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About Solar-plus-Storage

U.S. Solar[1] and Energy Storage[2] Facts

Utility-scale solar and energy storage are essential to a strong American energy future – strengthening grid reliability, enhancing security, and lowering electricity costs while employing hundreds of thousands of workers and delivering billions of dollars in tax revenue to local communities

Arevon's $2 billion privately funded Eland project is one of America's largest solar-plus-storage developments

Utility-Scale Solar and Energy Storage Projects Provide Steady, Reliable Benefits

354,000+ Americans

work in the solar and energy storage industries, across all 50 states

22 Million

U.S. households can be powered annually by operational utility-scale solar projects

50 Gigawatts

U.S. solar panel manufacturing capacity, making the U.S. the world's 3rd largest solar panel producer

$1.5+ Billion

is delivered annually by U.S. utility-scale solar and energy storage projects to local communities through tax revenue and land leases

$750 Million

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

4.5+ Gigawatts

of Arevon solar and energy storage projects in operation nationwide — enough to power the equivalent of more than 1.2 million U.S. homes

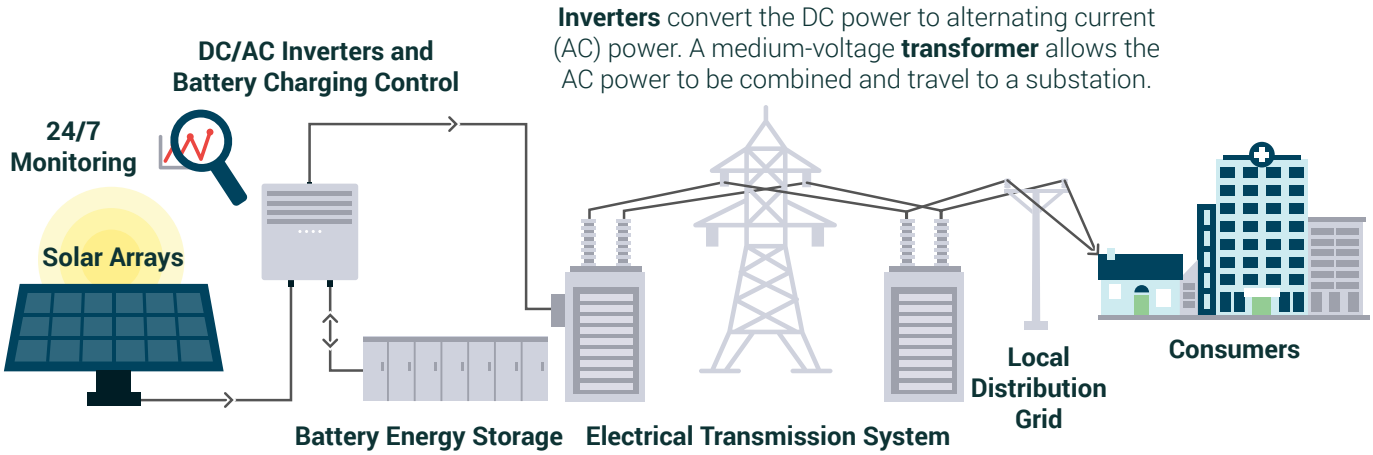
Frequently Asked Questions

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]"Solar Market Insight Report," Solar Energy Industries Association, 2025. https://seia.org/research-resources/us-solar-market-insight/
[2]"Energy Storage - Home," Energy Storage, n.d. https://www.energystorage.org/

Solar-plus-Storage Project Overview

Utility-scale solar-plus-storage projects generate enough electricity to power tens of thousands of homes, and feed it into the electric grid — similar to traditional power plants except without burning fuels to create electricity.



Solar panels generate direct current (DC) electricity by converting photons from sunlight to electrons.

A portion of the solar generated electricity is put into **battery energy storage**, to be delivered whenever grid operators critically need it most, even after sunset.

The **substation** is the main point of **connection to the existing grid.** A substation is a fenced facility owned and operated by an electric utility company.

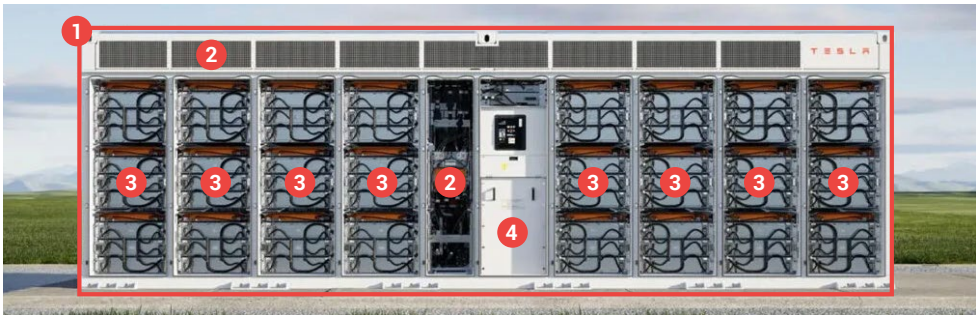
Energy Storage System Overview

Utility-scale battery energy storage systems share essential components, with Arevon implementing additional safety measures for enhanced reliability and protection.

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:** 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 DC to 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 managements 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.



Utility-Scale Solar and Battery Storage: Powering an American Energy Future

Utility-scale solar with energy storage ensures reliable, affordable power while reinforcing grid stability and boosting economic growth. This proven technology delivers key benefits for American families, businesses, and national security.

Strengthened Grid Resilience

When some of the electricity produced by the sun is put into storage, that electricity can be used whenever grid operators critically need it most, around the clock. It can help maintain the stability of the electric grid, shift energy from times of peak production to peak consumption, and limit spikes in energy demand.

Reduced Power Outages

Solar-plus-storage keeps the lights on, protecting homes and businesses from costly brownouts and blackouts. It strengthens the grid against extreme weather and demand surges, saving billions of dollars and safeguarding lives.

Lowered Energy Costs

Storing low-cost solar energy and deploying it when demand and prices are high delivers significant savings and enables the grid to adapt quickly to demand and supply fluctuations, reducing overall system costs.

Increased American-Made Energy

Battery storage increases the value of U.S. produced solar power, reducing reliance on foreign fuels and shielding Americans from energy price swings.

Boosted Local Economies

Solar-plus-storage projects generate tax revenue for schools and essential services, with minimal demand for public resources, helping keep local property taxes low. They create high-quality jobs, support domestic manufacturing, and strengthen supply chains — contributing to the more than 354,000 Americans with diverse careers in solar and storage.

Our Commitment to Safety

At Arevon, safety comes first — and our track record proves it. Since 2021, Arevon has operated our energy storage facilities without a single thermal or recordable safety incident.

Our systems utilize state-of-the-art LFP battery technology, which is inherently safer than traditional lithium-ion chemistries. LFP batteries have been in commercial use since 2019, with no reported fire incidents.

Safe, Regulated, and Reliable Energy Solutions

Utility-scale solar and battery energy storage systems are built to last and held to the highest safety standards. These systems undergo rigorous testing and certification before deployment. To go beyond regulatory requirements, we implement additional safeguards, including but not limited to:

- Outdoor steel containers to securely house battery systems.
- Real-time air quality monitoring with perimeter sensors.
- Infrared cameras for continuous temperature monitoring.
- Regular emergency response training with local fire departments.

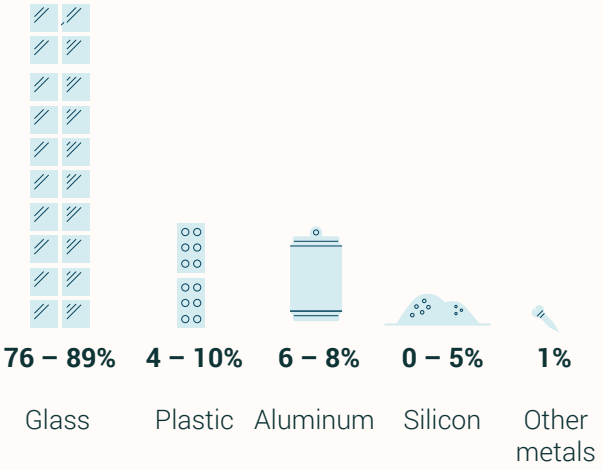
Solar Panel Safety and Environmental Responsibility

Solar panels are constructed from the same durable materials used in common household appliances, with layers securely laminated and sealed within tempered glass.

To ensure safety and longevity, Arevon requires all solar panels to meet the U.S. Environmental Protection Agency's rigorous Toxicity Characteristic Leaching Procedure. This means that even in the unlikely event of breakage, our panels pose no risk to people or the environment.

What Are Solar Panels Made Of?

Both silicon-based and thin-film solar photovoltaic (PV) panels are made up of the following materials:



Additionally, Arevon is committed to the responsible recycling of solar panels to support sustainability for future generations.

A Proven, Safe, and Responsible Energy Partner

Our approach is conservative, safety-first, and built on experience. We adhere to strict industry standards, work closely with regulators, and prioritize the well-being of communities, workers, and first responders.

With a proven record of reliability and safety, Arevon is a trusted leader in dependable, American-made energy solutions.

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.