

Tyn Y Coed is a proposed 500MW Battery Energy Storage System, located on land to the northeast of the village of Northop, adjacent to the A55.



The land within our proposal is approximately

Our proposals would deliver an increase in biodiversity net

48 acres, which would include infrastructure and landscaping to ensure long-term environmental benefits for Flintshire.

gain substantially above the industry standard and allow nature to thrive.



NatPower

Construction and Operation

Construction

Upon securing planning permission, we expect to start construction in 2029. The level of activity on site would vary throughout this period.

NatPower will prepare a Construction Traffic Management Plan (CTMP) and agree this with Flintshire County Council. The CTMP will set out how we will manage construction activities and any traffic moving to and from the site.

Access for construction vehicles to the site would be provided from the west via a slip road off of the A5119 (Northop Road) to reach the southwest corner of the site. A secondary emergency access point will be provided on the north-western boundary of the site, which will connect to Starkey Lane.

Operation

BESS are generally quiet neighbours and, once operational, traffic movements to and from the site are low. A team of qualified engineers would monitor our BESS 24/7 from an offsite location. An engineer would routinely visit our sites in a small vehicle two or three times a week to inspect the BESS and associated infrastructure.

The BESS and substation would be secured by security fencing and monitored by a CCTV system, which would face the battery storage and substation areas. We would use motion sensor and infra red lights to keep lighting to a minimum.

Project Timeline

- Summer 2024 Environmental and ecological surveys commenced
- Spring 2025 Finalisation of survey work and preparation of planning work
 - Consultation with key stakeholders
- Autumn 2025 Application decision issued by Flintshire

County Council

- Spring 2029 Construction begins
- Summer 2030 Construction complete



The site was selected as the most suitable location for the development following a comprehensive site search exercise that prioritised brownfield and industrial land before moving onto greenfield sites. A mapping exercise was then conducted to eliminate areas within historical and environmental designations as well as higher quality agricultural land (Grade 1 & 2).

Sites were then identified, assessed and scored against a number of pre-determined criteria that enabled us to filter out the most unsuitable options and to identify the sites with the least impact on the local environment and communities.

Agricultural land classification

Throughout the site identification process we have prioritised lower quality agricultural land. Mapping from Natural England confirms the site avoids higher quality (Grade 1 and 2) agricultural land. A full agricultural land classification survey will be conducted by an independent survey in accordance with industry guidance and submitted as part of our planning

Flood Risk and Drainage

The majority of the site is in an area with the lowest risk of river flooding (Flood Zone 1). Whilst there is some land in Flood Zone 2 and 3 in the south of the site, the layout of the infrastructure has been set out to avoid this area.

A flood consequence assessment and drainage strategy will be submitted with the planning application.

Transport

Access for construction vehicles to the site would be provided from the west via a slip road off of the A5119 (Northop Road) to reach the southwest corner of the site. A secondary emergency access point will be provided on the north-western boundary of the site, which will connect to Starkey Lane.

Landscape and Visual

Both the site selection and layout have been informed by ongoing landscape surveys and this has led to a site that is:

- Away from densely populated areas.
- Away from important international and national landscape designations.
- Largely screened by existing topography and tree cover.
- Adjacent to the A55 dual carriageway

A full landscape and visual impact assessment will be prepared and submitted with the application and will include photomontages of the proposed development from sensitive viewpoints.

Noise

The outcome of our noise modelling has shown that no significant adverse noise effects would be created by the proposed development Noise monitoring and 3D noise modelling has been carried out by our specialist acoustic consultant. This considers the topography, the physical aspects of the proposed equipment installed and the existing background noise levels.

The BESS design has been refined to minimise any potential adverse effects due to noise.

Fire Safety

All of NatPower's BESS sites comply with all applicable UK Health, Safety & Environmental legislation.

The design integrates all of the recommended guidance from the National Fire Chiefs Council including site design and layout, an on-site emergency water supply, risk mitigation measures, and liaison with fire rescue service.

The batteries are high quality and use the latest battery technology. They fully comply with all recommended industry standards and guidance.

We have employed an independent fire safety expert to ensure the site will accord with the highest standards of fire safety.

Heritage and Archaeology

There are no designated heritage assets or archaeological designations within the site boundary. In addition, existing and proposed landscaping, means there would be minimal harm to the setting of built heritage assets in the surrounding environment.

Detailed transport assessments have been carried out and other access routes assessed for viability.

We would work with local residents and communities to ensure deliveries are restricted to hours that would cause the least disturbance and would endeavour to minimise the number of vehicle movement required. This would be outlined in a Construction Traffic Management Plan which would be secured by a planning condition.

Ecology

We have been conducting ecological surveys on the land to ensure that impacts on existing habitats and wildlife would be kept to a minimum.

We have also looked for opportunities to boost biodiversity, aiming to deliver a 'biodiversity net gain' within the site boundary.

We are proposing to reserve some areas of the site for enhanced natural habitats for flora and fauna. This would include new trees, ponds, and areas for pollinators.





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