

Innovative Solutions for America's Energy Needs

Energy storage is beginning to play a larger role in the U.S. solar industry and energy markets as a whole. Federal, state and local policy makers are making decisions now that will dictate to what extent storage can and will be used. 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. Storage is playing a revolutionary role in the further advancement of solar. States with higher storage penetrations will lead an unmistakable trend in the solar industry.

Quick Facts

- Solar + storage will have a symbiotic relationship starting now and well into the future. Ultimately, the wide scale adoption of solar will lead to the widescale adoption of storage, and that will in turn lead to more opportunity to deploy more solar.
- While storage can be used in many applications, the success of the storage technology will be intimately tied to solar because of its potential for meteoric growth particularly in the solar sector.
- To reach our goal of solar accounting for 15% of electricity generation by 2030, storage will likely play an increasing role in providing power when the sun is not shining.
- SEIA is the voice of solar + storage.
- SEIA supports legislation to grant **full investment tax credit (ITC) eligibility for energy storage**, with the same rampdown assigned to the ITC for solar technology through 2021.

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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