



# Solar + Storage

## Combine Storage with Solar for Greater Impact

Adding storage to a solar project provides control over solar generation and allows energy to be used when it's most valuable. Storage systems can be added to existing solar projects or can be built at the same time as a new solar system. Over time, if projects expand to include new renewables, EV charging stations, fuel cells, or other assets, the storage system will operate as a central command center to manage and optimize all resources. Stem's Athena™ software is the analytical engine behind this process.



## Market-Leading Solar Plus Storage Expertise

Stem has operated the world's largest digitally connected energy storage network for more than a decade. In 2018, due to several factors – falling technology costs, expanding incentives, and shifting electricity rates that affected solar compensation – Stem began partnering with solar developers and engineering, procurement and construction firms (EPCs) to attach storage to solar projects. This both maximized ROI for solar projects and future-proofed them against potential rate changes. Launched in 2020, the Stem Partner Network supports hundreds of leading developers and EPCs, including Forefront Power, Greenskies Renewable Energy, and REC Solar, in pursuing both front of meter (FTM) and behind the meter (BTM) solar plus storage projects. Stem further cemented its market leadership with the launch of Stem University, the first free online resource that educates developers and EPCs on the specifics of developing successful solar plus storage projects.

### Solar Plus Storage Services

- System Design & Engineering
- Supply Chain Management & Procurement
- Solar+Storage Value Stream Optimization
- Warranty & Preventative Maintenance Plan Management
- O&M Reporting
- Program Enrollment & Incentive Management

# Unmatched Experience Helps Double Your Project Value

As the market leader in energy storage, Stem has unmatched experience in solar plus storage deployments. Our Athena smart energy software optimizes and automates interactions between solar, storage, and the grid, bringing our customers more savings and greater project ROI.



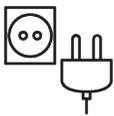
## Maximize Solar Benefits with Storage

The energy storage system, and specifically the AI software driving it, ensures that solar delivers maximum benefits – whatever the value streams may be, and regardless of how they may change over time. In BTM projects, storage increases the consumption of solar energy, lowering greenhouse gas emissions and supporting sustainability goals. It also lowers facility demand charges when solar generation is unavailable. And it dynamically discharges stored solar energy whenever and however is most advantageous – whether that’s powering a facility to avoid more expensive grid-supplied electricity, earning demand response revenues, or exporting solar energy to the grid to capitalize on favorable electricity rates. In FTM projects, Stem’s Athena AI maximizes project revenues via exceptional forecasting and optimized bidding. Athena also automates compliance with program requirements and market rules, which can change several times over a project’s lifespan. Finally, Athena can operate projects to meet a variety of different financial targets, ensuring a desired financial profile and supporting project financing and bankability.



## Energy Resilience: Add Storage to Solar for Clean Backup Power

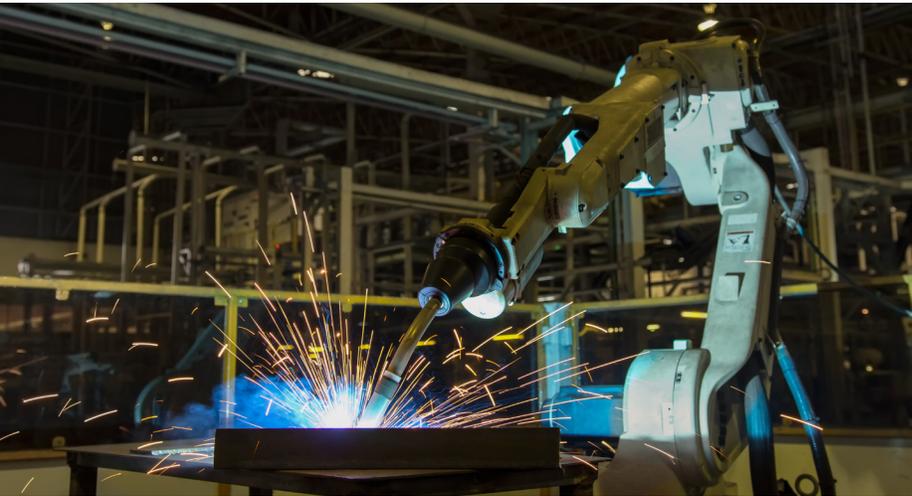
With power outages continuing to take a toll across the U.S., demand for backup power is now at an all-time high. Energy storage pairs easily with solar for longer-duration clean backup, significantly extending the ability of solar to power your operations. And because batteries still provide all economic benefits when they’re not being used for backup, they help pay for themselves. California, the largest U.S. energy storage market, places a premium on energy resilience, and generous state incentives can help offset project costs for eligible customers.



## Leverage the Industry’s Best Software

Athena is Stem’s best-in-class smart energy software and the industry’s first AI for energy storage. Athena maximizes solar value by analyzing thousands of data points – including solar production, energy demand, and market price forecasts – according to Stem’s proprietary and always-improving algorithms. In 2020, Athena exceeded customer savings guarantees by more than 50%.

# Project Spotlights



## Manufacturing Facility

### Storage System

1.55MW / 3.1MWh plus 771kW solar PV

### Configuration

Solar plus storage

### Impact

Maximizes energy savings and future-proofs solar asset



## Community College

### Storage System

1.2MW / 2.4MWh plus 2.4MW solar PV

### Configuration

Solar plus storage with backup

### Impact

Enables sustainability goals and avoids power outages



## Solar Developer

### Storage System

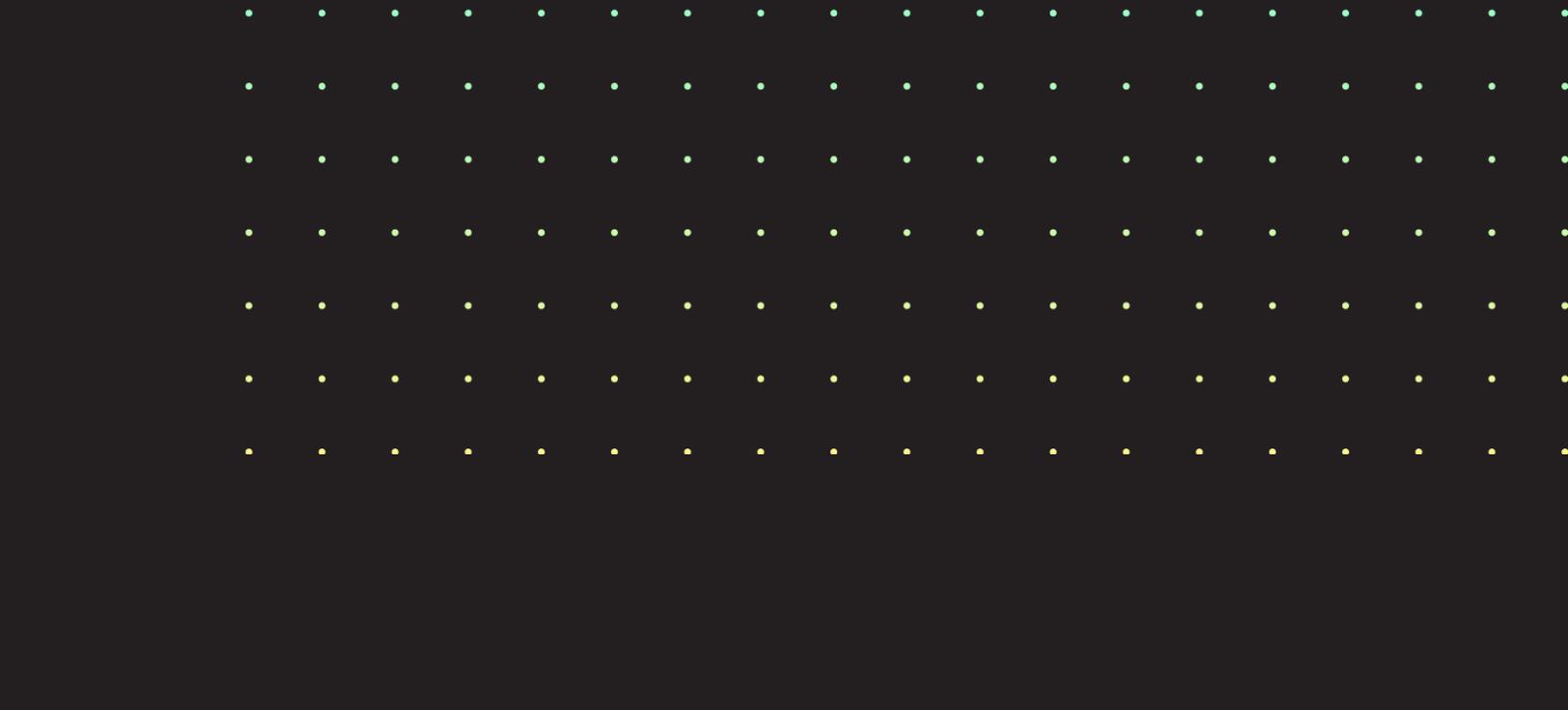
4MW / 8MWh plus 5 MW solar PV

### Configuration

Solar plus storage (front of meter)

### Impact

Maximizes ROI via automated market participation and incentive compliance



## About Stem

# Stem provides solutions that address the challenges of today's dynamic energy market.

By combining advanced energy storage solutions with Athena™, a world-class artificial intelligence (AI)-powered analytics platform, Stem maximizes the value of flexible energy assets to optimize customer benefit. Stem's solutions help enterprise customers benefit from clean, adaptive energy infrastructure and achieve a wide variety of goals, including expense reduction, resilience, sustainability, environmental and corporate responsibility and innovation. Stem also offers full support for solar partners interested in adding storage to standalone, community or commercial solar projects—both behind and in front of the meter.

For more information, visit [www.stem.com](http://www.stem.com)

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