

Texas Manufacturing Business Runs 100% on Solar

SUNPOWER®



Challenge

Rehme Steel designs and manufactures premium steel doors and windows from its facility in rural Spicewood, Texas. The company was interested in going solar to reduce operating costs and offset carbon emissions associated with energy-intensive manufacturing.

SunPower's Solution

Working with SunPower Commercial Dealer Freedom Solar, Rehme decided to add solar to every building on site with the goal to meet 100% of their electricity needs with solar energy.

Customer Benefit

The 240-panel SunPower® system is expected to generate enough clean energy to offset all of Rehme's electricity needs, and is projected to save the company more than \$330,000 over the next 25 years.



Quick Facts

 **81.6kW**
Total System Size

 **\$338,883**
Estimated Savings over 25 Years

 **100%**
Projected Energy Offset

 **3.8 years**
Estimated Payback Time

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Peter Rehme
Owner, Rehme Steel

Building a Business on Clean Energy

In the Hill Country just outside Austin, Texas, a small manufacturing company is making big strides. Rehme Steel’s owner, Peter Rehme, has been designing custom metalwork for homes and businesses for more than 20 years. Ten years ago he decided to focus entirely on steel doors and windows, all fabricated on site at his Spicewood manufacturing facility.

The business took off, and today Rehme Steel sells its high-end, premium products through a nationwide dealer network. Known for its quality workmanship, Rehme takes great pains to ensure each door and window is manufactured exactly to spec, and that takes energy. Lots of energy.

Welding machines, sanders, grinders, saws and drilling machines are just some of the tools employed daily to craft Rehme’s products, made from 100% American-made steel. Then there’s fans to keep things cool, painting machines, air compressors and of course, lighting.



“Lights in the office and ceiling fans and hot water heaters all use a surprising amount of energy,” Rehme explains.

All of this energy was a drain on company resources, as well as the environment. So Rehme decided it was time to look at solar.

Freedom to Choose Solar

Working with local installer Freedom Solar, Rehme learned all he could about solar. “I geek out on this stuff, so it was interesting to me,” he says. “The team at Freedom helped me understand our consumption patterns, and we worked together extensively to figure out where it would make sense to put the solar panels.”

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Peter Rehme
Owner, Rehme Steel

Each of Rehme’s five buildings was outfitted with a solar array that suited its load nearly perfectly. The fabrication facility, where the welding and most of the assembly takes place, was the biggest energy consumer and had the largest roof. Three-fourths of the system’s 240 panels were installed on the fabrication facility’s roof.

Each building’s array feeds into a different utility meter, and offsets are credited by meter. The Freedom team tweaked the design to ensure optimal energy output without overproduction, since net metering only provides credit against future expenditures, not cash.



REAPing Rewards for a Smaller Carbon Footprint

When Rehme looked into the costs of going solar, he was surprised to see how affordable solar had become. He learned about the federal tax credit that would offset 30 percent of the expense. And because the company is located in a rural area, he was able to take advantage of the USDA’s Rural Energy for America Program (REAP) grant for an additional 15 percent of the project cost.

“The REAP grant really sweetened the pot,” said Rehme. “I looked at what it meant for my electric bill, and even with financing the system the tradeoff was good. I needed it to affect the bottom line and I found that it did. Our system is expected to pay for itself in less than four years.”

Going solar was a learning experience for Rehme and his team—and a natural outgrowth of the company’s efforts to recycle all scrap metal and aluminum and be a sustainable manufacturer. But as a small business, he has to be careful with his budget, and solar’s financial benefits were the linchpin in the decision.

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“I’m very excited about the effect of our carbon footprint, but it’s not a purely green decision—solar is just a great business decision,” he explains. “It’s really a no brainer because it makes financial sense, environmental sense, and it’s a great marketing tool.”

Choosing to go with SunPower was also a natural decision. “The warranty is a big deal,” Rehme notes. “I looked at a lot of panels—where and how they’re manufactured, and there’s no question SunPower offers the best panel. You can buy a cheaper panel but if you look at that cost savings over the life of the system it makes sense to go with SunPower.”

Now that he has solar on every building, telling the company’s sustainability story ties in well with the company’s emphasis on local manufacturing, local jobs and American-made products. “I like to say we’re 100% American-made, and now, we’re 100% solar powered.”



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