



**ENERGY
ISLES LTD**

WIND FARM

**HELPING TO BUILD A
SUSTAINABLE FUTURE**

WELCOME

A warm welcome from Energy Isles to this exhibition which is designed to update you on the progress of the Energy Isles Wind Farm.

Members of the Energy Isles Team are on hand to answer any questions you may have, so please do feel free to ask.

Energy Isles Ltd is a consortium of over fifty mainly Shetland-based companies working together to develop a plan for a wind farm in the north of Yell. Companies in the group come from a wide variety of existing sectors including fishing, aquaculture, crofting, marine engineering, renewable energy and support services. Several are based in the North Isles.

Energy Isles was created to develop a plan for a large-scale wind farm in the north of Yell. We have a strong desire to ensure that the considerable benefits of additional renewables developments in Shetland are enjoyed locally and we believe that responsible development involves consulting widely with our local communities.



For more information please visit
www.energyisles.co.uk



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ABOUT THE PROPOSAL



The location for the Energy Isles wind farm has been selected for the following key reasons:

- ▶ **Great wind speeds;**
- ▶ **A rare opportunity to diversify and develop our local economy;**
- ▶ **To contribute to Shetland's energy mix.**

In 2017 we asked the Energy Consents Unit for their formal opinion on the information we would need to supply in our Environmental Impact Assessment Report (EIAR).

We are now in the final stages of preparing our EIAR which will be submitted with our planning application in the spring.

The Energy Isles Wind Farm has continued to evolve as the survey work has progressed. By considering the results of our environmental surveys, technical constraints and feedback from community consultation, the final design of the Energy Isles Wind Farm not only ensures high efficiency but has allowed us to more than halve the number of turbines originally envisaged without reducing output. Therefore, the final design is 29 turbines each with a tip height of up to 200 m, rather than the initial scoping layout of 63 turbines.

Further information on how this has been achieved can be found in the fact sheets available at this exhibition.

CURRENT FACTS AND STATS

Number of Turbines 29

Turbine Tip Height Up to 200 mtrs

Lifespan of Wind Farm 30 years

Location North Yell

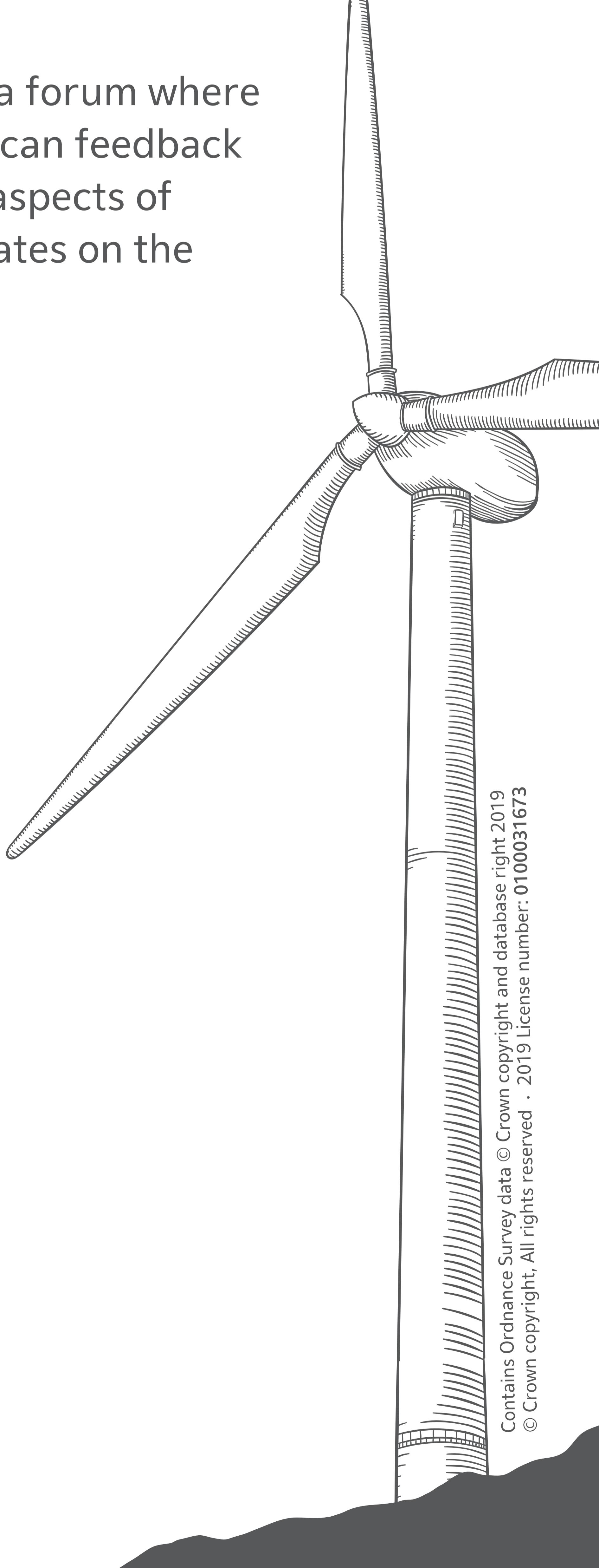
Energy Generation 145-200 MWs

IN TOUCH WITH COMMUNITIES

Energy Isles wants this unique development to have a positive and lasting impact on those who live and work in the North Isles and across Shetland.

Therefore, we have established the Energy Isles Wind Farm Community Liaison Group with members of the Yell, Unst and Fetlar Community Councils.

The Liaison Group provides a forum where community representatives can feedback your valued opinions on all aspects of the project and receive updates on the proposed development.



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ENVIRONMENTAL IMPACT ASSESSMENT

The Environmental Impact Assessment (EIA) has been undertaken by specialist environmental and technical consultants. This is a process which identifies and assesses the likely significant effects of the development and which has informed the design of the wind farm from an environmental perspective.

The results and findings of the EIA are detailed in an Environmental Impact Assessment Report (EIAR) which will be submitted with the planning application.

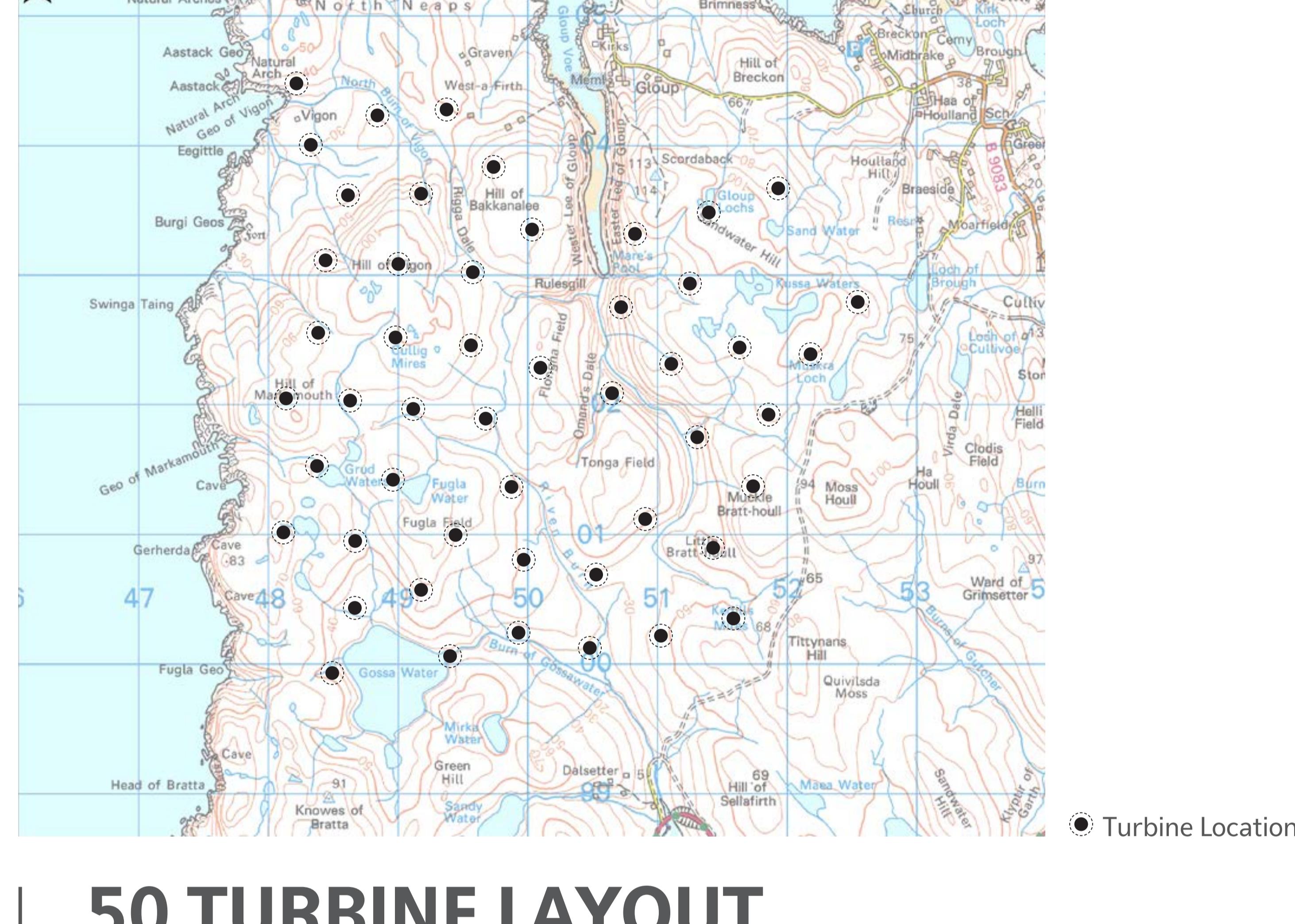
We have assessed the potential effects of the development on the following environmental topics:

- ▶ **Landscape and Visual Effects;**
- ▶ **Ecology;**
- ▶ **Ornithology;**
- ▶ **Noise;**
- ▶ **Hydrology, Hydrogeology and Soils;**
- ▶ **Cultural Heritage;**
- ▶ **Transport and Access;**
- ▶ **Socio-economics and Recreation; and**
- ▶ **Infrastructure, Aviation and Safety.**

For further information on the key findings of the surveys please speak to a member of the Energy Isles Team, or see the fact sheets available at this exhibition.

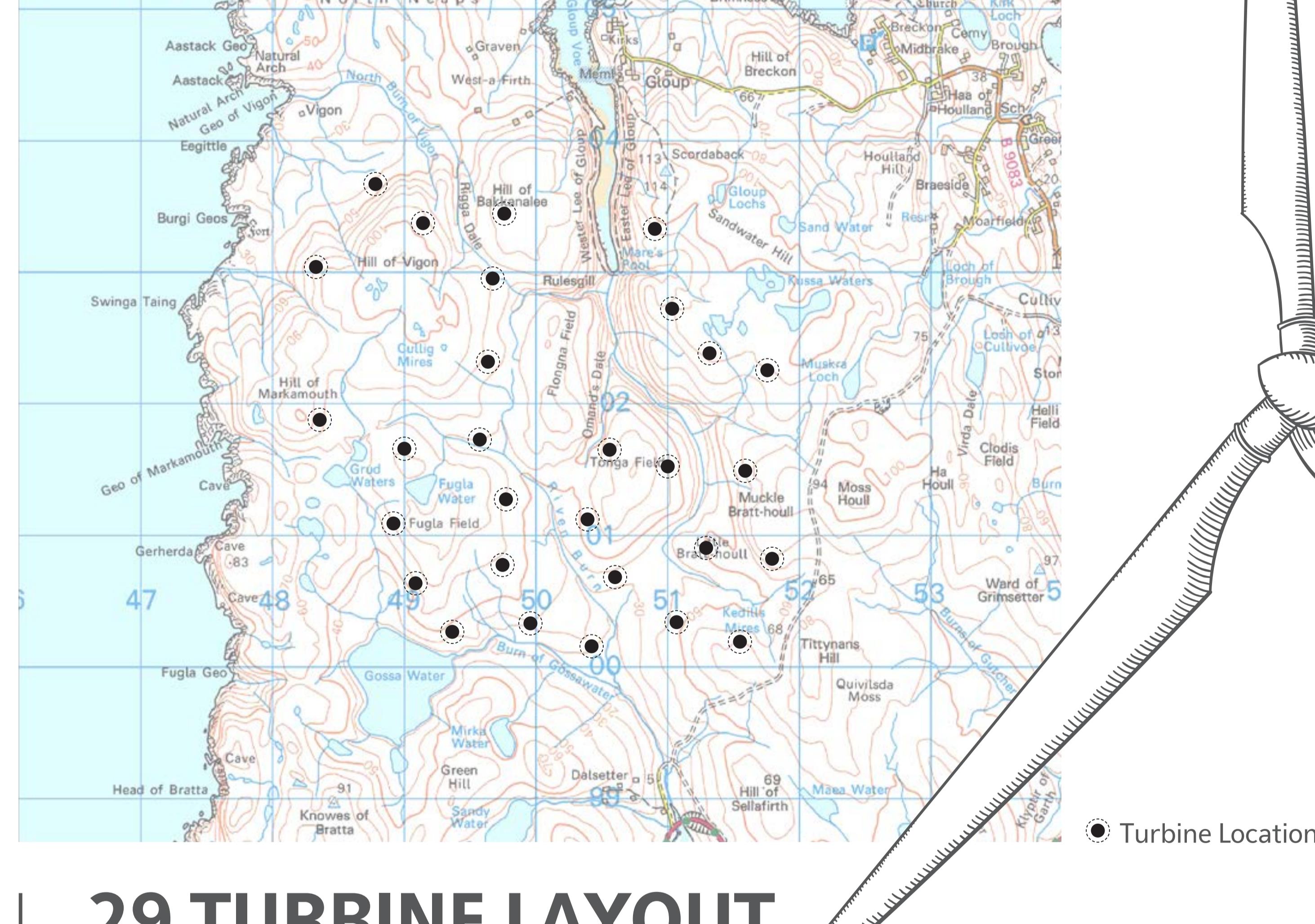
DESIGN EVOLUTION

The original scoping layout of 63 turbines was a desk-based exercise, arranged using standard turbine spacing within the land available and taking account of known basic hydrology, topography and wind data constraints.



50 TURBINE LAYOUT

The first iteration was made after initial environmental studies had been undertaken between 2014 and 2017. This design had 50 turbines and was presented at our first round of exhibitions in 2018.



29 TURBINE LAYOUT

This layout has reduced the number of turbines from 50 to 29. The removal of these turbines reduces the impact on peat, nesting birds and the visual impact from key receptors.

The proposed 29 turbine layout has taken account of the on-site constraints, the detailed technical and engineering appraisals, the extensive environmental surveys and the comments received through the consultation process.



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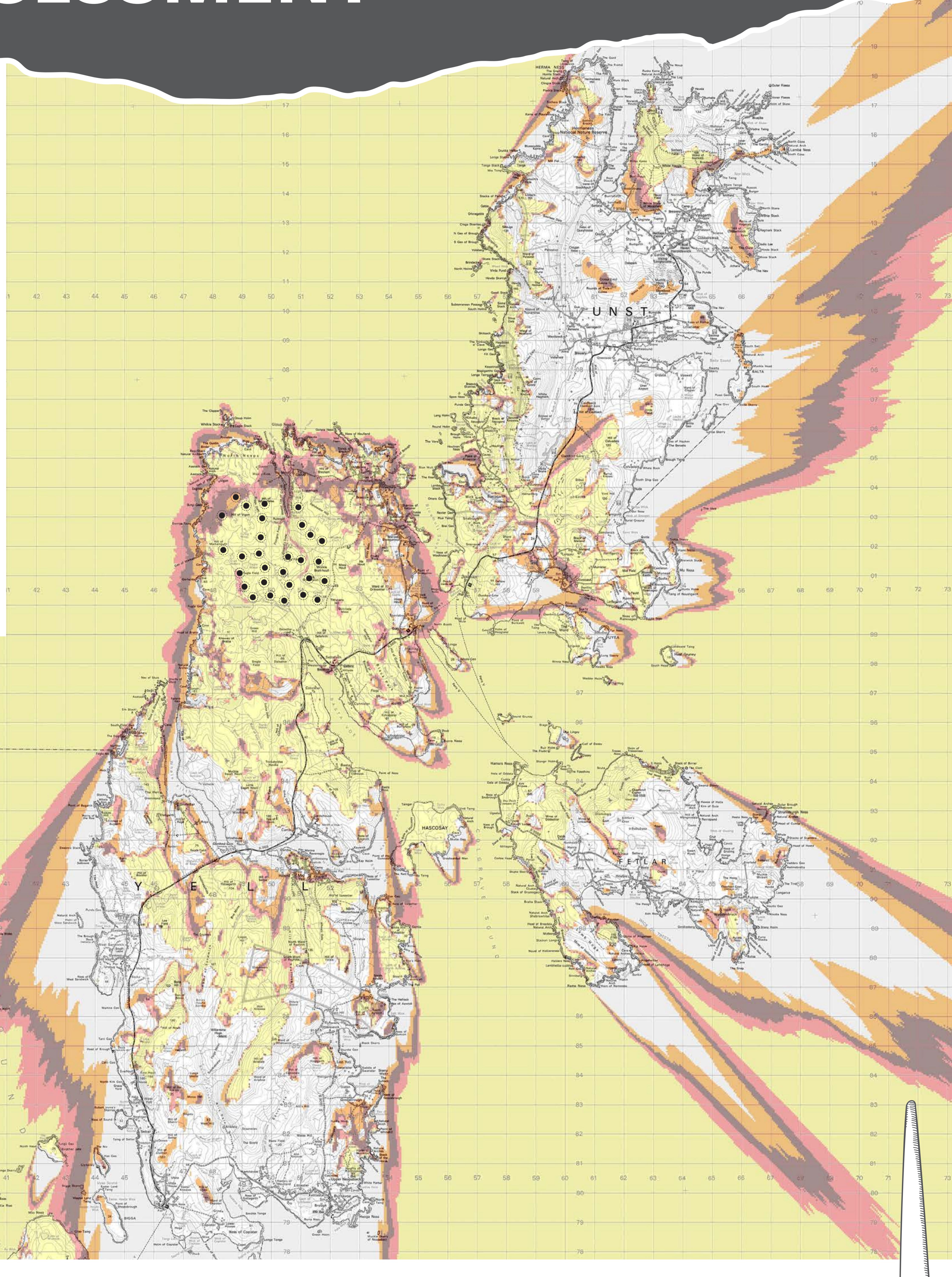
LANDSCAPE AND VISUAL IMPACT ASSESSMENT

ZTV TO 35 KM
WITH VPS, TURBINE
LOCATIONS AND
SITE BOUNDARY

● Turbine Location

Turbine Visibility

1 - 7
8 - 14
15 - 21
22 - 29



A full landscape and visual impact assessment based upon a selection of key viewpoints was agreed with Shetland Island Council and Scottish Natural Heritage and supports the planning application.

The maximum potential visibility of the wind farm in the surrounding landscape is illustrated by the Zone of Theoretical Visibility (ZTV). The ZTV does not allow for the consideration of buildings and other vertical structures which can obscure actual visibility on the ground.

So, whilst a wind farm might be 'theoretically visible' out to 35 km and beyond, in practice, the impact is minimal at this distance and, in fact, may be considerably less.



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CLIMATE CHANGE AND ENERGY SECURITY

OUR FUTURES ARE AT STAKE

Since the dawn of industry, we have been using oil, coal and gas to provide us with the power we need to thrive and prosper. As a result, we are now facing the biggest environmental challenge of all time - global warming.

Around the world sea levels are rising, landscapes are changing, and whole species are disappearing. The seas around Scotland have warmed by up to 1°C over the last 20 years. Warmer seas have prompted changes in the composition, abundance and distribution of a number of marine species, including plankton, fish, sea birds, whales, mammals, dolphins and porpoise.

Here in Shetland, we see the effects of climate change on our native species and more frequent severe weather incidents causing disruption to normal services.

We cannot continue releasing carbon into the atmosphere. Not just because it contributes to the rise in temperature, but because our ever-increasing demand for energy is rapidly diminishing finite stocks.

Fortunately, we have the technologies to replace fossil fuels with sustainable energy systems based on the efficient use of renewable energy. Renewable energy is harnessed from limitless natural sources - our sun, our wind and our water provide clean, natural alternatives.

ONSHORE WIND

As the most well-established and cost-effective source of renewable energy, onshore wind is expected to continue making an affordable, clean and significant contribution to the UK's energy mix.

Shetland has a world-class wind resource, and is well placed to help the UK and Scotland deliver on its targets.

SECURITY OF SUPPLY

As the world's indigenous sources of fossil fuels are depleted, energy security becomes an increasingly important consideration due to the vagaries of global politics and the rise of energy prices on the world market.

By investing in renewable energy solutions Shetland has the opportunity to continue to export energy using our natural resources.

Photograph by Robert Oodie

For more information please visit
www.energyisles.co.uk



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THE LOCAL ECONOMY, EMPLOYMENT AND BUSINESS OPPORTUNITIES

CREATING JOBS, BOOSTING ECONOMIES

The renewable energy sector in Scotland is now a significant contributor to the local, regional and national economy. If the Energy Isles Wind Farm is consented, there are very clear economic and industrial benefits to be delivered during the construction and operational phases of the project and we will invite local companies to tender for contracts.

We will work hard to procure a range of local services from construction companies, drainage contractors, concrete suppliers, metal fabricators, plant hire, cleaning, waste management, security, fencing contractors and catering and accommodation suppliers.

There will also be operational and maintenance jobs during the lifetime of the wind farm that could draw on the renewable expertise that is building in Shetland and throughout Scotland.

By using the local workforce where possible, the development can have a direct and positive effect on the local economy.

Companies can register their interest by submitting their information at:
www.energyisles.co.uk/suppliers

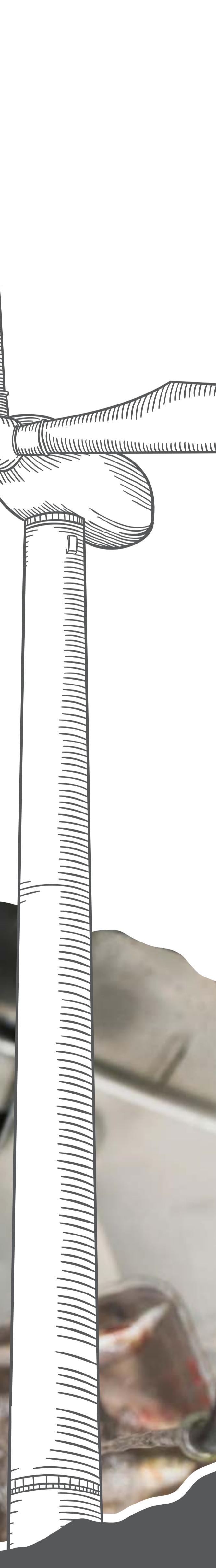
SHETLAND RENEWABLE DEVELOPMENT NETWORK

Energy Isles is pleased to be a part of the recently established Shetland Renewable Development Network initiative. Although our 29-turbine wind farm project is still at an early stage of development it can never be too early to start communicating information to the local supply chain businesses. We are estimating that the wind farm will generate no less than £19.9 million for local businesses during the construction phase and support as a minimum 12 jobs in Shetland during each year of operation.

During this second round of exhibitions we have invited local businesses to a Supply Chain Drop-in Session in the Cullivoe Hall to meet with our Construction Manager and explore the many opportunities available during the construction and operation of the proposed wind farm.

ENERGY ISLES WIND FARM

By creating new employment opportunities, commercial openings for local businesses and providing substantial funding for projects that could help transform the facilities that local people are able to enjoy for decades to come; the Energy Isles Wind Farm has great potential to make a really positive impact in the local area.



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LOCAL DEVELOPMENT FUND

In consultation with the local Community Liaison Group, Energy Isles will establish a dedicated Fund for the Energy Isles Wind Farm.

The proposed wind farm would have an installed capacity of between 145-200MWs and provide community benefit funding of £5,000 per MW. This suggests that the annual contribution of the fund to community projects would be between £700,000 and £1 million each year, equating to at least £17.5 million over the lifetime of the wind farm.

THE WAY FORWARD

We are actively encouraging people to let us know their views on this proposal. We invited Foundation Scotland (an independent charity that provides support and advice to local communities on how to achieve lasting and positive impacts through strategic grant making) to meet with North Isles Community Councils to begin the process of identifying: -

- ▶ **The challenges and opportunities facing your communities in the next 5-25 years?**
- ▶ **What is already in place to help meet these challenges and opportunities?**
- ▶ **How community benefit might assist in building your communities to be more sustainable?**

We believe that such a fund would be a rare opportunity to invest in your community and create a legacy that will outlast the turbines. Investment in the natural, built and cultural heritage of the islands will enhance the quality of life for local people and visitors and provide a catalyst to allow the advancement of further job creation and business opportunities.



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PHOTOMONTAGES

A photomontage is a visualisation which superimposes an image of a proposed development upon a photograph or series of photographs. The photomontages below are for illustrative purpose only. To review the day time and night time photomontages at the correct scale please see paper copies.

HAA OF HUILLAND



CUNNISTER



WESTING



For more information please visit
www.energyisles.co.uk



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YOUR VIEWS ARE VERY IMPORTANT TO US

Please register your comments by handing your completed feedback form to one of the Energy Isles team or place in the box by the door.

Thank you for taking the time to attend today's public exhibition.

If you would like to be kept informed on the progress of the Energy Isles Wind Farm development and the Section 36 planning application please do so by writing to **Energy Isles Ltd, 10 Charlotte Street, Lerwick, ZE1 0JL** or by email to info@energyisles.co.uk.

Please note, comments made at this time do not constitute representations to Scottish Ministers. A further opportunity to make representations to Scottish Ministers will be available following formal submission of the Section 36 application.

This consultation is undertaken in accordance with Section 36 of the Electricity Act (Scotland) 1989.



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