WHAT ARE WE PROPOSING TO BUILD AND OPERATE?

Field builds and operates large batteries which store energy to help create a greener, more stable electricity grid.

We'd like to build one of these batteries, Field Spittal, on land south of the existing Spittal converter station.

Field Spittal would connect directly to Spittal converter station via underground cables and would be capable of providing up to 300 MW of electricity to the national grid. This is expected to avoid up to 1.7 million tonnes of CO2e emissions during the first 20 years of operation. This would be achieved by storing electricity when renewable energy generation is high, and supplying the grid with electricity when renewable energy generation is low, thereby reducing reliance on high carbon energy sources.

Field currently operates two sites, Field Oldham, a 20 MW battery which has been operating since Autumn 2022, and Field Gerrards Cross, which started operating in April 2024. Field Spittal would join these sites as part of a nationwide network which, together, will help the UK reach net zero.

INDICATIVE TIMELINE

Early 2024

Early environmental assessments and design work

2 May 2024

Public consultation event 1

May 2024

Ongoing detailed environmental assessments and design updates based on stakeholder feedback

30 May 2024

Public consultation event 2

June 2024

Final design updates based on assessments and stakeholder feedback

Summer 2024

Submission of planning application

Early 2025

Determination of planning application

2027 onwards

Construction and operation

FIELD SPITTAL

Field Spittal would be located directly south of the existing Spittal converter station. The built infrastructure (batteries, cables, access tracks, etc.) is proposed to cover an area of approximately 9 hectares.

We'll also provide landscaping to reduce visual impacts and we'll provide biodiversity enhancements to ensure we are having a positive ecological effect on the land we use.

Field Spittal will be made up of the following components:

- **Battery energy storage units**, which will be used to store the energy from the grid.
- **Power conversion systems** (including inverters and transformers), which convert energy from alternating current to direct current, so that it can be stored by the batteries.
- An **on-site substation**, which either steps up or steps down the voltage of the energy being stored, so that it can be transferred to or from the grid.
- An **underground cable connection** to connect the battery to the existing Spittal substation.
- **Site access tracks** to allow vehicles (including emergency vehicles) to safely get around the site.
- **Drainage arrangements** to allow surface water to drain from the site at the same rate as the existing fields.
- **Site security**, including CCTV, fencing and lighting.
- **Landscaping**, including earth bunds and native species mix planting, to reduce visual impacts and contribute to biodiversity enhancement.

FIELD

FIELD SPITTAL BATTERY STORAGE

STORING ENERGY IN THE HIGHLANDS

Scotland has set a target to become net zero by 2045.* Batteries enable much greater use of renewable energy, and therefore play an important role in helping Scotland reach net zero.

Batteries are a vital part of how we can make the most of renewable energy, which is why we believe that they can play a part in Highland Council's "Future Highland" Programme. The Highland Council stated in their Net Zero Strategy (2023) that:

"The Council's "Future Highland" Programme sets out a vision of Highland, a centre for global renewable energy, by capitalising on our areas of immense natural capital to deliver alternative energy solutions including developing solar, hydrogen, Hydro, wind and wave solutions."

*https://www.gov.scot/policies/climate-change

WHY DO WE NEED BIG BATTERIES?

To reach net zero, increase energy security and help reduce energy bills, we need to store renewable energy and improve the electricity grid's stability and reliability.

Our batteries are designed to fill gaps in the UK's electricity supply by charging up when renewable energy is being produced (such as on windy or sunny days) and discharging energy back into the grid when needed (e.g. when the wind isn't blowing, the sun isn't shining, or we aren't able to import enough energy from elsewhere).This ensures plenty of energy is available for people to make their morning cuppa, even on a calm, overcast winter's day.

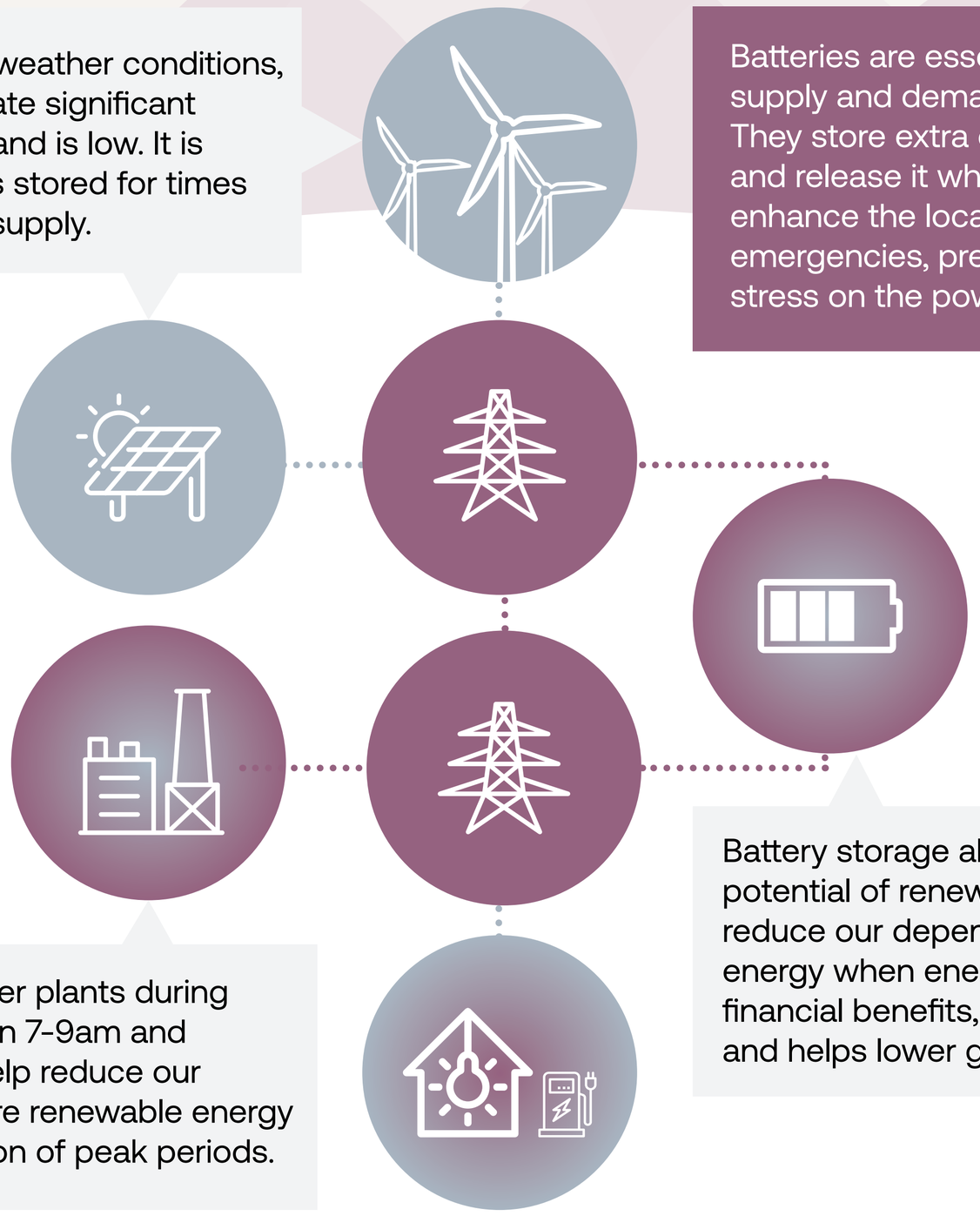
These batteries work a lot like the batteries you use at home, only instead of using our batteries to power a torch or TV remote, we operate large, 'grid scale' batteries.

This means we can rely more on renewable energy and less on expensive fossil fuels to provide electricity to thousands of homes and businesses.

Batteries are also very good at keeping the grid stable, by maintaining a constant and predictable supply of electricity to the grid, at the right frequency.

Changes in the supply and demand of electricity on the network create changes in this electrical frequency. This needs to be closely monitored, as if frequency is too high or too low, the network can't operate properly. Field Spittal will help to keep this frequency at the right level, which in turn helps reduce the chances of network disruptions or blackouts.

Wind and solar energy rely on weather conditions, meaning they can often generate significant amounts of energy when demand is low. It is important this excess energy is stored for times when demand is greater than supply.



Batteries are essential for managing energy supply and demand throughout the day. They store extra energy when demand is low and release it when demand is high. They enhance the local power grid's stability during emergencies, preventing blackouts and reducing stress on the power infrastructure.

We currently turn on gas power plants during peak periods such as between 7-9am and 6-8pm. Battery storage will help reduce our reliance on gas power, as more renewable energy can be stored up in anticipation of peak periods.

Battery storage allows us to maximise the potential of renewable energy sources and reduce our dependence on fossil fuel based energy when energy demand is highest. This has financial benefits, such as reducing energy costs, and helps lower greenhouse gas emissions.

WORKING WITH LOCAL COMMUNITIES

Our batteries will provide huge benefits to the UK, and we take great care to make sure this is not to the detriment of the communities that host them.

As a responsible developer and operator, listening to local communities matters to us, as it allows us to understand and respond to local issues, and ultimately build better battery sites.

We engage early with communities throughout the development process, oversee the construction on-site and we're responsible for the project once it's in operation. We're part of communities for the long-term.

COMMUNITY BENEFITS

Field is working with the National Schools Partnership (NSP)* to design a community-based education programme which invites and equips young people to explore the diverse range of careers that exist within the renewable energy sector.

The programme is currently in development and will be initially rolled out to local schools surrounding Field Spittal.

WHY WE'RE DOING IT

The Highland Council recognises that the renewable energy industry is a future growth sector for the Highlands and offers significant local employment opportunities.**

With 65% of young people stating that they don't understand the skills employers need***, Field recognises that educators need support to prepare young people for the jobs of the future.

Field aims to support educators by providing key insights about the diverse types of jobs that exist, the education or training required, and the steps that young people can take to pursue local careers in the renewable energy industry.

WHEN WILL IT LAUNCH?

The programme will launch across several pilot catchment areas across the Highlands at the end of August, for the start of the new academic term. Depending on feedback, the programme could be rolled out in other areas.

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* The National Schools Partnership is an education network (run by the Brand and Social Impact Agency, We Are Futures) providing free teaching resources to schools across the UK.

** Developing a Strategy to Enable a Future Workforce – A Strong and Fair Economy for all, The Highland Council (2023)

*** Youth Voice Census Report (2022)

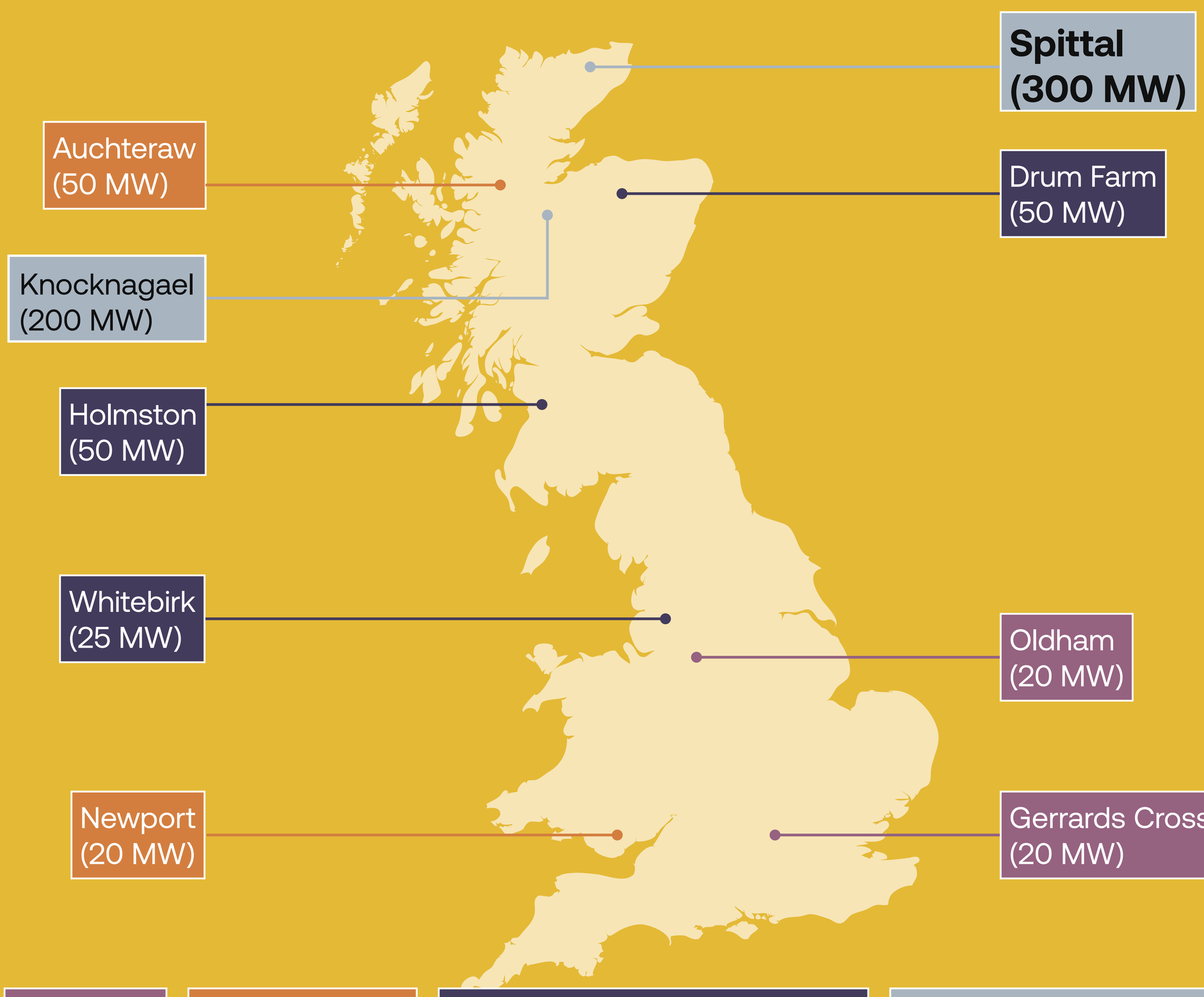
WHO WE ARE

Field is a leading developer, owner and operator of grid-scale batteries across the UK and Europe. Field's aim is to develop battery projects that reduce climate change emissions, support the stable operation of the electricity grid, and bring down energy prices for consumers.

We're responsible for all stages of project development, from initial landowner engagement through to concept design, planning, construction and operation. We're committed to designing, building and operating projects that are environmentally sustainable and have as little impact as possible on the communities around them.

We value ongoing engagement with our communities to understand and respond to local perspectives and concerns and will work with local communities throughout every stage of the project.

Field Spittal would form part of Field's extensive portfolio of battery projects across the UK and Europe. In the UK, we have several projects at varying stages of development:



FREQUENTLY ASKED QUESTIONS

When will Field Spittal be built?
We will be submitting our planning application to the Energy Consents Unit in Summer 2024. If we are granted consent, we would look to start construction in 2027 and it will take about two years to complete.

How will our local community benefit?
We're currently working with the National Schools Partnership* to deliver a community-based programme in local schools to help educate students about the work that Field is undertaking in renewable energy and energy storage, as well as encouraging and equipping young people to explore careers in STEM and renewable energy. The Field team will work with local schools to provide information to students about how to build a career in the renewable energy sector.

Are battery energy storage sites noisy?
The main noise associated with batteries are the cooling fans, which keep the batteries from overheating. This noise level is low and the batteries are not expected to be audible beyond the site boundary. Noise is measured against existing background noise levels and noise levels are required to meet the relevant British Standards and World Health Organisation Noise Guidelines.

We conduct thorough noise evaluations for each site and implement various noise mitigation measures in our project plans. These measures, such as acoustic fencing and bunding, ensure that noise impacts are acceptable at nearby sensitive locations.

Will the project impact nearby heritage assets?
St Magnus' Church, Hospital and Burial Ground is located approximately 130 m south of our proposed batteries. Whilst we won't directly impact the protected site, we're working closely with Historic Environment Scotland to reduce potential impacts on the monument's setting. This includes the use of earth bunds which would match the surrounding topography and reduce visual impacts from the monument and the A9 towards our site.

We appreciate the importance of this heritage asset and we're open to thoughts or suggestions about how its setting can be protected.

Will the project impact trees or ecology?
Tree and hedgerow removal will be avoided where possible. We also carry out full ecological surveys to identify any potential ecological impacts, and we provide biodiversity enhancements to compensate for any impacts that do occur.

This is typically through the planting of native species as part of our landscaping, which will also help to minimise any potential visual impacts.

Will the project impact local traffic?
Once operational, the battery will have minimal impact on local traffic, with only occasional visits required for maintenance.

When the battery is being built, construction traffic is managed through a Construction Traffic Management Plan. This will include details of construction traffic numbers, vehicle routing and working hours. As with all aspects of the development, we welcome input from the local community to help reduce any impact on local roads where possible.

Will the project cause flooding or impact drains?
Because our projects contain electrically sensitive equipment, flood risk is a key consideration during site selection and project design. We carry out detailed flood modelling to ensure equipment is located outside or above any modelled flood depths, which also ensures there is no increase to flood risk on or off-site.

We'll also build appropriate drainage infrastructure to ensure surface water run-off remains at an acceptable level. These will include rural sustainable drainage solutions, such as swales, which can collect and discharge water into existing drains at the right rate.

Are the batteries safe and what safety measures will you put in place?
Large batteries are safe facilities. We work hard throughout site design, construction and into operation to ensure the safety of our sites. We would only use batteries that have best-in-class fire safety performance and will be compliant with all relevant fire safety standards.

The batteries will be constantly monitored and in the unlikely event that a fire does occur, the facility will employ automatic fire detection and suppression systems.

We are also working with the Scottish Fire and Rescue Service to ensure suitable emergency response procedures are in place, including a Battery Fire Safety Management Plan.

To keep our sites secure, all our projects include perimeter fencing and gated access. During operation, our sites are unmanned and CCTV is used to monitor activities.

*National Schools Partnership is a unique education network (run by the Brand and Social Impact Agency, We Are Futures) providing free teaching resources to schools across the whole of the UK.

PLANNING APPLICATION

To support our planning application, we are proposing to submit the following documents and assessments:

- Ecology Statement
- Ground Condition Risk Assessment
- Landscape and Visual Impact Assessment
- Flood Risk Assessment / Drainage Strategy
- Noise Impact Assessment
- Archaeology and Cultural Heritage Statement
- Outline Construction Traffic Management Plan
- Outline Battery Safety Management Plan
- Socio-Economic Benefits Assessment
- Design Statement
- Planning / Sustainable Place Statement
- Pre-application Consultation Report.

Following submission, these documents will be available to the public via the Energy Consents Unit's website.

Please note that comments made during this pre-application consultation phase are not representations to the Scottish Ministers. Following submission of the planning application to the Energy Consents Unit, there will be an opportunity to make representations directly to the Scottish Ministers.

WHAT HAPPENS NEXT?

We're holding a second consultation event at Spittal Village Hall on 30 May 2024. We'll continue accepting feedback via post or email until 7 June 2024.

We'll then integrate your feedback into the final planning application and submit this to the Energy Consents Unit in Summer 2024.

After it's submitted, you will have the opportunity to make a representation about the application to the Scottish Ministers, via the Energy Consents Unit.

WANT TO KNOW MORE?

For more information, please visit our website at **www.fieldspittal.co.uk**

If you have any questions or you'd like to provide comments, please do not hesitate to email us at **feedback@spittal.co.uk**.