

Environmental Impact Assessment (EIA) considerations

Site selection

The Hill of Fare site was identified within the Aberdeenshire Local Development Plan (2017) Spatial Framework for Wind Energy as a 'Group 3' area which has 'potential [for wind energy] subject to detailed consideration'.

Since the site selection, the Aberdeenshire Council adopted its new LDP in January 2023 which reaffirms the Group 3 status. Furthermore, the Scottish Government published the National Planning Framework 4 (NPF4) in February 2023 which provides the national spatial strategy for Scotland. Whilst it removes identification of Groups 1-3, Policy 11 asserts support for onshore wind farms outside of National Parks and National Scenic Areas. Hill of Fare is outwith such national landscape designations.

The wind resource, site accessibility, topography, proximity to housing, local ecology and wildlife, waterbodies, peatland, cultural heritage assets, grid connectivity, etc, are some of the key considerations for the selection and then design of a site like the Hill of Fare.

Environmental Impact Assessment (EIA)

Environmental Impact Assessments (EIAs) are a compulsory part of the planning and consenting process for wind farms. The purpose of an EIA is to investigate and mitigate any potential effects of a development on the natural, physical and human environment.

Over the last couple of years, RES has undertaken a wide range of technical studies and environmental surveys on the site, including:

- Landscape and Visual
- Ornithology and Ecology
- Acoustics
- Archaeology and Cultural Heritage
- Hydrology, Hydrogeology and Geology
- Traffic and Transport

The findings from the site studies are written up in a comprehensive Environmental Impact Assessment Report (EIAR) which the Scottish Ministers will take into account when deciding whether or not to grant consent for the wind farm.

Landscape and visual

Our landscape architects have undertaken extensive assessment work to inform the design development and turbine layout. Key changes (since the scoping design) include the reduction in turbine numbers from 17 to 16 and the reduction in turbine tip heights from 250m to a mix of 180m and 200m.

The photomontages and wireline visualisations presented at this exhibition have been prepared to NatureScot guidance and help to give an impression of what the site could look like from different viewpoints in the area. We have also prepared 53.5° visualisations (in addition to the typical 90°) in response to public feedback.

We are looking to achieve a design that strikes an acceptable balance between the visibility of the proposal and its ability to generate significant amounts of renewable energy. Ultimately, the acceptability of this design will be assessed by the determining authority in relation to current energy policy and planning requirements having considered feedback from consultees as well as representations by members of the community and wider public.

Residential visual amenity

The Residential Visual Amenity Assessment (RVAA) is an important component of the wider Landscape and Visual Assessment which is undertaken as part of the EIA. Following feedback through the Scoping process and public consultations we have been working carefully with the design to minimise potential impacts of the site on residential amenity by increasing the separation distance from settlements and residential properties and exploring changes to the turbine height.

Private water supplies

RES has collected Private Water Supply (PWS) data from Aberdeenshire Council and holdings within Dunecht Estate and openly consulted members of the public in the surrounding area. The purpose has been to establish the PWS source locations and source types in order to inform the PWS assessment that will be presented in the EIAR. The assessment's findings will inform what further work would be required, if any, which may include baseline monitoring of relevant PWS, before, during and after construction. Any work associated with PWS post consent will be enforced through condition and subject to agreement with Aberdeenshire Council.

Private Water Supply sources surrounding Hill of Fare consist of surface watercourses, wells intercepting near surface water/springs as well as boreholes intercepting groundwater within bedrock. The bedrock geology within the proposed development site at Hill of Fare comprises granite (leucogranite and microgranite) from the Hill of Fare Intrusion, where groundwater can be present within fractures and the near surface weathered zone. The fracture network is considered to be highly heterogenous with limited wider connectivity within the bedrock mass. Presence of superficial deposits is limited to peat in flatter areas, and glacial till on lower and gentler slopes.

Surrounding the Hill of Fare Intrusion are a number of other bedrock units, including other igneous bedrock (microgranodiorite, granodiorite, tonalite and quartz-diorite) and metamorphic bedrock to the south (semipelite, pelite and psammite). These various bedrock units will have distinct groundwater character from, and limited connectivity with, the Hill of Fare Intrusion. Given the nature of the bedrock underlying the development site, and the limited depth and extent of superficial cover, it is considered that any impacts on groundwater resulting from the proposed development would be limited, and spatially restricted to the footprint of the development infrastructure and immediate surrounds. As outlined above, full assessment of PWS will be presented in the EIAR, along with any recommendations for mitigation and monitoring.

Peat

Peat depth surveys and assessments have been undertaken. Peat is not uniform across the site and deeper peat is being avoided wherever possible. Typically, wind farms pay back the carbon within 1-3 years and operate carbon free thereafter. A carbon balance assessment will be provided in the EIAR. This will also be supported by a Peat Management Plan and an outline Habitat Management Plan.