7 Encourage community solar projects

COMMUNITY SOLAR EXPANDS ACCESS

Community solar programs can allow apartment occupants and others who cannot install their own solar systems to purchase and benefit from clean solar energy. A 2015 Department of Energy and National Renewable Energy Lab report estimates that nearly half of all consumers and businesses are unable to install their own solar photovoltaic systems for a number of reasons. They may not own their building or have access to sufficient, sunny roof space. Community solar expands access by allowing customers to rent or own a set of panels in a shared solar project and receive a credit on their utility bill based on their share of the generated power. Community solar offers a number of benefits to consumers:

- Community solar programs expand access to solar energy to renters and homeowners whose properties are not suitable for on-site solar, helping your community adopt more renewable energy. According to the most recent Solar Energy Industry Association report, the community solar market is expected to add as much as 3.5 gigawatts of clean energy in the next five years. That would be enough solar energy to power approximately 700,000 additional american homes.
- Community solar can be more affordable than independent projects and often eliminates up-front investment barriers, providing more financial flexibility for participants.
- Community solar can and should deliver benefits back to

consumers on their electric bills, using virtual net metering or bill crediting structures that fairly reimburse consumers for their share of the solar energy that a project supplies to the grid.
- Neighborhoods and other groups can go solar together through community solar programs, fostering a sense of community and a shared vision for a clean and renewable energy future.
- Shared solar projects allow a city to make the most use of solar-friendly spaces, such as publicly owned land outside the city limits, closed landfills, former industrial sites, vacant lots, and other properties with limited uses.
- Shared projects provide an opportunity for cities to partner with both local solar installers and their utility company to drive participation.

SHARED SOLAR MODELS AND HOW THEY WORK

There are two common models for shared solar projects. In the utility-led model, a local utility sponsors a project that customers can subscribe to for a monthly fee or tariff. In the third-party community solar model, which generally offers greater benefits for consumers, a third party developer or nonprofit organization sponsors a shared solar project. Community members, businesses and other institutions can then lease or own a number of solar panels in the project in return for energy bill credits for the energy those panels produce.

BEST PRACTICES FOR SHARED SOLAR PROJECTS

Shared solar projects should first and foremost benefit consumers. Following a few best practices will help ensure that they do:

- Make participation in and benefits of new shared solar projects available to all community members. Broad public outreach and marketing efforts can help, as can reserving a portion of total project capacity for residential and small commercial customers.
- Foster an open and competitive market for community solar developers to build and operate community shared projects and interconnect those systems to the serving utility's grid, encouraging customer choice.
- Establish bill credit mechanisms that provide subscribers with fair and stable economic benefits, compensating for the full value of the clean, local energy to the grid, environment and society.
- Ensure long-term stability and quality of the program to protect benefits to customers and the investments of developers.
- Work with utilities and regulators to ensure transparent siting and interconnection rules, as well as to make both processes smooth and efficient.

Community solar farm in Maine

CASE STUDIES

According to the Solar Energy Industries Association, there were 40 states in the U.S. with at least one shared solar project online as of 2018. In addition to the District of Columbia, 16 states have policies that enable third-party community solar projects. So, you can choose from hundreds of shared solar projects as models for your own initiative. Below are just two examples of successful and beneficial community solar programs:

- **Avista Utilities** partnered with the third-party community solar developer Clean Energy Collective to offer participation in a shared solar farm with over 1500 panels in Spokane Valley to its Washington customers. Equipment for the project was made locally, participation was open to all types of customers, and the project's over 650 participants receive bill credits for up to 100% of their average monthly energy consumption.

- Serving upwards of 12,000 qualified low-income customers in the Imperial and Coachella Valleys in California, the 30 MW **Citizen's Energy community solar project** is one of the largest in the country. The array will operate under a 23 year purchase power agreement, and savings will be passed on to customers in the form of additional monthly discounts on their electric bills.

RESOURCES

- The National Renewable Energy Lab provides *A Guide to Community Shared Solar: Utility, Private, and Nonprofit Project Development*, which serves as a resource for utility managers, government officials and staff and community organizers who want to develop community shared solar projects.
- The Department of Energy Office of Energy Efficiency and Renewable Energy offers *Policy Guidelines and Model Provisions* for shared solar energy programs.
- Department of Energy runs the *National Community Solar Partnership*, which provides a number of resources and working groups to expand access to and development of solar energy in low income communities.
- The Coalition for Community Solar Access provides a *Community Solar Policy Decision Matrix* for designing community solar programs and numerous *additional resources*.
- *EnergySage* can help cities evaluate opportunities for and benefits of community solar in their area.