flexION energy

Developing Battery Energy Storage Systems

PRODUCE LONG TERM REVENUE FROM UNDERUTILISED LAND

We are seeking landowners who are interested in generating an elevated, stable, and long term revenue from underutilised areas of land.

If you have between one and four acres that you think can provide you with a better return, we can help you understand the benefits a battery energy storage system could bring.

Produce a significant return per acre compared to agricultural land use

Diversify your farming business income whilst keeping your land and continuing to farm

Receive a reliable revenue stream, detached from market fluctuations

Be part of the change that will bring about net zero, which will help to protect your environment and the planet

ACRES USED:	***1.5***
INDICATIVE ANNUAL INCOME:	***£42k***
ANNUAL INCOME PER ACRE:	***£28k***
BASE LEASE PERIOD:	***40 YEARS***

UP TO 4 ACRES OF LAND, OVER 40 YEARS, COULD PRODUCE BETWEEN £30,000 AND £150,000+ PER YEAR*

This example shows a site of approximately 1.5 acres hosting a Flexion Energy battery energy storage system.

1. This layout could provide a rent of over £42,000 per year
2. We would be your tenant for a basic lease of 40 years, with full responsibility to clear the site away at the end of the term
3. We are looking for land which is free of any environmental designations, has good access to the highway and is close enough to the grid
4. We manage all the necessary planning and connection agreements as well as contributing to your professional fees to negotiate the land agreements. You even receive interim milestone payments ahead of the entering the lease.

WHAT IS A BATTERY ENERGY STORAGE SYSTEM?

A grid connected battery energy storage system comprises a set of batteries stored in containers, and associated electrical equipment which are enclosed within a secure fenced site.

The compound is connected to the grid via underground cables which we would install. The batteries are able to take electricity from the grid to charge, as well as discharge the electricity onto the grid.

These schemes operate in a number of ways. When the national level of generation is high but the demand for electricity is low the batteries charge up and hold the electricity. When the situation is reversed they discharge their energy onto the grid network to supplement the electricity generated from other power sources.

Batteries are also able to help maintain the stability of the national grid, to ensure it is operating correctly and we obtain service contracts to do so. Lastly, battery systems can help manage the electrical networks to prevent wires and substations from becoming overloaded.

Battery systems can provide the electricity to fill the imbalance between demand and generation, which might otherwise come from back up gas and diesel generators. As such, this example project could prevent over 5,000 tonnes of CO_2 a year from being emitted.

Given that battery systems allow for greater amounts of renewable generation to connect to the grid, this CO_2 saving gets even higher as more batteries are connected to the grid.

* Dependent on the capacity of grid connection available

ABOUT US

We Develop, Build and Operate

Flexion Energy develops, builds, owns and operates energy storage assets in the UK, specifically large-scale battery systems connected to and serving the grid.

UK Based and Financed

Flexion Energy is a modern utility and energy storage infrastructure specialist, which is bridging the gap between development and finance.

We have solid and secure UK based financial backing to make long term investments in UK green energy infrastructure, enabling us to work quickly to bring energy storage systems on stream.

Experienced Development Team

Our people have been pioneering renewable energy, in particular battery technology since its first introduction to the GB grid.

The team consists of experts in grid connections, planning applications and property agreements as well as the design, construction and operation of these assets.

WHY DO WE NEED ENERGY STORAGE?

We are all aware of the climate crisis we are facing and the need to reduce our carbon emissions. From the historic dominance of fossil fuels in electricity generation to the current increasing drive to electrify our heating and transportation, it is imperative that we move to a cleaner, electrical grid which allows for a greater contribution of clean energy sources.

Generating more electricity from renewable sources like wind and solar means we require greater flexibility in how we store electricity and how we move it around our grid.

Battery energy storage systems not only provide an efficient means of storing and delivering electricity when there is a mismatch between demand and generation, they help maintain the stability of the national grid as a whole. They help grid network operators to overcome the twin challenges of preventing network components becoming overloaded and spreading out the need for reinforcements.

We are going through a period of modernising and cleaning our electricity supply. Battery energy systems play a key part in this transition to both make electricity generation more environmentally friendly and to keep the network stable and operating effectively.

YOUR QUESTIONS ANSWERED

How much land is required?

Unlike a solar PV installation, only a small piece of land is needed for an energy storage development, between one and four acres.

The land required for the actual electrical compound only forms part of the land take. The compound for a 20MW site could measure 40m x 40m, whereas the compound for a 100MW site could measure approximately 100m by 150m or equivalent.

Additionally, we need land to allow access for, and to turn vehicles, drainage channels and often we need a small amount of tree or bush planting to provide some visual screening.

Suitable sites for battery schemes include, disused yards or the sites of surplus farm buildings, lesser productive areas of land or awkwardly shaped field corners which are difficult to farm.

Given the modular nature of the compounds they can be designed to fit into any shape of plot.

Do I have to pay legal or development costs?

No, we pay your reasonable legal fees and handle all the planning application and grid connection costs.

In fact, we can pay milestone payments ahead of entering the lease in order to reserve the land.

Will the energy storage installation affect my farming business?

No, there is no disturbance to your business and farming practice. Farmers and landowners often like the fact that rents from battery installations, combined with their small footprint allows them keep hold of their land and continue to farm it.

The revenue stream from the installation is secure and reliable, it is not subject to price fluctuation or subsidy levels in the way that farming inputs and outputs have been over recent years.

Battery sites also require minimal human attendance meaning there might only be one or two vans a month visiting the site to ensure the site is kept tidy and is running well.

How long will construction last?

Depending on the size of the site and the specifics of your location, construction could last between 8 and 12 months, from the point where we enter onto your site to the point when the site is fully operational. Construction broadly follows four phases: ground works, deliveries, commissioning then demobilising the construction works. Heavy vehicle traffic is generally confined to the first two stages. A lot of our development work will be on how we can best get the vehicles onto site.

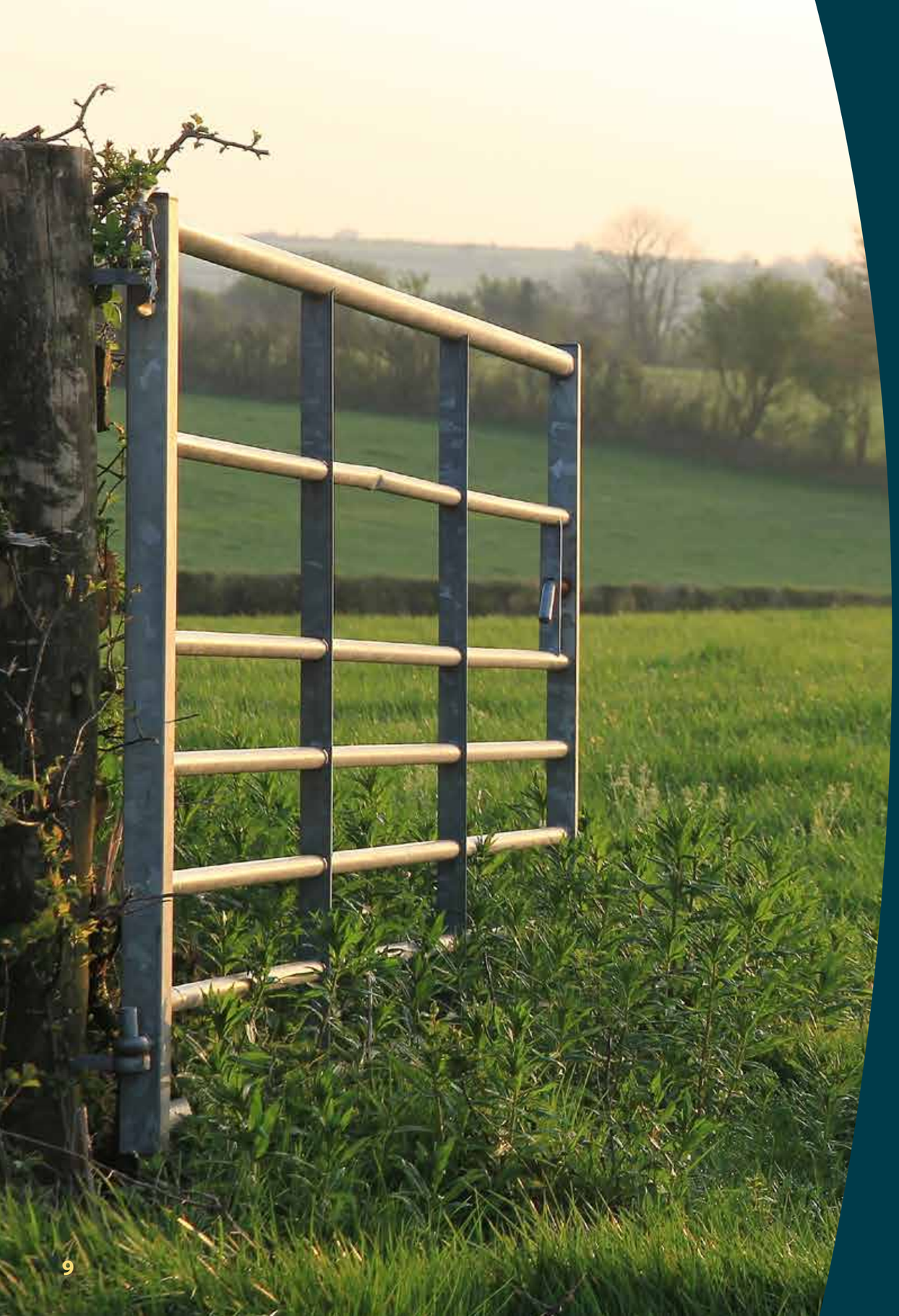
Do they make any noise?

Like most electrical equipment the components in a battery system give off a faint electrical hum, there are also cooling fans which make a small contribution. As part of our development works (which will be reviewed by the local council) we create models to predict how much noise there could be and we also survey the immediate area around the site to understand what your background levels of noise are. We then design the site to ensure the noise levels will be acceptable by selecting suitable equipment, orientating equipment in certain ways and or installing acoustic barrier fencing.

Is there any impact on tax or land inheritance?

The rent from battery schemes will provide a new revenue into your business, and depending on your personal circumstances, it may affect your tax (or other financial) position.

We can connect you with specialist land and rural tax accountancy professionals who can work with you to ensure the best route forward for you and your land.



OUR PROCESS

1 Initial Agreement and Letter of Authority

We discuss what is involved in developing a battery project on your land.

We discuss the suitability of your land and how we could access your land. This could include a site visit.

We ask you to sign a Letter of Authority which means you are giving us permission to discuss a grid connection on your land with the network operator.

2 Grid Network Application

We submit a formal application to obtain a connection to the network operator and they provide us a written connection offer in around 3 months.

Whilst the application is being considered we can discuss the Heads of Terms to your land agreements.

We can also get started on some early survey work which would contribute to the design and planning application.

3 Option and Lease Negotiation

We negotiate the Option to Lease and draft Lease Agreements, which will cover the pre-construction, construction, operation and decommissioning phases.

We will complete all the necessary design and environmental surveys to inform the site design and the planning application.

We will engage with your local authority and community to gather views on the project.

4 Planning Application Determination

We submit the planning application to your local authority and await their feedback, providing any further information as it is requested.

We may start conducting some buildability tests at the site to better understand the ground conditions.

A planning decision is usually forthcoming in around three to six months.

5 Construction

Construction will start with ground preparation works ahead of the delivery of the equipment.

The equipment arrives ready to place onto its foundations and connect together.

You will have a Flexion Energy representative to speak to at any time, in addition to getting hold of anyone of us that you have been working with to date.

6 Operation

The site will happily operate without any on-site staff, but it will be monitored 24/7 from a control room.

One to two vans per month will visit the site to keep the site tidy and make checks.

At the end of the site's operation we will clear the installation away and return your land to how we found it.

ABOUT FLEXION ENERGY

Flexion Energy is a joint venture platform between ion Ventures Ltd and GLIL Infrastructure LLP, to develop, build and operate energy storage projects in the UK.

ion Ventures is an international developer, expert adviser and partner for the growth of renewable generation, clean electrification schemes and optimised, flexible power infrastructure.

GLIL is an UK based Alternative Investment Fund with £3.6 billion of committed capital. GLIL is backed by Local Pensions Partnership Investments, Northern LGPS and the government-established DC workplace pension provider Nest. These are all large, local UK pension schemes, with access to competitive capital with a long term focus.

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