

Battery Energy Storage Systems

A Battery Energy Storage System (BESS) facility is designed to store power from the electric grid when there is an excess being produced and release electricity back to the grid when there is a shortage of power.

Energy supplied by solar and wind can often outpace demand. BESS solutions allow this excess energy to be captured and stored.

Environmental Benefits:

By reducing electric grids' reliance on fossil fuels, BESS technology reduces greenhouse gas emissions associated with burning coal and other fossil fuels. It can also reduce the pollution, environmental contamination, and greenhouse gas emissions associated with extracting and transporting fossil fuels.

Energy from renewable resources prevents air pollution, which makes the air safer to breathe, leading to better public health and lower health care bills.



Scan for more information on battery storage.



What About Safety?

The Electric Power Research Institute (EPRI)'s BESS Failure Database tracks failure events in grid-scale storage worldwide. Over the last four years, there have been on average 10 such failure events annually, even as global battery deployments have grown twenty-fold. That's 0.2 failures per GW of BESS deployed in 2023.

10-15 safety events a year may sound like a lot, until you realize that those numbers are dwarfed by the number of incidents in the fossil fuel industry. Pipes transporting natural gas cause thousands of deadly explosions in the US each year.

Storage can provide backup power during outages for households and high-priority community facilities, reducing disruption of critical services and equipment (e.g., emergency/medical services, telecommunications, etc.).



