

New Oak Energy Storage - FAQs for the project website

Q. What is the purpose of a Battery Energy Storage System (BESS)?

A. Battery Energy Storage Systems store energy from the grid at times of lower demand and release it back to the grid when it is needed most. It will make an essential contribution to ensuring reliable, secure and affordable electricity for the country as it moves away from using coal and gas for electricity generation.

New Oak Energy Storage will support the use of renewable energy technologies, such as wind and solar power, by reducing supply issues associated with their intermittency. It will store electricity generated when the sun is shining and the wind is blowing and release it later when consumers need it.

National Grid states that BESSs are: *“essential to speeding up the replacement of fossil fuels with renewable energy.”*

New Oak Energy Storage would provide a flexible back-up power source to the electricity transmission network (or National Grid), responding rapidly to variations that result from local and national energy demand and reactive power services.

These services will be increasingly vital to the NG as the transmission network becomes more constrained as future renewable energy schemes connect into the system.

Accordingly, the BESS would contribute towards ensuring that there is a reliable and constant supply of electricity across the National Grid in a cleaner and more cost-effective manner.

Q. How can BESS technology reduce the burden of curtailment payments to windfarm operators, which currently lead to higher electricity bills?

A. Currently, electricity producers are paid to stop generating when there is an oversupply – these are called curtailment payments. Battery storage could help reduce these costs by 80%.

Between 2015 and 2019, curtailment costs rose in line with wind output from £90 to £145 million per year. This cost doubled in 2020 as the National Energy System Operator (NESO) faced a bill of £282 million linked to reduced demand associated with the pandemic (around £10 per household). Put another way, curtailment costs added £4 to each MW hour of wind energy generated.

This is important as electricity generated from wind increased to more than a quarter on the UK's electricity in 2023, and renewable generation represented a record share of 47.3 %. Clearly, if curtailment costs can be reduced and more 'green' energy can be harnessed there are significant sustainable benefits.

Q. How will New Oak Energy Storage System connect to the National Grid?

A. The grid connection from the proposed development would be to the Drax Substation. The connection would be constructed through permitted development rights and therefore this element of the scheme is excluded from the application or assessment work. The cable will be buried under the ground.

Q. How long will construction take?

A. Construction is anticipated to take up to 10 months, with 5.5 construction days per week. Construction hours are anticipated to be between 08:00 – 18:00 weekdays and 08:00 – 13:00 on Saturday. No construction activities would take place on a Sunday or Bank Holiday. However, it is requested that a degree of flexibility is applied should it be necessary to transport a piece of infrastructure to the site outside of this time.

Q. When will the application for planning permission be submitted?

A. The planning application for New Oak Energy Storage was submitted to North Yorkshire Council in June 2025. It is anticipated that a decision will be made in early 2026.

Q. What impact will there be will on local roads?

A. A Transport Statement has been submitted with the planning application. This will consider the vehicle movements associated with the construction and operation of the BESS and ensure that there is no potential highway capacity or safety issue. Peak construction activity (in terms of vehicle numbers) would occur during enabling works phase. HGV traffic would not be maintained over any lengthy period of time. During the operational phase, the Proposed Development would be operated remotely, and it would only be necessary for an operative to undertake a site visit on a monthly basis. This would be undertaken using a small van, pickup or equivalent vehicle. The construction phase is anticipated to be controlled through a Construction Environmental Management Plan (CEMP), via a suitably worded planning condition to any forthcoming planning permission. This would ensure that there would be no potential for pollution and / or nuisance to the surrounding environment or residential properties.

Q. How big will the New Oak BESS site be?

A. The BESS compound would occupy an area of circa of 3.16 hectares, including a 1.3 hectare battery storage compound. The additional area is required for drainage, with 1.77 hectares dedicated to biodiversity enhancement.

Q. What will the visual and landscape impact of the site be?

A. A landscape and visual assessment has been submitted with the planning application. This work will include preparing a Zone of Theoretical Visibility which will demonstrate the potential visibility of the BESS within the wider environment. This will enable viewpoint photography to be focused on areas where there could be visibility. The assessment will consider both landscape character and fabric alongside the visibility of the BESS.

Q. What will the noise impact of the site be?

A. A noise assessment has been prepared to determine specifications for battery technology and acoustic screening that would ensure no significant adverse impact.

Q. Will there be any impact on heritage or archaeological assets?

A. A heritage assessment has been submitted as part of the planning application. This work will demonstrate that the BESS would not result in any impact to heritage assets in the surrounding area. Furthermore, through geo-physical survey work it will be demonstrated that the potential for buried archaeology is unlikely.

Q. Could this land be used for agricultural purposes?

A. A review of the online predictive agricultural land classification maps illustrates that most of the site forms Grade 3 (good to moderate quality).

Q. How long will the New Oak Energy Storage site be in place?

A. Permission is being sought on a temporary basis of 40 years. Following this timeframe, and the cessation of energy operations, the infrastructure would be removed, and the site restored to its present condition.

Q. Will the BESS be safe?

A. Battery Energy Storage Systems use well-established technology found in everyday devices like phones and electric vehicles. Modern designs incorporate multiple safety layers, including fire suppression systems, self-contained units, and sustainable drainage systems, reducing fire and contamination risks to extremely low levels. We work closely with fire safety experts, local authorities, and emergency services to ensure our systems meet strict regulations, with site visits, risk assessments, and training exercises in place.

Our proposals are in line with local and national regulations.

Fire strategy will be based on National Fire Chiefs Council guidance. Health and Safety in Grid Scale Electrical Energy Storage Systems guidance was also referenced in line with existing legislation, regulations, standards, and fire safety guidance.

Q: Why are you not using a brownfield site?

A: Brownfield sites are better suited to permanent development, such as new homes, whereas the proposed development would be returned to its current state after 40 years of operation. The chosen site on fields to the southeast of Camblesforth on the A645 was selected to minimise the impact on local people and make the best use of the available land. The proximity to the grid and access from A645 are key factors. Much of the suitable land in the area is of the highest agricultural quality, grade 1 and 2, whereas this site is of grade 3 quality.

Q: How are you engaging with the public on your proposals for New Oak Energy storage.

A: Public engagement on the proposals for New Oak Energy Storage was launched on Tuesday 8 April 2025. Letters were sent to Camblesforth residents inviting them to attend a webinar on Tuesday 8 2025 and provide feedback on the proposals. Local political representatives were also contacted with details of the proposed

development. Articles have also appeared in local media. Information can be found project website: <https://www.brockwellenergy.com/projects/new-oak-bess/>

Q: Given that Camblesforth has already been chosen for two other solar-based developments, why choose it for yet another one?

A: The availability of capacity for grid connections is a factor in site selection by Renewable Energy developers. The chosen site on fields to the southeast of Camblesforth on the A645 was selected to minimise the impact on local people and make the best use of the available land. The proximity to the grid and access via the A645 were also key factors. Much of the suitable land in the area of the highest agricultural quality, grade 1 and 2, whereas this site is of grade 3 quality.

Q: What will you do to compensate the local environment?

A: An ecological assessment is being prepared, which involves a record search and 'walk over' survey of the site to determine the habitats and potential presence of species. A biodiversity net gain assessment will be carried out to demonstrate that the BESS would result in enhancements to the site.

Q: The field is lower lying than some of the surrounding area. Is there potentially a flood risk?

A: A flood risk and drainage assessment has been submitted as part of the planning application. This considers the potential for the site to increase flooding and illustrates a drainage design where water runoff from the site would not exceed the rate that would occur naturally before development, preventing increased flood risk downstream.

Q: Are you going to share a risk assessment for fire/noise/etc?

A: Yes, a number of expert studies, including noise and fire risk assessments have been submitted as part of the planning application.

Q: Will the proposed development create a detrimental noise impact?

A: A noise assessment has been prepared to determine specifications for battery technology and acoustic screening that would ensure no significant adverse impact. The document does not provide specific details on the noise level of the cooling systems, so more information may be needed.

Q: In case of fire, what precautions will be taken to reduce the spread of fire between battery units?

A: Battery Energy Storage Systems use well-established technology found in everyday devices like phones and electric vehicles. Modern designs incorporate multiple safety layers, including fire suppression systems, self-contained units, and sustainable drainage systems, reducing fire and contamination risks to extremely low levels. We work closely with fire safety experts, local authorities, and emergency services to ensure our systems meet strict regulations, with site visits, risk assessments, and training exercises in place. Our proposals are in line with local and national regulations.

Fire strategy will be based on National Fire Chiefs Council guidance. Health and Safety in Grid Scale Electrical Energy Storage Systems guidance was also referenced in line with existing legislation, regulations, standards, and fire safety guidance.

Q: Batteries tend to have a lifespan of 10-15 years so these will need to be changed several times during the lifespan, so surely that will be virtually a construction phase all over again with more large loads on the roads and so on, is this not the case?

A: The proposed development would be operational for 40 years and it is anticipated that the batteries would be replaced once during that period. Battery replacement will not require the same level of work as construction.

Q: A number of solar farm and BESS applications are in the pipeline in this area. Why is this one needed?

A: Capacity for electricity grid connections through existing substations is a factor in site selection by Renewable Energy and BESS developers. The chosen site on fields to the southeast of Camblesforth on the A645 was selected to minimise the impact on local people and make the best use of the available land. The proximity to the grid and access via existing access from A645 were also key factors. Much of the suitable land in the area of the highest agricultural quality, grade 1 and 2, and this site is of grade 3 quality, which is good to moderate.

Q: How will you ensure that long-term jobs will go to the local workforce?

A: While there are limited opportunities for long-term employment due to the nature of Battery Energy Storage System operation, we welcome expressions of interest from local contractors who may be able to work on behalf of Brockwell Energy during the construction phase.

Q: Where is the power coming from that would be stored in the proposed BESS site?

A: The proposed development would store excess electricity available from the National Grid, including renewable energy, and release it for use at times when there is a requirement.

Q: Will there be a community benefit fund to support projects in the local community?

A: Yes. Brockwell Energy is committed to supporting local communities by establishing a Community Benefit Fund for the New Oak Energy Storage BESS project. The fund will be set up in line with industry guidelines, with a strong focus on early engagement with the community to ensure that local funds are allocated by local people.

For New Oak Energy Storage, we are committed to a community benefit fund of £100,000 once construction begins.

We welcome input from the local community on potential projects and beneficiaries. Brockwell Energy has a proven track record of delivering meaningful community support throughout the lifespan of its projects.

Q: In terms of celebrating local heritage, the only section of railway remaining from the long disbanded historic Hull/Barnsley line is behind your field. Other local developments have ignored this rich industrial heritage. How will you celebrate it?

A: A heritage assessment has been submitted as part of the planning application to demonstrate that the BESS would not result in any impact on heritage assets in the surrounding area.

Q: In terms of community, could you build a cycle path along the A645 between Drax and the Camblesforth roundabout?

A: Alongside the sustainability and air quality benefits associated with renewable energy, Brockwell Energy is considering options for further community benefits. We would welcome ideas for potential community benefit schemes during consultation.

Q: How does this link to the local area development plans for Camblesforth and Carlton?

A: Local area development plans for Camblesforth and Carlton will be taken into account as part of the planning application for New Oak Energy Storage.