

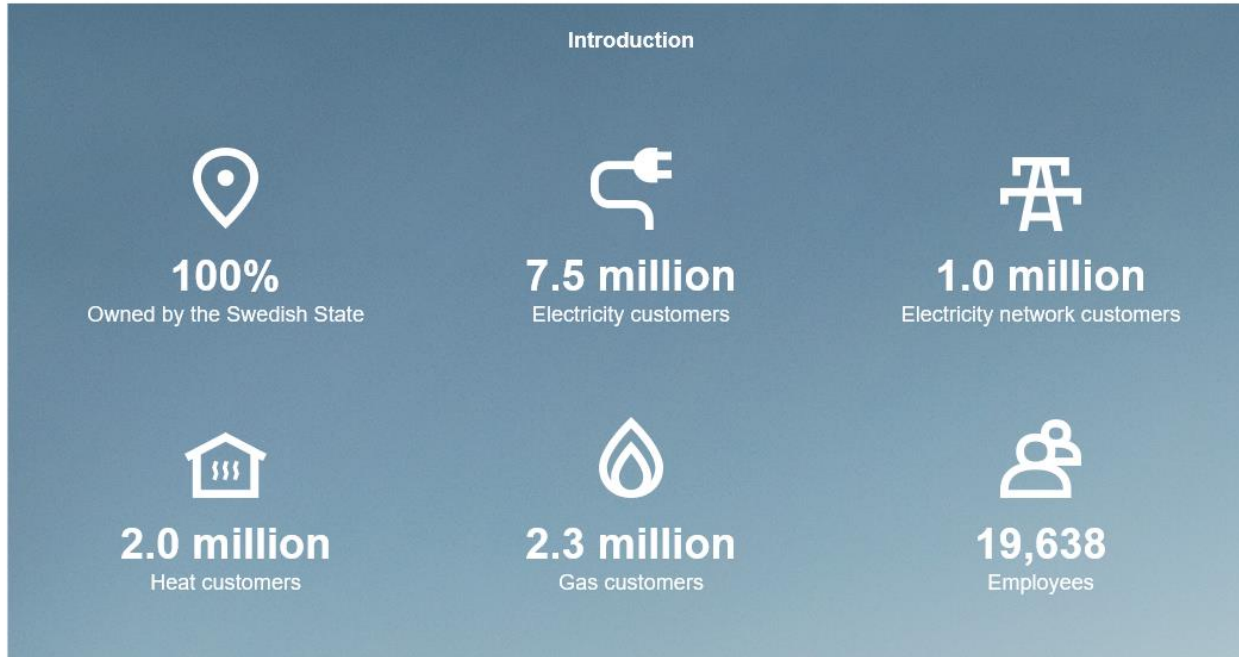
Frequently Asked Questions
December 2024

South Kyle II Wind Farm

About the project and the developer

Who is proposing the wind farm?

Vattenfall is one of Europe's largest producers and retailers of electricity and heat



Vattenfall in the UK

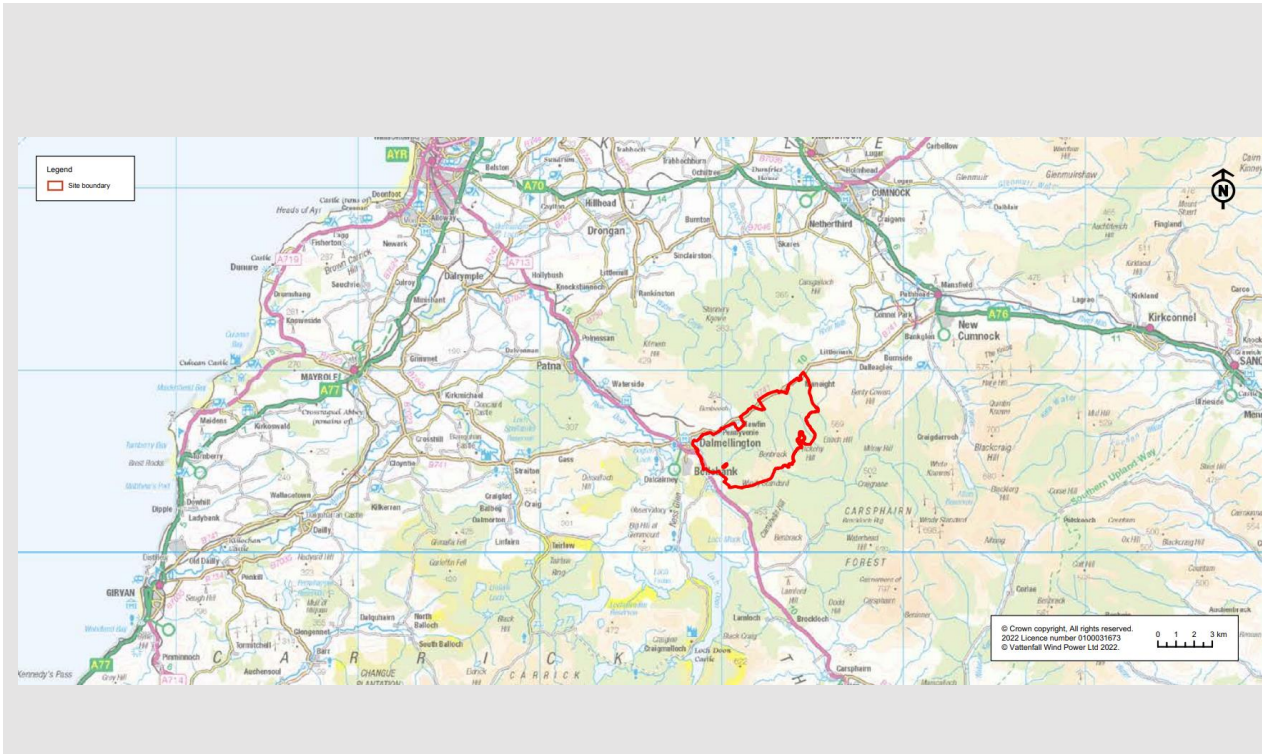
- Vattenfall has been in the UK for more than 15 years.
- Our work in the UK includes low carbon heating, on and offshore wind energy, electricity networks and delivering fossil free electricity to homes and businesses.
- Through this work we are making a significant contribution towards enabling the UK to reach net zero.
- Locally, developed and now operates the adjacent South Kyle Wind Farm (constructed 2021-23).

About Vattenfall

- One of Europe's leading energy companies
- Owned by the Swedish state
- Powering homes and industry for over 100 years

Where is South Kyle II Wind Farm?

The proposed site is in East Ayrshire, between Dalmellington and New Cumnock

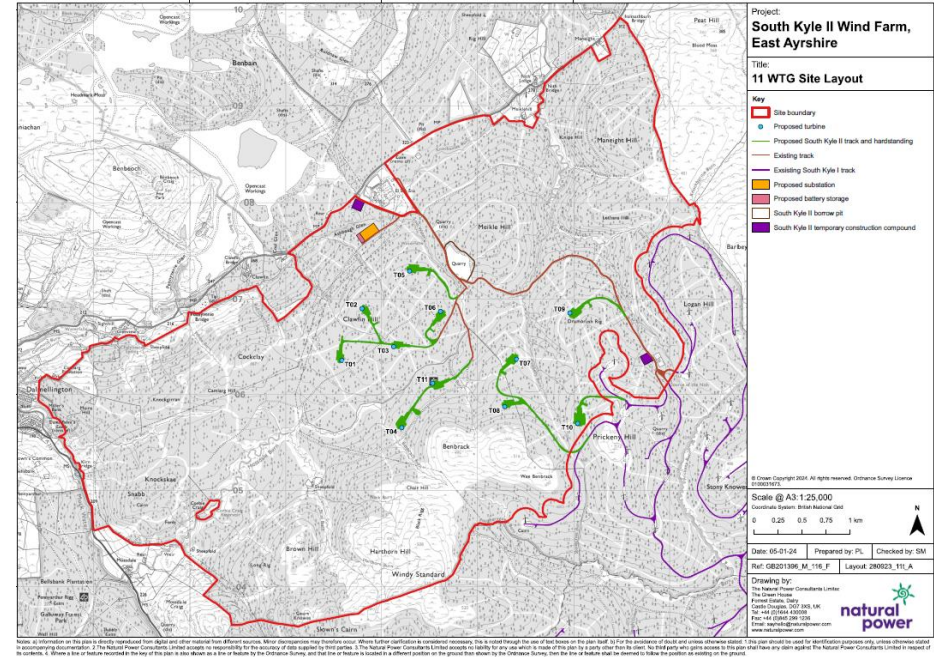


- South Kyle II is a proposed wind farm in East Ayrshire, north-east of Dalmellington and south-west of New Cumnock.
- Based on the current proposed layout, the nearest turbine to Dalmellington would be around a 3km distance, and around a 9km distance from New Cumnock.
- The site is on land currently used for commercial plantation forestry. It is adjacent to the now operational South Kyle Wind Farm.

What is being proposed?

South Kyle II would be an up to 11 turbine wind farm with the capacity to generate up to 92MW of electricity

- South Kyle II Wind Farm is a proposed onshore energy project of up to 11 wind turbines plus associated infrastructure and battery storage.
- The wind turbines would be up to 200 tip height.
- Collectively, the 11 wind turbines would have the capacity to generate up to 92.4MW of renewable electricity. This energy would be fed into the national grid, powering homes, businesses and public services.
- The wind farm would have the capacity to generate enough power to cover the needs of around 80,000 average homes.
- The wind farm could have an operating life of up to 40 years.
- The wind farm will also generate funding for local communities. Based on £5,000 per megawatt of installed capacity per year, this will be over £18million throughout the project's 40 year operating life.



What's new: turbine heights and battery storage

South Kyle II's turbines will be taller than most of those currently installed in the area, and the development will include battery storage.

Why are the turbines up to 200m tip height?

- South Kyle II proposes turbines of up to 200m tip height. Although taller than turbines currently installed in the local area, this is similar to the heights being proposed by most new wind farms in the region and reflects what manufacturers will be producing by the time construction gets underway.
- At this height, the wind turbines will be more efficient, generating more electricity per rotation. This means South Kyle II Wind Farm can make a significant contribution to home grown-renewable electricity. Please see the online exhibition for more information.
- And by increasing South Kyle II Wind Farm's generating capacity, these taller turbines can also positively impact on community benefit funding.

What is battery storage?

- Battery storage is an increasingly important part of renewable energy mix. Co-locating lithium ion batteries (often repurposed from electric vehicles) on wind farms means we can help keep the grid stable and enable excess electricity to be stored and fed back into the grid.
- At South Kyle II Wind Farm, battery storage will be around 50MW and will be housed adjacent to the substation.

How has the project been designed?

Vattenfall's plans for South Kyle II Wind Farm have undergone an extensive and robust design process

2021

- Vattenfall begins considering the potential to develop a wind farm on land adjacent to South Kyle. The project is named South Kyle II Wind Farm.

2022

- Initial assessments suggest the site could accommodate a 17 turbine project. Local specialist Natural Power are engaged as consultants, a scoping report is submitted to the Scottish Government, and details are published with local stakeholders informed and invited to feedback.
- To reduce impacts on nearby residential properties, the number of proposed turbines is reduced from 17 to 9 with maximum turbine tip height lowered from 220m to 200m. Public exhibitions were held in Dalmellington, New Cumnock and online, with feedback invited.

2023

- Extensive environmental and technical assessments continue as part of our design review process.
- Feedback is fed into the development process, and Vattenfall continues to engage with local stakeholders.

2024

- The design team identify an opportunity to reduce the separation distance between turbines in the centre of the site resulting in the addition of two turbines. The proposed layout is updated to an 11 turbine scheme and published, with stakeholders and local communities invited to feedback. Exhibitions are held in Dalmellington and New Cumnock and online.
- Feedback is fed into the design process. The topics raised and Vattenfall's response is fed back to local stakeholders, as the proposals near finalisation.

Why this location? (1)

The location of South Kyle II Wind Farm has excellent wind resource and connectivity.

- The suitability of an area for wind farm development is dependent upon many factors. Large landscapes where there are fewer residential properties, have good wind speeds, are close to existing grid infrastructure and are not protected by designations such as National Parks, National Scenic Areas, Wild Land are seen as the most appropriate locations for new wind farm development. This can mean certain geographical areas of Scotland and the UK as a whole are more suitable to accommodate a higher number of onshore wind farm developments than other areas. This is directed by the Governments national planning policies and local planning policies.

Aren't there enough wind farms here already?

- If Scotland, the UK, and the rest of the world is to achieve carbon emissions targets, more renewable energy sources will be required everywhere. Onshore wind is the cheapest ways to generate renewable electricity, and South Kyle II Wind Farm would mark a step closer to achieving a decarbonised future. In addition, as our society moves away from fossil fuels to heat our homes and fuel transport, we will all need to consume more electricity.
- East Ayrshire is abundant in wind resource and remains highly attractive to wind developers. Ensuring such developments benefit not only the climate but the local area is, we believe, the responsibility of developers, and that's why Vattenfall is committed to working with communities and agencies to deliver tangible benefits for those who live, work and visit in the local area. We worked hard to deliver this at South Kyle, the 50 turbine wind farm now operational east of Dalmellington. This approach supported hundreds of local jobs and spent millions with locally based businesses.

Why this location? (2)

Can the grid cope with more wind farms?

- The national grid is currently being upgraded across the country. South Kyle II Wind Farm will, along with other renewable developments, upgrade the parts of the grid that they connect to. This will ultimately bring forward improvement work to the local and national grid capacity.

Will the wind farm export energy to England?

- As with most wind farms in Scotland, electricity generated by South Kyle II Wind Farm will be fed into the National Grid. This operates throughout Great Britain, keeping the lights on and energising communities, services and the economy. Indeed, for many decades, Scotland has made a significant contribution to meeting the UK's energy consumption needs - from oil and gas to renewables - and projects such as South Kyle II Wind Farm can help accelerate the decarbonisation of energy use across the country.

What stage are the plans at?

As of November 2024, we are finalising the proposal.

- The proposals for South Kyle II Wind Farm are now being finalised. This is based on around four years of research, assessing the potential of the location and how the excellent wind resource can be harnessed efficiently and sympathetically to the landscape and topography.
- When finalised, the proposal will be submitted to the Scottish Government's Energy Consents Unit (ECU) who are the determining body for large scale wind farms. At this point, the formal planning consultation will commence. The ECU will seek the views of statutory consultees including East Ayrshire Council.
- Should consent be granted, Vattenfall aims see construction of South Kyle Wind Farm commence around 2028, and operational in 2030.
- Vattenfall will continue to engage with local communities throughout the planning and construction phases, with a particular focus on maximising local opportunities for jobs, businesses, communities and habitats.

Landscape and visual impact

Landscape and visual impact

Please view the visualisations in the online exhibition.

How will the wind farm affect the landscape?

- Vattenfall recognises the wide range of opinions people may have on the visual impact of wind farms. For some, they are problematic and unwelcome. For others, they are welcome additions and a positive symbol of the changes we need to make to combat climate change. Others simply don't have an opinion. Points of view – literally and figuratively – on wind farms are many and varied.
 - Taking all of these views into consideration is important in finding the right balance and we use landscape topography wherever possible to inform our wind farm design.
 - Vattenfall has also conducted a detailed landscape impact assessment as part of our planning application
- To assist with this, and to help local people understand how the wind farm may look from numerous points across the area, we have produced vantage point representations and Zone of Theoretical Visibility (ZTV) maps and photomontages. These can be viewed in our online exhibition.
 - Bespoke illustrations from specific addresses may be produced on request. Please contact the Project Team with details of your address/location.

Local residents

Local residents (1)

What impact will there be in terms of noise, shadow flicker or vibrations?

- Wind farms individually and cumulatively face strict planning requirements about the amount of noise they can generate during their operational periods, and this has been an important part of the Environmental Impact Assessment for South Kyle II Wind Farm. We have demonstrated within our EIAR how noise levels would be kept within established guidelines.
- Our data gathering has enabled us to identify where noise may be an issue and adapt our scheme design accordingly. For example, a number of turbines which were initially proposed have now been removed from our plans to ensure South Kyle II Wind Farm does not exceed cumulative noise limits.
- As with noise, the possibility of shadow flicker at nearby properties has been 'designed out' of the wind farm through careful turbine location relative to properties. Where turbines cannot be moved, mitigations exist to prevent shadow flicker causing annoyance, for example by stopping certain turbines turning when the risk of shadow flicker is high.
- To address this question of vibration and how it may relate to South Kyle II Windfarm, Vattenfall appointed independent specialists. Their studies have verified that the level of ground borne vibration generated from the operation of wind turbines is extremely low.

Local residents (2)

Will local property values be affected?

- There are a variety of studies about the impact of wind farms on house prices. One of the largest studies is by the Centre of Economics and Business Research (2014) which analysed 82,000 property transactions within a 5km radius of wind farms in England and Wales and concluded that house prices followed broader trends identifiable within the relevant county

Will there be aviation lighting?

- Yes, all structures in the UK over 150m can require aviation lights as part of international regulations. Following discussions with the Civil Aviation Authority five of the perimeter turbines will require fixed lighting T01, T04, T05, T09 and T10) and the other 6 will not. The impact of aviation lighting on the night sky will be a particular focus of our environmental impact assessment
- Aviation lighting effects can be minimised in a number of ways such as a reduction in the number of turbines with fixed lighting and visibility sensors that reduce the candela luminosity in certain atmospheric conditions.

- By its nature, aviation lighting is designed to be seen by aircraft passing at height and is therefore much less visible to those close by and at ground level.
- Night-time visual assessments have been undertaken and wireframes will be included within our Environmental Statement.
- Vattenfall have instructed a study by Dr Stuart Lumsden on the visibility of Aviation Warning Lights at night for South Kyle II. This report will be part of the EIAR along with aviation lighting visuals from key viewpoints. In summary, from his analysis, the lights appear similar to bright stars (albeit red) from the selected night-time viewpoints, with background light pollution reducing the contrast we see them at from many locations. In twilight, they are sufficiently distant that the brightness of the lights against the sky is limited somewhat by contrast with the background.

Ecology and natural habitats

Ecology and natural habitats (1)

How will South Kyle II Wind Farm protect and enhance the local environment and natural habitats?

- Vattenfall is committed to protecting the natural environment around our wind farms. As part of our assessment of South Kyle II, we are surveying the site across the seasons for birds, bats, protected mammal species, fish, flora & fauna.
- Like any form of development, wind farms can affect the wildlife around them. There are a number of ways we address potential adverse environmental impacts:
 - Through site design, for example the size, number, and location of turbines
 - Through mitigation during all phases, for example managing habitats onsite to encourage wildlife to visit parts of the site where there are no, or fewer turbines
 - Through compensation, for example creating new habitats to replicate or improve habitats affected by the location of infrastructure
- In addition, through our habitat management plans, we help to improve habitats and biodiversity interests.
- For example, our Pen y Cymoedd wind farm in Wales is a key part of one of the country's largest peatland restoration projects benefitting a wide range of rare species such as Nightjar.
- For South Kyle II Wind Farm a detailed Habitat Management Plan will be developed and submitted for approval. This would happen post consent should planning permission be granted.
- We have also been careful with the siting of the turbines to protect areas of deep peat as much as possible.

Ecology and natural habitats (2)

Forestry and felling

- To minimise the requirement for new roads, existing wind farm and/or forestry roads will be utilised as far as possible.
- Felling is to be expected in an area of plantation forestry such as South Kyle II. Felling required for the wind farm will be subject to replanting, and an improved species mix to enhance biodiversity.

Turbine blades and microplastics

- Leading edge protection coatings on wind turbine blades are specifically designed to minimise erosion. A well maintained and serviced blade (which is important also to wind turbine performance) should lose very little material.

Birds and wildlife

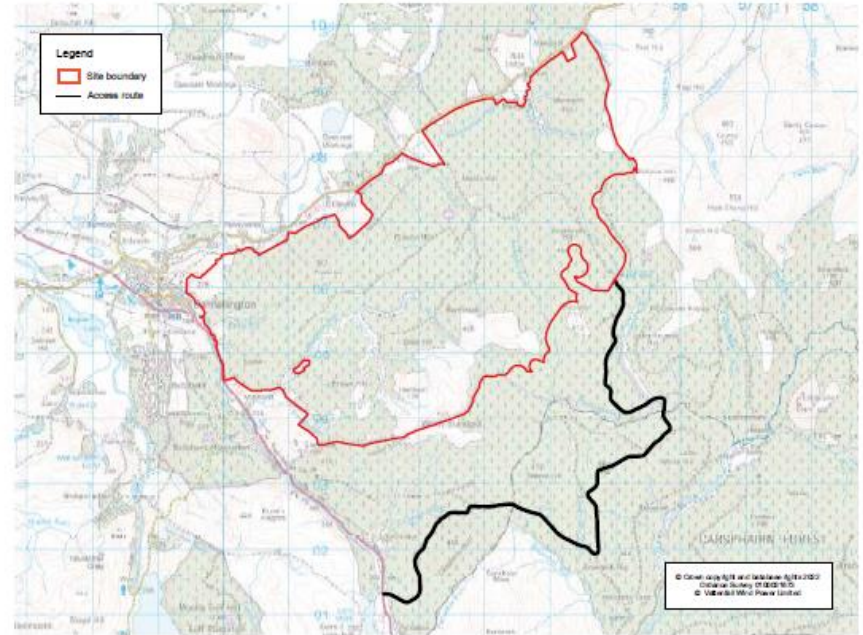
- Flight activity surveys and Collision Risk Modelling (CRM) have been carried out as part of the EIA process. From this, ornithological features were identified and of these only one Important Ornithological Feature (IOF), goshawk, was identified in the context of the Proposed Development.
- There are no predicted significant effects on goshawk as a result of the Proposed Development, including cumulative effects. Additionally, there are no predicted significant effects on other ornithological features recorded during baseline ornithology surveys for the Proposed Development.
- For all ornithological features, although no species-specific mitigation is required, various embedded measures will be implemented to ensure compliance with legislation, and to follow good practice guidance with regard to breeding birds. In addition, an EMMP has been prepared which includes measures for habitat enhancements and ornithological monitoring and is provided as an Appendix of the EIAR.

Traffic and transport

Traffic and transport

How will traffic access the site?

- Vattenfall is committed to working with local communities, authorities and contractors to both minimise disruption and maximise opportunities. The proposed turbine delivery route will be as per the one used for South Kyle wind Farm– via the A77 and A713, and the existing South Kyle Wind Farm main entrance south of Dalmellington.
- The impact on local road users has been thoroughly considered as part of our EIA work, and further specific details will be agreed with the relevant authorities post consent. Whilst some disruption is inevitable, Vattenfall will try to keep this to a minimum like we did for South Kyle Wind Farm.



The proposed access route is from the A713 and through South Kyle Wind Farm's existing southern entrance.

Socio-economic issues

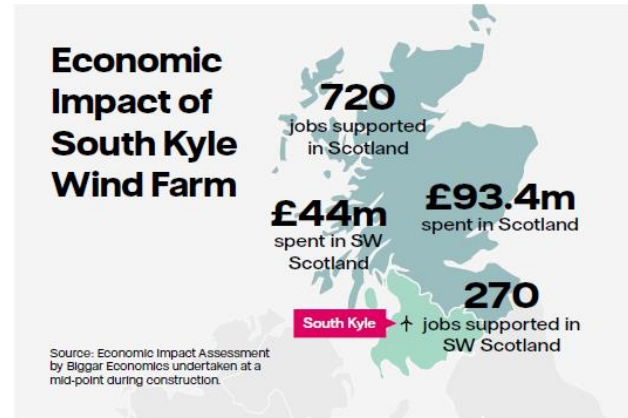
Socio economic issues (1)

Will the wind farm create jobs and opportunities?

- More than 70% of Vattenfall's onshore wind expenditure in the UK is with British businesses. There are a range of opportunities from very local small businesses to multi-national companies. Typical opportunities for British businesses cover everything from civil and electrical engineering, environmental studies, plant and equipment hire through to communications, security, and cleaning. In the longer term, the wind farm will require technicians to operate and maintain the facility on a daily basis over its lifetime.
- From 2020 to 2023, Vattenfall developed South Kyle Wind Farm. Our approach at this project focussed on maximising opportunities for local jobs and businesses. Independent analysis showed the project supported hundreds of jobs in Ayrshire and Dumfries and Galloway, and spent c£44million with businesses based in south west Scotland. With South Kyle II Wind Farm we want to build on this approach and bring further socio-economic benefits to local communities.

Will local heritage be protected?

- Yes. Protecting heritage assets is an important factor in our development of proposals for South Kyle II Wind Farm and has been properly considered within our EIA.
- Where impacts are unavoidable, it is of course an opportunity to responsibly excavate and learn more about the lives of our ancestors.



Socio economic issues (2)

How will the wind farm impact tourism?

- Whilst individual opinions vary, there have been a number of studies which show no relationship between wind farms and tourism. For example, a 2017 study by BiGGAR Economics showed that between 2009 and 2015, onshore wind increased by 121% in Scotland whilst over the same period the number of people employed in tourism rose by 15%. This includes areas with higher proportions of onshore wind than other parts of Scotland.
- A [study in Autumn 2021](#) showed support for onshore wind at 80%
- A [2016 ComRes poll](#) found that even in rural areas support for wind farms was at 65%.
- Studies for the Scottish Government have also found that 64% of tourists polled either had positive or no feelings towards wind farm development. In addition, a 2012 Visit Scotland survey of tourist attitudes found that 80% of UK respondents said their decision on where to go would not be affected by a wind farm.
- We do, however, appreciate concerns about tourism and are committed to exploring how the proposed wind farm can support the area's tourism aspirations and actively supporting local accommodation providers should construction go ahead.

Community investment

Community investment

How will community benefits be delivered?

- If approved, South Kyle Wind Farm could bring many benefits to local communities, including community investment worth equivalent of £18.4million over 40 years.
- Local communities decide how community benefits income is used. This could be as a traditional Fund supporting grants to local projects or the investment could be used to tackle specific challenges facing local communities.
- In recent years communities have directed this donation to things like energy efficiency, sustainable transport and Community Wealth building projects. Ideas like these help communities use this income to build their resilience in the face of rising costs and climate change.

Will shared ownership be offered?

- Yes. Vattenfall will offer local communities the opportunity to acquire an interest in South Kyle II Wind Farm, subject to their being sufficient local interest. We would be pleased to discuss this option further with interested groups.



Contact us

Contact us

How can I get in touch with the team?

Postal address:

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NE46 3QQ

Email Simon, Holly and Carol

at: southkyle2.windfarm@vattenfall.com

To find out more please visit our project webpage: [South Kyle II Wind Farm - Vattenfall](#)

How are you engaging with the local community?

- Vattenfall is engaging with local communities by post, email, phone and through digital means
- An online exhibition for the project can be viewed [South Kyle II Wind Farm - Vattenfall](#)

Next steps

- Following the second round of pre-application consultation, Vattenfall is now finalising its proposals for South Kyle II Wind Farm.
- We aim to submit the application to the relevant planning authority – the Scottish Government – in early 2025.