



ENERGY
SOLUTIONS

Case 1

PROTECT YOUR PRODUCTION WITH UNINTERRUPTED POWER



RESILIENCE SOLUTIONS WITH BESS



In industries with critical processes, power outages can cause significant financial losses and disrupt productivity. Battery Energy Storage Systems (BESS) like MC-I, ensure that operations continue

seamlessly, even during power cuts. With our advanced solutions, companies can safeguard key operations and minimize the impact of these events.

THE PROBLEM

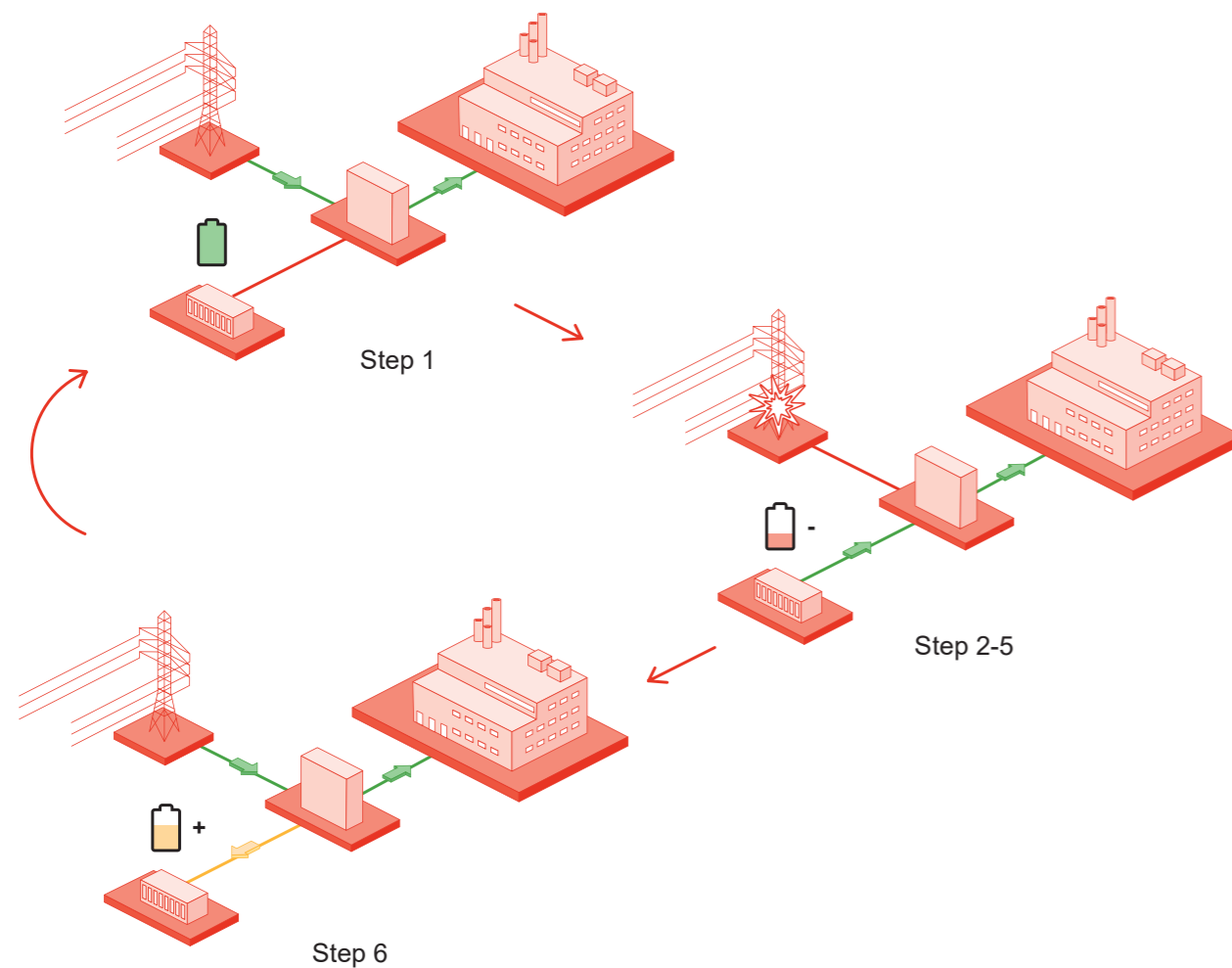
Industrial businesses often face unexpected power outages that halt production, damage equipment, and lead to financial losses. These issues are particularly critical for sectors like manufacturing, where every minute of downtime matters.

Example: Imagine a manufacturing plant experiencing a 2-hour power outage. During this time, machines stop working, production lines halt, and deliveries are delayed, resulting in significant financial losses.

OUR SOLUTION

We implement BESS solutions to ensure your operations are not impacted by power outages. These batteries store energy during normal grid operations and release it when an outage is detected, keeping your equipment running.

OPERATION OF THE BATTERY ENERGY STORAGE SYSTEM (BESS)



Step 1 NORMAL OPERATION WITH GRID POWER

- The grid (represented by the power lines on the left) supplies electricity during normal conditions.
- Electricity flows from the grid, through the transfer switch, and powers the equipments instantly (shown as a factory on the right), such as machinery or essential equipment.

Step 2 POWER OUTAGE OR GRID FAILURE

- When the grid fails, the connection to the grid is lost, meaning no power is coming from the grid.
- Without the battery backup, the equipment would lose power, potentially disrupting operations.

Step 3 TRANSFER SWITCH FUNCTION

- The transfer switch automatically shifts the power source from the grid to the BESS when a failure occurs.
- It ensures that the power supply to the critical equipments is smooth and uninterrupted.

Step 4 BESS ACTIVATION (BATTERY BACKUP)

- As soon as the grid fails, the Battery Energy Storage System (BESS) automatically activates.
- The BESS supplies stored electricity through the transfer switch to ensure that the critical equipments continue to receive power without any interruption.

Step 5 POWER TO CRITICAL EQUIP- MENTS FROM THE BESS

- The critical equipments (e.g., a factory or essential systems) continue to run on power supplied by the BESS, preventing costly downtime or damage to equipment.

Step 6 GRID POWER RESTORES AND BATTERY RECHARGE

- When the grid power returns and is stable again, the transfer switch switches back to using the grid as the primary power source.
- Once the equipments are powered by the grid again, the BESS automatically begins recharging.
- The BESS stores energy from the grid to prepare for future outages, ensuring that it has enough energy to provide backup power during the next failure.

SUMMARY

- Grid powers equipments under normal conditions.
- If the grid fails, the BESS supplies energy through the transfer switch, keeping critical operations running.

Ensure uninterrupted operations and protect your business from costly downtime. Discover how our BESS solutions can safeguard your critical processes. Contact us and request more information or a personalized consultation.

[GET IN CONTACT](#)

KEY BENEFITS



CONTINUOUS OPERATIONS

Keep production running even during prolonged power outages by combining BESS with renewable energy sources like solar or wind.



EQUIPMENT PROTECTION

Prevent costly damage to sensitive equipment.



COST SAVINGS

Avoid financial losses associated with downtime and idle equipment.



SCALABLE SOLUTION

We customize the BESS to fit the size and needs of your industry.

REAL WORLD EXAMPLE: GLAMPING SITE IN UK

The Hideaway at Baxby Manor is situated in a remote rural site near York. Due to their remote location, the whole site was connected to the end of a 60A single-phase line. They were already reaching the limit of what their grid could supply which was leading to 4 to 5 power cuts per winter season. Furthermore, they planned to expand their

range of accommodations with the addition of several fully equipped holiday Kabinas and EV charging points. As the campsite aims to offer eco-friendly holiday accommodations and with increasing fuel costs, the owners decided to complement the power supply with a 52kW solar and a 120kWh energy storage system instead of adding a diesel generator.



THE RESULTS

- 100% operational continuity during power cuts
- 70% electricity savings thanks to clean energy
- Available capacity for future expansion without investment

