

# VALE OF LEVEN WIND FARM PROPOSAL



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## Welcome to our public consultation event for Vale of Leven Wind Farm

Welcome to the public consultation event for the proposed Vale of Leven Wind Farm development, located in the Kilpatrick Hills, northeast of Bonhill, West Dunbartonshire.

Vale of Leven Wind Farm Limited (“the applicant”) is proposing to submit an application for consent for the proposed development of Vale of Leven Wind Farm (the “proposed development”).

### Site description

The proposed development is situated within the Kilpatrick Hills, within the West Dunbartonshire Council Area. A number of settlements including Bonhill, Alexandria, Dumbarton and Gartocharn are located within 5 km of the nearest proposed turbine.

The land use is predominantly agricultural, as the site is dominated by upland moorland used for sheep grazing. Dumbarton Muir Site of Special Scientific Interest (SSSI), designated for bog habitats, is located outwith the turbine proposal area immediately to the east. While the proposed development avoids this SSSI opportunities for biodiversity enhancements that the development could deliver for these habitats will be explored in consultation with specialist interest groups and as part of the EIA process .





## Our public consultation event

### **The Vale of Leven Wind Farm development is a joint venture between Coriolis Energy and ESB.**

Coriolis Energy is a specialist independent wind farm development company operating throughout the UK and has been responsible for the development of 300 MW of wind farm projects. Since its inception, Coriolis Energy has delivered more than 100 MW of operational onshore wind farms, with a further 1,500 MW in development.

ESB, Ireland's part state-owned electricity utility company, is a leading independent power generator in the UK. ESB has offices in Glasgow and is heavily involved in onshore wind, offshore wind, electric vehicle infrastructure and renewable heating systems, such as the low-carbon heating and cooling system it installed in the V&A Dundee.

ESB works in partnership with Coriolis Energy. Coriolis Energy identifies and works on the development of wind farm proposals and ESB constructs and operates those wind farms.

### **Background**

The proposed development is situated at the same location, but with a different access routes and site boundary, to a previous wind farm proposal, Merkins Wind Farm, which was submitted by the developer (Lomond Energy) as a planning application in January 2012. The 10 x 120m to tip Merkins proposal was refused by West Dunbartonshire Council in 2013.

The proposed development is a wholly new project and in deciding whether to progress with the proposed development, Coriolis Energy carefully considered emerging wind turbine and other technologies i.e battery storage , current and emerging planning policies as well as all the consultee responses and representations to this previous proposed development.

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## The proposed development

**Coriolis Energy and ESB want to build a wind farm with up to 10 turbines that will aim to deliver energy generation in excess of 50 MW. Environmental, technical and commercial considerations throughout the design process will inform the final number of turbines.**

The proposed turbines will reach a blade tip height of up to 250 m a blade length of approx. 85 m, with each turbine expected to generate roughly 7 MW. The final turbine selection will be informed by an environmental impact assessment (EIA) that will look at various factors to assess the environmental considerations of the development.

The plans include providing battery storage capacity to maximise the use of the grid connection and help balance the national electricity transmission grid.

### Construction and Access

- Access to the site for vehicles delivering both construction materials and turbine components, such as tower sections and blades, are likely to be

via Murroch Farm to the south-west of the site. A new access road would be constructed. The access would be developed to meet the requirements of appropriate guidelines (such as visibility, construction materials, surface water drainage, gradient, and safety of other road users).

- One or more on site construction compounds, new access tracks and watercourse crossings will be required to enable wind farm construction.
- Watercourse crossings will be designed in accordance with Scottish Government best practice and Scottish Environment Protection Agency (SEPA) guidelines to enable the continued passage of fish and other wildlife.
- Crushed stone will be used to construct new tracks, lay turbine foundations and create temporary hardstanding areas. The source of the stone and aggregate is to be confirmed during the design process and the EIA phase, but is expected to be won on site.



## Environmental impact assessment

**As part of the development process, we must undertake an environmental impact assessment (EIA) to assess the effects of the proposed development on the natural, physical and human environment.**

The applicant has appointed RSK Environment Ltd (RSK), an experienced environmental consultancy based in Glasgow, as lead consultant to carry out an Environmental Impact Assessment (EIA) and related assessments to accompany a Section 36 Application\* to the Scottish Ministers.

The EIA process includes

- Consultation with the local authority, stakeholder organisations and the public to identify specific concerns and issues
- Determining the existing conditions at and around the site by reviewing the available data and undertaking specialist field surveys
- Assessing the potential impacts on the existing environment
- Developing proposals for mitigation measures to alleviate any significant impacts identified.

Coriolis Energy has conducted a detailed scoping exercise to identify the environmental aspects to address in the EIA for the proposed development. This included a review of available environmental information and desk- and site-based surveys.

A Scoping Report was submitted, as part of a request for a scoping opinion, to the Energy Consents Unit, issued on the 14th of April 2022. This report identified the environmental aspects to be addressed within the EIA report. Statutory and non-statutory organisations were consulted at the Scoping stage and their responses were included in the scoping opinion issued by the Scottish Government on 23 June 2022.

The scoping report concluded that the following detailed studies should form part of the environmental impact assessment:

- Landscape and visual impact
- Archaeology and cultural heritage impact
- Ecological and ornithological impact
- Geology, hydrogeology, hydrology, peat and geotechnical conditions
- Hydrology and flood risk
- Noise and vibration impact
- Traffic and transportation impact
- Electromagnetic Interference, shadow flicker and aviation risks
- Socio-economics, land use and tourism
- Forestry.

\* In Scotland, any proposal to construct, extend, or operate an onshore electricity generating station with a capacity of over 50 megawatts (MW), or to install and keep installed an overhead electric line, requires the consent of Scottish Ministers under sections 36 and 37 of the Electricity Act respectively.

<https://www.gov.scot/publications/good-practice-guidance-applications-under-sections-36-37-electricity-act-1989/pages/1/>

## Landscape and visual impact

### LVIA Design Iteration

The appearance of the wind farm will continue to be given a high priority in the design process, although technical parameters do also have to be considered. The scoping layout had 19 turbines with a maximum blade tip height of 200m. These turbines were distributed across the site, and represented the maximum number of turbines that could be fitted onto the site within the parameters of on-site constraints such as watercourses, environmental designations and steep slopes.

When the appearance of the wind farm with this scoping layout was reviewed, it became apparent that the distribution of the turbines across the site was leading to a development that extended widely across some views, with notable variations in the ground levels of the turbine bases. The arrangement of turbines also led to eye-catching clustering and overlapping of turbines in some views, with gaps appearing between groups of turbines.

As a result, a layout review was carried out with the chief objective of improving the appearance of the wind farm. This recommended that the wind farm is focussed in the central part of the site, with turbines removed from the northern and southern areas. This has the following benefits:

- A notable reduction in the extent of the wind farm across views
- A reduction in the clustering and overlapping of turbines
- An increase in the distance of turbines from sensitive locations all around the site
- The creation of a compact, balanced and cohesive array of turbines
- A reduction in the variation between the ground level of turbine bases

The implementation of these actions led to the current layout, which consists of ten turbines. A comparison of the two layouts shown in this exhibition demonstrates the removal of turbines from the north and south of the site, and the rationalisation of turbines in the central part of the site.

The benefits of the revisions to the layout can be seen on the three 'wireline views' shown on the next panel. (Wireline views are computer-generated models that show the proposed turbines in their landform setting. They do not show any features that appear in views, such as trees, houses, forestry or roads, and are therefore theoretical rather than realistic, but they do provide an impression of the turbine arrangement.)

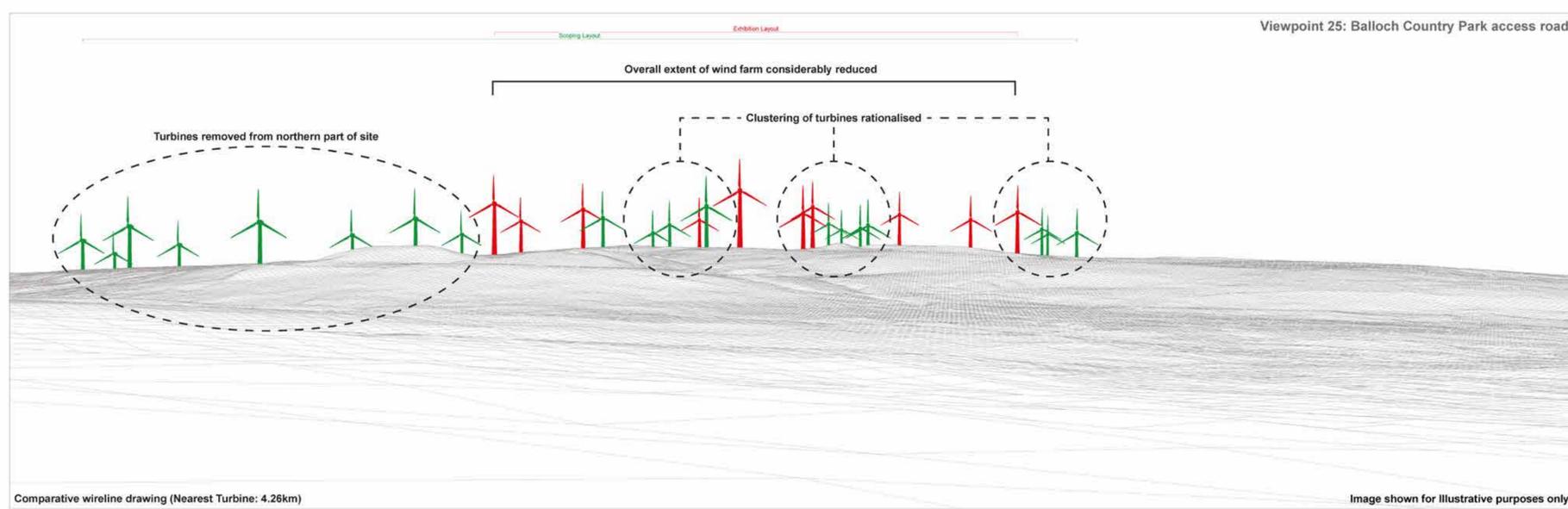
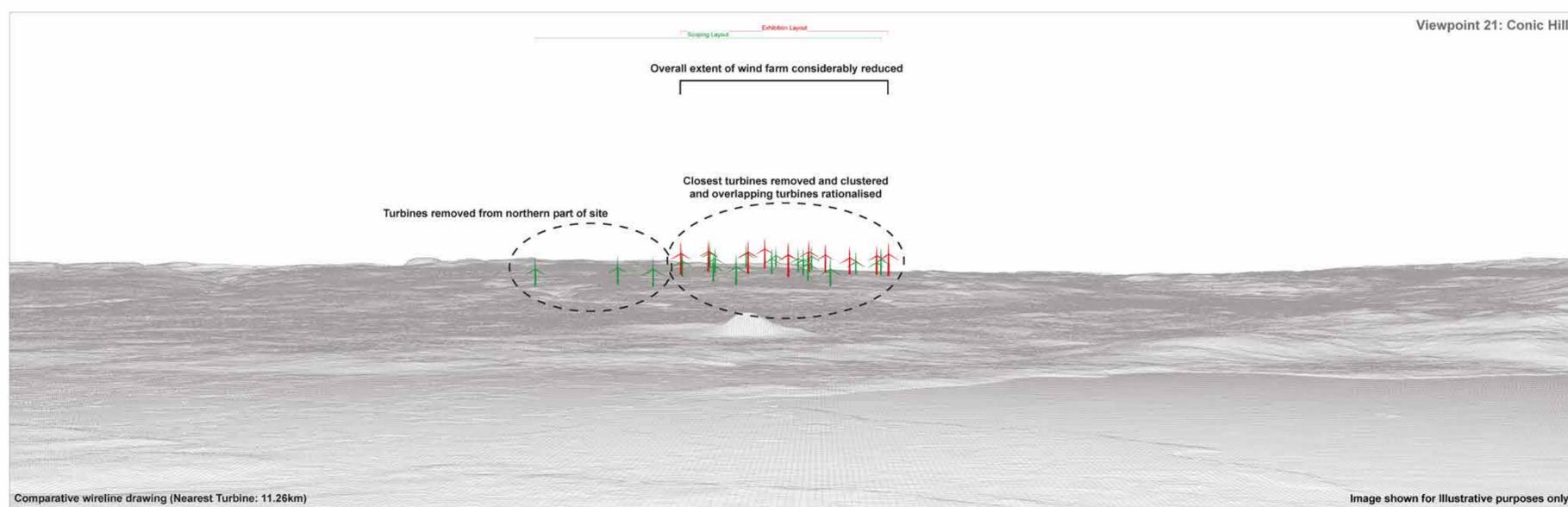
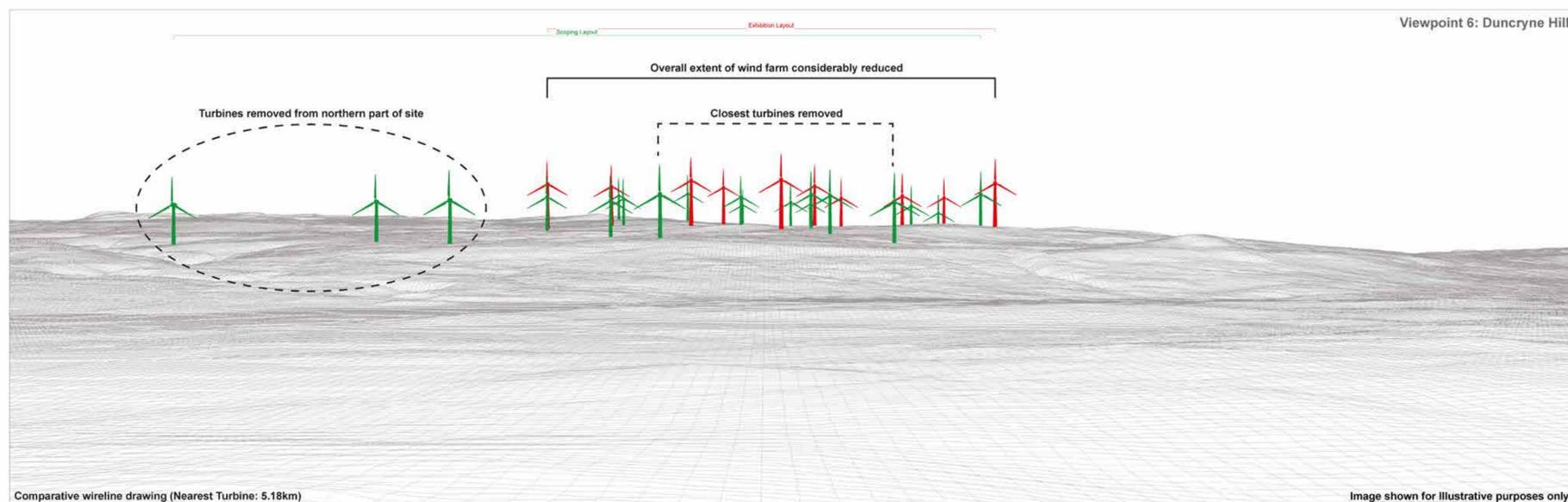
These three wireline views show a comparison between the scoping layout (shown in green) and the current layout (shown in red) at three viewpoints; Duncryne Hill, Conic Hill and Balloch Castle Country Park access road. The locations of these viewpoints are shown on the Zone of Theoretical Visibility diagram.

The three wireline views particularly illustrate the following key benefits of the revised layout:

- Notably reduced extent of the wind farm across the view
- Increased distance of the turbines from the viewpoint
- Reduced clustering and overlapping of turbines and a reduction in gaps between groups of turbines
- The creation of a compact, balanced and cohesive array of turbines

The reduction in the number of turbines from 19 in the scoping layout to 10 in the current layout is highly beneficial in terms of the appearance of the wind farm, as described above. It does, however, have an implication on the productivity of the wind farm in terms of energy output, as the smaller number of turbines significantly reduces the amount of energy that is produced. In order to counter this loss of energy yield, it was proposed at this stage that the maximum tip height of the turbines was increased to 250m, in line with the most efficient turbines currently available. Accordingly, the wireline views presented here show the scoping layout turbines with a tip height of 200m and the current layout turbines with a tip height of 250m.

## Comparison of scoping layout with current layout



These wirelines are for exhibition purposes only and have not been presented to conform fully to SNH or THC visualisation standards. Final visualisations included in the Environmental Impact Assessment Report (EIA Report) that would accompany any application for consent will meet appropriate standards and guidance. Please stand at arm's length from the visualisation presented to gain the best impression.



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## Landscape and Visual Impact Assessment

**A landscape and visual impact assessment (LVIA) will be undertaken to analyse and identify the potential effects that the wind farm will have on views from the surrounding area and the landscape character of areas around the wind farm.**

This assessment will include consideration of effects on views from settlements, walking routes, roads, visitor destinations, hilltops, and other relevant locations. Specific assessments will be carried out for the effects of the wind farm on views seen by local residents and on the 'Special Qualities' of Loch Lomond and the Trossachs National Park. The night-time effects of the wind farm will also be considered.

### Zone of Theoretical Visibility

The Zone of Theoretical Visibility (ZTV) is a computer-generated diagram that illustrates areas from where the proposed wind farm may be seen. The different colours shown on the diagram indicate the number of turbines that may be seen, as shown on the legend. The areas from where the wind farm will not be visible – because it is hidden by hills and other landforms – have no coloured shading.

This diagram is based on landform only, and does not take account of the forestry, woodland and buildings that can also screen views of the wind farm. This means that many of the areas that are shown on the ZTV to have theoretical views of the wind farm will not in fact have any visibility.

The ZTV diagram shown here extends to a radius of 45km from the wind farm. This covers the Study Area that will be considered in the Landscape and Visual Impact Assessment for the wind farm, in accordance with guidance published by NatureScot.

The ZTV shows the suggested locations of 31 viewpoints that will be used to analyse the visibility of the wind farm. These viewpoints have been selected through site visits made by the project team, with suggestions made by NatureScot, Stirling Council and West Dunbartonshire Council also incorporated.

Photomontaged views from four of these viewpoint locations are shown on the exhibition boards. These viewpoints are:

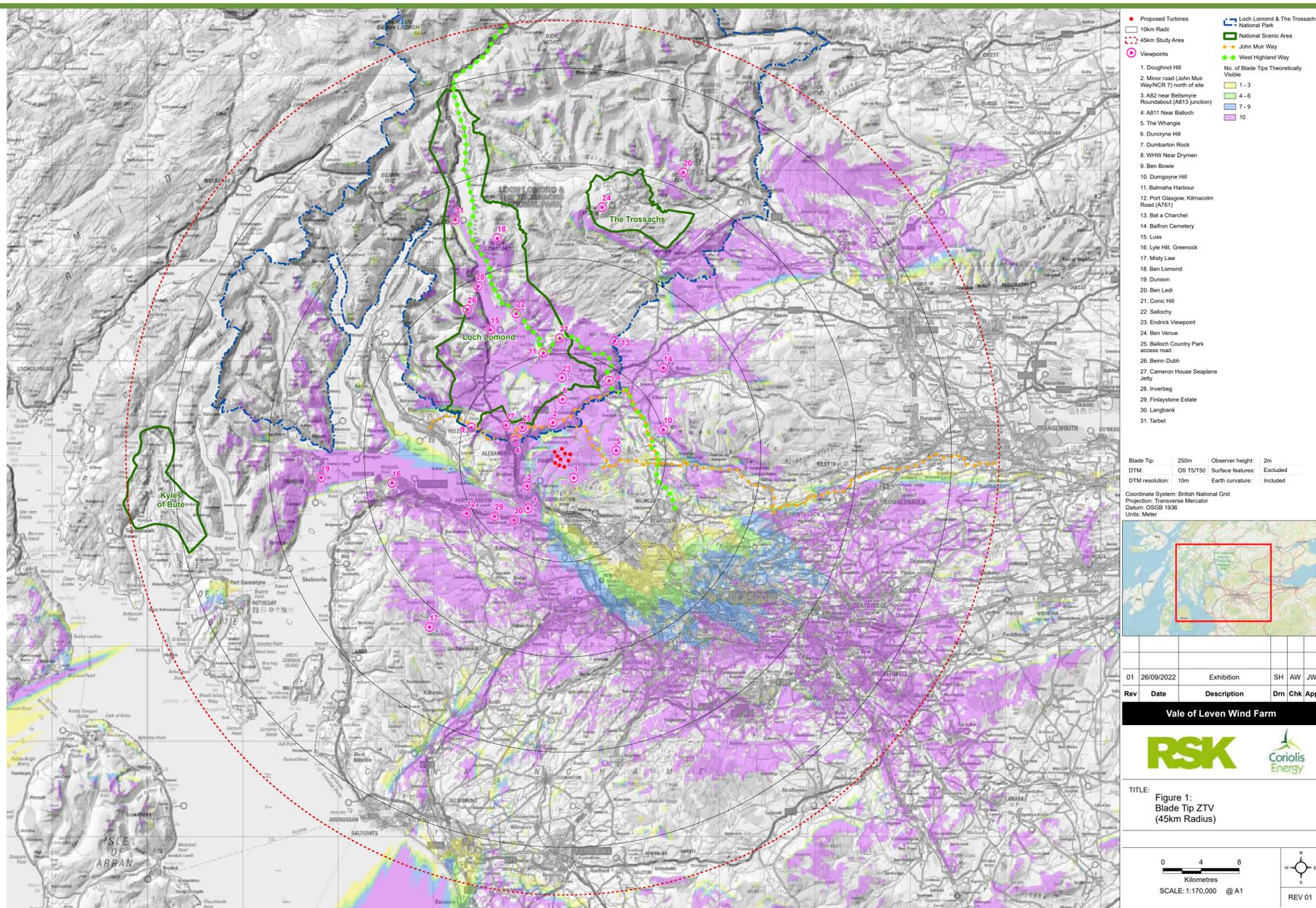
- Viewpoint 4: A811 near Balloch
- Viewpoint 6: Duncryne Hill
- Viewpoint 8: WHW near Drymen
- Viewpoint 30: Langbank

The photomontage views on the exhibition boards are created using photographs taken at the viewpoint locations specifically for the purpose of creating these visualisations. The wind farm is then superimposed onto the photographs using a computer-generated model. The photography and modelling of the wind farm as shown in the photomontages are carried out in accordance with guidance produced by NatureScot.

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## The Zone of Theoretical Visibility

The ZTV also shows the boundary of the Loch Lomond and the Trossachs National Park, the West Highland Way (WHW), the John Muir Way walking route, and the three National Scenic Areas that lie within the 45km Study Area.

## Visualisations



Viewpoint 4: A811 near Balloch



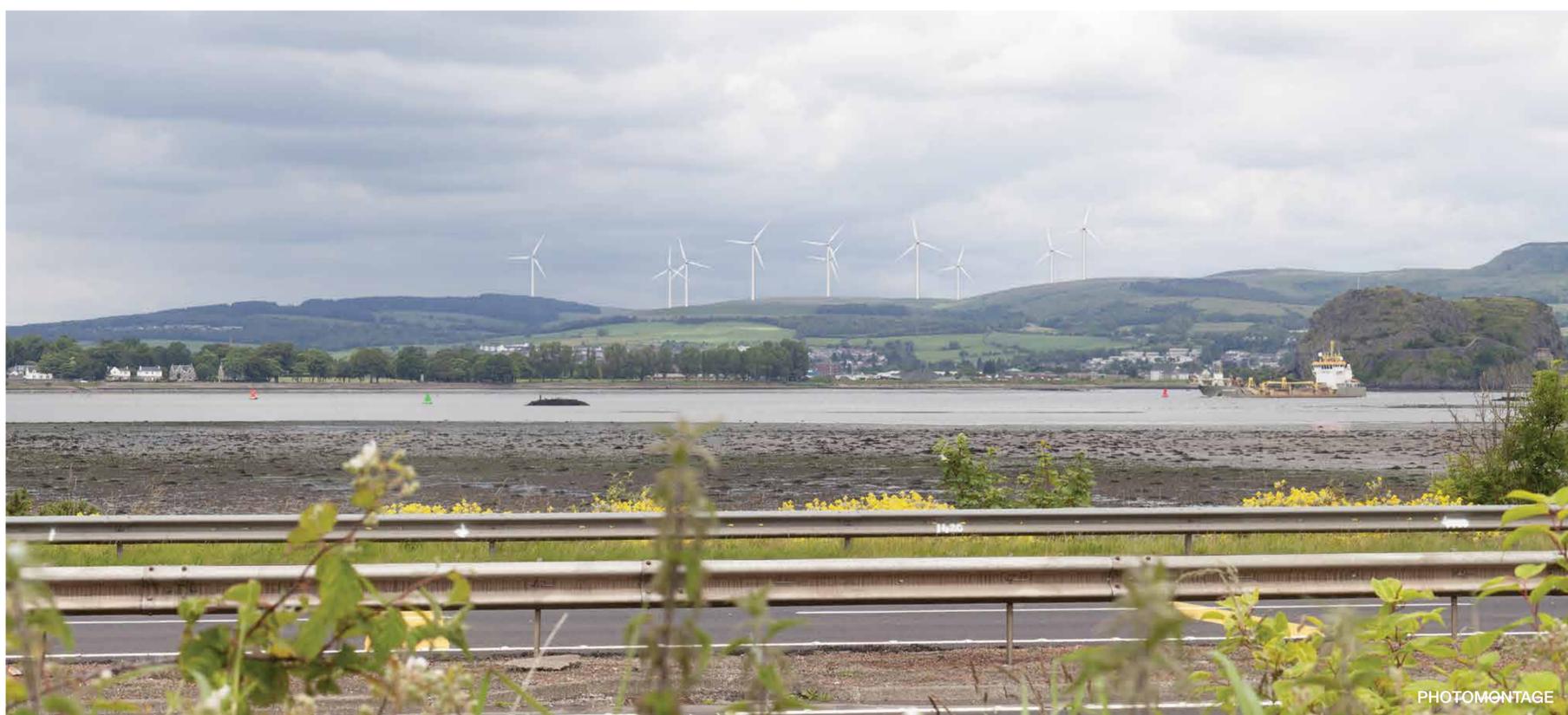
Viewpoint 6: Duncryne Hill

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## Visualisations

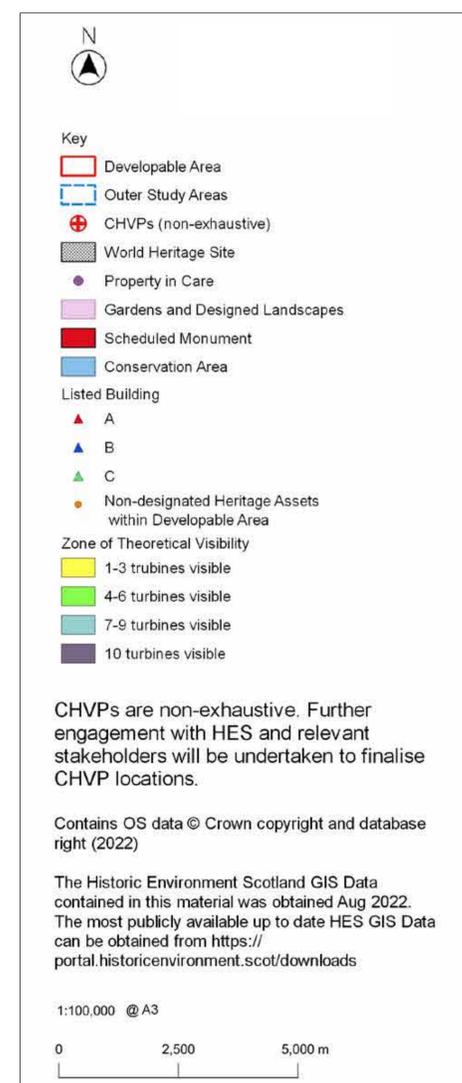
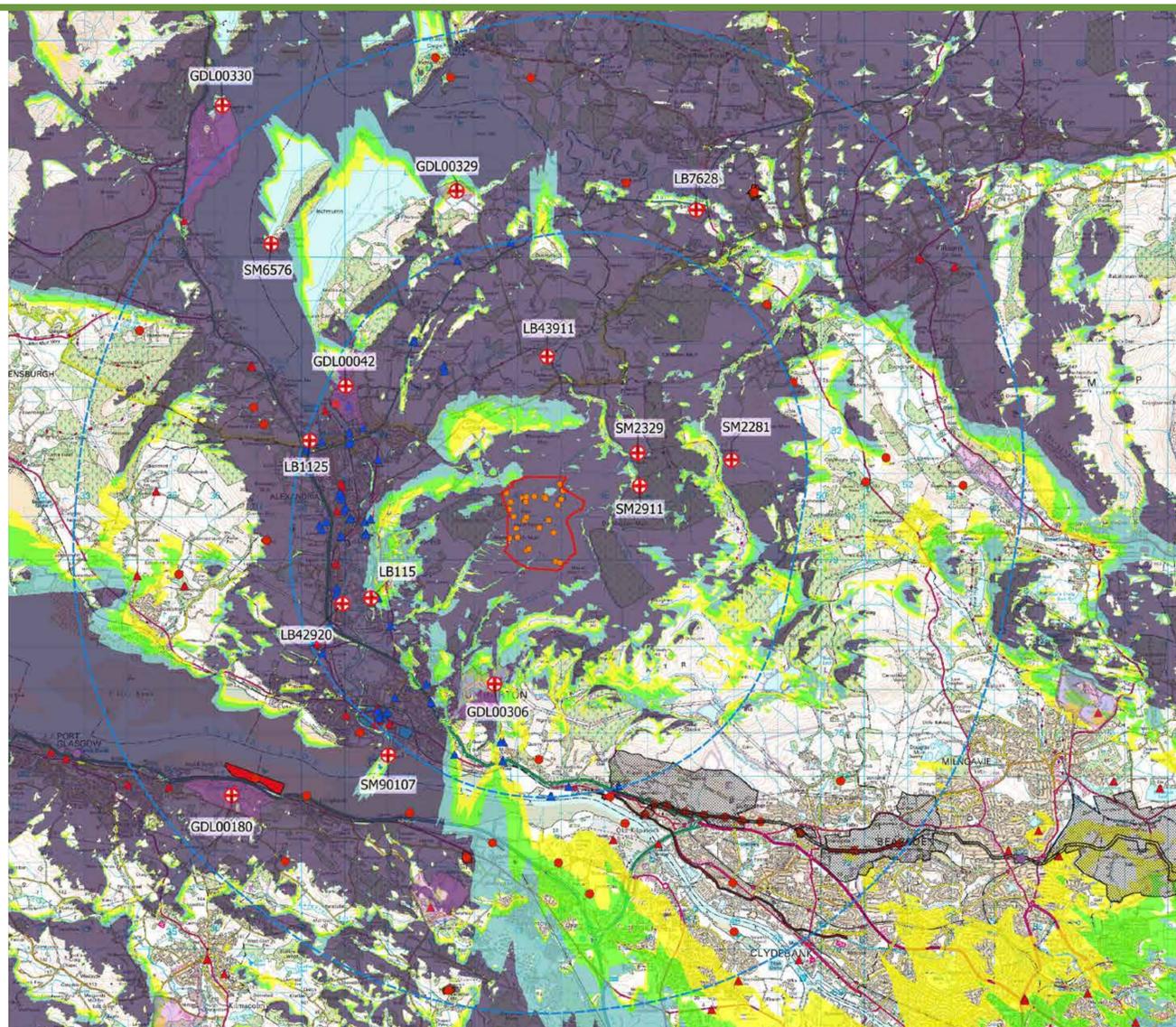


Viewpoint 8: WHW near Drymen



Viewpoint 30: Langbank

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## Cultural heritage and archaeology

**The effects of the proposed development on the historic environment, including cultural heritage and archaeology, will be assessed.**

We have undertaken a desk-based study of the site and surrounding areas to identify all known heritage assets recorded on national and regional archaeological registers, and a site walkover has been performed to investigate the potential for archaeological remains. The effects of the proposed development on the historic environment (cultural heritage and archaeology) will be assessed and the findings will be presented in the EIA report.

There are no designated heritage assets within the site boundary. There are known non-designated heritage assets within the site boundary, some of which lie within the 'developable area' for the proposed development. For example, five cairns or mounds (possible), four farmsteads/shielings, two enclosures, one cattle tryst, three quarries, three old roads or

trackways, two bomb craters, one boundary marker, and one area of peat cutting. In addition, analysis of Scottish Remote Sensing Portal LIDAR data for the EIA has identified two potential heritage assets, and three further features are shown in the developable area on the first edition Ordnance Survey (OS) map (1860).

Key heritage assets in the surrounding area have been visited to assess potential impacts on their settings. Those proposed for further detailed assessment in the EIA, pending further consultation with Historic Environment Scotland and relevant stakeholders, are presented on the adjacent Figure.

For any identified impacts, mitigation measures will be proposed in the EIA to be implemented during construction to record and, where appropriate, protect any remains that are discovered. Known heritage assets within the developable area will also be protected with visible barriers to minimise the risk of accidental disturbance during construction.

## Ecology and ornithology

**A programme of ecological and ornithological surveys have been carried out on the site. The results will be used to assess potential impacts and identify suitable mitigation as required.**

In addition, opportunities for biodiversity enhancements that the development could deliver will be explored in consultation with specialist interest groups and as part of the EIA process.

### Ornithology surveys

There are no statutory designations with ornithological features within the site. The Loch Lomond Special Protection Area (SPA) and associated Loch Lomond Ramsar site, Endrick Mouth and Islands Special Scientific Interest (SSSI), Inchcruin SSSI, Inchtavannach and Inchconnachan SSSI are located within 20 km of the proposed development. Non-breeding Greenland white-fronted goose is a qualifying feature designated under the Loch Lomond Special SPA and as agreed with NatureScot, this species will be assessed under the terms of the Habitats Regulations Appraisal (HRA) process due to potential connectivity between this designated site and the proposed development. The associated SSSIs and Ramsar site will be considered as part of the EIA process.

The Inner Clyde SPA, Black Cart SPA and Renfrewshire Heights SPA (plus associated SSSIs and Ramsar site) and Castle Semple and Barr Lochs SSSI are also located within 20 km of the proposed development, but after considering the distance between these designated sites and the proposed development, the foraging distances for relevant qualifying features provided by NatureScot and following consultation with NatureScot, there is considered to be no connectivity between the proposed development and these designated sites.

A comprehensive survey programme has been undertaken to identify the use of the site and its wider surroundings by sensitive bird populations. The data gathered between 2008 and 2009 for the Merkins Wind Farm proposal will form part of the baseline assessment alongside additional survey data, collected between 2019 and 2020, as agreed with NatureScot.



The following ornithology surveys will form the baseline for the assessment:

- flight activity surveys
- black grouse surveys
- scarce breeding bird surveys
- breeding bird surveys
- winter walkover surveys

### Ecology surveys

The site has undergone a suite of surveys, including for habitats, protected species and bat activity in order to gain an understanding of the area's ecological context to inform the impact assessment and to ensure adherence with relevant legislation. All surveys were carried out in line with the latest guidance from relevant authorities.

The habitats on site are typical of an upland setting, with much of the site covered by blanket bog, with smaller areas of modified bog, wet heath and dry heath in addition to grasslands, flushes and semi-natural woodland. Dumbarton Muir and Auchentreoch Glen SSSIs which are designated for their important habitats of raised and blanket bog, and lowland calcareous grassland and springs are located outwith the turbine proposal area.

There are a number of watercourses on site which would offer suitable habitat for otter and water vole, although definitive signs of these species were not identified in the surveys carried out in 2020. Badger activity was recorded on site, in addition to sightings of common lizard.

Ground-level static bat activity surveys were carried out to determine bat activity levels within the site, and identified the presence of Daubenton's bat, common pipistrelle, soprano pipistrelle, brown long-eared bat, *Myotis* spp. and *Nyctalus* spp.



## Transport and access

**An abnormal loads route assessment (ALRA) has been undertaken for the proposed turbine locations to identify the appropriate work required to accommodate the delivery of abnormal load from the port of entry to the site. The ALRA will be included as a technical appendix to the EIA report.**

The proposed wind farm would be accessed from a new junction on the A813 Stirling Road, located at near the Aggreko site. The junction will allow access to the site for construction traffic, turbine deliveries and maintenance vehicles.

The majority of construction traffic will approach the site from the site via the A82 and A813. This reduces the amount of Heavy Goods Vehicles (HGV) that would pass through residential areas in Balloch, Bonhill and Renton.

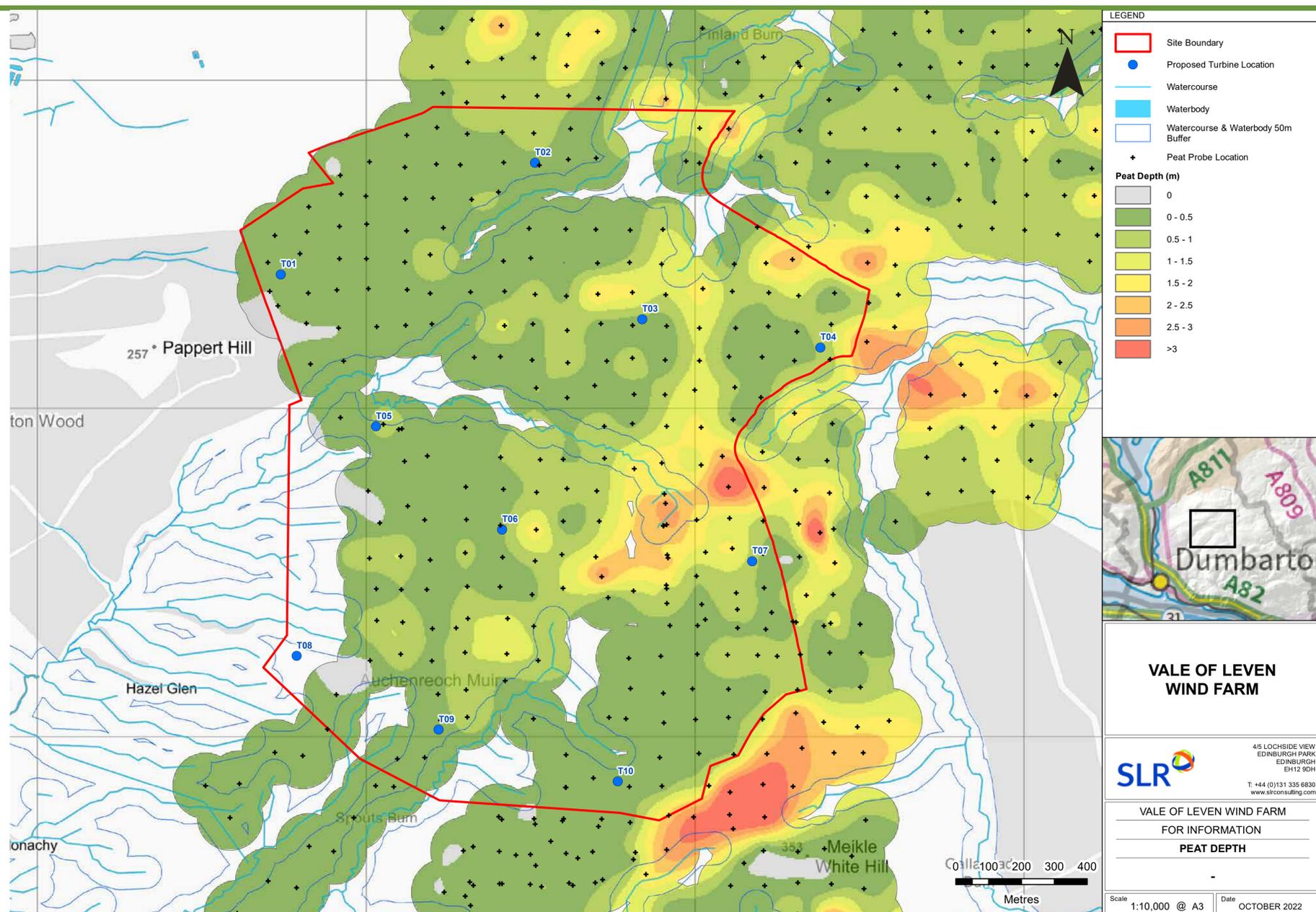
There will be a temporary increase in traffic on the A82 and the southern section of the A813 during the construction period. A detailed Construction Traffic Management Plan is to be provided to help reduce the disruption caused by construction traffic on local roads.

Where possible, construction material excavated from site will be used to help reduce the numbers of HGVs on local roads.

A detailed review of access from abnormal loads associated with the turbine deliveries has been undertaken. A number of minor street furniture and junction improvement works will be required.

Access to the site for abnormal loads is expected to be from Glasgow, with traffic using the A82 and A813. All abnormal loads will be escorted by the Police at the developer's expense.

The developer will enter into a legal agreement with West Dunbartonshire Council to ensure that the public road does not deteriorate as a result of the construction traffic.



## Geology, hydrogeology, hydrology and peat

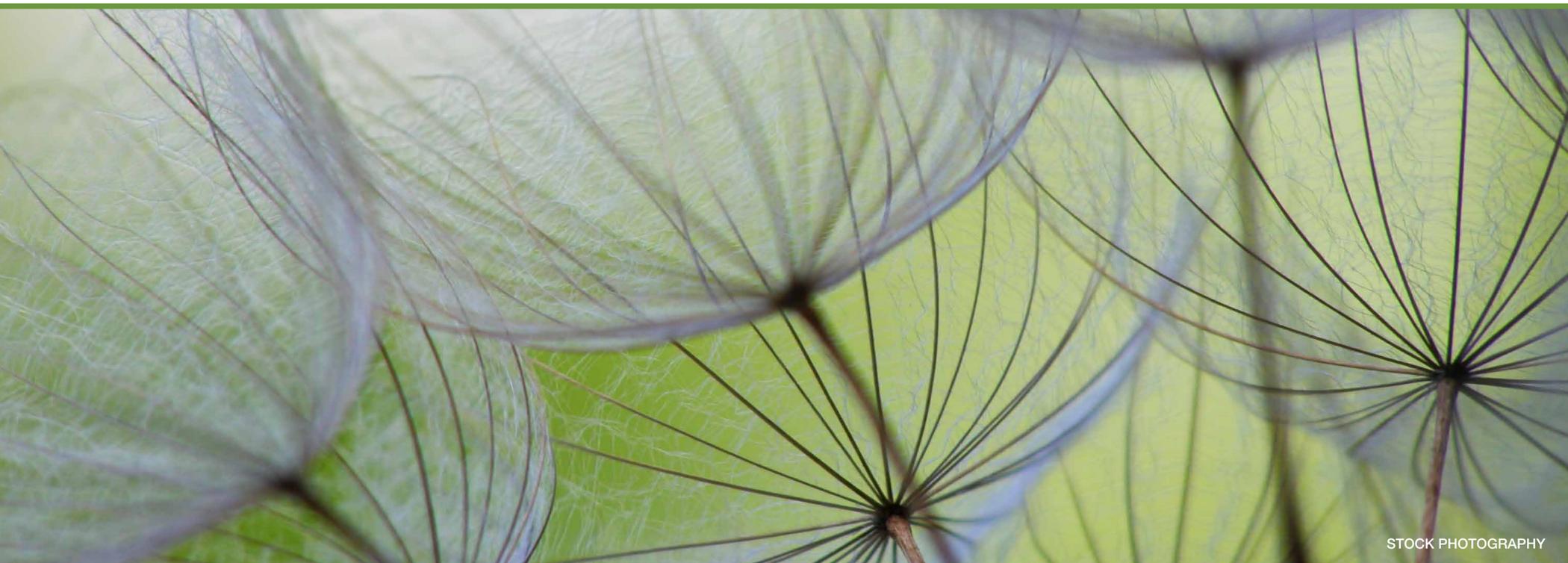
**Potential impacts on groundwater quality or quantity, flood risk, water quality and private water supplies, and changes to peat and carbon-rich soils will be considered in the EIA.**

A peat depth survey has been conducted that found a number of areas of deeper peat onsite, primarily in the southeastern corner of the site. Where possible, these areas have been avoided, in the design of the proposed development. The site is also constrained by steep incised valleys primarily flowing west into the Murroch Burn, the track design and turbine layout has avoided these and has minimised significant water crossings.

The majority of the turbine locations are on shallow peat <1m.

The site has a very low flood risk and there are no private water supplies impacted by the development, two private water supplies exist to the south of the site but they are not in the same catchment area. There is no impacts to groundwater anticipated. The Duntocher Burn catchment, located immediately southeast of the site, has also been designated as a drinking water protected area (DWPA) but again at the moment there is no development proposed in this catchment.

These issues are being fully addressed as part of the EIA.

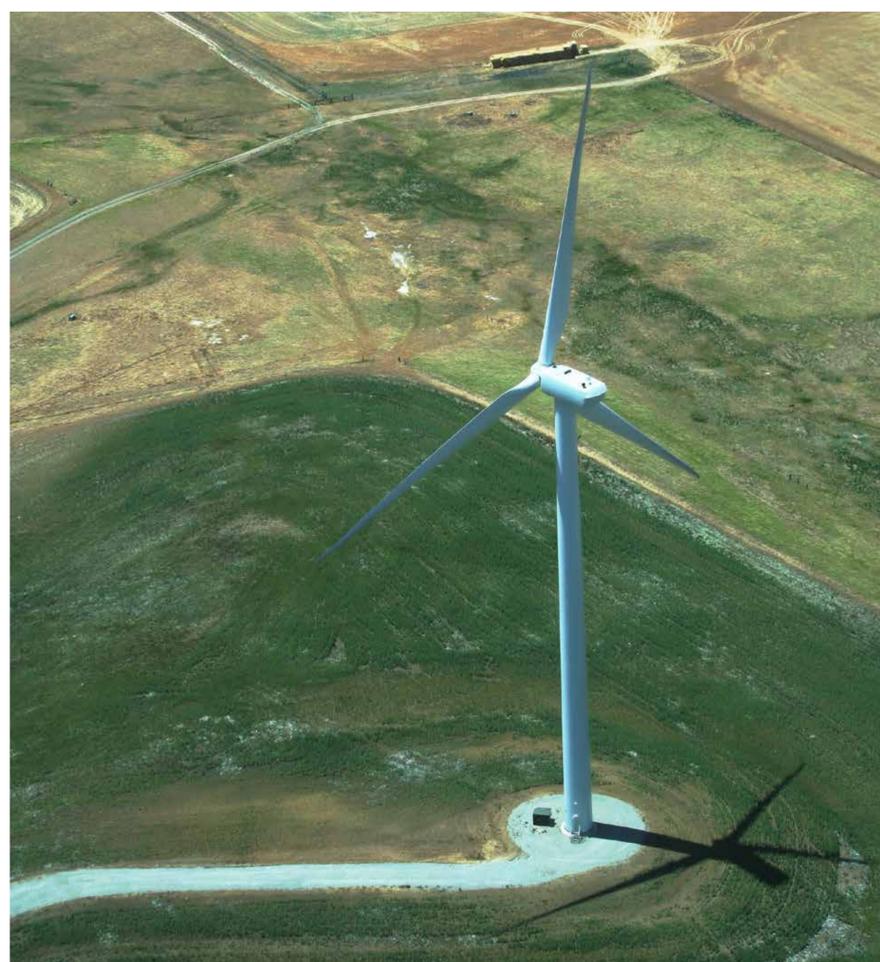
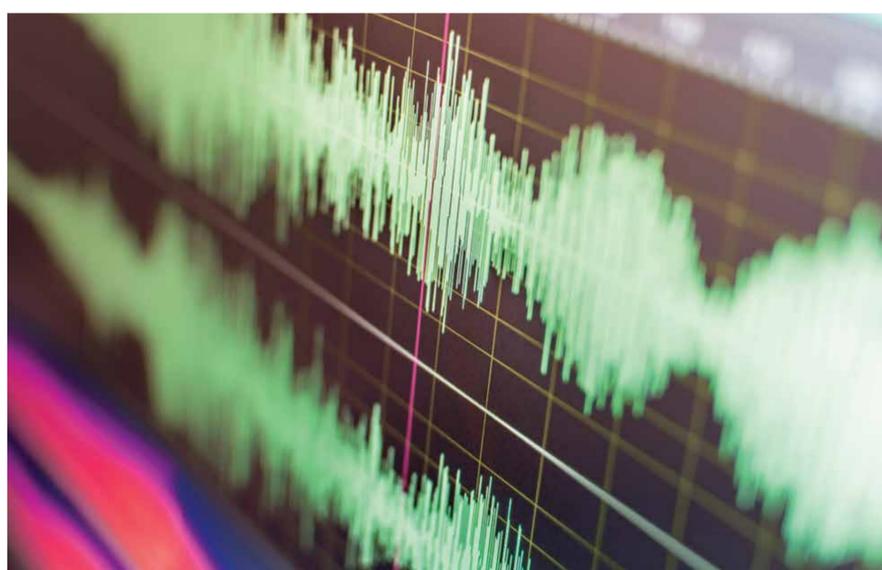


## Noise and vibration

**Monitoring and modelling of background noise levels are important parts of the site evaluation process.**

- A survey of background noise levels at different wind speeds and directions will be compiled over several weeks at several locations around the site.
- These levels will be compared with computer predictions of the noise the new turbines are likely to generate.
- The impact of noise during construction and operation on properties near the site will be carefully assessed.
- Modern turbines are quieter than older ones, as mechanical noise has been minimised through engineering and insulation techniques.

- Aerodynamic noise associated with the movement of the blades has been controlled through redesigning the blade tips and edges.
- Any development consent would impose strict noise limits on the operation of the windfarm.
- No wind turbines are planned within 1.5 km of privately owned residences.



## Aviation and radar impacts, shadow flicker and carbon balance

### Aviation and radar impacts

Our Scoping Report identified a number of potential effects of the wind farm on aviation. The principal effects relate to Glasgow Airport, including effects on air traffic control radar, obstacle limitation surfaces, instrument flight procedures, visual flying routes, and obstacle lighting. Other issues include the NATS En Route air traffic control radars at Lowther Hill and Cumbernauld and the Meteorological Office rainfall radar at Holehead. The wind energy industry has decades of experience of working with the aviation industry to resolve the impacts of wind turbines on aviation. The issues of wind turbine effects on radar are well known and the methods of mitigating them are tried and tested. The wind industry has funded enhancements to air traffic control radar operators over the years for their radars to deal with wind turbines. This has included funding completely new radars at Glasgow, Edinburgh and Prestwick Airports and at Cumbernauld, Kincardine and Lowther Hill. Issues related to the height of wind turbines, such as the minimum permitted altitudes for aircraft flying in the vicinity, are the same as for any other tall structure such as radio and television transmitters. The proposed turbines will exceed 150 m blade tip height and will therefore require aviation obstruction lighting.

### How we propose to assess these impacts

We are modelling the line of sight from all potentially affected air traffic control radars to the turbines to determine whether the radars will be capable of detecting the turbines. We will engage with Glasgow Airport and NATS to agree on any mitigation required. Both Glasgow Airport and NATS have established methods of mitigating wind farm impacts and we expect to enter into commercial agreements with them to fund mitigation of the effects of the Vale of Leven wind farm on radar.

While UK air law requires lighting on any obstacle higher than 150 metres, the Civil Aviation Authority will consider proposals for reduced lighting schemes, where not every turbine is lit. We propose to do this for Vale of Leven so that the night time visual impact of the wind farm to people on the ground is minimised.

### Shadow flicker

Shadow flicker is an effect caused in particular circumstances by the rotation of the turbine blades when

the sun is shining, which can create a flickering effect. This can be a cause of annoyance at residences near wind farm developments. The proposed development will be designed where possible to avoid shadow flicker. Potential shadow flicker receptors within 2 km of each turbine will be assessed for potential effects.

### Climate and carbon balance

A key benefit of wind energy (in common with other renewable energy technologies) is the generation of low carbon electricity. This contrasts with much of the electricity distributed on the national grid generated by fossil fuels. Fossil fuel-generated electricity gives rise to the emission of carbon dioxide and other GHGs which trap heat within the atmosphere. This leads to the destabilisation of the prevailing climate (climate change)

The Scottish Government requires the nation-wide reduction of GHG emissions through the Climate Change (Scotland) Act 2009. When introduced, the Act set a target of reducing GHG emissions by at least 80% by 2050, relative to the 1990 baseline year. In October 2019, this was amended by the Climate Change (Emissions Reductions Target) (Scotland) Act 2019. The amendment set out to achieve net zero by 2045 in line with the recommendations of the Climate Change Committee. This long-term aim is one which is supported by WDC. Specifically, the LDP serves to ensure that “renewable energy ... is achieved in line with national climate change targets whilst giving due consideration to environmental, community and cumulative impacts.”

The Scottish Government has prepared a carbon assessment tool for wind farms to help determine the time taken for the carbon impact of the Proposed Development to be reversed by the zero-carbon electricity generation. The assessment tool will be applied to the proposed development and the results reported in the EIAR.

During the design process, the turbines will be sited to avoid the areas of deepest peat as far as practicable, and measures to minimise peat disturbance, especially during excavation, will be considered. To minimise peat disturbance in construction and decommissioning best practice measures will be provided as part of the Construction Environmental Management Plan.

## The local community

**Coriolis Energy and ESB will work closely with local communities, businesses and residents in seeking to ensure that they bring real benefits and help to meet national climate change targets through Vale of Leven Wind Farm.**

### Key Socioeconomic Impacts

The proposed development would create an economic opportunity during construction, through the investment of £20 – 30 million in civil engineering and construction contracts. Opportunities will benefit companies in West Dunbartonshire, such as: construction trades, sub-contracting, suppliers to construction trades, accommodation, security and site services and environmental services.

Also, there are ongoing economic opportunities during operational lifetime of the Wind Farm, with an annual spend of £2.5 – 3.5 million. Main opportunities will include site maintenance and habitat management.

To maximise local economic content, Coriolis Energy will work with Tier 1 contractors to identify opportunities, as well as opportunities for Power Purchase Agreements, to support Net-Zero ambitions of major employers in West Dunbartonshire.

### Business, employment and investment

Coriolis Energy and ESB would like to hear from businesses across West Dunbartonshire and Scotland to ensure that it can fully consider the skills and services of local people and suppliers if the Vale of Leven Wind Farm receives consent. The opportunities available include those for:

- an engineering, procurement and construction 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, craneage, welfare units, etc.
- labour hire companies: engineers, plant operatives and general labourers
- transport: taxis and minibuses for local labourers.

### Community benefit

Coriolis Energy are committed to setting up a community benefit fund to the value of £5,000 per installed MW. This could equate to about £350,000 per year for 35 years (calculated on base assumptions on turbine numbers when the proposed development is consented and operational). This would equate to up to £12.25 million of community-benefit funding over the lifetime of the proposed development.

The communities that will be impacted by the construction and operation of the proposed development will be invited to help shape a community benefit package that best meets local needs. Coriolis Energy and ESB will reach out to local groups and community representatives to seek their input as the project progresses.

### Electricity Discount Scheme

It is for the community to decide the use of the community benefit. If there is interest in using some or all of the community benefit fund to provide an electricity discount scheme for the local communities nearest the wind farm then we would welcome further discussion with community representatives to progress proposals.

There are Electricity Discount Schemes in operation in Scotland for communities that host wind farms.

### Community shareholding

We are committed to the proposed development being a shared ownership project if there is interest in the local community.

Coriolis Energy invites the local community to discuss with us the opportunity for shared community ownership of Vale of Leven Wind Farm.

Shared ownership would be in addition to the Community Benefit Fund and provides a tangible link to the project for the local community.

The communities that will be impacted by the construction and operation of the proposed development will be invited to help shape a community benefit package that best meets local needs. Coriolis Energy and ESB will reach out to local groups and community representatives to seek their input as the project progresses.



## Climate emergency

**We are facing a climate crisis that is being caused, in part, by the use of fossil fuels. Although Scotland produces almost 100% of its electricity from renewable sources, we need to electrify transport and heating and move away from fossil fuels.**

This means we require more renewable energy sources to provide renewable electricity and decarbonise our transport and heating by, for example, moving away from petrol and diesel cars, and gas boilers.

The Scottish Government has declared a Climate Emergency and has set out ambitions for 8–12 GW of new onshore wind power to help reach Scotland's 2045 net-zero target. Scotland and the rest of the UK have legally binding targets to reach net zero and new onshore wind development will play a pivotal role in meeting these.

### Project contribution

Vale of Leven Wind Farm has the potential to make an important contribution to the decarbonisation of our electricity system: the project could produce enough energy to power the equivalent of 52,092 homes.

### Energy Security

Onshore wind is the cheapest form of renewable energy and Scotland has some of the best wind resource in Europe.

With the cost of living and energy prices rising, the question is often asked, why are energy bills increasing if onshore wind is the cheapest form of electricity generation? This is due to the 'merit order' that is used when every generation type is available to meet demand. In this, technologies are ranked to determine which is brought into the grid first. Fossil fuel generation has a high marginal cost (the change in the total cost of producing an additional quantity); however, the marginal cost for renewables is almost zero. Therefore, when they are available, renewables are always chosen for the grid first because they are the cheapest to run, but the electricity price reflects the higher marginal cost of gas when this is needed for the grid.

The Office of National Statistics states that gas is used to fuel about a third of the UK's electricity generation, so rising gas prices have, in turn, led to rising electricity prices.

The design of electricity systems still has to catch up with the role of renewable energy, and this is recognised by the UK Government and Scottish Government, who have plans to make the grid more 'renewable ready' to ensure far more renewables can go into the grid at reduced cost.



STOCK PHOTOGRAPHY

## What next?

**Coriolis Energy hopes to submit its application for consent for the Vale of Leven Wind Farm project to the Scottish Ministers in spring 2023. The Scottish Government will undertake its own consultation process when the public will be invited to make formal comment on the proposals.**

In the meantime, we would welcome your feedback on our proposals for Vale of Leven Wind Farm and can provide further information if required. Details of the feedback provided to us via our public consultation will be captured and included in a statement of community consultation provided to the Scottish Government alongside the application for consent.

Please note that comments made to Coriolis Energy are not representations to the West Dunbartonshire Council or Scottish Ministers.

You can view more detailed information on our website: [www.valeoflevenwindfarm.com](http://www.valeoflevenwindfarm.com)

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