

National Community Solar Partnership: Multifamily Affordable Housing Collaborative

National Community Solar Partnership Overview

The National Community Solar Partnership (NCSP) convenes stakeholders working to expand access to affordable community solar to every American household by 2025. Led by the U.S. Department of Energy (DOE), partners leverage peer networks and technical assistance resources to establish goals and address persistent barriers to expanding community solar access to underserved communities.

What is a Collaborative?

NCSP collaboratives are made up of stakeholders working together to expand access to community-based solar. Partners in collaboratives work together to identify and address common barriers over roughly a 2-year period (Summer 2020–Summer 2022 for the Multifamily Affordable Housing Collaborative); DOE supports these efforts by providing technical assistance and convening stakeholders. Collaborative members demonstrate practical, effective, and scalable community solar models, and will develop goals and evaluate progress through defined metrics.



Multifamily Affordable Housing (MFAH) Collaborative Overview

In America, low-income households (earning 80% or less of the area median income) reside in approximately 60% of multifamily¹ housing units.² These units vary greatly in terms of ownership and financing structures (including different types of federally subsidized housing, as well as naturally occurring, non-subsidized) and building type (mastered or individually metered). This diversity in MFAH can impact the costs and energy burden (energy cost as a proportion of income) that residents face and ultimately, the benefits they receive from on-site and off-site solar installations.³

Low-Income Households

Low-income households pay a disproportionately higher share of income toward energy related expenses. To help more low-income households access affordable solar energy, the NCSP will work with MFAH owners, their partners and communities to identify and implement successful community solar models.

There are a variety of barriers to deploying solar on multifamily affordable housing that make it challenging to carry out projects and pass benefits to low-income residents. The collaborative will address a variety of barriers that MFAH face when deploying community solar for their customers including, but not limited to:

- **Financing:** Limited operating reserves of MFAH buildings make it difficult to finance solar projects outside of already scheduled operation and maintenance investments.
- **Split Incentives:** Tenants may be responsible for paying electricity and other utility bills directly, and therefore MFAH entities or building owners may lack the incentive to pursue capital-intensive upgrades.
- **Tenant Benefits:** MFAH entities may experience challenges with communicating with and delivering direct and indirect benefits to MFAH tenants from solar initiatives.
- **Capacity of MFAH Building Owners:** many affordable housing providers may not have internal expertise on solar project development or lack the time and resources to devote to exploring and implementing solar projects.

NCSP For each of the projects undertaken through the MFAH Collaborative, there is a goal of demonstrating replicable models for solar energy deployment that reduce monthly electric utility bills by at least 10% or provide other direct benefits for low-income residents of multifamily housing.

Through DOE partnership and peer learning, the NCSP's MFAH Collaborative will concentrate on the following objectives:

- **Ownership and Financing:** Demonstrate promising strategies that overcome barriers to community solar in MFAH for a variety of ownership and financing structures, and building types, including either master-metered or multi-metered buildings.
- **Various MFAH Types:** Provide tools and document replicable models (program action plans, project implementation models, etc.) to assist housing providers with incorporating solar into a variety of MFAH types.
- **Tenant Benefits:** Develop best practices for effective resident engagement in program development and for providing benefits directly and indirectly to residents from MFAH solar projects.
- **Technology Integration:** Feature successful approaches for integrating complementary technologies (e.g. energy efficiency and storage) with solar to enhance project value and resident benefits. ■



A rooftop solar PV array on a multifamily apartment building in Brooklyn, New York. Photo credit Bright Power, Inc.



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Solar Energy Technologies Office

The U.S. Department of Energy Solar Energy Technologies Office supports early-stage research and development to improve the affordability, reliability, and performance of solar technologies on the grid. The office invests in innovative research efforts that securely integrate more solar energy into the grid, enhance the use and storage of solar energy, and lower solar electricity costs.

Interested in learning more about the Partnership?

Email community.solar@ee.doe.gov or visit energy.gov/community-solar

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SOLAR ENERGY TECHNOLOGIES OFFICE

For more information, visit: <https://www.energy.gov/eere/solar/national-community-solar-partnership>

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1 Multifamily housing is defined here as two or more housing units in one building.

2 Low-income Energy Affordability Data Tool: <https://www.energy.gov/eere/slsc/maps/lead-tool>

3 https://betterbuildingsolutioncenter.energy.gov/sites/default/files/IB_Reducing%20Energy%20Burden%20in%20MF%20Housing%20with%20Solar%20Energy_FINAL_0.pdf