

Welcome to the National Road Battery Storage Public Exhibition

National Road Battery Storage (REWE 2 Ltd) is being proposed by Windel Energy Limited & Recurrent Energy.



Founded in 2018, Windel Energy is a privately held company that specialises in the development and asset management of renewable energy projects and low carbon technologies.

With more than 4 gigawatts (GW) of clean, renewable power and battery energy storage in various stages of development, Windel is at the forefront of low carbon technologies including solar, energy storage, and onshore wind, and are helping to pave the way to achieve the Welsh Government target of 100% of electricity consumption being generated from renewable energy by 2035.

Windel Energy is committed to responsible land use and believe that the development and delivery of a Battery Energy Storage System can be achieved in harmony with its surroundings.



Recurrent Energy, a subsidiary of Canadian Solar Inc., is one of the world's largest and most geographically diversified utility-scale solar and energy storage project development, ownership, and operations platforms.

With an industry-leading team of in-house energy experts, Recurrent Energy serves as Canadian Solar's global development and power services business.

To date, Recurrent Energy has successfully developed, built, and connected 11 GWp of solar projects and 3.7 GWh of energy storage projects across six continents. As of December 31, 2024, its global pipeline includes over 28 GWp of solar and 67 GWh of energy storage capacity.

\ Application site location

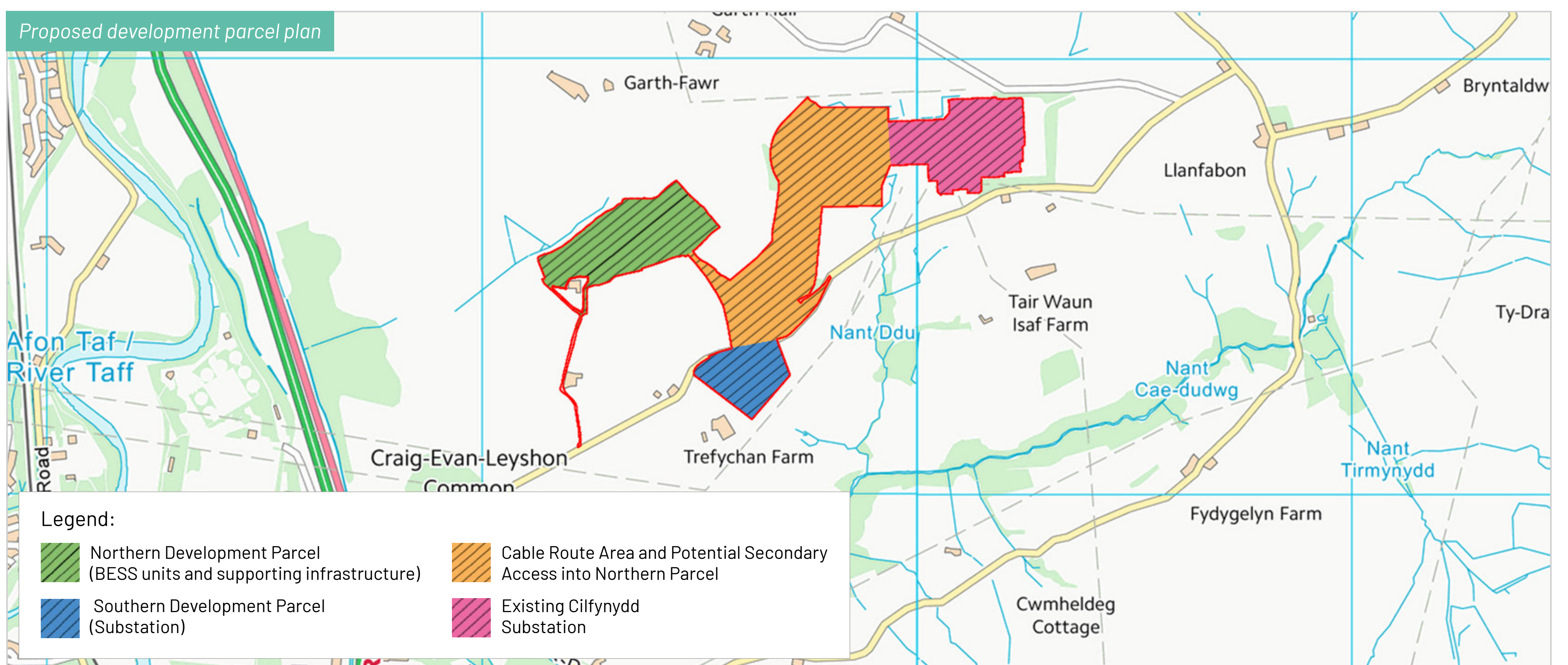
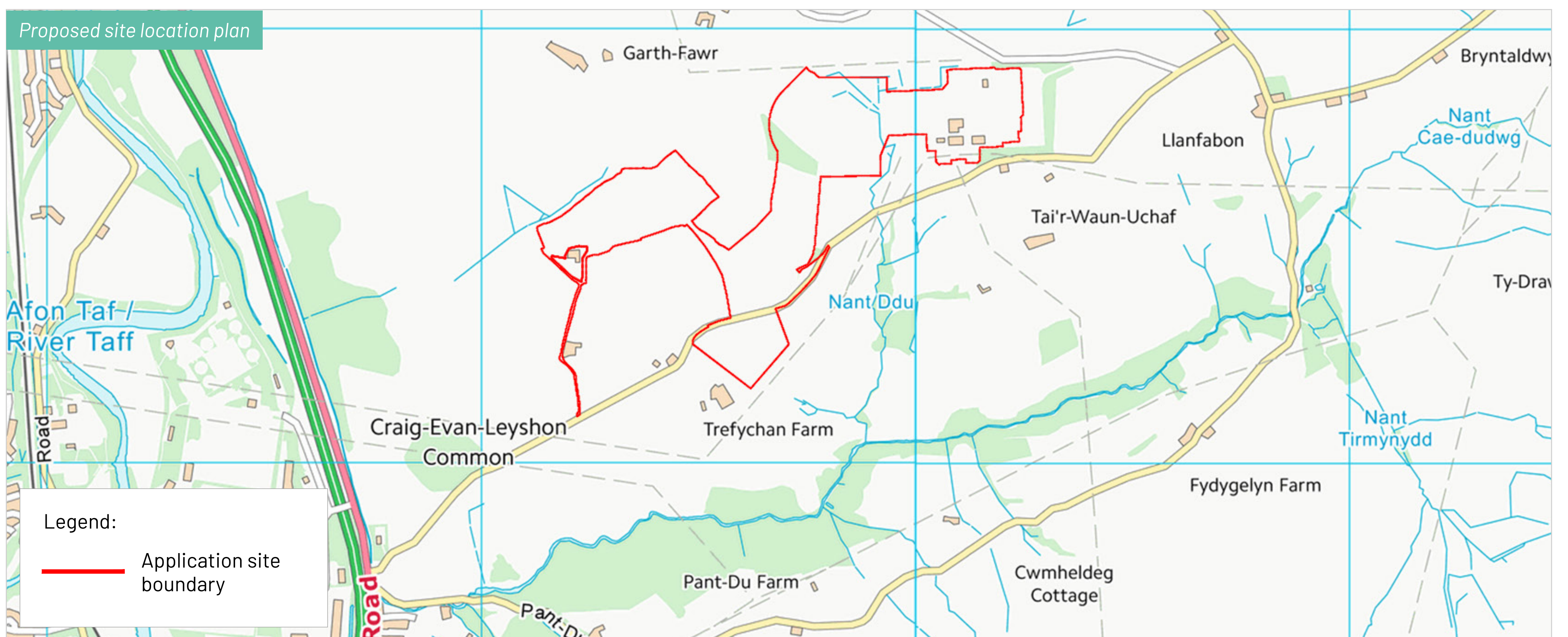
National Road Battery Storage is a proposal for a Battery Energy Storage System (BESS) development and associated infrastructure, including a substation, earthworks, access, drainage, landscaping and an underground cable route connection.

The proposal is to be located on land to the north and south of National Road, Cilfynydd, Rhondda Cynon Taf.

Proposed site location and development parcel plans

The site location plan below shows the application site boundary which includes the underground cable route required to connect to the national grid at Cilfynydd substation.

The development parcel plan details the infrastructure proposed for, or existing on, each parcel of land.



\ Proposal

The proposal is predominantly situated within the local authority area of Rhondda Cynon Taf with the point of connection at Cilfynydd substation situated within Caerphilly County administrative area.

Following pre-application consultation a planning application will be submitted.

The proposal consists of a number of parcels of land with a development area of approximately 9.5 acres (3.9 hectares), with the area within the red line boundary being approximately 59.2 acres (24 hectares). Grid connection will be made via underground cable, across a number of parcels of land, at Cilfynydd substation.

The battery storage development, located in the northern development area, would consist of 142 battery storage units, which are similar in appearance to a typical shipping container, arranged back-to-back in 71 pairs. Supporting infrastructure to the northern parcel will include 71 inverter/transformer stations,

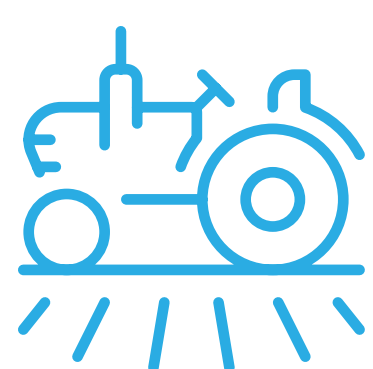
7 auxiliary transformers, 3 spare parts containers and a compound building. A substation is proposed to be located in the southern development area. Earthworks will provide platforms for the built development alongside drainage.

There will also be access tracks within the site to facilitate maintenance and fencing around the perimeter with inward facing infrared CCTV and motion detection lighting for security. Landscape planting will also be incorporated into the proposal to provide biodiversity enhancement, visual screening and reinforce landscape character.



\ Environment

The following considerations will inform the final design of the development to support the planning application.



Agricultural Land

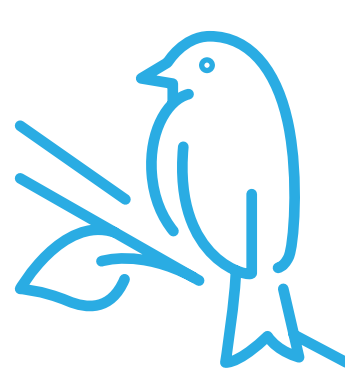
The site has been chosen to avoid development on the Best and Most Versatile Agricultural land which is most suitable for farming. The site comprises Grade 4 (Poor) and Grade 5 (Very Poor) agricultural land and, therefore, it is not classed as Best and Most Versatile.



Landscape and Visual Impact

To assess the impact of the BESS development on the landscape, a detailed Landscape and Visual Impact Assessment has been prepared. Extensive landscaping is also provided as part of the proposed development to provide visual screening.

The Landscape and Visual Impact Assessment considers a range of views the proposed development can be seen from and will consider the potential effects of this development on the surrounding landscape and visual receptors.



Ecology and Biodiversity

A number of surveys have taken place to assess the ecological potential of the site, including a Preliminary Ecological Appraisal (PEA), extended habitat surveys and a desk study. The surveys show the site does not lie within any statutory or non-statutory designated site for nature conservation. The land parcels north and south of National Road are predominantly of low ecological value. The cable corridor consists of arable fields, a block of woodland and grassland fields, as well as the Cilfynydd substation.

Any habitats that support species will be retained and protected with sufficient buffers. Landscaping enhancements proposed on the site will also support the delivery of biodiversity improvements.



Flood Risk and Drainage

The site is located in Flood Zone 1, so is at low risk of flooding, as identified by the Environment Agency Flood Map for Planning.

A Surface Water Drainage Strategy has been designed and will be implemented to ensure flood risk elsewhere is not impacted in accordance with policy.

\ Environment

The following considerations will inform the final design of the development to support the planning application.



Heritage and Archaeology

An assessment of heritage assets and archaeology has been undertaken.

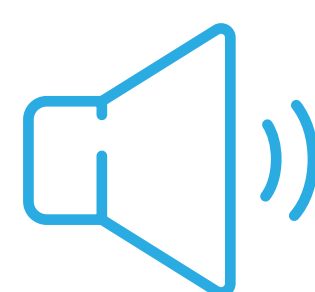
The assessment work confirms there are no designated heritage assets on or in close proximity to the site, with no significant impacts found in relation to archaeology or cultural heritage as a result of the proposals.

It is noted that a Scheduled Ancient Monument is located approximately 500m from the site however, the assessment confirms that the development proposals would not have a detrimental impact on this heritage asset.



Topography

The site has steep and undulating topography, particularly to the land north of National Road. The topography of the site has been taken into consideration in the design of the scheme with earthworks and retaining walls incorporated into the design to address the changes in levels across the site. The changes in levels on the site have been taken into consideration through the Landscape and Visual Impact Assessment.



Noise

A Noise Impact Assessment has been prepared to establish the predicted noise levels generated by the proposed development.

This is in relation to the existing baseline and sets out the mitigation proposed to ensure any noise emissions generated is in compliance with the relevant policies and guidance.



Transport and Access

Access to the development parcels is proposed from National Road. A Construction Traffic Management Plan has been prepared to accompany the planning application.

It is anticipated that during construction there will be peak traffic associated with deliveries of the components to site and construction works however this is not considered to result in a significant impact on the road network. During the operational phase of the site, it is anticipated there will be very low traffic flows related to ongoing maintenance.

\ Frequently asked questions

Why this location?

The application site for this proposal is considered to be suitable for a development of this nature for the following reasons:

- It is located in close proximity to the point of connection at Cilfynydd substation where there is capacity and a secured grid connection.
- The proposed development is within a viable distance from the point of connection.
- The site is available with a willing landowner.
- The site is not located in proximity to a built up area and the proposed use is considered compatible with the surrounding land uses where there is existing energy infrastructure.
- The site benefits from existing access to the northern development parcel and is bound by National Road to the south to facilitate access into the southern development parcel.
- There is sufficient land to accommodate the development and integrate landscape and ecological mitigation to provide environmental improvements to the site.

Are battery energy storage systems safe?

Battery storage systems use the same Lithium-Ion technology as in our smartphones and laptops, which we use with ease and relative comfort every day. There are currently over 8.7GWh of battery storage projects operating safely around the UK over 96 separate sites.

Battery storage systems are fitted with cooling and fire suppression systems alongside hyper-sensitive sensors which can detect defects.



Should a sensor detect even the slightest anomaly, it will automatically shut off the battery unit instantaneously, well in advance of any possible fire. The batteries are also monitored 24/7 and regularly inspected to ensure safety and compliance.

The proposed development will be designed to meet industry guidelines and statutory regulations such as appropriate access arrangements, sufficient spacing between battery units and access to water supply in accordance with National Fire Chiefs Council (NFCC) guidance. The regional Fire and Rescue will be consulted and the application will be supported by an Outline Battery Safety Management Plan.

What about noise?

Battery Energy Storage Systems may generate some noise from inverters, switchgears and fans. Where required, mitigation will be integrated into the design, to minimise noise impacts to acceptable levels. A Noise Impact Assessment will be provided as part of the planning application.

To manage noise through construction and to minimise potential environmental and amenity effects, best practice construction methods will be adopted and agreed with the local planning authority prior to commencement of construction.

\ Frequently asked questions

Why is Battery Storage needed?

Battery storage has an important role to play in supporting the decarbonisation of our energy supply as it provides a balancing mechanism to reduce the risk of power shortages, blackouts and optimises the use of renewable energy generated. In periods when electricity supply outweighs the demand, the proposed development would provide the capacity to store electricity, which would otherwise be wasted. It will then return electricity to the national grid when baseload supply falls below the level of demand and there would otherwise be an electricity shortage.

National Grid have stated that “battery storage systems will play an increasingly pivotal role between green energy supplies and responding to electricity demands”.

Planning Policy Wales (PPW) identifies that “energy storage has an important part to play in managing the transition to a low carbon economy. The growth in energy generation from renewable sources requires the management of the resultant intermittency in supply, and energy storage can help balance supply and demand. Proposals for new storage facilities should be supported wherever possible”.

Future Wales: The National Plan 2040 outlines that achieving decarbonisation and climate-resilience are one of the key national priorities for Wales. The recently published National Policy Statement for Energy states battery storage should be considered a critical national priority.

How long would it take to build?

The construction will last for approximately 12 months and once complete the development will operate for 40 years, when the site will be decommissioned and the land returned to its current use.

A temporary set down and vehicle parking area will be provided for the construction phase within the site boundary.



Will the proposal impact the local environment?

For proposed developments such as National Road Battery Storage, the applicant needs to undertake assessments and prepare reports considering the environmental impacts. These environmental topic areas include, but are not limited to:

- Agricultural Land
- Topography
- Landscape and Visual Impact
- Flood Risk and Drainage
- Ecology and Biodiversity
- Heritage and Archaeology
- Noise
- Transport and Access

The feedback from the assessments has been carefully considered and will help to shape the final design and layout of the development whilst also providing mitigation/enhancements where possible and suitable to limit any adverse impacts on the local environment.

\ Have your say

We want to hear your feedback on our proposal. You can send us your thoughts via any of the channels listed below:



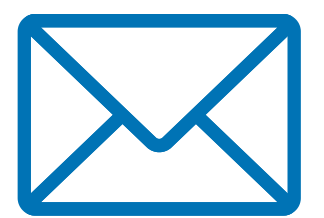
Feedback form

Available today and online at
www.nationalroadbatterystorage.co.uk
We will also post hard copies upon request



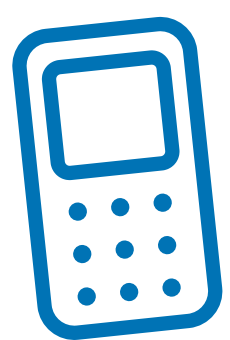
Email

Written feedback can be sent to
info@nationalroadbatterystorage.co.uk



Post

Send feedback via post to
FREEPOST PC CONSULTATION
(no stamp required)



Phone

Register your views or request a call back from the team by calling **07493 060539**



Website

Register for project updates at
www.nationalroadbatterystorage.co.uk

\ Project timeline

2023/2024

Pre-application advice and screening request submitted to Rhondda Cynon Taf County Borough Council

February 2025

Pre-application consultation with local communities and stakeholders to commence

Spring 2025

A planning application will be submitted following pre-application consultation

2027

Construction to begin, connecting to the national grid in 2029

All responses will be gratefully received and will be analysed as we refine our proposals ahead of submitting a planning application.

A Pre-Application Consultation Report will accompany the planning application, which will set out the methods used to consult, the views expressed and how these have been taken into account in relation to the project.

The deadline for response to this consultation is **20 March 2025.**

