

# National Community Solar Partnership



## Solar Holler

# Crowdfunding Model Brings Solar to Community Organizations in Appalachia

West Virginia is ranked 37 among the 50 states for installed solar electricity systems, according to the National Renewable Energy Lab.<sup>1</sup> The state's voluntary renewable portfolio standard was repealed, there are no state incentives for solar and the legislature has considered overturning net-metering.

In the midst of this challenging environment, installing solar can be even harder for nonprofit organizations because they cannot take advantage of tax incentives. Power Purchase Agreements (PPAs) are not allowed in West Virginia and common sources of funding, such as the United States Department of Agriculture (USDA) are targeted to for-profit companies.

A creative **crowdfunding model** leveraged revenue from energy efficiency to put 24kW of solar on nonprofit buildings in Appalachia.

To make solar possible for nonprofit community organizations, social enterprise Solar Holler has developed an innovative approach that requires **no upfront cost** and **creates immediate savings**. To date, four projects have been installed: Shepherdstown Presbyterian Church, Bolivar-Harpers Ferry Public Library, Courtyard Apartments (affordable housing) and the Cabell-Huntington Coalition for the Homeless.

Funding for these solar projects came from local supporters that wanted to help the nonprofit organizations. Supporters installed remote controllers on their hot water tanks through a program run by [Mosaic Power](#) in the PJM Power Pool.<sup>2</sup> Mosaic Power uses remote controls to adjust the times the hot water heater turns on and off – having no impact on the homeowner, but having significant impacts on energy efficiency collectively. Each participant earns \$100 each year, which they donate to enable the solar installation. Using these funds, in addition to the value of renewable energy credits (RECs), Solar Holler was able to donate the solar system to the nonprofit organization. Once a system has been paid for, the water heater income will continue to be used to support other solar projects in West Virginia. To date, Solar Holler has coordinated the installation of over 200 water heater controllers.



For more information contact:  
[www.solarholler.com](http://www.solarholler.com)

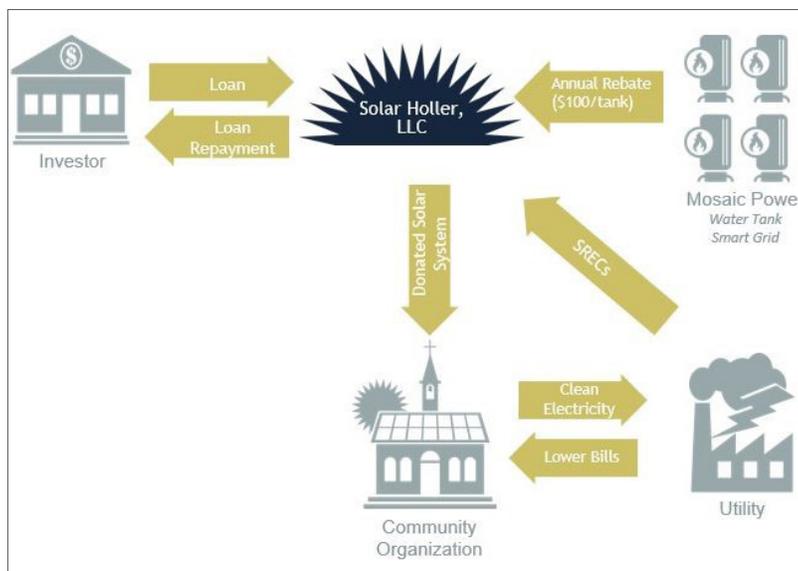
<sup>1</sup> <https://openpv.nrel.gov/rankings>

<sup>2</sup> PJM territory includes the following states in whole or in part: all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

# Lessons Learned

## Educational and Networking Opportunities

Customer acquisition is among the greatest challenge for both solar energy and energy efficiency service providers. Community organizations, including churches, schools and community centers, provide a way to reach potential customers in an efficient way. In addition, the Solar Holler approach provided a tangible way for community members to support a nonprofit organization they cared about. Gaining community member involvement helped to create a network of support for solar. More than 100 families were involved in the program to put solar on a Presbyterian Church and when the legislature began to reconsider the state's net metering legislation, these households quickly became advocates. Legislators received more than 600 letters, leading to a unanimous vote in support of net metering.



## Messaging that Resonates with your Audience

West Virginia has a history rooted in energy. The state has long been an important source of coal and natural gas, and continues to produce 15% of the nation's fossil fuel energy. Building on this rich history, Solar Holler is committed to demonstrating that solar offers a way for West Virginia to continue its tradition as an energy leader – even the company logo and tagline “Mine the Sun” reflects the history of mining in Appalachia.

## Link Energy Efficiency and Solar

To some extent, the water heater program is only made possible because West Virginia is in the PJM Power Pool. However, in any market, there are creative ways to link cost savings from energy efficiency and demand response to help cover the cost of solar energy installation. In some cases, Solar Holler found that solar isn't the best option, but they still work with the organization to implement efficiency measures. Every dollar saved means more money is available to help the nonprofit pursue its core mission.

## Manage the Size of the Crowd

The water heater model has been successful, but managing the installation of water heaters in homes across a large, low-density rural area proved to be a challenge. To simplify things, Solar Holler stopped installing single-family residential systems. They found that multi-family housing and other buildings that include many water heaters offer a more efficient approach.

## Help Grow the Solar Market

After completing the first couple of projects, Solar Holler was overwhelmed with interest. With fewer than two dozen people in the solar industry operating in the state, demand quickly outstripped supply. In this challenge, Solar Holler found an opportunity. Last year, Solar Holler partnered with Coalfield Development Corporation to launch the first solar job training program in West Virginia. Participants will have the opportunity to apprentice with the Solar Holler installation crews for two years while earning an associate degree and NABCEP solar certification. Thus far, 20 people have completed the program, increasing the number of solar installers in West Virginia by approximately 40%.