

Nonprofit or mission-based organizations with experience developing community solar projects are partnering with faith- or community-based nonprofits to implement community solar photovoltaic (PV) projects that include local capacity building and improved access for disadvantaged low-income communities. The faith- or community-based organization serves as the project's anchor subscriber, and partners with the community to recruit participants. The organization hosts a community solar PV array on its property and helps drive economic development through job creation and training.

Benefits

Community solar program implementers can partner with local institutions that hold the trust of the community for a holistic approach to improving access to renewables while furthering local economic development. A large and well-established anchor institution also provides assurance to financiers on the project's stability. Job training and apprenticeship programs can be incorporated to create new employment opportunities for community members. This also builds further understanding and excitement around community solar projects. Lastly, an anchor institution is likely to have the physical space required for a community solar array (and energy storage if applicable). Linkages with energy efficiency, bill assistance and education programs provide a pre-qualified pool of participants and yield greater impacts on energy affordability.

Key Elements

A faith- or community-based organization serves as a hub for a community solar program and offers its space for solar PV arrays, energy storage, and green job training. This institution may work with an experienced community solar implementer to effectively deliver solar energy, further economic opportunity and build local capacity within a community.

Example

The District of Columbia (DC) Department of Energy and Environment launched Solar for All to extend the benefits of solar to 100,000 moderate and low-income households through both distributed generation and community solar projects developed by partners. DC partnered with Groundswell, a nonprofit organization that focuses on building community solar projects that deliver utility bill savings to those who need it most, creating workforce development opportunities, and partnering with local minority-owned businesses. Groundswell partnered with the 100-year-old Dupont Park Seventh Day Adventist Church located in DC's historic Ward 7 neighborhood to bring renewable energy to neighborhoods that are traditionally overlooked as host locations. Dupont Park will host to two community solar projects totaling 168 kilowatts (kW) of capacity that will deliver 100% of the electricity it generates to 47 low-income families in the community at no cost as part of the District of Columbia's Solar for All program. The utility bill savings for participating families is estimated to cut their bills in half and provide a total of \$23,500 per year across all participants and an estimated \$470,000 over the 20-year life of the project. A local, 4th-generation minority-owned business, will lead the solar PV project construction at Dupont Park. By providing and assisting with on-the-job training, certification and access to additional education, the installation company helps build the technical skill set employees need to be successful in the ever-growing renewable energy industry.

The Housing Authority of the City and County of Denver (DHA) is another example of the community solar hub strategy. In 2017, DHA partnered with Xcel Energy (the utility) along with nonprofit and private developers and technical service providers and financiers to deploy 2 Megawatts (MW) of community solar focused on low-income housing properties. Since about 90% of DHA residents do not pay their own utility bills, DHA signed power purchase agreements for individual deployments for most of the community solar

capacity. Savings of around 15-20% on monthly electric bills are reinvested in enhanced services and improved facilities. Remaining capacity is subscribed at no cost to residents who do pay their electric bills, resulting in monthly savings of \$15-\$30. A more detailed profile on this project can be found in the issue brief noted in the Links section below.

Applicability

The community solar program strategy will have the greatest impact in a region with an existing and willing community-based or faith-based organization, multi-family housing complex, or other business that has a strong community presence and a facility to serve as an anchor site. The entity should also be willing to serve as a partner in the recruitment of subscribers for the community solar program.

Implementation Considerations

In the case of DC, partnering with a church as an anchor site was the right choice for Groundswell and DC's ward 7 neighborhood, but other communities may also find success with a school, healthcare center, or housing authority, depending on local characteristics. In Colorado, state regulation requires the utilities to deploy low-income community solar projects, which helped the DHA secure a 20-year solar PV renewable energy credit agreement with Xcel Energy. Additionally, most of the DHA properties subscribed to the community solar project are low-income housing tax credit financed properties, whose utility allowance structures may allow building owners and tenants to keep much of the solar PV generation credits, whereas some other federally funded housing may not allow building owners and tenants to keep such savings due to regulations. Without these types of incentives for building owners, or the ability to provide credits to properties that can realize savings, a housing authority may not make such an effective community solar anchor because without savings, there is substantial reason for a building owner (housing authority or partners in the community) to participate.

Links

- ▶ [Connecting Solar Power to Economic Development \(2018\), Groundswell](#)
- ▶ [Issue Brief: Reducing Energy Burden for Low-income Residents in Multifamily Housing with Solar Energy \(2019\), Better Buildings Initiative](#)