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Factory fueled by sun power

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By **JIM KINNEY**

Business writer

GREENFIELD - Small Corp. has been producing picture frames, display cases, and exhibition fixtures for museums in a building at the Interstate-91 Industrial Park here for 21 years.

Starting this month, the company's 30 employees are building these products using electricity generated atop the 36,000-square-foot factory's roof.

Photovoltaic cells generate electricity on an atomic level by absorbing photons from light and releasing electrons. At Small Corp., 440 solar panels cover almost all of the company's steel roof, except for the skylights.

The factory sits on a hillside, facing the sunny south.

"The designers said the layout here couldn't be more ideal," said Van V. Wood, who founded and owns the company with his wife, Molly L.

It takes 110,000 kilowatts a year to power the lights, the industrial air compressors, and all tools at Small Corp., said Van V. Wood. It is an expense that he fears will only go up as the price of electricity escalates.

The average home uses about a 10th of that, or 11,000 kilowatt hours a year, according to the Department of Energy.

The solar equipment cost \$730,000, or about \$7 per watt of generating capacity, said Van Wood. Grants from the state Department of Energy Resources covered almost half, or about \$330,000, of that investment.

In exchange for the grant money, the Woods agreed to make their plant a sort of research station in the state's energy initiatives. The state will monitor the amount of power that gets generated, and has installed a small remote-monitored weather station.

Ultimately, Molly L. Wood says, she would like to see the company go carbon-neutral and generate as much power as it uses.

"Our business is dedicated to preservation," she said. "We build things that preserve things. I think there is a link to preserving our environment."

Small Corp. already has high-efficiency lighting with motion detectors that switch off the lights if no one is in a certain part of the factory. The thermostats set back at night.

The air-compressor is a high-efficiency model.

"Before we did this, the state came in and did an energy audit," Van V. Wood said. "That report came back

saying we are already doing the easy things. This was the next step."

Molly L. Wood said she has asked employees to help with energy-saving ideas.

"I can't wait to hear their ideas," she added.

Business writer Jim Kinney can be reached at jkinney@repub.com

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