

SolarEdge Powers Mission-Critical Medical Manufacturer Facility Connecticut's Medline Offsets Electricity by Half, Puts Savings Back into Operations

"We chose SolarEdge to supply the inverters and power optimizers for this project for several reasons. First, its state-of-the-art technology produces more electricity in cloudy regions, like the Northeast, due to superior design and increased energy output by tracking the maximum power point of each module. Plus, using reliable and NEC 2017 compliant products from SolarEdge results in a safer system with rapid shutdown and higher system uptime."

Alex Dembitzer, Founder, SkyREM, LLC and Sky Power, LLC

Background

Energy: the Most Vital Element in Medical Manufacturing

Energy is an important parameter in delivering and improving high-demand medical supplies. For a crucial, and very busy manufacturing facility, like Medline Industries Inc., these energy costs can account for a large portion of overhead. Without a way to offset electricity usage, high utility bills can keep plants from expanding, producing at full capacity and maximizing savings.

The Challenge

Saving Money – and the Planet

As the largest privately held manufacturer and distributor of medical and surgical supplies in the world, Medline was looking for a way to better manage the high energy needs of their Connecticut facility – already operating six days a week – while hopefully creating new savings. In addition, they needed to meet sustainability goals of the organization, including eliminating harmful carbon emissions from the local community.

The Solution

Lowering Overhead with a Rooftop PV System from SolarEdge

With a mission to make a positive environmental impact, Sky Power, LLC (Sky), an affiliate of Sky REM, LLC, successfully proposed a PPA (Power Purchase Agreement) to its tenant, Medline Industries Inc. A SolarEdge smart energy system was chosen to ensure maximum power and safety. As a part of this cost-effective solution, Sky will own, operate, and maintain the new rooftop solar system, and sell the majority of the energy generated to Medline at a locked price for the term of their tenancy.

To implement the SolarEdge PV system, Sky turned to its longtime partner, Evergreen Energy, LLC, a leading East Coast commercial installer based in New Jersey.



Customer Benefits

A Healthier Bottom Line. A Happier Community.

As one of the largest commercial solar projects in the Eversource utility system, Sky's PV install will offset more than half of the Medline facility's annual electricity usage. The project produces approximately 1,578,430 kWh of clean and renewable electricity annually, and will substantially lower Medline's utility costs.

By using SolarEdge Synergy inverters and power optimizers, this system will actually save Medline an additional \$136,800* on their electricity bill over 20 years compared to the savings an alternative traditional string inverter could produce. Medline will redirect its operational savings towards its bottom-line, staff, and expanding production lines.

Using renewable energy resources is just one part of Medline's charted path to a better, ecologically-responsible future. Not only will this system enable them to manufacture more life-saving PPE, surgical and healthcare equipment during an ongoing pandemic like COVID-19, it will also help make a meaningful, positive difference for customers, staff and surrounding communities.



"The Sky Power team handled the installation of our solar system in an efficient and professional manner. It is clear that Sky Power is passionate about renewable energy and delivering a positive experience for their customers. Having solar energy is both financially and environmentally important to our business."

Robert Rotaru, Manager, Engineering,
Medline Industries



Installer Insight

Reduce Commercial Concerns with Advanced Monitoring and Safety

For Evergreen Energy, SolarEdge's module level monitoring capability is key to maximizing energy production for their customers, while also reducing O&M costs through remote troubleshooting. SolarEdge's maximum power point tracking technology (MPPT) ensures each module produces at its maximum energy. This eliminates mismatch-related power losses and increases energy yield of the entire system.

SolarEdge keeps projects safe by complying with the latest NEC 2017 requirements for Arc Fault Protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS). The entire system comes with a built-in Safe DC feature that is designed to automatically reduce voltage to a safe level, providing protection to the installation crew and maintenance personnel.

“Evergreen promotes SolarEdge to all of its customers. We are constantly seeing the benefits of monitoring commercial projects down to each and every panel. When using traditional string inverters, troubleshooting an underperforming site can be a total nightmare. Plus, we have seen the long-term effects of the power optimizers, as our SolarEdge sites continue to outperform.”

Jacob Sussman, COO, Evergreen Energy



Installation at a Glance:

- / Meriden, Connecticut
- / 1.32 MW PV system
- / 9 x SE100K, 3 x SE33.3K SolarEdge three phase inverters with Synergy technology
- / 1913 x P730 SolarEdge power optimizers
- / 3828 x 345W Hanwha Q PLUS PV modules
- / Estimated Energy Production: 1,578,430 kWh/Year

Environmental Savings:

This PV system produces energy equivalent to:



250 cars driven for 1 year



145 homes energy use for 1 year



1,475 acres of US forests in 1 year



1,244,162 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.

www.solaredge.com

**Calculations based on system simulation with both SolarEdge MLPE, and traditional string inverter solutions.*