

Environmental considerations

Peat

Initial peat depth surveys and assessments were done across the site to inform the preliminary scoping layout shown in June 2025.

The phase 2 peat probing surveys, along with a peat condition survey, have now also been undertaken across the site. These surveys have been used to inform the site layout, avoid areas of deeper peat wherever possible, and inform potential habitat enhancement and restoration plans.

Shadow flicker

Shadow flicker is a phenomenon where, under certain circumstances of geographical position and time of day, the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off. It only occurs inside buildings, such as where the flicker appears through a narrow window opening.

Shadow flicker can be easily modelled and the Kinnelhead Wind Farm proposal is being designed in a way that will minimise any potential for shadow flicker. Shadow flicker can be mitigated in a number of ways, including shadow detection technology on relevant turbines to create a shutdown timetable, if necessary.

Aviation and Radar

Radar systems can be susceptible to interference from wind turbines as the blade movement can cause intermittent detection by radars within their operating range. This is particularly relevant where there is a line of sight between the radar and the wind turbine development. We are working directly with the National Air Traffic Services (NATS and the Ministry of Defence (MoD)) to work on technical solutions if required.

Acoustics

We take care to ensure sound levels from wind turbines are within recommended limits and comply with planning policy. Acoustic assessments have been undertaken in accordance with the relevant standards, current assessment methodologies and best practice as determined by the regulatory bodies, which include Dumfries and Galloway Council, the Scottish Government and the UK Institute of Acoustics.

The acoustic impact of the wind farm will be modelled and will be presented in the acoustic chapter of the EIA Report. This will demonstrate that RES has considered all appropriate measures in the design, construction, and operation phases to minimise the acoustic impact of the wind farm.

Cultural heritage

There are three scheduled monuments within the site boundary located to the east, Kinnelhead Cottage (SM12615), Lochanhead Cairn (SM12622), and Kinnelhead Tower (SM8610).

A targeted walkover was undertaken in order to examine locations and data gathered during the walkover was used to ensure that there are no direct impacts on known heritage assets as a result of the proposed development, from both turbines and related infrastructure.

The Cultural Heritage chapter of the Environmental Impact Assessment Report (EIAR) will provide assessment of the impacts of the development on heritage assets identified and agreed in consultation with Historic Environment Scotland.

Kinnelhead Wind Farm Proposal

www.kinnelhead-windfarm.co.uk