



CUSTOMER CASE STUDY

Pioneering Fail-Safe Distributed Energy Storage Systems

8.4MWh Fail-Safe Energy Storage: Maximizing Campus Sustainability.

Aggressive clean energy procurement commitments allow Multi-National Financial Firms to elevate their reputation as global leaders in Corporate Sustainability. One common approach has been the purchase of Renewable Energy Certificates (RECs) that allow firms to offset their buildings' Scope-2 grid electricity emissions with zero carbon electricity generated by solar farms across the country. To boost impact, firms can directly install solar at their facilities. While the latter demonstrates a higher commitment to lowering the carbon intensity of a building's energy mix, there remains a mismatch between a facility's 24/7 energy demand curve and the daytime-only production of a solar array. How do you extend a building's usable hours of on-site solar? Enter Battery Energy Storage.

CHALLENGE:

Five years ago, a Multi-National Financial Firm installed a 1.8MW solar system behind-the-meter at a data center on the US East Coast. By its design, the system produces more peak mid-day power than the facility demands, leading to significant energy export into the utility grid. The problem is, while the array is producing multiple GWh of energy per year, the Firm can only claim toward its zero-carbon energy goal the fraction that its facility uses in real time—many hours of the year it remains reliant on grid electricity, which is far from carbon neutral.

FOR MORE INFORMATION



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www.lathroptrotter.com
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INDUSTRY

Multi-National Finance

LOCATION

US East Coast

IMPLEMENTATION

- Seven **RPS1200** BESS [8.4MWh]
- **Control:** Viridi AI-Enabled EMS for Behind The Meter Energy Services like Solar Maximization
- **Monitoring:** ViSTA™ Monitoring and Control Dashboard enables remote oversight with real-time alerts

RESULT:

The Firm turned to Viridi because of two cornerstone technologies: Fail-Safe Anti-Propagation architecture that prevents traditional Li-Ion battery fires, and AI-Enhanced Energy Management System (EMS). The Viridi EMS will operate an 8.4MWh BESS consisting of (7) **RPS1200** containers, running a straightforward algorithm called "Solar Zero Export". The battery will charge with daytime solar energy above what the facility is actively consuming (minimizing grid export) and discharge to power the facility throughout the evening and nighttime hours (minimizing grid import). This maximizes the facility's self-consumption of zero-carbon solar electricity, a major step toward the Firm's commitment to 24/7 carbon neutrality.

