STATEMENT July 2023

EDF Renewables UK's response to inaccurate information being circulated in the community

EDF Renewables UK is proposing a renewable energy park at Hirfynydd, between Crynant and Seven Sisters. We announced our proposals in 2022 and have since held two rounds of public consultation.

We have been made aware that inaccurate information on the project has been circulated in the community. As a responsible developer, we respectfully set out the following information in response to inaccuracies being made. This information was also available at the consultation events that we hosted in person, online, and much has been shared by post.

The Hirfynydd Energy Park is a proposal for up to 7 turbines and a solar farm, with a combined capacity of up to 100 MW, and a battery storage facility. The proposed development will be capable of generating enough electricity for 37,500 households annually*

**The proposed Development (up to 50MW wind and up to 50MW solar) will contribute to renewable energy and decarbonisation targets for Wales, as follows: estimated wind annual electricity output of 102,054 Megawatt Hours using a capacity factor of 23.3%; estimated solar PV electricity output of 46,428 Megawatt Hours using a capacity factor of 10.6%; total electricity output of 148,482 Megawatt Hours; reduction in carbon dioxide emissions of approximately 64,000 tonnes per year.*

Context – Climate Change

Climate change is the biggest threat we face. In July, Professor Sir Bob Watson, the former head of the UN climate body and a leading British climate scientist told the BBC he believes the target to limit global warming to 1.5C will be missed. Scientists say that surpassing 1.5C could trigger a cascade of tipping points which would be irreversible, from melting ice caps and sea level rises, to warming seas, and violent weather patterns. This summer, we are witnessing the serious consequences of rising global temperatures with extreme heat across Europe, the US and China this summer, as well as wildfires and devastating flooding.

Projects like Hirfynydd reduce our dependence on fossil fuels and the amount of harmful carbon dioxide emissions we release into the atmosphere.

You can find out more about climate change from trusted news sources such as the BBC https://www.bbc.co.uk/news/science-environment-24021772

The Welsh Government has targets to tackle climate change, including to meet 100% of its electricity consumption from renewable sources by 2035. Currently, only 55% is from renewables.

Meeting Net Zero means that we have to electrify heating, transport and industry. Estimates suggest that this will require a fivefold increase in electricity in Wales between now and 2050.

The process

The planning application is not yet submitted. We are working on the final design following feedback from the two round of public information days and engagement with stakeholders including Cadw, Natural Resources Wales and the Local Authority. We will present the draft Environmental Statement to statutory consultees and the public during a six week statutory consultation period, most likely later this year.

Find out more about the environmental assessments we are undertaking on the Planning and Environment Decisions Wales portal, here https://planningcasework.service.gov.wales/ quoting case number DNS CAS-02084-T4Z8W4.

Information about the project

EDF Renewables UK has shared information with the local community and at the earliest point possible.

At the first round of information and consultation events that we ran last autumn, an invitation was sent to nearly **two thousand households** in Crynant and Seven Sisters advertising the face-to-face events and how to access the information online.

At the second round of information and consultation events earlier this year, a 28 page bilingual booklet was sent to households, with details of further face-to-face events as well as a virtual exhibition online. That mailing also included a freepost return feedback card. There was also an online feedback form on the project website, and at the events, there were paper copies of the feedback form for people to complete.

At our second round of events, as well as project information, we had lots of information for reference on policy and legislation, guidance on local ownership, studies on the impact of renewable energy schemes on tourism and house prices, carbon payback, FAQs, leaflets on noise, shadow flicker, and glint and glare impacts, pictures of typical infrastructure such as grid and battery, detailed maps on mineworkings and peat, and information for suppliers. EDF Renewables project staff, and specialist consultants, were on hand to answer questions from the public. In fact, much of the information in this statement which addresses the claims made by the group opposing Hirfynydd, is already readily available in the public domain and was shared at the consultation events.

We have also addressed the community councils of Seven Sisters and Crynant on two separate occasions and met with local elected representatives.

EDF Renewables UK is more than happy to answer questions from members of the public at any time, and we would urge you to email us at hirfynydd@edf-re.uk

Access to the mountain

The open access land and the public rights of way will still be available for access during the operation of the project with minimal disturbance during construction.

There will be NO impact on the Sarn Helen Roman Road.

Loss of jobs at Aberpergwm

Under NO circumstances will Hirfynydd Renewable Energy Park put at risk jobs at the active coal mine. The scheme is being designed to avoid impacts on Aberpergwm coal mine. EDF Renewables UK has no influence whatsoever on the future of the coal mine.

At this stage we are using existing records to find out the location of historic mines. If we get planning permission, we will undertake thorough onsite investigations to search for mines that may not show in the records. We will draw up detailed site specific construction drawings/reports following these investigations, that must be approved by the local authority. No construction can commence until investigations are complete, and approvals are in place.

Safety of the battery storage facility

Lithium battery units are climate-controlled and operate safely. EDF Renewables UK is an experienced developer of battery sites. Careful attention is paid to cell selection, module design and site layout, to ensure multiple levels of fire risk mitigation. Battery cell procurement is part of EDF's world

qualification process to ensure only Tier 1 battery cells are procured. CATL cell qualification process includes desktop review and factory audit.

In the highly unlikely event of a fault, in-built fire suppression systems control the fault resulting in no releases to air, land or water of contaminated materials. A battery safety management plan will form part of the planning application and the local fire service will be consulted.

Battery storage is important to transforming our energy systems across the UK and meeting net zero by 2050. Battery storage provides:

- Flexibility – To keep power supplies flowing electricity supply and demand must always be equal, or 'balanced.' Battery storage provides critical flexibility services required by National Grid to manage renewable intermittency and maintain this vital balance.
- Security – Batteries can respond extremely rapidly to faults on the network or changes in electricity supply and demand, helping to reduce blackout risk and ensure a secure and resilient network.
- Adaptability – As more of our lives are powered by electricity – from heating to cars – our energy system is changing. Batteries help to future-proof the grid and cost-effectively integrate more renewable power.

It's estimated Britain will need 25+ GW of battery storage by 2050, up from around 1GW today.

Serving local electricity demand

We are working with the Global Centre for Rail Excellence based in Onllwyn on the potential to supply them directly with green electricity for their world leading innovative train testing operations.

Precedent for similar schemes in the valley

Hirfynydd Renewable Energy Park is being developed as the site has favourable characteristics for renewables in terms of windspeed, access, distance from residential properties and no environmental designations. The planning process is rigorous, and fully considers the cumulative impacts from other renewable energy projects in the area.

Impact on wildlife habitat and carbon capturing peat bogs

The solar PV is proposed on semi-improved grassland and we have plans to significantly improve this low value habitat under the panels. The siting of the wind turbines will avoid peat as much as possible. Where this is not possible, peat will be reused on site to create new habitats and improve degraded peat deposits. A number of chapters within the Environmental Statement which accompanies the planning application will contain the details of what measures we will undertake. Mitigation and restoration measures to the peat resource will be implemented through a Peat Management Plan (PMP) in consultation with Natural Resources Wales and the Local Authority.

Impact on growth of tourism and business

There is no evidence that renewable energy developments restrict the growth in tourism. Tourism continues to thrive in areas where there are lots of renewable energy projects, such as Scotland, Cornwall and North Wales. Wind farms in the area including Maesgwyn Wind Farm in Banwen, Pen y Cymoedd Wind Farm or Mynydd Brombil, are all near tourist attractions such as Zip World, Afan Forest Park, and Margam Park. Neither house prices nor tourism have been impacted.

Further information is available in this research:

https://www.gov.wales/sites/default/files/publications/2019-06/potential-economic-impact-of-wind-farms-on-welsh-tourism_0.pdf

https://www.climatexchange.org.uk/research/projects/the-impact-of-wind-farms-on-scottish-tourism/

https://www.climatexchange.org.uk/research/projects/impact-of-wind-farms-on-property-prices/

Electricity prices

Onshore wind and solar are two of the cheapest forms of new energy generation. As we build out more and more renewable energy projects, we will reduce our reliance on gas imports which is the reason for our higher energy bills. The more the UK can rely on homegrown low carbon and renewable energy, from a diverse range of sources, the more stable our energy supplies and costs will become.

Providing reliable power

The proposed renewable energy park includes wind turbines, solar and battery storage. By spreading generation across technologies in this hybrid way, there will be fewer pronounced peaks and fewer total times without production.

Local jobs

The project is already creating jobs with many of the specialist employed on the development of Hirfynydd based in South Wales. Welsh specialists working on the project are providing technical support in the shape of environmental surveying, geological advice, legal advice, and comms and PR. EDF Renewables UK has recently opened an office in Cardiff for its expanding South Wales team. As our portfolio of projects grows, more development staff will be recruited, and as projects are built, operations and maintenance staff will be employed.

In July, we hosted a supplier event in Port Talbot and nearly 100 representatives from local companies interested in the contract opportunities that arise out of the Hirfynydd proposal (and other EDF Renewables proposals in the area) registered. Contracts worth significant sums of money can be awarded to local companies, and we are committed to working with the local supply chain and Neath Port Talbot Council to ensure that companies based in the area can be successful.

We are preparing a socio-economic impact study to assess the value of the renewable energy park to the local area, and this will be submitted as part of the planning application.

Impact on the landscape

An Environmental Statement (ES) will accompany the planning application which will include a detailed Landscape and Visual Assessment, the findings will be presented at the statutory pre-application consultation and will a key consideration in the planning determination**.**

The wind turbines are located in the east of the site away from properties, with Crynant approximately 1.5km from the nearest turbine. A residential amenity impact assessment of the closest properties with views of the development will be outlined in the Environmental Statement. The solar panels will be largely screened by topography, and planting will provide further screening of the panels.

Noise

One of the most frequently asked wind farm questions from members of the public is about how noisy the turbines will be when they are turning. There are strict upper limits regulating how much noise is

permitted from wind turbines, and all wind farms in the UK must comply with industry standards know as ETSU-R-97.

In very general terms, a modern wind farm that is designed to comply with this guidance will typically be limited to noise levels between 35 and 40 dB at the nearest surrounding properties under worst-case wind conditions.

Specialist noise consultants have undertaken surveys to assess the existing background noise levels at properties near Hirfynydd, in consultation with Neath Port Talbot Council. This provides 'baseline' noise levels to determine noise limits. Preventing the noise produced by the turbines from exceeding the noise limits determined by the ETSU-R-97 standards is managed through planning conditions under the control of the local authority.

At Hirfynydd, the wind turbines will be located in the eastern part of the site, away from residential areas. Baseline noise measurements were carried out at five representative properties near to the site.

Noise from the solar farm and battery elements of the project will also be assessed but is likely to be insignificant.

Shadow Flicker

Put simply, shadow flicker is the shadow of a turbine flicking on and off a surface as the blades rotate. The occurrence of shadow flicker is the result of several environmental conditions coinciding, it can therefore only occur in very specific circumstances. For example, the sun must be at a certain level in the sky, the sky must be clear enough for the sun to shine directly, and the sun must be shining onto a window of a building from behind a turbine rotor.

The most direct way to mitigate shadow flicker is through the design process, such as positioning turbines to minimise its impact. If the design process cannot fully eliminate shadow flicker, software can be used to model its theoretical occurrence, this data can then be deployed to automatically stop turbines, this is deemed highly effective.

Community funding, and EDF being a French company

EDF Renewable UK is committed to delivering local benefits and the proposed community fund could be up to £270,000 every year which amounts to £9.45M over the 35 year lifetime of the project, index linked. EDF Renewables UK is a subsidiary of EDF Group and currently employs 500 in the UK with plans for rapid expansion across the UK. Independent analysis suggests that in Wales alone more than two thousand high skilled and high salaried jobs will be created as a result of our ambitious plans for an additional 1 GW of onshore wind, solar and battery.

Energy overproduction

Wales aims to meet 100% of the electricity it consumed from renewable sources by 2035. Currently, Only 55% of the electricity we consume is generated from renewables.

Meeting Net Zero means that we have to rapidly move away from using fossil fuels and to do that we need to electrify heating, transport and industry. Meeting Net Zero means that we have to electrify heating, transport and industry. Estimates suggest that this will require a **fivefold increase in electricity in Wales between now and 2050.**

(https://www.gov.wales/sites/default/files/consultations/2023-01/consultation-document-review-of-renewable-energy-targets_0.pdf)

As we move to a renewables-based system, there may be times when favourable conditions mean we will be producing more than our own demand and will be exporting electricity to the rest of the GB system or through interconnectors onward to other centres of demand. Conversely, there may be times when there is insufficient resource to meet the demand, for instance during still winter evenings. South Wales is one of the most carbon intensive regions of the UK, additional renewable capacity is required to de-carbonise the area either through electrification or green hydrogen which produced from renewable electricity.

Offshore wind developments making onshore wind redundant

In reality, we need more of everything, a diverse mix of technologies, including those we can deploy now such as onshore wind, offshore wind, and solar, and newer technologies that are still in development. Onshore wind is a tried and tested technology.

EDF Renewables UK's Strategy

We are still developing the plans. To be as transparent as possible, we have provided information and consulted with the community at an early stage. This decision to provide early information and consultation was taken deliberately to involve the community in the development process so that feedback could influence designs. The finalised designs will be made public and available before a planning application is submitted.

EDF Renewables has extensive experience of working in and with rural communities, including our existing wind farms in Mid Wales where many of the team are from rural communities themselves and have a deep rooted understanding and consideration for the communities in which we work and operate.

Local ownership

Information on local ownership and who can provide advice to local communities has been shared and was widely available at the consultation events for review. The Welsh Government has issued guidance on what on local and shared ownership (link below). EDF Renewables UK is offering up to 10% of the project for shared ownership, and we are open to suggestions about different models of how this could work. We don't have a preferred model. Community groups can seek advice from Community Energy Wales, or the Welsh Government Energy Service (links below).

More information about local ownership:

https://www.gov.wales/sites/default/files/publications/2022-06/guidance-local-and-shared-ownership-of-energy-projects-in-wales_0.pdf

http://www.communityenergywales.org.uk/

https://www.gov.wales/energy-service-public-sector-and-community-groups