

Energy Storage in California



Behind-the-Meter (BTM) Opportunities with Stem



California is the most dynamic U.S. market for behind-the-meter (BTM) energy storage. The state's Self Generation Incentive Program (SGIP), which has supported renewable energy and energy storage for over a decade, is the primary market driver. The SGIP incentive, along with California's high energy and demand prices, make storage one of the most financially attractive energy projects C&I customers can undertake. Additionally, California has become the first state in the country to institute a statewide building code that requires all new commercial buildings to install solar + storage and EV charging capabilities.

How the SGIP Program Works

SGIP provides an upfront incentive for storage system deployment, plus ongoing performance-based incentives for complying with program requirements for cycling and GHG emissions reductions.

SGIP's "General Market" incentive extends to any California business or organization that receives retail electric service from one of the state's major investor-owned utilities (IOUs). Incentive adders can be earned for deploying backup power systems at facilities that qualify for the SGIP "Resiliency" incentive.

To qualify for Resiliency funds, facilities must 1) have experienced at least two Public Safety Power Shutoff (PSPS) events or be located in a high fire threat district (which includes more than half of California); and 2) be a "critical resilience facility," defined as:

- Emergency responders
- Medical facilities
- Utilities
- Jails and prisons
- Emergency shelters designated by IOUs
- Homeless shelters
- Food banks

Act Now

In all, more than \$1 billion of SGIP funding has been authorized through 2024. However, much of this funding has already been allocated to specific projects. Based on the available budgets and recent pace of applications, we expect SGIP funds to be depleted across all utilities around mid-2022. To secure funding for your energy storage project, we encourage you to submit your SGIP applications as soon as possible. It is important to remember that the SGIP application fee is fully refundable within 150 days of submission, so there is very low risk in submitting applications.

Stem Services for Developers

- Modeling
- Incentive program application
- End-to-end support from procurement through operation

Best-fit Customers

- Critical Resilience Facilities
- EV Charging Depots
- Big Box Retail
- Logistics / Warehouse
- Manufacturing
- Municipal, Universities, Schools, and Hospitals (MUSH)

Typical Results

- 10-30% utility bill savings

Entire Lifecycle Support for Energy Storage

Solar + Storage Expertise

Stem can help solar developers, EPCs, and end customers in California right-size storage systems not just to meet program requirements but to maximize economic returns based on a customer's particular rate structure.

EV Infrastructure

Storage-paired EV charging is expected to grow exponentially in the coming years, as CA has set aggressive targets to phase out internal combustion engine (ICE) cars by 2035.

Lifecycle Management

Get full support from project design, installation support, through operations management.

Incentive Management

Get application support, compliance, and reporting for SGIP and solar ITC.

Value Stream Optimization

Get demand charge management, TOU energy arbitrage, demand response, and CAISO market participation.

Resilience

Get design and engineering for Solar + Storage microgrids as well as SGIP Resilience incentive management.

Why Partner with Stem?

Stem is a global leader in AI-driven energy storage systems, with more than a decade of experience partnering with organizations and developers to realize hundreds of successful projects. Athena is Stem's clean energy intelligence platform built to seamlessly integrate and optimize energy resources. In California, this means maximizing utility bill savings, operating to exceed SGIP performance-based incentive requirements, and integrating with grid operator signals to provide demand response and grid services.

It can also be difficult to design effective projects that meet both organizational needs and SGIP program requirements – anything from standalone storage to complex solar + storage microgrids. We help right-size systems not just for the minimum requirements but for maximized economic returns.

Stem's energy experts helped create California's energy storage market and remain a leading storage provider to the state's C&I customers. If you're interested in capitalizing on California's SGIP incentive, contact Stem today. As a longtime storage pioneer and California market leader, our experts would be happy to answer your questions, help you determine which incentives you qualify for, and design an ESS that works for you.

Project Highlights



Stockmans

San Bernardino County, CA

Facility Type: Wastewater Treatment Plant

Solutions: Energy Storage, Utility Bill Optimization, Backup Power

Storage System Size: 464kW / 1856kWh



Penske Truck Leasing

Ontario, CA

Facility Type: EV Fleet Charging Depot

Solutions: Energy Storage, Commercial EV Charging

Storage System Size: 350kW / 800kWh

To learn more about Stem's SGIP solutions, visit www.stem.com/california-sgip.

