Environmental Considerations

Avian Ecology

An assessment of effects on bird populations has been undertaken by APEM Ltd, an ecological consultancy which specialises in bird surveys and monitoring.

Bird surveys at the site have been undertaken since the 2022/2023 non-breeding season up to and including the 2024/2025 non-breeding season, which exceeds the requirement of two year's minimum of surveys. Surveys have been undertaken in both breeding and non-breeding seasons and consist of flight activity studies and site walkover surveys. Surveys followed established guidelines recommended by DAERA.

The data gathered during the flight activity study enables collision risk modelling to be undertaken. The walkover surveys involve recording all species seen or heard along a transact route.

Breeding bird surveys focus on identifying breeding species including birds of prey or breeding waders so that appropriate mitigation measures can be applied if necessary.

Climate Change

The urgency to combat climate change is well known and has been enshrined within the Climate Change Act (Northern Ireland) 2022, which commits Northern Ireland to achieving a target of 80% renewable electricity consumption by 2030. Figures published by the Department for the Economy in June 2025 confirm that for the 12-month period March 2024 to April 2025, only 43% of electricity consumed in Northern Ireland was generated from renewable sources, highlighting the scale of the challenge to meet the 2030 target.

The Derry City and Strabane District Council Plan Strategy 2032 (DCSPS), will be the key document for planning policy in the area. Section 7 'General Development Principles and Policies' includes a section related to climate change and states the following:

'The Council has produced the Green Infrastructure Plan 2019-2032 (GIP 2032) which outlines the impacts of climate change facing the District, and the role green infrastructure can play in addressing the issue. More recently, in June 2019, the Council declared a 'climate emergency', which reinforces the need for urgency and underpins the requirement for these development principles within the Council's Local Development Plan (LDP).'

'The Council has a critical role in mitigating and preventing the effects of climate change as well as adapting to them, particularly through its Planning function. The LDP seeks to contribute to this by setting strategies and policies that promote sustainable forms of development, avoid and / or mitigate against flooding, reduce the impact of heatwaves...'

Based on industry-standard figures it is calculated that the proposed Pullytean Wind Farm will:

- Provide enough energy to power between 26,611 and 31,789 homes per annum equating to between 43.7% and 52.2% of the households within the district
- Reduce CO2 emissions by between 39,842 and 50,284 tonnes per year.

Archaeology and Cultural Heritage

An Archaeology and Cultural Heritage Assessment has been prepared by Gahan and Long who have overseen the production of a high volume of archaeological impact assessments for a wide variety of development types, including wind farm and other renewable energy projects, large-scale residential, commercial and industrial projects. The assessment included a desk top study of known archaeological sites within the area and a site inspection across the entirety of the lands under applicant control. No evidence of any archaeological features was noted during the site inspection. Within a 5km radius from the centre of the site, the desk-top study identified:

- Eight known archaeological monuments, two of which were identified as scheduled monuments of regional importance (TYR 23:500: Fairy Bridge and TYR 23:22: Church & Graveyard)
- Eighteen industrial heritage records
- Five listed buildings
- Four archaeological investigation areas (for which no archaeological deposits were found)

Based on the assessment, the effects of the proposed Pullytean Wind Farm on archaeology and cultural heritage will be limited to the physical impact upon previously unknown, sub-surface archaeological deposits within the application site footprint. Given the level of known archaeological assets within the wider landscape, the potential for archaeological discovery here is low.

Geology, Fisheries and Water Environment

An assessment of the likely effects of the proposed development on the hydrological and geological environment has been undertaken by McCloy Consulting Ltd.

The impact assessment undertaken involved a combination of desktop investigations, field surveys, and consultation with various stakeholders. Where constraints were identified during the assessment, they were reported to the design team at the early stage of design development and avoided as far as possible within the proposed layout

The proposed development is located within the Derg River (Legvin), Derg River (Killeter), and Owenboy Burn catchments which ultimately drain to the Derg River to the north of the site. The River Derg is part of the 'River Foyle and Tributaries' Special Area of Conservation (SAC) and Area of Special Scientific Interest (ASSI), designated for the presence of key habitats and species including Atlantic salmon.

The main watercourses at the proposed development (tributaries of the River Derg) are fed by a number of smaller channels and field drains. The significance of the River Derg and its tributaries to fisheries on and downstream of the site has been noted.

The soils on site largely comprise areas of peat. The bedrock beneath the site is comprised of psammite and pelite. The underlying bedrock is indicated to have limited water productivity potential. A detailed assessment of peat slide risk has been undertaken by Whiteford Geoservices Ltd. to ensure that turbines are not sited in areas where they could cause land instability. An assessment of the potential effects of the proposed development on fisheries and aquatic ecology in local watercourses is being undertaken by Paul Johnston Associates Ltd. Field surveys have been carried out to assess stream quality in line with Water Framework Directive (WFD) procedures, and to assess fish habitats and fish stocks in line with Loughs Agency procedures. The potential effects on fisheries and aquatic ecology will be assessed for the construction, operational and decommissioning phases of the proposed development, and any mitigation measures required to address significant effects will be proposed and included in the ES.

Aspects of the design, construction, operation, and decommissioning of the proposed development that may impact on the receiving geological and water environment have been identified and the pathways of potential effects assessed. Mitigation measures integrated as part of the design of the proposed development, and others to be implemented throughout its lifetime to minimise potential adverse effects include:

- Design of site elements to minimise impact on the geological and water environment (e.g. careful consideration of the positioning of wind turbines, foundations, and areas of hard standing);
- Avoidance of significant water features (i.e. establishing zones around watercourses where construction works are to be avoided):
- Careful management of minor water features where they come into contact with wind farm infrastructure;
 - Implementation of a comprehensive surface water management plan comprising the use of Sustainable Drainage Systems (SuDS) and silt management to prevent pathways for pollution reaching the wider environment as well as reducing any increased risk of flash flooding downstream; and
- Establishing pollution prevention procedures to minimise the potential risk to the wider environment posed by construction, operation and decommissioning-phase activities (e.g. accidental spillage).

With the proposed application site layout and mitigation measures, and in particular measures to protect water quality in the River Derg downstream of the site, no significant risks to the water and geology environment are likely.

Grid Connection

ABO Energy has assessed the local NIE Networks infrastructure to inform an indicative grid connection route for the proposed Pullytean Wind Farm. The assessment has considered the impact of a grid connection alone, as well as cumulatively, and as part of the wider wind farm development. This assessment is based on our professional experience of developing other renewable energy projects across Northern Ireland.

A grid connection application will be submitted to NIE Networks for the proposed development if it receives planning permission. NIE Networks will then define the final grid connection route and method in a grid connection offer. For this reason, the proposed grid connection that will be assessed by ABO Energy, should best represent the most feasible and likely route NIE Networks would pursue, in our professional judgment.

The indicative route consists solely of underground cable from the proposed Pullytean Wind Farm substation to the existing Magherakeel 110kV substation location. The total route length is approximately 6km and all works will be conducted within the public road in line with NIE Networks' best practice requirements.



