



INNOVATIVE OFF-GRID EV CHARGING SOLUTION FOR COSTCO WHOLESAL

BUSINESS OBJECTIVES

In January 2024, Costco needed to deploy an electrified charging depot at their distribution facility in Mira Loma, California. This facility required a robust solution to power its new electric vehicle (EV) fleet while following stringent ESG goals and meeting an aggressive deployment timeline. As a result, Costco chose to build out their charging infrastructure without relying on the traditional power grid, enabling increased energy independence and operational efficiency.

OUTCOME

By utilizing Sol-Ark's 3 phase commercial inverters, Costco was able to scale their EV charging infrastructure quickly and cost effectively, avoiding hundreds of thousands of dollars on trenching and transformers, and remove the need for new utility service thereby eliminating any kind of Time-of-Use or demand charges, as well as a lengthy interconnection process.

Shay Reed, Assistant General Merchandising Manager at Costco, praised the project, stating, "These off-grid electrified structures enable

SOLUTIONS

After careful selection, Sol-Ark's innovative 60K-3P-480V hybrid inverters were chosen to integrate seamlessly with EndurEnergy's high voltage lithium-ion storage system to create a powerful, self-sustaining micro-grid that operates with no utility power, providing a faster and more cost-effective solution than bringing in a new utility service from Southern California Edison.

Project Overview:

- Location: Mira Loma, California
- System Components: 4x 60K Hybrid inverters, 8x EndurEnergy ESS (Energy Storage Systems)
- System Capacity: 240 kWac output with 492 kWh storage
- Solar Array: 75.6 kWdc
- Backup Generator: None
- Application: EV fleet charging for 4x 22kW of 480V DC Fast chargers

The installed system supports the facility's 88kW worth of high-demand DC fast chargers by generating almost 400kWh per day from an innovative solar canopy structure, while then storing excess energy in the co-located battery energy storage system to enable 24/7 usage. Utilizing solar energy closely aligned with Costco's Climate Action Commitment, whose goal is to reduce operational carbon footprint and enhance company sustainability.

our fleet to meet and exceed our Climate Action Commitments during this energy transition. The partnership with Trinity Structures allowed for a solution that is creative, effective, operationally viable, and financially responsible." (on the web page put this in a different color and bolder font to highlight it)

This project exemplifies how Sol-Ark's wide range of adaptable and efficient energy solutions can meet the specific needs of large-scale commercial operations, paving the way for a greener future across multiple industry segments.