

Logistics Company Taps Stem as Key Energy and Sustainability Advisor



A Stem customer is a Fortune 100 global shipping and logistics provider that delivers packages in more than one hundred countries around the world. Sustainability is a key priority: the company has set goals for both reducing greenhouse gas (GHG) emissions and increasing the share of renewable energy it consumes. Stem's energy storage platform is helping the company achieve both goals while integrating clean energy solutions and achieving substantial cost savings.

Challenge

As a global logistics provider, the company relies on enormous amounts of energy to serve customers. As a sustainability leader, it must solve its core emissions challenge: delivering more while emitting less.

Developing a forward-looking energy strategy was therefore paramount. Such a strategy would contain costs at facilities, maximize opportunities for onsite renewables, and integrate emerging solutions like electric vehicle charging. Electric vehicles (EVs) are an integral part of the company's emissions reduction strategy.

Energy storage offers the company a unique value proposition. It's a proven way of achieving "set and forget" energy savings at facilities and future-proofing the value of onsite solar PV. And as fleet electrification evolves, energy storage can integrate and optimize diverse energy assets including solar, backup generators, and EVs.

Location

San Gabriel, CA (and several others)

Facility Type

Shipping and logistics

System Size

220 kW / 880 kWh

Applications

Demand charge management, demand response

Commercial Operation Date

September 2019

Actual 1-Year Savings

\$25K

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Solution

The company first approached Stem because it wanted to lower demand charges at its facilities. Like many industrials, it had lowered energy consumption costs by signing direct access contracts with independent power producers. But it still lacked a means of reducing its demand charges, which remained uncomfortably high.

Stem worked with the company to identify several sites for energy storage across Southern California, including a logistics facility in San Gabriel. Several of the projects were eligible for the Local Capacity Requirement (LCR) program from the local utility, Southern California Edison (SCE), which had chosen Stem as a partner to provide grid relief. On especially hot days or when the grid is otherwise stressed, SCE alerts Stem; our Athena™ artificial intelligence (AI) software platform dispatches a fleet of hundreds of energy storage systems, including the one at San Gabriel; and batteries power customer sites for a specified duration, and earn revenues for doing so.

While the LCR program was a welcome enhancement, lowering demand charges was still the company's top priority. Stem installed an 880 kWh energy storage system at the San Gabriel site, backed by a performance guarantee to ensure energy savings materialized. The resulting Energy Services Agreement and the immediate savings it provided were a milestone for the company, which had waited years for returns from past capital investment projects.



Results

Since coming online in September 2019, the San Gabriel project has performed as expected, delivering automated revenues that have been an important windfall for the company, particularly during the COVID pandemic.

Stem's relationship with this customer has deepened considerably over time. We now have a dozen projects in the U.S. and Canada representing a broad cross-section of energy storage use cases, with more in development. Our California projects, located in all three major investor-owned utility (IOU) territories, increasingly incorporate EV infrastructure to support the company's sustainability goals.

Elsewhere, our New York front of meter projects optimize value streams from the Value of Distributed Energy Resources (VDER) tariff, while our project in Ontario, Canada helps the company avoid high and unpredictable costs from the Global Adjustment charge.

Stem has also become a trusted sustainability advisor to the company. As it strategizes about combining multiple assets into advanced clean energy microgrids at its future facilities, Stem is advising the company on the unique role energy storage can play as a system integrator and the value of having a scalable, AI-powered services platform.

ABOUT STEM

Stem pairs artificial intelligence with energy storage to help organizations manage expenses, reduce risk, and support sustainability goals. As the market leader in real-time energy optimization, Stem has created new cash flows for hundreds of customers, including many Fortune 500 enterprises. Athena by Stem is the first AI for energy storage.

To learn more about Stem's energy storage solutions, contact us at www.stem.com/contact-us