

Energy Storage Solutions

Energy storage paired with solar provides added savings.

What is Energy Storage?

Energy storage systems (ESS) are typically made up of lithium-ion batteries, much like those used in common household items and electric vehicles, which absorb power generated through a solar array or the grid and store the power for later use. These batteries can store substantial amounts of energy that can be released during peak energy usage to reduce electricity costs and demand charges*. Energy storage and solar are the perfect match to create a dispatchable, smart, distributed generation source that can produce clean electricity anytime the grid needs it.

Benefits of Energy Storage

Demand Charge Savings: Storage systems absorb the extra energy generated by the connected solar array during peak production times. That stored energy can then be discharged when demand charges are high and your usage peaks.

Demand Response Revenues: Utilities and grid operators will pay for storage systems to be discharged at times when electricity usage is peaking on the overall grid.

Resiliency: Energy storage can be configured to provide backup during power outages.

Future Proof your System: A solar system can reduce the grid electricity you consume onsite, however, can't be relied upon to reduce your 'peak' usage. Utilities charge most commercial customers on both kilowatt hour consumption, and their peak usage during a billing period. The ratio of these charges can vary over time, but by adding energy storage to your solar array you'll be ready to offset utility charges in whatever form they take.

Sustainability: Going with energy storage reduces emissions from dirty peaker plants that only generate when grid usage peaks.

*Demand charges are calculated each month based on your highest energy usage for a 15-minute window, & under the right circumstances they can account for a hefty portion of your bill.



Solect's Energy Storage Solutions

Solect will work with you to understand your operations and develop a storage solution for you. We start by looking at your energy usage, room on your property and your future plans for your facility. We then analyze all potential savings/revenue streams and how they could stack to co-optimize a financial solution. We can finance a bundled "Hybrid Power Purchase Agreement" where you pay nothing up front and get savings from day 1, or work with you on a system that you own and we operate and maintain. Energy storage can be complex, but we'll simplify it for you and handle all the details.



Incentives for Energy Storage

- Those who install a storage system at the same time as a solar system can take advantage of the Federal Incentive Tax Credit (ITC) and accelerated depreciation if the battery is charged by the solar array.
- Under the SMART program in Massachusetts, solar arrays combined with energy storage get a higher incentive payment for every kWh that the solar produces.
- Some utilities pay for batteries to be discharged at times of peak demand.
- Grid operators such as ISO-New England have programs that pay for stand-by and ancillary services that energy storage can provide.

