

Holloway BESS



Role of battery storage in the National Electricity Market

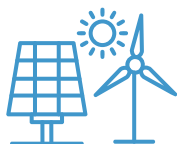
What is the National Electricity Market?

The National Electricity Market (NEM) is both the wholesale electricity market and the actual electricity network and is operated by the Australian Energy Market Operator (AEMO). Electricity across all states and territories except WA and NT is traded through the NEM.

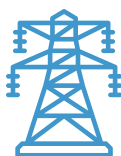
When electricity is being 'sent to the grid', this means it is being sent to the NEM.

The NEM is composed of:

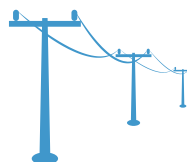
- electricity generators and storage facilities
- high voltage transmission network providers
- low voltage distribution network providers
- market retailers or customers



Renewable energy infrastructure generates the energy



Power stations produce the energy and 'offer' it into the market



Electricity is sent through transmission networks to homes and businesses



Batteries mean stored energy can get to homes when it is needed most

What is the role of battery energy in the NEM?

A battery energy storage system (BESS) stores electrical energy during periods of high production, usually during the day when the sun is shining and the wind is blowing. This is when wind and solar farms are generating electricity and sending it to the NEM.

A BESS releases this stored energy during periods of high demand, such as evenings when households are cooking, using lights, heating and air-conditioning, watching TV etc. Sending energy to the grid when it's most needed helps to stabilise the NEM, preventing brown outs and black outs.

How much battery storage does the NEM need?

Right now, grid-scale battery storage in the NEM is about 1.4 gigawatts (GW). By 2030, AEMO forecasts that at least 19 GW of storage will be needed. The Holloway BESS contributes towards filling this gap by providing short-term storage to handle daily peaks.