A GREEN HOME IN HILLCREST

The Capozzis Build Their Dream Home

by Gerri Williams

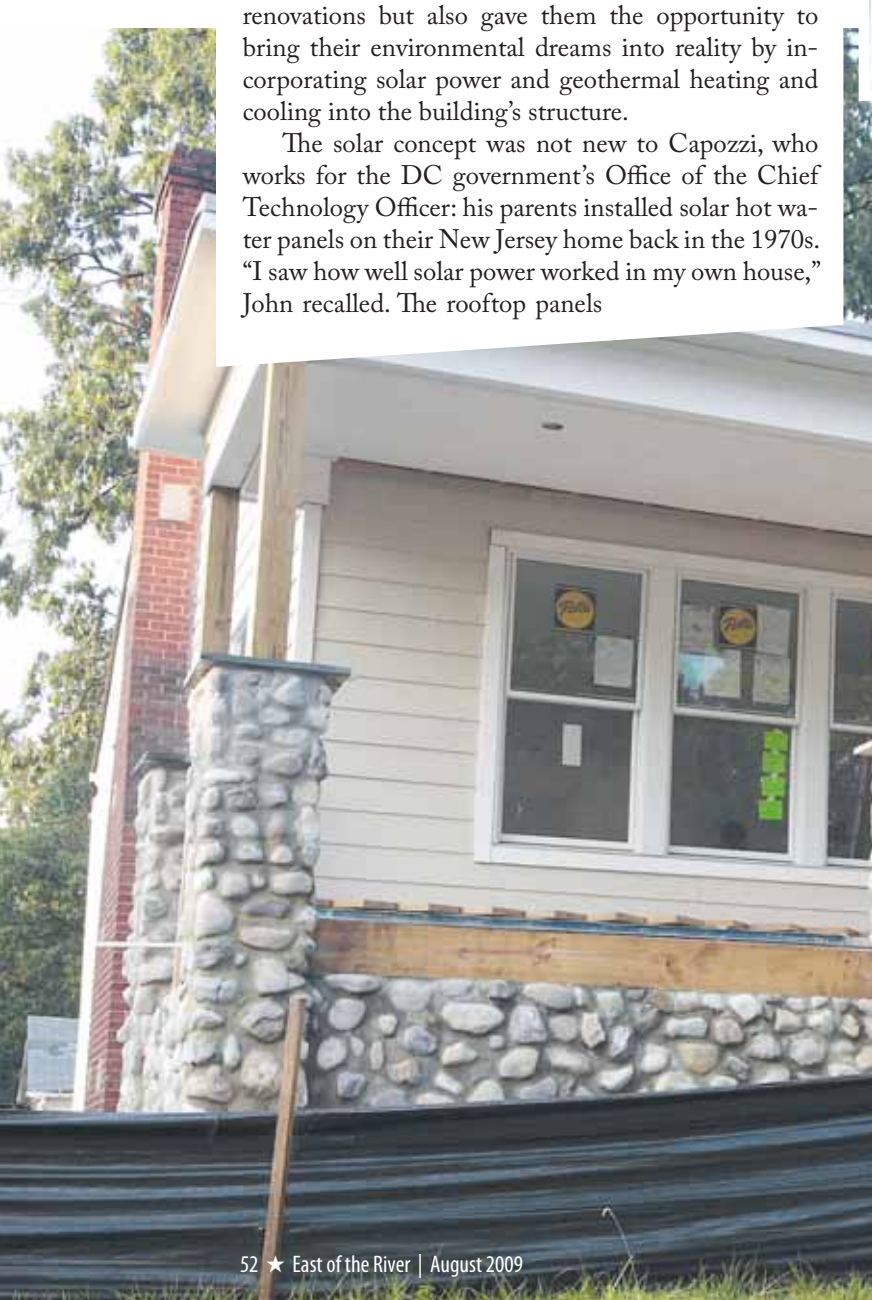
John and Sue Capozzi loved living on Capitol Hill. Active in the Barney Circle community, they joined the local civic association, participated in the neighborhood watch, and helped organize an annual anti-crime rally. Yet the couple and their two children will be waving goodbye to the Hill in August and moving to their dream home in Hillcrest.

Attracted to the Southeast community's roomy lots and neighborhood feel, the Capozzis scouted for a house in Hillcrest over a five-year period. The three-story house they purchased in October 2008 needed renovations but also gave them the opportunity to bring their environmental dreams into reality by incorporating solar power and geothermal heating and cooling into the building's structure.

The solar concept was not new to Capozzi, who works for the DC government's Office of the Chief Technology Officer: his parents installed solar hot water panels on their New Jersey home back in the 1970s. "I saw how well solar power worked in my own house," John recalled. The rooftop panels

1. Capozzi family stands the roof of their new home with Atta Kiarash of Solar Solution.

2. Technicians from Solar Solutions installing a solar panel.



3. The front of the Cappozzi's new green home. Photos by Andrew Lightman

“YOU CAN CHANGE THE ENVIRONMENT ONE PERSON AT A TIME.”

- JOHN CAPOZZI

John Capozzi in the back of his new ‘green” home. Photo by Andrew Lightman

maintained comfortable water temperatures, with little additional conventional heating needed. At the Hillcrest home, the solar photovoltaic panels will supply electricity by converting the sun’s rays to the standard power current. And, John noted, the energy enhancements “really return value. I expect to recoup the costs in about seven years.”

The spacious quarter-acre lot made installing a geothermal system another feasible option. Geothermal energy uses the consistent, 55-degree temperature of the Earth to heat and cool structures. A trench was dug – 8 feet deep, 3 feet across and 70 feet long – along the west side of the house’s foundation and pipes laid in that lead from the trench to a network of pipes inside the building. A heat pump circulates a special liquid in the pipes to form a heat exchange between the earth and the building’s interior.

Funding Green Dreams

When the Capozzis decided take the plunge into alternative energy technologies, they found that both the District and the federal governments are providing new incentives to make green building choices more accessible and affordable to homeowners and businesses.

“Mayor Fenty’s vision for the District includes making as much use of natural, renewable energy sources as we possibly can,” said George S. Hawkins, director of the District Department of the Environment (DDOE). “It’s one of the best ways to reduce a city’s carbon footprint and its dependence on fossil fuels. That’s why DDOE is working to encourage the early adopters to put these technologies to use in their homes.”

DDOE offers rebates to homeowners for solar and wind energy installations through its Renewable Energy Incentive Program, while the federal government provides tax credits of up to 30 percent of a solar installation. These combined incentives can return 50 percent to 75 percent of the cost of a renewable energy project to the homeowner.

Green Energy DC, a service of DDOE, was launched in February 2009 as a one-stop resource for sustainable programs supported by the District government. Since the launch, interest in the solar program has been intense, according to Emil King, program manager for renewables at DDOE. To date, more than 260 applicants have completed the pre-qualification process, resulting in almost $3 million dollars in requests. (Wind energy projects are also eligible, although few DC areas produce adequate wind currents for turbines.) Applicants are responsible for securing the funds to carry out the installations and upon completion may apply for the rebate. For the fiscal year beginning in October, King said, Green EnergyDC will be working on producing detailed “how-to” guides for solar and geothermal projects. As energy costs continue to climb, forward-thinking home and business owners increasingly will seek alternative energy sources.

A Green Lifestyle

The Capozzis have been gratified by the funds that the District and federal governments offer, which enabled them to take full advantage of alternative technology options. Recycled materials for the siding, substantial wall insulation and insulating paint added to the home’s energy efficiency.

The renovation process has quickened the interest of the Capozzi’s children in the green features of their new home. Eleven-year-old Camille frequently asks about the flat panels that will be attached to the roof of her dormer bedroom. Hans, who is in third grade, purchased a “Solar Science Kit” powered by photovoltaic cells during a recent trip to the Smithsonian’s Air and Space Museum. Adding the new energy technologies “changes your whole outlook,” John asserted. “An additional bonus is that it sets a good example to the kids that we can all do something to help the environment.”

The Capozzis look forward to an Aug. 21 move-in to their home. “Hillcrest is a hidden jewel,” Sue, a native Washingtonian, enthused. “Every time we visit the site, people come up to the fence, introducing themselves and welcoming us to the neighborhood.”

Their new home promises the family greater energy independence for years to come. And they haven’t ruled out further green energy enhancements down the road, including even a wind turbine. “I like to be ahead of the curve,” John joked. It’s all part of a growing attitude shift in which homeowners know they can enjoy a comfortable home and a modern lifestyle while helping the environment. “You can change the environment one person at a time,” John emphasized. “I lived 21 years in one house, and when the time came for a change, I thought, why not do the right thing?”

Is ‘Going Green’ for You?

Start your research with reliable and current information. Download pamphlets and applications for green incentive programs, as well as other useful links, at the District of Columbia’s government website: green.dc.gov/green.

Join a neighborhood group – or start one of your own – to encourage information sharing and support for green energy options among community residents. Two active groups are the Capitol Hill Energy Coop (capitolhillenergycoop.googlepages.com) and Mount Pleasant Solar Coop (www.mtpleasantsolarcoop.org).

Find out about tax credits available to homeowners for energy-efficient construction and products at the US Department of Energy’s website www.energy.gov/taxbreaks.htm. ★