CASE STUDY

## Locking in Low Energy Prices with Solar Power:

# Long-Stanton Manufacturing

GREATER CINCINNATI 2030 DISTRICT®

## Background

Tucked away in a quiet corner of West Chester Township is one of the oldest continuously operating businesses in greater Cincinnati: Long-Stanton Manufacturing. Originally founded in 1835, Long-Stanton has been in the business of metal stamping and fabrication for almost 200 years. The company serves customers in a host of industries, including aerospace, healthcare, construction. Long-Stanton has been able to survive and thrive for almost two centuries thanks to its long-standing commitment to remaining at the leading edge in its field. That remains true today, as exemplified by the recent installation of rooftop solar arrays on two of its manufacturing buildings. Marvin Cunningham, the President and CEO of Long-Stanton, emphasizes that this decision was driven fundamentally by the bottom line.

## The Operating Landscape: Rising Electricity Costs

In an industry characterized by tight margins, Marvin is always on the lookout for opportunities to control his fixed costs. He first looked into solar in 2018, but he found that the economics at that time were such that it would take too long to recoup the investment (i.e. the "payback period" was too long). Fast forward to 2023, and Long-Stanton was renegotiating its supply contract for grid-supplied electricity and facing a cost increase of more than 40 percent. Marvin decided to take a second look at solar power. What he found was a changed landscape: while grid-supplied electricity prices were going up, solar prices were falling, and new incentives were available. Most notably, Congress had passed the Inflation Reduction Act (IRA) in August of 2022, making new incentives available for companies that installed solar power. In addition, some of Long-Stanton's customers, especially those in Europe, had started asking about the company's efforts to reduce its carbon footprint and increase energy efficiency.

## Partnering with Melink Solar

Marvin partnered with Melink Solar, a Professional Partner of the Greater Cincinnati 2030 District. The expert team at Melink Solar performed a solar feasibility study for Long-Stanton, which analyzed many different variables including current power demand, current cost of power, projected rate of increase in power prices, the cost of solar modules and accessories, and the value of available state and federal incentives. The study also considered available roof space, orientation and shading, the roof's structural capacity to support a solar system, and the cost of any engineering upgrades that would have to be made, and the projected power output of a roof-mounted solar system. Based on this analysis, Melink Solar was able to determine that solar did make sense for Long-Stanton, with a payback period of just under 5 years.

# Digging Deeper into the Numbers

With a total price tag a bit over $600,000, the upfront investment represented a significant investment for a firm of Long-Stanton's size. That price tag, coupled with a payback period of nearly five years, might have dissuaded some people. But Marvin insists that it is important to take a closer look at those numbers.

First, he emphasizes that although the official price tag was just over $600,000, the actual net cost, after accounting for state and federal incentives and accelerated depreciation, was closer to $152,000 - a 75% cost reduction.

Second, Marvin found that he was able to offset this discounted price even further by selling Solar Renewable Energy Credits (SRECs). For every megawatt hour of electricity the solar system produces, one SREC is created, which can then be sold on the open market. The concept of SRECs stems from the insight that solar power really has two distinct sources of value: the first is the power itself, which in this case is used by Long-Stanton; the second is the zero-emissions aspect of that power. Because they capture and certify that second source of value, SRECs are a tradable commodity that is attractive to companies that have made a commitment to offset their emissions. By purchasing SRECs, buyers are boosting the financial incentive for the market to generate power with solar rather than by other means.

Third, and just as important as the price tag, is the way the Long-Stanton team thinks about the solar system as an investment. Whereas for a new piece of manufacturing equipment they might insist on a payback of just 1-2 years, they do not apply such stringent criteria to their new solar system. A new piece of equipment may be utilized just one or two days a week, often just for particular kinds of projects, sometimes to serve just one or two customers. By contrast, the solar system is more akin to a real estate investment: an asset that is in continual use over the course of its 30+ year lifespan, and produces an essential daily commodity over that entire period. When considered through that lens, a five-year payback period seems entirely reasonable.

Finally, Marvin emphasizes the importance of his solar system as a kind of insurance policy, which is an additional source of financial value. By installing solar, Long-Stanton has significantly insulated itself from the risk of rising electricity prices - a risk that has only grown in the time since he performed his original feasibility study.[1]



[1] Rapidly rising demand for electricity, driven in large part by expanding data centers and other commercial-industrial demand sources, is fueling a need for significant investments in power infrastructure. This is poised to significantly affect electricity prices starting in the summer of 2025.

## Installation and Commissioning

The first electrons started to flow from Long-Stanton's first rooftop system on December 30, 2023, and it now produces between 80-85% of the electricity used in the facility. During the sunniest months of the year, the system actually produces more electricity than the facility uses in the aggregate, which results in a negative power bill. (The electricity meter literally spins backward!) Thanks to a program called "net metering" - which is administered by Duke Energy under terms spelled out in Ohio law - during times of overproduction, the excess power flows out onto the grid, and Long-Stanton receives a credit for it. This credit is applied to the company's utility bill in months when the solar system does not cover the company's full demand.

Marvin estimates that Long-Stanton generated 80% of its total electric power needs over the course of 2024 and reduced its utility payments by more than $36,000, a full 20% more than he had forecast. The system proved so successful that Marvin made the decision to put a second array on his other major building. That system was switched online in early 2025.

## Parting Thoughts

When Marvin talks about solar at Long-Stanton, he emphasizes that for his firm it just came down to dollars and cents. He likes that he has reduced his company's carbon footprint and he is hopeful that, as a visible sign of his company's community-mindedness and environmental sensitivity, it may help with his efforts to recruit new young employees. But most important, from a business standpoint, is the fact that he has significantly insulated his company from the risk of rising electricity prices, an investment that is already paying off as prices for grid electricity rise across the region. At the end of the day, Long-Stanton made the decision to go solar because it made good financial sense.

## For further information about this project, please contact:

- Long-Stanton Manufacturing: Marvin Cunningham, CEO
- Melink Solar: Monica Niehaus, Sr. Business Development Manager

**About the Greater Cincinnati 2030 District:** The 2030 District is the energy and buildings program of Green Umbrella. The program helps building owners across the tri-state region to reduce resource consumption, lower utility bills, and lessen environmental impact. We also work with professional service providers in the building sector to connect them with building owners in need of their services. Our work focuses on four pillars of building operations: energy, water, transportation, and occupant health. We provide educational programming and materials, connections to professional and financial resources, and community building events. Participation in the 2030 District is open to all members of Green Umbrella. For more information, please contact greatercincy2030@greenumbrella.org.