

Column: Rooftop wind turbines generate a lot of interest

by Mike Lloyd | Grand Rapids Press Editor
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A rooftop wind turbine generates power for City High/Middle School not far from a group of 11th-graders on their lunch break.

Dave Miller doesn't tilt at windmills -- unless he thinks they are trying to blow something past him. The retired engineer was energized by a [front-page Press story](#) last weekend about the installation of wind turbines at two local schools, Grand Rapids City High/Middle School and St. Anthony of Padua Catholic Church and School.

The turbines were put up to demonstrate green technology, capturing "free" energy from the wind to generate electricity. Otherwise, that voltage arrives concurrent with a bill from the power company.

Steelcase heir and prominent philanthropist Peter Wege was the spark behind the projects. His foundation covered purchase and installation costs. Swift Wind Turbines are manufactured by

Cascade Engineering. Wege is an environmental missionary, continuously pushing forward ideas to show that being "green" is not just good global citizenship but also makes sound business sense.

"He loves projects where a positive approach to the environment and an educational experience come together," said Ellen Satterlee, executive director of the Wege Foundation. So The Press and all local media were encouraged to report about the turbines at the two local schools.

Reporter Beth Loechler visited both locations and wrote about the gift that put a "new spin on energy." Citing Michael Ford from Cascade Engineering, she reported that the cost of each turbine was \$10,000 to \$12,000, including installation, with an expected energy savings of about \$200 annually.



"Can these numbers be right?" asked Miller who, for many years ran a successful manufacturing company, Miller-Moorehead Machinery. "How can anyone make a business out of that? It would take 50 or 60 years before there is any return on investment. Even if the price dropped to a thousand bucks, it would be five years before there would be any return. Miller, by the way, was the banjo/guitar leader of the Muskat Ramblers that performed at the former Pantlind Hotel. His manufacturing firm, which he eventually sold, prospered with the office furniture boom. "I started as a one-man company with a machine that could slit sheets of laminate. It eliminated a lot of waste and saved material costs. We had a better way of making the small strips for the edges of office-table tops. I look at production costs and ask, 'How soon do I get a pay back?' "

The windmills had his head spinning. "Am I missing something? Should we *really* be applauding this?" Miller's questions re-charged my concerns about the accuracy of what we'd reported. The payback gap surprised me, too.

I called Satterlee, who said she was "curious where those figures came from. I did a double-take when I read them. But then, Mr. Wege often undertakes things to make a statement or to demonstrate what's possible. He is always thinking forward, hoping to push us in a better direction."

Reporter Loechler explained her story: "It was supposed to be about a nice thing Wege did for two local schools. It will save money and help students learn about wind power in a real direct, in-your-face way.

"No one involved was making the point that everyone should go out and buy a couple of these. The economics seemed like a moot point because Wege donated the turbines. I hardly think I'd tell him 'no' if he offered to install one on my roof."

She didn't talk to Ford, her source for the figures on cost and savings. After unsuccessful attempts to connect with Cascade Engineering officials, Loechler pulled the cost estimates -- attributed to him -- from an earlier Press story written when Cascade first ventured into manufacturing wind turbines.

Ford confirmed that the numbers were accurate. "They're true. But, of *all* the things I've said about the turbines, many of which have been in the paper, this quote would be the last one I'd hope to see in print again. There's a lot more to this story than a simple sound bite. It misses the much larger view of the economics involved."

He explained that the estimate was based on the 10 cents charged now per kilowatt hour. "We have no idea what energy prices will be in the future," he said. "There was a time when we couldn't imagine \$4 a gallon gas."

Then there's the "Swift" turbine itself. "This is our first product in the renewable energy field," he said. "It contains robust and innovative technology. As we build demand for the product, we will achieve efficiencies and scale. Mass producing them will drive cost down."

Wege readily acknowledged that he "wasn't trying to bring power to the national electric grid. I'd never make the claim this was high efficiency. I saw this as a teaching tool. It's not in the ideal place for wind, like up near Traverse City or out west. The turbines up north are twice as large and even those are half the size of the ones in the desert. I do these things to attract attention and create awareness.

"That's a value all in itself. And reader curiosity about your story is proof."

We call that a wind/wind.

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