

Getting Started with Multifamily Affordable Housing Solar Programs

A guide to plan and implement equitable multifamily affordable housing solar development projects.



Center for
Sustainable
Energy®

As the market for solar power grows, so should access for diverse communities. Governments need to clearly define and communicate the importance of multifamily solar projects to help drive stakeholder agreement and align policy and project objectives.

This guide provides a framework to support the planning and development of solar energy projects that create new pathways to economic prosperity and healthier communities for low-income residents.

MAKING THE CASE FOR MULTIFAMILY AFFORDABLE HOUSING SOLAR PROJECTS



Direct Savings to Low-income Tenants

Solar on multifamily affordable housing (MFAH) offers significant savings by offsetting utility costs through electricity bill credits. Once the initial investment is recovered, the property will have essentially free energy for decades.



Environmental & Economic Benefits

Solar energy is clean, renewable and releases zero greenhouse gas emissions. It offers a hedge against future higher energy costs, reduces dependence on fossil fuels for energy production and increases property value.



Developing a Clean Energy Workforce

Investing in solar projects is also an investment in your community's economy. Supporting local clean energy companies stimulates job growth while also opening opportunities for low-income communities through workforce development and training. Nationwide, the solar industry employs over a quarter-million full-time workers.¹

¹IREC National Solar Jobs Census 2022 <https://irecusa.org/programs/solar-jobs-census/#:~:text=The%20U.S.%20solar%20industry%20employs,annual%20National%20Solar%20Jobs%20Census.>

WORKING TOWARD CARBON-FREE ENERGY FOR ALL

Electricity generation accounts for approximately one-quarter of U.S. greenhouse gas emissions.² Higher pollution rates in disadvantaged communities mean MFAH residents may be disproportionately exposed to lower quality air. These communities often lack access to funding and resources needed to transition to cleaner energy sources. Over the past 20 years, solar power has grown substantially in the United States, with most solar installation projects benefitting large corporations and businesses and higher-income homeowners. This underscores the necessity for developing programs that address these inequities and provide financial incentives

for installing solar photovoltaic (PV) systems in communities where they can make significant impacts.

A just transition to a clean energy economy cannot be achieved without participation from all stakeholders. Local governments will struggle to meet climate, energy and economic goals if low- and moderate-income households, which typically face a higher energy burden, are left behind in the burgeoning solar market. What is needed are programs that create greater access for MFAH residents to participate in the solar market and to deliver direct, measurable benefits to low-income tenants.

Barriers to Solar for Low-income Communities

Rental properties **prohibit MFAH customers from installing solar panels** on their roof.

Low or limited credit ratings and access to capital are **common barriers for low-income property owners** to finance on-site solar or participation in community solar programs.

For multifamily properties the **property owner is the decision-maker** for the on-site installation of solar.

²U.S. Environmental Protection Agency (EPA) <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

PRINCIPLES OF EQUITY-ORIENTED CLEAN ENERGY

Effective and equitable MFAH solar programs facilitate the transition from fossil fuel energy dependence while delivering direct economic benefits to communities that traditionally face barriers to the adoption of sustainable energy solutions. Adopting a community-based approach to program planning ensures long-term, direct economic benefits for low-income tenants, helps catalyze the market for solar on multifamily housing and creates jobs.

Additionally, policymakers need to design programs that ensure low-income households are not only included but are valued stakeholders in new community solar projects.

Define Program Goals

1

Ensure meaningful economic benefits that reduce customers' energy burden

3

Clearly define program eligibility criteria (e.g., low-income qualified, deed restricted properties)

2

Calculate the total megawatt (MW) capacity needed to deliver economic benefits to tenants

4

Promote transparency and accountability so that outcomes are quantified and made public

MFAH solar program design must be transparent and accountable to the communities they serve to ensure equitable access to clean, affordable solar energy for households that have been traditionally left out of solar.

PLANNING AND DESIGNING MFAH SOLAR PROGRAMS

Develop and implement a structured approach by first establishing project goals. This will bring clarity and focus to the process of developing solar projects for all stakeholders. Defining program success with specific objectives and milestones provides regulators and administrators with direction and affirms your intent to the community. Prioritize qualitative and quantitative metrics that serve to identify efficiencies in delivery and energy needs being met.

MFAH programs should offer a host of no-cost services to maximize participation and community benefit. Services should include comprehensive technical assistance for housing owners, tenant education resources and job training.

Consider establishing a community advisory council that includes community-based organizations (CBOs) to oversee program planning and development to further encourage participation, including robust local hiring requirements for contractors.

Determine whether the program should be administered by a single statewide program administrator. Select a partner who has experience with project and resource planning, navigating complex policy analysis and defining actionable steps toward implementing renewable energy infrastructure. This may require a competitive request for proposal process as well as implementing new procedures.





The tenets and economic benefits of community-based solar

- + Decrease barriers to low-to-moderate income participation
- + Provide efficient service to customers from diverse and underserved communities
- + Create new pathways to empower all customers toward economic prosperity and healthier communities
- + Remove arbitrary requirements such as credit worthiness and verification
- + Ensure affordable housing tenants do not experience rent increases to offset the cost of an onsite solar PV system
- + Ensure most of the solar energy produced (kilowatt-hours) is allocated to tenants, with common area loads receiving some benefit
- + Provide no-cost technical and educational services to participating property owners, contractors and tenants
- + Establish job training opportunities and internships for tenants and community members

Keys to program success

- + Create virtual net metering tariffs and utility billing systems that allow a single PV installation to serve multiple tenant units that maintain their own meter
- + Supply comprehensive technical assistance for projects
- + Set up a competitive bidding process
- + Promote market development while ensuring broad consumer protections are in place
- + Establish robust job training and local hiring components, furthering the benefits to communities
- + Collect data that ensures comprehensive program evaluations and transparent operations
- + Provide tenant education and support throughout the solar installation and explain changes to their billing.
- + Select a single statewide administrator to ensure consistent program implementation



UNLOCKING SOLAR BENEFITS FOR ALL CALIFORNIANS



Objective

The Solar on Multifamily Affordable Housing (SOMAH) Program provides financial incentives for installing photovoltaic (PV) energy systems on multifamily affordable housing in California. SOMAH builds on California's successful Multifamily Affordable Solar Housing (MASH) program, which helped bring over 30 megawatts (MW) of solar PV online from 2009–18. While MASH was successful, refinements were needed to ensure low-income tenants, rather than building owners, were the primary program beneficiaries.



Solution

Administering a massive statewide program with multiple audiences and an ambitious market transformation goal through one program administrator presents numerous challenges. To effectively meet them, the Center for Sustainable Energy (CSE) formed a nonprofit partnership that brought four organizations' key strengths together. The partnership leverages individual nonprofits with specializations in reaching multifamily affordable property owners, solar contractors and affordable housing tenants and blends it with program administration expertise to launch an efficient, coordinated program starting on day one.

Over
35,000
tenant units
served*

70
megawatts of
solar energy
installed or
reserved*

\$33
million paid
to completed
projects*

* as of September 2023

WHY PARTNER WITH CSE?



Integrated Solutions

Our goal is to transform and advance the market for clean and sustainable energy, while creating greater consumer choice and reducing greenhouse gas emissions. We accelerate the adoption of clean energy and distributed energy resources through energy program design and implementation, workforce training, technical consulting and policy innovation.



Data Supported Strategy

CSE provides clients with objective information, research, data analysis, measurement and evaluation on energy issues and technologies. Our research and analysis team conducts all phases of qualitative and quantitative research in the design, delivery, analysis and interpretation of program, product and service development, including market assessment, market impact evaluation, data process automation, dashboard development and rate/tariff analysis.



Experience

We have more than 25 years' experience assisting governments, regulators, utilities, businesses, consumers and, most recently, community choice aggregators with every aspect of program design and implementation. As a mission driven nonprofit, with no members or donors, we serve as an objective implementation partner. Our experts work with clients to understand their objectives and advise on policies and strategies that address complex issues in clean energy. Our portfolio of projects reflects the expertise of enterprise-level consulting firms while retaining a mission-driven culture and boutique-level service for our clients.



One mission — DECARBONIZE®

Center for Sustainable Energy® (CSE) is a national nonprofit that accelerates adoption of clean transportation and distributed energy through effective and equitable program design and administration. Governments, utilities and the private sector trust CSE for its data-driven and software-enabled approach, deep domain expertise and customer-focused team. CSE's fee-for-service business model frees it from the influence of shareholders, members and donors, and ensures its independence.

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