Solar + Storage



Innovative Solutions for America's Energy Needs

Energy storage plays an important role in the U.S. solar industry and energy markets as a whole. Federal, state and local policymakers are making decisions now that will dictate to what extent storage can and will be used as the grid diversifies and electricity demand increases. The U.S. energy storage industry comprises hundreds of companies and thousands of American workers that manufacture, distribute and install residential, commercial and utility-scale energy storage systems across the country.

Quick Facts

- Solar + storage has, and will continue to have, a symbiotic relationship. Ultimately, the wide-scale adoption of solar will lead to the wide-scale adoption of storage, which will in turn lead to more opportunities to deploy solar.
- While storage can be used in many applications, the success of the storage technology is intimately tied to solar because of its potential for meteoric growth in the solar sector.
- To reach our goal of solar accounting for 20% of electricity generation by 2030, storage will play an increasing role in providing power when the sun is not shining.
- SEIA is the voice of solar + storage.
- Membership in SEIA by storage technology providers and their supply chain partners is a must have in gaining access to the solar market and in leading solar + storage policy priorities.

Why Solar + Storage?

Solar and storage create business opportunities for each other. As solar penetration increases, states and solar companies are turning to storage. Energy storage can smooth electricity prices through arbitrage, manage evening energy ramps, mitigate the risk of curtailment, provide black start capability, and provide backup power.

The cost of lithium ion batteries (the most common type of storage paired with solar) has fallen rapidly as manufacturing has scaled up to support both electric grid applications and electric vehicles. For distributed projects, storage can address issues, help customers manage the move toward time-of-use (TOU) pricing and later TOU periods, and give system owners access to the power from their solar panels for more hours of the day.

Increased storage deployment can reduce grid management concerns like the so-called "duck curve," creating additional opportunities for solar deployment. While there is certainly plenty of room for growth of stand-alone solar in most states, the long-term success of the solar industry and its ability to scale beyond about 20% of total electricity generation depends on the cost-effective integration of storage.

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