

# Customer Success Case Study

## Largest Solar System on a Manufacturing Facility

**T**he Lee Company of Westbrook, CT found the path to solar energy because of loss. In the middle of a busy workday, this Connecticut-based manufacturer of fluid control technology had a power failure that forced production to stop. From that point on, the company was determined to self-generate a portion of its electricity.

Knowing there were incentives for green energy, The Lee Company began pursuing a solar solution for its 90,000 square-foot Westbrook plant, which had an enormous, unobstructed roof.

"Three firms bid on the project," explained Leighton Lee IV, the company's Facilities Manager. "We selected Spire Solar Systems because of their longevity in the business, their reputation, and their system design, which offered greater efficiency. They also came highly recommended from *Centerbrook Architects* and the *Connecticut Clean Energy Fund*."



1,760 PV panels, 308kW Solar electric system -  
282 tons of CO<sub>2</sub> generation avoided

### Keeping costs down up on the roof

At the start of the project, Spire Solar Systems engineers visited the Westbrook site and discovered that the building's roof was ideal for saving energy and costs. The roof's standing seams could easily accommodate the use of simple mounting clips, rather than large frames, resulting in the cost-efficient installation of 1,760 PV panels. Furthermore, the 29,000-square-foot galvanized expanse was pitched at an advantageous angle and free of shade.

"When you see the system up on the roof, it's like it's tailor made," Lee said. "It's a beautiful installation and really fits the building. And its energy profile is great, so it's in keeping with The Lee Company spirit of innovation and independence."

### Efficiency, value, and other reasons to beam

The Westbrook facility's production cycle perfectly mirrors the daily journey of the sun, beginning in the early morning, peaking at around noon, and slowing down by 4 pm. This enables the company to optimize the sun's power, providing enough clean energy for 17% of the building's power consumption with 1,760 PV panels which avoids 282 tons of CO<sub>2</sub> generation per year.

"There's definitely a payback with solar," Lee said, "and it's right in front of you, not on the horizon. We funded about fifty percent of the project through a grant, which was a huge factor, and there are negligible maintenance costs."

"It sends a very positive message to employees," Lee continued. "It's a little bit of shock-and-awe, plus pride. Shock and awe from the size of the system and pride from knowing that their company is on a path of self-reliance, putting money back into the business and becoming more energy independent." Today, The Lee Company has a 308kW solar electrical system for a 90,000 square foot building.