

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 will be the voice of solar + storage.
- Membership in SEIA by storage technology providers and their supply chain partners will become 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.

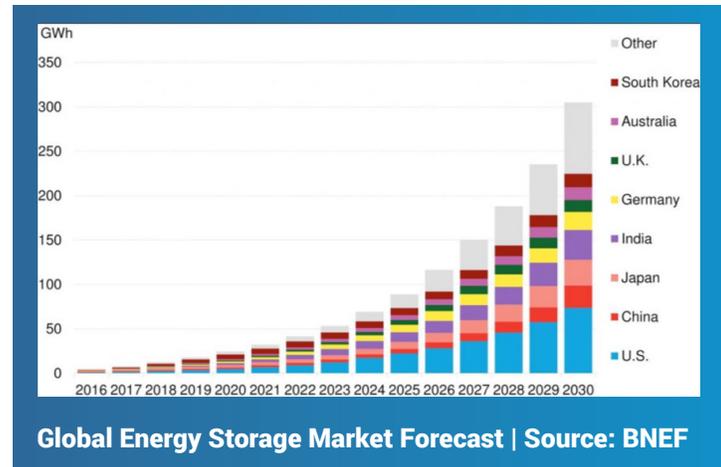
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Policy Opportunities

SEIA strongly supports the creation of an Investment Tax Credit (ITC) for energy storage. SEIA lobbied hard to get an ITC for storage added to tax reform legislation and will continue to push for that with our congressional allies. SEIA is providing top level communications and lobbying for storage. We are educating members of Congress and the administration, as well as the general public, about how solar + storage can transform the energy landscape.

Other Advocacy Actions Include:

- providing input on product standards and building codes for storage;
- creating a storage addendum for SEIA's standard solar contracts;
- coordinating with the Energy Storage Association on priorities relevant to solar;
- tracking and analyzing EIA and other data for large-scale storage projects;



- working to remove barriers to adoption for distributed and utility-scale storage at the state level; and
- adding storage to consumer protection materials distributed and utility-scale storage at the state level.

Sample State-Level Actions SEIA Has Undertaken

- Modeled and created a proposed solar + storage rate design for the PG&E rate case in California. The design, an optional TOU rate with a high peak/off-peak differential, formed the basis for the settled rate.
- Developed extensive testimony in a Nevada rate case focused on creating residential and small commercial TOU tariffs that would support energy storage.
- Submitted extensive testimony in Michigan opposing DTE's construction of a new natural gas plant, arguing that a better solution would be a mix of distributed generation, battery storage, energy efficiency, and demand response.
- Successfully supported the inclusion of storage compliance credit for the requirement for solar on new homes in California (applies to both on-site and off-site/shared/community compliance pathways).

Policy Drivers Needed for Further Growth

- Continued federal lobbying to unleash the ITC for storage
- Additional public private investment to make storage affordable & applicable across a broad range of projects
- Making sure that solar + storage is a central component in federal projects
- Establishing IRPs that incorporate solar + storage as cost-effective alternatives to fossil fuel power plants
- Ensure storage is represented in grid modernization efforts
- Continuing to promote and establish effective, costed-out, solar + storage rate design

Engage with SEIA's Solar + Storage Work Through Our Committees & Working Groups

Codes & Standards Working Group

Federal Policy Committee

State Policy Committee

Public Relations Committee

Individual State & Regional Committees

To learn more about getting involved, visit us at www.seia.org/join