



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.



¹"Energy Storage - Home," Energy Storage, n.d. <https://www.energystorage.org>

²"U.S. battery capacity increased 66% in 2024," U.S. Energy Information Administration, 2025. <https://www.eia.gov/todayinenergy/detail.php?id=64705#>

Energy Storage System Overview

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

Battery Enclosures

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.

Battery Components

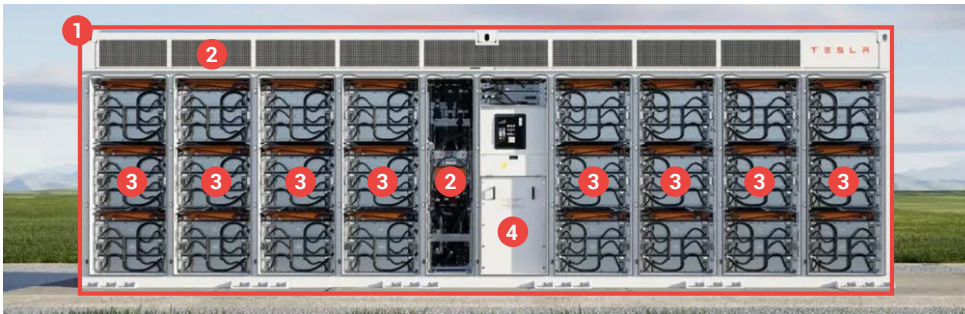
3 Battery modules: contain interconnected Lithium Iron Phosphate (LFP) cells that store and release energy. Stacked modules form a battery rack.

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.

24/7 Monitoring and Management

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, and our track record proves it. Since 2021, we have operated our energy storage facilities without a single thermal or recordable safety incident, using state-of-the-art LFP batteries, which have had no reported fires since their debut in 2019.

“ 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 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 cost-effective, 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.