

**08/08/07****Zero energy home debuts**

The home, constructed by Schroeders Homes of Venice, produces its own power with the help of photovoltaic cells.

Can a home be so energy efficient that it actually produces its own electrical power?

David Schroeders, president of Schroeders Homes in Venice, believes it can. He has developed what he calls a "zero energy home," which not only connects to and uses energy from the local electric utility, but also makes enough of its own power to send energy back to the grid. He is currently building four homes incorporating the system in North Port, Port Charlotte and Rotonda Lakes. According to Sales Manager Chris Hostler, the homes should all be ready by the middle of September.

According to Schroeders, the technology has been around since the 1970s and has just recently become cost-effective.

"They've been doing it in California a little bit for about two or three years, some parts of Arizona and a little bit in New Mexico," Schroeders said. "Only two have been done in Florida so far, through the Department of Energy's Building America program, of which we're a partner."

Schroeders maintained the zero energy concept is a whole system approach.

"It's not as simple as taking a conventional, code-built house and throwing a bunch of solar panels on it," he said. "You really have to get the house as energy efficient as possible."

Schroeders' team insulates the windows, ceiling and inside the roof. They also put an energy efficient air-conditioning unit and a solar hot water system in the house.

"That brings our houses down to \$75 to \$80 electric bills, then the PV systems offset that," Schroeders said.

PV stands for "photovoltaic" panels, which contain the silicone cell that creates electricity from sunlight. They are wind resistant up to 135 mph. Schroeders said no other builders he knew of were integrating the panels in home construction.

"I've heard of solar contractors installing PV systems on people's houses (separately)," he said. "But no one is doing this as zero energy."

Subrato Chandra, program director for the Florida Solar Energy Center on the campus of the University of Central Florida, acknowledged Schroeders' efforts.

"I know David Schroeders," Chandra said. "As a matter of fact, some of my team and I are going to be on a (Schroeders) site in North Port (soon), because it is of interest to us to monitor the performance of this home."

Chandra added he also knew of Florida builders looking to incorporate the zero energy idea in

Stuart, Cocoa, Naples and Gainesville.

"There are a half-dozen or so across the state," Chandra said. "But in Southwest Florida, David Schroeders is our man."

Schroeders said a zero energy house would sell for the same price, or less, than a comparable house -- once the \$200 to \$300 a month in electric bill savings were factored in.

He gave as an example the house he is currently building in North Port, where the price dropped to \$189,370 after the state of Florida grants rebates of \$4 per watt for a PV system, \$500 for a solar hot water system and the federal government tax credits factored in.

"If you get a house with a 5 kilowatt system, that's \$20,000 you get back from the state," Schroeders said, "Add in the \$500 for the solar hot water, plus the \$4,000 for the two IRS tax breaks and you get \$24,500 in rebates."

Schroeders has homes going up in Cape Haze, Rotonda, Rotonda Lakes, Port Charlotte and North Port.

"I think we've made decisions easy for people," he said. "You're not polluting, you're insulating yourself from FPL bill increases and your monthly mortgage payment is tax deductible."

So what happens if you get a week of cloudy days?

"You're still hooked up to the FPL grid," Schroeders said. "If it's still dark outside, you've got your meter on, spinning like normal. But when the sun comes up, your meter slows down, stops -- then starts spinning backwards."

Mel Klein, external affairs manager for FPL agreed the zero energy technology is "encouraging."

"What it does require is some partnership with utilities," Klein said. "Right now, we've got a dual metering program that will allow for a customer using solar energy at a certain level and wants to return that to the grid to be paid according to one of our tariffs."

Klein added FPL was looking at a concept called net metering, which uses a meter that goes forward when electricity is consumed and then reverse when it's not.

"However long it takes us to get there, I think it's something that has to happen now and I think our company understands and is, in fact, a leader in that whole renewable energy program," Klein said.

Meanwhile, Schroeders is currently finishing a model home incorporating the panels at 16694 Toledo Blade Blvd. in Port Charlotte. Work should be completed soon.

"You'll be able to see what the cells look like," he said. "We don't put them on the fronts of homes, we put them on the sides or the backs. They look nice, very modernistic looking."

Schroeders believes a zero energy home is a perfect Florida home.

"We've built it to withstand a Category 5 hurricane," he said. "And it uses Florida's greatest resource to make its energy -- the sun."



Schroeders Homes Inc. zero energy homes currently under construction: The Brittany, on 3408 Cascabel Terrace, North Port; The Ashley/Victoria on 13451 Cain Ave., Port Charlotte; The Courtney, on 255 Albatross Lane, Rotonda Lakes; The Alison, on 6913 Babbit Ave., North Port.

Schroeders Homes Inc. is located at 141 Pond Cypress Road in Venice. For more information about their homes, contact Chris Hostler at 941-485-7040 or visit them on the Web at [www.dschroeders.com](http://www.dschroeders.com).

*You can e-mail [Steven J. Smith](mailto:ssmith@sun-herald.com) at [ssmith@sun-herald.com](mailto:ssmith@sun-herald.com).*

**By STEVEN J. SMITH**

Staff Writer