

# The need for battery energy storage

Our energy system is in a transitional period to enable it to manage the increasingly complex supply and demand needs of the 21st Century.

Ageing infrastructure is being replaced and greater flexibility introduced into our networks through technology such as battery energy storage.

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

Renewable energy technologies, however, 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 considered the fastest technology for responding to a sudden spike in demand or an abrupt loss of supply.

Battery energy storage can also provide grid stability (frequency of the grid) services on a second-by-second basis as well as providing additional network capacity, particularly at times of network stress.



Image for illustrative purposes only

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