Top Supermarket Stocks Up on Solar, Saves \$75K in Electricity Bills

SolarEdge Rooftop System, Installed by Ecopulse, Helps Mexico Grocery Chain Reduce Item Prices





"We standardize on SolarEdge products for our installations. The superior technology, safety-first approach, high-definition monitoring platform and customer support have been the perfect combination to keep our accounts satisfied. This installation is for one of our top clients who've benefitted customers - more human from MPPT (Maximum Power Point Tracking) at the module level - which helps ensure continual and maximum energy production - as well as the outstanding support portal for validating warranties remotely and getting support from engineers."

Ing. Alexis Hernandez Matu, Ecopulse

The Challenge

Spending Less on Energy, More on the Customer Experience

On average, supermarkets in the United States spend more than \$200,000 on annual energy costs. A top leading grocery store in Mexico, was no exception. Recently, the popular supermarket chain explored clean energy solutions to reduce grid demand and electricity costs. With the right solar solution, they felt they could improve the customer experience through lower prices, decrease their carbon footprint, and set an example that other regional supermarkets could follow.

The Solution

Optimizing Energy and Savings

Ecopulse, a leading EPC in Mexico, proposed a rooftop array for this grocery store chain. SolarEdge 100kW Three Phase Inverters with Synergy Technology and P850 Power Optimizers were chosen for:

- Design flexibility, which enabled them to install panels in different orientations
- Generating more energy over the system lifetime (when compared to a traditional string inverter solution) greatly reducing costly grid dependence

With Maximum Power Point Tracking (MPPT) technology and high-resolution module-level monitoring rounding out the benefits, SolarEdge was an obvious choice for the Ecopulse team which had already come to know and rely on simplified operations and maintenance (O&M) with SolarEdge products.

Customer Benefits

Bagging \$75K USD in Savings

SolarEdge's system is already producing ~10% more energy than was originally forecast, offsetting about half of the facility's electricity usage by delivering ~680,000 kWh of clean energy per year. More importantly, it is saving the supermarket ~\$75,000 USD in annual utility bills. Now, more funds can be directed towards lower price strategies and the workforce, all while bettering the planet. As a result, Ecopulse will be installing the same SolarEdge solution at 50 other similar stores across Mexico.

Installer Insight

Valuing System Visibility, Support, and Safety

Ecopulse especially appreciated the automatic alerts system in the monitoring platform. It pinpoints issues so professionals can remotely troubleshoot malfunctions and eliminate costly site visits that require truck rolls. Their team was also pleased with the engineering and design support provided by SolarEdge throughout the process, including a dedicated field service engineer to teach SolarEdge know-how and best-install practices.

Meanwhile, management at the supermarket chain was "amazed" by all the features in the SolarEdge monitoring platform. The ability to view granular levels of energy data for each solar module was an extremely powerful selling point, considering the job required more than 1250 modules.

Additionally, SolarEdge's safety-first approach gave Ecopulse's O&M team the peace of mind when servicing. Featuring a built-in SafeDC™ mechanism, the system will automatically reduce voltage to a safe level when necessary. SolarEdge's SafeDC™, plus the arc detection and mitigation features, combine to provide maximum protection to the installation crew, maintenance personnel, the grocery store employees and customers.

The Bottom Line

Why Grocers are Ripe for Solar Energy

According to BizEnergyAdvisor, grocery stores in the US use an average of 52.5 kilowatt-hours (kWh) of electricity annually, out of which refrigeration and lighting represent about 65% of total use, making these kind of stores the best candidates for clean energy savings. With energy costs accounting for up to 15% of a grocery store's operating budget, there is huge potential to offset their electricity usage with solar energy cutting down on their operating costs and using the savings to increase sales by changing price strategies and furthering staff development.

Installation at a Glance

- 499.77 kWp
- 1,234 x 405W Jinko Solar modules
- 625 x P850 SolarEdge Power Optimizers
- 5 x SE100K SolarEdge Three Phase Inverters with Synergy Technology
- Payback Period: 5 years
- Estimated Energy Production: 680,000 kWh/Year





Environmental Savings

This solar system produces energy equivalent to:



1 year of driving for 131 cars



1 year of energy usage for 72.5 homes



73 million fully- charged smartphones



665,801 pounds of coal

About SolarEdge

SolarEdge is a global leader in smart energy, delivering innovative commercial and residential solutions that power our lives and drive future progress. Leveraging world-class engineering and worldwide experience, SolarEdge developed a ground-breaking intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. As a result of this and other innovations, today SolarEdge is the world's #1 solar inverter company in revenue with millions of systems installed in 133 countries. SolarEdge addresses a broad range of smart energy market segments through its PV, storage, EV charging, battery, UPS, and grid service solutions.

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