

Welcome

BayWa r.e. is sharing its early stage plans for a Battery Energy Storage System (BESS), known as Clach Energy Storage, on land approximately 14 km south of Thurso in Caithness.



Today's exhibition is an opportunity for you to:

- View our early plans
- Meet the project team
- Ask questions and share your views
- Understand next steps and the project timeline

Our team is here to answer any questions you might have. We have also provided feedback forms to gather your comments.

About us

We are a leading renewable energy company dedicated to developing, managing and operating renewable energy projects across the UK and Ireland. As a subsidiary of the global BayWa r.e. Group, we bring extensive experience and expertise in renewable energy solutions, including wind, solar and battery storage systems.

Our experience in Scotland

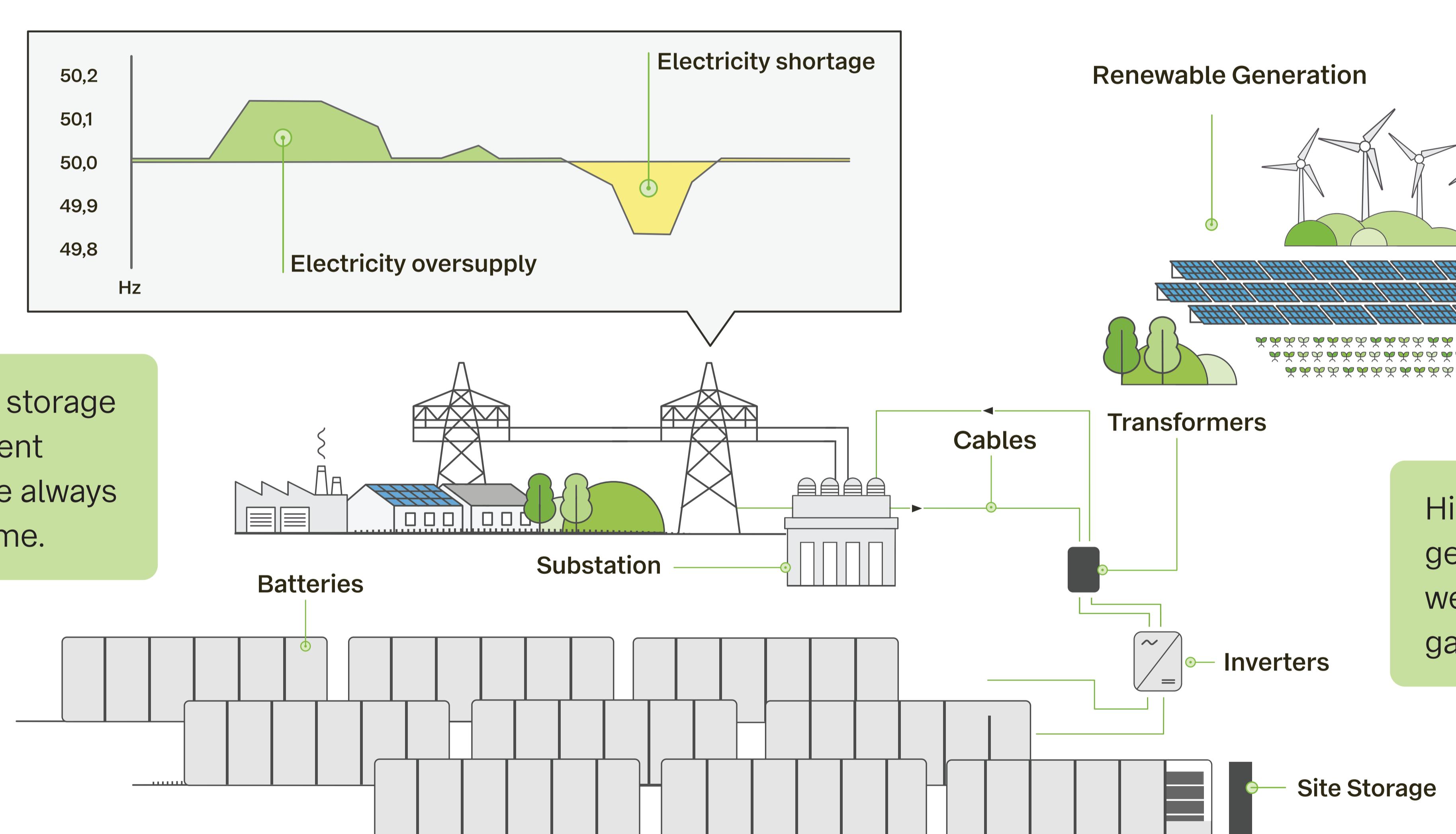
BayWa r.e. has been developing and constructing renewable energy projects across Scotland for many years, including wind farms such as **Dalquhandy**, **Broken Cross**, and **Little Gala**. We have secured planning permission for the **Redshaw BESS** in South Lanarkshire and are now developing **Clach**, a new energy storage project for the Highlands. These projects support the provision of clean, reliable energy and Scotland's transition to a low-carbon energy system.



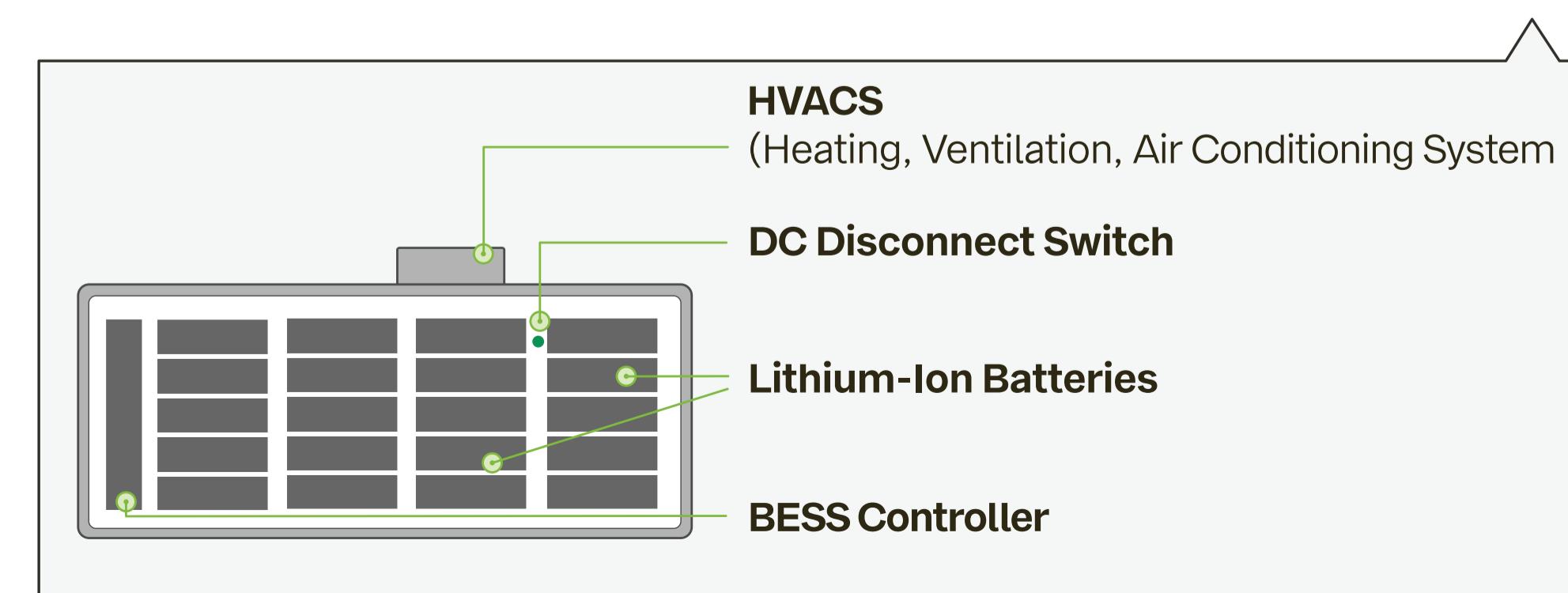
What is a BESS?

A Battery Energy Storage System (BESS) stores excess energy for later use. It helps to balance the electricity generated and the electricity needed. For example, wind turbines may produce more power than required on a windy day.

A BESS can reduce our dependence on non-renewable energy and stabilise the grid by balancing supply and demand.



Placing BESS strategically across the grid network helps reduce the need for grid expansion by making better use of existing infrastructure.



Historically when renewable energy generation could not meet demand, we relied on non-renewable fuels like gas to balance our electricity network.

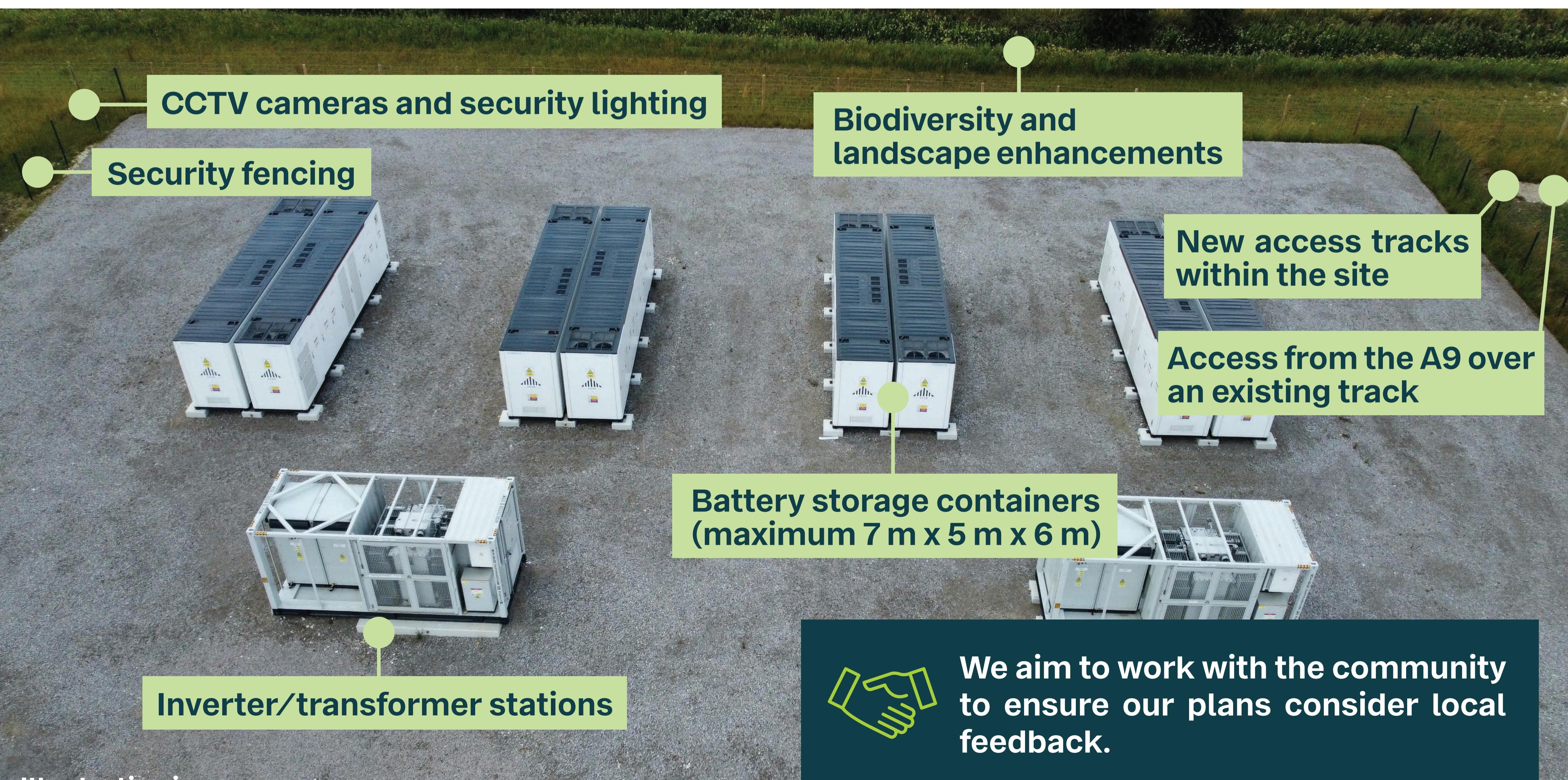
A BESS allows this excess power to charge the batteries, which can then discharge to the grid when less power is available.

About Clach Energy Storage

Originally known as Caithness BESS, Clach Energy Storage will help to manage renewable electricity in northern Scotland. As a **456 MW project** with a grid connection offer, it stores surplus energy and releases it as demand rises, helping make better use of Scotland's renewable resources and supporting a stable grid network.

The project is being considered as part of **Ofgem's Long Duration Energy Storage (LDES) Scheme**. If successful, it could store more energy than a conventional battery site, allowing longer-term storage for the National Grid.

The plans are at a very early stage. However, we expect that they will encompass:



What is long duration energy storage?

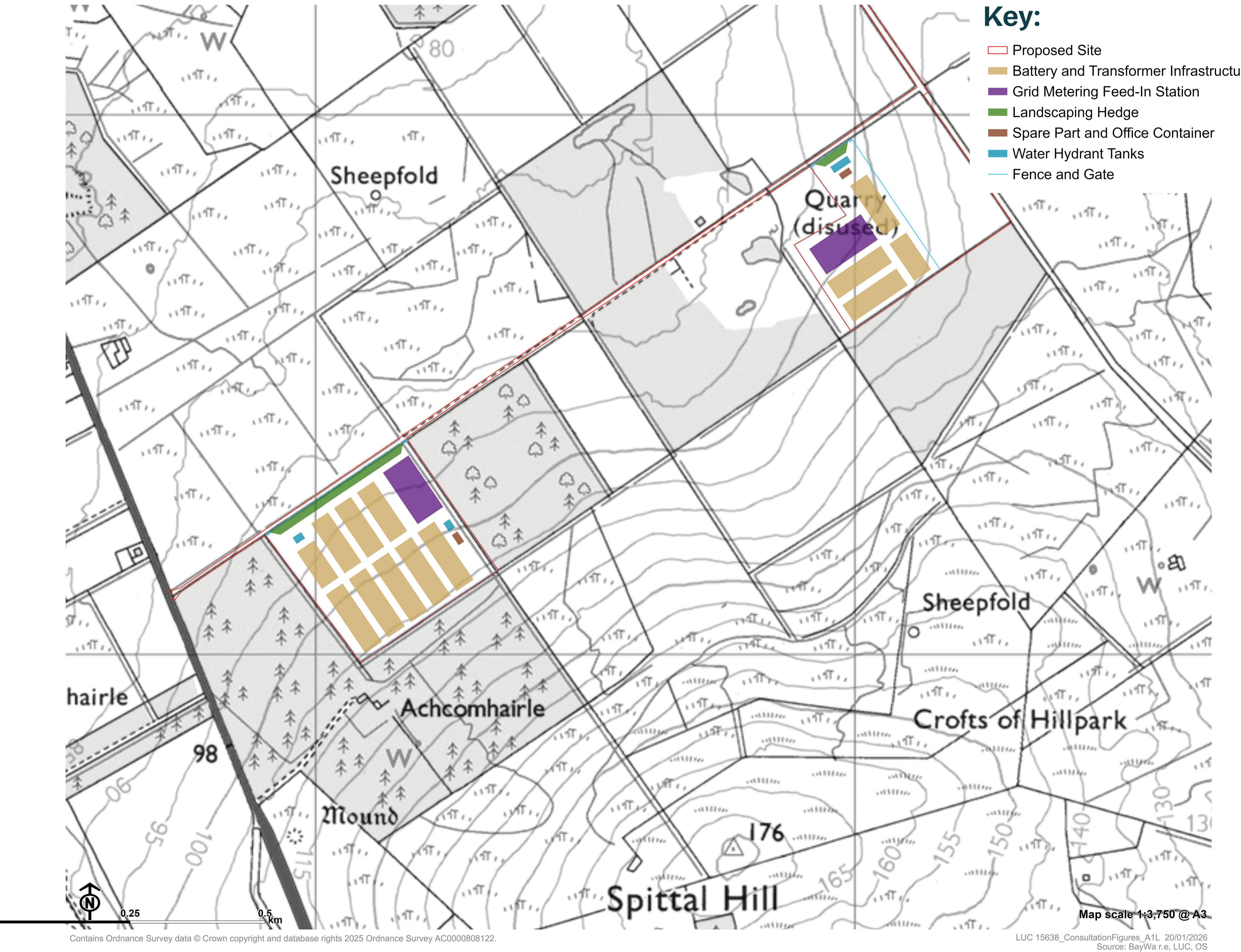
Long Duration Energy Storage (LDES) is a type of battery energy storage system (BESS) that can store electricity for longer periods than standard batteries.

This means it can hold more energy and release it over a longer time, helping to support the electricity grid when demand is high or when renewable energy is not being generated.

It uses the same battery technology as other energy storage systems and is simply designed and set up to store and deliver energy for longer.

Site layout

The proposed Clach Energy Storage Layout is detailed below.



The site:

- Covers approximately **19 hectares (47 acres)**, similar in size to around 28 football pitches
- Current plans include infrastructure across **14 hectares (34 acres)** with approximately 20% of the land remaining undeveloped
- We anticipate a maximum of **720 battery storage containers** and between **80 and 90 inverter/transformer stations**
- Is located across two fields approximately **800 metres** apart
- Is currently used for **rough grazing**, operational quarry is present between the two parcels
- Benefits from existing **forestry**, which will help to screen the development

Site context

The site has been carefully selected due to its location within an established area of electricity infrastructure.

Key context:



Located next to SSE's consented **Banniskirk Hub and HVDC converter station**



The proposed **Spittal-Loch Buidhe-Beauly transmission line** is expected to pass between the two fields



An existing **overhead power line** runs close to the site, and an **operational quarry** sits between the two fields



The site also benefits from **direct access from the A9**



Existing forestry is present, helping to screen the site

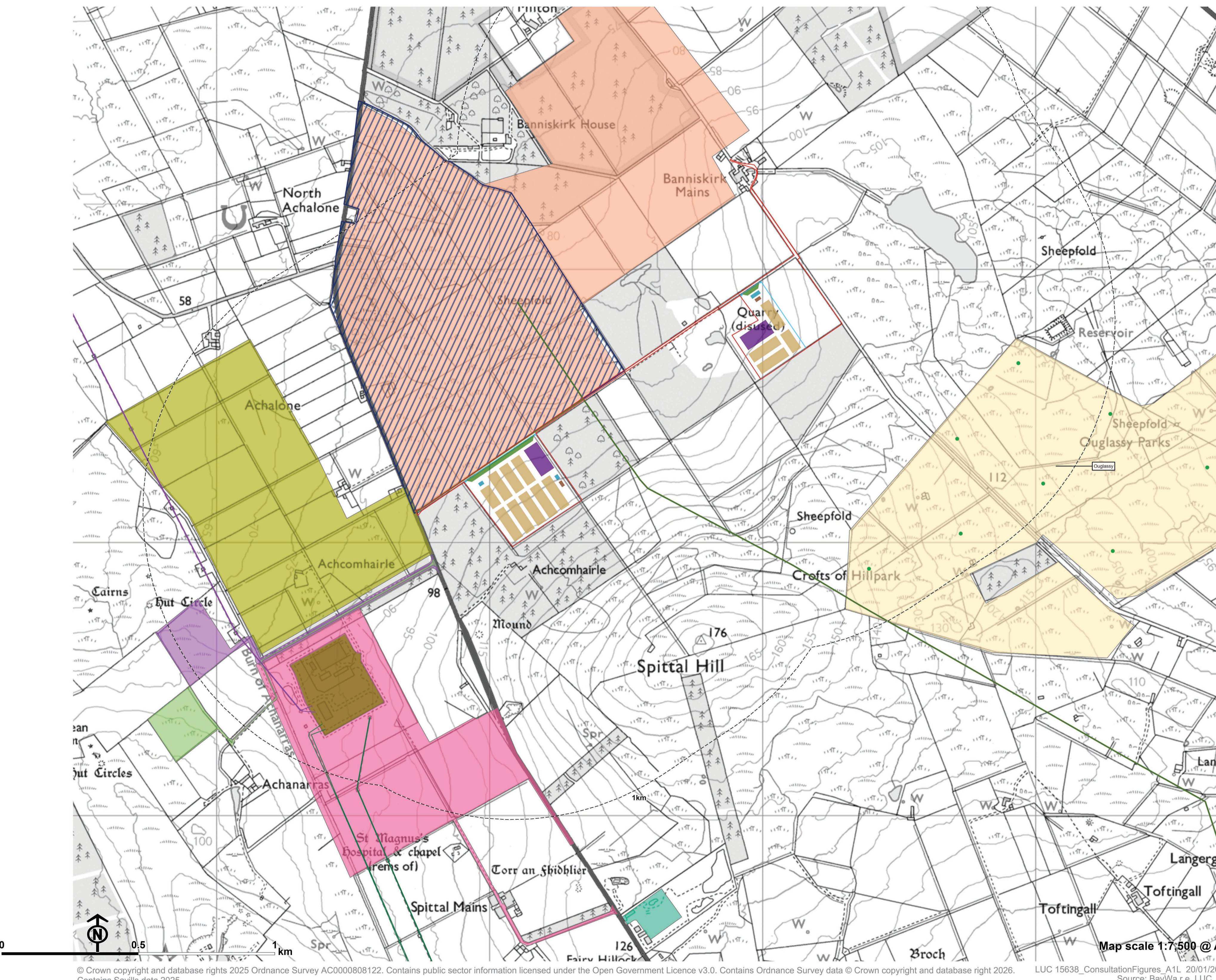


Why this location is considered appropriate:

- Enables a direct connection to the existing electricity network
- Avoids the need for extensive new power lines
- Sits within a landscape that already accommodates energy development
- Helps minimise additional environmental and visual impact
- Supports a more reliable and efficient electricity system

Why this location?

A map of the existing and proposed developments.



Key:

- Proposed Site
- 1km Site Buffer
- Battery and Transformer Infrastructure
- Grid Metering Feed-In Station
- Landscaping Hedge
- Spare Part and Office Container
- Water Hydrant Tanks
- Fence and Gate
- Existing Infrastructure**
- 132 kV Overhead Line
- 275 kV Overhead Line
- Spittal Substation
- Proposed Infrastructure**
- Spittal - Loch Buidhe - Beauly 400kV Overhead Line
- Cumulative Development Scheme Boundary**
- Achanarras BESS
- Achies BESS
- Ayre Offshore Wind Farm Onshore Transmission Infrastructure
- Banniskirk Substation (Consented)
- Caithness Flagstone Limited BESS (Consented)
- Ouglassy Wind Farm
- Spittal BESS
- West of Orkney Wind Farm Transmission Infrastructure (Consented)
- Wind Farm Status**
- Design/Scoping

- Clach Energy Storage site is located close to the recently consented **Banniskirk Hub**.
- Our proposed development is small covering just 22% of the Hub's area, adding **limited additional footprint**.
- **Low-profile equipment and surrounding forestry** will help to ensure the site is well-screened.

Environmental considerations

The project will be subject to a **Section 36 application**, which will be considered by the Scottish Government Energy Consents Unit.

A **Screening Report** confirmed that a full Environmental Impact Assessment (EIA) is not required. However, all relevant environmental and technical studies will be carried out to understand and manage potential effects.

We are working closely with the **Energy Consents Unit**, **The Highland Council**, and **key statutory consultees** to agree the information to present as part of the planning application which, as a minimum, will include assessments of the following aspects:



Ecology

Local ecosystems and biodiversity



Ornithology

Bird populations and habitats



Hydrology and flood risk

Water systems and potential flooding impacts



Historic environment

Any impacts on historical sites



Noise

Measuring and mitigating noise impacts



Land use

Current land use being assessed



Access, traffic, and transport

Transportation and access needs



Landscape and visual

Visual impacts and how the BESS integrates with the landscape

We are continuing to carry out survey work and developing the design of the BESS ahead of submitting a planning application in the near future.

Powering opportunities locally

Opportunities for communities

BayWa r.e UK is proud to invest in the communities that host our projects. We will contribute **£50,000 per year (indexed)** to a dedicated community fund throughout the lifecycle of the project. This **flexible fund** can support local initiatives, services, education, training, jobs, and sustainability projects. It may also attract additional match funding to increase its impact.

We welcome your ideas on how this fund can best benefit the community.



Opportunities for local businesses



Clach Energy Storage offers exciting opportunities for local businesses with the right skills and services, both during construction and operation. BayWa r.e UK is committed to working with local companies wherever possible.

At recent projects:

- 77% of civils contracts at **Dalquhandy Wind Farm** were awarded to Scottish companies
- At **Broken Cross Wind Farm**, 80% of civils contracts went to Scottish companies, many of them local

[Join our Local Business Register](#) to hear about upcoming opportunities.

Please email: info@clach-bess.co.uk

Indicative timescales and next steps

The project team has carried out **early-stage assessments**, including desk-based studies, site visits, and technical surveys. These studies have helped us build an **understanding of the local environment** and inform our emerging layout for the site.



Thank you

Thank you for taking the time to attend this event.

We value your feedback

At this stage, please provide your feedback directly to BayWa r.e.. Once the application is submitted there will be the opportunity to make formal representations directly to the Scottish Government Energy Consents Unit.



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