

Battery energy storage

Battery energy storage is crucial in enabling the rollout of zero carbon energy and supporting the UK's net-zero emissions target.

Renewable energy technologies are needed to replace electricity generation from fossil fuels, however, they can generate electricity intermittently depending on weather conditions, which can cause imbalances in the electricity network.

Battery energy storage works by storing energy at times when generation exceeds demand and then releases electricity back to the electricity network when demand exceeds generation.

Battery energy storage is also considered the fastest technology for responding to a sudden spike in demand or an abrupt loss of supply.

Battery energy storage can provide a range of services to the energy network. These include:

- Maintain grid stability (frequency of the grid) on a second-by-second basis.
- Balance supply and demand on the grid.
- Provide additional network capacity, particularly at times of network stress or unexpected demand.



Image for illustrative purposes only