

Welcome to Clashindarroch Wind Farm Extension

Proposals for a wind energy project adjoining Clashindarroch Wind Farm

24 October 2022



Today's event



Circa 30-minute presentation followed by a Q&A session



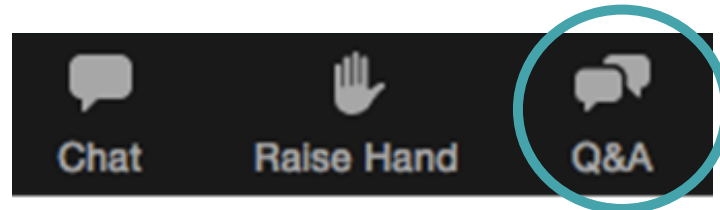
Opportunities for questions & answers



Post-event FAQs will be made available online and in hard copy



Session will be recorded, and recording made available on website www.clashindarrochwindfarmextension.co.uk



Ask questions using Q&A button at the bottom of the screen



Questions can be asked afterwards through project Freephone, Freepost, website and email

Session topics

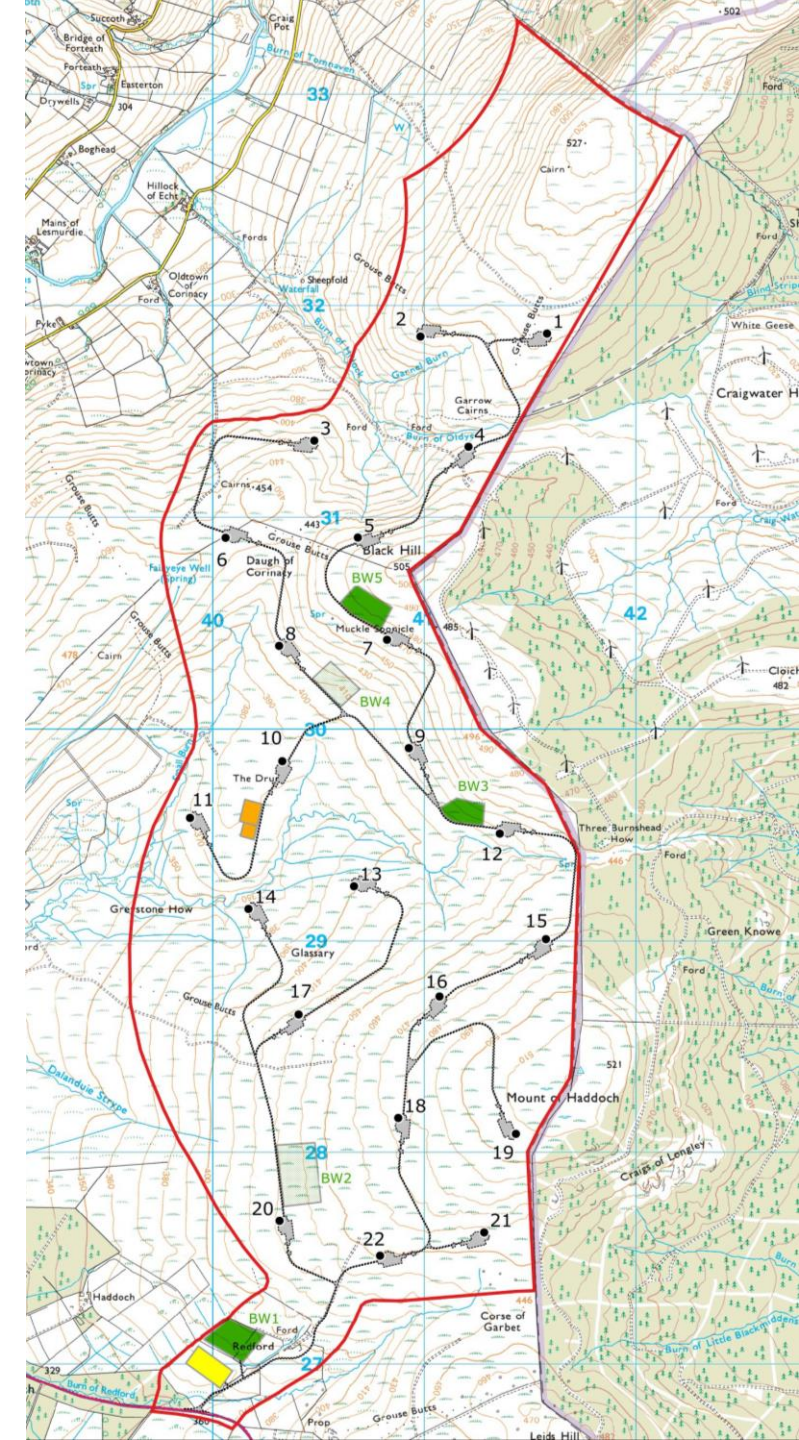
- Overview of the proposals – Richard Frost, Infinergy
- Why this site? – Richard Frost
- EIA process and scheme evolution – Richard Frost
- Landscape & visual impact – David Gooch, Pegasus
- Noise – Moise Coulon, Wardell Armstrong
- Transport & access – Gordon Buchan, Pell Frischmann
- Community benefits and next steps – Marlies Koutstaal, Infinergy

Overview of the proposals

- Up to 22 wind turbines, installed capacity of up to 6.6MW each, totalling up to 145.2MW, on land to west and south west of existing Clashindarroch Wind Farm
- Combined with a 50MW battery energy storage facility, overall installed project capacity 195.2MW maximum
- Wind turbines would generate enough electricity to meet the demands of up to 108,055 average UK households every year
- Carbon dioxide emissions of up to 171,714 tonnes per year would be replaced, compared to fossil fuel-powered generators
- Blade tip heights of up to 200m for 13 turbines and up to 180m for 9 turbines are being considered

Legend:

- ▭ Site Boundary
- ▭ Substation & Battery Storage
- ▭ Construction Compound
- ▭ Borrow Working Search Area
- ▭ Reserve Borrow Working Search Area
- Wind Turbine



Why this site?

- **Scale** – the site is large enough for sufficient and viable generating capacity
- **Wind speeds** – the site is elevated whilst not too steep and the wind resource is excellent
- **Residential amenity** – the project would not result in unacceptable visual, noise or shadow flicker impacts
- **Environmental factors** – outside any landscape or environmental designations such as Wild Land Areas. Survey results don't indicate any insurmountable technical issues to successful construction and operation
- **Proximity to existing wind farm** – the project would form an integrated wind energy cluster with Clashindarroch I and II. This reduces visual impacts across a wider area compared to finding a separate location elsewhere
- **Policy support** – more sites are needed for Scotland to achieve net zero by 2045 and this site can make a considerable contribution



EIA process and scheme evolution

- The Environmental Impact Assessment (EIA) is required to study potential environmental impacts and avoid or mitigate any that exceed specified acceptable limits
- Topics include:
 - Landscape and visual issues
 - Ecology and ornithology
 - Noise
 - Hydrology, ground conditions and peat
 - Transport and access
 - Telecommunications, shadow flicker and aviation
 - Archaeology and cultural heritage
 - Socio-economic, tourism and recreation issues
 - Climate change and carbon balance
- The scheme has evolved over time. Initially 34 turbines were considered for the site. The Scoping stage layout of August 2020 consisted of 28 turbines, each up to 200m to tip
- The current draft layout comprises 22 turbines, 13 of which of 200m to tip and 9 with a maximum tip height of 180m



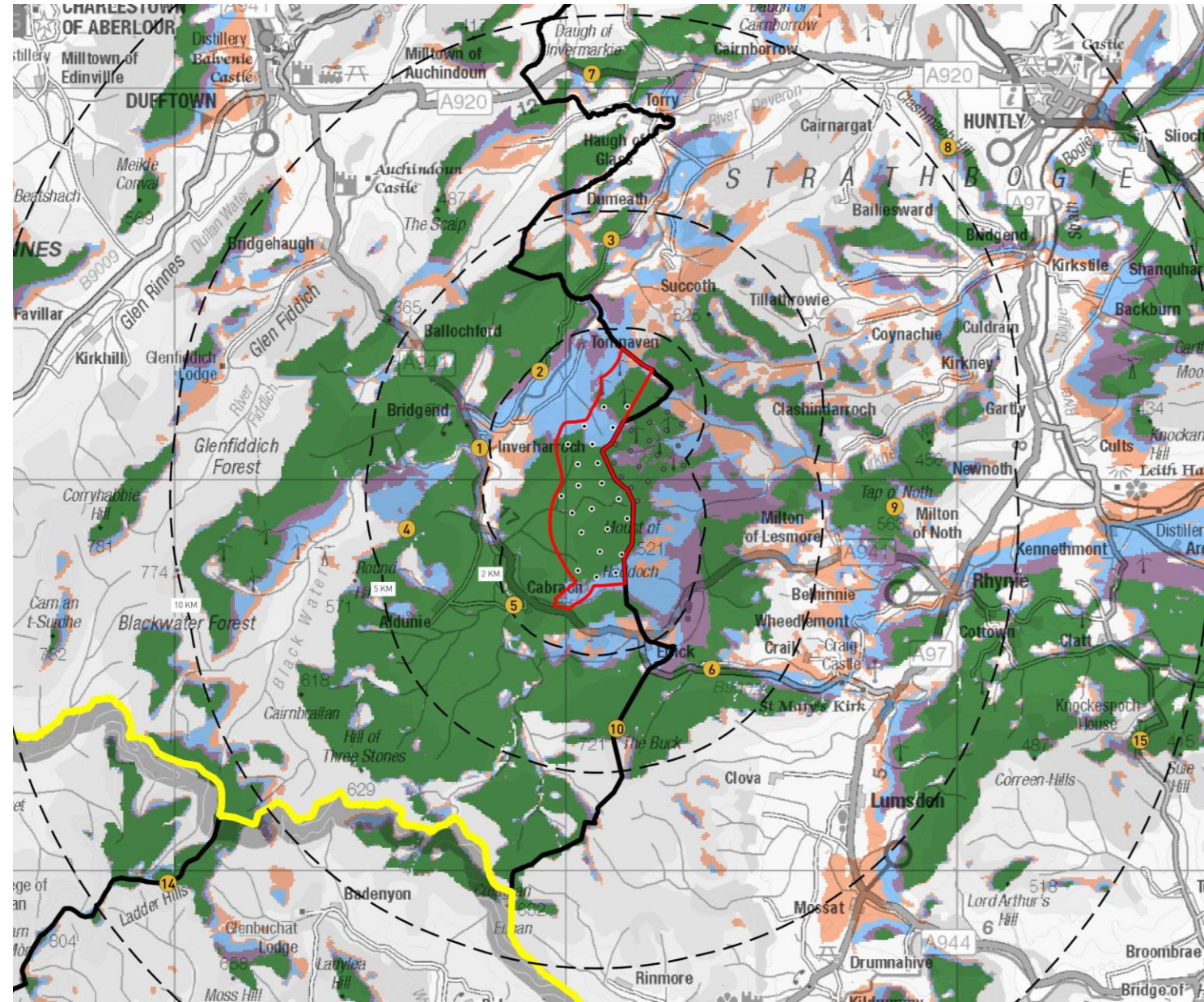
Landscape & Visual

- The Landscape and Visual Impact Assessment (LVIA) is carried out following the 'The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition'
- Assesses the effects on landscape and on views and visual amenity
- Describes the existing landscape and visual baseline
- Assesses the **sensitivity** of the landscape, view, or visual receptor
- Judges the scale of change introduced, the **magnitude of change**
- Combines these two judgements to arrive at a **level of effect**
- Professional judgement about whether the effect is **significant** or not



Landscape & Visual

- Blade tip ZTV – bare earth
- Lit Turbine ZTV – visibility of the nine turbines proposed to be fitted with visible aviation lights
- 15 representative viewpoints agreed at Scoping
- Assess effects during daylight hours and hours of darkness on the receptors:
 - Landscape Character
 - Representative Viewpoints
 - Landscape designations
 - Residential properties within 2 km
 - Settlements
 - Roads/Footpaths
- Assess cumulative landscape and visual effects
- Report the effects and identify significant effects – not whether effects are acceptable or not



Landscape & Visual

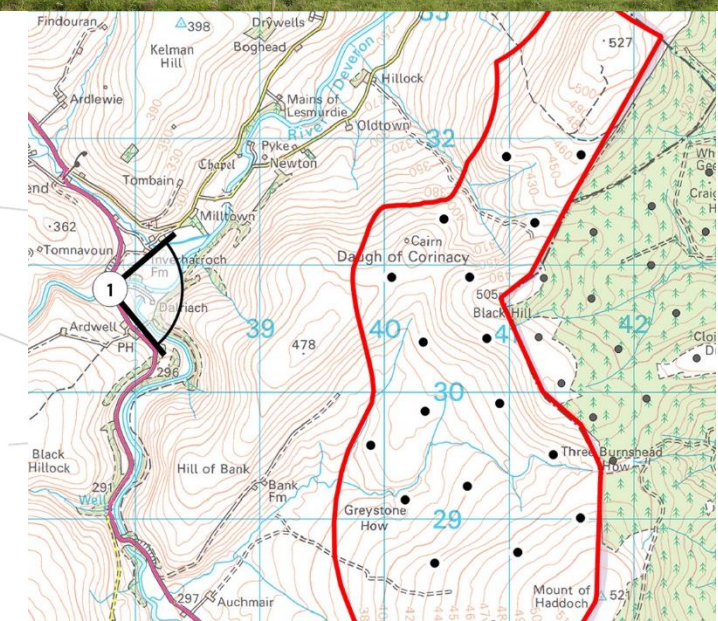
Viewpoint I - A94I, Blackwater Bridge



Existing view



Wireline

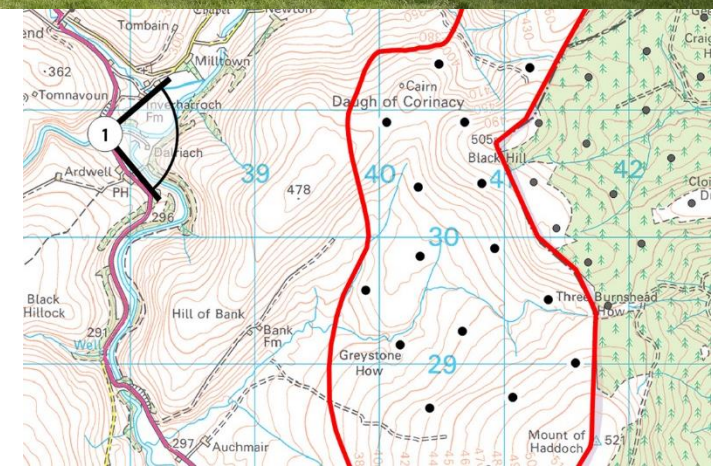


Landscape & Visual

Viewpoint I - A941, Blackwater Bridge

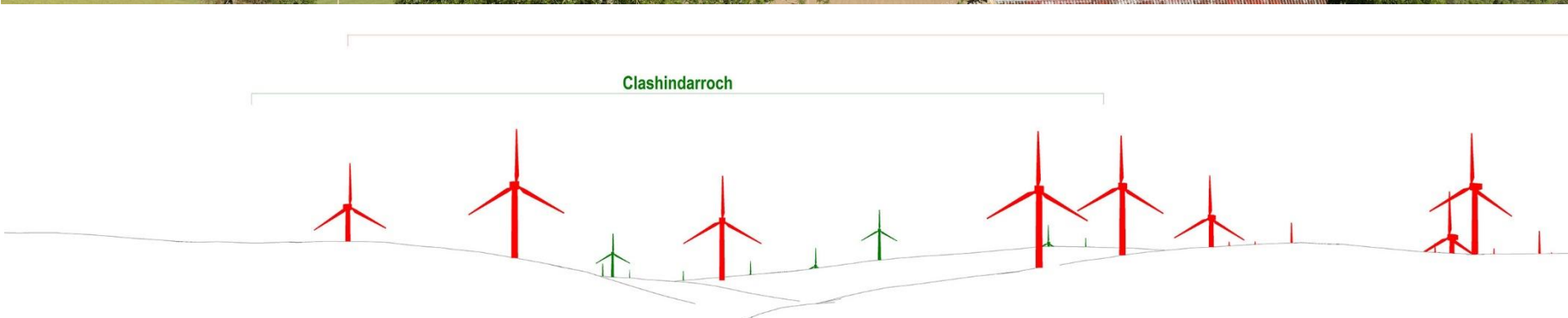


Photomontage

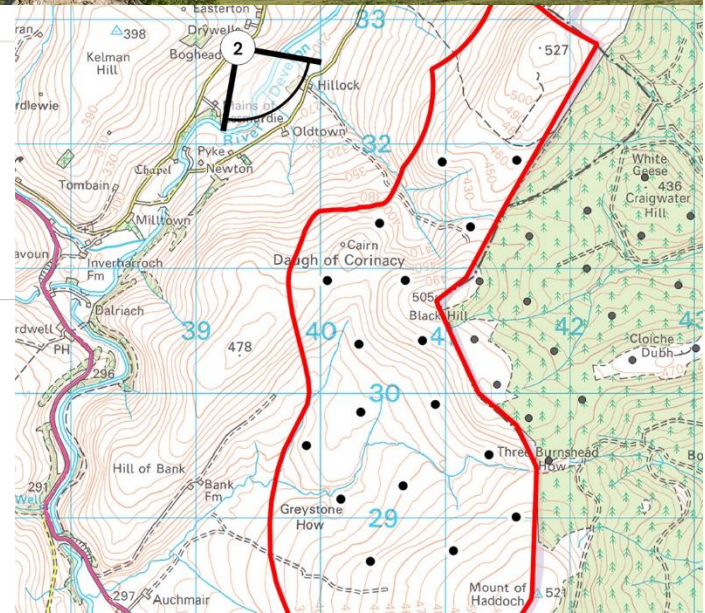


Landscape & Visual

Viewpoint 2 – Minor Road near Boghead



Wireline

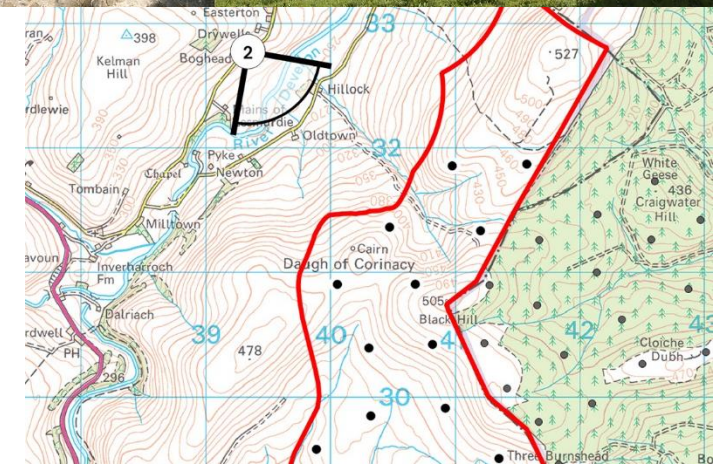


Landscape & Visual

Viewpoint 2 – Minor Road near Boghead



Photomontage

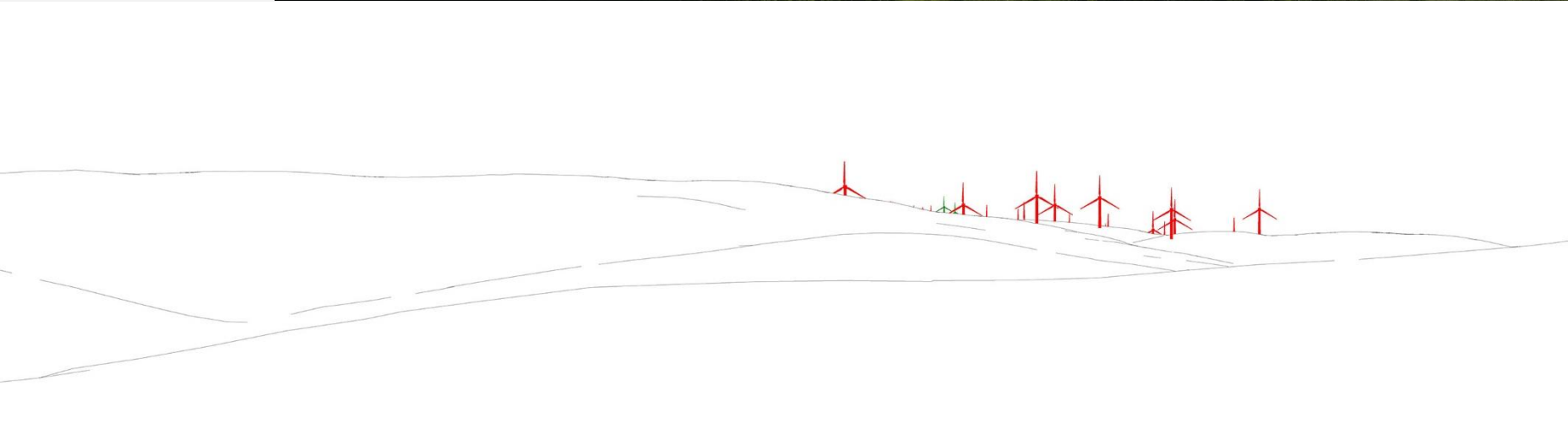


Landscape & Visual

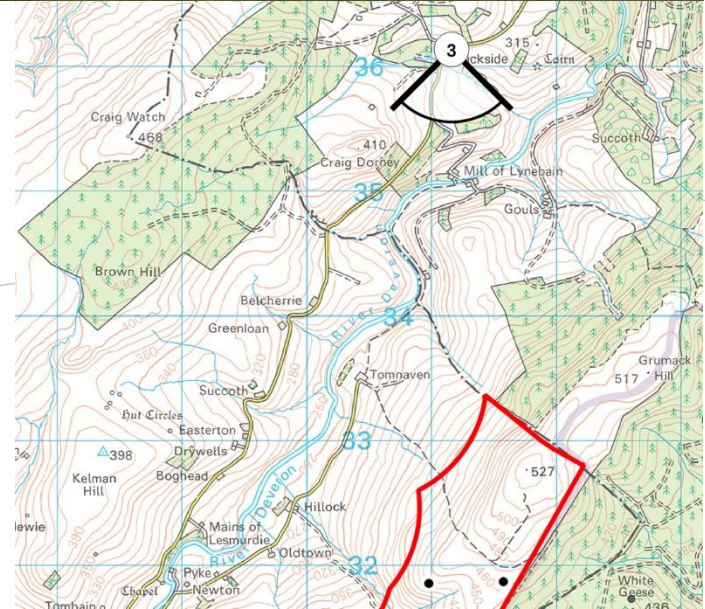
Viewpoint 3 – Minor Road near Backside



Existing view



Wireline

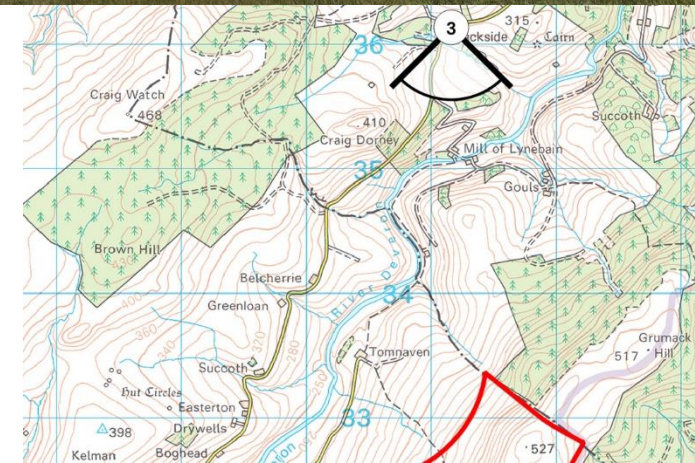


Landscape & Visual

Viewpoint 3 – Minor Road near Backside



Photomontage



Landscape & Visual

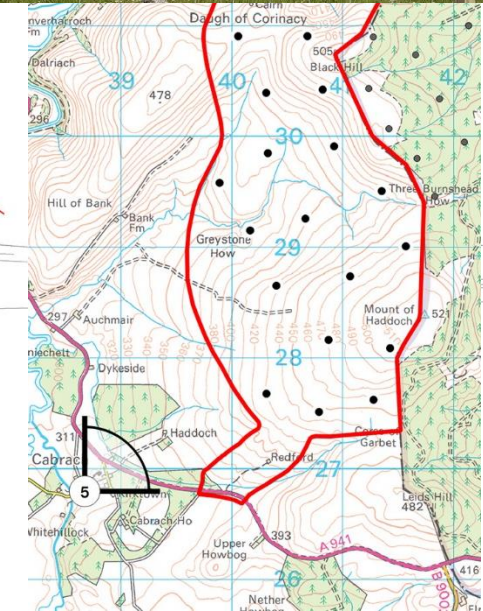
Viewpoint 5 – Minor Road near Cabrach Church



Existing view



Wireline

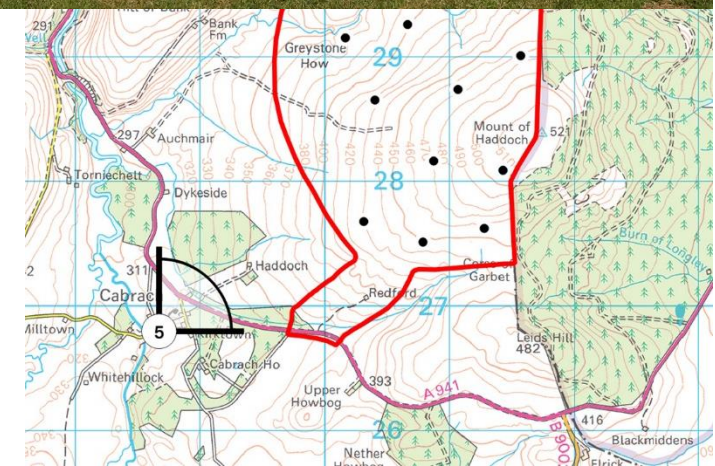


Landscape & Visual

Viewpoint 5 – Minor Road near Cabrach Church



Photomontage

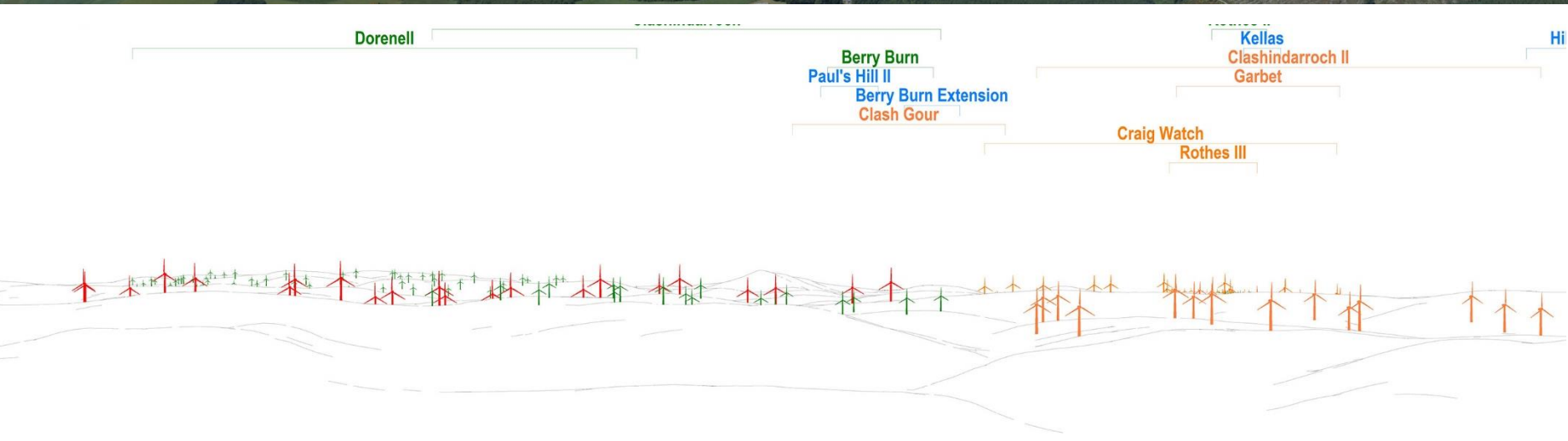
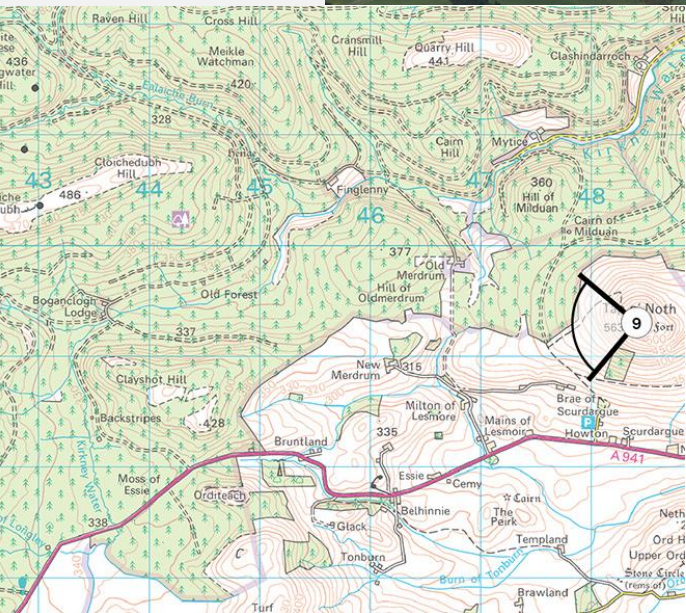


Landscape & Visual

Viewpoint 9 – Tap ó Noth



Existing view



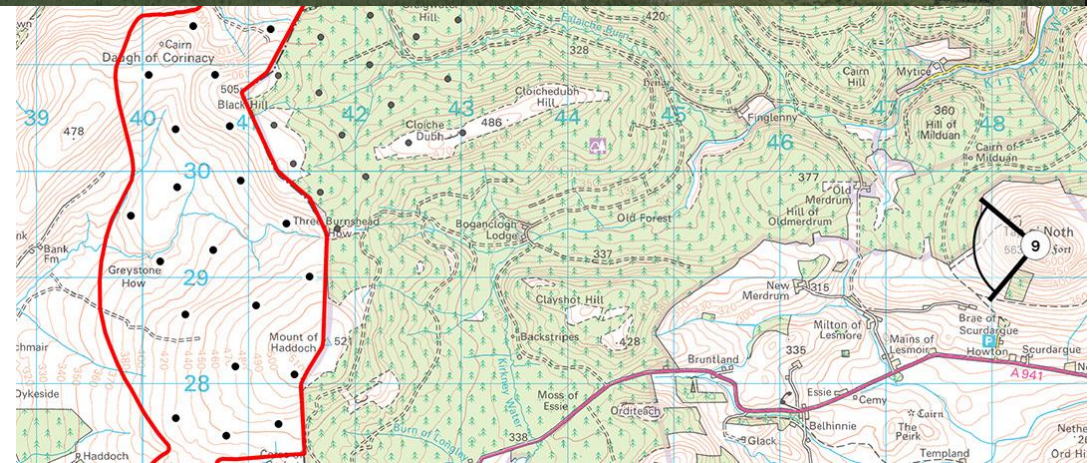
Wireline

Landscape & Visual

Viewpoint 9 – Tap ó Noth

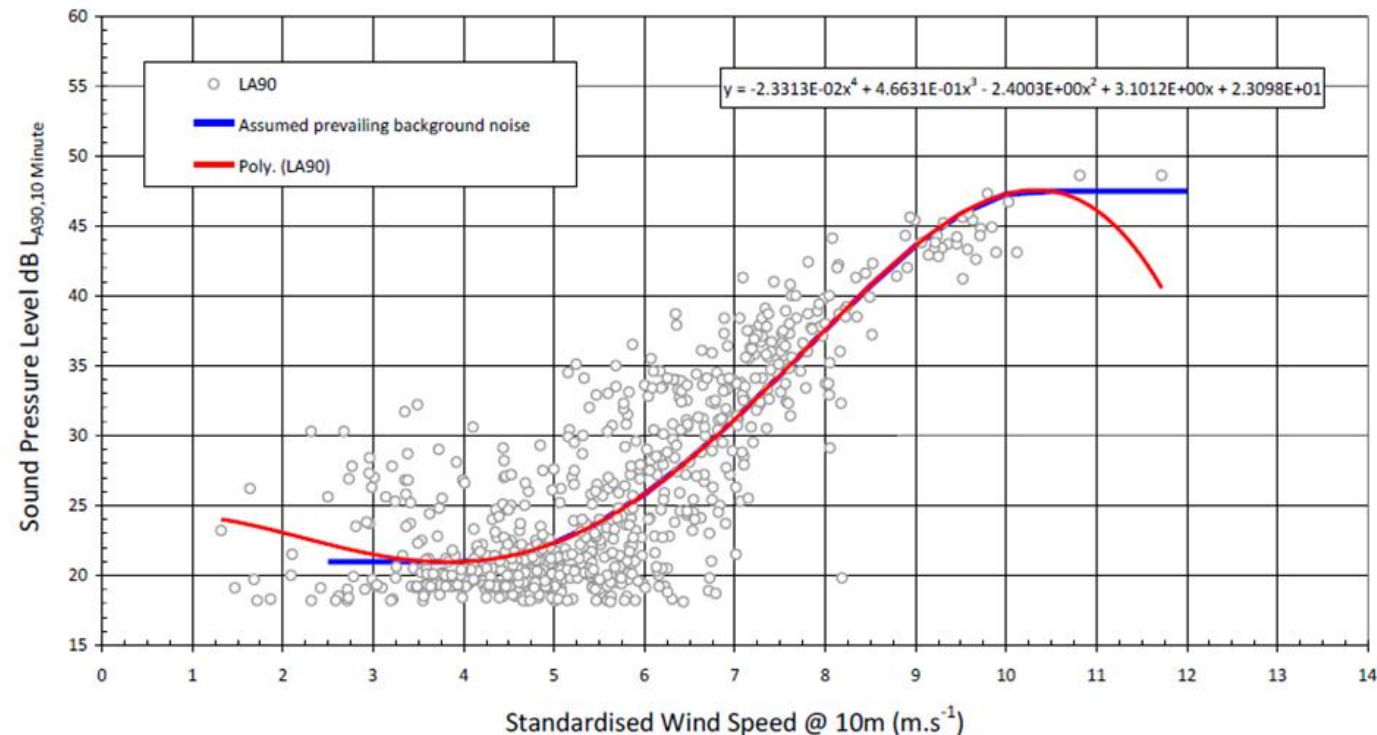


Photomontage



Noise

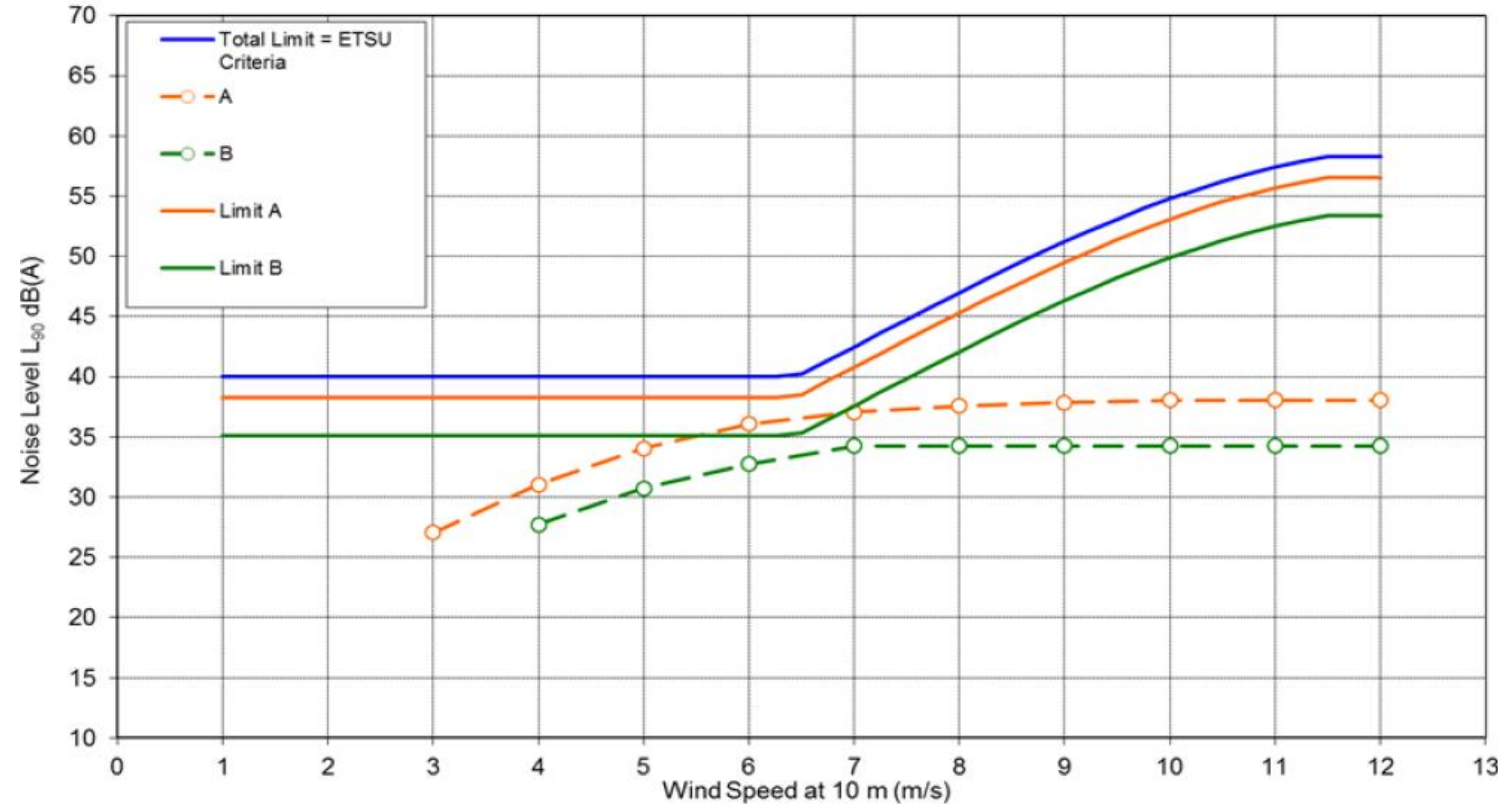
- Wind farm noise is assessed using ETSU-R-97, “The Assessment and Rating of Noise from Wind Farms”.
- Noise levels are calculated at nearby houses and compared to noise limits derived from existing background noise, without the wind turbines operating.
- Noise and wind monitoring equipment is set up and left for a number of weeks to record background noise levels and wind speeds.
- For Clashindarroch Wind Farm Extension, noise monitoring was already undertaken for some properties near to the existing Clashindarroch Wind Farm. Additional monitoring was undertaken in 2021 at two more locations.



Background Noise Trendlines

Showing how noise changes with wind (without wind turbines)

Noise

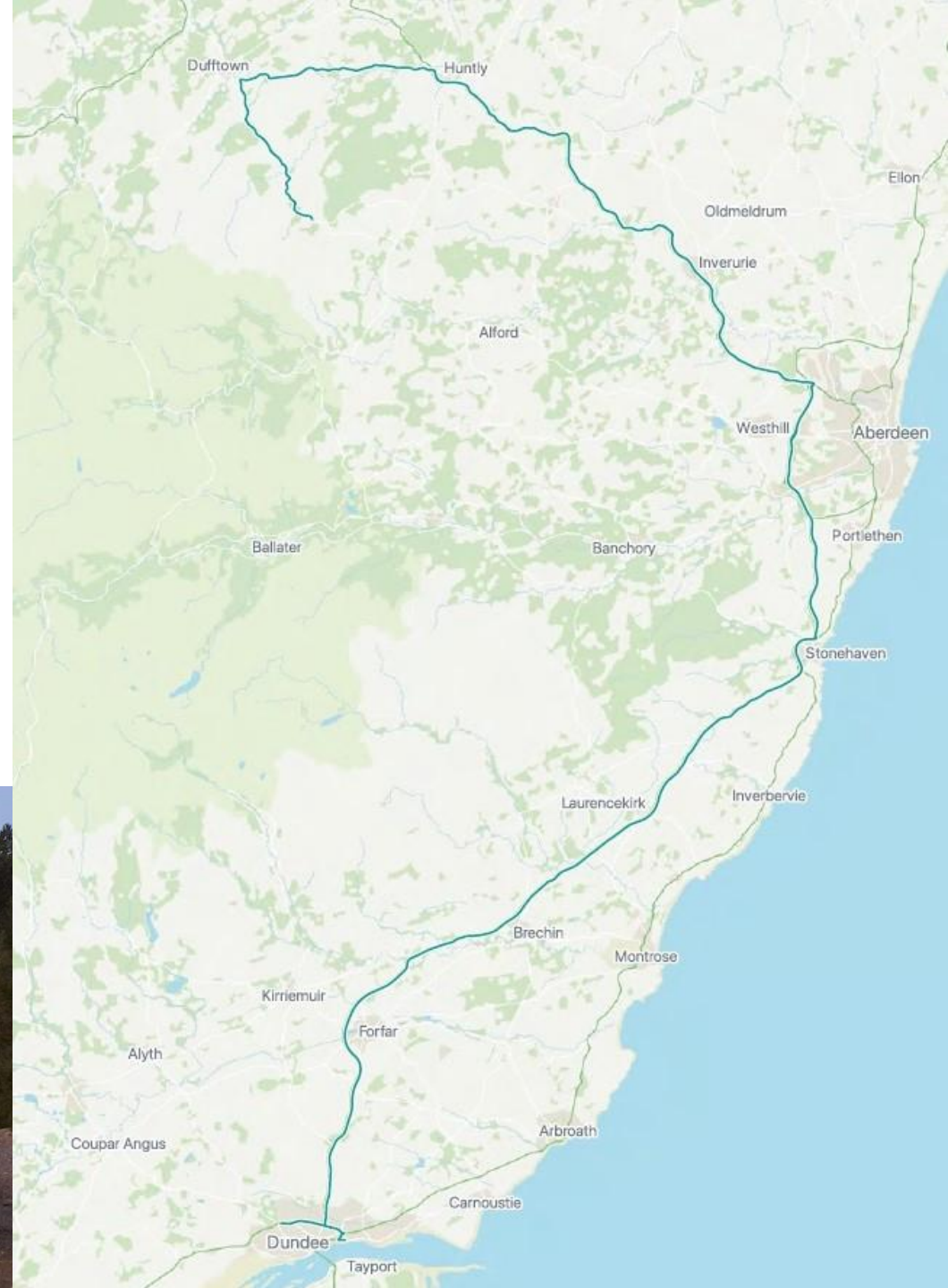


Comparison of limits with predictions in a cumulative context
Showing limits (continuous lines) and predictions of wind turbine noise(dashed lines)

- Predictions of wind turbine noise use manufacturer data from a candidate model and from other nearby existing wind turbine models
- Wind turbine noise is at its highest in “downwind” conditions which is assumed in most predictions. However, in a cumulative scenarios where a house is between two wind farms, some turbines will be “downwind” and others “upwind”. This directivity is accounted for in cumulative predictions
- Current results based on the latest layout and cumulative predictions indicate that the project would operate within limits

Transport and access

- Access to the site for abnormal loads will be from Dundee, with traffic using the A90 and A96 to Huntly. At various points along the A920 and A941 minor temporary road improvements will be required
- Access for construction traffic, turbine deliveries and maintenance vehicles would be taken from a new junction on the A941, located at Redford, to the east of Upper Cabrach
- A legal agreement with Moray and Aberdeenshire Councils will ensure that the public road does not deteriorate as a result of the construction traffic



Community benefits

- If approved, the project is expected to generate economic benefits for Moray and the wider Scottish economy:
 - Development and construction stages could deliver £38.2m of Gross Value Added (GVA) and 587 years of employment
 - Operational stage would contribute £1.8m GVA and 27 jobs
- Based on best practice in the industry and a total installed turbine capacity of 145.2MW, a Community Benefit Fund could be delivered of up to £726,000 per year of operation
- Over the anticipated 40-year life of the project, this would add up to just over £29m
- Discussion with the local community will guide how the fund may be allocated. Suggestions can be provided through our consultation channels: project website, Freephone number, Freepost address and project email address.



Next steps

- The Clashindarroch Wind Farm Extension proposal exceeds 50 megawatts. Therefore, the decision on whether or not the project will obtain consent lies with the Scottish Government. We hope to submit the Section 36 application for the proposals to the Scottish Government by the end of 2022
- Statutory and non-statutory consultees will provide feedback on the application and EIA reports, similar to the way they provided comments at the Scoping stage in 2020
- Moray Council will be a key consultee. Other consultees include Aberdeenshire Council, NatureScot, SEPA, Historic Environment Scotland, RSPB, Visit Scotland and local community councils



Questions and answers

Thank you for listening. Please ask us any questions you may have



Please keep in touch after this event:

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