



**STATERA**  
BALANCING THE GRID

# Exeter Storage Scheme

## About Statera

We develop and deploy energy infrastructure to balance a high renewables electricity system

### Why we exist

The amount of renewable energy generation forecast to be installed in the UK by 2030 means a transformational shift in how the grid operates.

### How we're doing it

We build, own and operate flexible energy infrastructure that solves the issues of balancing grid supply and demand.

### What we do

The projects we deliver are aiming to decarbonise the electricity system, while ensuring greater energy security.



## Purpose of the exhibition

- Introduce the Exeter Storage Scheme
- Provide details of the proposed project and explain the rationale
- Explain the timeline of the proposed project
- Provide contact details and explain how you can keep in touch
- Offer an opportunity for the public to have their say in the development process

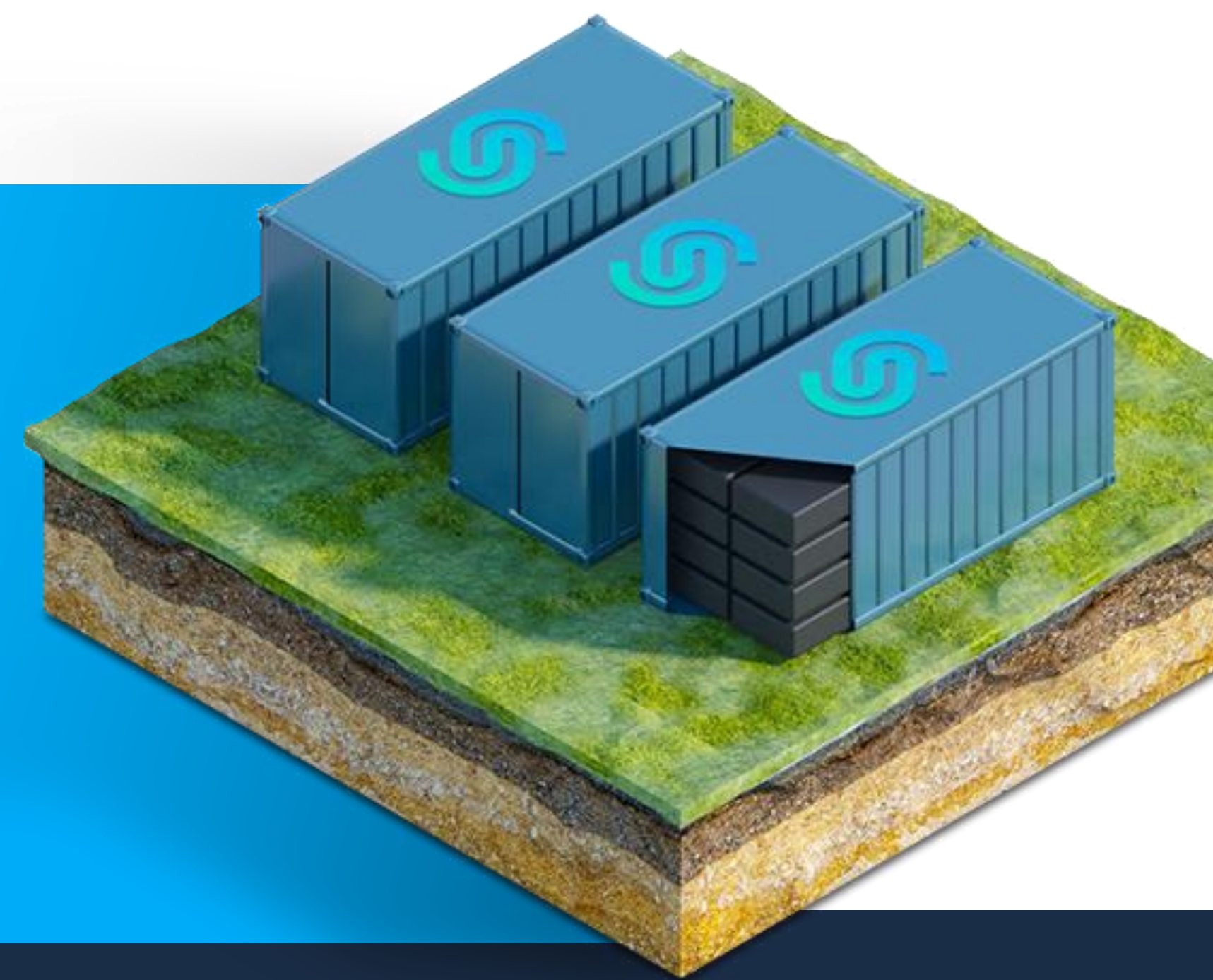


# What is battery storage?

Storage technologies enable energy from renewables like solar and wind to be stored and then released when customers need power most.

Energy storage can be grouped into five broad technology categories;

- Batteries
- Thermal
- Mechanical
- Pumped Hydro
- Hydrogen

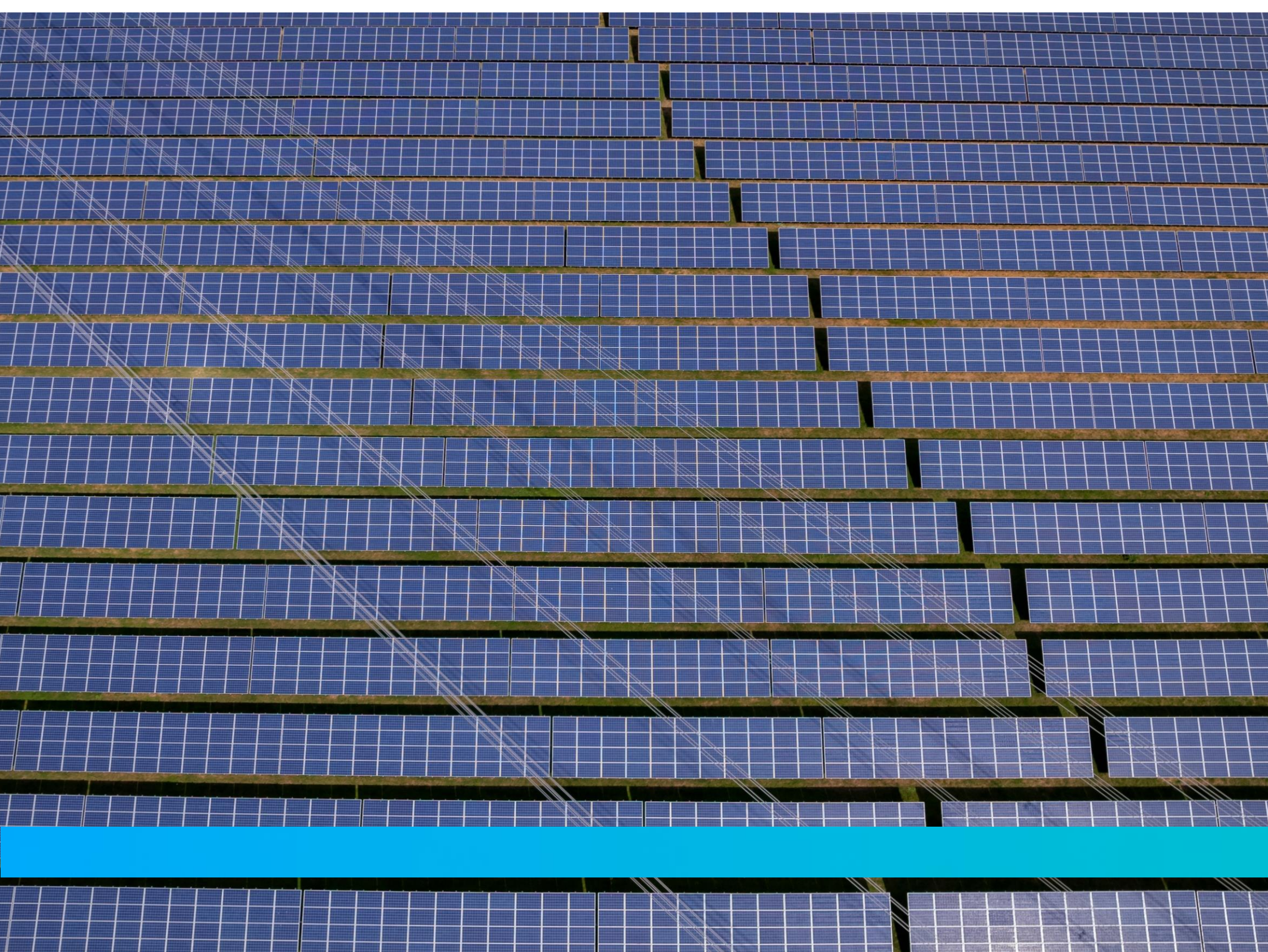


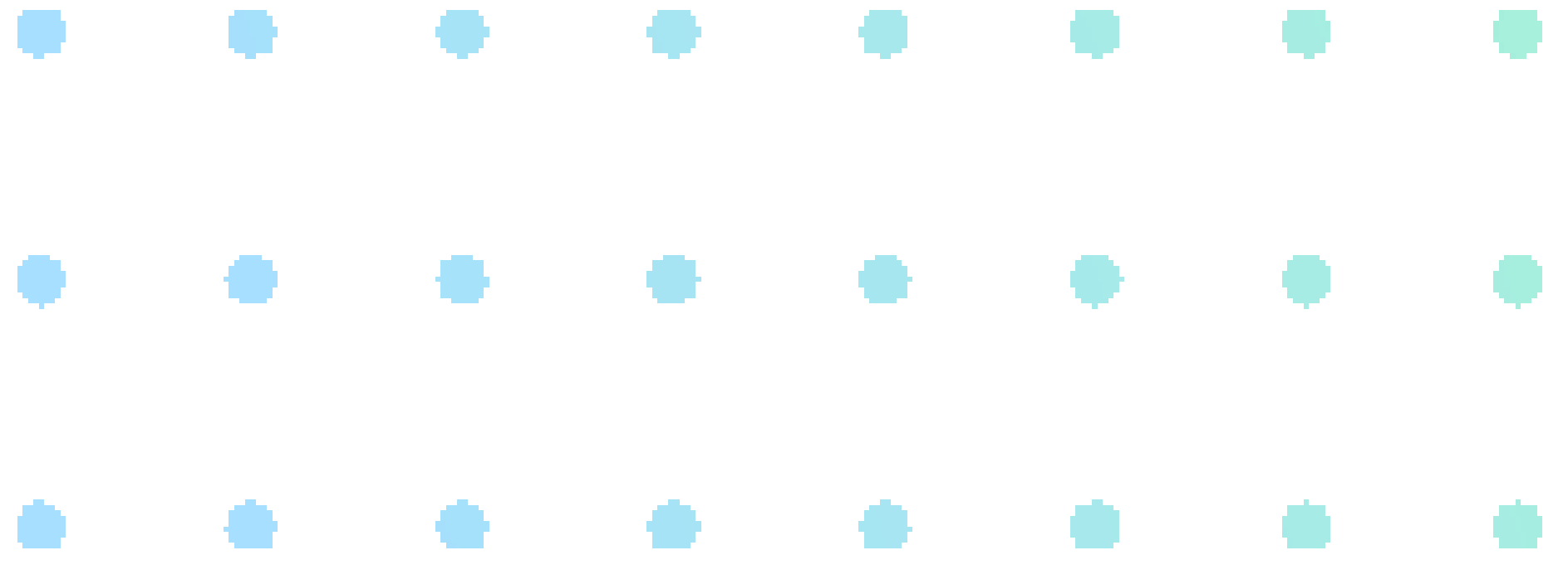
Batteries are a fundamental energy storage technology used across a range of applications. The lithium-ion batteries found in smartphones, laptops and electric vehicles are the most widely known. However, on a larger scale, Battery Energy Storage Systems (BESS) provide services to electricity networks.

Batteries perform two functions for the electricity network. They use electricity to charge when there is surplus energy or low demand and they also transfer energy back to the grid in times of high demand. As renewable energy generation increases, BESS are becoming a more important tool to provide services to the grid and to large scale electricity users.

## Energy Storage is an essential component to a modern grid system:

- allowing surplus energy generated at off peak times to be stored for later use – increasing efficiency
- facilitating the integration of distributed and renewable generation
- rapidly responding to power fluctuations within networks to maintain system stability and integrity

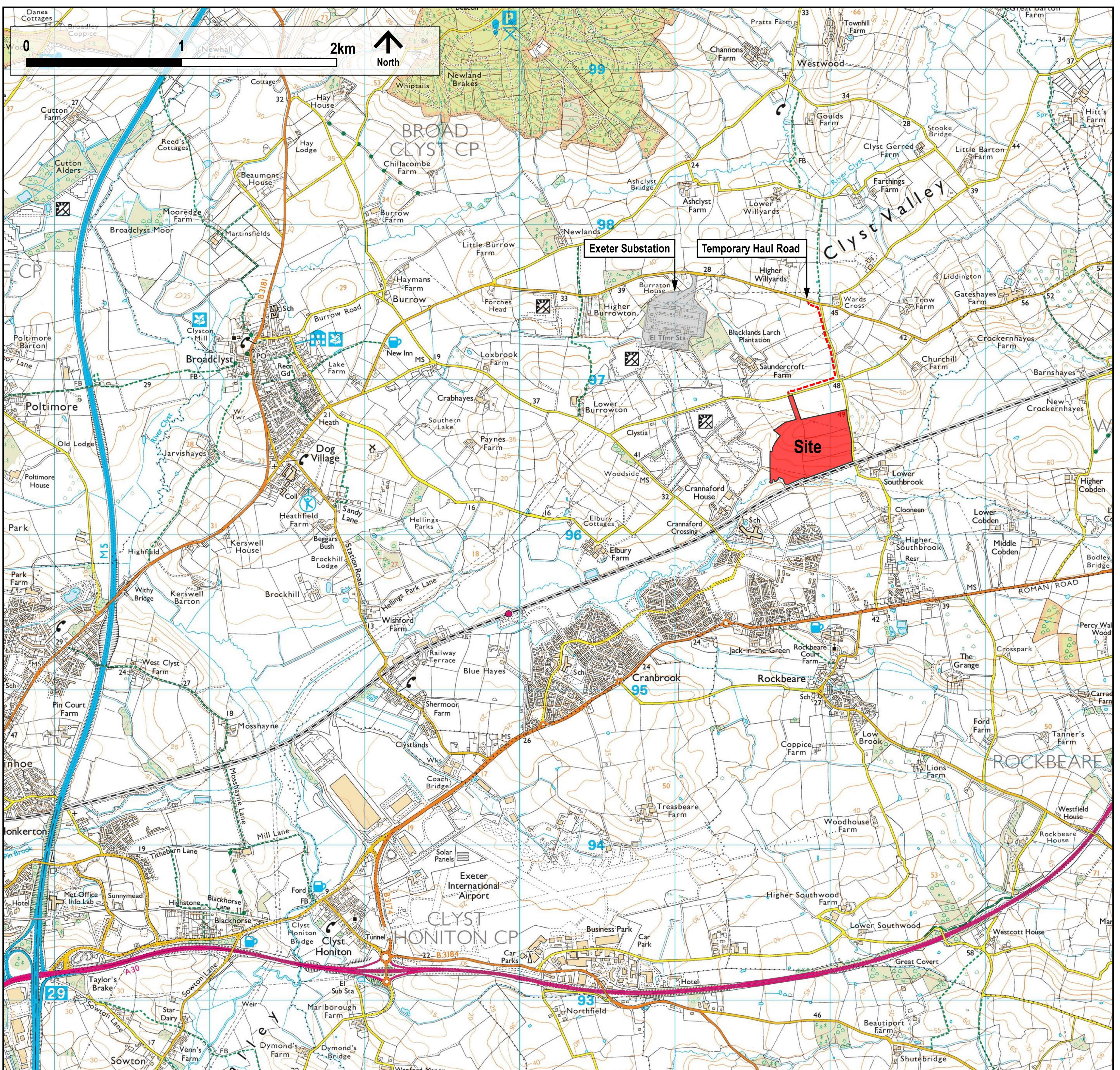




# Location

The site is located on agricultural land to the north and east of Cranbrook and to the east of Broadclyst. The site lies to the south of Saundercroft Road with the existing Exeter substation to the north west and the railway line to the south.

The site is located within the administrative area of East Devon District Council.





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# Project Overview

## Important Project Details:

- This a battery storage scheme
- It has a capacity of up to 300MW
- The Point of Connection is into the existing Exeter substation

## Battery Storage

**Statera Energy is seeking planning permission to develop a battery energy storage system (BESS) on farmland to the southeast of the existing National Grid substation near Exeter.**

The site will span approximately 47 acres including land for landscape and biodiversity enhancement. Our battery systems are designed to deliver an efficient and reliable service that can adapt to various energy market conditions. The BESS we develop can provide super-fast, sub second responses to demand and generation changes on the Grid.

As renewable energy generation increases, BESS are becoming an increasingly important tool to provide services to the grid and to large scale electricity users. Deploying batteries at this large scale can realistically only be done next to existing National Grid substations. This scheme will connect to the substation at 400kV and it is uneconomic to run these cables great distances.





# Battery Layout



Revision	Date	Comment	ON BEHALF	PROJECT
			Statera Energy	Exeter Battery Energy Storage System
			DATE: 21 October 2022	TITLE: Masterplan
			SCALE: 1:1,250 @ A1	
			DWG No: SL247_L_X_MP_1	
			APPROVED: C&D	

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**Legend**

- Site boundary
- Existing contours
- New contours
- Existing trees/hedgerows
- New substation compound
- 2.5m high weld-mesh security palisade fencing
- Crushed stone access track
- New woodland planting
- Land safeguarded for a railway station within the Cranbrook plan
- Attenuation pond
- Loose permeable gravel
- Wildflower grass
- Overhead electricity clearance zone
- Species-rich grassland suitable for livestock grazing
- 1.5m high post and wire stock proof fence
- Proposed hedgerow planting
- Proposed native hedgerow and parkland tree planting
- Proposed orchard trees
- Proposed permissive access for the operational life of the facility
- Inverter building
- Transformer
- Battery container
- Storage container
- Control room (total 4)





## Environmental Impacts



Environmental surveys will be undertaken to understand the potential impacts the proposed development could have on the environment and to identify appropriate mitigation measures to avoid, reduce or offset any adverse effects identified.

Initial walkover surveys have commenced in 2022 for cultural heritage, protected species, habitats and birds, as well as noise and transport assessments.

## Agricultural Land Classification

An Agricultural Land Classification assessment has been carried out on the land proposed for the battery development. Approximately 67% of the site is classified as Grade 3b with 24.4% of the site being classified as Grade 3a and 8.3% being classified as Grade 2.

Climate change is the single biggest threat to UK food security according to the Department for Environment, Food and Rural Affairs.

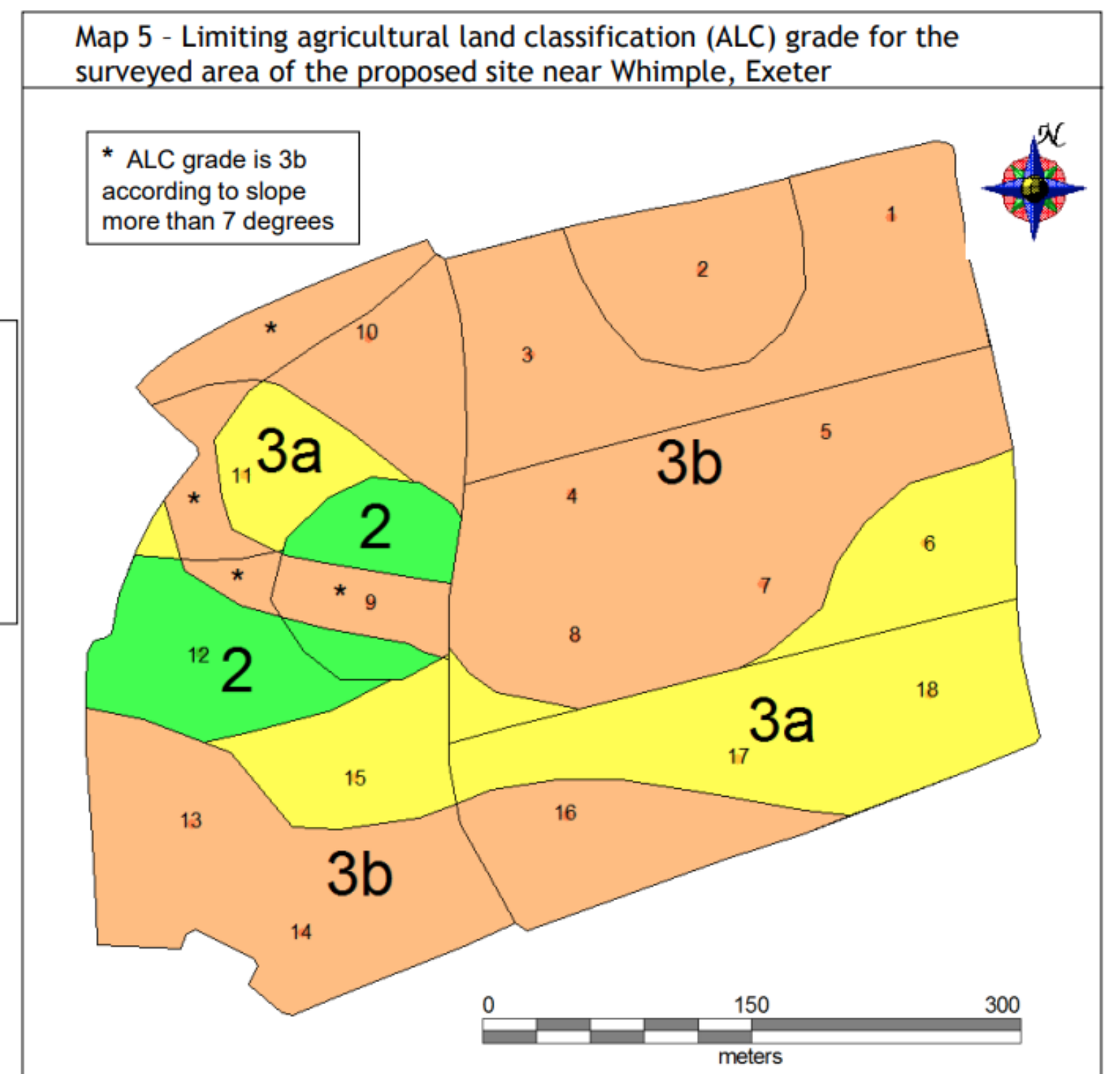
Battery Storage Schemes help to keep farmers in business, providing them with a stable source of income in uncertain economic times



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ALC grade	%area
2	8.3%
3a	24.4%
3b	67.3%

Soil wetness is the main limiting factor on this site together with soil A which is limited by droughtiness and a small area of gradient marked with \* which limits the grade to 3b.



## Community Benefits

The project would be a substantial investment in the local area and would deliver economic benefits for the lifetime of the project, including:-

- A Community Benefit Deed and / or Community Foundation partnership
- A Biodiversity Net Gain for land otherwise intensively farmed
- An opportunity for local employment via local suppliers / businesses during construction
- As part of the development a Community Orchard and permissive path will be established for the lifetime of the project.



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# Proposed Timeline and Opportunity for Feedback

Battery storage (at whatever installed capacity) can be consented at a local level via East Devon District Council. We have submitted a pre application advice request to East Devon District Council (EDDC) and have had a meeting with one of the planning officers on site. We are yet to receive a formal response.

We are hoping to submit a full planning application to EDDC in February 2023.



## We welcome your feedback

You can give your feedback in the following ways:

- Feedback form available to download from the website or fill in today
- By email – [contact@stateraenergy.co.uk](mailto:contact@stateraenergy.co.uk)
- By phone - 02071 860588
- Via the website - [www.exeterbess.co.uk](http://www.exeterbess.co.uk)
- By scanning the QR code below

We look forward to hearing from you.

