

# Solar power will do double duty

*Lower bills, healthier Earth are the payoffs*

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The Arizona Republic

Aug. 16, 2004 12:00 AM

SCOTTSDALE - Throughout the blazing hot day, Larry and Monica Foster use as little electricity as possible, though their home remains comfortably cool.

The couple installed 25 solar panels on the roof of their house near Dynamite Boulevard and 114th Street to generate renewable, photovoltaic energy.

The Fosters said their 5-kilowatt solar energy system, which cost slightly over \$25,000, and other design elements in their home will save them about \$100 to \$200 on their electric bill each month.

With less reliance on an already overburdened public electric grid, their new home is a long-term financial investment, and for the Fosters, it is something more.

"It's about being a good steward (of the Earth)," said Larry Foster, a retired airline pilot who moved to Scottsdale in 2001 from Minnesota.

Architects designed the home according to many of the guidelines of the Scottsdale Green Building Program, which promotes renewable energy and alternative home design techniques to lessen the impact of construction on the environment.

The Fosters' home is angled to offset the intense summer sunlight. Overhangs outside windows limit the heat that enters the house, and "solar tubes" serve as strategic skylights so electricity does not need to be used.

A solar energy hot water system is also positioned on the rooftop, facing south over Pinnacle Peak.

Rick Johnson, an associate of the Edwards Design Group, Inc. that designed the Fosters' house, said the project was one of six he worked on in the area where a photovoltaic system was installed.

The Scottsdale-based company has worked with such technology for about 30 years, Johnson said.

Retrofitting existing homes with things like solar panels can be cumbersome for architects, though the projects are possible. Projects such as the Fosters', which employed "green" techniques from scratch, are less expensive.

"A lot of consumers are afraid it will cost them more to be environmentally friendly, but that is not the case at all," Johnson said.

Aesthetics were also of concern to Monica Foster, who said she had workers up on the roof to demonstrate how the installed solar panels would look.

They are barely noticeable except from the Fosters' balcony, where the views of surrounding rock formations almost distract the eye.

"We were lucky because orienting the home for solar energy made for the best view," she said.