had been carried out to form the route selection for the cable corridor, and this seemed a topsy turvy approach. This is because if there are important ornithological features within the corridor the mitigation hierarchy will already be compromised, because there will be no opportunity to avoid the effects. Although the BWCC is not in the South Pennine Moors Site of Special Scientific Interest (SSSI) or South Pennine Moors Phase 2 Special Protection Area (SPA), it runs immediately alongside it. Birds do not bother about lines on maps, so if there are important bird assemblages within the SSSI adjacent to the survey route, just because an area of land is not designated as SPA or SSI doesn't mean that it may not still be important for birds. The BWCC does lie within the impact zone for the SSSI and SPA and this needs to be taken account of.

2.2 Lack of survey along the western access route

The PEIR states that the western access route is not going to be surveyed until after the PEIR has been submitted. So despite chapter 9 saying that this area has the potential to support moorland edge and lowland fringe species including breeding lapwing, curlew, snipe and redshank, and foraging raptors such as kestrel and buzzard and potentially short eared owl, the route selection has taken no account at all of the likely presence of some or all of these species and the disturbance which may be caused by improvements to existing sections and creation of new offline sections, which we consider will cause further unnecessary habitat fragmentation, that should be avoided. We consider that lack of survey here has prevented exploration of alternatives that may have fewer adverse effects on birds and biodiversity. Furthermore, we would add that the appalling mapping – or lack of mapping – has seriously hampered our efforts to comment on this meaningfully.

We say more about the general inadequacies of baseline surveys in our response to section 10.4.

2.3 Scoping out of operational effects of the BWCC

We do not agree that the operational effects should be scoped out. We are aware that high temperatures can be expected to be generated along the length of the cable route. Until it can be demonstrated that effective insulation can neutralise these increases in temperature, the operational effects must be scoped in. This is because the increase in temperature could have many adverse effects, including:

- drying out of the peat where the BWCC goes across peat, leading to loss of peatland habitat and erosion
- changes in vegetation as a result of drying out of the peat

These effects could affect the hydrology of the peat and consequently have an impact on habitats and the birds relying on those habitats over a much greater area than the corridor itself. Because many of the birds likely to be breeding in these areas, curlew in particular are site faithful, repeatedly returning to the same site, the loss of habitat could cause a reduction in the number of breeding pairs.

3. Errors omissions and inconsistencies

The Upper Calderdale Wildlife Network who have put this response to the PEIR together have many decades of experience of observing the bird animal and plant life on Walshaw Moor, monitoring breeding and roosting raptors and waders, up to the present day. Our observations have been carried out in all seasons and weathers, and our findings are regularly reported to West Yorkshire Ecology and other national data bases.

We are very concerned about the extent of omissions and that the impact on birds such as Curlew, Golden Plover and Ring Ouzel in particular are being completely underestimated.

3.1 Kestrel

We consider the numbers of Kestrel within the study area have been underestimated. Kestrel are seen on Walshaw Moor in numbers that are not evident in other areas. Recent sightings have included 6 Kestrel seen simultaneously over Mid Walshaw Reservoir, with confirmed nesting near Blake Dean too. We consider the number of nest sites on Walshaw Moor certainly exceeds 4. We would like the magnitude of impact to be re-assessed as it is currently considered to be small.

3.2 Ring Ouzel

These should definitely not be scoped out. There is certainly more than one pair nesting in the area. Ring Ouzel are frequently seen on the fields opposite the Pack Horse Inn where the substation is proposed, and as many as 8 birds have been seen in the cloughs leading into the Walshaw Reservoirs. There is other suitable habitat for Ring Ouzel within the turbine area. We consider that Ring Ouzel are an important ornithological feature and must be included in the ES.

3.3 Twite and other passerines

If the number of Twite were to increase in the South Pennine area in the future due to habitat improvement there is no reason why they could not return to Walshaw Moor again. We would disagree with the statement that evidence shows passerines are not significantly affected by wind farms. We would argue that changes to the environment as significant as this windfarm will bring would result in habitat change and loss, and a change in hydrology and micro-climates which could affect populations of passerines.

3.4 Hobby

We observed a hunting pair in 2024 that may have nested in the top of Hardcastle Crag or more likely in the plantation west of Walshaw village which is in the operational zone. Therefore, Hobbies may well be affected by the turbines.

3.5 Whooper Swans

This species should not be scoped out for habitat loss and alteration for any phase of the proposed development, as the assessment that Whooper Swans do not utilise habitats within the turbine area is wrong. These birds do not just use it for a flight path but have been observed using the reservoirs and their shores. We recorded 14 at Lower Gorple reservoir in March of 2026. Therefore, this species needs to be taken into consideration in the PEIR.

3.6 Gulls

They state that gulls rarely breed here but as gamekeepers are licensed to kill them as pests this explains why breeding densities are low. We have observed reasonable numbers of gulls in the area to the south of the Packhorse Inn in April of 2026. More gulls would certainly nest here if they were allowed to. Gull species are in decline nationally and they should be considered in the ES.

3.7 Common Sandpiper

Common Sandpipers are present around Lower Gorple Reservoir and the three Walshaw reservoirs at the very least and potentially across the whole operational area since they frequent upland moorland areas away from the water's edge. They should be scoped into the ES.

3.8 Curlew

We consider the statement in para 9.9.53 that the proposals are likely to:

“result in the permanent loss of approximately 56.5ha (1.5%) of the identified sensitive nesting area for curlew, which in absolute terms has the potential to result in the loss of approximately up to one breeding pair from direct land-take”

to be a gross underestimation. The paragraph does go on to say that ‘given the species sensitivity...’ that this figure is likely to be exceeded.

We are seriously concerned that these figures for curlew are being seriously underestimated because we consider that damage that will be done to the Curlew population as a result of this proposal could be a show stopper in terms of the whole development.

The substation is being placed on top of a key breeding area for curlew. How is that going to result in the loss of one breeding pair, “*given the species’ strong site-faithful nature and sensitivity to habitat fragmentation and degradation*” The applicant’s ornithologists words.

3.9 Golden Plover

We note in paragraph 4.2 below the extent to which the data for golden plover is being misinterpreted and information cherry picked to give more palatable results. The fact that building wind turbines across the 5 key breeding areas for Golden Plover will only likely lead to the loss of one pair of birds is laughable, when it is widely recognised that this bird will generally avoid breeding anywhere near wind turbines. This biased approach to the study just serves to discredit the rest of the work.

3.10 Other birds

We are also concerned that the following red listed and vulnerable bird species are not mentioned in the PEIR chapter 9:

- Swallow
- Swift
- Cuckoo
-

Migrating osprey is not mentioned either.

Swift are known to feed at heights, and over moorland plateaus such as Walshaw, where they are vulnerable to collision with turbine blades. While swifts¹ are unlikely to be displaced by disturbance, as they are habituated to human activity and structures, it is also plausible that they may be drawn to turbines as insect activity may be greater around these areas. Consequently, swift should be scoped into the ES.

3.11 The impact on migratory birds

¹ Technical Appendix A11.1 – Ornithology Report Owenreagh/Craignagapple Wind Farm Co. Tyrone

Very little is said in the PEIR about the potential impact of the proposals on migrating birds, aside from the use of the development area as a 'stopover'. The potential impact of wind turbines on birds flying over the site to variations in pressure and electromagnetic fields is not explored at all. While migrating birds may take steps to avoid wind farms, where these cover large areas, birds may suffer adverse effect due to increasing their migratory routes by substantial distances in order to avoid turbine areas.

3.12 Changes to species, habitat or prey as a result of the proposals

Table 3.1.7 states that the ES should consider and report on any potential change in species resulting from the development and resulting changes to habitat or prey and says this will be fully considered in the PEIR. It isn't: apart from noting likely losses and reductions in numbers there is no further detail on this.

4. Confusing and limited information, points which we found shocking

4.1 Mapping

We have been shocked by the poor standard of mapping within the PEIR which has made it extremely difficult to find locations, this has been difficult on the site layout where there is limited background information, features are not named, important routes are not marked which makes orientation tedious and time consuming for us attempting to review these documents. This lack of detail has been particularly poor in relation to the Bradford West Cable Corridor and the Eastern and Western Access route, where the mapping for the latter is so utterly featureless it has been impossible to use and has seriously impaired our ability to comment on the proposals. One is tempted to think this is deliberate. We prepared our own maps for the BWCC to enable our co-consultees to better understand what was proposed.

4.2 Magnitude of impact on different bird species

Table 9.10 sets out the definition of impact magnitude:

A large impact is defined as follows:

- Any impact which significantly undermines or improves the favourable conservation status of the qualifying interests of any internationally or nationally designated conservation site.
- An impact resulting in the total loss of sensitive characteristics.
- Total/near total loss or change of a bird population due to mortality or displacement.
Total/near total loss or change of productivity in a bird population due to disturbance.

- Guide: >80% of feature extent or population change

The PEIR states that the following species will suffer a large impact at a National or Regional Level

- Merlin
- Peregrine
- Marsh Harrier
- Hen Harrier
- Short eared owl
- Golden plover (breeding)
- Dunlin
- Snipe
- Redshank
- Oystercatcher

Besides these the PEIR notes:

That a “total of 108 bird species were recorded during the field surveys undertaken in the breeding seasons between 2022 and 2025. Of those 108 species, 86 were considered to be possible, probable or confirmed breeding within the study area, representing a diverse assemblage and reflecting the ecological richness and structural diversity of the South Pennines uplands.” It goes on to state that 70 of these are priority species.

Despite efforts to demonstrate otherwise, the devastating impact that these proposals would have on the birds of Walshaw Moor are spelt out in list of birds noted above. That these nationally and regionally important groups of breeding birds are going to be pretty much wiped out by these proposals when the applicant is still trying to convince us that this scheme can somehow enhance the biodiversity on Walshaw Moor is truly shocking to us.

The assemblages of Golden Plover within South Pennines Moor Phase 2 SPA are regarded as the most southerly in the world and are consequently of international importance. Despite parts of the PEIR making a strong case for the high numbers of Golden Plover on Walshaw Moor and clearly stating that Golden Plover are highly sensitive to wind turbine development, the PEIR manages to contradict itself, suggesting that in respect of the effects of construction, habitat loss and alteration would result in the loss of 1 breeding pair of Golden Plover. It does qualify this by saying it is a conservative estimate and goes on to say that this figure is based on “average territory densities” yet in para 9.5.8 we are told that the density of breeding populations of Golden Plover in the South Pennines are high compared to other regional populations in North England and Scotland. So why are losses of 1 breeding pair used as the basis for the assessment, which is then described as having a small impact magnitude, in respect of habitat loss and

temporary modification of the habitat? We consider the number of pairs which would be lost and the assessment that this would be a significant effect at a local scale is an underestimation.

We do not accept either that the nature of the effects relating to hydrology and habitat degradation are necessarily temporary and short term, as effects to peatland hydrology are complex and may have long term consequences to vegetation and hence habitats affecting bird populations.

We are concerned that some species of vulnerable breeding birds have not been considered at all, namely swallow, cuckoo, and swift, the latter two are red listed while cuckoo is a priority species which breeds abundantly within the wider study area and within the development area notably around Holme Ends.

Amber listed Osprey are not mentioned at all, yet they have been seen over Walshaw Moor during Spring 2026, doubtless using the Pennine chain as a migratory route northwards.

4.3 Magnitude of impact on South Pennines Phase 2 SPA and South Pennine Moors SSSI

The PEIR also notes that a large magnitude of effect will be suffered for both the SPA and the SSSI and these would be at international and national levels respectively.

Given our international obligations to the international, legally binding Kunming-Montreal Treaty, how are we able to legally justify these massive losses in biodiversity? The Environmental Improvement Plan sets out the national policy vision for halting overall biodiversity loss in England by 2030 and then reversing loss by 2042. The December 2025 Overarching National Policy Statement for Energy EN1 (5.4.2), warns NSIP energy project applicants that: “Failure to address this challenge will result in significant adverse impact on biodiversity and the ecosystem services it provides.”

We consider the protection and restoration of biodiversity on Walshaw Moor are imperative reasons of overriding public interest. We say more about this in our response to section 10.3.

5. Are likely significant effects fairly assessed?

5.1 Effects on Golden Plover underestimated

The author of chapter 9 shows clear bias in favour of the development: they say in paras 9.9.114 - that reactions of Golden Plover to windfarms is mixed, citing a study in 2009 that showed that on *multiple* wind farm sites Golden Plover numbers reduced in the vicinity of

windfarms, and then go onto describe two projects where this has not been the case and there has been no discernible reduction in numbers, and they talk about the compelling evidence from this long term study, the inference being that on these two sites, Golden Plover are unaffected, and so there must be a really good case for them being unaffected by any windfarm proposal on Walshaw Moor.

6. Has baseline survey work lead to good design decisions?

6.1 Substation Location

The substation will be located on sheep pasture adjacent to the Pennine Way close to Holme Ends. Para 9.5.25 states with reference to the breeding areas at Holme Ends that “The integration of these upland and lowland edge habitats creates strong ecological gradients, supporting species with overlapping habitat requirements and allowing for high breeding densities.”

This location may have been selected as it lies outside the SPA and SSSI, however it does still lie within the SSSI impact zone. However, birds do not respect lines on a map, and this is a particularly important area for breeding Lapwing and Curlew and is also close to an area where Ring Ouzel breed, all three are vulnerable and declining red listed birds. This is also an important area for nocturnal foraging for Golden Plover as well as being widely used by other breeding birds such as Greylag Geese and Oystercatcher.

Walshaw Moor is a stronghold for Lapwing and Curlew bucking the national trend; Curlew populations for instance have halved since 1995² in the UK, this is particularly serious as the UK hosts 25% of the global population. South Pennine Moors Phase 2 SPA is recognised as most southerly breeding area for Golden Plover globally and the PEIR notes that this is a sensitive population, on the edge of the species’ breeding area, the PEIR also states in para 9.5.37 that the variety of habitats within the study area contributes to the biodiversity. This site meets the needs of breeding lapwing and curlew, which are not met in most other places locally, hence the lack of thriving numbers of breeding lapwing and curlew in other parts of Calderdale. To place the substation on this site “in order to avoid the designated areas” when it is clearly of such great importance to the nesting birds seems incredible and demonstrates the lack of understanding of the importance of Walshaw Moor and its wildlife from those proposing this development.

Furthermore, at the Hebden Bridge Statutory Consultation event, we specifically asked the competent peat expert for evidence that the proposed substation field – explaining that it was a popular breeding ground for red-listed, protected birds - was not peat. He said coring showed which locations of shallow depth were shallow peat and which were soil.

² BTO Breeding Bird Survey Report

However, a look at the map that includes the 8 coring locations shows that none were in the proposed substation field, and none were in locations with a probed depth of <0.3m.

6.2 Surveys of the wider area

The PEIR recognises that displacement will be a likely impact of the proposed development. This is where birds are unable to return to their feeding, breeding or roosting areas due to disturbance caused by the construction, operation or decommissioning of the wind farm. It is also stated that birds are likely to relocate into the extensive contiguous upland habitats immediately surrounding the Proposed Development. It is then very worrying that surveying of these contiguous upland habitats will be limited to within 500 metre offset of the development area for breeding and non-breeding birds, 1 kilometre for nocturnal woodland survey and 2 kilometres for breeding raptors, and the wider upland area will not be surveyed for the ES.

If there is an assumption that some bird species may be displaced into adjacent areas of moorland, then why are surveys of these areas not being carried out? We consider these surveys are essential because unless it is known to what extent birds are already occupying these areas, how can there be any confidence that there is habitat available for displaced birds to be moved into? Birds are generally territorial and different species require territories of different sizes. There is no point in assuming that the birds from the development area might move into these contiguous areas, if these are already at capacity for that species.

We were told by the ornithologist at the Hebden Bridge Consultation that these surveys would be carried out but not until after the DCO has been agreed, and these would be carried out as part of the pre-construction surveys.

So it seems to be apparent that the displacement of birds from Walshaw Moor is of little interest to the applicant, and certainly not one that is going to affect any development proposals, we find this completely unacceptable, and further evidence that the applicant is not interested in mitigation or habitat restoration or enhancement despite their platitudes to the contrary.

6.3 Bird displacement

Following on from the point made above, we are very concerned that many of the birds threatened by the proposals cannot be displaced onto adjacent habitat, or habitat in other parts of the South Pennines even if it were available. There is very strong breeding site fidelity amongst many species, notably Curlew, this means that pairs return to the same spot year after year to breed. If Curlew cannot return to the same spot to breed they will not breed, and as Curlews have a lifespan of 20 – 30 years, and the recent massive decline, - 49% since 1995 – is due to their failure to breed successfully, if we prevent

these birds from breeding in one of their best breeding grounds in England we are speeding up their extinction in the UK, which holds 25% of the global population.

We strongly disagree with the assessment that species can utilise a wide network of suitable habitats across the wider South Pennine landscape.

7. Inadequacy of mitigation

7.1 Comprehensive mitigation and compensation package

The PEIR states in table 9.2:

“The Applicant is developing a comprehensive mitigation and compensation package in consultation with Natural England and other relevant stakeholders. This package will include detailed measures to avoid, reduce and, where unavoidable, compensate for collision-related mortality, disturbance and displacement, and habitat loss and alteration associated with the Proposed Development. Compensation measures will extend beyond the footprint of habitat loss and will reflect the strategic ecological importance of the study area for upland breeding waders and raptors. The approach is expected to include both on-site and off-site measures, aimed at enhancing retained habitats, improving ecological resilience, and delivering habitat creation and restoration at a landscape scale. Potential compensation land is currently being identified and will be confirmed through ongoing consultation. An outline Habitat Mitigation and Compensation Strategy will be prepared and submitted as part of the ES, setting out the finalised proposals, delivery mechanisms, monitoring framework and long-term management arrangements.”

Quite how habitats such as the fields proposed for the substation which are such a rich area for breeding waders, can be enhanced by these proposals is beyond our comprehension, nor can we understand how fragmentation of 9 square miles of moorland by industrial scale infrastructure can actually enhance the habitat for birds such as Golden Plover that avoid disturbance. We cannot see how the installation of 34 turbines will enhance the habitat for species such as Golden Plover, where studies find 79% fewer Golden Plover within 400m of turbines³, and Curlew and Snipe declining by 40% and 53% respectively.

We consider proposals to restore and restore the moorland discussed in para 9.6.21 to be unrealistic. Sphagnum bog is an irreplaceable habitat which grows at the rate of 1 mm per year. We look forward to the details of the potential ecological benefits which we are told will be developed for the ES, but somehow these don't quite square with the massive loss in bird biodiversity outlined in chapter 9 that will be the likely outcome of this development.

³ The Impact of windfarms on Moorland Birds in the UK The Moorland Association

Para 8.1.7 of the PEIR states:

“As the Proposed Development overlaps with two European Sites¹, the South Pennine Moors Special Area of Conservation (SAC) and the South Pennine Moors Phase 2 Special Protection Area (SPA), any mitigation or compensation will need to ensure that requirements under The Conservation of Habitats and Species Regulations 2017 (the ‘Habitat Regulations’)² are met. The Proposed Development is subject to a separate Habitats Regulations Assessment (HRA), which is under preparation.”

We that consider proposals for compensation will be inadequate. Firstly, how can loss of breeding areas for site faithful birds such as Curlew, Golden Plover and Lapwing be compensated for? In the case of Curlew, these are birds with a long lifespan, which have been breeding in the same part of Walshaw Moor for many years. We know from previous studies that once Curlew have been displaced from an area where they have previously bred, they are unlikely to return, so compensation and mitigation post construction will not help these birds. The best strategy is to not disturb them in the first place.

There is no detail anywhere in the PEIR of the comprehensive package for habitat restoration. We say more about this in section 8 of our response to chapter 8 Biodiversity. Different disciplines seem to have different ideas about how this can be achieved, none give more than the loosest of outline detail, and where this is given it focuses on the re-establishment of trackside grasses and not the re-establishment of the complex habitats that make up Walshaw Moor, the PEIR itself states the variety of the habitats within the study area contributes to its biodiversity (para 9.5.37). So where is the detail and the acknowledgment that many varied and different approaches to mitigation are required? Heather establishment is a different technique to grass establishment and creation of areas of sphagnum bog or cotton grass mire is different again, but these are not even hinted at. So, forgive us for thinking this is ill conceived and that the whole mitigation package is an afterthought, a mere sticking plaster to cover the wounds made by the turbines and their infrastructure, and one in our opinion with very little stickiness.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**PEAT, HYDROLOGY, HYDROGEOLOGY, GEOLOGY
(PEIR CHAPTER 10)**

- **Do the competent experts for this theme have appropriate qualifications and experience?**

1.1 The competent peat expert is a geoscientist/geomorphologist. This is a different skillset from peat ecology.

He is also the author of a contentious paper published in Dec 2025 by the Welsh renewable energy trade organisation: "Peatlands and Renewable Energy – The Developer Position". In it, he advocates for a "tiered, condition-based framework for peatlands" that challenges the Welsh government's policy changes that give all peatland the same protection as designated blanket bog. We disagree with the industry position he expounds, and flaws in the evidence presented in the paper have been rebutted by the Director of the IUCN UK Peat Programme. (*PEIR Appendix 1-1 Statement of Expertise*)

1.2 Competent peat expert's Conflict of Interest

Competent experts are required to exercise their professional judgement with an impartial regard to evidence. We think the competent peat expert may be in a position of conflict of interest, as the author of a position paper that advances an industry agenda. The IUCN UK Peat Programme Director has criticised it as presenting flawed evidence. At the very least we think there should be a conflict of interest statement in his bio in Appendix 1-1 Statement of Expertise.

We have noticed that wording and agendas in the industry position paper appear in the PEIR. We think that the application of the industry position advocated by the competent peat expert to the CEP PEIR is inappropriate and has resulted in some anomalous features of the blanket bog environmental impact assessment. They seem to represent an attempt to impose a tier-based system of blanket bog protection on Walshaw Moor's Special Area of Conservation, with some blanket bog more equal than others. This is a challenge to the Habitats Regulations protection for all blanket bog regardless of its condition. (*More info in our Overview Response to the Statutory Consultation, section 7*)

The anomalies in the blanket bog environmental impact assessment methods also seem related to the PEIR's apparent failure to consider key aspects of Natural England's Scoping Response. (See 2, below)

We think this shows that the PEIR is not considering Blanket Bog as a living, peat-forming habitat with hydrological and climate-regulating functions that exist as complex feedback processes, but simply as another form of lifeless soil. And that this is related to the qualifications and competences of the competent peat expert and the competent hydrology experts.

- 1.3** None of the three competent hydrology experts appears to have qualifications or competences in peat hydrology or hydrogeology. We think employing a standard hydrologist instead of a peat hydrologist won't get useful results. With peat, the initial effect on hydrology is just the first in a series of impacts. They would continue through the windfarm's operation and post-decommissioning.

2. Consideration given to Planning Inspectorate and consultees'/stakeholders' Scoping Responses

PEIR Chapter 10 has omitted to consider some Planning Inspectorate and Natural England Scoping Responses about Peat, Hydrology, Hydrogeology, Geology (*PEIR Chapter 10 and Biodiversity (PEIR Chapter 8)*).

We present examples of such failures in our Overview Response to the Statutory Consultation, sections 6 and 7; and in Section 2 in each topic response.

The PEIR does not wholly match up to the claim in Chap 7 PEIR Methodology, 7.4 Scope of the EIA, s7.4.2, that: "The feedback received through the Scoping Opinion has informed this PEIR, in particular the sources of information consulted, data collected and the scope of the EIA."

It seems that the PEIR may be in breach of Regulation 14(3)(a) of the EIA Regulations, that requires the Applicant to follow the Planning Inspectorate's Scoping Opinion.

2.1 Natural England Scoping Responses that PEIR Chapter 10 has omitted to consider:

PEIR Chapter 10 only notes the Environment Agency and Calderdale Council as relevant consultation bodies and considers their Scoping Responses. (*10.3.3 Table 10-3 Consideration of Scoping Responses from Other Consultees and Stakeholders*)

It ignores Natural England's Scoping Responses that are relevant to the topic of Peat, Hydrology, Hydrogeology and Geology. We think this is a serious problem since peat hydrology and hydrogeology are unique and Natural England's Scoping Response was very clear about the need to use an ecosystem approach. This applies to carrying out accurate baseline ecohydrology surveys, and assessment of the proposed development's ecohydrological and hydrogeological impacts.

Natural England's Scoping Response on hydrology seems to have been a response to the lack of clear, assessable information in the Scoping Report about Walshaw Moor's baseline hydrology and assessment of the proposed development's impacts on it - and on downstream flood risks including Hebden Bridge. (*More info in s2.2, below*)

These are Natural England's Scoping Responses that PEIR Chapter 10 seems to have ignored;

- Permanent loss of Special Area of Conservation habitat (*see also our Response to PEIR -Biodiversity*)
- Areas of blanket bog should be identified in line with Natural England's Definition of Favourable Conservation Status for Blanket Bog (ie the 2025 English definition of peat, which is not depth-based but depends on percentage of organic content).
- "The definition of blanket bog should use a peat depth of 30 cm based upon ecological factors... most areas of semi-natural vegetation on upland peat >30 cm should therefore be assessed as active or degraded blanket bog (except where other specific habitats are present, such as upland flush or fen). All degraded blanket bog is considered as restorable... based on local experience, we understand there to be peat-forming species including cotton- grass and sphagnum across large areas of the site, in which case the habitats would be considered active blanket bog."
- Irreplaceable Habitats should be avoided, with any impacts permitted only in exceptional circumstances.
- Internationally Designated Sites/Potential Impact Pathways where further information/assessments required. This states that reinstatement of peat in cutover areas is not considered to be appropriate or effective in this context. But the PEIR Appendix 3, Outline Peat Management Plan proposes to go ahead and do this, as part of its peat reuse and restoration plan to avoid having to treat peat excavated for infrastructure construction as waste, and truck it off site to landfill. (*More info in 5, Response to App 10-3 OMP, below.*)
- Hydrology, areas of blanket bog should be identified in line with Natural England's Definition of Favourable Conservation Status for Blanket Bog. This is not being done.
- Assessment of hydrological impacts: a sufficient level of detail about the assessment of hydrological impact should be provided in the ES to ensure the ecohydrology of the wider ecosystem function will be assessed."

More info about our response to these omissions in: 3. Errors; below; 5. Baseline survey work, in our Response to Appendix 10-4 Preliminary Peat Landslide Hazard; and Risk Assessment, Response to Appendix 10-9 Preliminary Flood Risk Assessment; Response to Biodiversity, sections 2.6, 2.8, 2.9; Overview Response, s7

2.2 Planning Inspectorate Scoping Opinion on Hydrology that the PEIR has failed to follow

PEIR Appendix 10-9 (Preliminary Flood Risk Assessment) has ignored the Planning Inspectorate's Scoping Response advice about the flood study area and Hebden Bridge Flood Alleviation Scheme:

- 3.3.7 Study Area: "The study area for the Environmental Impact Assessment should be wide enough to ensure that it encompasses all water features that have the potential to be significantly impacted by the proposed development... The study area should consider present conditions and future changes. Where possible, the study area should be agreed with relevant consultation bodies."
- And Table 10.2, Planning Inspectorate ID 3.3.8: "the FRA and ES will refer to the Hebden Bridge FAS"

(PEIR Chapter 10: Table 10.2, Planning Inspectorate ID)

More detail in our response to PEIR Appendix 10-9, Preliminary Flood Risk Assessment

The assessment and mitigation of the flood risk impacts of the Proposed Development to Hebden Bridge is a very high stakes aspect of the PEIR.

We therefore assumed that the PEIR would accept the Scoping Opinion advice about the Hebden Bridge Flood Alleviation Scheme and the hydrological study area. Particularly since there is a national policy requirement for Local Planning Authorities and statutory advisors to have the best and most assessable information from applicants. (2025 NPS EN-1 paras 4.2.13 – 4.2.14)

They didn't. Instead the PEIR came up with a 1km buffer of the proposed development boundary, choosing to follow guidance about study areas for flood risk assessments **of the impacts that road projects can have on the water environment**. It claimed there is no guidance for hydrology study areas for onshore wind farms. *(More info in Response to PEIR Appendix 10-9, Preliminary Flood Risk Assessment)*

But what is the Planning Inspectorate Scoping Opinion, if not guidance for the hydrology study area for Calderdale Energy Park?

2.3. The PEIR may be in breach of Regulation 14(3)(a) of the EIA Regulations, that requires the Applicant to follow the Planning Inspectorate's Scoping Opinion

The PEIR itself refers to the statutory power of the Scoping Opinion.

It is confirmed in the Planning Inspectorate's FAQs on The Planning Act 2008: Environmental Impact Assessment: Scoping Process.

There *is* a statutory basis that requires the Applicant to follow the Planning Inspectorate's Scoping Opinion:

"Regulation 14(3)(a) of the EIA Regulations states that where a Scoping Opinion has been adopted the Applicant's ES should "be based on the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)..."

"It is for the Applicant to demonstrate how an ES submitted as part of an application for development consent meets this requirement, and to justify any deviation from the SoS's Scoping Opinion due to the evolution of the project or methodologies."

3. Errors, omissions and inconsistencies

There seem to be three kinds of errors that riddle the Peat/Hydrology PEIR. They all more or less drove us mad trying to figure them out.

We have come to the view that there is something very wrong when the Saudi investors have so far spent £15m or thereabouts on the development of this project, but the Project Team and competent experts lack the basic skills to give a clear account of how they've:

- Considered Scoping Opinions and corrected previous errors,
- Carried on to accurately complete Walshaw Moor's and other project locations' baseline peat and peat hydrology and hydrogeology surveys.
- Assessed the proposed development's likely environmental impacts on these "receptors"

Is Calderdale Energy Park perhaps nothing more than a tax write off scheme for Next Gen Infra? Are we all being given the run around for nothing? In which case we could all just revert to our normal lives without all this hooah? Or is that what they want? Are they trying to get us all to give up and shut up?

3.1 Numerous clerical errors

Clerical errors confused and frustrated us. Trying to work out what was meant wasted our time Here are some of them. It got too boring to carry on.

- Appendix 10-3 Outline Peat Management Plan section 3.2 Peat Depth calls the map of the interpolated peat depth model Figure 10.4.3. Except there isn't a Figure 10-4.3. The estimated peat depth map (different name for map of the interpolated peat depth model) is Figure 10-11.
- Section 3.2 also gives a misleading description of the map of the interpolated peat depth model. The colours that it says represent peat areas in fact are shown on the map key as peat 1.5m - 5m. The colours that he calls 'organic or other soils' are shown on the map as deep peat 0.3m -1.5m. Grey is peat up to 0.3m which the 1980 England and Wales Soil survey peat definition says isn't peat.
- (Chapter 10 Peat, Hydrology, Hydrogeology, Geology, section 10.5.70 gets the Figure number right. It says: "The interpolated peat depth map and probing locations are shown in Figure 10-11.")
- Appendix 10-3 Outline Peat Management Plan section 5.4 states that Fig 10-3.4 shows there will be a Peat Storage Area located in the loop of a proposed track linking the proposed turbines T16 and T18. There is no Fig 10.3.4. We think they must mean Fig 10-11. This shows the locations of the Borrow Pits (but doesn't show the Peat Storage Area. Although it is possible to identify its location if you've read Appendix 10-3 Outline Peat Management Plan section 5.4. But if you haven't you wouldn't know a Peat Storage Area was proposed, or what it would be).
- Appendix 10-3 Outline Peat Management Plan section 5.3.4 states: The Turbine Area has been subject to extensive gully erosion (see Fig 10-3.4)...There is no Fig 10-3.4. We don't know which Figure is meant because we're too tired to look.
- Other clerical/typo errors are mentioned in our Response to PEIR Appendix 10-2

3.2 Manipulation and Gaslighting about proposed wind farm design, peat and carbon storage and emissions baseline data, and assessment of proposed development's impact.

Manipulation is the only polite word we can find to describe what the underhanded mix up of peat definitions in PEIR Chapters 10 and 11 feels like.

When the PEIR says the word 'peat' it means whatever they want it to mean.

This falls far short of the impartial professional presentation of accurate preliminary environmental information that a public consultation requires in order to be Gunning compliant.

It obviously matters how the PEIR defines peat. It is basic to the design and construction of the proposed development, including any proposed restoration programme. It is also key to quantification that underpins key baseline data, and methodology for assessing the significance of the environmental/hydrological impacts of the proposed development.

We were baffled as to why the PEIR denied that shallow peat - defined by DEFRA/Natural England as up to 0.3m - is peat, and instead classified it as soil, and excluded it from the quantification of excavated peat.

And we couldn't see why the PEIR claimed that the current version of the proposed development had taken account of concerns expressed in the statutory consultation and had moved the turbines off deep peat.

That is quite simply untrue, using the 2025 English definition of peat in Natural England's Definition of Favourable Conservation Status for Blanket Bog. It defines deep peat as >0.3m. A table in the PEIR Appendix 3, Outline Peat Management Plan, shows that only one turbine is on an area of peat <0.3m.

At the 12 May Parish Councils Forum meeting with CEP, a Wadsworth Parish Councillor challenged the Project Team Director Christian Egal when he repeated the claim that the turbines are now on shallow peat as a result of the redesign. A member of the Project Team conceded that, using the DEFRA peat definition, the

claim was untrue. Christian Egal should have said "shallower peat", not shallow peat. This was recorded in CEP's Draft Notes of the meeting.

Public confusion increased after the 14th May Calderdale Energy Park webinar. A member of the public emailed us that she had asked how they classify deep peat and Don MacKay said anything more than 30cm.

The answer confused her. She wondered if it meant that they were no longer using the Scottish definition of peat that is one of the peat definitions referenced in the PEIR Chapter 10. A fair question, but the webinar didn't deal with it.

After the webinar she scoured the PEIR Chapter 10 for a reference to the DEFRA definition of peat. She found an obscure footnote which referenced an out-of-date 2010 Natural England definition of peat, and thought that was the current DEFRA/Natural England peat definition the PEIR was using.

The confusion has continued. As of early June, Christian Egal is still publicly claiming on TV that the turbines would be on shallow peat.

This is gaslighting - misleading the public and spreading confusion and ignorance. There is a lot of this throughout the PEIR and other statutory consultation materials.

For this reason among others, we find the statutory consultation has been inadequate to the task of providing information that enables people to make an intelligent response to the PEIR and related Statutory consultation materials.

(More info in our Overview Response, s 6, 6.2.2)

3.3 Trying to disentangle what peat definition game the PEIR is playing has been vexatious.

The PEIR includes references to both 2017 Scottish and 1980 Welsh and English Soil Survey peat definitions:

- **“In the absence of English Guidance**, the Phase 1 and Phase 2 Peat Surveys presented in Appendix 10-2 and Figures 10-10 and 10-11, had been carried out using the 2017 Scottish Guidance on Peat Survey for Developments on Peat .”

PEIR Chapter 10 Peat, Hydrology, Hydrogeology, Geology, 10.4.4 (More info in our Overview Response, s 6.2.2)

- “For the purposes of this report”, the 1980 England and Wales Soil Survey peat definition is used. It defines peat as a soil comprised of $\geq 20\%$ organic matter of a depth of ≥ 30 cm where over bedrock or weathered rock or ≥ 40 cm within the upper 80 cm (i.e. not over bedrock / weathered rock) excluding fresh litter and living moss (Avery, 1980)” The full reference is given. *PEIR Appendix 10-3 Outline Peat Management Plan Section 1.2*

Based on an explanation from the competent peat expert to the Parish Councils’ Forum on 12th May 2026, the Scottish Guidance defines peat as 0.5m and upwards, and deep peat as 1.0m and upwards.

It seems that Calderdale Energy Park has chosen to use the 2017 Scottish definition of peat for the purpose of defining deep peat in order to inform the design of the Proposed Development and make it seem that it now avoids deep peat. (The 2017 Scottish definition reference is in PEIR chap 10, table 10-1, footnote 30.)

We assume the justification for using the 1980 Welsh and English soil survey definition is that it excludes areas of Walshaw Moor from being defined as peat, where the baseline peat depth surveys measured up to 0.3m. However the peat depth surveys were too simplistic to verify whether or not these shallow peat probe areas are in fact soil or not. *(More info on the Peat Depth Survey shortcomings in Response to PEIR Appendix 10-3, Outline Peat Management Plan.)*

Despite Natural England’s Scoping Response advice to use the 2025 English definition of peat. Calderdale Energy Park, it seems that they continued to use 2017 Scottish

definition of peat in the Phase 2 peat depth probing carried out in Autumn 2025, (PEIR Chapter 10 Peat, Hydrology, Hydrogeology, Geology, Section 10.4.4)

3.4 It's not true that there was an absence of English guidance when the Peat Depth Surveys were carried out

(We don't know who's going to read this. If you know about English definitions of peat you might want to skip this section and go to 3.5.)

These are the dates of peat depth surveys, that the PEIR claims were undertaken in the absence of English guidance on the definition of peat:

- Phase 1 in 2022
- Phase 2 since October 2025. (As a result of the Planning Inspectorate's Scoping Opinion on Calderdale Energy Park's second, September 2025 Scoping Report).

Until 2025, in England DEFRA/Natural England used a depth-based definition of peat, and defined deep peat as 0.4m or more. In 2022 the English definition of deep peat was therefore NOT the 0.5m used in the September 2023 Scoping Report with reference to the Phase 1 Peat Depth Survey.

At the time, Ban the Burn and Calderdale Council both pointed this out in their Scoping Responses, as an error that needed correcting because Calderdale is in England not Scotland.

The 2025 English definition of peat has abandoned depth as a criterion. Instead it defines peat as any accumulation of waterlogged decomposed dead plant matter that has accumulated in situ and consists of at least 30% (dry mass) of dead organic material. (Natural England's 2025 Definition of Favourable Conservation Status for blanket bog.)

Although peat in England is no longer defined by depth. an ecologically-based depth criterion of 0.3m is still used to define the irreplaceable blanket bog habitat.

Natural England's 2025 Definition of Favourable Conservation Status for blanket bog uses this criterion on the grounds that: "once the peat is deeper than 0.3m the majority of plant roots are restricted to the peat layer, which contains relatively few solutes and is generally highly acidic, making conditions increasingly intolerable to all but the typical species of blanket bog...This being the case, it is axiomatic that most of the vegetation on blanket bog must obtain its required nutrients via precipitation rather than from any underlying mineral soils."

However this depth categorisation is not hard and fast because “areas of peat shallower than 0.3m... will also support blanket bog vegetation and should also be regarded as blanket bog and an integral part of the hydrological unit of the peat mass or body.”

Contemporary English definitions of peat do not exclude any depth of peat from being considered as peat and the English peat map doesn't use any depth definitions in its handbook/how to use info.

3.5 Omission of risk of water contamination from potential mobilisation of heavy metal and polycyclic aromatic hydrocarbons contamination stored in the peat.

At the Trawden consultation event on 9th May, when a member of the public asked about the risk that habitat loss and degradation caused by the Proposed Development would mobilise heavy metals and organic compounds such as polycyclic aromatic hydrocarbons, the Calderdale Energy Park project team member didn't know what she was talking about. *(More information in our response to PEIR Biodiversity, s6.2.2)*

3.6 Field Studies errors

For example, in Phase 2 peat probing and coring Calderdale Energy Park used the 2017 Scottish Peat Survey Guidance when they carried out their second high density peat depth survey. But it looks as if there have been failures to follow it. (PEIR Chap 10 Peat, Hydrology, Hydrogeology and Geology)

The effect of these errors has been to create a wholly inadequate dataset for peat substrate character. But depth and character of peat and the underlying substrate information are key to establishing baseline blanket bog data and environmental impact assessment. *(More info in Response to PEIR Appendix 10-2, Peat Depth Surveys, section 10)*

4. Inadequate hydrology baseline survey and associated monitoring work

In addition to what we have already said above, for hydrology, hydrogeology, geology and peat, the following baseline surveys have not been completed to a sufficient degree, meaning that our ability to evaluate hydrological and hydrogeological aspects of the proposed development has been severely constrained so far:

- Detailed characterisation of the peat moorland
- Understanding of the character and properties of superficial deposits underlying the peat
- Understanding of depth to bedrock and local aquifer properties

- Variation in groundwater and surface water levels and flows
- Residual contamination levels in the peat
- Groundwater Dependent Terrestrial Ecosystems.
- The bespoke Habitats Condition Assessment's identification of MW hydrology units appears to have used an inadequate methodology. (*More information in Response to Biodiversity, section 5.5.2*)

5. Downgrading already-degraded blanket bog in the Methodology for Assessment is not an impartial or evidence-based approach.

PEIR Chapter 10, Methodology for Assessment, has used the fact that Walshaw Moor's blanket bog has been previously drained and degraded, in order to reduce its perceived value and give it a low sensitivity classification Eg peat >1m to 2m thick in densely drained, eroded terrain is categorised as of LOW significance in their methodology for assessment!

This seems to undermine the protection for all blanket bog in the South Pennine Moors Special Area of Conservation.

We think the PEIR advocacy of this approach may involve an undeclared conflict of interest on the part of the competent peat expert. (*More info in Section 1.1 above, and Section 7.1 of our Overview Response to the Statutory Consultation*)

6. Repeated deferral of decisive hydrology impact assessment to the Environmental Statement

PEIR Chapter 10 repeatedly defers decisive hydraulic modelling, drainage strategy, downstream receptor assessment and climate-change evidence to the Environmental Statement,

It is not ok to exclude information about these matters from the Statutory Consultation, and we doubt that it is feasible to complete them to the required standard in the available time.

2025 NPS EN1 has things to say about applicants not submitting proposals for examination before they are ready.

6.1 Groundwater investigation is deferred to the Environmental Statement.

In the meantime, Calderdale Energy Park keep banging on that there is little or no movement in groundwater in catotelm because of the low permeability of peat (ignoring the presence of peat pipes and research on infiltration).

The PEIR Draft Commitments Register states that the effects of infrastructure (tracks/drainage) “would be limited to a few metres due to the steepness of drawdown curves in low permeability peat”. This is not based on fact as they have not characterised the peat in the proposed development area. If they had used the word could instead of would the sentence may be more accurate.

Peat is typically thought of as having high storage (of water) and relatively low permeability (hydraulic conductivity). However, this can be misleading. The stated permeability/void ratio is very interesting in Hobbs 1986. He compares montmorillonite clay and peat, which do have similar void ratios (linked to ability to store water). However, the permeability of peat can be so much greater than that for the montmorillonite. Uncompressed coarse fibrous peat can have the permeability of medium sand and therefore transmit water quite readily which means the impacts on Walshaw Moor’s peatland would not have a steep drawdown curve linked to pumping or drainage.

Deeper peat may be expected to have much lower permeability and be much less likely to dewater, with steeper drawdown curves, but the upper less consolidated peat zone will be at risk of dewatering over much wider areas that they are assuming.

If the deeper peat is underlain by coarser grained material like, sand for example, the whole system could dewater over time if installed drainage or pumping is connected to such an underlying zone. Again, with no site characterisation or detailed design of their infrastructure they cannot answer this and should not make such bold statements based on invalidated assumptions.

7. Proposed peat and hydrology mitigations seem to be largely unevidenced statements of intent

We explain this in our Response to PEIR Appendices 10-3 and 10.4, and Biodiversity.

We are particularly alarmed at proposed mitigations for flood risk to Hebden Bridge in PEIR Appendix 10-9, Preliminary Flood Risk Assessment. The proposed direct- rainfall run off flood risk model seems ill conceived and we can’t see how it’s not hampered by lack of baseline ecohydrology data. We don’t think a hydrology walkover, undertaken since the Scoping Opinion, will have given them much useful information. As a result we think the inputs that the competent flood expert says they are using in their draft model are inadequate. That combined with the 1km hydrology study area and lack of

consideration of the Hebden Bridge Flood Alleviation scheme, plus daft errors in the Preliminary Flood Risk Assessment all add up to our response of heartsink.

More info in our Response to PEIR Appendix 10-9, Preliminary Flood Risk Assessment.

The PEIR Draft Commitments Register proposes a Drainage Management Strategy to mitigate for groundwater flow alteration and interruption, as a result of alteration of surface flow, natural drainage patterns / runoff volumes and rates caused by the proposed development. This Drainage Management Strategy would incorporate the diffuse discharge of captured groundwater to down gradient peat, in order to limit the down gradient effects on low permeability peat to short distances, up to approximately 10m, from excavations.

How do they propose to engineer this diffuse discharge of trapped groundwater downslope from the offending infrastructure? Are they proposing culverts under the tracks? If so, do they not know that these cause erosion and peat degradation downslope, because the water they send downslope is not diffuse but concentrated in a big rush following rainstorms and snowmelt? And do they not know that these measures are accompanied by peat subsidence under the tracks which is potentially a big problem?

8. Peat hydrology impacts and Imperative Reasons of Overriding Public Importance

Calderdale Energy Park are currently screening their Habitats Regulation Assessment with Natural England, as part of the process of seeking the Secretary of State's derogation of the Habitats Regulations. (*More info in Response to Biodiversity, section 10*)

We think it is worth noting the exceptional cases that would overrule the presumption of consent for Calderdale Energy Park as Critical National Priority Infrastructure. These are:

- Residual impacts after mitigation which present an unacceptable risk to, or interference with, human health and public safety ...,
- Residual impacts after mitigation which present an unacceptable risk...onshore to flood risk 2025 NPS EN-1, 4.1.7

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**PEAT DEPTH SURVEY REPORT
(PEIR APPENDIX 10-2)**

- **The PEIR has failed to provide the required justification for the need to site infrastructure on peatland**

Where developments are proposed on peatlands, including deep peat, a peat survey is required, and applicants must provide justification of the need for infrastructure to be sited on peatland. (2025 National Policy Statement EN-3, 2.12.78)

The PEIR has failed to provide this justification. (Info in our Response to the Biodiversity PEIR, section 3).

2. Shortcomings of the PEIR baseline peat depth surveys

Baseline peat depth survey shortcomings are summarised in the Wadsworth Parish Council Overview Response to the Statutory Consultation, sections 6.2.1 and 6.2.2.

Briefly, baseline survey and associated monitoring work has been inadequate in several respects. For hydrology, hydrogeology, geology and peat aspects, the following have not been completed to a sufficient degree, meaning that our ability to evaluate environmental aspects of the proposed development has been severely constrained so far:

- Detailed characterisation of the peat moorland
- Understanding of the character and properties of superficial deposits underlying the peat
- Understanding of depth to bedrock and local aquifer properties
- Variation in groundwater and surface water levels and flows
- Residual contamination levels in the peat
- Groundwater Dependent Terrestrial Ecosystems.

Details of PEIR baseline peat depth surveys shortcomings are in section 10, below.

3. Defining peat

How data from baseline peat surveys are used to identify predicted impacts of the proposed wind farm depends on how peat is defined.

For reasons explained below, we find it problematic that the baseline peat depth surveys have used a mishmash of peat definitions, particularly since the PEIR does not present this information in an easily accessible way.

The phase 1 survey seems to have defined peat according to the 2017 Scottish definition. This was identified as problematic by consultees to the 2023 Calderdale Wind Farm Scoping Report, because:

- It defined deep peat as deeper than the then-current English definition of 0.4m.
- Calderdale is in England not Scotland and the peatlands of each country are significantly different.

The PEIR Outline Peat Management Plan - mainly about what to do with excavated peat - indicates that it has used the 1980 Welsh and English Soil Survey Definition of Peat.

4. Simple peat depth baseline surveys are not the basis for establishing the spatial distribution of peat across the PEIR boundary. But this is what the PEIR has used them for.

The peat depth baseline surveys undertaken to date are only a first look at peat and superficial deposit geology. They have comprised 8,263 probe hole locations. As a headline number this may seem impressive.

But a very simple screening method has been used, that yields very little quantitative data. Peat cores have only been taken at 0.1% of probe locations and there is no record of groundwater monitoring. As a result they are not the basis for establishing the spatial distribution of peat across the PEIR boundary. But this is what the PEIR has used them for.

Moreover they have done this using the old 1980 Welsh and English soil survey definition of peat. (PEIR Chapter 10, s10.5.70). It defines peat as >30cm over bedrock or very stony material and otherwise as >40cm. Anything up to 0.3m it defines as soil, not peat.

Towards the end of April, Calderdale Energy Park told Wadsworth Parish Council (three months after being asked) that this was the definition of peat they'd been using since October 2025 "for the purposes of the PEIR."

Use of this old definition has served to exclude any probe locations with a depth <0.3m from the quantification of the area of peat on the Walshaw Moor proposed Turbine site.

The Preliminary Environmental Information Report Appendix 10-4 (Preliminary Peat Landslide Hazard and Risk Assessment) justifies using this Soil Survey of England and Wales definition because, “The relevance of the use of these depth thresholds is to focus the assessment on deeper peats with a higher likelihood of a functional acrotelm / catotelm hydrological system, associated bog vegetation capable of peat forming and proportionately greater carbon storage. While shallow peaty soils less than these thresholds may be functionally linked components of the landscape, they are less likely to be characterised by these attributes.”

We think this seems more like an excuse than a reason.

We don't understand why the PEIR has failed to consider Natural England's Scoping Opinion that - for habitat and hydrology baseline surveys, and subsequent predictions of impacts from the proposed wind farm on habitats and peat ecohydrology - Calderdale Energy Park should use the 2025 English definition of peat. This is the Definition of Favourable Conservation Status for Blanket Bog. This is not a depth-based definition of peat, but is based on percentage of organic matter (20%) (*More info in WPC Response to Biodiversity PEIR, Chapter 8*)

5. Undercounting key factors in predicted environmental impacts

We guess that the PEIR has chosen to use this old definition because it has the effect of reducing the area of Walshaw Moor's Special Area of Conservation that is defined as peat, and therefore also reducing quantification of:

- The area of irreplaceable blanket bog.
- The volume of excavated peat.
- The predicted carbon emissions from degradation of excavated and stored peat, and from other indirect impacts on peat of the proposed windfarm.

But the cursory baseline peat depth surveys cannot identify with any certainty that the areas up to 0.3m are soil, not peat. The competent peat expert told us that they know these areas are soil because they'd cored shallow probes. But Figure 10.10 shows that 5 of the 6 locations they cored on the Walshaw Moor proposed wind farm site were >0.5m.

6. Garbage in, garbage out

This seems like the garbage in-garbage out problem associated with the use of the Scottish Government Carbon Calculator for Wind Farms on Protected Peatland, that was one of the reasons for its 2025 Phase 1 Review. The Review identified several questions about its effectiveness and accuracy which led to the advice that it should no longer be used pending further work on a number of recommendations to improve its accuracy and functionality. Despite this, as of May 2026 the Scottish Government

Energy Consents Unit continues to require completion of the Carbon Calculator for relevant wind farm applications submitted to Scottish Ministers.

<https://www.gov.scot/publications/foi-202600511024/>

7. Inaccurate claim about content of non-statutory consultation feedback

We distrust PEIR attempts to misrepresent public feedback to the non-statutory consultation last year as "concerns about locating turbines in areas of deep peat", This was not the case. It was not and is not about deep peat, it was and is about any and all peat.

The united campaign groups' response last year was to say NO to windfarms on protected peatland, because "Protected peatland like Walshaw Moor is NOT the right place for a windfarm and we reject the Calderdale Energy Park proposal in its entirety."

This PEIR has omitted this response to the non- statutory consultation.

8. Incorrect claim that redesigned wind farm avoids deep peat

The PEIR Outline Peat Management Plan claims to have redesigned the proposed development so as to avoid the deepest peat. But data in the Outline Peat Management Plan show that only 1 of the 34 turbines is on shallow peat (defined by Natural England as up to 0.3m) and the rest are on deep peat (0.3m +), with a range between 0.34m-1.13m. (*Appendix 10-3: Outline Peat Management Plan, Table 4.2*)

But their use of the Scottish definition of peat may allow them to claim to be avoiding areas of deep peat when they are avoiding anything 1.0m deep or more. This seems to have been the basis for Christian Egal's announcement to the Parish Councils Forum that the 2026 version of the Proposed Development has redesigned the turbines' layout so they are located on shallow peat.

When challenged by Parish Councillors, Calderdale Energy Park had to clarify that turbines are on Defra-classified deep peat. (April 2026 Parish Council Forum Meeting Report)

9. Appendix 10-1 Good Practice Methods claims

Peat Habitat and Deep Peat Avoidance:

The layout has been designed to avoid good quality peat habitats and areas of peat (>0.3m) where possible. This has been conducted, and through probing and coring [sic]

to establish the spatial distribution of peat across the PEIR Boundary as discussed in Appendix 10-2: Peat Survey Report and presented in Figure 10-10: Depth of Penetration and Probe Locations and Figure 10-11: Estimated Peat Depth.

But as mentioned above (4), they only have a totally inadequate dataset for coring which does not provide the basis for establishing the spatial distribution of peat across the PEIR boundary. And the PEIR has failed to justify the need for infrastructure to be sited on peatland. So we doubt that the design layout has constituted good practice.

10. Shortcomings in the Phase 2 Peat Depth Survey Field Work

.As Calderdale Energy Park are using the 2017 Scottish Peat Survey Guidance, (*PEIR Chap 10 Peat, Hydrology, Hydrogeology and Geology*) [here is how they should have surveyed](#) their second high density peat depth survey. (6409 probing points on a 20m grid around proposed infrastructure (turbines, hardstands and access routes, plus 8 peat cores.)

But it looks as if there have been failures to follow it:

- Using a 20m by 20m grid instead of a 10m by 10m grid
- Relying on narrow diameter fibre glass probes insufficiently backed up by peat coring using an auger, so they haven't reliably obtained information about the depth and character of peat and underlying substrates
- Only coring about 0.1% of locations probed, equivalent to one data point per 278 hectares in the Turbine Area. This is considered a wholly inadequate dataset.
- They recorded the condition of the peat using the Von Post test, but only for the 8 locations where they cored.
- They use the 1980 Welsh and English soil survey definition of peat that lets them claim in Tables 3 and 4 that shallow peat less than 0.3m is not peat but soil.

10.1. The grid question

They didn't include a 10m by 10m grid around the centre of each proposed turbine base or other infrastructure including borrow pits and proposed temporary storage sites, which the Scottish Guidance recommends.

Instead, they used a 20 m grid across the footprint of proposed infrastructure, across additional locations considered for infrastructure, and within a 50 m buffer area. They also probed at 50m intervals with 10m offset probes along all proposed and existing internal site access tracks.

This doesn't seem adequate to us. We carried out some peat depth surveys ourselves using an IUCN UK peat programme citizen science protocol which specified 10m probes along 100m transects, because peat depth can change radically in a short distance - which we found and have GPS located proof of.

It's also not clear if they cross referenced their 20m x 20m peat depth measurements with NVC habitat survey quadrats' description of vegetation, so as to provide identification of Annex I habitats and Ground Water. (*More information about habitat surveys in our Response to the Biodiversity PEIR*)

10.2 The auger question

For further assessment - e.g. the Phase 2 peat survey - Scottish Guidance recommends using an auger rather than a probe to identify the thickness of peat deposits and provide an indication of peat stratification and localised surface hydrological conditions.

But PEIR Appendix 10-2 Peat Depth Survey Report says they used narrow diameter fibre glass probes of up to 7m length that do not allow a sample to be obtained. The probing technique uses exactly the same rods as the ones we used which we think were nylon (in their case fiberglass rods)..

10.3 Substrate

It is unclear to us how they managed to determine the substrate to the accuracy they claim with a probe. At shallow depth it may be possible to determine if it is rock (or a boulder) but that's about it. We are not sure what purpose this information provides to be honest.

The likely reason they didn't use augers is that this would have taken much longer to complete in the field, with a lot more subsequent data processing.

But depth and character of peat and underlying substrate information is key to have. In the case of the latter it is necessary to know if peat is directly underlain by bedrock or superficial deposits and what these are. For example if present, is the superficial geology uniform or varied in character, and is it relatively permeable allowing groundwater movement? Neither probing or auger techniques can provide any information on bedrock as they cannot penetrate it.

The credibility of their data in the Table 2 is highly questionable. They state the probes recorded substrate information based on feel as the probe contacted the formation underneath the peat. Such an approach can be seen as a stab in the dark. We would consider providing 12 different substrate types in Table 2, based on such a method, nonsense. At best you may be able to interpret the "feel" in very broad sense, whether the substrate is rock/resistant or soft/clayey.

10.4 Coring

10.4.1. Misleading claim that substrates data obtained by peat probing was verified with coring data

There are 6048 new probes to add to the 1854 original probes, making a total of 8263 probes. Of these only 8 cores were extracted using a hand auger shown in photo 3 of PEIR Appendix 10-2. And PEIR Figure 10-10 Peat Probe Depth and Core Locations shows that two of the core locations are outside the proposed turbine area.

The cores are intended to check the accuracy of the probe depth indications. This means CEP only collected hard data for peat/subsoil character at about 0.1% of locations probed, equivalent to one data point per 278 hectares in the Turbine Area. This is considered a wholly inadequate dataset. Therefore, for CEP to say the substrates data obtained by the probing was verified with the coring data is misleading.

10.4.2 Limited usefulness of the 8 cores in checking the accuracy of probe depths

They have summarised their findings in the text and also at Annex III of 10-2. The point they make is that there are discrepancies between core and probe peat depth data because the probes will push into the underlying mineral soils, the type of which they claim to be able to discern, (substrate, 5th column of the probe survey results). The depth discrepancies are in the range 0.15 to 0.65 metres with the probes exceeding the actual recorded depths of peat from the cores by this range of lengths.

Of the 8 probes they did (although they record 10 at Annex III), the maximum depth they achieve is 1.4 metres at probe 3385. For the most part (8 from 10) they are all less than 1.0 metre. When you are probing to such shallow depths, It is relatively easy to push a probe through peat and on into mineral soil if it's soft.

However, in our peat depth survey we found deeper peat required much greater effort to probe, because of the skin friction on the rods. It stands to reason then that the deeper the probe the more accurate it will be, as you can see if you look at the results properly, see below:

Probe No.	Probe (m)	Core (m)	Actual peat depth (m)	Difference (m)	%age of Overall Probe Depth
4824	0.9	1	0.9	0	0.0
4242	0.9	0.9	0.75	0.15	16.7
ex 6	1.0	1.0	1.0	0	0.0
ex 21	1.25	1.25	1.25	0	0.0
3504	0.95	0.95	0.65	0.3	31.6
3004	0.85	0.85	0.55	0.3	35.3
3385	1.4	1.4	1.25	0.15	10.7
3272	0.9	1	0.25	0.65	72.2
3185	0.55	0.6	0.25	0.3	54.5
5950	0.65	0.7	0.45	0.2	30.8

Having said that, in 4.2 they do allude to the poor accuracy at shallow depths in their penultimate paragraph. But why did they not core the deeper peat which would have proved the accuracy of simple probing?

As it is, they claim that the coring verified the peat probing depths in one location where the probe depth recorded the same as the core (within 0.10m margin of error). In seven coring locations the probe overestimated peat depth by up to 0.65m due to a presence of clay substrates “indicating that there is likely some overestimate of peat depth from probing alone.”

Two coring locations are outside the proposed turbine area, along a track to the southwest of Dove Stones. Of those inside the turbine area, one is near T22, the others are by the access tracks near turbine foundations T25, T26 (either side of the turbine foundation), T27 and by T24.

The key shows that the 6 on-site core locations are all on peat probed at >0.5m-1.0m or >1.0m-1.5m, except T24. It is hard to see any rhyme or reason in these 8 core locations.

10.5. Error in PEIR Fig 10-10

PEIR Fig 10-10 Peat Probe Depth and Core Locations confused us because of various blue-bordered shapes on the map which the key defines as 'peat survey area.' This seems to be an error, because when you look closely at the map, the blue-bordered shapes are areas including dikes where no peat probing took place. This isn't what the key says.

11. Peat Depth Distribution

They claim that 82.1% of the results indicate peat more than >0.3 m depth. We looked at our peat depth survey results and we recorded 92.5 % of our 199 peat probes more than 0.3 metres depth.

Our survey had found that the field where they want to put the substation is peat not soil as they claim, and the area behind the Shackleton Plantation is deep peat (>0.3m) not shallow peat as they claim. The competent peat expert said we could have been probing a soft substrate, not peat. They knew the proposed substation field is soil because they'd cored shallow probes. But Figure 10.10 shows that 5 of the 6 locations they cored were >0.5m and none were in the proposed substation field.

12. Clerical error

The Annex 2 peat probing data declare at the bottom of each page they are for the "LT 14 Mainland Cable Route", this must be incorrect. Along with the units for depth which we believe should be centimetres and are given as metres.

13. Unreliability of Von Post test because of tiny sample

They record the condition of the peat using the Von Post test, yet this is only for the 8 (or 10) probes they carried out and may misrepresent the condition of the underlying bog and the reuse of peat by some margin.

Amorphous peat (Von Post score H7 and above) was identified in two out of the eight cores undertaken within the Peat Survey Area.

Their final sentence of section 4.5 warns, "In terms of reuse, consideration must be given to the increasingly amorphous and plastic nature of that catotelm with Von Post scores of H7 and above."

But rather than verify that claim by carrying out more coring so as to get a more accurate representation of the condition of the underlying bog, Calderdale Energy Park hasn't bothered carry out a representative sample of cores.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**OUTLINE PEAT MANAGEMENT PLAN
(PEIR APPENDIX 10-3)**

The PEIR Outline Peat Management Plan is not credible because of its many flaws.

It hopes to get away with excavating 559,645m³ of the most highly protected peat in England, without having to truck it off site as waste. (*Outline Peat Management Plan 2.2.3*)

That requires finding ways of using all the excavated peat to either reinstate temporary excavations or to restore degraded blanket bog—while maintaining the ecosystem functions of the displaced peat and the peat surrounding an excavated area. This is unlikely, given that peat readily disintegrates when excavated from the water table.

Our response identifies the following problems with the PEIR's peat reuse proposal:

- The peat mass balance is only achieved by dumping an excess 99,386m³ of excavated peat (18% of the total) in a created peat storage area that has largely lost its peat.
- The peat area and the volume of excavated peat are almost certainly underestimates due to the use of an old 1980 peat depth definition. It defines areas probed as up to 0.3m deep, as soil. But the simplistic baseline peat depth survey methods are not up to the task of accurately distinguishing between shallow peat and soil.
- There are good reasons to be sceptical about the claim that reuse of excavated peat would restore already-degraded blanket bog and other peatland habitats designated by the Special Area of Conservation. The Peatland Alliance position on why peat removal and reuse won't work is stated in section 9.
- Peat Reinstatement proposals get a thumbs down from Natural England's Scoping Response, which advised against reinstating peat in cutover areas. Nature Scot Guidance says peat reinstatement cannot be considered as offsetting or enhancement

A more detailed account follows.

1. Peat Mass Balance

The PEIR Outline Peat Management Plan is remarkable in its claim that calculated peat arisings (ie volume of peat excavated to build the windfarm infrastructure) are just 131

m3 short of the estimated volume of the peat reuse and reinstatement, given the approximations involved here! (*Table 5.7 Estimated peat mass balance at PEIR*)

“The value indicates that all peat excavated could be reused within the Turbine Area both in reinstatement of temporary infrastructure and in positive restoration of peatlands already in degraded condition.” (*Section 5.6 Peat Mass Balance*)

Reuse of excavated peat avoids it being categorised as waste and so needing to be trucked off site. The Outline Peat Management Plan anticipates there will be no waste disposal if reuse measures are deemed suitable in consultation (2.2.3)

But for there to be considered no net loss of peat, both the displaced peat and that connected to it (e.g. surrounding an excavated area) must maintain ecosystem service functions. (2.2.3) The Outline Peat Management Plan lists these as:

- Carbon retention
- Biodiversity
- Water regulation

To which we would add:

- Carbon sequestration
- Flood risk mitigation

That prospect seems questionable, for reasons that follow (*sections 8-12, below*).

2. The lack of peat mass balance

Despite the headline claim of no peat waste/peat mass balance, in fact 5.4 Peat Storage Area admits that the volume of peat calculated to be excavated at PEIR (ie on the basis of the current, PEIR version of the Proposed Development) far exceeds the volume for reuse and restoration of degraded blanket bog.

So they have identified a peat storage area for 99,386m³ of excavated peat (18% of the total). It is in the loop of the proposed track between T16 and T18, above Pisser Rough. (*More about this in section 8 Peat Reuse Summary, below.*)

This is an area that has largely lost its peat “following enclosure of the lower slopes.” They admit it is not genuine restoration and is the least preferred reuse option.

But they brush over this flaw in the rest of their outline Peat Management Plan.

3. Peat “arisings” that aren’t counted

It doesn’t seem to include peat arisings from the access road across the moor to the north of the proposed Turbine Area, or from the export cable out of the proposed Turbine Area east to the Bradford West substation.

Nor does it include peat excavated for the cables connecting each of the 34 proposed turbines to the proposed substation, nor for the export cable across the proposed Turbine Area to the exit point at its eastern border.

They say this is because all that peat would be reinstated in the cable trench once the cable was laid. This may be a valid reason when calculating the Peat Mass Balance but arguably it is not a valid reason for not counting this peat when calculating the peat carbon dioxide emissions from the excavated peat. *(See our response to PEIR Chapter 11, Carbon and Climate Change).*

4. The volume of excavated peat is an underestimate, due to use of an old 1980 Welsh and English Soil Survey peat definition.

The old 1980 Welsh and English Soil Survey peat definition is depth-based —unlike the current 2025 English peat definition, that Natural England’s Scoping Response advised them to use. *(More info in our Overview Response to the Statutory Consultation, section 6.2.2, and our Response to PEIR Appendix 10-2, Peat Depth Surveys, sections 3,5,6, and 8.)*

The old 1980 peat definition only counts as peat areas that are deeper than 0.3m or 0.4m — depending on whether they are over bedrock or very stony material (>0.3m), otherwise, >0.4m. Anything up to 0.3m or 0.4m (depending on the substrate), it defines as soil.

But the Phase 1 and Phase 2 peat depth survey methods were too simplistic to accurately distinguish between shallow peat up to 0,3m and soil. So there can be little certainty about the PEIR’s identification of areas of soil and volumes of excavated soil. *(Please see our Response to PEIR Appendix 10-2, Peat Depth Surveys)*

5. Proposed reuse of excavated ‘soil’ shows no understanding of the ecological value of Walshaw Moor’s landscape

They propose to reuse 40,322 m³ of excavated soil for “vegetated turves with species tolerant of drier conditions for landscaping” on the edges of permanent infrastructure

that would remain in place during the wind farm operation. (*PEIR Appendix 10-3 OPMP, 5.5 Soil Reuse and Landscaping*).

In our September 2025 Scoping Response, we commented: “This demonstrates a lack of understanding of the ecological value of the landscape of the proposed turbine area. Restoration must take full account of the restoration of the peatland vegetation and hydrology and understand the challenges of restoring irreplaceable and irreparable peatland habitats. It is hugely concerning that the restoration of this precious landscape is being entrusted to those that appear to have no grasp of its importance.” That was (*Wadsworth Parish Council September 2025 Scoping Report, Chapter 10 - Landscape and Visual impact*)

They've not taken any notice.

6. Key ecosystem functions risk being disrupted without anyone even taking any notice, if shallow peat is mistaken for soil

Apart from the undercount of the volume of excavated peat, this is another problem that arises with reused “soil”: maintaining peat ecosystem service functions. (*Peat Mass Balance, 1, above*)

If shallow peat (<0.3m in the 2025 English definition of peat, which Calderdale Energy Park should be using) is mistaken for soil, no account will be taken of its ecosystem functions.

But the 2025 English definition of peat, which is called Definition of Favourable Conservation Status for Blanket Bog, points out that “areas of peat shallower than 0.3m... will also support blanket bog vegetation and should also be regarded as blanket bog and an integral part of the hydrological unit of the peat mass or body.”

So key ecosystem functions risk being disrupted without anyone even taking any notice, if shallow peat is mistaken for soil. This mistake is quite likely, since the baseline peat depth surveys are too simplistic to accurately tell the difference between soil and shallow peat. (*More info in our Response to PEIR Appendix 10-2, Peat Depth Surveys.s10: Shortcomings in the Phase 2 Peat Depth Survey Field Work*)

7. Summary of proposed reuse of permanently excavated peat.

For reasons we lay out below (sections 9 - 12), we are sceptical about the Outline Peat Management Plan claim that reuse of excavated peat would restore already-degraded

blanket bog and other peatland habitats designated by the Special Area of Conservation - or compensate for the projected loss of SSSI-protected plants like CHEGD fungi.

Here is how they propose to restore degraded peat with reused excavated peat, which the PEIR identifies as a potential mitigation measure:

- Approximately 19,000m³ of peat could be placed in the construction compounds once they have been decommissioned after the wind farm construction, to a maximum depth of 2.0m.
- Approximately 44,000m³ could be used to repair two large dikes from which major linear gully networks have eroded by head cutting. The dikes are accessible directly from proposed infrastructure locations. PEIR Chapter 10 Peat, Hydrology, Hydrogeology and Geology, s 10.6.7 states this would “reuse peat in a positive way to support habitat recreation.”
- Habitat recreation would also be achieved through “patch repair of bare ground, and reinstatement of peat in cutover areas.”
- Approximately 75,500m³ of peat could be used to reinstate peat within peat cutting footprints identified on LIDAR data. These show typical cutting depths 0.3 – 0.5m. Target depths will be circa 0.4m.
- Approximately 3,000 m³ of peat could be used to reinstate peat cover in old pits and quarries across the Site.
- A peat storage area could be constructed within a track loop above Pisser Rough, to take care of the lack of peat mass balance. (2, *above*) The storage area could be constructed in cells using higher density rock, and peat placed behind these rock bunds. In total, circa 99,500 m³ could be placed in this area. The PEIR acknowledges this isn't peat restoration.
- 208,000 m³ is intended to go back into the 5 proposed borrow pits, up to 2m deep (*OPMP Table 5.2*). They mention providing a liner.

8. Peatland Alliance position on why peat removal and reuse won't work

Will there really be zero loss of peat with these peat reuse measures?

Christian Egal told BBC Look North: “Any peat that is removed [for construction of infrastructure] will be reinstated locally so the net balance will be zero loss of peat.”

Really?

8.1 Borrow pits are like engineering a landfill site - not a natural system that self-regulates a water table close to ground level, as peat-forming plants need.

Where they have excavated rock from the borrow pits (which is ostensibly what they're for—although arguably they're to hold the excavated peat so it doesn't have to be trucked off site as waste), as the rock is fractured, they will have provided a pathway for water to seep into the underlying bedrock and so a liner will be required. A man-made polyethylene type liner will provide no seepage out of the borrow pit whereas a clay liner, which they also mention, will provide some seepage in time. Bunds would also be necessary to "help retain peat."

This is what you would do to engineer a landfill for domestic or commercial waste, with a liner to prevent seepage of contaminants into the water table. That is not the same as a natural system that allows just the right amount of seepage to maintain a water table close to ground level without allowing too much to build up which would cause bog bursts and peat landslides. This is a carefully balanced system that has to be there for the peat to form in the first place.

This is difficult to achieve because the bog is unique and is formed by the balance of water in and out of the bog to maintain a water table within a few centimetres of the ground surface within the acrotelm, or just at the base of this shallow layer. It is a fine balance, once the bog is disturbed alongside the unique hydrological conditions prevailing, to create artificially those conditions once again that have allowed the accumulation of the peat bog in the first place.

Too much water will allow bog bursts and loss of peat downslope, too little and the peat will degrade at the surface due to oxygen and if the water table falls dramatically it will begin to affect the catotelm and become a carbon source rather than a store or, as most of it will be, a carbon sink. **So roughly 37% of the excavated peat, 208,000 m3 could be at risk if these borrow pits were unsuccessful.**

Peat slides can be triggered when underground peat pipes in sloping peat become surcharged with rainwater during rainstorms. They make the peat buoyant so it floats and on a slope it can slide downhill. Shallower peat is more dangerous in terms of buoyancy. So the peat impact assessments need to focus on the shallower peat. But the OPMP says this is soil, not peat, thanks to the use of the 1980 English and Welsh Soil survey definition. (*More in our Response to PEIR Appendix 10-4, Preliminary Peat Landslide Hazard and Risk Assessment, below*)

8.2. Degradation of excavated peat and carbon dioxide emissions once it's removed from the water table would go unmitigated for many years

By excavating the peat you are removing it from the water table environment that it needs in order to form and continue to exist.

As already mentioned regarding borrow pits, water tables are established by rainwater soaking through soil layers until they eventually reach an impermeable, or relatively impermeable strata, in our case rock. The rock is weathered over the first few centimetres up to the first few metres. The degree of weathering is also variable from slight to complete. The rock breaks down under weathering processes to smaller particle sizes, eventually to clay whose particles you can only see through an electron microscope. This reduces its permeability and so water sits on top of the weathered rock layer and the water column can then rise. Grasses and mosses growing in this environment when they die exist in an acidic and anoxic environment which prevents their decay.

For anoxic conditions to return for the reused peat, the water table needs to reinstate. This will take time and in the time it takes the peat will rot and CO₂ will be released to the atmosphere.

These ecohydrological impacts would go unmitigated for an indefinite duration of many years. A Journal of Hydrology research paper, 'Water table dynamics in undisturbed, drained and restored blanket peat', investigated water table dynamics on intact, drained and restored peatland slopes in a blanket peat in northern England. The results showed that restoration of drained blanket peat is difficult and the water table dynamics may not function in the same way as those in undisturbed blanket peat even many years after management intervention.

This means the PEIR should have accounted for duration of ecohydrological impacts well beyond the construction stage. But the proposed OPMP mitigations for loss of peat/loss of carbon are limited to the construction and decommissioning stages. So (<https://www.sciencedirect.com/science/article/abs/pii/S0022169411001703>)

8.3 Man-made dikes and natural gullies have been successfully dammed - but we don't know about filling them with excavated peat

Man-made dikes and natural gullies have been successfully dammed by Moors for the Future Partnership, trapping water and sediment, slowing the flow of the water and storing more of it in the peat. This raises the water table, providing the conditions necessary for bogs to develop again. Some of the dams have been peat dams.

But they have not blocked dikes and erosion gullies through using excavated peat to fill the dikes and gullies.

Where has this been done successfully? The PEIR doesn't say. We need to know.

9. Waste legislation might apply once peat is dug up and spread around, as it's no longer peat

Peat is about 95% water, they treat it as a solid but it's a body of liquid held on a hill. Treating it as a solid leads to incorrect solutions. What holds this body of liquid together is that peat is highly fibrous. It forms a tangled geometric that holds the whole thing together and stops the water going anywhere.

If you remove the water, eg by excavating the catotelm, it is likely to disintegrate, collapse and oxidise.

PEIR Outline Peat Management Plan 4.1.3 admits catotelmic peat is very watery and less fibrous so more likely to disintegrate on excavation. And they've not calculated "in detail" the split of the total volume of excavated peat into acrotelmic and catotelmic peat.

So you can't reuse the catotelmic peat effectively, because the geomatrix structure will have been broken and it will be far more prone to be washed away.

10. Natural England's Scoping Response advised against reinstating peat in cutover areas.

Natural England has advised that Calderdale Energy Park's "proposed use of displaced peat as a mitigation measure to 'reinstate' other cutover areas may cause additional impacts through damage to established vegetation (i.e. loss of habitat). Removed peat is likely to become aerated, prone to oxidation and will not improve functioning of the peatlands. Therefore, this proposed approach is not considered to be appropriate or effective in this context." (*September 2025 Scoping Response, Table 1, Comments on Internationally Designated Sites/Potential Impact Pathways where further information/assessments required*)

The PEIR Outline Peat Management Plan fails to consider Natural England's advice.

A Wadsworth Parish Councillor questioned this at the 20th April Parish Council Forum meeting with Calderdale Energy Park. Ashley Robinson said they were meeting Natural England the next day and would ask.

At the following Parish Council Forum meeting with CEP on 12th May, the Parish Councillor asked for an update on the meeting. Ashley Robinson said it had been about the Habitat Regulations Assessment so the matter of reinstating peat in cutover areas hadn't come up.

This is called being given the runaround.

11. Nature Scot too say peat reinstatement cannot be considered as offsetting or enhancement

Nature Scot guidance: The reinstatement of general earthworks and excavated areas with layer of excavated peat, even if respecting the structure of acrotelm/catotelm, is not by itself sufficient to achieve functional peatland habitats or protect from further degradation to soil carbon stocks, as such it cannot be considered as offsetting or enhancement. Additional factors, for example related to hydrological properties, connectivity with adjacent peatland system, nature of remaining substrate will need to be considered in devising an effect Peat Management Plan.

(Nature Scot guidance <https://www.nature.scot/doc/advising-peatland-habitats-and-carbon-rich-soils-development-management#Annexes>)

Elsewhere in our Response to the Statutory Consultation, we show how baseline surveys of peat depth, habitats condition and hydrology are inadequate to the consideration of these additional factors.

12. The PEIR is supposed to provide impartial, evidence-based information. Where is the evidence?

The Viking wind farm seems to be their poster child for peat reuse. A member of the Mytholmroyd Facebook group said that at the Hebden Bridge consultation event, Calderdale Energy Park told her there is some unpublished research from there which suggests peat reuse can work.

Any so called peat restoration projects that involve moving peat with the intention of preserving it, are likely to have been carried out in the recent past. What evidence is available that has measured their success over a significant length of time, given the complexities involved?

Everything the PEIR Outline Peat Management Plan proposes for peat reuse will significantly alter the hydrology of the site and this will take time to play out. The PEIR proposes to monitor the impacts of the Proposed Development including peat restoration measures for 5 years after construction and reinstatement of excavated peat is completed. That is way too short a time for the results to become apparent. (OPMP, 6.5)

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**PRELIMINARY PEAT LANDSLIDE HAZARD RISK ASSESSMENT.
(PEIR APPENDIX 10-4)**

The competent peat expert is described in this Appendix as “a chartered geologist with 27+ years experience of mapping and interpreting peatland terrains and peat instability features”.

Our Response to PEIR Chapter 10 Peat, Hydrology, Hydrogeology, Geology, section 1 comments on his “competent peat expert” bio in PEIR Appendix 1-1

1. Peat slope stability - We have serious concerns

Calderdale Energy Park have undertaken a site-wide appraisal of hill slope stability using "limit equilibrium analysis". Due to the absence of any intrusive ground investigation data, the analysis includes parameters for peat extracted from a literature search rather than using parameters measured from samples taken at Walshaw Moor.

Two sets of parameters have been selected, parameters that they believe are typical for peat and a lower bound set which they declare as conservative. It can be shown that the analysis is particularly sensitive to the value of cohesion assigned to this appraisal. Our view is that their selected parameter of 5 kPa is optimistic and moreover, typically in slope stability analysis this parameter which is often a quirk of the laboratory tests where it is derived, is ignored altogether, i.e. assigned as zero.

Using more realistic values, we believe there is instability in 8 out of 12 locations where the PEIR has carried out Crane Loading analysis.

This means there are serious concerns about the safety of these locations. But the Preliminary Peat Landslide Hazard and Risk Assessment is all qualified with caveats so they are covering themselves for now.

The important thing for us is to flag up the issues so they then know they can't pull the wool.

2. PEIR Appendix 10-4 has looked at the peat slope stability in some detail in two ways

- 1) A traditional soil mechanics approach using what is called limit equilibrium analysis. In simple terms you take the restoring forces which is friction and compare these with the disturbing forces (gravity due to the soil sitting on a slope). When the restoring forces exceed the disturbing forces then the slope is theoretically stable. For a margin of error you include a factor of safety, typically 1.3 to 1.4. So in other words the restoring forces need to be say 1.3 or 1.4 x greater than the disturbing forces to be comfortable you have stability. To do this you need to assign parameters to the peat and as they haven't actually measured any on site, they are taking typical values from a literature review.
- 2) They have used what they call a "Landslide Susceptibility Approach", here they assign values for various parameters, which are listed in section 4.3. They summate the values and they assign a risk factor on this basis. Our view is this approach is somewhat subjective and offers a less rigorous approach than that offered by limit equilibrium analysis".

The competent peat expert mentioned these two methods at the 12th May Parish Councils Forum but he didn't explain either.

Our response concentrates on 1) "Limit equilibrium analysis".

The issues with their Limit equilibrium analysis are basically twofold:

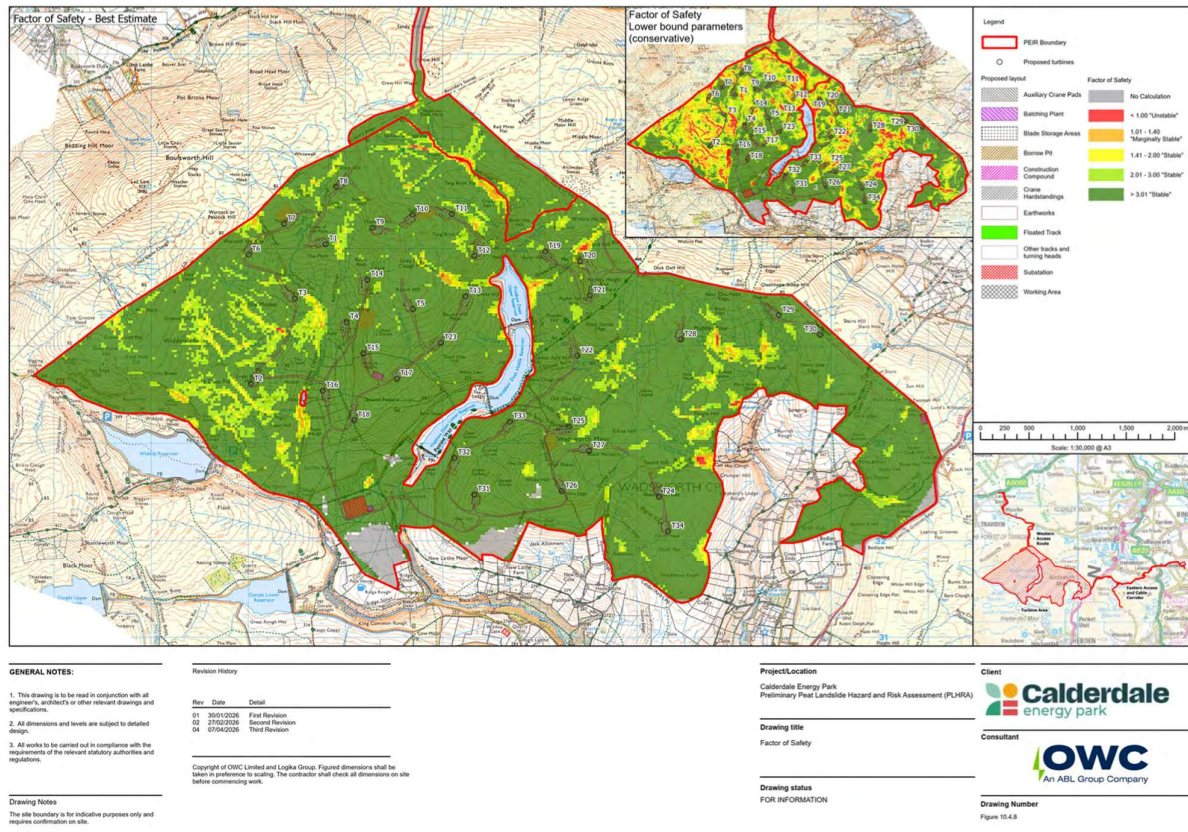
One, their Factor of Safety calculations are guesswork from published data. This is because they haven't tested a single sample of Walshaw Moor's peat. They use assumed parameters taken from a literature review for their baseline study - which identifies the factor of safety for the locations in the Turbine Area where all the windfarm infrastructure is intended to go.

They also appear to be selective about which parameters they use. In their baseline Factor of Safety test (drained analysis) they used parameters on the high side to produce the map (Figure 10.4.8, reproduced below) that shows all the locations for the proposed infrastructure in the Turbine Area is safe (green).

A second issue is that in their analysis including Crane Loadings they used an arguably inappropriate strength parameter for the peat, undrained shear strength, rather than continuing with their previously selected "drained" soil strength parameters.

Figure 10.4.8 also includes a cursory look at what they call "lower bound parameters (conservative)" with the results presented in a smaller inset window. Quite a bit more red, here, i.e. a Factor of Safety <1.0, which is a fail.

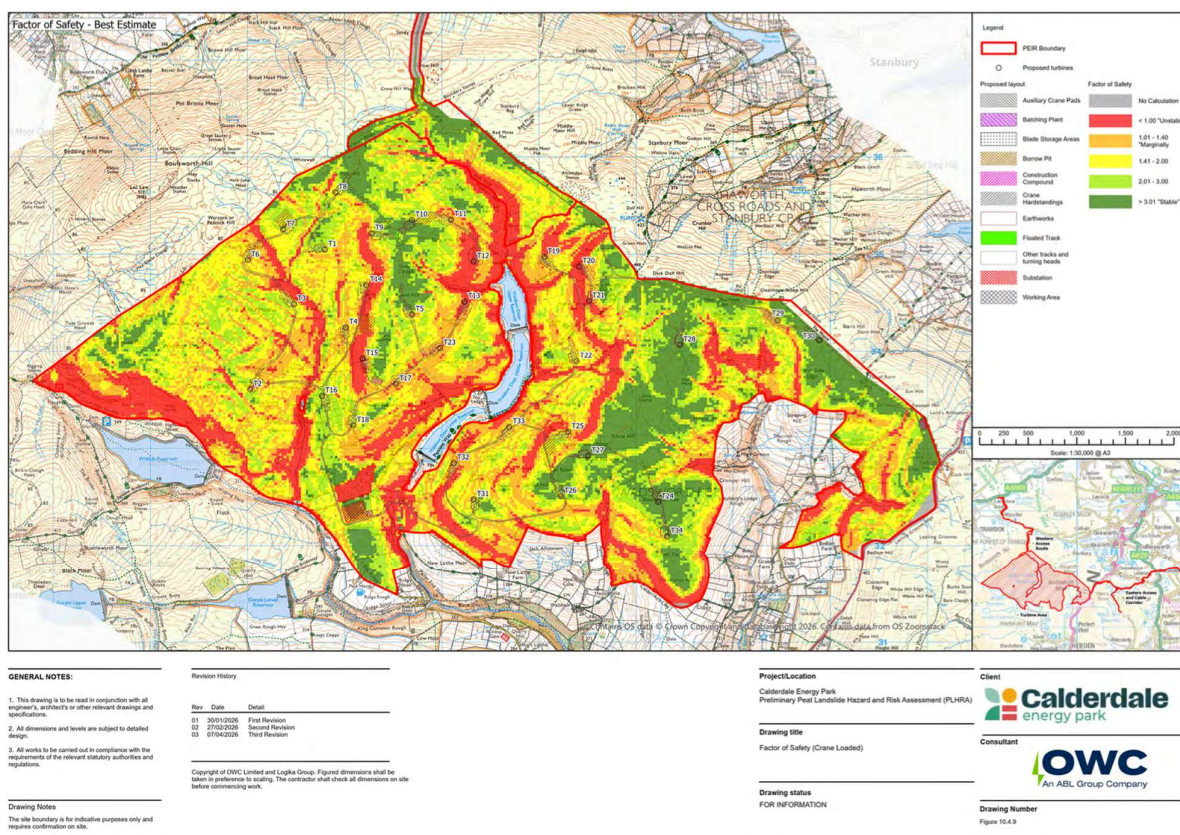
Figure 10.4.8



A second issue is that in a Factor of Safety test for the Crane Loadings, they used an arguably inappropriate (undrained analysis) test.

Undrained strengths are applicable for short term loadings on fine grained soils, but peat is a free draining soil, and it is unlikely that it can retain pore water pressures when loaded, as simply the water drains away like squeezing water out of a sponge, particularly over the duration that the axle will be loading the ground whilst standing idle. This radically alters the behaviour of a soil and arguably they should be using the same drained approach as they did for the baseline study, which I would expect would return lower factors of safety. As it is, the results of the Crane Loadings Factor of Safety analysis are mapped in figure

10.4.9. They are actually quite alarming. Look at the amount of red here, factors of



safety less than 1.0 "Unstable". It is likely they would be even worse had they used the drained parameters approach.

Figure 10.4.9

However, the narrative at the end of 4.2.3, is fairly benign, "*however, there are a number of small areas which may need to be amended in either routing or structure through detailed design.*" (More on this below: What about those small areas where the factor of safety is a fail in the crane loadings analysis?)

3. Additional background to the Limit Equilibrium analysis undertaken and why selected parameters matter

PEIR Appendix 10-4, 4.2 Limit Equilibrium Approach sets out how they have carried out a baseline study using assumed parameters taken from a literature review, in order to identify the Factor of Safety for a series of 25m x25m grid cells on the Walshaw Moor proposed turbine area.

4.2.1 explains that the stability of a peat slope is assessed by calculating a Factor of Safety, which is the ratio of the sum of resisting forces (shear strength) and the sum of

driving forces (shear stress) (Scottish Government, 2017). This is expressed in a formula where important parameters are "effective cohesion" and "effective angle of internal friction". It assumes that there are no excess pore pressures, i.e. that the soil is in its natural, unloaded condition.

Table 4.1 sets out their assumed values for the parameters for their baseline study. For cohesion they are proposing to use either 2 or 5 kPa. (kPa is kilopascal - a unit of pressure in the International System of Units.) We would view 5 as particularly high and even 2 also on the high side for peat.

For the angle of friction Table 4.1 they propose to use 20 degrees or 30 degrees. 20 degrees appears reasonable, 30 is on the high side.

The disturbing forces are a function of the slope angle, which is obviously measurable easily and fixed. The restoring forces are a function of the peat strength, the cohesion and friction angle (together these are known as drained shear strength parameters), they have assumed them. These are less easily measured as the tests that can be done are sophisticated and require so called "undisturbed" samples, which in itself is a relative term, because by taking a sample you have disturbed it from its natural state.

So they need to support their assumptions by providing good quality lab test results taken from "undisturbed" samples, otherwise it's guesswork from published data.

They are downplaying the lower parameters and declaring them conservative without any basis for doing so, as they haven't tested a single sample. It's only the higher assumed parameters that is giving them the sea of green on Figure 10.4.8 which shows the results of their baseline analysis. The sea of green means a factor of safety of more than 2.0 or even 3.0, in other words the restoring forces exceed the disturbing forces by 2 to 3 times. In the top right and much smaller are the results for the lower bound parameters, so cohesion = 2 kPa and friction 20 degrees. Quite a bit more red, here, i.e. a factor of safety <1.0 which is a fail.

4. What about those 'small areas' where the factor of safety is a fail in the crane loadings analysis?

This is about the quite alarming results at Figure 10.4.9 of their analysis for the crane loadings.

We have prepared our own calculations summarised below by reviewing 10.4.9 to pick out the turbines that are close to or on red areas, column E, this defines if there is an issue. We have then looked at slope angle from Figure 10.4.2, column D. We have then determined which Turbine needs further attention at Column F and assigned a

peat depth at column G from Figure 10.4.6. The calculations use a friction angle of 20 degrees throughout and there are 3 tabs each with a different value of cohesion 1 kPa, 2 kPa and 5 kPa. The differences in factor of safety are quite illuminating. In the FOS column (factor of safety), We've marked those in red bold which are unacceptable, i.e. below 1.0, so this is when the restoring forces are less than the disturbing forces, ideally the restoring forces should be 30 to 40% more than the disturbing forces which would be FOS 1.3 to 1.4.

C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Slope Stability Appraisal - Calderdale Energy Park																		
Cohesion = 1 kPa																		
Turbine	Slope angle	Crane Loading Results	Slope Analysis	Peat Depth (m)	γ_{sat}	γ_w	β	c'	ϕ'	σ'	τ	u	$\cos^2\alpha$	SIN	COS	TAN	α'	FoS
T1	2.5 to 5.0	OK																
T2	2.5 to 5.0	OK																
T3	10 to 15	NO	YES	0.8	10.5	9.8	13	1	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	1.194	0.648
T4	2.5 to 5.0	OK																
T5	2.5 to 5.0	OK																
T6	2.5 to 5.0	OK																
T7	2.5 to 5.0	OK																
T8	2.5 to 5.0	OK																
T9	7.5 to 10	NO	YES	0.8	10.5	9.8	9	1	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	1.199	0.924
T10	0 to 2.5	OK																
T11	7.5 to 10	OK																
T12	10 to 15	NO	YES	0.8	10.5	9.8	13	1	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	1.194	0.648
T13	10 to 15	NO	YES	0.8	10.5	9.8	13	1	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	1.194	0.648
T14	10 to 15	NO	YES	1.5	10.5	9.8	13	1	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	1.363	0.395
T15	10 to 15	NO	YES	0.8	10.5	9.8	13	1	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	1.194	0.648
T16	0 to 2.5	OK																
T17	5 to 7.5	OK																
T18	2.5 to 5.0	OK																
T19	10 to 15	NO	YES	1.5	10.5	9.8	13	1	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	1.363	0.395
T20	>15	NO	YES	0.8	10.5	9.8	15	1	20	7.837	2.100	7.315	0.933	0.259	0.966	0.364	1.190	0.567
T21	7.5 to 10	NO	YES	0.8	10.5	9.8	9	1	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	1.199	0.924
T22	2.5 to 5.0	OK																
T23	2.5 to 5.0	OK																
T24	0 to 2.5	OK																
T25	7.5 to 10	OK (M)	YES	1.5	10.5	9.8	9	1	20	15.365	2.434	14.340	0.976	0.156	0.988	0.364	1.373	0.564
T26	0 to 2.5	OK																
T27	0 to 2.5	OK																
T28	0 to 2.5	OK																
T29	7.5 to 10	OK																
T30	0 to 2.5	OK																
T31	5 to 7.0	OK																
T32	10 to 15	NO	YES	0.4	10.5	9.8	13	1	20	3.987	0.921	3.722	0.949	0.225	0.974	0.364	1.097	1.191
T33	7.5 to 10	OK (M)	YES	0.8	10.5	9.8	9	1	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	1.199	0.924
T34	0 to 2.5	OK																

C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Slope Stability Appraisal - Calderdale Energy Park																			
Cohesion = 2 kPa																			
Turbine	Slope angle	Crane Loading Results	Slope Analysis	Peat Depth (m)	γ_{sat}	γ_w	β	c'	ϕ'	σ	τ	u	COS^2	SIN	COS	TAN	τ_f	FoS	
T1	2.5 to 5.0	OK																	
T2	2.5 to 5.0	OK																	
T3	10 to 15	NO	YES	0.8	10.5	9.8	13	2	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	2.194	1.191	
T4	2.5 to 5.0	OK																	
T5	2.5 to 5.0	OK																	
T6	2.5 to 5.0	OK																	
T7	2.5 to 5.0	OK																	
T8	2.5 to 5.0	OK																	
T9	7.5 to 10	NO	YES	0.8	10.5	9.8	9	2	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	2.199	1.694	
T10	0 to 2.5	OK																	
T11	7.5 to 10	OK																	
T12	10 to 15	NO	YES	0.8	10.5	9.8	13	2	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	2.194	1.191	
T13	10 to 15	NO	YES	0.8	10.5	9.8	13	2	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	2.194	1.191	
T14	10 to 15	NO	YES	1.5	10.5	9.8	13	2	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	2.363	0.684	
T15	10 to 15	NO	YES	0.8	10.5	9.8	13	2	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	2.194	1.191	
T16	0 to 2.5	OK																	
T17	5 to 7.5	OK																	
T18	2.5 to 5.0	OK																	
T19	10 to 15	NO	YES	1.5	10.5	9.8	13	2	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	2.363	0.684	
T20	>15	NO	YES	0.8	10.5	9.8	15	2	20	7.837	2.100	7.315	0.933	0.259	0.966	0.364	2.190	1.043	
T21	7.5 to 10	NO	YES	0.8	10.5	9.8	9	2	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	2.199	1.694	
T22	2.5 to 5.0	OK																	
T23	2.5 to 5.0	OK																	
T24	0 to 2.5	OK																	
T25	7.5 to 10	OK (M)	YES	1.5	10.5	9.8	9	2	20	15.365	2.434	14.340	0.976	0.156	0.988	0.364	2.373	0.975	
T26	0 to 2.5	OK																	
T27	0 to 2.5	OK																	
T28	0 to 2.5	OK																	
T29	7.5 to 10	OK																	
T30	0 to 2.5	OK																	
T31	5 to 7.0	OK																	
T32	10 to 15	NO	YES	0.4	10.5	9.8	13	2	20	3.987	0.921	3.722	0.949	0.225	0.974	0.364	2.097	2.278	
T33	7.5 to 10	OK (M)	YES	0.8	10.5	9.8	9	2	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	2.199	1.694	
T34	0 to 2.5	OK																	

C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Slope Stability Appraisal - Calderdale Energy Park																			
Cohesion = 5 kPa																			
Turbine	Slope angle	Crane Loading Results	Slope Analysis	Peat Depth (m)	γ_{sat}	γ_w	β	c'	ϕ'	σ	τ	u	COS^2	SIN	COS	TAN	τ_f	FoS	
T1	2.5 to 5.0	OK																	
T2	2.5 to 5.0	OK																	
T3	10 to 15	NO	YES	0.8	10.5	9.8	13	5	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	5.194	2.821	
T4	2.5 to 5.0	OK																	
T5	2.5 to 5.0	OK																	
T6	2.5 to 5.0	OK																	
T7	2.5 to 5.0	OK																	
T8	2.5 to 5.0	OK																	
T9	7.5 to 10	NO	YES	0.8	10.5	9.8	9	5	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	5.199	4.006	
T10	0 to 2.5	OK																	
T11	7.5 to 10	OK																	
T12	10 to 15	NO	YES	0.8	10.5	9.8	13	5	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	5.194	2.821	
T13	10 to 15	NO	YES	0.8	10.5	9.8	13	5	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	5.194	2.821	
T14	10 to 15	NO	YES	1.5	10.5	9.8	13	5	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	5.363	1.553	
T15	10 to 15	NO	YES	0.8	10.5	9.8	13	5	20	7.975	1.841	7.443	0.949	0.225	0.974	0.364	5.194	2.821	
T16	0 to 2.5	OK																	
T17	5 to 7.5	OK																	
T18	2.5 to 5.0	OK																	
T19	10 to 15	NO	YES	1.5	10.5	9.8	13	5	20	14.953	3.452	13.956	0.949	0.225	0.974	0.364	5.363	1.553	
T20	>15	NO	YES	0.8	10.5	9.8	15	5	20	7.837	2.100	7.315	0.933	0.259	0.966	0.364	5.190	2.472	
T21	7.5 to 10	NO	YES	0.8	10.5	9.8	9	5	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	5.199	4.006	
T22	2.5 to 5.0	OK																	
T23	2.5 to 5.0	OK																	
T24	0 to 2.5	OK																	
T25	7.5 to 10	OK (M)	YES	1.5	10.5	9.8	9	5	20	15.365	2.434	14.340	0.976	0.156	0.988	0.364	5.373	2.208	
T26	0 to 2.5	OK																	
T27	0 to 2.5	OK																	
T28	0 to 2.5	OK																	
T29	7.5 to 10	OK																	
T30	0 to 2.5	OK																	
T31	5 to 7.0	OK																	
T32	10 to 15	NO	YES	0.4	10.5	9.8	13	5	20	3.987	0.921	3.722	0.949	0.225	0.974	0.364	5.097	5.536	
T33	7.5 to 10	OK (M)	YES	0.8	10.5	9.8	9	5	20	8.194	1.298	7.648	0.976	0.156	0.988	0.364	5.199	4.006	
T34	0 to 2.5	OK																	

You can see with 2 kPa there are 8 out of 12 locations where we believe there is instability and remember this is without any crane axle loading. With 5kPa which is the basis of their large 10.4.8 (although they used 30 degrees as well), you can see none of the turbine locations are at risk.

To be clear, at each turbine location they have to excavate the peat to form the foundation and to create the lay down areas. This leaves a steep batter on the upside of the excavation on sidelong ground. At 4.2.3 they declare "*areas where peat has been excavated (e.g. the excavated peat itself and the peat upslope of the excavation) have not been modelled since it is assumed that safe systems of work will include buttressing of / support to excavations.*"

We have shown without any excavations, the peat at these 8 locations is not stable, albeit in reality it clearly is as it has not slipped, this is what is known as "meta-stable", i.e. just about stable. This has severe implications. Slopes generally fail when acted upon by external changes particularly slopes that are meta-stable, e.g. additional water, additional loading above on the crest or on the slope surface, removal of material at the slope toe and localised excavations within the slope.

5. Our conclusion is that they need to look at these 8 locations in more detail and propose how they are going to engineer the construction of the turbine foundation and crane pad area without compromising peat slope stability

What temporary measures (which may be permanent) are they going to propose to provide slope support in these locations? Such as embedded retaining walls, for example secant bored pile walls which will maintain the water table, which will be expensive.

In summary then they have used parameters on the high side to produce 10.4.8 with a cursory look at what they call "lower bound parameters (conservative)" with the results presented in a smaller window on 10.4.8. Their crane loading analysis arguably uses the wrong parameters altogether, they should be using the same baseline parameters to at least demonstrate the effects of the crane loading on the baseline case, this approach is demonstrably inaccurate and unconservative. They then effectively skirt round the results of the crane loading analysis by saying some "small areas" are affected when in fact we suspect 8 of the turbine locations are at risk particularly when circumstances change during construction, unless they provide expensive mitigating temporary work solutions, which may even end up as permanent works.

Their stability analysis didn't include modelling areas where peat has been excavated (e.g. the excavated peat itself and the peat upslope of the excavation) "since it is assumed that safe systems of work will include buttressing of / support to excavations."

6. Mitigations for peat instability

PEIR Appendix 04-1 Draft Commitments Register includes “design measures to prevent or reduce construction-induced failure”, as a so-called mitigation for peat instability.

Such measures include excavation support methods which may be temporary or permanent, like secant bored pile walls mentioned in 5, above. They are effectively watertight which would avoid or mitigate drawdown of the water table in the peat and obviously they would prevent peat slides.

All this requires ground investigation and we don't understand why this hasn't yet been done. Otherwise it's all guesswork. At the February 2022 Parish Councils Forum meeting with Calderdale Energy Park, an engineer who has spent a large part of his later career designing stuff like this told the Project Team, "you need to do some ground investigation".

7. Other matters of concern relating to peat stability: misleading habitats classification, habitat condition assessment and peat definition

We think there are potential safety concerns about slope stability arising from:

- i. The competent peat expert's repeated under-representations of the extent and state of the blanket bog on Walshaw Moor,
 - The apparently inadequate PEIR bespoke Habitat Condition Assessment. (More info in Response to PEIR biodiversity) and
 - The PEIR's lack of consideration of Natural England's Scoping Response request to Calderdale Energy Park to use the 2025 English Definition of peat, which is based on percentage of organic matter, not depth.

Taking each of these in turn:

7. 1. Under-representation of extent and condition of blanket bog

Unaccountably, PEIR App 10-4, 3.6 Land Use states: “The habitat is mainly rotationally burned upland heath, managed for and used as a grouse moor, with areas of rough grazing (predominantly for sheep)”

This is a direct lift from the September 2025 Scoping Report's factually incorrect section **6.3.6**: that vegetation consists “mainly of rotationally burned upland heath managed for Grouse with areas of blanket bog and rough grazing....”

Although the PEIR has taken out the reference to blanket bog. Why?

Wadsworth Parish Council response to the September 2025 Scoping Report called out its misrepresentation of Walshaw Moor's habitats:

"Scoping Report Chapter 7 has corrected the error in the seriously misleading Walshaw Moor Estate UK Habitats survey map, that was used in the non-statutory consultation Brochure. The map now records approximately 50% of the turbine area as blanket bog (a significant correction from next to nothing). We are fairly confident that large areas that are described as dry heath are in fact probably degraded blanket bog." (WPC Scoping Response to Scoping Report Chapter 7)

The Planning Inspectorate's Scoping Opinion ID 3.2.8 Habitat classifications stated: The applicant should seek to agree habitat classifications with relevant consultation bodies to inform assessments. Clear figures depicting these should be provided in the ES.

We have questions about how CEP has since carried out advanced habitat surveys and how the results have been used in the PEIR assessment of Walshaw Moor blanket bog's condition, sensitivity and significance. (More info in our Response to PEIR Biodiversity, s 2)

7.2. A bespoke Habitat Condition Assessment, found no indications of peat pipes on Walshaw Moor (*PEIR Appendix 08-3 Habitat Baseline Report s2.4.11*)

A bespoke Habitat Condition Assessment has been completed for each habitat polygon alongside the National Vegetation Classification survey in the field, its methodology seems questionable. (More info in Response to PEIR Biodiversity.)

It seems unlikely that there are no peat pipes or flows on Walshaw Moor, and it matters whether and where they are present or absent.

"Absence of evidence is not evidence of absence" - so the fact that they didn't see any evidence of peat piping using their survey approach perhaps tells us more about the limitations of their method than it does about the presence or absence of peat piping.

If the PEIR is still misidentifying Walshaw Moor's peatland habitats and failing to adequately carry out baseline surveys of its hydrology and hydrogeology, including peat pipes, this must give rise to potential safety concerns about peat stability and much else.

8. Potential safety risks of not paying attention to peat up to 0.3m

We think these potential safety concerns are intensified by the Applicant's lack of consideration of Natural England's Scoping Report request to use the 2025 English definition of peat in their baseline surveys and environmental impact assessment work. It is not a depth-based definition but based on percentage of organic content (>20%).

Instead, for the Outline Peat Management Plan the PEIR used a 1980 England and Wales Soil Survey definition of peat, that anything measuring 0.3m or less is soil, not peat.

This has resulted in the PEIR excluding areas of Walshaw Moor as peat and instead defining them as soil, where peat probes recorded depths up to 0.3m. However, as discussed in our Response to the PEIR Appendix 2, Peat Depth Surveys, the baseline peat depth survey methods were too simplistic to provide evidence that these shallow probe areas are in fact soil and not shallow peat.

When it comes to identifying potential peat slide areas, it seems important on safety grounds to pay attention to areas of shallow peat ie up to 0.3m. During rainstorms, underground peat pipes filled with water can make the peat buoyant so it floats and on a slope it can slide downhill. Shallower peat is more dangerous in terms of buoyancy. *(Personal email from Richard Lindsay.)*

So the peat impact assessments need to focus on the shallower peat - as well as peat of 0.3m+ which the Outline Peat Management Plan 1.2 says the use of the 1980 English and Welsh Soil survey definition helps them to focus on.

9. A quarter of a million tonnes of imported aggregate stockpiled in the wrong place could cause a peat slide

The PEIR Materials and Waste chapter indicates that the weight of imported crushed rock = 240, 800 tonnes.

It is believed to be the weight of crushed rock that caused the peat slide at the Viking wind farm 2 years ago. That raises the question of where CEP would put the crushed rock as it was imported onto Walshaw Moor. As with the Viking wind farm, in the wrong place it could create a peat slide risk.

App 10-4, 2.1 states that the Viking May 2024 "occurrence of instability in association with construction works...involved failure of peat or mineral spoil at track margins rather than the triggering of a new 'peat slide' by groundworks."

Natural slopes slip when circumstances change such as the water table rising quickly in a storm or when disturbed by humans. Undercutting the toe of the slope during road construction is a common cause along with surcharging the crest of the slope with placed material. They will need to stockpile their imported stone away from any slopes.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**PRELIMINARY FLOOD RISK ASSESSMENT,
(PEIR APPENDIX 10-9)**

By rejecting the hydrology Scoping Opinions it was given last October, the PEIR has perversely made sure there are no accurate ecohydrological baseline data for the preliminary assessment of flood risk.

Scoping Opinions from the Planning Inspectorate, the Environment Agency and Natural England advised the PEIR to generate accurate baseline data for the preliminary assessment of habitat loss, degradation and subsequent changes to habitats. These data are key to an ecohydrological assessment of the flood risk from the proposed development on Walshaw Moor to downstream Hebden Bridge.

The fact that Calderdale Energy Park has not acted on these Scoping Opinions, means no such data exist. This is a big problem because Calderdale Energy Park's draft direct rainfall runoff flood model estimates the flood risk impact of the proposed development on Walshaw Moor - and hence to Hebden Bridge - on the basis of estimates of how the proposed development would change the blanket bog topography - and so, the runoff.

There is nothing about this in the PEIR Preliminary Flood Risk Assessment and the information comes from a Parish Councils Forum meeting with Calderdale Energy Park. The flood expert didn't say how they intend to model the changes to Walshaw Moor's topography but our contention is that realistically it must be on the basis of a preliminary assessment of habitat loss, degradation and subsequent changes to habitats. Since that is what causes topographical change to Walshaw Moor's blanket bog. There is more about this in section 2, below.

Without accurate data about topographical change to Walshaw Moor caused by the proposed development, there can be no accurate assessment of the flood risk to Hebden Bridge. So if and when it comes to the Environmental Statement, it seems that it will be in breach of the 2025 National Policy Statement EN-1 paragraph 5.8.12, which states that development should be designed to ensure "there is no increase in flood risk elsewhere,"

As a result, PEIR Chapter 10 and Appendix 10-9 seem materially incomplete for flood-risk assessment purposes. There are well-founded anxieties in Hebden Bridge about increased flood risk from the proposed development, which Hebden Bridge Flood Alleviation Scheme has not been designed to mitigate - and why should it?

We cannot accept PEIR Chapter 10 and Appendix 10-9 as an adequate basis for statutory consultation. We do not see why we should have to wait anxiously for the Examination Stage to see if it provides enough accurate evidence that there would be no increase in flood risk in Hebden Bridge. We further contend that the PEIR is not an adequate basis for a passable Environmental Statement and we hope the Planning Inspectorate will refuse to accept it and the Development Consent Order application for examination, when the time comes.

1. The PEIR's apparent rejection of the Planning Inspectorate's hydrology Scoping Opinion relating to the proposed windfarm's impact on flood risk to Hebden Bridge is incredibly irresponsible

The PEIR Preliminary Flood Risk Report has ignored the Planning Inspectorate's Scoping Opinion that the study area for the EIA should be wide enough to ensure that it encompasses all water features that have the potential to be significantly impacted by the proposed development; and that sufficient cross-referencing within the ES should ensure all hydrological links, ecological and human receptors are considered in determining this.

Instead it has limited the study area to a 1km buffer round the proposed development site boundary. And the lack of cross referencing is a nightmare. *(More about this in s5, below.)*

There is no real indication either, that it has taken on board the Planning Inspectorate's Scoping Opinion that the ES and Flood Risk Assessment (FRA) should clearly set out any information available in relation [sic] the Hebden Bridge Flood Alleviation Scheme along with how this has been taken into account in the ES and FRA.

There are astonishing errors that suggest that whoever wrote the Preliminary Flood Risk Assessment doesn't know where Hebden Water, Hebden Bridge and the River Calder are; and that the Calderdale Project Team that is responsible for publishing the PEIR haven't bothered to fact check it. *(More info in s3, below)*

There is already plenty of available information about the Hebden Bridge Flood Alleviation Scheme that the PEIR seems to have ignored. The Calder Catchment Strategic Flood Risk Assessment records that runoff from steep moorland around urban areas causes major flooding to towns in the valley bottom, with road networks acting as floodwater pathways, and it records Hebden Bridge as having suffered major fluvial and surface-water flood events.

The iCASP Calderdale Natural Flood Management project identifies SD-TOPMODEL, developed at the University of Leeds, as a rainfall-runoff model used to show water flow

from hill slopes to rivers and to support Calderdale Flood Action Plan natural flood management prioritization 4.

We think the PEIR's apparent rejection of the Planning Inspectorate's hydrology Scoping Opinions is incredibly irresponsible. The PFRA's proposed direct rainfall runoff flood model appears focused on the Turbine Area and "immediately downstream" rather than the full Hebden Water, Hebden Bridge and River Calder receptor chain.

This is basically to ignore the NPS EN-1 requirement that the proposed development should not increase flood risk elsewhere.

What was needed in the PEIR was that it should disclose a clear, auditable modelling chain and demonstrate how the proposed windfarm in its current version would impact flood risk to and from Walshaw Moor, Hebden Water, Hebden Bridge, the River Calder, and how affected downstream receptors would be managed.

Equally we can't see any evidence in the PEIR that Calderdale Energy Park has done what the Environment Agency's Scoping Opinion identifies as necessary: to undertake a comprehensive desk and field-based survey of the likely identification of peatland hydrological units, and hydrological flow paths within and between interconnected peat bodies. This should "apply to all peat related infrastructure scoping areas, including turbines, access tracks (including floating roads), cable routes and battery sites." (*More info about identification of Walshaw Moor hydrological units in Response to the PEIR Biodiversity.*)

The Environment Agency's Scoping Opinion addresses the Scoping Report's "insufficient consideration of sub-surface hydrology and flow paths within the extensive peat bodies within the search site," which would risk leading to "less informed choices for siting of infrastructure; possible increased risk of peat instability during and post construction. Possible increased water quality and habitat impact. Less effective peatland restoration planning."

The PFRA just seems to assume that mitigations will make sure that there is no increased run off or reduction in water quality as a result of the impact of of the Proposed Development on Walshaw Moor's hydrology and hydrogeology. (*More info in s9, below*)

(There is information in our Response to PEIR Chapter 10 on its consideration of Natural England Scoping Opinions on hydrology and flood risk to Hebden Bridge from the proposed development.)

The PFRA acknowledges that: "The Flood Risk Assessment and Drainage Strategy should be completed in line with NPS EN-1 (5.8.15), and should include measures to

ensure the development will be safe and remain operational throughout the development's lifetime, without increasing flood risk elsewhere." (*Chapter 10 Table 10-3 Consideration of Scoping Responses - The Environment Agency's advice about Flood Risk*)

But it doesn't say what the PFRA has done about this - particularly the requirement to follow 2025 NPS EN-1 5.8.12 in making two flood risk assessments - one for the proposed development on Walshaw Moor, one for Hebden Bridge. 5.8.12 states that development should be designed to ensure "there is no increase in flood risk elsewhere,"

2. The draft flood risk model seems rudimentary and there is inadequate info about the data it would run on.

The Preliminary Flood Risk Assessment omits to say what data its flood risk assessment model would run on. A model is only as good as the inputted data, and we need to know.

From consultation events and a Parish Councils Forum meeting with Calderdale Energy Park, we have gleaned some information about the data inputs to the draft Direct Rainfall Runoff Flood Risk Model that the competent experts have made and sent to the Environment Agency.

The inputs seem very narrowly defined. They seem inadequate for a model that would need to be based on ecohydrological data as per the Scoping Opinion of the Environment Agency and Natural England.

The direct rainfall run off model is a baseline model without the impact of the proposed development on run off. It will also include the ability to add on the impacts of the Proposed Development in relation to the ground model. They will do this by adding changes that the Proposed Development would make to the Walshaw Moor topography.

2.1 What evidence would underpin data about changes to Walshaw Moor's topography as a result of the proposed windfarm?

Are the topographic changes associated with the proposed development just the excavations and hard infrastructure? Or are they also changes to the nanotopes/microtopes associated with drainage caused directly or indirectly by the infrastructure?

The small-scale surface architecture of alternating drier 'hummock' nanotopes and wetter 'hollow' nanotopes plays a crucial feedback role in sustaining peat-forming

conditions. During dry climate phases, the hummock nanotopes expand, thereby slowing surface-water losses from the bog, whereas in wetter climate phases the hollow nanotopes expand to provide greater capacity for water storage and surface run-off (Barber 1981).

Drainage induces many of the same responses as a shift towards a drier climate. Drainage also results in substantial long-term subsidence, altering surface gradients and thus inducing yet further drying and subsidence. These topographical changes would almost certainly increase direct rainfall run off.

But is the Tope System included in the direct rainfall run off flood model? What is the basis for its topographical data? The Tope System provides a means of identifying an ecosystem response to an ecosystem impact using smaller scale elements within the hierarchy as signals of change. Surely to be accurate, the model needs to include data about nanotopes and microtopes, and the predicted changes to them resulting from the drainage effect of infrastructure, as part of the changes caused by the Proposed Development. Also any changes to the tope system as a result of restoration, as this too is part of the Proposed Development.

2.2 Preliminary hydrology impact assessment is based on unevidenced 10 m buffer

This is problematic for the assessment of topographical changes to the blanket bog. It means that the PEIR assumes that the drainage effect of the proposed infrastructure will only extend 10m from any infrastructure component. There is no evidence for this and the assumption is countered by peat hydrology research like Professor Joseph Holden's.

His research has found the zone of influence of unintended blanket bog drainage can extend up to 400m from any given impact, such as infrastructure. (*More info in Response to PEIR Biodiversity, s4.*)

On that basis, almost the whole of Walshaw Moor's 9 square miles could suffer habitat loss or degradation - and so topographical change - as a result of the unintended drainage effect of infrastructure, if the proposed wind farm were to happen.

But if the 10m buffer assumption was fed into data for modelling potential topographical changes to Walshaw Moor resulting from the hydrological impact of the proposed development, this could radically underestimate the runoff and therefore the associated flood risk downstream to Hebden Bridge.

The 10m buffer assumption not only runs counter to peat science, it goes against Natural England's Scoping Opinion, that Calderdale Energy Park should sufficiently account for the functional ecohydrological extent of the peatland system across the

whole site, rather than solely focusing on immediate and/or buffered areas that relate to the Proposed Development itself.

Relatedly, the Planning Inspectorate Scoping Opinion, ref 3.2.9, says the Environmental Statement should consider the potential for the Proposed Development to change the habitat presence and composition, for example as a result of dewatering of peat.

2.3 By rejecting hydrology Scoping Opinions, the PEIR has made sure there are no accurate ecohydrological baseline data for the preliminary assessment of flood risk.

Both Scoping Opinions intend for the PEIR to generate accurate baseline data for the preliminary assessment of habitat loss, degradation and subsequent changes to habitats. The fact that Calderdale Energy Park has not acted on these Scoping Opinions, or a similar one from the Environment Agency, means no such data exist, so there can be no accurate preliminary assessment of habitat loss, degradation and subsequent changes to habitats. So there can be no accurate data about topographical change to Walshaw Moor caused by the proposed development. So there can be no accurate assessment of the flood risk to Hebden Bridge. So the Environmental Statement will be in breach of the 2025 National Policy Statement EN-1 paragraph 5.8.12, which states that development should be designed to ensure “there is no increase in flood risk elsewhere,”

As a result, PEIR Chapter 10 and Appendix 10-9 seem materially incomplete for flood-risk assessment purposes. There are realistic anxieties in Hebden Bridge about increased flood risk from the proposed development, which Hebden Bridge Flood Alleviation Scheme has not been designed to mitigate - and why should it? Why should public money pay for damage caused by private profiteering?

We cannot accept PEIR Chapter 10 and Appendix 10-9 as an adequate basis for statutory consultation. We do not see why we should have to wait anxiously for the Examination Stage to see if the ES provides enough accurate evidence that there would be no increase in flood risk in Hebden Bridge. We further contend that the PEIR is not an adequate basis for a passable Environmental Statement and we hope the Planning Inspectorate will refuse to accept it and the DCO application for examination.

As it is, the competent flood expert told the Parish Councils Forum that the draft model has been sent to the Environment Agency. And at consultation events, members of the public have been told that the Environment Agency is happy that it will show that, with mitigations, there will be no increased flood risk to Hebden Bridge.

How can they be putting this about? When so much basic information is lacking and the draft direct rainfall runoff flood risk model seems so rudimentary, as far as we've heard.

2.4 The draft flood risk model discounts rainfall infiltration to groundwater

The “direct” bit of the direct rainfall run off flood model means it just estimates surface run off, and doesn’t take account of rainfall infiltration of the peat. So groundwater is left out of the model.

Monitoring Walshaw Moor’s water table fluctuations hasn’t been done, although to us this would seem key to characterising the ecohydrology of Walshaw Moor.

They say this is because peat groundwater is locked into the low permeability catotelm and so is unresponsive to surface water fluctuations. So they are discounting rainfall infiltration in their model.

But given the lack of groundwater investigation on Walshaw Moor, and shortcomings in peat surveying, there is no evidence for assuming the catotelm here is of low permeability. A lot depends on the substrate and no work has been done on this. *(More info in our Response to PEIR Chapter 10 and Response to PEIR Outline Peat Management Plan.)*

Instead of dismissing rainfall infiltration out of hand as an input to the rainfall run off flood risk model, we think Calderdale Energy Park should do some baseline work using an infiltrometer.

Otherwise there will be some general figures that modellers can input along scales but without site specific data it will be more generalised.

For infiltration, work by Prof. Joe Holden is relevant to do with surface roughness, however as we understand it the surface based condition can only tell you so much. Ecohydrology combines both surface and subsurface processes.

water@leeds has also developed the DigiBog Hydro model. It can simulate water-table dynamics over peatland landscapes and can be used to explore how different types of management affect the hydrological 'behaviour' of a peatland. Digibog incorporates several land uses but we don't know if they include wind farms. The update to DigiBog Hydro is being done in conjunction with the Moors for the Future Partnership and the Yorkshire Peat Partnership and will be freely available.

We think the PEIR should have at least considered these issues instead of sweeping them under the carpet.

If site-specific ecohydrology work were done, as per the Environment Agency's and Natural England's Scoping Opinions, there would be grounds for a more evidence-based decision about data inputs to the direct rainfall runoff flood model. But, as mentioned above, we can only assume from the PEIR omission of any reference to these issues that this is not on the cards for the Environmental Statement.

2.5 The PFRA doesn't provide any information about how the Hebden Bridge flood risk assessment relates to the draft Walshaw Moor direct rainfall run off flood risk model.

The Preliminary Flood Risk Assessment refers to the need to produce two flood risk assessments: one of the flood risk to the Walshaw Moor proposed Turbine Area, and one of the flood risk to Hebden Bridge Flood Alleviation Scheme, as a result of the Proposed Development on Walshaw Moor. But the flood risk assessment for Hebden Bridge seems like a token afterthought.

The Preliminary Flood Risk Assessment omits to outline the conceptual model they are working with as the basis for modelling the flood risk to Hebden Bridge Flood Alleviation Scheme from the Proposed Development. According to both DEFRA guidance and the 2013 Heben Bridge participatory workshops to model Hebden Bridge flood risks that some of us took part in, that is the first step in flood risk modelling,

The Preliminary Flood Risk Assessment s1.1 Scope only mentions the Proposed Development and its own risk of flooding - omitting to refer to the potential increased risk of flooding from the Proposed Development to Hebden Bridge:

"The purpose of this document is to present flood risk information to support the Preliminary Environmental Information Report (PEIR) for the Proposed Development, to include a brief description of the Proposed Development, common background relating to planning policy, technical guidance, consultation and methodology, and a summary of flood risk from all sources."

There is no downstream receptor modelling for flood risk from the proposed development to Hebden Water, Hebden Bridge, the Hebden Bridge Flood Alleviation Scheme interface, the River Calder confluence, off-site people and property, water company assets, public rights of way, and access routes.

This is inadequate. The Calder Catchment Strategic Flood Risk Assessment identifies Hebden Bridge and valley-bottom communities as subject to major flooding mechanisms involving moorland runoff, surface water, fluvial flooding and infrastructure interactions.

The ES should therefore include a source-pathway-receptor assessment that traces flows from the turbine area, access tracks, cable corridors, altered drainage and peat disturbance through Hebden Water, Hebden Bridge, the Hebden Bridge Flood Alleviation Scheme interface and the River Calder confluence

There also needs to be:

- A cumulative assessment with existing moorland drainage/restoration, reservoir operations, Calderdale natural flood management work, the Hebden Bridge Flood Alleviation Scheme, and any relevant catchment interventions.
- A table comparing baseline, construction, operation, decommissioning and restored-condition scenarios for peak flow, peak level, time to peak, runoff volume, flow routes, flood extent and residual risk at key downstream receptors.
- A clear reconciliation between the Hebden Bridge Flood Alleviation Scheme model extent and the Calderdale Energy Park flood-risk model domain, including whether the project model can test any change in flow, level, time to peak or residual risk affecting the FAS standard of protection.

2.6 The PFRA doesn't indicate if the flood risk model will work as a time series

Wouldn't it need to, in order to take account of the ecohydrological changes to the proposed Turbine Area's blanket bog over the whole 35 year life of the Proposed Development, and beyond? There is evidence that the hydrological impact of infrastructure on peatland can continue for up to 150 years.

It also omits to say what work will be done to establish future ecohydrological baselines for modelling the flood risk to Hebden Bridge Flood Alleviation Scheme from the Proposed Development. over its various stages of construction, operation, repowering, maintenance, and partial decommissioning. This model evidently needs to be based on a future baseline for the Walshaw Moor proposed turbine area, - or rather, future baselines at different stages of the Proposed Development.

3 The PFRA includes a set of daft errors about the location of Hebden Water and Hebden Bridge

It mistakenly says:

- Spring Grove Bridge is about 3.6km from the proposed Turbine Area.
- Hebden Bridge is located approximately 7km downstream from the Turbine Area.

(In fact, Foster Mill Bridge, which they seem to think is called Spring Grove Bridge, is in Hebden Bridge, and Hebden Bridge is about 3.6km from Walshaw Moor proposed Turbine Area, not 7km distant.)

These errors are made in the context that Hebden Bridge FAS modelling does not extend north beyond what they mistakenly call Spring Grove Bridge. This means the FAS modelling cannot, by itself, test the downstream effect of the Proposed Development on the FAS or on Hebden Bridge receptors.

- Elsewhere PEIR Fig 10-09a shows Hebden Water in the North West of the Walshaw Moor proposed turbine area, near Colne Water.
- Preliminary Flood Risk Assessment, 3.2 Watercourses says Hebden Water forms a tributary to the River Aire.

4. The guidance the PFRA has substituted for the Planning Inspectorate's Scoping Response advice seems inappropriate

With regard to setting the flood study area, the PFRA has chosen to follow guidance from the Design Manual for Roads and Bridges (DMRB) LA 113 Road drainage and water environment.

It justified this decision on the grounds that there's no guidance for wind farms.

It also justified it on the basis of the competent experts' professional judgement.

Why would they think that the 'Design Manual for Roads and Bridges (DMRB) LA 113 Road drainage and water environment 'would give an appropriate technical understanding of flood risks on blanket bog?

The flood risks are about the hydrology/hydrogeology impact of the proposed development on Walshaw Moor's blanket bog, and flood risks from the impacted blanket bog downstream to Hebden Bridge.

They seem to think that the roads and bridges drainage manual:

"Outlines a methodology for assessment, including criteria for sensitivity of receptors and magnitude of potential impact." (*PEIR Chapter 10, Table 10-1: Legislation, Policy and Guidance for Hydrology, Hydrogeology, Geology and Peat*)

Does their choice of guidance have something to do with the fact that the last 2012 flood of Hebden Bridge was a pluvial flood that saw torrential run off from the tops pour down into Hebden Bridge, using roads as a flood pathway?

Do they know that the speed of the runoff was accelerated as a result of blanket bog degradation, caused by unconsented bad land management practices carried out on Walsaw Moor's Special Area of Conservation for an intensive driven grouse shooting business?

Speed of runoff from the tops is a defining factor in whether Hebden Bridge endures pluvial flooding during rainstorms and snowmelt. It determines peak flow, and peak flow determines whether or not Hebden Water floods. Speed of runoff from the tops is significantly determined by the health of the blanket bog habitat and the ability of its vegetation to slow the runoff.

If the peat, flood and hydrology competent experts don't understand that this set of relationships is the basic cause of pluvial flooding in Hebden Bridge, they don't know what they don't know so their professional judgement is unlikely to help.

They need to get their heads round the Calderdale flood-risk evidence base, including treatment of the December 2015 and 2012 Calder Valley flood evidence where relevant.

The Flood Risk Assessment for Hebden Bridge should involve a source- pathway-receptor assessment that traces flows from the turbine area, access tracks, extensive underground cables, altered drainage and peat disturbance through Hebden Water, Hebden Bridge, the Hebden Bridge Flood Alleviation Scheme interface and the River Calder confluence.

5. PEIR's compartmentalised thinking makes it hard to track information across different topics

The Planning Inspectorate's Scoping Opinion advised that there should be sufficient cross-referencing within the ES, to ensure all hydrological links, ecological and human receptors are considered in determining the proposed development's flood risk to Hebden Bridge.

The PEIR has not taken this on board. We found it difficult and very time consuming to try and track information about:

- Ecohydrology baseline work that has been undertaken,
- Ecohydrology baseline work still to be done,
- Next steps ecohydrology assessment work which has mostly not yet been done - but is expected to be completed in time for the Environmental Statement (and Habitats Regulation Assessment).

We can't believe how conscientiously we hunted for this information through PEIR Chapters 8 (Biodiversity) and 10 (Peat, Hydrology, Hydrogeology and Geology) plus associated Appendices and Figures. It proved very time consuming and frustrating, because we first looked in what turned out to be the wrong place: Chapter 10 (Peat, Hydrology, Hydrogeology and Geology)

Eventually we found that Appendix 08-3 Habitat Baseline Report includes some information about ecohydrology-related survey work: a Peatland Condition Assessment that was carried out alongside the National Vegetation Classification survey.

It is infuriating that we wasted an enormous amount of time looking for information that should have been clearly signposted. This was a problem with the Scoping Report too. We think it is because the different experts don't know what each other are doing and the Project Team has a shaky grasp on the overall view.

The fact that ecohydrology comes under Biodiversity not Peat, Hydrology, Hydrogeology and Geology basically says all we need to know about the narrow limitations of the PEIR's approach to peat and hydrology. And it may well go back to the fact that none of the competent Peat, Hydrology, Hydrogeology and Geology experts has qualifications or experience in peat ecology. And that's before we get to the apparent undeclared conflict of interest for the competent peat expert. (*More info in PEIR Chapter 10, s 1*)

6. Significance assessments lack quantification and evidence

Flood risk significance findings have been reached without quantification. Chapter 10 states that there is no specific quantitative methodology allowing flood-risk effects to be assessed, but then goes on to draw significant conclusions for certain flood-risk effects. That is inadequate because 2025 NPS EN-1 requires the Flood Risk Assessment to consider and quantify different types of flooding, including joint and cumulative effects, and to provide information on flood likelihood, speed-of-onset, depth, velocity, hazard and duration.

Appendix 10-9 reinforces this concern. It says no detailed fluvial modelling is available within the PEIR Boundary and that the site-specific hydraulic model is still being developed. But its conclusion still presents several baseline risk findings in the absence of final quantitative outputs. The ES should either provide the quantitative modelling needed to support significant conclusions, or explicitly identify any remaining conclusions as provisional and unresolved pending further evidence.

Construction flood-risk magnitude is asserted rather than evidenced.

Chapter 10 concludes that construction and decommissioning flood-risk effects are minor/not significant on the basis of negligible magnitude, despite identifying potential off-site mechanisms including altered overland flow routes and increased runoff from impermeable areas. This conclusion is not robust without the hydraulic modelling and drainage strategy that the chapter itself says are still incomplete.

Appendix 10-9 states that the surface-water drainage strategy was still being prepared and gives only drainage principles, including targeting greenfield runoff rates and attenuation for the 100 year plus 45% climate-change rainfall event. The ES should quantify construction-phase flood-risk effects, including temporary works and partial mitigation/failure states, before concluding that construction effects are not significant. EN-1 requires opportunities to reduce the causes and impacts of flooding overall during construction to be identified and secured¹¹.

Decisive operational flood-risk evidence is deferred to the ES

Chapter 10 accepts that operational fluvial/pluvial flood risk cannot be accurately completed in the absence of hydraulic modelling results and the drainage strategy. It also states that significant effects cannot be ruled out at this stage. That means the PEIR does not yet demonstrate compliance with EN-1 paragraph 5.8.12, because it does not show that there would be no increase in flood risk elsewhere when climate change is taken into account¹².

Appendix 10-9 confirms that the key direct-rainfall hydraulic model is not yet available and that the existing Environment Agency datasets cannot be interrogated to quantify changes in flood risk resulting from the Proposed Development. The ES should provide the completed hydraulic modelling and drainage strategy, including model outputs comparing baseline, construction, operation, decommissioning and restored scenarios at key downstream receptors.

7. There is vagueness about what still has to be done for the ES

The Environmental Statement is due to be submitted with the DCO application in November. We can't see clearly what the PEIR thinks that means and what is feasible for the Flood Risk Assessment.

As we have already said, baseline ecohydrology data doesn't exist, we don't think they have any intention of producing it, and therefore the PEIR Chapter 10 and Appendix 10-9 seem materially incomplete for flood risk assessment purposes.

Is it possible for them to carry out baseline survey work to provide data for assessment of the significance of flood risk effects by then? To the ecohydrological study survey and analysis recommended in the Scoping Opinion?

For example, In PEIR Chapter 8 Biodiversity, table 8.3 refers to detailed recommendations in Natural England's Scoping Response for further study, survey and analysis to assess the link between hydrology and the designated habitat features of the SAC and SSSI.

We asked the flood expert at the Trawden consultation event about this. She didn't know. But she said they'd be doing baseline work for data to feed into the Walshaw Moor Flood Risk Modelling. She couldn't say what baseline data they already had. She didn't know that Chapter 8 Biodiversity was assuming that the impact of infrastructure on surface and sub-surface hydrology was limited to within 10m of excavations and that this was the limit of the functional loss of habitat beyond the footprint of the infrastructure.

At the Hebden Bridge consultation event we asked the peat expert why the PEIR hasn't acted on any of the recommendations in the Planning Inspectorate and Natural England scoping response about baseline ecohydrology surveys /data, and extension of the hydrology study area to include the HBFAS area. He said they'd do the baseline surveys in time for the DCO submission. But he didn't know when that was scheduled

The obvious point is if they haven't got the necessary baseline data their model will be worthless. And as we said at the start of our Response to the Preliminary Flood Risk Assessment, it is worse than inadequate to present such a materially incomplete piece of work for statutory consultation with people who live with constant background anxiety about flooding.

We hope Calderdale Council's Adequacy of Planning Report will inform the Planning Inspectorate about this. And that the Planning Inspectorate will see fit to refuse the Development Consent Order for examination. Because there is no good reason why the people of Hebden Bridge and downstream to Mytholmroyd should have to put up with any more of this garbage.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**CARBON AND CLIMATE CHANGE
(PEIR CHAPTER 11)**

This response is only to the section on greenhouse gas emissions of the proposed development, Part A pages 13 to 41, and concentrates on emissions from peat and how the carbon savings are calculated.

1. Competent experts

I am sure the expert are competent in their fields, but it is unclear how much experience they have with regards to peat and in particular the ecology and hydrology of blanket bogs. From the evidence in this chapter it would seem very little given that it is very simplistic and lacking in any actual detail.

2. Planning Inspectorate advice

The PI gave only two recommendations, the first was:

‘the ES should clearly describe any assumptions made in determining the quantification of any emissions reduction resulting from the proposed development such as the displacement of fossil fuel power generation.’

They may well have described the assumptions clearly, but as detailed below in section 3 we believe these assumptions to be wrong.

The second recommendation was:

‘The ES should assess any likely significant effects arise from the presence of the turbine foundation and other components due to be left in situ in perpetuity on carbon capture and storage.’

This is mentioned in section 11.8.12:

‘Should underground elements remain in situ, there is unlikely to be any further loss of peat. Peat loss due to decommissioning would only normally occur if underground elements are removed, as the vacant space left by the removed elements causes water to drain out of adjacent peat.’

We believe this is incorrect – elements left in situ will have an effect on the hydrology of the blanket bog, especially with regard to cut and fill tracks. To blandly say ‘there is unlikely to be any further loss of peat’ is not assessing likely significant effects.

3. Errors, omissions and inconsistencies

This chapter was incredibly difficult to read, mainly because the assumptions made in it are so outrageous, both in simplicity and outright misinformation. It is also padded out with pointless comments and specious arguments based on out of date thinking. They have vastly oversimplified the effect of the development on carbon emissions from peat, and vastly overcomplicated the 'baselines'.

The main errors/omissions are that they have:

- Used an out of date definition of peat, and classified all areas with a depth < 30cm as soil,
- Ignored peat loss in the on-site cable trenches, and access and cable corridor routes,
- Used a very low estimate of volume of peat lost during storage,
- Used a lower than accepted figure for the carbon content of peat,
- Completely ignored the effects of drainage of peat on emissions,
- Completely ignored the fact that the baseline for future emissions should be that of a fully restored bog WITHOUT the development, compared to WITH the development.
- Overestimated the generating lifespan of the development,
- Used a much higher value for energy generated than given online and in their promotional brochures.

The upshot of all these errors and omissions is a gross underestimation of the CO₂e emissions of peat impacted by the proposed development. Their (single) estimate of 8,208 tonnes CO₂e bears no resemblance to our estimates of a range from 161,000 tonnes to well over 1,000,000 tonnes. Their estimate of the carbon intensity of electricity produced is also grossly underestimated, their figure of 6.58g CO₂e/kWh bears no resemblance to our figures which range from 18g at best to a worst case of 121g, with an average of 49.4g CO₂e/kWh, above the target for grid intensity for 2030⁴, let alone 2032.

Therefore, we do not believe that this development has been proven to be 'low carbon' or a "Critical National Priority" project as their methodology for calculating emissions from peat in particular has fallen well short of best practice. We therefore cannot see that there is an Imperative Reason of Overriding Public Importance for the Secretary of State to derogate the Habitats Regulations and approve the Development Consent Order application, should they be so minded.

3.1 Detailed Analysis.

The main problems are threefold:

- The method for estimating emissions from peat,
- The generating lifespan of the development, and

⁴Target for 2030 is 'well below 50g CO₂e/kWh, see Methodology section below.

- The methodology of calculating the carbon savings.

3.1.1 Estimating emissions from peat.

Incredibly they have used the most simplistic method for estimating these. Appendix 11-1 states:

11.1.4 The total excavated volume of peat is taken from the oPMP (and is 559,645m³).

10% of this volume is assumed to be lost during temporary storage. The emission factor for peat loss is 0.04t/m³, taken from the Forest Research climate change factsheet on peat.

There are three variables here, the quantity of peat excavated, what percentage is lost during storage and the emission factor (do they mean carbon content?) for the peat loss. Given that this application is claiming the Rochdale envelope approach these should be the reasonable worst case assumptions.

The excavated quantities of peat are given in Table 4.1 in Appendix 10-3. The first thing to note is that they are using a definition of peat from 1980 (Section 1.2 Definitions). This is at odds with the latest science on peat and blanket bog which no longer uses a depth-based definition. There is no evidence in their peat depth surveys either as to whether the <0.3m probes were peat or soils. The upshot is, especially given the Rochdale Envelope approach, that there should be no split between soil and peat as in Table 4.1. This would give a figure for excavated peat just shy of 600,000m³. There is very little real detail in the PEIR as to how these figures were actually arrived at however.

There also seems to be some confusion over on-site cable trenches and whether the peat excavated from these is accounted for. Section 4.2.3 Cable Trenches in the oPMP states:

“Cable trenches are to be excavated alongside access tracks within verges (i.e. the earthworks footprints) and any peat excavated prior to cable placement will be directly reinstated after installation. Therefore, peat disturbed in this activity is not considered in the overall peat mass balance calculations.

However, 4.2.2 Access Tracks states:

Cut and fill tracks include associated earthworks on their margins (which also involve peat excavation), while any earthworks associated with floated track sections are simply an extension of the ‘floated’ surface...

All peat excavated from tracks will be permanently displaced and reused elsewhere.

So is this peat accounted for or not, the two statements appear contradictory. Has peat from cable trenches running next to ‘floating’ tracks been accounted for?

Also, peat volumes excavated along the Access Routes and Bradford West Cable Corridor have not been included in the excavation calculations due to a lack of peat data.

The figure of 0.04t/m³ – 40kg/m³ - is taken from a Forest Research paper on the benefits of restoring peatland after forestry clearing, and takes the minimum value in order to not overstate the benefits. A more reasonable value is 52kg/m³ (Peatbogs and Carbon: a critical synthesis Richard Lindsay 2010), although figures as high as 104kg/m³ are possible in damaged peat. The Scottish carbon calculator defaults to (if using suggested carbon content percentages) between 120kg and 150kg per cubic metre.

The figure of 10% comes from the initial 2008 paper that led to the development of the Scottish Carbon Calculator tool (now discontinued and under review). It is the best case scenario:

‘Peat that is used for restoration of a site under anaerobic conditions could potentially retain a large proportion of its C content, but peat that is laid on the surface will lose a large proportion of the stored C.’

The figure was actually 10% to 15% in the original paper, but the Scottish Carbon Calculator defaults to 100% with a note that:

‘If peat is treated in such a way that it is permanently restored, so that less than 100% of the C is lost to the atmosphere, a lower percentage can be entered’.

However, looking at the way the spreadsheet works in practice, that lower figure cannot be anywhere near 10% to 15% else negative values for emissions occur.

Taken all together then, the quantity of peat is approximately 600,000m³, a lower percentage for peat loss than the default carbon calculator of say 50%, and the lower of the more realistic carbon figure of 52kg/m³ then the total CO₂e figure is over 57,000 tonnes, as opposed to the 8,208 tonnes quoted in the PEIR. And over 100,000 tonnes if the carbon figure of the peat on site is the higher value of 104kg/m³ – or even over 200,000 tonnes with that higher figure and 100% peat loss. So the claim that their CO₂e loss estimate for peat is a realistic worst case already looks rather unlikely.

However, the real glaring omission is the fact that there is no allowance for emissions caused by drainage due to the infrastructure, in particular the over 30km of access tracks required. Using a conservative figure of 30m for the drainage extent (from 11.5.5 quoting the oPMP – yet in the biodiversity chapter they assume a lower figure of 10m...) and an average drain depth of 1m, that equates to a volume of peat drained as nearly 1.5 million m³. Recent research has suggested though that the effects of drainage may reach much further, 100m or more, and up to 900m in extreme cases.

The following assumptions were made concerning drainage, that the carbon content either 52 or 104 kg/m³, drainage either 30m or 90m, and whether the site would be restored after decommissioning⁵⁶

Taking all of these, and using conservative inputs to the Scottish carbon calculator, gives a range of between 161,000 tonnes to well over 1,000,000 tonnes of CO₂e⁷. Not a single figure of 8,208 tonnes...

Section 11.7 deals with 'Potential Effects Scoped Out'. Drainage is one of these, and the listed effects are claimed to be in line with ISEP recommendations:

'that activities with emissions that are individually less than 1%, and in total equal less than 5% of the lifecycle emissions of the Proposed Development, may be scoped out of the assessment.'

How do they know these are less than these percentages without carrying out an assessment?

Section 11.4.26 claims that:

'the assessment is considered to be robust because in each case the assumption represents a reasonable worst-case, which means all GHG emission sources are reasonably captured by the assessment.'

Yet on page 27 under section 11.4.26 the PEIR states, in reference to decommissioning:

'If all underground elements of the Proposed Development are left in-situ, there is unlikely to be any further peat loss as a result of decommissioning activities.

However, if underground elements are removed, the resultant space that was occupied by the underground elements will serve as drains, draining water from the nearby peat, and causing peat loss.'

We do not believe that their figure of 8,208 tonnes of CO₂e 'represents a reasonable worst-case' due to these errors and omissions.

3.1.2 Generating lifespan of the development.

Section 11.4.24 makes the same claim about 'realistic worst-case scenarios'. It then goes on to list a number of assumptions, including:

⁵Although the developers claim restoration work will be done, they admit a lot of the infrastructure such as turbine bases, crane hardstandings, cable trenches and cut and fill tracks will be left.

⁶Drainage losses were estimated using the Scottish carbon calculator with a figure of 7 tonnes CO₂e/ha/year.

⁷The range is large because of the large number of variables, and the fact that the PEIR includes no site specific values for these variables.

‘All turbines (excluding foundations and towers) are assumed to be replaced once (on average) over the lifetime of the Proposed Development. The Vestas study assumes a 20-year lifetime, therefore this Chapter assumes an average of a full replacement over the 35-year lifetime of the Proposed Development as a reasonable worst-case scenario in terms of emissions from maintenance, at this stage.’

The claim that the development will last for 35 years as a worst case is extremely dubious. Firstly, Vestas themselves say on page 69 in the LCA document referenced to by the PEIR:

‘It is often wear or fatigue of the load-bearing components of the turbine (such as tower fatigue) which limit the overall turbine lifetime. Many components can be routinely replaced as part of maintenance, except for the fixed parts (such as the tower, foundation and cables, etc) which are generally not replaced and may limit the physical lifetime of the plant’

So they intend to not replace the towers but yet put a brand new multi-million pound turbine on top?

Secondly, by the time these parts will need to be replaced it will be into the 2050's. Who knows what the energy market may be like then? There is every possibility that the cost of replacing the turbines (and towers) will not be financially viable. To be able to make a direct comparison with the Vestas LCA they should be using the same timescale of 20 years.

3.1.3 Methodology of calculating the carbon savings

There are over four pages devoted to defining ‘Baselines’. Whilst some of this may be relevant to parts of the development, with regards to defining the impact on peat and future electricity generation it is way off the mark.

With regards to peat, the fact is the majority of this area is blanket bog peatland, one of the main criteria for the SAC designation. According to numerous statements and publications from government departments it is vital that the UK's peatlands are restored both for carbon storage and bio-diversity. Whilst the majority of the area of the proposed development qualifies as degraded (as the vast majority of UK peatlands are) there are no environmental reasons why it could not be restored to a fully functioning blanket bog landscape that could actually sequester carbon from the atmosphere. The area is actually less degraded than large parts of the Peak District moors were, and the Moors for the Future partnership have shown what can be done there.

From this point of view the only baseline that needs to be taken with regards to peat is that of a fully functional blanket bog that at the very least is neutral with regards to carbon loss or gain. Then look at the effect that the proposed development would have on that. This is the approach taken in the ‘Estimating emissions from peat’ section above.

With regards to future electricity baselines, the wind farm is still being compared with natural gas, both with and without CCS. This is missing the point that this natural gas generation is being built as back up for when the wind is NOT blowing – this development should

be being compared to other wind farms, both onshore and offshore, solar and nuclear power, large scale or SMR. This will give a more meaningful indication of how green the proposed development is.

Current carbon intensity of new renewable energy sources in the UK:

Onshore wind	11g/kWh
Offshore wind	6g/kWh
Solar farms	20g/kWh
Nuclear	8g/kWh
Nuclear (SMR)	15g/kWh (estimated)

Obviously, to calculate this figure for the proposed development involves making a lot of assumptions, as the developers already have. One of these is the load factor, which surprisingly doesn't appear to be mentioned in Chapter 11. This is a very important figure as it determines how much electricity is expected to be generated over the lifetime of the development. It does mention in 11.4.24 that the development will generate 733GWh of electricity a year however, which equates to a load factor of 35%. However, in the company's promotional material it states the development will provide electricity for 198,000 homes, but omits to say which metric it is using for home use – UK wide, England, or even just Yorkshire? The median home electricity usage for the UK is around 2,700kWh according to the Office for National Statistics. That gives, for 198,000 homes, an annual output of only 535GWh, which equates to a load factor of only just over 25%. So which is it? This is not a small difference.

In the FAQ section on the CEP website, in answer to a question relating to this it was stated:

'The details of the EYA is not required to be provided as part of the PEIR or ES documentation.' (EYA = Energy Yield Assessment – a vital factor in determining the financial viability of a project).

Surely there should be an accurate statement of how much energy will be produced and the reasoning behind it?

4. What we expect from the Environmental Statement

In the Environmental Statement we would expect to see a far more rigorous assessment of the GHG emissions due to the development being on peat land, using actual on-site data and the latest research to inform the outcome.

We would also expect the findings to be compared against the technologies it will be competing against, such as offshore wind, onshore wind on mineral soils, solar and nuclear.

5. Good design decisions?

We believe that the choice of site on peat land itself was the wrong decision, and no amount of good design can alter the fact that heavy engineering and track building on a complex ecosystem such as blanket bog – which is primarily what the site is – can compensate for that.

6. Mitigation and compensation.

We do not believe that it is possible to effectively mitigate or compensate for the destruction of irreplaceable habitat such as blanket bog – the clue is in the description.

7. Are there grounds for claiming IROPI?

Given all of the above, what do the carbon intensity figures look like if they are taken into account, compared to the single figure of 6.58g/kWh given in the PEIR?

The following assumptions were made - the quantity of peat excavated was 600,000m³, carbon content either 52 or 104 kg/m³, drainage either 30m or 90m, and whether the site would be restored after decommissioning⁸⁹, power output and generating life of the development¹⁰.

This resulted in a range of figures from 17.5 g/kWh to 127.0 g/kWh, with an average of 49.4 g/kWh.

This is from the 'Clean power targets' research briefing published by the government on January 14th 2026:

'In December 2024, the Department for Energy Security and Net Zero (DESNZ) published its [Clean Power 2030 Action Plan](#). This set out the government's pathway to a clean power system and what it plans to do to achieve this. It included details of how the clean power target will be defined:

"In a typical weather year, the 2030 power system will see clean sources produce at least as much power as Great Britain consumes in total over the whole year, and at least 95% of Great Britain's generation; reducing the carbon intensity of our generation from 171gCO₂e/kWh [grams of carbon dioxide equivalent per kilowatt hour] in 2023 to well below 50gCO₂e/kWh in 2030.'

Well below 50g CO₂e/kWh, and that is 2030, it will be less by 2032, the predicted start of generation.

⁸Although the developers claim restoration work will be done, they admit a lot of the infrastructure such as turbine bases, crane hardstandings, cable trenches and cut and fill tracks will be left.

⁹Drainage losses were estimated using the Scottish carbon calculator with a figure of 7 tonnes CO₂e/ha/year.

¹⁰The 35 year generating lifespan was excluded as being unviable.

This is in stark contrast to the claims made in the conclusion to chapter 11, which claim the GHG emissions will be 'Significant Beneficial'. We believe that this is not the case at all, and that they have not provided any hard evidence to back this claim up.

There is every chance that rather than helping the drive to Net Zero this development could actually hinder it. The claim that it is a low carbon generating source has not been proven.

We do not believe there is any case at all for claiming Imperative Reasons of Overriding Public Importance. The development will not provide clean energy compared to the alternatives as shown above.

We do believe that we should claim IROPI to save and restore Walshaw Moor as a haven for nature and wildlife – we are in a nature crisis as well as a climate crisis.

**WADSWORTH PARISH COUNCIL RESPONSE
TO CALDERDALE ENERGY PARK'S STATUTORY CONSULTATION**

**LANDSCAPE AND VISUAL
(PEIR CHAPTER 12)**

1. Competency of expert

The landscape architect is a Fellow of the Landscape Institute which indicates that he is a competent and senior member of the profession with expertise in this subject.

He does say that he has 40 years of experience of LVIA, although LVIA have not been around for 40 years, having been formally embedded into British law in 1988. It would be useful if this could be clarified.

2. Have comments made in the scoping report on landscaping been acted upon in the PEIR?

2.1 Townscape Assessment

A number of responses to the scoping report noted the lack of any townscape assessment. This is felt to be important as the scale and number of the turbines would have an impact on the skyline which forms the backdrop to several communities, including Heptonstall, Howarth, Oxenhope and Trawden.

The response in the PEIR states: "The Proposed Development will not have any significant physical effects on the fabric of settlements. Townscape effects are not typically included in LVIAs for wind farm developments and a detailed townscape assessment is not proposed to be undertaken for the Proposed Development".

However, since there have never been any developments in England which compare with this scheme in terms of scale and number of turbines, we do not consider it is appropriate to consider what is typical, this development is not typical of anything that has been planned in England before.

We disagree with the Applicants decision not to include townscape assessments for affected communities. Townscape assessment should be included for communities where one or more turbine breaches the horizon, as there could be detrimental visual effects arising from the proposals, open moorland skylines underpin the moorland character of settlements such as Haworth, Oxenhope, Heptonstall and Trawden.

2.2 Use of Zone of Theoretical Visibility (ZTV) to determine route selection for access and cable routes

We asked the Applicant to confirm that ZTV has been used to inform route selection, particularly where there is a chance that mature trees and woodland would require removal, which would have a visual impact.

The applicant has confirmed that a ZTV would not be used to assist with route selection and refers to chapter 5 Alternatives and Design Evolution. This states that constraints mapping has been used to define possible cable and access routes.

However, we consider the lack of any ZTV mapping is an important omission, and extent of visibility is surely a constraint? There will be effects on landscape features including landform and vegetation as a result of access and cable routing, and where these can be minimised by the use of ZTV mapping this should be used.

There are three offline sections of the access route which could all have potential visual effects on the wider landscape, and although the cable route will be buried there are still likely to be above ground features, such as a midpoint station which need to be considered. Visual effects are still likely to occur even with buried cables, particularly where cable routes intersect areas of woodland or individual trees where these may be lost or damaged. The extent of the offline sections of the western access route and the type of terrain they cover of the route is impossible to determine from the mapping supplied by the applicant and we consider this is just one further illustration of the utter inadequacy of this statutory consultation. We go into this in more detail in point 2 of our response to biodiversity chapter 8.

2.3 Siting of elements within the proposed development

We asked in the scoping report that where routing and siting of elements of the Proposed Development seeks to avoid notable landscape features, these should be clearly defined, and justification should be given for how they relate to important ecological features such as blanket bog.

We consider that the role of the Landscape and Visual Assessment (LVIA) is to consider the landscape and visual effects of a proposal and use this information to refine and improve the scheme from a landscape perspective, however the applicant's response to this was to refer to chapter 5 Alternatives and Design Evolution.

This states in para 5.7.4: That a wide range of assessments were considered including: "Landscape and Visual Impact Assessment (LVIA), including views from designated routes, and cumulative effects with existing wind farms; as well as Residential Visual

Amenity Assessment (RVAA) relating to spatial considerations such as enclosure, particularly in relation to nearby dwellings” and in para 5.7.10 “Landscape and visual impacts, particularly on elevated ridgelines in the southwest and northeast of the Turbine Area.” And that was all we could find.

We consider this level of detail too brief and inadequate in describing the evolution of the design process from a landscape perspective. We consider it is important that the applicant is able to demonstrate clearly and in some detail the extent to which adaptations to the design have been made and consider that one sentence responses are insufficient.

2.4 Effects during decommissioning

We asked in the scoping report that effects during the decommissioning phase should be considered, as there are likely to be long term changes resulting from the reinstatement of vegetation over hardstandings.

We were dismayed that although the response stated that this will be reviewed as more design information is available...and particularly where significant effects may occur, that there was consideration that there may be no significant adverse effects predicted. We consider the latter unrealistic.

2.5 Scoping out effects beyond the limit of the ZTV

In the scoping response it was requested that effects beyond the ZVT are not scoped out. The visual effects of the proposals are so widespread, that where effects would still be visible beyond the ZTV these should not be scoped out.

2.6 Residential Visual Amenity Assessment (RVAA) for cable route and access route

The scoping response states that an RVAA wouldn't be carried out for the access routes or cable routes.

Parts of the access road at School Lane Laneshaw Bridge, Colne, and Lancashire Moor Road we are told will be 'offline'. The information given about these offline route sections is scant, so until such time as the route is finalised and it is known how far any offline sections of route will be from existing residential properties, the RVAA must be scoped in.

With reference to the cable route, there may be effects to visual amenity, as well as noise, dust and disturbance, for residents during the construction period due to compounds required for tunnelling operations and there may be longer term operation visual effects arising from the location of any midpoint station which should be considered.

2.7 Agreement of viewpoints and consultee workshops

The applicant's response to consultees requests for clarification on the range of viewpoints to be included within the ES, states that this will be discussed with relevant stakeholders. However, this standard response by the applicant does not appear to recognise the massive scale of these proposals and the interregional visual effects. A formal methodology for agreeing the viewpoints among the many consultees, and the suggestion that consultee workshops should be held does not seem unreasonable for a project of this magnitude.

2.8 Detail design evolution

The scoping response asked for a lot more detail on the design evolution and how the LVIA was informing this. Reference is made to Chapter 5 Alternatives and Design Evolution but the information supplied in this chapter is very limited, and it is not possible to clearly determine how the evolving LVIA has influenced the design apart from in the broadest sense. There is nothing for instance to explain why the on site substation has been sited where it has, an appalling location which just reinforces the lack of understanding and sensitivity the applicant has for this landscape, or the landscape considerations that might have lead to its location in a such visually prominent location alongside the Pennine Way and Widdop Road, and on a site of clear importance for biodiversity and breeding birds.

There appears to be no consideration of how local design policies have been taken on board, how the and a clear lack of any detail or understanding of what that detail might be. The PEIR does not refer to the Statement of opportunities set out in National Character Area (NCA) 36 for example.

3. The following errors, omissions and inconsistencies have been found:

3.1 Details of mitigation

Chapter 5 states in Para 5.1 2 that "refinement of environmental measures and additional mitigation will be undertaken following consultation", but there is a huge amount to do here. Chapter 8: Biodiversity repeatedly says mitigation measures will be set out in the ES, and gives no detail whatsoever, (See our section 8 in our response to chapter 8 biodiversity) while Chapter 12: Landscape gives very slightly less scant detail in little more than four sentences.

It is very difficult for consultees to comment on the effectiveness of proposed mitigation when there is no detail. It will leave consultees with a mighty task to understand, research and comment on the effectiveness of the mitigation during the period allocated for comment on the ES. The effectiveness of mitigation is crucial to the success of any proposed restoration of this highly protected site and it remains to be demonstrated that this is in any way achievable.

3.2) There are repeated references throughout the PEIR to the treatment of edges of tracks and hardstandings, Chapter 9 refers to:

“hardstandings and access tracks (with associated soil berms at the edges/seeding...)” in para 9.9.82, and in PEIR APP 10-3 OPMP 5.5 Soil Re-use Proposals for “vegetated turves with species tolerant of drier conditions for landscaping” on the edges of permanent infrastructure that would remain in place during the wind farm operation. For instance, both assuming that in this peatland habitat non-peatland species would somehow be appropriate.

Chapter 12 refers to “Native grass/moorland species to be planted around the internal site access tracks to assist in blending the track into the surrounding moorland context “ and at least acknowledges the presence of moorland species, but there is a lack of consistent approach and a worrying lack of any technical expertise which might seamlessly reinstate the habitat along the edges of tracks with vegetation which would both be ecologically appropriate, reducing habitat loss, and would consequently be visually more appropriate.

Our response to PEIR APP 10-3 OPMP 5.5 Soil Reuse and Landscaping points out that this demonstrates a lack of understanding of the ecological value of the landscape of the proposed turbine area.

We are also concerned that there is no mention in PEIR APP 10-3 of best practice storage methods for storing and handling peat and soil. DEFRA's publication Construction Code of Practice for the sustainable use of soils on construction sites should be adhered to as best practice for the treatment of soil.

3.2 Perceptual qualities of ecological aspects

When establishing the value of the site, as part of the landscape assessment a range of factors should be considered, and on this site ecology is key. Changes to its existing perceptual qualities as a result of the proposed development should be taken into account by the LVIA . This includes the whole range of biodiversity - wildlife as well as habitats and their extent and condition.

Important experiential qualities of Walshaw Moor's ecology that the windfarm would alter include the very likely loss of the song of the curlew, and - with the wind turbines' noise - the loss of the moor's unusual and haunting acoustic where distant sounds seem closer in the same way that sound travels over water. Rather than just thinking about Landscape and Visual Impact, the PEIR should be considering Landscape and Sensory Impact.

3.3 South Pennine Moors Landscape Character Area

The PEIR Chapter 12 omits to mention that the South Pennine Moors area is unprotected by any landscape designation and vulnerable to inappropriate development, indeed it is the only upland areas of England with no landscape designation. Calderdale Energy Park, if consented, would set a precedent that would change this vast landscape of peat to a windfarm landscape, destroying the South Pennine peatland habitats and losing this vital carbon store. Why is there no mention that the South Pennine Moors Landscape Character Area is a landscape of peat that would be put at risk by this precedent-setting proposed windfarm? Would the ES consider this?

3.4 Failure to agree Planning Performance Arrangement with Calderdale Council and other host Local Planning Authorities

The statutory consultation risks being inadequate because Calderdale Council have no landscape architect and Calderdale Energy Park refuses to provide funding for Calderdale Council to employ consultants to respond to the statutory consultation. So how can Calderdale Council provide democratic feedback to the Preliminary Environmental Information Report?

At the time of writing, Calderdale Energy Park has still not agreed a Planning Performance Arrangement with Calderdale, and CMBC's response to the draft Statement of Community Consultation reported the Applicant's misleading statements about the Planning Performance Arrangement and failure to negotiate the required funding to CMBC. So how are CMBC supposed to be able to respond to this Preliminary Environmental Information Report? Why was the Planning Performance Arrangement not sorted when it should have been last September, for the Scoping Report? CMBC commented in its Response that it did not have the necessary staff skillsets to respond fully. This issue has come up in consultation events and in the PC forum meetings with CEP but seems to be no closer to resolution.

4. Points which have been underestimated

4.1 Description of existing baseline

Para 12.5.4 states that the Moorland Plateau is valued locally for recreation. We consider this an understatement, and there is failure to recognise the regional importance of Walshaw Moor for recreation. There is clear evidence of this:

- Haworth and the Bronte Country of which Walshaw Moor is an integral part receives visitors from all over the world, many of whom venture on to the moor.
- The Scout accommodation at Blake Dean hosts groups from all over the UK
- The Pennine Way passes through the centre of the Proposed development area

- The Pennine Bridleway, the equine and cycle equivalent of the Pennine Way, runs along the western edge of the development area.

Other long distance paths of regional importance include Bronte Way, Burnley Way, Calderdale Way, and the Calder Aire link.

4.2 Underestimation of the scale of the proposals

Para 12.8.7 of the PEIR describes the footprint of the proposed development as covering a “relatively small area”. We consider this is an unnecessary and inaccurate description, which fails to consider the massive scale of the infrastructure of this project: 34 crane hard standings each 5000m², that’s 17 hectares; up to 20 miles of track; a new highly visible substation which will itself cover 2.64 hectares, at least three works compounds which we are told will measure 5000m² each, that’s another 1.5 hectares, as well as 5 borrow pits and laying down areas. And this is on an upland moorland devoid of any other development save the existing dirt access tracks. How can this be described as a relatively small area? There is more about this in our response to the Biodiversity PEIR.

4.3 Underestimation of visual effects during construction

Para 12.8.11 The effects on landscape character and visual amenity, arising as a result of the construction of the Proposed Development, are predicted to be no greater than those that would occur during operation and maintenance.

We consider that this is wrong and fails to consider the scale of works required. The installation of each turbine will require massive cranes, which are moving elements to which the eye will be drawn, the scale of these works will be unprecedented in England. The construction of offline sections of access road will have different effects to the operational phase of the project. Similarly, the installation of the cable to Bradford West Substation will have considerable visual and landscape effects over and above those of the operational phases, with the operation of tunnelling equipment and or the carrying out of trenching works.

5. Unrealistic programming

Chapter 12 details the huge extent of works which need to be completed before the Landscape and Visual Assessment (LVIA) element of the Environmental Statement can be completed. It states that the preparation of the visualisations is in accordance with Scottish National Heritage (SNH) guidance in visualisations.

The LVIA will incorporate photographs from agreed viewpoints within the zone of theoretical visibility, ZTV. This zone is vast:

- It has a radius of 45 kilometres.

- Para 12.4.44 states that all key stakeholders, i.e. local authorities within the study area will be consulted. There are 29 local authorities, including Calderdale, the host authority within the study area.
- SNH guidance recommends that 'Less is More' with regard to the number of viewpoints, to avoid replication of many similar views, so it is assumed that careful discussions will be required between the multiple stakeholders to ensure these viewpoints can be agreed across the whole study area.
- Some local authorities, National Park authorities and National Landscapes may have standard viewpoint lists which should be referred to.
- For each viewpoint, it is expected that there will be baseline photography and wirelines of the Proposed Development and the 'bare earth' landform for the same extent as shown in the photography. In accordance with published visualisation guidance, the viewpoints will also have accompanying photomontages for the majority of locations.
- The author of this response is a Chartered Landscape architect who is involved professionally with reviewing LVIA 's for local authorities and is well aware that even for modest schemes the viewpoints need to be visited to be agreed if the reviewer is not already familiar with the viewpoint. Consequently, it is anticipated that there will be considerable work for reviewers in up to 29 local authorities to agree all the viewpoints, and then the applicants Landscape Architects need to carry out the necessary photography, within the whole of the 45 km radius study area.
- Having carried out the photography, the wire frames, and where appropriate, photomontages for each location need to be produced.
- The photomontages and wire frames would/should be used to inform the development of the scheme, by illustrating where the visual effects would be most prominent, so allowing the design to evolve and improve to create the most visually acceptable scheme, otherwise what on earth is the point of doing them?
- It is considered that it is hugely ambitious and probably impossible to complete this massive workload in sufficient time for the publication of the ES in November let alone use the resulting images to inform the design.

- If the visual assessment part of the LVIA is not completed before the design is fixed, then this part of the process will have been no more than a worthless tick box exercise.

8. Has baseline survey work lead to good design decisions?

8.1 Change of T20 and T21 Turbine heights

It is noted that turbines T20 and T21 will be shorter to reduce their visual impact on the area immediately due west of Haworth. The turbines would have a height of 150 m we are not told the radius of the blade but assume that this would need to be proportionately smaller to accommodate the smaller hub height. Shorter blades will turn at different speeds to longer blades and consequently we assume that T20 and T21 turn at a different speed to the other 32 turbines in the array.

We note that the wirelines shown in Appendix 12.2 do not appear to show any size difference. Perhaps this can be clarified and corrected if necessary?

The South Pennines Wind Energy Landscape Study by Julie Martin and LUC recommends against mixing sizes of wind turbines. The Julie Martin report states that there will be visual conflicts where turbines of different heights are seen in juxtaposition with one another. Has this been considered and what mitigation would be proposed to minimise these effects? It seems that one visual effect: dominance of the turbines, is just being exchanged for another adverse effect visual disturbance and lack of visual harmony.

8.2 Flyover visualisation presented at the consultations

A visualisation was shown at each of the public consultation events, however it was noted when queried that the turbine heights and blade lengths were not to scale “due to software limitations” we were told. However, here's what Scottish National Heritage (SNH) Guidance on visualisation says in para 123 "Turbines shown in a visualisation should represent faithfully the shape of the intended turbine for a project and have the correct hub height and rotor diameter. Chap 12 refers to the SNH guidance.

8.3 Reference to The South Pennines Wind Energy Landscape Study by Julie Martin and LUC

This is cited in the literature referred to for the LVIA. To what extent have the comments on strategic landscape issues described in para 5.22 of the report been considered, and how has this influenced the evolution of the detail design? The guidance on the siting of wind farms within the High Moorland Plateau LCT states that “This landscape is extremely sensitive and highly valued” and that key considerations must include:

- Minimise any further loss of accessible areas of relatively wild, unspoilt landscape to help contain impacts on this key landscape quality.
- Set large turbines well back from steep moorland edges, generally by at least 400m, to minimise visibility and avoid undue intrusion on skylines as perceived from valley settlements below.
- Choose turbine locations well away from the distinctive features such as gritstone tors and monuments that characterise this LCT.
- Avoid locating turbines where they will interrupt popular panoramic views from the escarpment edge and from National Trails or other long-distance paths.
- Minimise any impacts on deep peat deposits (e.g. by siting turbines on quarried or brownfield land where present) and on other natural, cultural heritage and recreation interests as described above.
- Minimise the need for new infrastructure by utilising existing wind farm access points, on-site tracks, grid connections and other services where possible.
- Avoid the use of structures that have an industrial character, such as lattice towers or masts; and limit any unnecessary disruption to the simple, open character of the moorland, for example due to access track cut and fill, fencing, other enclosures, or external turbine transformers.
- Put in place measures to minimise the impacts of recreational motor vehicles, which can cause erosion and loss of tranquillity.
- In the longer term, manage wind farm sites to restore and improve the condition of moorland landscapes and habitats.

And finally, although the reference relates to nearby Scout Moor windfarm, the report warns of the danger where “the surrounding landscape does not become ‘a wind farm landscape’ i.e. a landscape in which the influence of wind energy development dominates landscape character, effectively creating a new character.”

Will there be any analysis of the Julie Martin report in the LVIA?