

# A Hot Topic

Harness the power of the sun in your home

by Glenda Rogers

Using solar energy is certainly nothing new. The ancient Greeks built their homes facing south and put down tile floors that would absorb the sun's energy and radiate it back in the cool evenings. Since that time, however, we've become dependent on fossil fuels to meet our home energy needs—a resource forecasters say will be depleted in the next 40 to 70 years.

As of Jan. 1, the federal government will offer a tax credit worth 30 percent of the cost for solar-energy installations to both residents and businesses. For homeowners, the credit is capped at \$2,000 and will be offered for two years.

## Space heating

Heating the home with solar energy alone is not a cost-effective alternative for Georgians because of the short duration of colder weather. However, you can enjoy the benefits of "passive" solar heating by taking a few things into consideration when looking at buying, building or renovating a home.

Homes with a north-south orientation and most of the windows located on those sides will be more efficient because the homeowner can take advantage of cross ventilation and natural light. In addition to the orientation, a home with a 2-foot overhanging roof will keep the building cooler in the summer by blocking direct sun and warmer in the winter, since the direction of the sun will have changed enough to allow the sun to shine in the windows.

Ceramic tile is the best flooring option for passive solar heating, since it radiates absorbed heat.

## Water heating

Heating water is one of the most cost-effective uses of solar energy. "By simply converting your

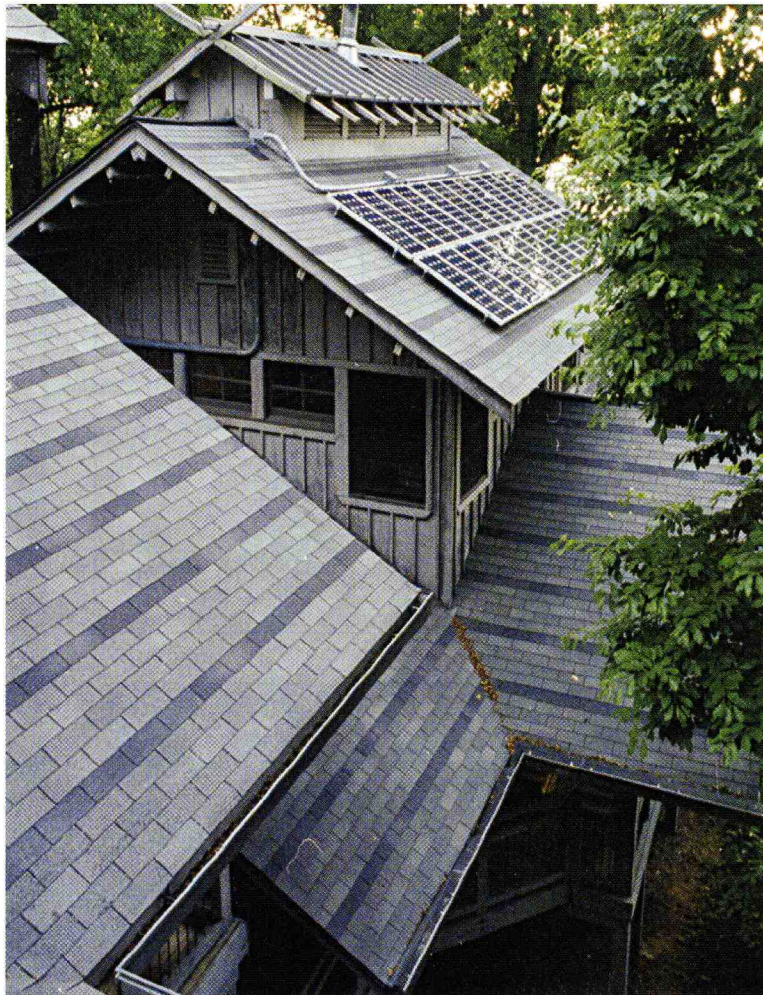
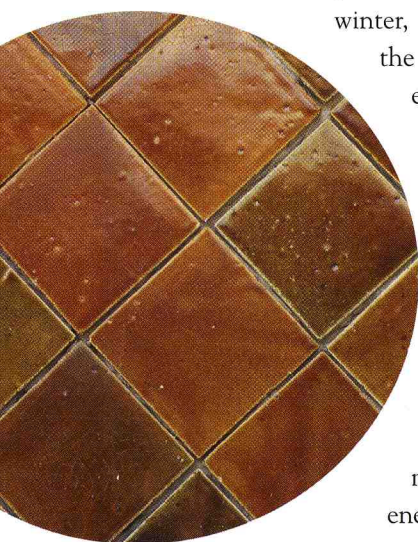


Photo courtesy of Len Foote Hike Inn

**PHOTOVOLTAIC (PV) PANELS** are used to produce electricity from solar energy. These panels are usually located on the roof of a house where they catch full sun throughout the day.

conventionally heated pool or spa to solar heat, one can extend pool season by two months on either end and the system will pay for itself in one year," says Gerry Kilgore of Suncatchers of Atlanta.

In heating water for home use, a passive solar water heater that works in combination with your existing conventional water heater can reduce your dependence on natural gas. "And if you find yourself at the end of a long line of family members waiting for the shower, chances for a hot one are considerably greater using this combination," says Dennis Creech of Southface Energy Institute.



**CERAMIC TILE IS THE BEST FLOORING OPTION** for passive solar heating, since it radiates absorbed heat.