

About Energy Storage

U.S. Energy Storage Facts¹

Utility-scale energy storage is a critical part of U.S. infrastructure – strengthening grid reliability and energy security while lowering electricity costs with American-made energy



Utility-Scale Energy Storage Projects Provide Steady, Reliable Benefits

Minimized Power Outages and Improved Grid Resilience

Energy storage is essential for a resilient, modern grid, ensuring affordable, uninterrupted power and preventing costly outages that sometimes prove fatal and cost Americans billions of dollars each year.

Reduced Electricity Costs

Batteries store energy when electricity prices are low and discharge it when demand and prices are high, delivering significant savings and reducing overall system costs while also helping the grid adapt quickly to demand and supply fluctuations.

Increased American-Made Energy

Battery storage not only enhances the value of domestically produced energy but also enables greater domestic production, while shielding the nation from volatile world fuel prices.



75.000+ Americans

are currently employed by the energy storage industry



\$580 Million

is delivered annually from utility-scale energy storage projects to local communities through tax revenue and land leases



26+ Gigawatts

U.S. utility-scale battery energy storage in operation to further grid reliability²



\$750 Million

was saved through battery energy storage on the Texas grid in a single month

Frequently Asked Questions



For a full list of frequently asked questions, along with answers and backup data based on scientific research and reports, please visit **arevonenergy.com/resources/#faqs.**



Energy Storage System Overview

Utility-scale battery energy storage systems share the same essential components.

Battery Enclosures

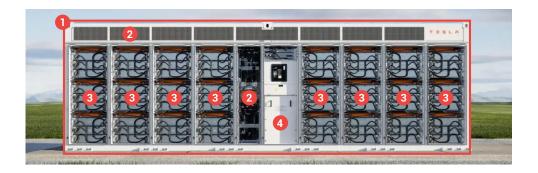
Battery Components

24/7 Monitoring and Management

- 1 Battery storage system enclosure: systems are housed in engineered shipping containers, outdoor-rated cabinets, or purpose-built buildings.
- 2 Thermal management system: the noncombustible, weatherproof enclosures feature a thermal management system with sensors to maintain optimal battery temperatures, shutting down automatically at elevated levels.
- 3 Battery modules: contain interconnected Lithium Iron Phosphate (LFP) cells that store and release energy. Stacked modules form a battery rack.

The modules include an integrated **power conversion system (PCS)** that converts direct current (DC) to alternating current (AC) for grid discharge and AC to DC for charging.

- 4 System management and control includes:
 - An energy management system (EMS) which optimizes performance and directs energy flow.
 - A battery management system (BMS) that monitors battery health and functionality — and ensures safe operation.
 - A supervisory control and data acquisition (SCADA) system for 24/7 monitoring, control, and data acquisition for safe, reliable energy management.



Our Commitment to Safety

Safety is a top priority at Arevon, beginning with installing the most advanced technology available today. Our energy storage systems use state-of-the-art LFP batteries, which we've adopted since their commercial availability, valued for their thermal stability and ability to withstand higher temperatures. Since their commercial introduction across North America, there have been no reported fire incidents.

We have achieved an excellent safety track record by adhering to the highest safety standards, providing continuous training, and fostering a culture of vigilance. From the design phase to ongoing operations, we take every precaution to create a safe and secure environment at our projects.



Abigail Licnikas, Director, Health and Safety

About Arevon

Arevon is a U.S. energy leader committed to powering America with affordable, reliable, and secure homegrown energy. Headquartered in Scottsdale, Arizona, and with a regional office in New York City, the company's experienced and dedicated team develops, finances, builds, owns, and operates renewable energy projects nationwide. With a strong track record in utility-scale solar and energy storage, Arevon is a trusted partner to utilities and businesses seeking costeffective, sustainable energy solutions. By prioritizing American manufacturing and domestic energy production, the company invests in U.S. jobs, strengthens local economies, and advances the country's energy independence.