

Solar energy: Many suburbs are still in the dark

Just before the first snow fell, Harry Ruetschlin climbed up on his garage roof and mounted 12 flexible panels, becoming one of the first residents in his northwest suburb to take the solar plunge.

"I've been thinking about this for many years," said Ruetschlin, an electrical engineer, who spent more than \$14,000 for the installation, which he hopes will cut his monthly electricity bills by almost half. "Solar is a long-term investment, like a furnace. I don't care if it takes 12 to 14 years" for the system to pay for itself.

With a 30 percent rebate for the installation from the state of Illinois and an additional 30 percent tax credit from the federal government for his project, Ruetschlin, of Rolling Meadows, hopes to shave almost \$7,000 off the top of his project cost.

The number of residents following a similar path is growing rapidly, officials say. With scores of applications for solar energy use pending at ComEd, local municipalities and their building inspectors are discovering that they need to update their code books as more residents go green.

Ruetschlin needed the village's zoning approval for his project, and inspectors stopped by unannounced several times during the three-day installation. This "learning phase" for inspectors is not unique to Rolling Meadows.

"It's all new to us," said Tom Trapani, Rolling Meadows code compliance inspector. "We're reading the rule book like crazy." In Schaumburg, a consultant will be hired to revise code books to address renewable energy, said Martha Dooley, the village's senior landscape planner.

With Schaumburg's many hotels, residential neighborhoods and Woodfield Mall, village inspectors recognized this year that they needed to make some changes and decided to use their federal stimulus funding to help, she said.

Similarly, officials in Palatine plan to tweak their codes to accommodate solar installations, officials said. The community got a taste of the future recently when the North American headquarters of Schneider Electric, an international energy management company, flipped the switch on 29 15-foot poles studded with solar energy panels. The panels are capable of generating more than 60 kilowatts, offsetting the plant's energy use by about 3 percent, said Martin Hanna, a company vice president.

"We're not doing this for the cost savings," Hanna said. "Our business is energy management; it's more to set an example and walk the talk."

In Arlington Heights, which allows roof-mounted solar panels, there are a few homes and a number of schools with such installations, officials said.

But there are no permitted uses for geothermal projects, free-standing solar panels or wind spires, vertical wind turbines.

So the village will be evaluating its building codes and may host public hearings this spring to discuss renewable energy sources for residential and commercial use, officials said.

ComEd has seen a steady increase in the number of residents in northern Illinois looking to generate their own solar energy, said Frank Blacker, a company spokesman.

In 2008, he processed 50 applications between August and the end of the year. Last year, he received 150 applications, 75 percent of them from residents scattered across many of the northwest suburbs.

"ComEd has a lot of green initiatives and we want to reduce our carbon footprint," Blacker said. "We are a distribution company only, but if we have customers generating their own electricity, that means that much less that Exelon generates and the less coal we use."

Blacker said he recognizes that the cost of solar energy installation is often prohibitive. Some residential systems cost up to \$20,000 with a 10-year payback.

"What's nice about solar, studies have shown that we get as much sun as they do in Arizona," Blacker said of the Chicago area. "We average four hours of sunlight a day. Down in Arizona, they only average 4 1/2 hours a day, so solar is still not a bad way to go."

The system Ruetschlin installed included solar panels 39 inches wide and 64 inches high that come with a 25-year warranty. The panels are flexible and guaranteed to sustain golf-ball-size hail. Each is equipped with a device that allows Ruetschlin to gauge efficiency and output.

Ruetschlin figures his panels will add value to the house.

The new system is also a good lesson for his 8-year-old daughter, he said.

"I can instill in my daughter and make her more conscious of solar energy," he said, noting that he plans to have her school class over to his home for a tour.