

## Part 3 Solar Co-Ops, Working Together to Save

Editor's note: in part 2 of this story we visited with Edinburg entrepreneur Ed Kelly of Shenandoah Energy Services who finds creative ways to make solar energy blend into the homes and lives of his customers. In part 3 we'll see how the power of cooperative buying and the energies of dedicated volunteers helped dozens of home owners in Harrisonburg go solar. And how that option is coming to Shenandoah and Page counties next.

## BY BRUCE MCCLINTON

Joy Loving says she doesn't deserve the credit but the process that created the largest expansion of home solar installations in our region arguably started in her living room. In May of 2013 she organized a meeting at her home in Bridgewater of like-minded folks to discuss how best to encourage the use of solar power. The contacts she made that day led her eventually to a local environmental group, the Climate Action Alliance of the Valley (CAAV). Anne Nielson, a board member, had run across a new concept known as "Solarize." Solarize Blacksburg was helping people in that community to save by buying in bulk - a solar co-op. This was such an exciting concept that although Joy already had solar at home she volunteered to act as the coordinator for a new local co-op.

The Solarize concept was born when young Walter Schoolman told his mom Anya that he'd like to find a way to help his neighbors in the Mt. Pleasant area of Washington, D.C. afford solar. From this idea came the Mt. Pleasant Solar Coop, which in 2009 helped

45 homes make the change. Anya's efforts have since grown into the Community Power Network, which works with groups across the country. CPN has affiliates in the mid-Atlantic including Virginia Solar United Neighborhoods (VA SUN).

Joy and CAAV contacted VA SUN for assistance in setting up a co-op and Solarize Harrisonburg was created. The process started with public meetings in June last year to introduce the concept and sign up members. There is no cost or commitment to becoming a member; you just have to be interested. By the end of October 2014 more than 200 people had joined. At that point Joy handed off responsibility to Aaron Sutch of VA SUN. He and his team reviewed each member's home using satellite images to determine their suitability for solar.

The next step was soliciting bids from qualified contractors. Those bids were reviewed by a committee of co-op members. "We got 14 responses from 13 installers" says Carl Droms who served on the committee. They worked with Aaron on a "process of elimination and decided on one or two" finalists. In the end they selected Sigora Solar of Waynesboro because they had a "good price and we felt that they could handle that many installations. There's the track record, the materials they use, the warranty they are willing to offer."

Following detailed site surveys individual proposals were made by Sigora to home owners. Ultimately 68 households in and around

Harrisonburg signed up. Installations were completed between December last year and July. By concentrating that many installs in a short period Signora was able to significantly reduce their costs and pass the saving on to co-op members.

While Solarize contracts don't offer the flexibility of a custom installation they do provide a menu of choices including roof or ground mounted. They also can supply either US made or "responsibly sourced foreign panels." Many homeowners in the valley prefer to "go American."

According to Aaron, "It's been an unqualified success. We took 68 people solar in less than a year. Installed a capacity of 414kW, about industrial scale. One million dollars of solar sales to Sigora. It is actually our biggest project at VA Sun, and it's the largest in terms of signed contracts that Community Power Network has ever done."

But the final judgement on Solarize comes from its members. The home of Carl Droms and Adrie Voors received the first installation. Carl says the entire Solarize process was "completely painless." They were very satisfied with the work of Sigora. "They installed our system on January 6, they had to sweep the snow off the roof. They did the installation in a day, and we were hooked up the next week." And the result: "Our last four electric bills have been negative. You generate most of your electricity in the summer. It will be banked for the winter. "

Aaron feels most of the credit belongs to



A ground-mounted solar installation at the home of Solarize Harrisonburg coordinator Joy Loving.

Photo by Bruce McClinton

Joy and the other volunteers at CAAV. "You have a pretty close knit community in Harrisonburg, and CAAV was really instrumental in the outreach and had a presence in the community that was really helpful."

But despite CAAV's involvement it's not just about environmentalism. "CPN and VA SUN are fiercely non-partisan," says Aaron. "We're really involved in helping people go solar but not telling them why they should. We want to make it as easy as possible. We're starting to see the messaging around the Green Tea movement resonate more, especially in places that are more conservative. Solar represents energy freedom: freedom to produce your own electricity, freedom to create economic opportunity and build resilience within the electric grid."

Some have expressed concern about the effect that Solarize has on local installers. That it takes away from the pool of possible clients. Aaron disagrees. "Solarize is competing against the idea that it's too expensive to go solar. The Solarize program results in a lot

of jobs for other installers because not everyone can meet the co-op's time table." Also, "some people want that kind of custom job. Those are the opportunities that we'll direct to other installers. Our job is to lift all of the solar installers." So rather than draining the pipeline Solarize creates new opportunities. As Carl Droms observed, "It creates a market that might not have been there."

The success of Solarize Harrisonburg has finally drawn the attention of local media. As a result of that publicity there has been an outpouring of requests from those who missed out the first time. Aaron and Joy have announced a new phase that will include Shenandoah and Page counties. Reflecting that broader scope it will be called the Massanutten Regional Solar Co-op and will begin public meetings this month.

Solarize also created another spin-off when several members of the local Mennonite community concluded that they had the skills to do it themselves. Micah Shristi says that when "Solarize Harrisonburg came to town,

it got us all thinking about it. When you compare the cost of doing it yourself versus paying somebody else to do it it's significantly less expensive. Maybe two-thirds the cost of Solarize." Ultimately "a group of friends, some of whom work in various construction trades" got together and agreed to help with a sort of solar barn-raising project. So far three of the 10 members in the group have systems up and running and two more are pending.

Although Micah teaches English at Eastern Mennonite University, he had studied industrial technology at Appalachian State and was able to do much of the work himself. "A lot of my free time all summer was digging trenches and pulling wires." But the whole group turned out to help in putting the panels up on his barn roof. Micah and others in the group did reach out to Joy to explain their decision. They applaud the goals of Solarize and in fact Micah's parents had a system installed by Sigora under the co-op.

There is a growing movement in the faith communities around supporting sustain-

able technology. It falls under the umbrella of "Creation Care" and has most recently received attention with the release of Pope Francis' encyclical on the environment. But the Mennonite community has a long history and for several years EMU boasted the largest solar installation in the state.

Whether you see solar as an answer to environmental issues, a means to declare your energy independence or just an intelligent investment there are more options today than ever before to help you go solar.

The Massanutten Regional Solar Co-op will be holding public meetings in several locations in Shenandoah, Page and Rockingham counties in the next few weeks. The first session will be held in Harrisonburg on September 3 at 6 pm at the Massanutten Regional Library (174 S Main St, Harrisonburg, VA 22801). A second info session for residents of Shenandoah County will be held on September 10 at 6 pm at the Shenandoah County Public Library (514 Stoney Creek Rd, Edinburg). Volunteers will also be speaking to local groups and making themselves available for questions at farmers' markets and other gatherings.

For a schedule of events and information on the program see their web page:

www.vasun.org/massanutten-regional-solar-co-op

CPN and VA SUN are non-profit organizations, which depend on a variety of sources of income including foundation grants, fees from each co-op installation and donations to help them "keep the lights on." Their web sites offer a wide range of useful information: www.vasun.org, www.communitypowernetwork.com

For those who like to DIY, Home Power Magazine provides a wealth of information and advice: www.homepower.com

The 2015 Valley Solar Tour is coming October 3 and 4. A self-guided tour will feature PV (electric) solar systems while some will showcase thermal (hot water) solar system and/or other efficient building techniques. Homes range from Roanoke to Harrisonburg and possibly further north. For status or to sign up to receive updates: www.svrea.org

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Micah Shristi's DIY solar install received help from other members of the Mennonite community in Rockingham County. Photo by Bruce McClinton