

# Welcome

# Stornoway Wind Farm

Scoping Consultation



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\*Photograph of EDF-R Fallago Rig wind farm EDF-R 2013



# Welcome to the Stornoway Wind Farm Scoping Consultation

This event is designed to set out potential changes that Lewis Wind Power (LWP) may seek to make to its existing plans for the project, including the use of larger turbines, and to get your feedback at this early stage of our considerations.

The exhibition is part of our work to develop a comprehensive understanding of possible impacts these potential changes could have, and how these should be assessed if we ultimately proceed with a new consent application.

Please take as much time as you need to read the exhibition material. There are LWP staff on hand to answer any queries you may have. Should you wish to make any comments feedback forms are provided to complete before you leave the exhibition.



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\*Photograph of Stornoway LWP 2016



# Lewis Wind Power

Lewis Wind Power is the owner of both the consented Stornoway and Uisenis wind farms. The company, through its subsidiary Stornoway Wind Farm Limited, has been developing the Stornoway Wind Farm since 2010, working closely with the community landlord, The Stornoway Trust.

Registered in Scotland, the company is a 50:50 joint venture between EDF Renewables and Wood.



Owns and operates 34 wind farms across the UK, as well as a battery storage unit. The company is part of EDF Energy, which produces 40% of Scotland's electricity, employs more than 1,300 people in Scotland and supplies power to the country's local authorities, schools, public buildings and hospitals through

A global leader in the delivery of project, engineering and technical services to energy and industrial markets. Headquartered in Aberdeen, the company operates in more than 60 countries across oil and gas, chemicals, environment and infrastructure, power & process, clean energy,

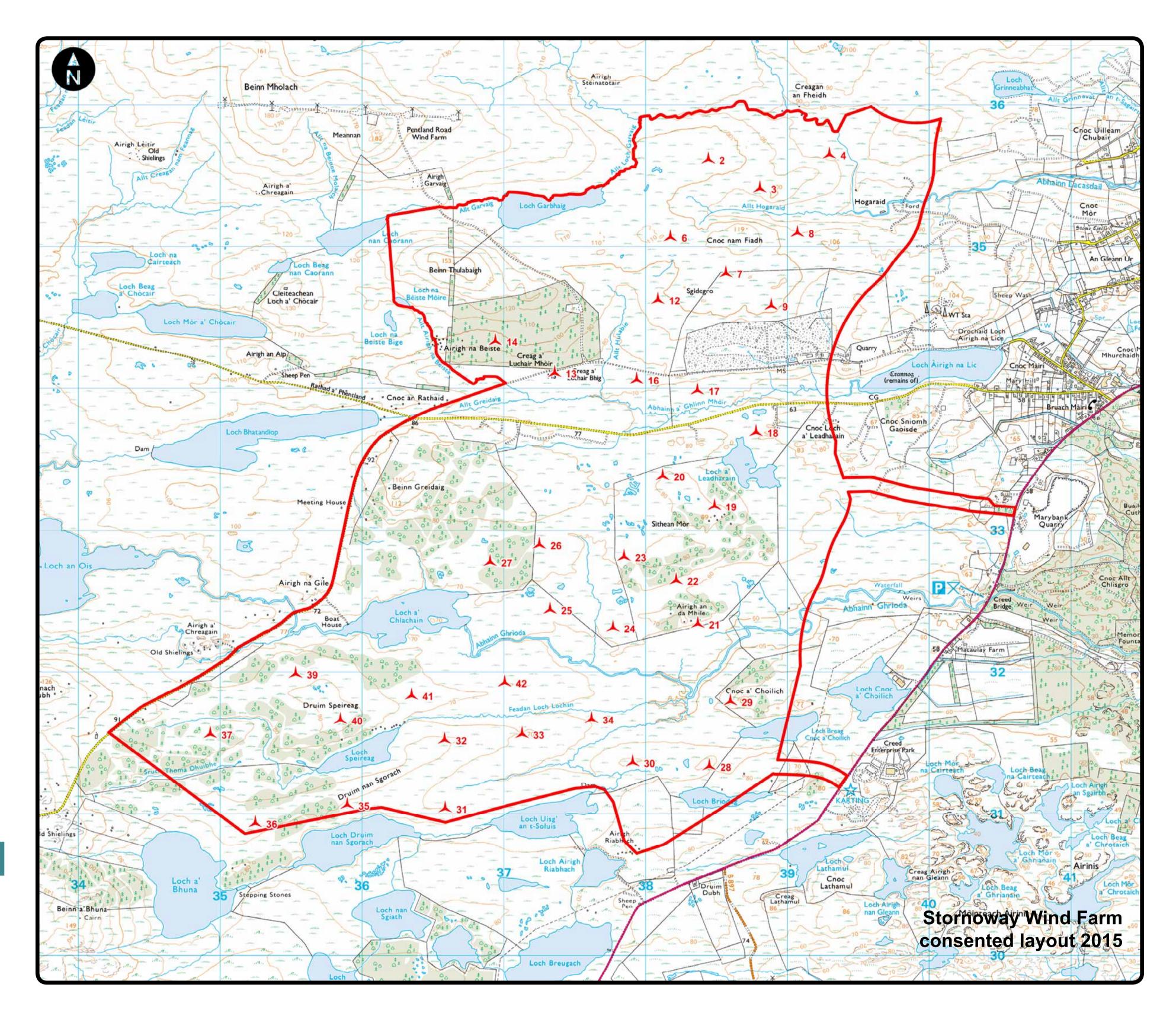
a single contract awarded by the Scottish Government. mining, nuclear and general industrial sectors. It has 4,900 employees based in Scotland.

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# **Background to the project**

Stornoway Wind Farm was originally consented by the Scottish Government in September 2012. The consent was for up to 36 wind turbines with a tip height of up to 143.5m and associated infrastructure. The consent included over 50 planning conditions on the development to ensure its impacts would be acceptable.



In 2015 the Scottish Government approved a variation of the 2012 consent to allow for the installation of larger turbines up to 145m high, with a rotor

## diameter of up to 128m, and a revised internal track layout.

Since the variation to the original consent was approved, LWP has been working to discharge some of the important planning conditions, including the relocation of an existing meteorological radar and ensuring revised approach procedures for Stornoway Airport can be implemented. In addition, a detailed site investigation has been carried out in relation to the ground conditions on the site.

Despite holding a planning consent, an agreement for connection to the grid, and a lease with the Stornoway Trust, LWP has not begun the construction of the wind farm for two important reasons.

The wind farm is dependent on the delivery of a new grid connection with the mainland as the electricity grid on Lewis is at full capacity. Scottish and Southern Energy Networks (SSEN) recently submitted a proposal for a new 600MW cable to the energy regulator Ofgem, but even if approved by the regulator later this year, the connection will not be in place until late 2023. The high capital cost of building a wind farm and the high charges the projects will pay to use the new grid connection means that they cannot proceed without a 'Contract for Difference', the new financial support scheme for renewable electricity. Contracts for Difference, or CfDs, are awarded through a competitive auction process, and the first auction that the project will be able to take part in is expected to get underway in May 2019.

LWP has invested £12m to date, and will continue to invest significantly in order to prepare the project for the CfD auction next year.

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# Potential revised proposals

Lewis Wind Power is now exploring a number of potential changes to its plans for the site as part of its work to ensure it looks at all the options that may be required to secure a Contract for Difference. These potential changes include:

- An increase in maximum tip height from 145m to 155m on turbines closest to the eastern perimeter of the wind farm which is closest to the town of Stornoway;

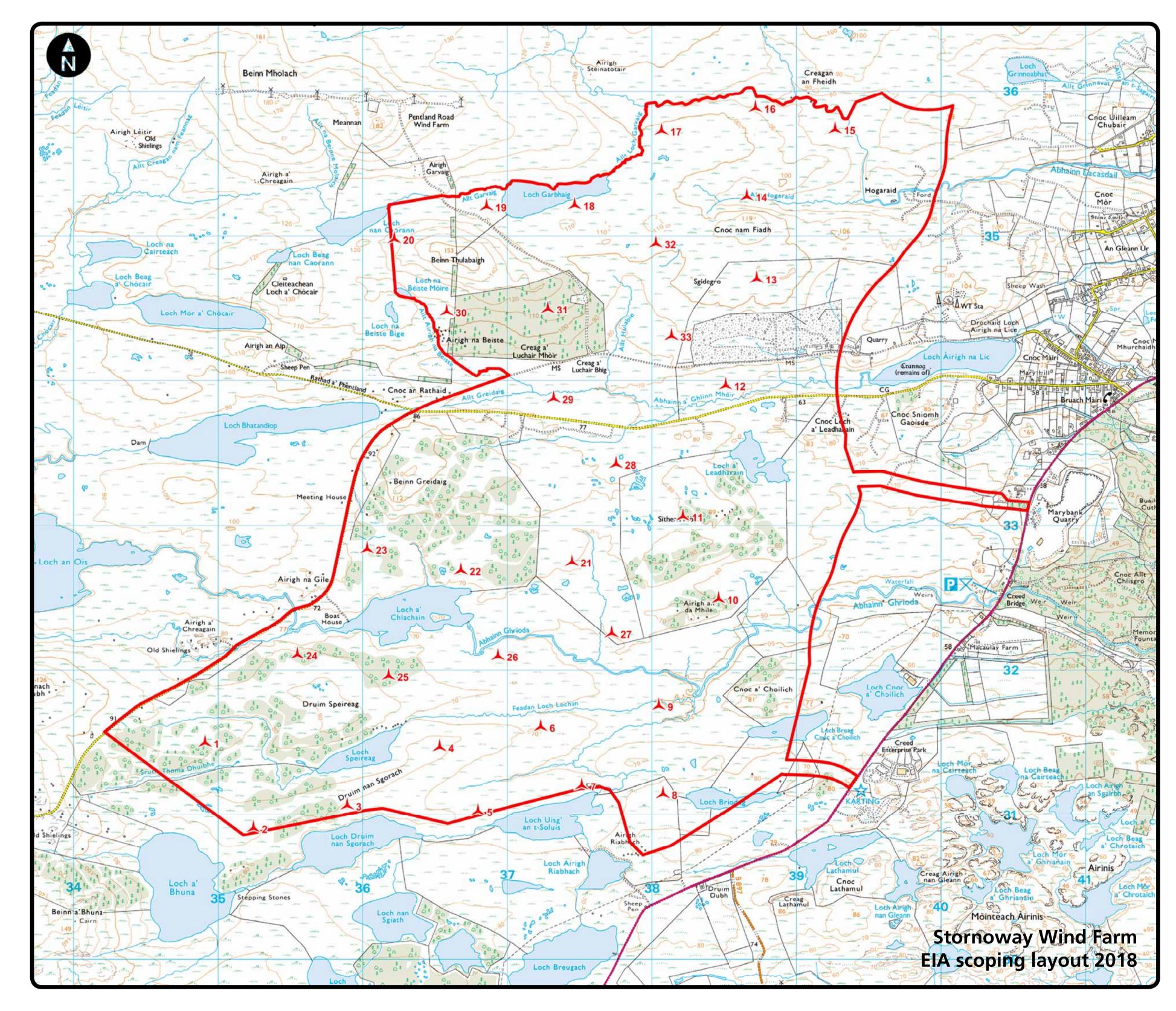
- An increase in tip height up to a maximum of 187m on the other turbines which are located further from the town;

 An increase in rotor diameter from 128m up to a maximum of 150m;

 A revised site layout in order to accommodate the longer blades;

- Co-location of a battery storage system.

We are 'scoping' on 33 turbines but this could increase or decrease slightly if we proceed with our proposals, depending on the feedback received and from our analysis of the optimal layout of the wind farm.



#### It is important to stress that at this stage no decisions have been

made and the company is at an early stage of exploring the potential for these changes. A new consent application would be required if LWP were to pursue these changes, and this would involve further consultation with local residents, businesses and stakeholder organisations, as well as 'statutory consultees' such as Comhairle nan Eilean Siar, Scottish Natural Heritage and the Scottish Environment Protection Agency.

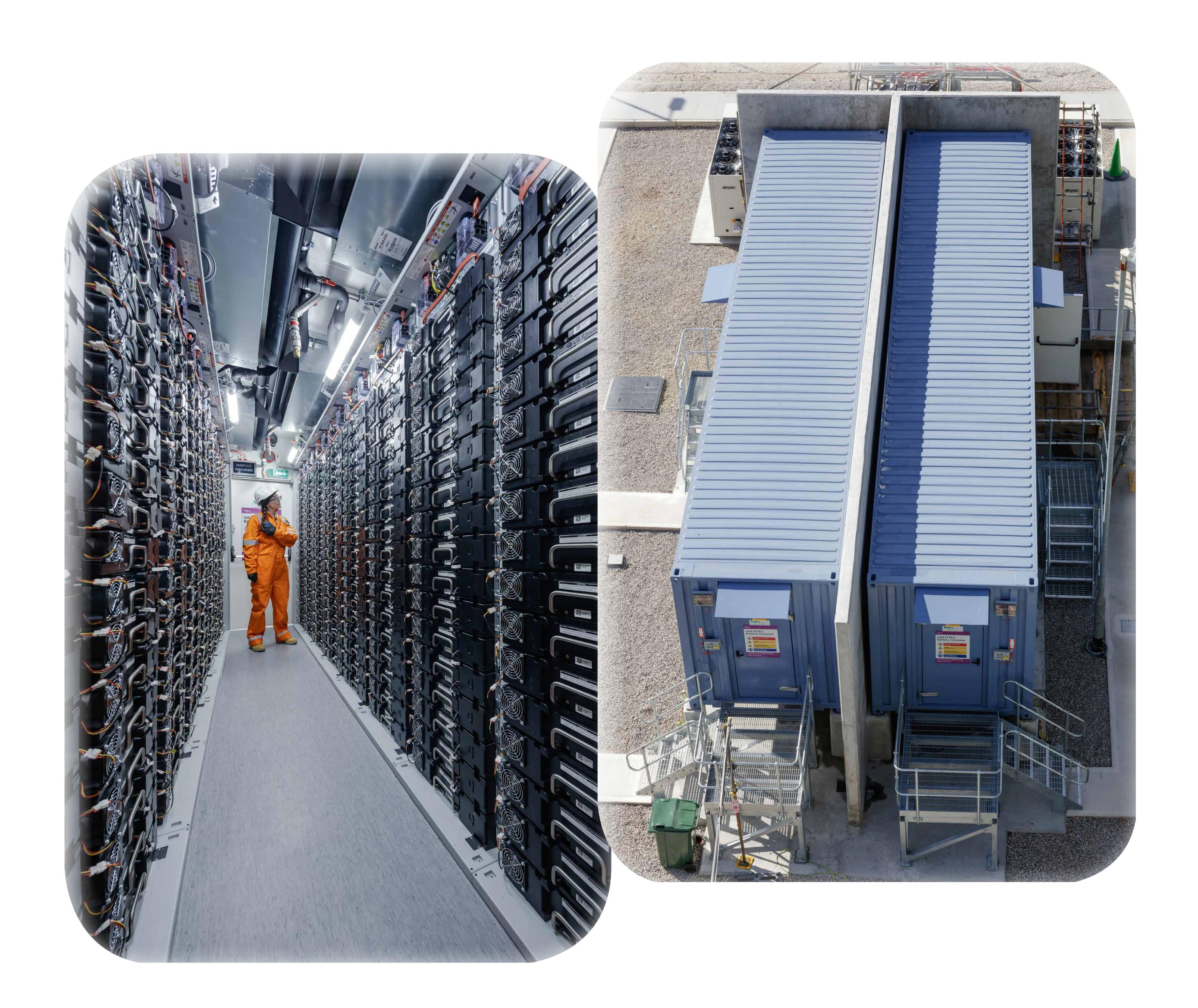
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# **Battery Storage**

There has been significant growth in battery storage across Great Britain in recent years, with large-scale batteries being used to store energy for use at times of peak demand or to provide services to help manage the flows of power on the local electricity grid. These are often co-located with solar or wind energy projects

LWP is at the very earliest stages of assessing the potential to add a battery storage facility to Stornoway Wind Farm, which would mean that any excess energy could be kept and then used during periods when it isn't windy. We will be doing further analysis on this possible facility over coming months, as well as speaking with the local power grid operator, Scottish and Southern Energy Networks.



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\*Photographs of West Burton B battery system EDF-R 2018

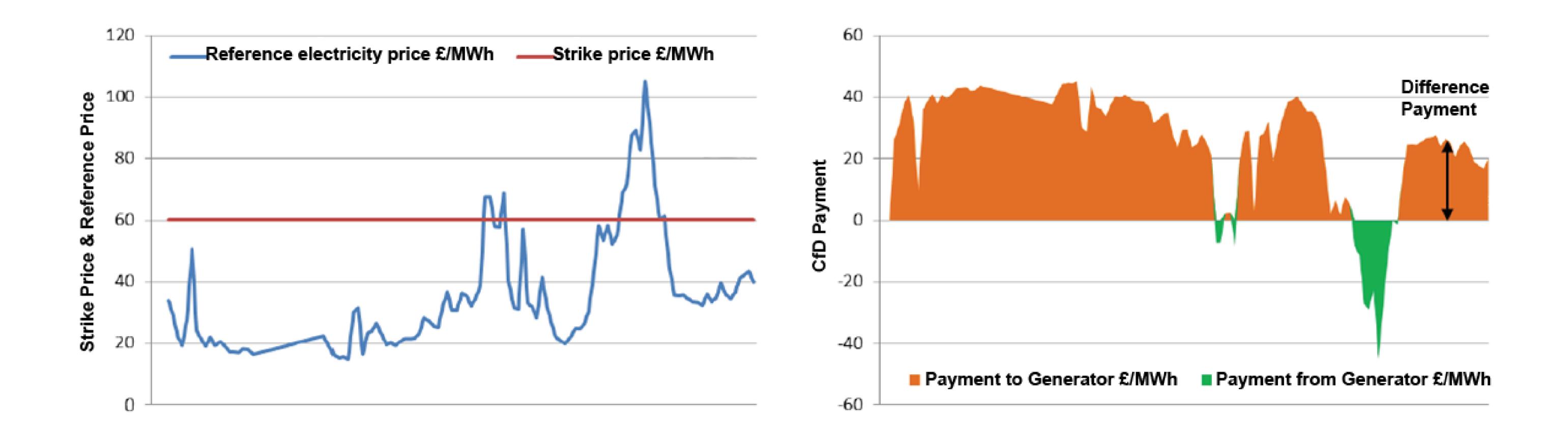


# Reason for potential changes to existing plans

Larger wind farms built on the Western Isles will be required to pay significantly greater grid charges than projects on the mainland, as they will pay for their share of the installation and operation of a new interconnector.

As such, they can only proceed if they successfully bid for a longterm contract for power backed by the UK Government, known as a 'Contract for Difference', which guarantees a price per unit of power over 15 years.

CFDs have replaced to 'Renewables Obligation', a non-competitive and more generous subsidy system that supports the larger wind farms currently operational in the Western Isles and large-scale wind renewable electricity projects across the rest of the UK.



CfD contracts are awarded through a competitive auction process, with island projects required to bid against each other and other technologies including offshore wind. This means that only the most cost-effective projects can go ahead.

Since the project was awarded its existing consent, the wind industry has moved to significantly larger turbines - onshore and offshore – resulting in considerable reductions (over 60% for the most competitive schemes) in cost and therefore public subsidy.

In line with its competitors, and other developers throughout the world, LWP is therefore looking at all the possible options to make the project as competitive as possible, and the use of larger generators or turbines could have a significant impact on the cost of each unit of energy produced.

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# Environmental Impact Assessment

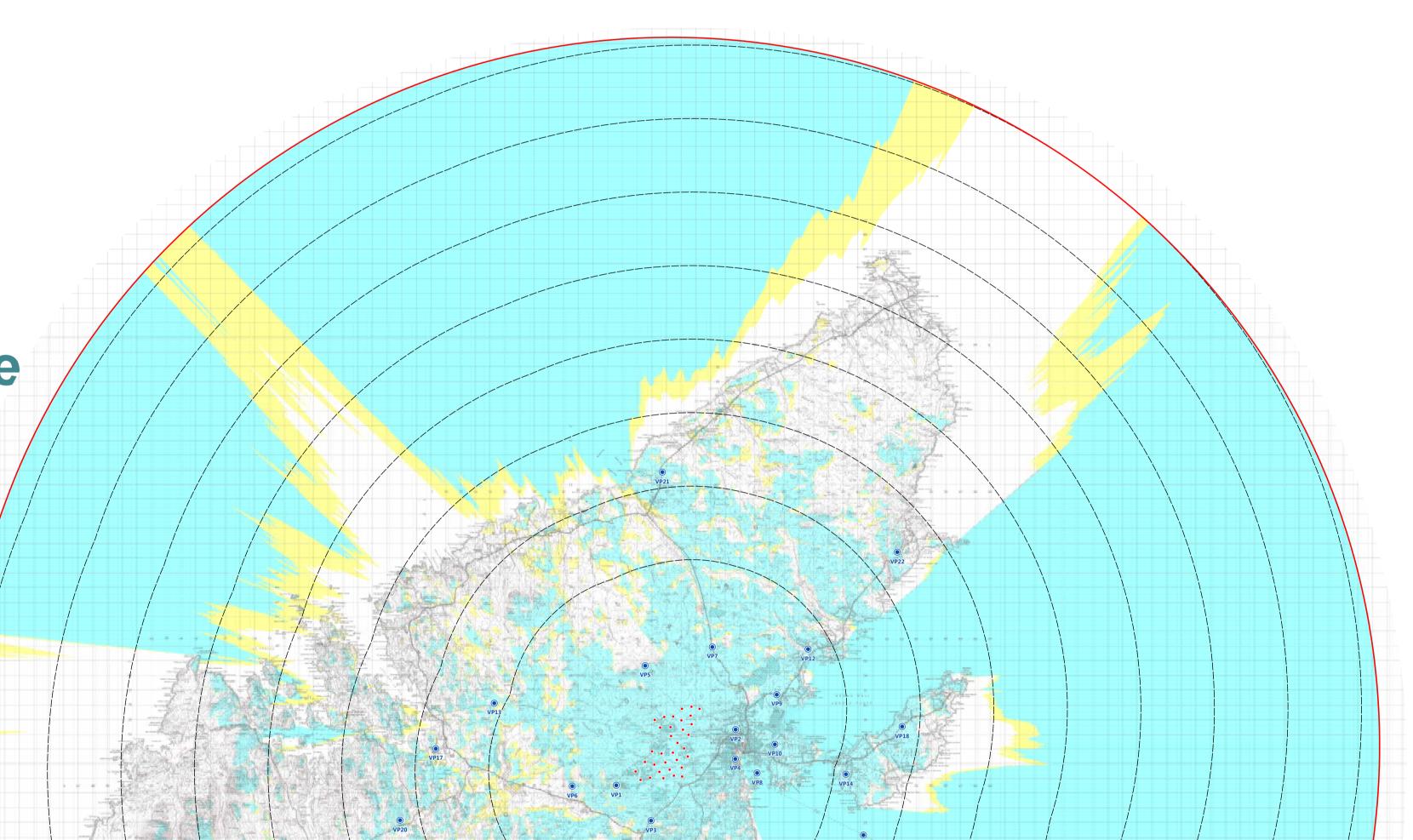
Given that the possible changes would require a new application, early discussions have been held with the Energy Consents Unit (ECU) of the Scottish Government, and the Comhairle nan Eileen Siar regarding the potential revisions to the scheme. A scoping report has been submitted to ECU which would help guide the required submission, should LWP decide to proceed with a new consent application. The key areas of work are detailed below.

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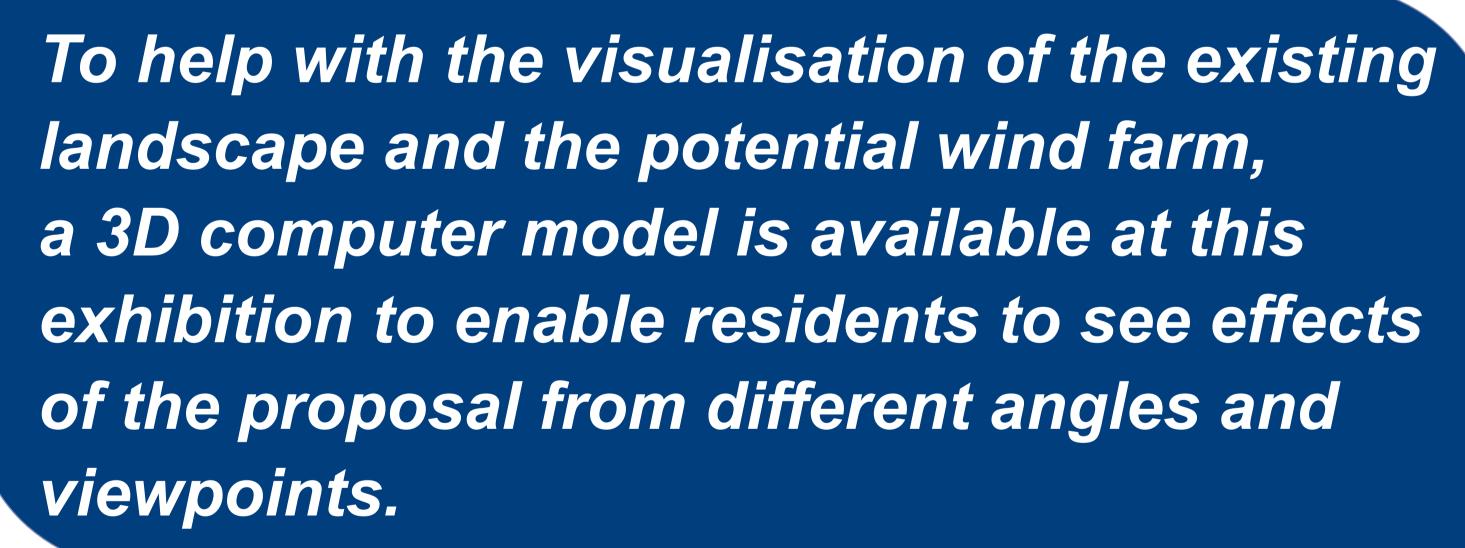
#### Landscape and Visual

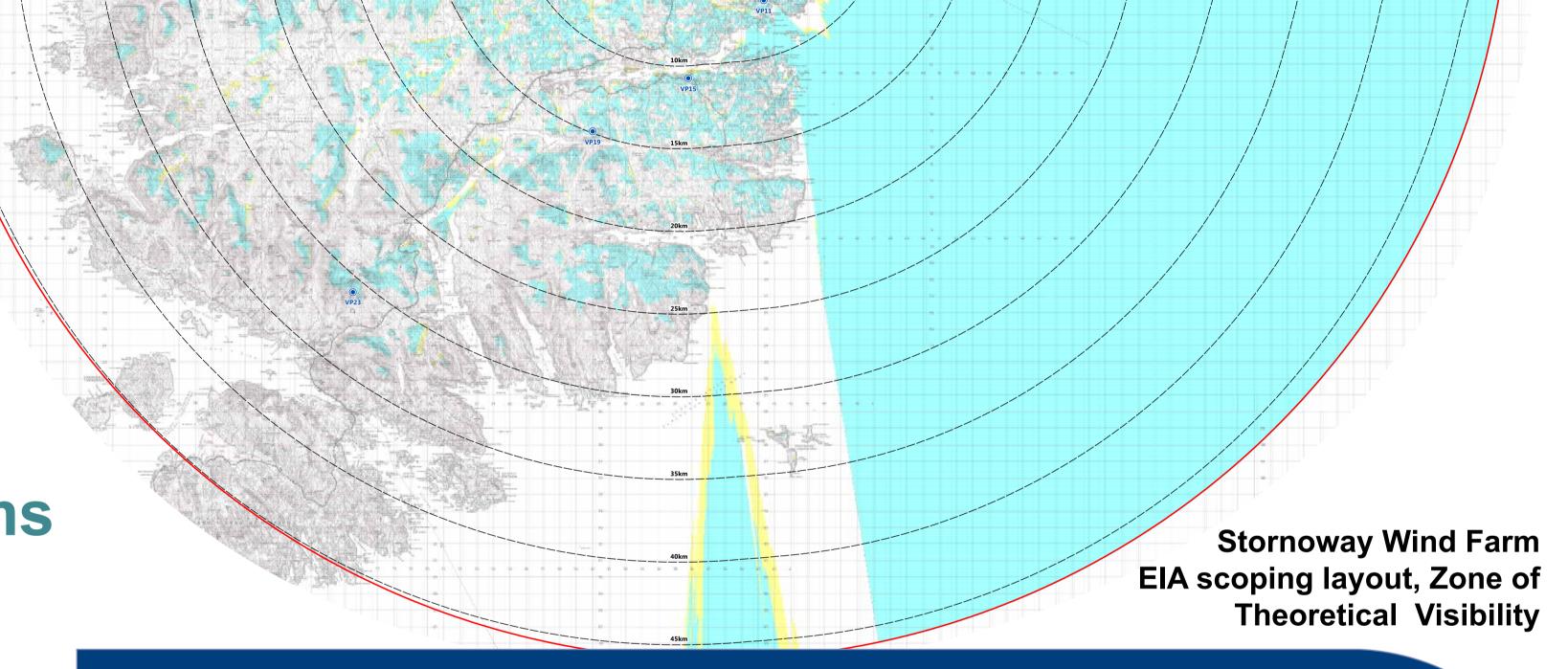
A comprehensive assessment of the impact of the potential wind farm on the existing character and value attached to the local landscape is currently being undertaken.

In order to fully demonstrate the visibility of the potential wind farm, photomontages will be prepared from specific viewpoints, including key locations and public rights of way in agreement with the Comhairle and other stakeholders. The landscape assessment will also take into account the cumulative impact of other wind farms in the local area.



The photomontages will show the turbines in their position and scale to give accurate representation of how the site would look if the scheme were to go ahead. These are based on specific standards for software modelling and onsite panoramic photography.





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\*Photograph of Stornoway Wind Farm Site LWP 2018



# Environmental Impact Assessment

#### **Ornithology and Ecology**

The ecology and ornithology assessments follow extensive monitoring programmes. They will consider all impacts on species and habitats in and around the wind farm site. Where possible, alternative solutions and mitigation is proposed to reduce any negative effects which may occur.





#### **Peat/Hydrology**

The hydrology and soils assessment consider soil/peat depths and hydrological flows to predict how the development may cause damage to habitats through removal, erosion, desiccation and degradation. It will make recommendation for measures to avoid and mitigate such impacts as well as avoiding any pollution impacts on water bodies.

#### **Traffic and Transportation**

Vehicle movements to/from sites will consist of some abnormal vehicle loads, notably the turbine components. The EIA will consider the effects of these movements on the local road networks and details whether traffic flows will require management. The precise access route to site is not yet defined, and would need to be finalised prior to submission of any new consent application.



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\*Photographs of: White Tailed Eagle Stornoway Wind Farm site Blade delivery at Corriemoillie Wind Farm LWP 2018

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# Environmental Impact Assessment

#### Archaeology/Cultural Heritage

The project design will seek to avoid any physical impact on archaeological features in and around the site. The EIA will assess the direct and indirect impact of the wind farm on cultural heritage interests.



#### Noise

As part of the development process, LWP would require to satisfy the planning authorities that the wind farm would comply with national noise guidelines known as ETSU-R-97 which establishes noise levels to ensure people are not subject to disturbance.

The monitoring and assessment would consider daytime and night time noise levels. It will also take into account factors such as wind shear and low frequency noise, as recommended by industry best practise guidelines.



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\*Photograph of: Callanish standing stones View of the site from war memorial LWP 2018



# **Project benefits**

The development of the Stornoway Wind Farm would provide significant economic benefits to the Isle of Lewis and the wider Western Isles.

#### **Community Ownership**

Lewis Wind Power is working closely with the Stornoway Trust, the local community landowner, and Comhairle nan Eilean Siar, as they seek to develop a joint venture to acquire the Trust's option of up to 20% of the Stornoway Wind Farm and the council's option of up to 30% of the Uisenis Wind Farm. The proposed joint venture would be one of the largest community owners of renewable power anywhere in the UK.

#### Local Suppliers

#### **Community Benefit**

The project would make an annual payment of £5,000 (index linked) per MW over the life time of the project. As an example, a 180MW scheme would mean an annual payment of £900,000 per annum for the local community to invest in local projects and priorities.

#### **Rental Payments**

The Stornoway Wind Farm would be sited on the Stornoway Trust Estate and pay

LWP has committed to using a contracting strategy for building the wind farm that will maximise the potential for the use of local suppliers and facilities during the construction phase of the wind farm. We will be holding an event over coming weeks to engage with local businesses and organisations to make them aware of the opportunities to work with us and to make sure we understand the range of skills and capabilities across the Western Isles.

#### **Delivery of the Interconnector**

No further onshore wind development can take place on Lewis as the electricity network is at full capacity. Scottish and Southern Energy has recently proposed a new 600MW interconnector with the mainland, dependent on Stornoway and Uisenis wind farms going ahead. A 600MW cable would leave significant capacity for additional renewable energy development on the Western Isles. an annual commercial rent to the Trust for the land required by the project. LWP would also make payments to the common grazings that comprise the wind farm site with annual payments subject to approval by the Scottish Land Court.

#### **Employment and Wider Economic Development**

A report commissioned by EDF Renewables and produced by respected consultancy BVG Associates found that during construction of LWP's wind farms and the interconnector to the mainland there would be more than 600 people employed at the peak of construction activity.

The report found that longer term, onshore wind projects on the Western Isles in aggregate could add up to £33m a year to the local economy and support several hundred jobs on an ongoing basis as a result of the forecast community benefits, ownership and further community wind farm development enabled by the interconnector.

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Stornoway Wind Farm would be sited across a number of common grazings to the west of Stornoway and therefore approval is being sought from the Scottish Land Court for a 'scheme for development' in accordance with section 19A of the Crofters (Scotland) Act 1993. This process has been followed by other wind developments in other parts of Scotland, such as Viking Wind Farm on Shetland, and also by the Pentland Road and Beinn Ghrideag wind farms here on Lewis.

The Court is currently assessing the 'scheme for development' that we have developed in close consultation with local grazings, which reflects the wind farm and its supporting infrastructure. In summary, this statutory process is designed to protect interested parties by ensuring that

- (1) the development is for a "reasonable purpose",
- (2) carrying it out would not be "unfair",
- (3) there is fair recompense to each member of the crofting community in the area affected by the development for the effects

of the development, and (4) the Land Court is satisfied that the community would be likely to benefit financially.

In addition to the payments we would make to the relevant grazings, the wind farm would also deliver a number of indirect benefits, such as new access tracks and fencing.

It is important to stress that rights to grazing would continue, though there will be restrictions on access for Health and Safety reasons during construction. The physical area ultimately taken up by the turbines and other wind farm infrastructure would represent a small percentage of the overall grazings.

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\*Photograph of Stornoway Wind Farm Site from Acha Mor road LWP 2018



# What happens next?

Thanks for taking your time to visit the exhibition - we hope you found the information useful. Your feedback is important and over coming weeks we will be reviewing the questions asked and comments that have been made.

If LWP does decide to pursue the potential revisions further then we would develop more detail on any changes and consult on these before submitting any application for a consent.

Any new application would involve the development of a full Environmental Impact Assessment on the revised proposals, and the Comhairle nan Eilean Siar would be consulted, along with other key consultees such as Scottish Natural Heritage. The final decision on any proposed changes would ultimately be made by the Scottish Government, with all local people and organisations having the chance to submit their views directly as part of Ministers' considerations.

We will share our intentions over coming months but LWP will continue to move forward by preparing to bid for a Contract for Difference in next year's auction on the basis of the project's current consent.

We will also be undertaking a similar exercise at our Uisenis project in Spring 2019.

There are LWP staff on hand to answer any queries you may have. Should you wish to make any comments feedback forms are provided to complete before you leave the exhibition.



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\*Photograph of Stornoway LWP 2016