Causeymire Wind Farm Repower

Exhibition Brochure

June 2026

nadara

Welcome

Welcome to our second round of public exhibitions about our proposal to repower Causeymire Wind Farm.

Causeymire Wind Farm is situated on Dale Moss, next to the A9 near Spittal. The wind farm has been operational since 2004 and currently has 21 turbines, that are 100 metres to tip.

We are now exploring the potential to repower the wind farm.

Following on from our first round of public exhibitions, development work on the project has progressed. Due to a combination of environmental and grid restraints, the scale of the repowered project has been reduced. We are now proposing to replace the current 21 turbines with up to 7 turbines using improved technology.

The turbine layout has been designed to avoid, where feasible, sensitive environmental constraints and, where possible, utilise the existing infrastructure as much as possible whilst maximising renewable energy generation.

We are proposing

Up to 7 turbines, maximum tip height 200m

Up to 49MW capacity

~£245,000 community benefit per year

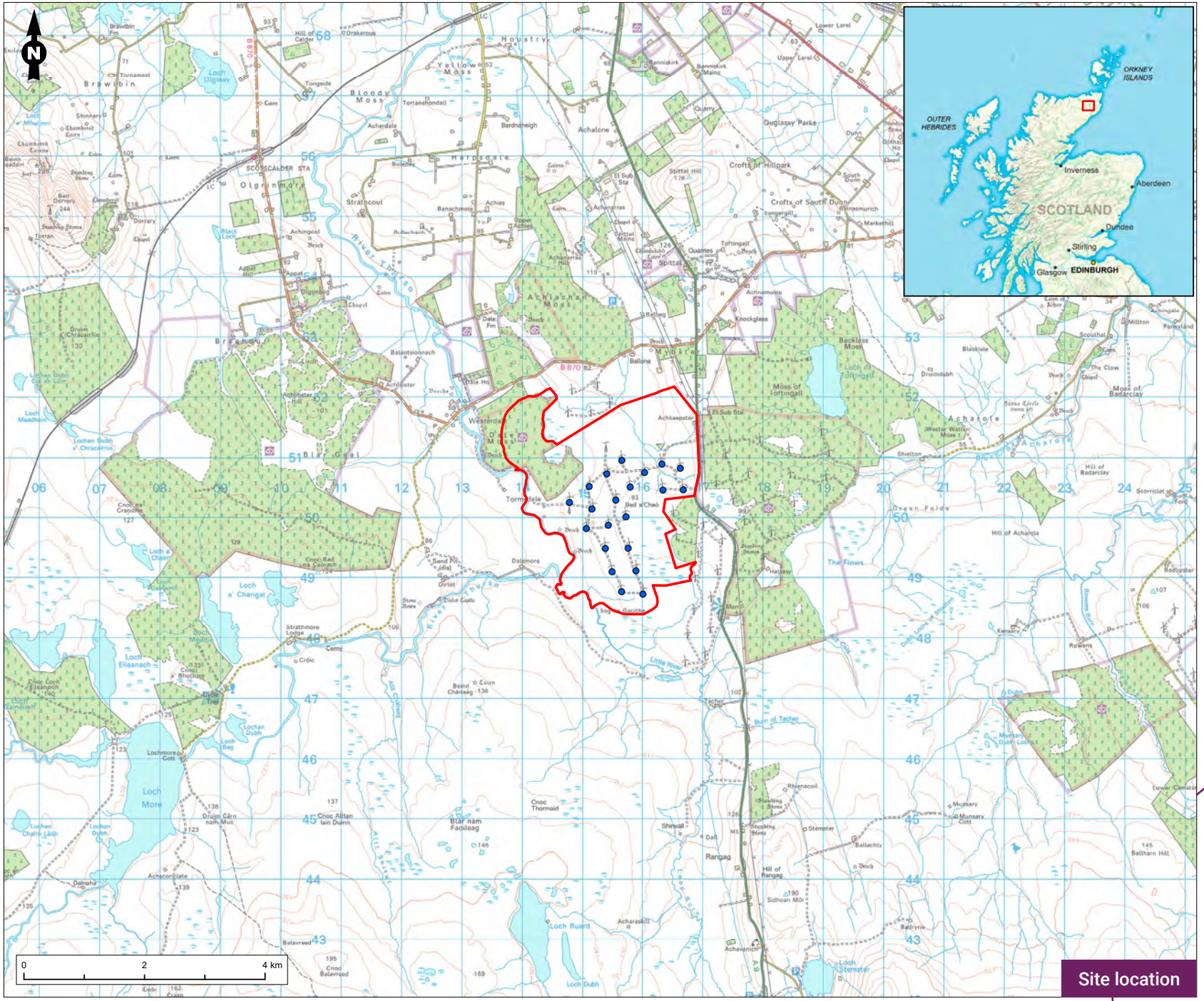
About us

Working with nature, backed by shareholders, and with the support of local communities, Nadara develops, owns and operates renewable energy sites across Europe and the US. We have been present in the UK since 2002 where we operate 45 farms for a total installed capacity of over 1GW. We have extensive experience delivering social and economic benefits across our portfolio through close collaboration with communities and local businesses.

Repowering: what does it mean

Repowering a wind farm refers to the process of replacing older wind turbines with more powerful and efficient models with advanced technology to increase the wind farm's energy production capacity.

- Benefits: Repowering with more efficient technology can increase the energy output of an individual wind turbine, thereby reducing the number of turbines needed.
- Environmental Impact: Repowering contributes to decarbonisation by using existing infrastructure and reducing the ecological footprint of wind energy projects.



Application Site Boundary

Existing Causeymire Wind Farm Turbines

Site location

Consultation timeline

Following our first round of public exhibitions we would like to continue the conversations with the local community and key stakeholders about how we make sure our plans:

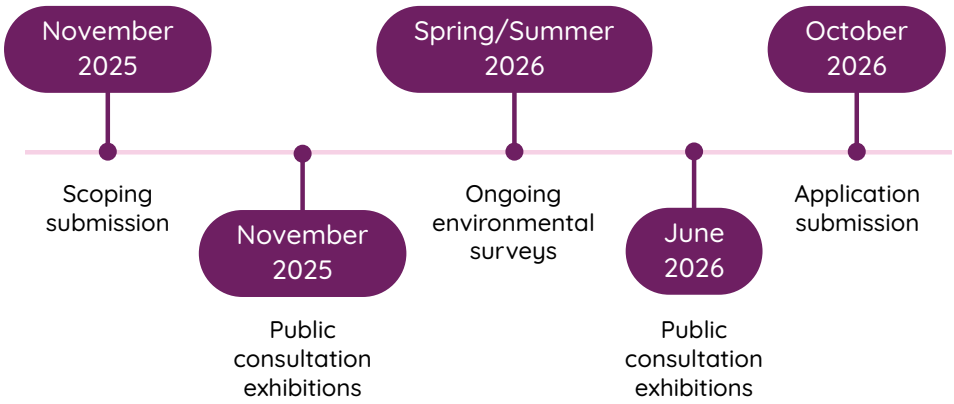
- Consider community feedback
- Support local initiatives
- Deliver a range of benefits locally

We have already undertaken a range of consultations and have been gathering feedback from statutory consultees and the local community.

We hope that this brochure will help to provide an update on how this feedback, alongside the findings of our technical assessments, have influenced the design.

Due to reduction in scale to up to 49MW the application will now be submitted to The Highland Council as a Town & County Planning application instead of a S36 Application to the Scottish Government.

We are aiming to submit this by late 2026. The full suite of application documents will be made publicly available at this time.



Design process

Many factors have determined the current layout of Causeymire Wind Farm Repowering. One of the key design principles for the proposed project is to use the existing wind farm infrastructure, access tracks and grid connection as much as possible.

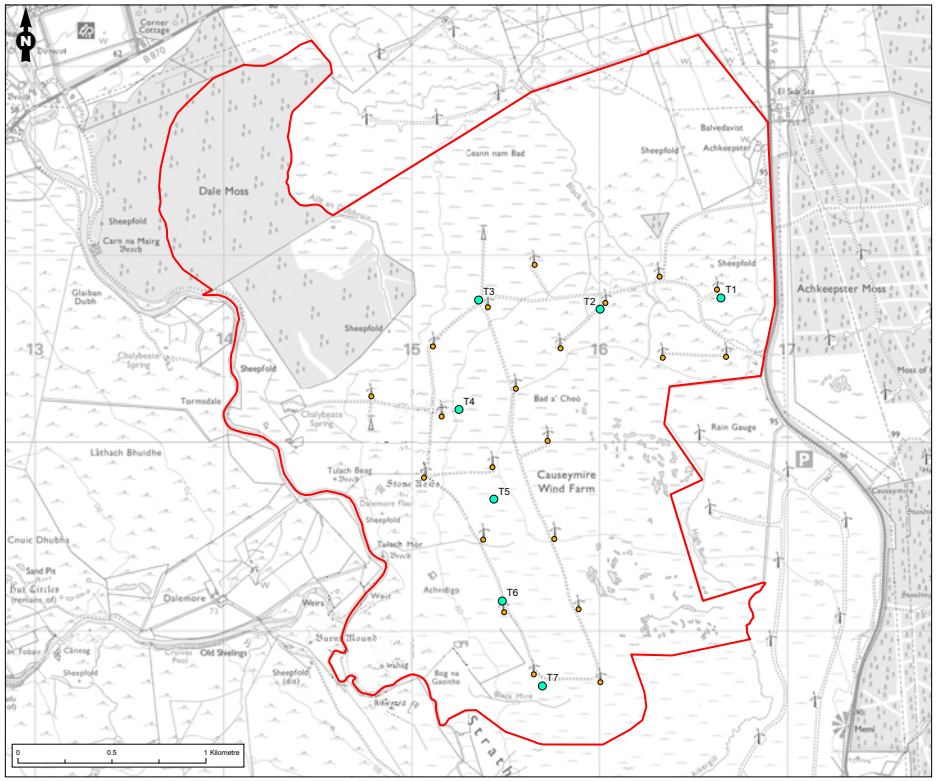
Key updates to the design include:

- Removal of six turbines;
- Removal of turbines away from areas of deep peat in the eastern part of the site, allowing for opportunities for restoration of the existing eastern track;
- Relocation of turbines away from the River Thurso, to reduce potential impacts on heritage assets adjacent to the river and potential ecological impacts;
- Development of an array which has the potential for a reduced lighting scheme (to be agreed with the Civil Aviation Authority); and
- Removal of turbines closest to Westerdale, to minimise potential noise impacts.

It is unlikely that the current layout will change again, however if there are any changes then we will ensure that the local community and key stakeholders are consulted throughout.

Current proposals

The proposed repowered Causeymire Wind Farm will consist of the removal of all 21 existing wind turbines, which are currently 100m to tip, and replacing them with up to 7 new wind turbines with a maximum tip height of 200m together with all associated infrastructure.



Development process

A Scoping Report was submitted to the Scottish Government Energy Consents Unit (ECU) in November 2025 following which we have received a range of feedback from consultees such as:-

- The Highland Council
- NatureScot
- RSPB
- Scottish Environment Protection Agency (SEPA)
- Historic Environment Scotland (HES)
- Community Councils

This feedback has determined the scope of the EIA and informed the extent of our surveys and assessments. These have helped to inform the layout of the site and helped to ensure that it minimises effects on the local environment.

We will evaluate any potential significant effects of the proposed development, and these will be presented within the EIA Report (EIAR). The EIAR will accompany the application for consent to The Highland Council and cover topics including, amongst others:

- Ecology
- Ornithology
- Hydrology
- Hydrogeology and Peat
- Aviation and Telecommunications
- Socioeconomics and Tourism
- Noise and Vibration
- Traffic and Transport

Environmental Impact Assessment

We have appointed environmental consultants Ramboll to carry out a detailed Environmental Impact Assessment (EIA) of the proposed Causeymire Wind Farm Extension, the outcomes of which will be presented in an associated Report (EIAR) to accompany the application for consent.

The EIA will:

- Identify and assess the potential significant environmental effects of the proposal
- Help to shape the design and layout of the proposed development

The process includes:

- Consultation with the local authority, local community councils, statutory and non-statutory organisations, and the public to identify specific concerns and issues
- Determining the existing environmental conditions at and around the site by reviewing available data and conducting specialist field surveys
- Refining the design of the repowered wind farm to avoid or mitigate potentially significant environmental effects, where possible
- Assessing the potential impacts of the repowered wind farm on the surrounding environment
- Developing mitigation solutions to reduce potentially significant effects.

Climate

The project is underpinned by the climate change emergency and the drive to offset carbon emissions. Construction of the Proposed Development will generate limited greenhouse gas (GHG) emissions, and the turbines will incorporate embodied carbon.

Carbon contributions will be measured against the energy offset created by the development, leading to a net positive impact on climate change.

The Scottish Government's Carbon Calculator Tool will facilitate a statement of expected carbon savings over the lifetime of the Proposed Development. Where required, EIAR topics will consider predicted changes in environmental conditions to allow an assessment that takes account of climate change conditions.

Ecology & nature conservation

A desk-based study was undertaken in 2024 prior to the commencement of baseline surveys. This provided background information on protected sites designated for their ecological interest and protected species either known or likely to be present within the site and its surrounding area. These findings were used to inform the ecological field survey programme. The desk based assessment was also informed by ecological data collected during previous post-construction surveys undertaken for the original wind farm, and more recent aquatic habitat and fish surveys undertaken for the neighbouring proposed Tormsdale Wind Farm.

The site of the proposed development does not overlap with any ecological designations. The site has undergone a suite of baseline ecology surveys undertaken between 2025 and 2026 (inclusive).

These were:

- Phase 1 Habitat Survey (UKHab)
- National Vegetation Classification Survey
- Habitat and Peatland Condition Assessment Survey
- Protected Species surveys for Otter, Water Vole, Badger, Pine Marten and Wildcat
- Static Bat Detector (bat activity) Surveys
- Freshwater Pearl Mussel Survey

All surveys were undertaken in line with the latest guidance from NatureScot and the extent of the baseline surveys were agreed in consultation with NatureScot.

The dominant habitat types within the site are blanket bog (predominantly in the eastern part of the site (approximately 200ha)) and degraded blanket bog (in the central, western and northern part of the site (totalling approximately 270ha)). Other habitats are present including heathland and acidic and modified grasslands. Priority habitats identified comprise blanket bog, degraded blanket bog, upland wet heath and purple moor grass and rush pastures.

Nadara will apply a sensitive design approach to reduce potential effects on species and habitats by avoiding them where possible and applying embedded best practice mitigation during the construction and operational phases of the proposed development.

Ornithology

A desk-based study was conducted in 2024. This provided background information on protected sites designated for their ornithological interest and protected species, either known or likely to be present, within the site and its surrounding area. This study helped to determine the baseline for the impact assessment. In agreement with NatureScot, the following ornithology surveys were undertaken:

- Moorland breeding bird surveys, for a period of four months in the summer of 2024
- Breeding raptor surveys, for a period of four months in the summer of 2024
- Vantage Point (VP) surveys from four VP locations covering the Site, for a period of 18 months from September 2024 to February 2026.

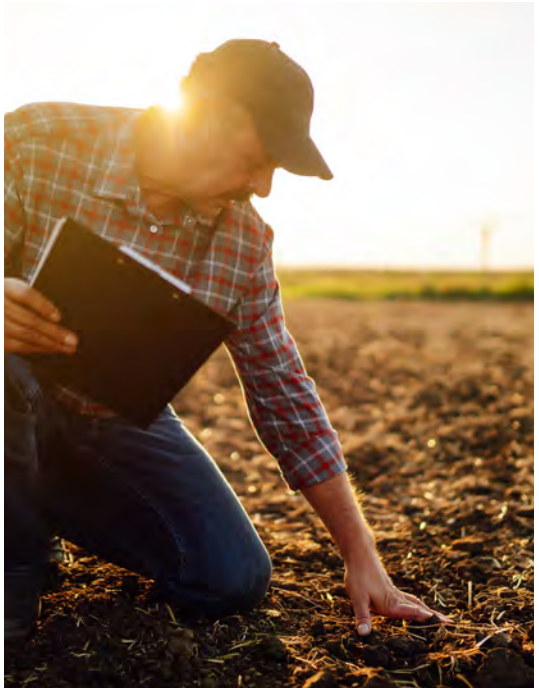
All surveys were undertaken in line with guidance from NatureScot.

Vantage Point surveys recorded 21 target species, with flight activity recorded across the site but predominantly in the northern and western parts of the site. Breeding bird surveys recorded a further 17 species.

High value species recorded during the surveys included: White-Tailed Eagle, Golden Plover, Merlin, Hen Harrier, Greenshank, Greylag Goose, Osprey and Black-Throated Diver.

The ornithology assessment will also be supplemented with data from the local biodiversity records centre and RSPB.

Collision Risk Modelling (CRM) will be undertaken to inform the need for mitigation through turbine relocation or micrositing. Low collision risk values have been recorded for the majority of species across wind farm developments within 20km of the site.



Hydrology, hydrogeology, geology and soils (including peat)

This assessment considers the hydrological, hydrogeological and geological characteristics of the site and identifies sensitive areas, constraints and buffers to inform the layout design.

Minimising impacts on peat is essential because peatlands are one of the most important carbon stores and biodiversity habitats. Careful design, siting, and construction of the wind farm repowering will be undertaken to safeguard these nationally significant peatland ecosystems.

The site is being repowered and there is evidence where the peat has been modified and degraded through former forestry, peat cuttings and drainage features, prior to the construction of the original wind farm.

The project aims to avoid or minimise disturbance to the deepest and most valuable peat by reusing existing tracks and placing new infrastructure on shallow or already degraded peat. Detailed peat surveys have been undertaken to refine the design further, in accordance with the peat hierarchy in NPF4 to minimise impacts on peat.

Surveys confirmed that peat is present across most of the site, with peat over 0.5m in depth recorded across nearly 80% of the site, with the maximum peat depth of 6.65m. The site is located adjacent to the Flow Country World Heritage Site and the Caithness and Sutherland Peatlands SAC, highlighting its importance as a carbon store and sensitive habitat.

Previous restoration work at the existing wind farm has re-wetted large areas of bog, increasing sphagnum moss cover from 11% in 2004 to 48% in 2019, primarily through drain blocking, reducing grazing pressure, and encouraging vegetation recovery to support wildlife, including breeding raptors.

Further peat restoration would form an integral part of the repowering proposals.

High-quality restoration typically includes re-wetting, drain blocking, reprofiling eroded peat, and re-vegetation with Sphagnum.

Noise & vibration

This assessment considers the effects of construction and operational noise on nearby noise-sensitive receptors, including cumulative impacts with surrounding operational and proposed wind farms.

Ongoing noise assessment will inform the layout design to ensure there are no noise level exceedances at identified properties. Where required, appropriate mitigation will be employed to ensure noise limits are met.

Archaeology & cultural heritage

The cultural heritage assessment considers the potential impacts of the proposal on archaeology and cultural heritage assets within the site and wider area.

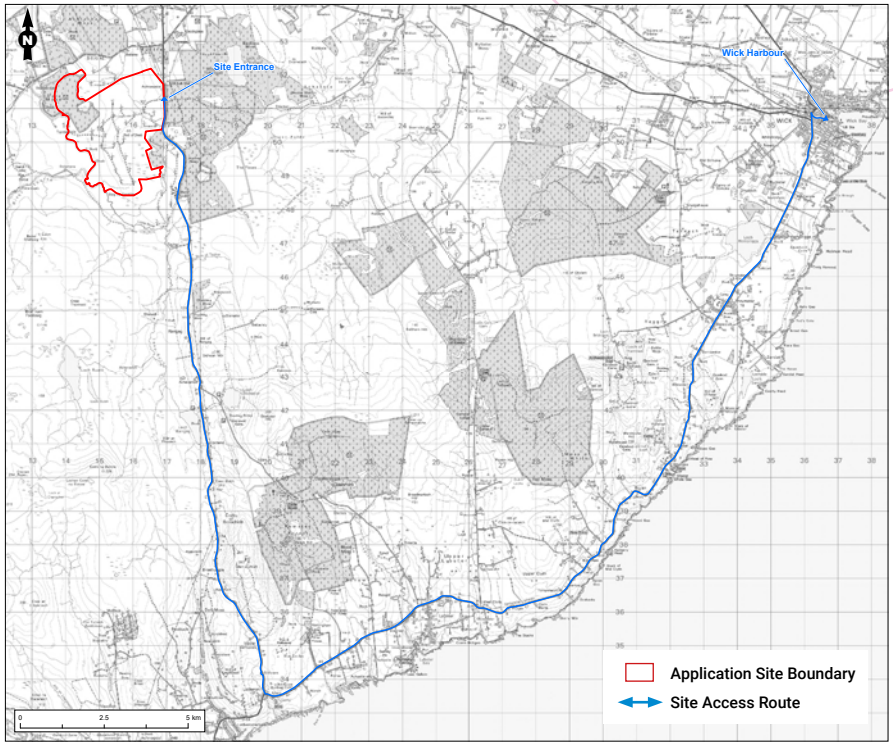
Desk-based assessment, comprising review of data sources including the Highland Historic Environment Record, historical mapping and available lidar data, and detailed walkover surveys have been carried out to establish the cultural heritage baseline within the site and the wider landscape.

Cultural heritage assets of interest within the site and surrounding area include:

- Tulach Mor broch, a Scheduled Monument at the western edge of the site adjacent to the River Thurso;
- Tulach Beg broch, an unscheduled broch, also at the western edge of the site adjacent to the River Thurso; and
- Cairn Merk broch, a Scheduled Monument to the northwest of the site.

Throughout the design process close consideration has been given to any potential direct impacts upon cultural heritage assets as well as impacts on their setting. Information gathered from the walkover survey and desk based assessment, together with feedback from stakeholders including Historic Environment Scotland, has fed into the on-going design process.

Consultation is ongoing as the design is refined further and care will be taken to minimise the potential for the proposals to adversely affect an asset's setting and thereby the ability to understand, appreciate and experience the asset in its wider context.



Traffic and transport

Our traffic and transport assessment will consider the impact of traffic volumes on the transport network during the construction period, operational phase and decommissioning phase of the proposed development.

The initial route review and site visit has been undertaken and identified that the blades and towers will be delivered to Wick Harbour and be transported to the existing site entrance off the A9 on the following route:

- Loads would join the A99 at Wick;
- Loads would continue south on the A99 to Latheron;
- Loads would turn right from the A99 onto the northbound A9 at Latheron; and
- Loads would continue north on the A9 to the proposed access junction.

An Outline Construction Traffic Management Plan (OCTMP) will form part of the EIAR and will provide measures to manage temporary traffic increases safely and effectively along the selected access route.

Socioeconomics, recreation and tourism

This assessment considers socio-economic effects at local (electoral ward), regional (Council boundary) and national level. Socio-economic impacts associated with onshore wind farms primarily relate to job creation, use of local services, local income expenditure and community benefit. These can result in both short- and long-term direct beneficial effects for surrounding communities.

An assessment of effects on recreation and tourism receptors has also been undertaken, taking account of published data on visitor numbers and the value of tourism to The Highland Council area economy. This includes consideration of local businesses such as accommodation providers, tourism businesses, transport operators, visitor attractions and tourism agencies.

These assessments are ongoing and the final outcome will be reported in the EIA which will be available on our website once the planning application has been submitted.

Aviation and electromagnetic interference

Under Civil Aviation Authority (CAA) Regulations structures over 150m in height are required to be lit with visible aviation lighting.

The turbines will therefore be equipped with aviation lighting attached to the hub.

The aviation lighting scheme will be agreed with the Civil Aviation Authority (CAA), Ministry of Defence (MoD) and other relevant consultees.

Consultation will aim to agree a reduced lighting scheme whereby not all turbines are fitted with visible lighting. The outcome of this consultation will be detailed in the EIA Report when submitted in planning.

The LVIA will include a night-time Aviation Lighting Impact Assessment to assess the additional visual effects of the proposed aviation lighting.

Landscape and visual impact

A full Landscape and Visual Impact Assessment (LVIA) is carried out to establish the potential effects of the proposed development on the surrounding landscape and visual amenity.

The landscape element of the LVIA considers the effects of the proposed development on landscape character and special qualities of landscape classifications and designations, including key views from designated landscape areas, such as Wild Land Areas.

The visual element of the LVIA examines the effect on views from settlements, residential properties, roads, recreational routes and tourist/visitor attractions.

The LVIA will also assess the cumulative effects of other existing, consented and proposed (i.e. Application Submitted) wind farm developments within the 35km study area.

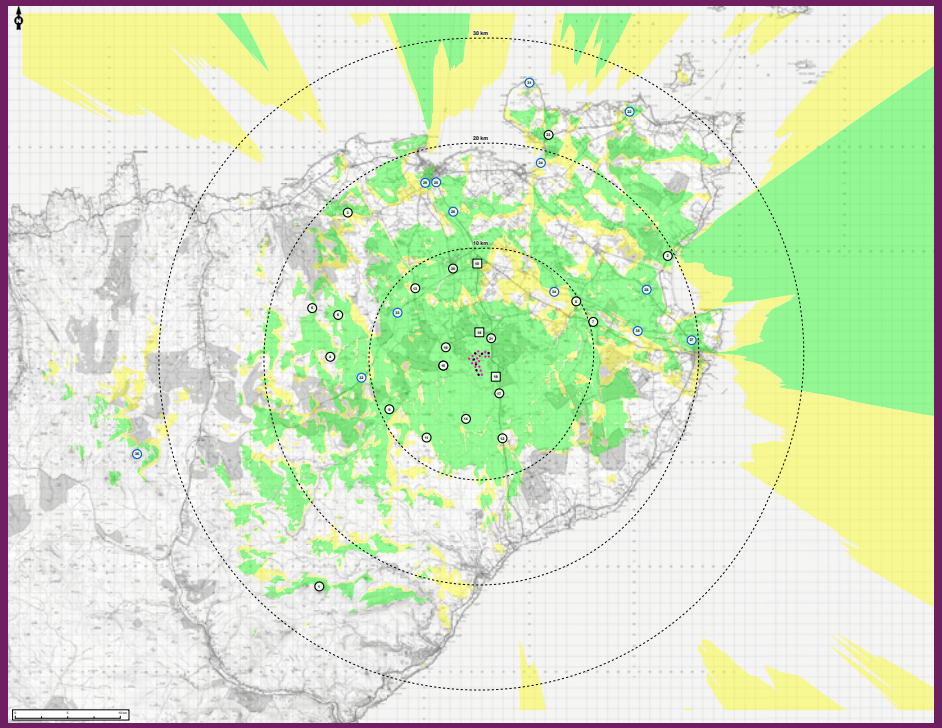
The LVIA will be informed by a suite of visualisations prepared from selected Viewpoints in the surrounding area. The Viewpoints to be included have been agreed through extensive consultation over a period of two years with THC and NatureScot.

A Zone of Theoretical Visibility (ZTV) is a computer-generated tool that establishes the likely extent of the visibility of a proposed development.

The ZTV has been produced to understand the geographical area where views of the proposed development are theoretically possible and to guide the selection of appropriate viewpoints to inform the assessment.

It is based on bare earth terrain and does not take account of screening effect of ground cover features, such as woodland, vegetation and buildings, which can reduce the extent of actual visibility of wind turbines from some locations. It also does not represent how long-distance views become increasingly recessive, and in many cases barely noticeable to the human eye.

The ZTV is presented across the surrounding study area, which is defined as a 35km buffer from the outer turbines of the proposed development.



- Proposed Turbine
- Existing Turbine
- Study Area (30km from Outer Turbines)
- Photomontage (Day)
- Photomontage (Day & Night)
- Wireline Only
- Both the existing turbines (100m Tip Height) and the proposed turbines (200m Tip Height) would be visible
- Only the existing turbines (100m Tip Height) would be visible
- Only the proposed turbines (200m Tip Height) would be visible

Two ZTVs have been prepared for this public exhibition:

- Proposed Development ZTV – representing the theoretical visibility of the repowered Causeymire Wind Farm, and indicating the number of number of turbines potentially visible (tip height).
- Comparative ZTV – representing the theoretical visibility of the existing Causeymire Wind Farm and the repowered Causeymire Wind Farm, identifying areas of potential additional visibility from the repowered scheme.

Cumulative impact

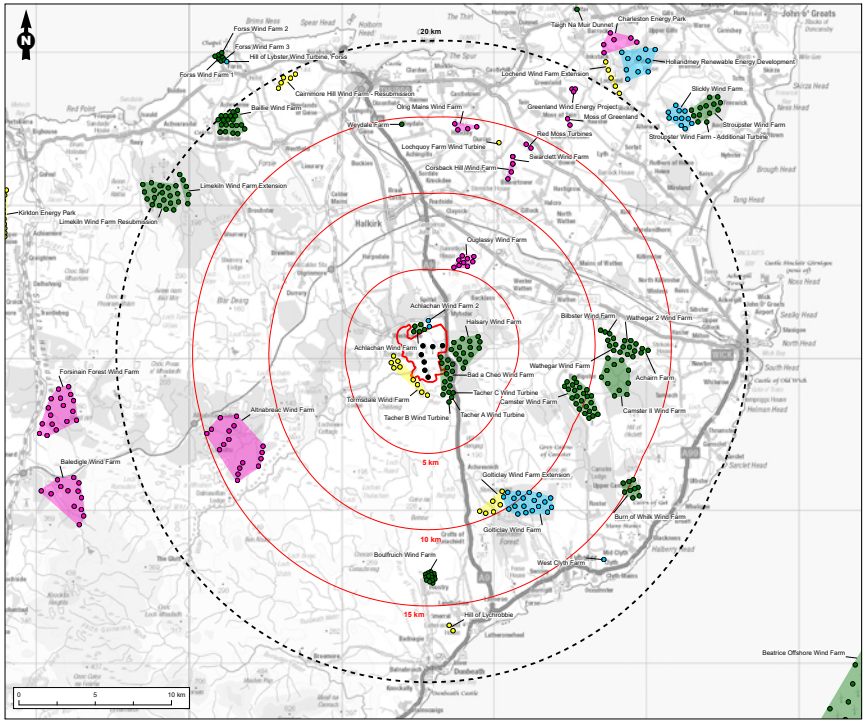
The LVIA will consider the effects of the proposed development on landscape character and special qualities of landscape classifications and designations, including key views from designated landscape areas.

The site at Causeymire itself is not subject to landscape designation or classification although a Wild Land Area is located approximately 200m to the west of the Site, therefore a Wild Land Assessment will be included in the EIA Report.

The visual element of the LVIA examines the effect on views from settlements, residential properties, roads, recreational routes and tourist/ visitor attractions.

The LVIA will consider the impacts of the repowered scheme in combination with cumulative developments in the surrounding area.

- Application Site Boundary
- Proposed Development Turbine
- 5km Radii from Outer Turbines
- Study Area (20km from Outer Turbines)
- Operational
- Consented
- In Planning
- Scoping



Clean energy - supporting a sustainable Scotland

Energy use across power, heat and transport is one of the largest sources of carbon emissions. Unlike fossil fuel, wind power generates electricity without releasing greenhouse gasses - making it one of the most effective tools we have in our belt to tackle climate change.

The expansion of renewable energy in Scotland be it onshore wind, offshore wind, solar, pump storage and hydro - we are directly helping to reduce the carbon footprint of the energy system building a cleaner future for generations to come.

By bringing more renewable energy to Scotland, we are helping to:

- **Reduce reliance on fossil fuels - displacing coal, oil and gas**
- **Strengthen energy security - reducing dependency on imported energy in volatile markets**
- **Support government ambitions - contribute directly to Scotland, and the UK's, ambitions commitments**
- **Help to tackle climate change - limiting global warming**

Climate change - impacts in Scotland

Scotland is already experiencing the effects of climate change. Across the UK, temperatures have been rising steadily by around 0.25°C per decade since the 1980's. In Scotland, the evidence is increasingly apparent.

In 2022, Scotland recorded its warmest year on record, with temperatures reaching 35°C. At the other end of the scale, over the past decade, average winter temperatures have also risen significantly.

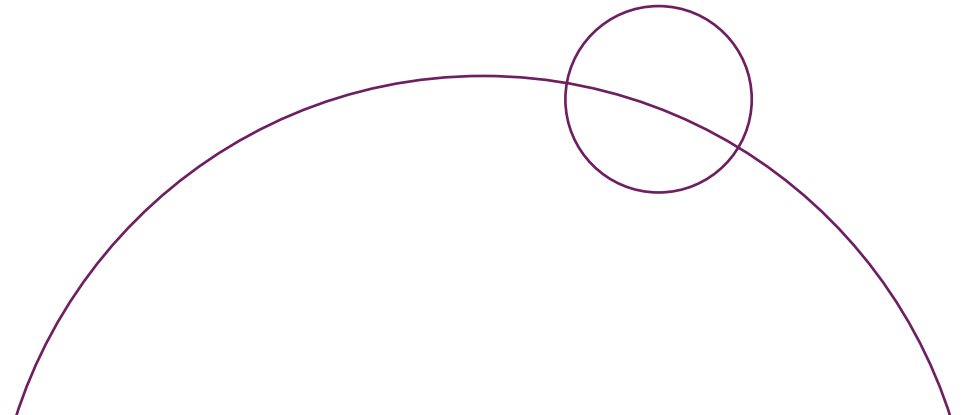
Extreme weather events that were once considered rare are also becoming more common. Flooding is now a regular occurrence across the country and Scotland has also experienced some of the largest wildfires in its recorded history.

Without action these impacts will continue to increase. Part of our response is the transition to renewable energy - helping to reduce emissions and limit future climate disruption.

Renewable energy - supply & demand

Scotland already generates a wealth of renewable energy. However, demand is rising. There is increasing electrification across our transport, heat and digital infrastructure means, and it is projected that electricity demand will at least double by 2050.

Meeting this demand will depend on significant investment in the transmission network. However, as infrastructure is upgraded and more renewable generation comes online, Scotland will be better placed to meet growing demand with clean energy.



Community benefit

Causeymire Wind Farm has been operating since 2004. In that time, it has delivered a range of local opportunities, for the regional supply chain and the community.

Currently the Community Benefit fund is managed by Foundation Scotland on behalf of the communities closest to the wind farm. If this project receives consent this Community Benefit fund will continue.

We look forward to discussing with the local communities throughout the consultation period about what they would like to see and how they would like the fund managed to help support the local area.

Funding awards 1st April 2024 – 31 March 2025

Caithness Voluntary Group – Halkirk District Development Officer	£27,528.89
Halkirk Parent Council – events and equipment	£44,925.00
Halkirk United	£10,000.00
Halkirk Sport and Recreation Club	£6,735.00
Sidh Chaileann Art – "Industrial Caithness" art exhibition	£5,396.70
1st Halkirk Guides – Camping equipment	£2,825.00
Spittal SWI – Annual running costs	£900.00
1st Halkirk Guides – Annual Inverness Pantomime Trip	£2,780.00
Hearing and Sight Care – support for local people	£6,832.00
Halkirk Village Council – river path and Ross Institute improvements	£20,499.81
Highland and Islands Enterprise – Science Skills Academy / Thurso Newton Room	£10,000.00
Thurso District Guides Supporters Committee – Girlguiding Scotland event in Amsterdam	£1,500.00
Girlguiding Caithness Central West – Girlguiding Subscriptions	£2,496.00
Spittal Village Hall – Annual running costs	£1,500.00
Caithness Voluntary Gorup – Halkirk District Community Bus & Driver	£40,000.00
19 Local People – competing or training in martial arts, golf, swimming, badminton & more	£20,804.00
TOTAL awarded	£204,722.40

Supply chain

We want to hear from businesses in the local area, and across the Highlands, who could be involved in the project if it receives approval and proceeds to construction.

Opportunities available include those for:

- An engineering, procurement and construction ("EPC") contractor.
- Construction material suppliers: concrete, aggregate and building materials.
- Electrical contractors: supply and installation of plant, cabling, earthing etc.
- Plant and equipment hire contractors: excavation earthworks, cranage, welfare units, etc.
- Labour hire companies: engineers, plant operatives and general labourers.
- Local accommodation and catering services.
- Transport: taxis and minibuses for local labourers.

If you are a local company and would like to register your interest please email causeymire@nadara.com or fill in a registration form at causeymirerepowering.co.uk

We will continue to engage with the local community and interested parties throughout the lifetime of the development, and in particular throughout the current assessment and application phase.

Following on from our first Public Exhibition, we are keen to continue our conversation with the community about how we can develop a project that will:

- Deliver local and regional supply chain opportunities
- Make a positive contribution to the local economy
- Provide around £245,000 a year in community benefit to support local projects (index linked).

November 2025

Scoping Report submitted to Scottish Ministers

First public consultation event and feedback received from the community

February 2026

Scoping Opinion received from Scottish Ministers

March - June 2026

Further environmental survey/ assessment work and design development.

June 2026

Second public exhibition event

July - September 2026

Finalisation of design and prep of EIA.

October 2026

Anticipated date of submission of planning application to The Highland Council.

Next Steps

We want to apply to The Highland Council for consent by late 2026. Ahead of then we will continue to undertake consultation and seek to gather as much feedback as possible. The application will be supported by an Environmental Impact Assessment Report (EIA-R) that will show the results of all studies undertaken.

Meanwhile, we will continue to undertake consultation and seek to gather as much feedback as possible and we would welcome your comments on our proposals.

Thank you

Please take a moment to complete a feedback form, which can also be found online along with all our latest exhibition materials at: causeymirerepowering.co.uk

Web **causeymirerepowering.co.uk**
Email **causeymire@nadara.com**
Phone **0131 2431 380**

Causeymire Wind Farm Extension
Nadara, 4th Floor, 12 Blenheim Place, Edinburgh, EH7 5JH

nadara