

Environmental Considerations

Ecology

Blackstaff Ecology has carried out a suite of terrestrial ecology surveys to inform the EIA for the proposed Cam Burn II Wind Farm. This has included a Phase 1 habitat (including botanical quadrats) survey of the entire site, which identified ecologically sensitive habitats such as raised bog. The findings from these surveys have directly informed the layout of the proposed development, helping to minimise impacts to raised bog and other habitats (such as semi-natural woodland). Regarding fauna, targeted mammal surveys have been carried out for badger, otter, pine marten & red squirrel. Targeted butterfly surveys also focussed on the foodplant (Devil's-bit scabius) of the protected species marsh fritillary. All surveys have been carried out in line with best practice guidance published by the Northern Ireland Environment Agency (NIEA). The results from the surveys will identify any requirements for mitigation measures to avoid or minimise potential impacts on protected and important species. In addition, a range of habitat enhancement measures are being proposed as part of a HMP (Habitat Management Plan) which will be implemented as part of the proposed development. These will include management of areas of raised bog and improvement to farming practices to benefit pollinators.

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. The assessment included a desktop study of known archaeological sites within a 5km radius from the centre of the site (the study area) and a site inspection across the entirety of the lands under applicant control (LUAC). No evidence of any archaeological features was noted during the LUAC site inspection. Within the desktop study area, the assessment identified:

- Sixty-five known archaeological monuments, seven of which were identified as scheduled monuments of regional importance (LDY 11:01 graveyard, LDY 11:06: rath, LDY 11:13: portal tomb, LDY 11:17 and LDY 11:18: sweat houses, LDY 18:16 and LDY 18:17: raths)
- Eighteen industrial heritage records
- Eighteen listed buildings

Eleven previous archaeological investigation areas are also located within the 5km study area, six of which identified no archaeological deposits. Of the remaining five sites, AE/04/89 identified a Bronze Age ring ditch and cremation pit; AE/04/90 identified an un-designated feature during the monitoring of the topsoil strip for the North-West Gas Pipeline; AE/04/91 identified a Bronze Age burnt mound; AE/04/100 identified a Bronze Age burnt mound and AE/14/142 identified a pit with Neolithic pottery and associated flint scatters.

Based on the assessment, the effects of the proposed Cam Burn II 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.

Grid Connection

ABO Energy has assessed the local NIE Networks infrastructure to inform an indicative grid connection route for the proposed Cam Burn II 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 Cam Burn II Wind Farm electrical substation to the proposed Cam Cluster Project. The Cam Cluster Project, being brought forward by SONI, consists of a new cluster electrical substation between Limavady and Coleraine to be connected to both the Coolkeeragh – Limavady and the Coleraine – Limavady 110kV circuits. The cluster substation is anticipated to be in the vicinity of Springwell Forest / Cam Quarry / Cam Forest.

Avian Ecology

An assessment of effects on bird populations has been undertaken by Allen and Mellon Environmental, an ecological consultancy which specialises in bird surveys and monitoring. Bird surveys at the site were undertaken from the 2021/22 non-breeding season up to and including the 2025 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 NIEA. The data gathered during the flight activity study enables collision risk modelling of target species to be undertaken. At the proposed Cam Burn II Wind Farm, the key target species for collision risk assessment are Lesser Black-backed Gull, Herring Gull, Buzzard and Sparrowhawk. The walkover surveys involve recording all species seen or heard along a transect 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. Additional dusk surveys were undertaken in the wooded areas to determine whether breeding Woodcocks were present.

Water, Geology and Peat Slide Hazard

An assessment of the likely significant effects of the proposed development on the water 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 site layout.

The proposed development is located upstream from the Cam Burn within the Aghadowey River catchment which ultimately drains to the River Bann approximately 8km to the east of the site. The main watercourses at the proposed development (tributaries of the Cam Burn) are fed by a number of smaller channels i.e., forestry and agricultural drains. The significance of the Cam Burn to fisheries at, and downstream of the site has been recognised in the assessment.

As the proposed green hydrogen production facility would require water to operate, McCloy Consulting Ltd has assessed a potential groundwater abstraction (taking water from the ground) at the site to ensure no significant adverse effects to groundwater quantity and/or quality would occur as a result.

A detailed assessment of peat slide risk has also been undertaken by Whiteford Geoservices Ltd to ensure that site infrastructure is not sited in areas where it could cause land instability.

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 site infrastructure);
- Avoidance of significant water features (i.e. establishing zones around watercourses where construction works are to be avoided);
- Careful management of water features where they come into contact with site 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 site layout and mitigation measures, and in particular measures to protect water quality in the Cam Burn downstream of the site, no significant risks to the water and geology environment are likely.

Fisheries and Aquatic Ecology

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.

