



# Community solar garden captures innovation award for Moorhead, Minnesota

Moorhead Public Service installed its community solar garden near its first renewable energy systems, two wind turbines. (Photo by Moorhead Public Service)

**M**oorhead Public Service (MPS), based in Minnesota, recently received the Energy Innovator Award from American Public Power Association for giving residents what they want: clean solar power.

The award-winning, 40-kilowatt (kW) Capture the Sun Community Solar Garden went online in 2015, after public outreach indicated strong support for more solar options. Moorhead customers pay for the power output of one of the 144 non-rotating, photovoltaic (PV) panels that make up the array. The value of the energy generated by the panels

is prorated annually in the form of bill credits to participating customers. MPS is responsible for ongoing maintenance and delivering the energy to subscribers' homes and businesses.

"The point of the gardens is to allow people who don't have the ability to have solar panels at their home, to help feed solar energy into the grid," said

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**Moorhead residents, utility employees, city officials and contractors attended the ribbon-cutting ceremony for Capture the Sun, Oct. 6, 2015. MPS is planning a ceremony for the second phase of the solar garden this coming October. (Photo by Moorhead Public Utilities)**

MPS Energy Services Manager Dennis Eisenbraun. “That fits the criteria for the Energy Innovator Award very well.”

The award recognizes utility programs that demonstrate advances in the development or application of creative, energy-efficient techniques or technologies. Judges also look for programs that improve service to electric customers or projects that increase the efficiency of utility operations or resource efficiency. Transferability and project scope in relation to utility size are also considered. APPA presented the award during its annual National Conference in June in Phoenix, Arizona.

### **Keeping customers satisfied**

Although support for clean energy—especially the home-grown kind—is strong among consumers, many homes and businesses are not in the position, literally or figuratively, to install solar. According to the National Renewable Energy Laboratory, about

three-quarters of all buildings are not suitable for a solar array due to shading, roof orientation, structural issues and other concerns.

Shared solar, however, has the potential to greatly increase consumer access to solar PV, a fact not lost on MPS customers. “We did an initial survey to gauge customer interest last year, and then held a couple of public meetings,” Eisenbraun recalled. “Finally, we sent out a mass mailing seeking a commitment to the project and there was an overwhelming positive response.”

Capture the Sun quickly attracted more subscribers than it had panels to accommodate them. “We knew before we finished building the 2015 project that it was only going to be ‘Phase One,’” said Eisenbraun. “Between the waiting list and a second mass mailer sent earlier this year, we had enough support to go ahead with another array in 2016.”

### **Poised for success**

The second phase of Capture the Sun will be fully subscribed when it goes online this fall. MPS is planning a public dedication, Oct. 4, during Public Power Week.

The success of the solar garden is not surprising, given that Moorhead residents are already familiar with the concept of community renewable energy development. MPS built two wind turbines, one in 1999 and another in 2001, and more than 800 customers signed up to support the Capture the Wind program with a small green power tariff on their monthly electricity bills. “Our first foray into renewable energy was a resounding success,” Eisenbraun acknowledged. “The turbines were a great public relations tool and they reached payback in just 11 years, four years ahead of schedule.”

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Solar installers from Enterprise Sales mount PV panels on a rack. The project brought attention—and business—to the regional construction company. (Photo by Moorhead Public Service)

### Going local

Like the wind turbines, Capture the Sun is a distinctly local project that keeps control in the community and the economic benefits within the region. MPS self-financed the solar garden with a combination of subscriptions and funds shifted from its renewable system incentive program. “We didn’t have as many individual customers installing systems as we hoped,” explained Eisenbraun. “So instead of leaving that money on the table, we decided to use it to give our customers another option.” A very popular option, as it turned out.

MPS also chose Enterprise Sales Co. from nearby Valley City, North Dakota, to build the project. The website states that Enterprise is “more than a contractor,” but Eisenbraun was surprised to learn that the company builds solar arrays. “I was only familiar with them as grain bin builders,” he admitted. “But they came in with the best price and their project manager worked everything out to the finest detail.”

At Moorhead Public Service, bringing recognition to a local business, self-financing community renewables projects and giving customers what

they want is not so much about innovation as it is about doing the right thing. “We didn’t build Capture the Sun because of any mandates,” Eisenbraun pointed out. “We did it because it was a great idea and our customers thought so, too.”

And that kind of thinking deserves an award. ■

## WAPA congratulates SMUD for efficiency award



**S**acramento Municipal Utility District (SMUD) is among the agencies and individuals to be honored by the Alliance to Save Energy at its Evening with the Stars of Energy Efficiency awards dinner on Sept. 22 in Washington, D.C.

The annual awards celebrate individuals, companies, organizations, government programs and educational institutions that have made notable contributions to advance energy efficiency in their respective fields. SMUD is receiving the transportation award for 25 years of leadership and large-scale deployment of electric drive vehicles.

Whether a customer owns an electric vehicle or is thinking about buying one, the municipal utility offers information and resources to help make the decision easier. On SMUD's website, customers can learn about charging options and links for finding public charging stations.

SMUD introduced a special time-of-use rate in January 2016 that credits plug-in electric vehicle owners an additional 1.5¢ per kilowatt-hour (kWh) for charging their vehicles between midnight and 6 a.m. every day, all year long. During those hours, participating households pay only 7.17¢ per kWh for their electricity. As part of the efforts

to promote electric vehicles in its territory, SMUD also began offering a \$300 rebate this year to customers who purchase or lease a plug-in electric vehicle.

"SMUD is honored to receive the Transportation award in recognition of our wide-ranging commitment to energy efficiency," said Arlen Orchard, SMUD CEO and general manager. "We began supporting electric transportation solutions in the 1990s as a way to improve the Sacramento region's

air quality. From developing the first solar-powered charging station on the West Coast to launching an innovative rate program that rewards customers who charge their electric vehicles during off-peak hours, SMUD's actions and leadership have helped drive the technology forward. We look forward to continuing these efforts as more of our customers turn to electric vehicles to save money and benefit the environment."

As the utility industry continues to look for ways to adapt to changing technology and expectations, SMUD offers yet another example of programs and products that benefit the customer, community and power provider. WAPA is proud of our innovative customers and congratulates SMUD on its well-deserved recognition. ■



**SMUD has two charging stations that can recharge most fast-charging electric vehicles in 30 minutes. (Photo by Sacramento Municipal Utility District)**



# Better Buildings fact sheets highlight top Peer Exchange Call takeaways

**W**hen it comes to energy-efficiency programs, each utility is in a different place: Looking for examples to help them get started, trying come up with a way to measure and improve the results of a first-time offering, figuring out how to take an established program to the next level and all the phases in between. Everyone could use a little help and the Better Buildings Residential Network (BBRN) is a good place to find it.

Several times a year, members hold Peer Exchange Calls to compare experiences, analyze misfires, celebrate successes and discuss ways to increase the number of energy-efficient homes in America. As valuable as it would be for utility program managers to participate in this exchange, that is not the only way to benefit from it. BBRN publishes “greatest hits” fact sheets quarterly, summarizing the top takeaways from these calls. You can download this treasure trove of customer service and other tips from the BBRN website, or find Volumes 1 through 6 in the Energy Services fact sheet library.

We want to make it as easy as possible for our customers to access these resources because they have so much to offer utilities. For example, here are just two takeaways from Vol. 6 of Lessons Learned:

- Leverage HVAC upgrades to spark conversations about whole-home performance. Customers, who have put their trust in a contractor to complete their HVAC repair, might welcome the contractor’s expert efficiency advice.
- Residential energy-efficiency customers have different backgrounds, needs, and motivations, which programs can use to tailor messages and services to different groups. EnergySavvy uses cloud software to pair utility data with marketing data and create individual utility customer profiles to target energy efficiency messages.

The fact sheets includes links to full summaries of each call, complete with lists of participants and their locations, an

agenda and presentations. Summaries to all past Peer Exchange Calls are archived at BBRN, in case you don’t want to wait for the quarterly fact sheets.

Of course, you can also find out what the leading practitioners of energy-efficient home improvements are talking about by participating in the Peer Exchange Calls. They are generally held on Thursdays from 11 a.m. to 12:30 p.m. Mountain Time and are free with registration. The Return of Residential PACE – the Sequel (201) is the topic of the July 21 call. ■



**The Better Business Residential Network Peer Exchange Calls often focus on tips and strategies for choosing and working with contractors. (Photo by Better Building Residential Network)**

# APPA publication helps utilities report sustainability activities

It is hard enough to agree on a definition of sustainability, let alone measure and account for it. Yet the general public, along with local, state and federal governments are increasingly calling upon electric utilities to demonstrate sustainable operation.

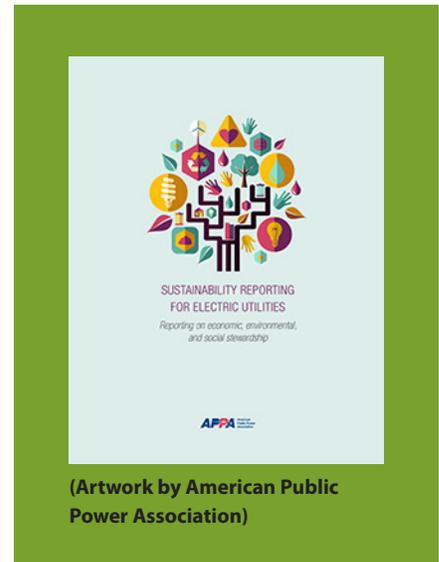
To help power providers meet these demands, the American Public Power Association is offering a new publication, *Sustainability Reporting for Electric Utilities*.

Use this resource to learn how to account for and report your utility's positive economic, environmental and social impacts. You will discover how to build, maintain and use reports to impact your strategy.

*Sustainability Reporting for Electric Utilities* describes current trends in sustainability accounting and offers guidance on reporting to stakeholders and employees on your sustainable activities. This publication provides you with up-to-date practices on sustain-

ability accounting and reporting by:

- Explaining what sustainability reporting is
- Introducing you to standards-setting entities
- Describing processes for gathering sustainability statistics
- Showing how to build and maintain sustainability reports
- Demonstrating how sustainability reporting can impact utility strategy



Written by Megan Decker and Russ Hissom of Baker Tilly Virchow Krause, *Sustainability Reporting for Electric Utilities* will help to establish your utility as a good steward of the resources it uses to deliver reliable and affordable energy to customers. ■





DOE wants your ideas about how to structure and evaluate its Community Solar Challenge. Public comment is due Aug. 2. (Artwork by DOE SunShot Initiative)

## Federal, state, private agencies partner to increase solar access nationwide

**T**he Obama administration unveiled a new cross-government partnership this week to increase access to solar power, promote energy efficiency and build a more inclusive workforce. In collaboration with state agencies, the Clean Energy Savings for All Americans Initiative aims to bring 1 gigawatt (GW) of solar to low- and moderate-income families by 2020.

The new program builds on the successes of the Department of Energy (DOE) SunShot Initiative, introduced in 2011. SunShot works with private companies, universities, non-profit organizations, state and local governments and national laboratories to make solar energy fully cost-competitive with conventional energy sources by 2020.

DOE is joining with the departments of Housing and Urban Development (HUD), Agriculture, Health and Human Services, Veteran's

Affairs and the Environmental Protection Agency to make choosing solar an easier and more affordable option. The key components of the initiative will unlock financing mechanisms, bolster technical assistance for states and communities, drive innovation and scale up workforce training. These measures will enable more low- and moderate-income Americans to take advantage of the jobs that come with a transition to clean energy.

### Accompanying executive actions

In addition to the launching Clean Energy Savings for All Americans, the administration is implementing several executive actions to support American communities in deploying renewable energy.

Programs to scale up Property Assessed Clean Energy, or PACE, financing will allow homeowners to make energy improvements immediately and pay back the cost over time through their property taxes. Increased technical assistance will make it easier for low-income households to access hundreds of millions of dollars in funding for renewable energy investments. DOE and HUD will work with national laboratories to track the progress of deployment of solar energy systems on targeted households.

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DOE is developing a Community Solar Challenge that will award teams in dozens of communities up to \$100,000 to develop innovative models to increase solar deployment and cut energy bills, in particular in low-income communities. Teams will build local capacity around the legal, technical, financial and administrative aspects of community solar programs and projects. The DOE SunShot Initiative has released a request for information to gather feedback and information on the structure of challenge. The deadline is Aug. 2.

The initiative also includes the sharing of best practices on how to finance and how to overcome barriers to creating healthier communities. Over the next months, summits on clean energy savings, community solar project financing and funding resources and training for vulnerable communities will convene across the country. You can keep up with these events and funding opportunities by subscribing to SunShot email updates newsletter.

### Developing solar workforce

Solar jobs are growing 12 times faster than the rest of the economy, and the Obama administration hopes to train an additional 25,000 workers by 2020. To reach that goal, DOE has teamed up with the Solar Foundation to create the Solar Training Network. The network is designed to connect training providers, employers and job seekers to supply the skilled solar workforce the industry needs to continue to grow.



DOE is also implementing a community and workforce investment program to both create new employment opportunities and train low-income West Baltimore residents for jobs in the solar industry. The initiative will explore options to expand access to solar for renters and local individuals in the Baltimore area.

### States, private sector get on board

More than 120 private, state, local and philanthropic sectors in 36 states are pledging to support Clean Energy Savings for All Americans. These new commitments represent \$287 million in investment, and nearly 280 megawatts (MW) of community solar and low- and moderate-income solar deployment. Combined with previous commitments, this brings the total amount of

commitments secured to more than \$800 million in investment and more than 491 MW of solar power.

Rural electric cooperatives are among the partners committing to install community solar projects by the end of 2017. WAPA customer Sacramento Municipal Utility District is among the more than 90 member-owned, not-for-profit power providers in 25 states that have brought online community solar projects in the last year.

Utilities hoping to bring the benefits of renewable energy into their communities can join the National Community Solar Partnership. You can learn more about starting a utility community solar program from Community Solar FAQ and find information to encourage solar homes in your territory with *Solar Energy Resources for Homebuilders*. ■

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