Northwest couple installs city’s largest solar system

By KARA BRANDEISKY
Current Correspondent

Last Friday, the Cohen-Gala family in Northwest installed the largest residential solar panel system in the District — an 11.96-kilowatt system that produces 13,754 kilowatt hours per year, equivalent to the environmental benefits of planting 250 trees a year or recycling 100 tons of waste over a span of 30 years.

With the help of a federal tax credit, a District grant, and the value of solar energy credits, homeowners in the District can install a similar system for a fraction of the original price, according to Astrum Solar, the company that installed Shelley Cohen and Mike Gala’s panels.

“Of all of our states that we’re in ... our D.C. customers have some of the fastest returns;” said Michelle Waldgeir, vice president of marketing for Astrum. The company specializes in residential systems and expects to install 500 solar panel systems this year.

Waldgeir said the price range is “pretty big depending on what options [customers] select,” and she urged interested homeowners to explore the possibilities on Astrum’s online solar calculator, at astraumsolar.com. The calculator takes into account location, size, amount of shade, average monthly electric bill and more.

Customers can expect to get about 1 kilowatt of energy per 100 square feet of their house.

Cohen and Gala’s system was initially priced at about $65,000, which included a discount. They expect the panels to cut their electric energy costs by 75 percent to 85 percent.

A District grant is covering about 35 percent of their cost. Additionally, utility companies are required to produce or sell a certain amount of solar renewable energy credits per year, and Astrum works as an aggregator, buying credits from homeowners either upfront or yearly, and selling them to utility companies. Cohen and Gala chose the upfront option, covering about 25 percent of their price. Finally, a tax credit from the federal government pays for 30 percent of the cost.

With incentives, the couple will probably pay about 10 percent of the system’s original quote, and they hope to break even in about two-and-a-half to three years.

The federal portion of the credit is higher than in the past, because last year lawmakers eliminated a $2,000 cap on each installation. Because of that change and other recent incentives, Astrum Solar and its competitors have seen a “big growth spurt” in the past 18 months, said Walgeir. Now, for many of Astrum’s customers, environmental considerations come after financial considerations, she said.

“They’re motivated because it just makes financial sense,” she said.

But for the Cohen-Gala family, environmental sustainability isn’t just a consideration; it’s “a way of life.”

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Zoo “Garden Day” spotlights fauna

By LAURA L. THORNTON
Current Correspondent

For the first time in weeks, Washingtonians woke last Saturday to the sound of steady rainfall — perfect weather for the gardens at the National Zoo, if not for the people visiting them for the new Garden Day event.

Still, “for a rainy day, it’s been really fantastic,” said Teresa Vetick, a Zoo horticulturist who helped organize the event, which highlighted the special challenges — and beauty — of Zoo horticulture.

“We’re an environment with a live collection ... of flora and fauna,” said special events manager Dan Pierron. And so gardening at the Zoo — which must keep both animals and visitors in mind — is different from creating flower or vegetable gardens at home.

Pierron, Vetick and other staffers began planning Garden Day a year ago to showcase the uniqueness of Zoo horticulture,” Pierron said.

“It was a matter of bringing everyone together, creating Garden Day a year ago to showcase.

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‘Miles for Muscles’ strives for a cure

By PAUL D. SHINKMAN
Current Correspondent

Mike Hamlin of Chevy Chase has always felt natural on two wheels.

“Freedom comes from riding a bike,” said Hamlin, who seems more comfortable in bicycling shorts and a helmet than most people do in pajamas. “It’s always been in me.”

A longtime human resources employee at the U.S. Environmental Protection Agency, Hamlin, 58, has dedicated much of his life to applying his greatest passion to the greater good.

He met his husband, Spencer, on a bike ride organized by the Metropolitan Community Church of Washington, and the pair has participated in AIDS rides to Raleigh, N.C., and the Seagull Century 100-mile ride from Salisbury, Md., to the Atlantic coast and back, which raises funds for a number of organizations.

But in 2004, the avid rider began to notice weakness in the muscles of his upper body; he was unable to grip the hand brakes on his Trek, his arms were unstable and his neck at times couldn’t support the weight of his head.

The doctors at Georgetown University Hospital diagnosed him with myotonic muscular dystrophy. One of the most common forms of muscular dystrophy in adults and children, the life-threatening illness causes “a slow, progressive wasting of the muscles, irregular heartbeat, cataracts and insulin resistance,” according to a University of Virginia research...
**SOLAR**

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life,” said Cohen.

She has worked in the environmental field for 16 years, now as a senior project developer of renewable energy and energy efficiency for Ameresco Inc. Gaia is an architect for the Navy.

Their goal is to achieve a zero carbon footprint. When they moved into their Everett Street home in 2007, they immediately undertook renovations to make it more energy efficient. In 2009, they were featured on a show called “Renovation Nation” on the Planet Green Channel. The show tracked them as they installed recycled-concrete-and-windshield-glass countertops in their kitchen, a cork tile floor, and a patio of bricks made from recycled tires.

And although she was initially concerned about buying an older home that hadn’t been updated in years, Cohen was excited about the south-facing roof, knowing she could finally install a renewable energy system. First, the 70-year-old slate roof had to be replaced, and smaller energy conservation efforts had to be completed. The homeowners invested in an Energy Star mechanical system and used icynene spray foam to seal the basement and attic.

For its part, Astrum first installed a metal seam roof. The workers then put clamps onto the seams to attach the solar panels. Each panel has its own microinverter, what Walgeir describes as “the brains of the operation.” The microinverters convert the direct current into alternating current that homes can use. If shade blocks one part of the roof for a portion of the day, only that panel is affected, rather than the entire system.

Walgeir said the panels will last decades, noting that workers sometimes stand on them during installation — and the panels hold the weight. She said the manufacturer’s warranty for solar panels is 25 years, and panels that were installed when the technology came out in the 1950s still work.

Cohen said part of the inspiration to do “the right thing for the next generation” came from having children: the couple has a young daughter and a baby on the way.

“What’s happening in the Gulf ... makes you realized how our dependence impacts nature and the ecosystems where we have to get these resources from,” Cohen said.

Clearly others feel the same. Cohen said her neighbors in the community just off Connecticut Avenue have been “extremely supportive” of their project. She said about 75 to 90 people attended a ribbon-cutting ceremony Friday, including Ward 3 Council member Mary Cheh and D.C. Department of the Environment director Christophe Tulou. The mayor’s office also sent a proclamation.

The family considers the solar panels “phase three” of their environmentally friendly home improvement projects, but their desire to go eco-friendly is a “never-ending pursuit,” Cohen said.

**BIKER**

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document.

The abrupt news stopped Hamlin in his tracks.

“I hit a wall,” he said. “You’re not sure what this is or where it will take you.”

The disorder has no treatment, and for the first time, Hamlin was forced to search inwardly to determine how he could continue living his life.

“This might be life-shortening, and you’re not going to get better,” he said. “You just have to pull yourself up.”

**The long, winding road**

While looking for a way to get back on the road after a three-year forced hiatus, Hamlin discovered Mt. Airy Bicycles in Maryland.

“We do a lot with special needs,” said store owner Larry Black, who has been working to get people like Hamlin back on cycles since the 1970s.

Black helped Hamlin pick out a recumbent trike, which Hamlin named “Nitro.” The car-sized streamlined frame are two articulat-ed front wheels on either side of a seat into which the cyclist leans back, pushing pedals directly in front of the trike.

With some modifications to the trike to provide more control over the brakes, and a lot of practice on the unused leg, Hamlin was able to get back on the road slowly.

“I’m fortunate,” he said. “I still have decent strength in my legs.”

Hamlin had discovered a new outlet for his passion, but his life continued to be challenging.

“If I can button my own shirt, or open a jar of peanut butter ... those are small wins for me,” he said.

He recounted one ride in Rock Creek Parkway, when wet leaves on a slight incline leading up to a tunnel caused his trike to slip backward, almost launching him into oncoming cars.

But he was undeterred.

“I never walk a bike up a hill,” he said, and he wasn’t about to start then. Hamlin dismounted, walked up the slope, cleared the leaves away and finished his ride.

**Miles for Muscles**

With a desire to compete again, Hamlin set his sights on this year’s Seagull Century, hoping to pair the event with combating myotonic muscular dystrophy.

Last year, Hamlin had discovered the Stone Circle of Friends, a nonprofit founded in a Richmond suburb by Todd and Edibell Stone in 2007, when their two sons, Nicholas, 13, and Elliot, 10, were both diagnosed with the disease.

The organization, which has raised almost $400,000 in the last two years, has been working closely with Dr. Mani Mahadevan, one of the world’s pre-eminent researchers of the cause of, and potential treatments for myotonic muscular dystrophy. Mahadevan is also a professor in the Department of Pathology at the University of Virginia — which, coincidentally, is close to the Stones’ residence in Glen Allen, Va.

Through her own research, Edibell Stone learned that scientists are close to finding therapeutic treatment. “I asked, ‘How can I help?’ and the answer was, ‘Funding,’” she said.

Mahadevan has been researching the disease since 1992. He and his team discovered in 2006 that unlike most genetic diseases, which are caused by irregularities in DNA, this condition is caused by toxic RNA — what Mahadevan describes as “photocopies” of DNA that create proteins, which make up most parts of cells.

The Stones and their team have introduced the disease into laboratory mice, and they have been able to successfully remove all the toxic RNA, leaving the test subjects perfectly healthy.

“This showed, for the first time, that this disease might be treatable,” he said.

The next step is to develop clinical trials, which, depending partially on funding, would take five to 15 years to complete, Mahadevan said.

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For more on Miles for Muscles and the Stone Circle of Friends, visit stonescircleoffriends.com. For more on Mt. Airy Bikes, visit bike123.com.