



Welcome



NatPower

NatPower

GROWING BY NATURE

Welcome to our consultation event for the proposed Battery Energy Storage System.

We are keen to share our plans with you. They include not just energy storage, but also areas reserved for habitat enhancement and tree planting to support local wildlife and help screen the site.

Please take your time to review all the material on display and direct any questions to our project team. We would also like to hear what you think about our Community Energy Transition Foundation, which would invest in local initiatives to promote sustainable communities. Tell us how we can help in your local area.

We welcome any feedback you would like to share with us.

Alternatively, scan the QR code below which will take you to our project webpage where you can find all of the information on display here today, as well as a digital feedback form.

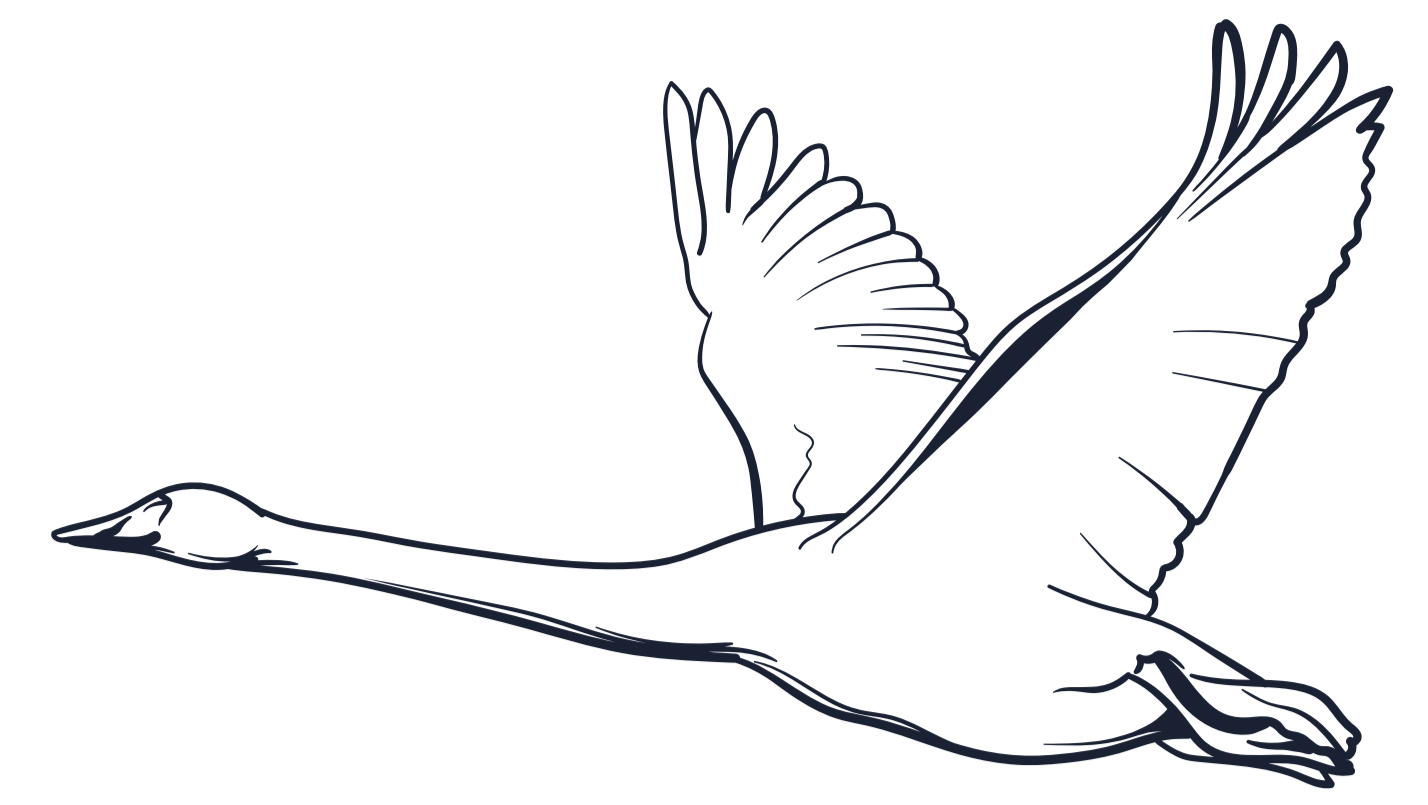
We will be listening to feedback in this consultation before submitting a planning application.



Find out more

→ www.natpower.uk/our-projects

NatPower



Introducing NatPower

NatPower UK is part of the NatPower Group, an independent, well-capitalised energy enabler, with 25 years' experience and 30GW of assets developed across 20 countries and six continents.

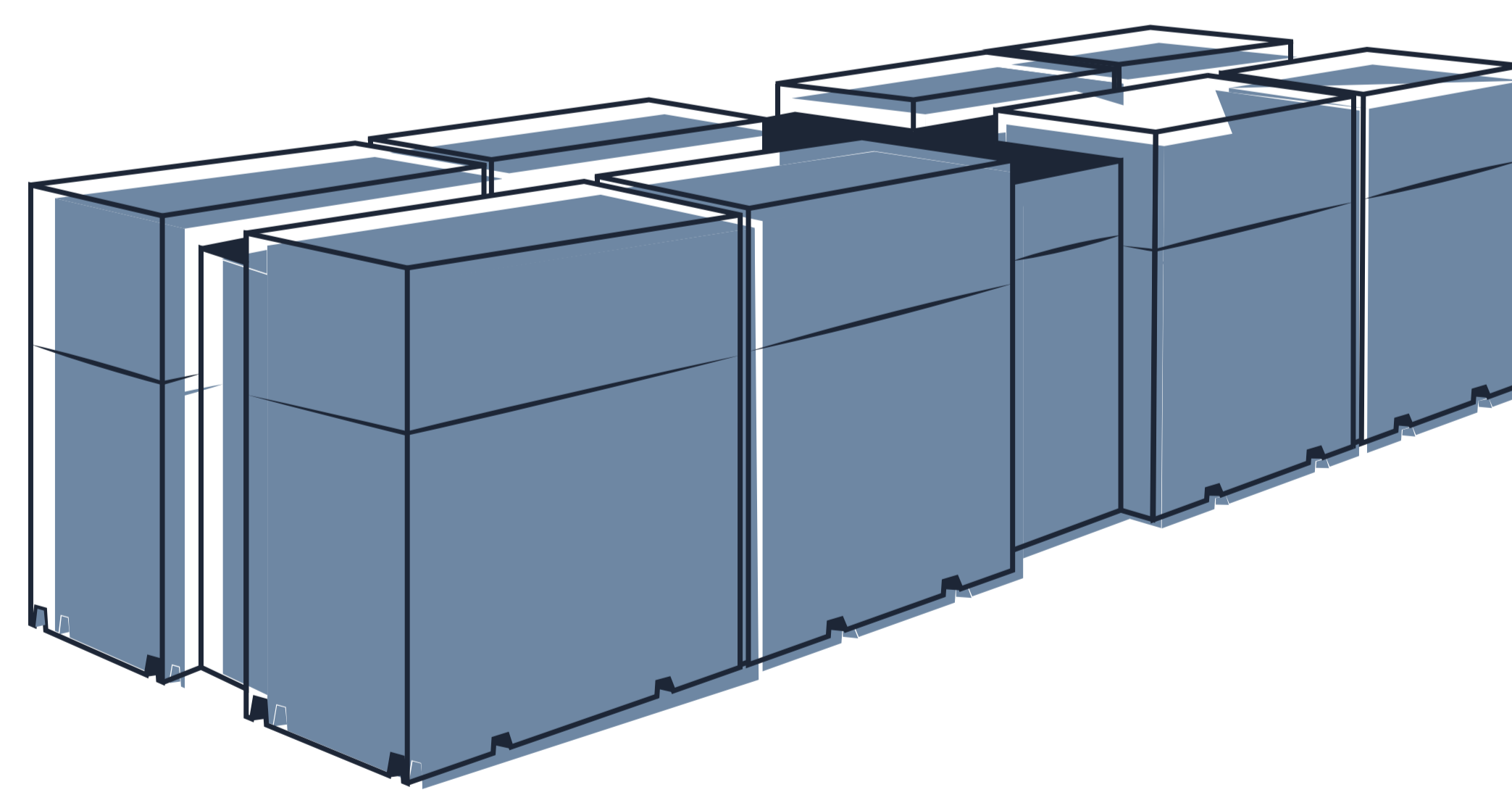
We are making a meaningful contribution to the UK's need for clean, secure and affordable energy. By delivering more than 60GWh of energy storage across the country, we are aiming to provide 20% of the energy storage requirement of the UK by 2040. We are also bringing forward wind and solar farms in different places to contribute cleaner energy for the UK.

We develop, build and manage our own projects. That means that we are long-term partners in our communities – and we look to work with local residents, businesses and community groups to bring the benefits of the clean energy transition to the places we operate. That includes designing our projects in a way that is sensitive on the environment and our neighbours – but it also means investing directly into our communities to assist them in becoming the most sustainable in the UK.

You can learn more about NatPower's Community Energy Transition Foundation here at our event today.



**60GWh of
energy storage
across the UK.**



**20% of the energy
storage requirement
of the UK by 2040.**



Battery storage - the need

The UK is committed to achieving net zero by 2050 and expects to completely decarbonise its energy network by 2035. In the future, wind and solar will be the main ways that we generate energy across the UK.

We are forecast to use more electricity in future. As we stop using fossil fuels to power our cars and heat our homes, the country expects to double the amount of electricity it uses by 2050.

That means we need access to reliable, consistent supplies of electricity. Battery storage has a vital role to play: wind and solar farms don't generate electricity consistently, but batteries allow us to store electricity and release it at times when it is most needed.

The United Kingdom imported 37% of its primary energy in 2022 from foreign countries. This leaves us vulnerable to price increases when there are issues with supply abroad. Battery Energy Storage will help to keep electricity affordable and our supplies secure.

By adopting this sustainable approach, we can help to ensure a cleaner, more secure energy supply for future generations.

A large, stylized, light blue logo consisting of the letters 'N' and 'U' in a bold, rounded font, positioned in the bottom right corner of the page.

How energy storage works

1

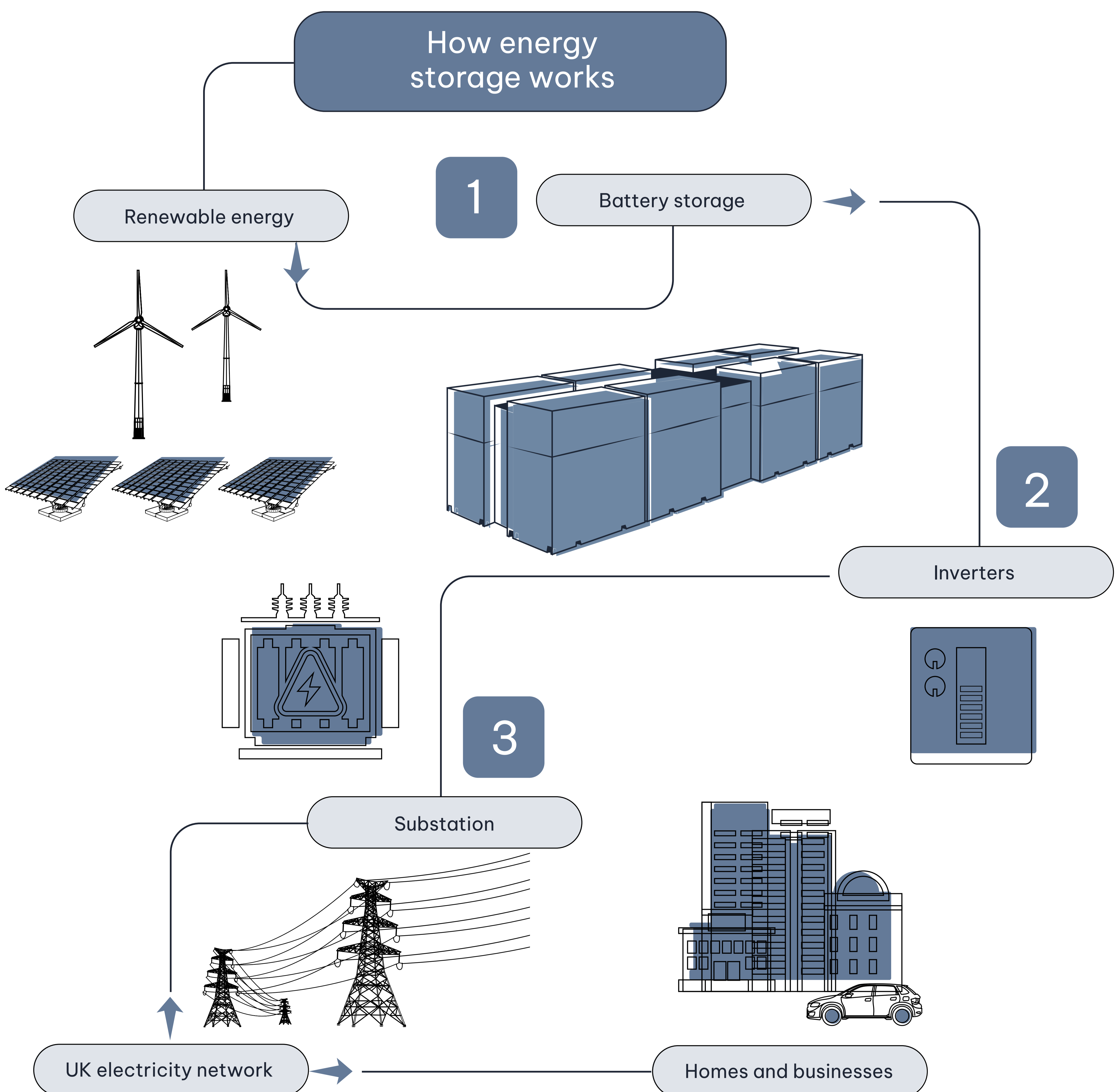
Battery energy storage system (BESS): Enable us to capture and store energy when supply exceeds demand. They then release that power back to the grid later, when it is needed, so that we have a steady and reliable supply of energy at all times.

2

Inverters: Battery systems store and deliver electricity as Direct Current (DC) while most electrical systems operate on Alternating Current (AC). The BESS includes inverters to change the electricity from AC to DC and back.

3

A substation: A substation connects the project into the National Grid. A substation typically appears as a collection of electrical equipment and towers, sometimes connecting to overhead powerlines by cabling.

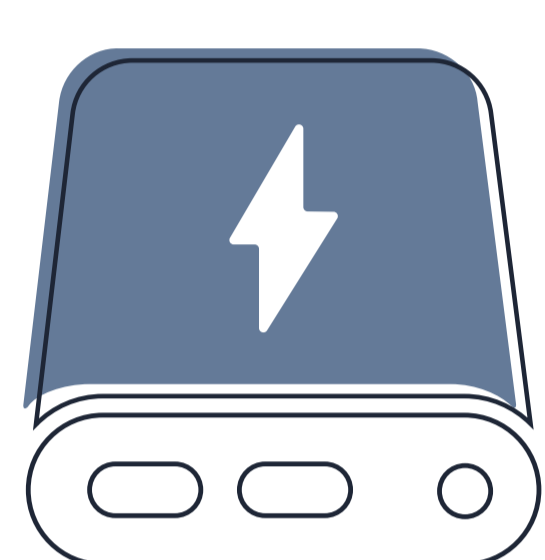
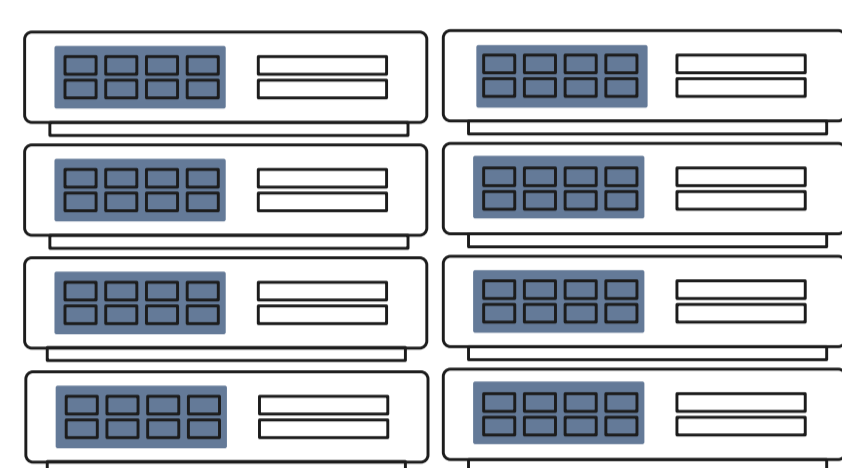


Battery storage - what's involved

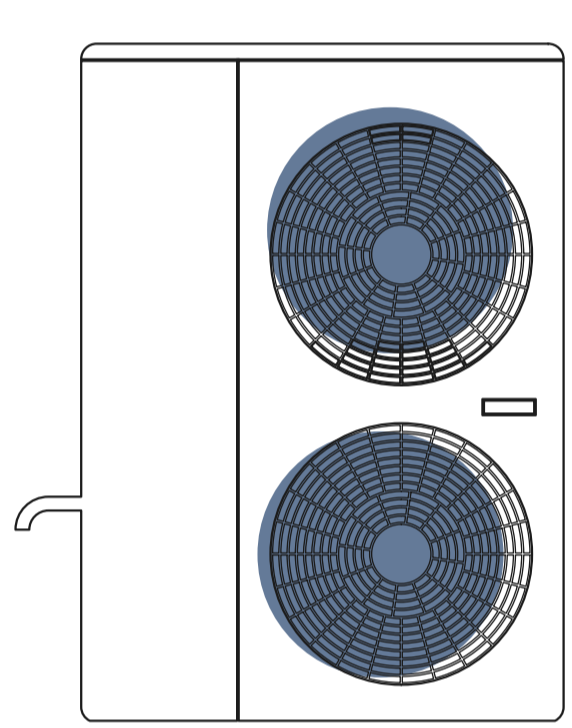
1

The BESS contains a number of components, all housed in units similar in size and shape to shipping containers, about 12m in length and 2m-3m high.

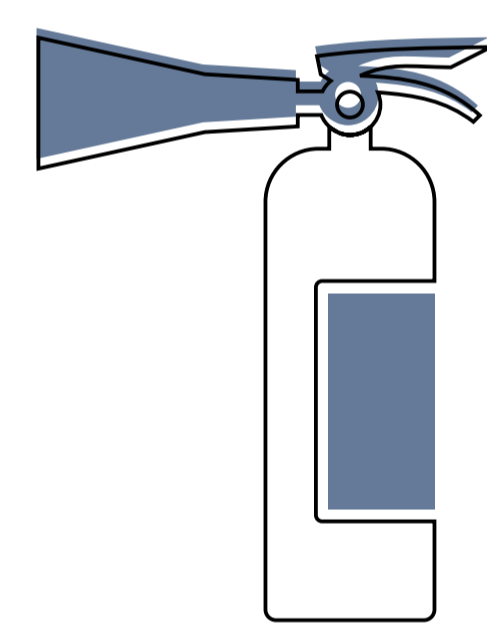
Lithium Iron Phosphate batteries store energy ready to be supplied when needed. These are stacked on top of each other to form a battery rack and are connected together to reach the required voltage and current of the BESS. These are a tried and tested technology that is commonly used in our day-to-day lives, such as in smartphones.



The battery management system is the brain of the BESS and works to safeguard the batteries from damage in various scenarios. It constantly monitors the state of charge, state of health, voltage, temperature and current. It ensures the safety and longevity of the batteries.



A heating, ventilation and air conditioning system controls the operating temperature within the system's enclosure and ensures good air distribution. This prevents the batteries from overheating, which in turn means that the batteries last longer and perform better.



A fire suppression system is built into the design of the BESS and would only operate in the unlikely event of overheating of the batteries.

2

Security: The BESS and substation will be secured by metal security fencing and monitored by a CCTV system, which will face the battery storage and substation areas. We will use motion sensor lights to keep lighting to a minimum.

3

Landscaping: Our projects include landscaping to screen the BESS from view.

