

# Battery Storage in action

Powering your business

Product series  
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**centrica**  
Business Solutions



## The Power of Battery Storage



### Powering Resilience

Battery Storage will help ensure your business is 'always on' by removing the risk of disruption and ensuring continuity of your operations



### Powering Performance

Battery Storage will help you generate on-site power and lower costs



### Powering Growth

Battery Storage will help you maximise your profits through the sale of excess energy generated



# Don't underestimate battery power

What if you could cut the cost of your energy during peak charge periods, rely on your power 100% during network failures and generate revenue from your own power?





## What is Battery Storage?

Battery Storage systems are specifically sized to meet the customer's peak demand and allow you to generate energy using natural resources, then store the power on-site. A battery will fully charge during low Distribution Use of System (DUoS) periods when electricity costs are low. A charge will give you enough power to run many aspects of your building during peak periods – cutting your energy costs.

Excess energy that you've stored can be saved or sold back to the grid, creating a new revenue stream for your business. Battery Storage is also a proven method of protecting your business should your mains supply fail, as it acts as an emergency backup system.



## What can Battery Storage do for your business?



### Strengthen your energy supply

Storage gives you greater site resilience as you benefit from instant emergency power if the main supply fails. System set up requires minimal upheaval, as your batteries work in conjunction with on-site generation. The system is also designed to be flexible, so your Battery Storage solution can increase in capacity should your business grow.



### Lower the cost of your energy use

The batteries charge during the night, when the cost of electricity is at its lowest. They then provide alternative power to your business when the costs are at their highest (red DUoS period).



### Create an additional source of revenue

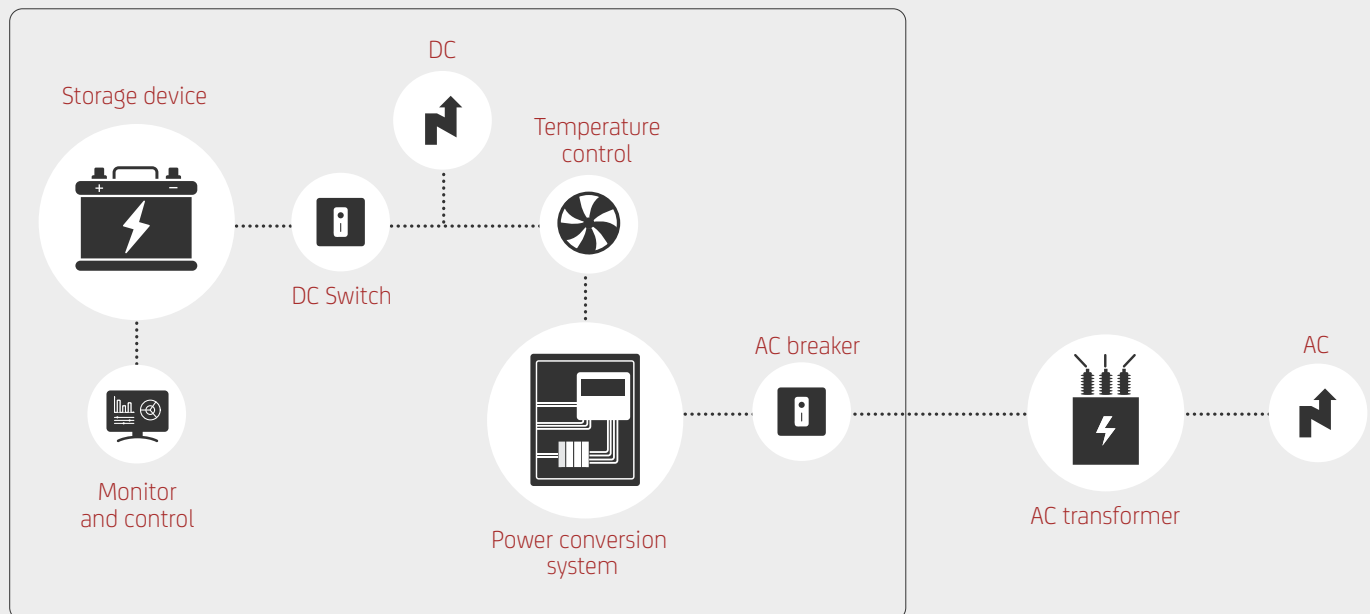
It is also possible to trade surplus energy produced by Battery Storage on the short-term power market, creating an additional revenue stream for your business.



## How Battery Storage works

Batteries can be charged from many types of power source, including solar, wind, Combined Heat and Power (CHP), and the local grid. This electricity feeds down a cable into your Battery Storage system. The power is converted from DC to AC current and, at the time of day when energy costs peak, is released into your building's electricity system, helping you to power your business for less.

### Battery energy storage system and primary power components





## How batteries are stored

Battery cells are factory configured into 50kW racks, and stored within a temperature controlled enclosure, ensuring that the batteries perform consistently, avoiding losses through elevated and prolonged heat.

## Cycles, charge rates and lifespan



### Full Battery Cycles

The battery system will run through one charge cycle and one discharge cycle a day, enabling a daily full battery cycle



### Power charge rate and capacity

Battery power capacity ranges from 500kW upwards, predicting and preparing for power issues



### Battery life

Each battery is warrantied based on one full cycle a day





## Predicting and preparing for power issues

Battery Storage can be connected to our Energy Control Centre. This will give you real-time visibility of assets and provide you with an early warning of any potential problems – adding an extra layer of resilience to your business. If there is a supply issue, such as a voltage or frequency fluctuation, your battery will automatically kick in, preventing a reduction in or restriction on the availability of electrical power in a particular area.

## Selling your stored energy

As well as using the electricity you've generated during peak period tariffs, there is also the possibility of sharing your battery capacity to support grid balancing. Another option is to sell your surplus energy on the short-term power market, using an energy trading desk to achieve the highest possible price.

## Is it right for you?

Determining whether Battery Storage is right for you is simple.

- 1 Do you want to create a more balanced energy supply to your business?**
- 2 Do you want to reduce your energy bills?**
- 3 Do you want to increase your turnover with an additional revenue stream?**

If you can answer yes to these three questions, then Battery Storage is worth exploring further for your business.







### Battery Storage in action

## Merchant power supplier Powering up the grid

#### Switching on

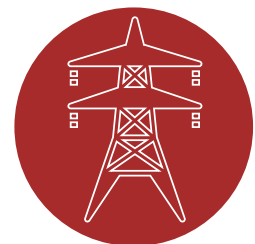
The customer's business function is to provide energy resilience to their local grid during peak demand, and they had to be in operation within 12 months of contract execution.

#### Plugging in

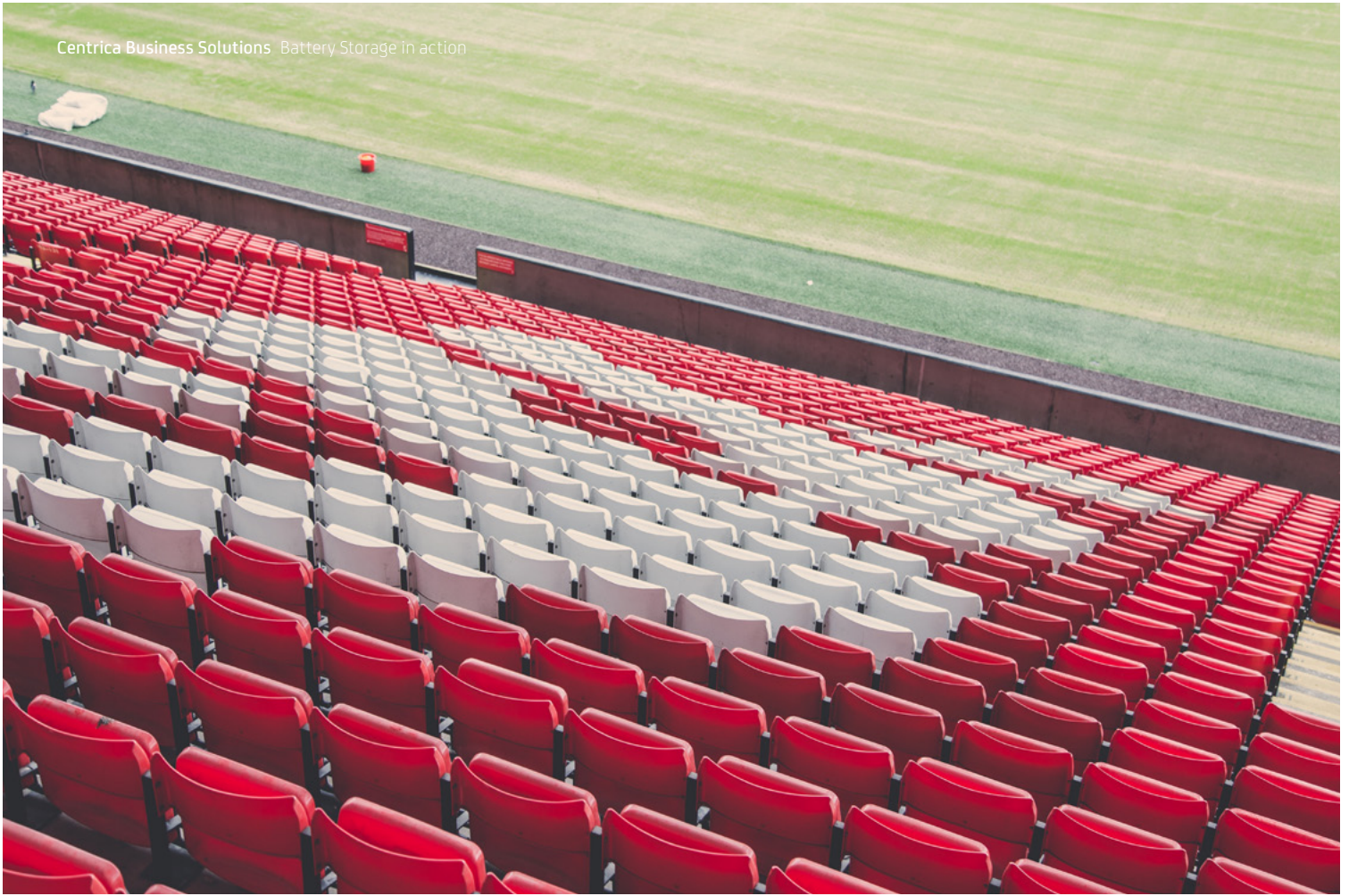
Centrica designed a power generation solution that integrated with the leased building the customer was based in, delivering a bespoke range of Battery Storage units that support their Power Generation units. All are monitored and managed by an automated station – offering low construction and operational costs over a long lifecycle.

#### Generating returns

Battery Storage installation was completed on schedule, allowing the customer to be fully operational and even able to offer power into the market at higher levels than they had envisaged, generating a higher return on their investment.







### Battery Storage in action

## Sports Arena Continuous play

#### Game plan

To ensure the continuity of all power-dependent activities throughout the arena, they required a battery storage solution that provided backup power – whilst keeping overall costs at a minimum.

#### Power on the bench

Centrica designed and installed a battery storage solution that provides continuous standby, housed in a soundproofed nearby enclosure, that was able to meet all of the customer's specifications and was delivered within the projected timeline.

#### Final results

Our Battery Storage solution for the sports arena was so effective, Centrica were invited to create a similar solution for a ferry terminal which serves as a main transportation hub for city commuters.





## Why choose Centrica Business Solutions?

We work with you in partnership from the beginning, helping to create the best Battery Storage solution for your business. But we are with you for the long-term and offer unparalleled aftercare to ensure that you are maximising the potential savings. You also have the reassurance of Centrica's vast experience and knowledge of the energy industry, now – and for the future.

### Want to know more?

**Battery storage is generating new opportunities across all types of industry. Find out how we can help you power new levels of performance today.**

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