

# Multifamily Affordable Housing Solar and Solar + Storage

Solar for All Greenhouse Gas Reduction Fund-Compliant Solar Program Design for States – August 2023

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#### ABOUT THIS PROJECT

With the passage of the Inflation Reduction Act (IRA), federal funding is available for states to launch programs that provide solar and solar+storage to disadvantaged communities and transform the low- and moderate-income (LMI) solar market. The Clean Energy States Alliance (CESA) has produced this document and other resources that can be used by states and other relevant stakeholders to design and launch programs utilizing the U.S. Environmental Protection Agency (EPA)'s <u>Greenhouse Gas Reduction Fund</u> (GGRF) <u>Solar for All competition</u> as well as relevant IRA tax credits. CESA's documentation includes three types of LMI solar and/or solar+storage programs:

Single-Family Homes. CESA produced documentation relevant to single-family
homes programs, such as <u>a guidance note</u> on LMI solar leases or power purchase
agreements programs for states and <u>a standard request for proposals</u> for public
agencies to use in selecting private sector partners to implement such state
programs. Additional documentation relevant to consumer protection is
forthcoming and will be made available here:
<a href="https://www.cesa.org/projects/scaling-up-solar-for-under-">https://www.cesa.org/projects/scaling-up-solar-for-under-</a>

resourcedcommunities/resources/

- **Community Solar.** CESA produced <u>documentation</u> presenting three options for community solar designs that can be used by states within their Solar for All applications and related tax credit information.
- **Multifamily Affordable Housing Solar and Solar+Storage.** This document offers a simple multifamily affordable housing solar and solar+storage program design for states.

In addition to producing these resources, CESA offers technical assistance and organizes state convenings to accelerate learning about LMI solar across the country. We welcome all states to participate.

Please refer to our <u>website</u> for the most up-to-date information on these topics. Government officials and green bank staff can sign up for CESA's Solar for All updates by completing this form: <u>https://forms.office.com/r/FxusQA1sk5</u>

For questions about this project or this document, reach out to Vero Bourg-Meyer, CESA Project Director for Solar and Offshore Wind at <u>Vero@cleanegroup.org</u>.

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the Connecticut Green Bank for providing guidance and lessons learned from his work in Connecticut. We also thank our colleagues at Clean Energy Group, Seth Mullendore and Marriele Mango, for their time and input.

#### HOW TO USE THIS GUIDANCE

This guide is available for use by all stakeholders interested in learning about a simple design for a multifamily affordable housing solar+storage program that can be proposed to EPA as part of a GGRF Solar for All application.

The guide was designed with states as the primary audience, but it will likely be useful for other eligible applicants under GGRF as well.

This document can be used in states that do not already have multifamily affordable housing solar or solar+storage policies and programs in place and in states that wish to expand their current program offerings to reach LMI customers or provide additional benefits to disadvantaged communities.

States will have to make program design choices incorporating or removing elements based on policy and regulatory considerations in their state.

#### ABOUT THIS DOCUMENT AND IRA PROGRAMS AND REGULATIONS

This note is part of several resources produced by CESA in the summer of 2023 to assist states and other relevant stakeholders in designing and launching LMI solar and solar+storage programs. This document presents information relevant to multifamily affordable housing solar and solar+storage design options.

To maximize the funding opportunities afforded to states and other relevant stakeholders through the IRA, this document aims to provide options that will comply with the following:

- (1) The <u>Notice Of Funding Opportunity</u> (**NOFO**) issued by the U.S. Environmental Protection Agency (**EPA**) on June 28, 2023, pertaining to the Solar for All competition;
- (2) The <u>Final Regulations</u> published by the Internal Revenue Service (IRS) regarding the relevant to the tax credit bonus program under <u>26 U.S.C § 48(e)</u> (the LMI ITC Adder) published on August 15, 2023 in the Federal Register and that will become effective on October 16, 2023 (the Final Regulations); and
- (3) The preliminary rules relevant to <u>26 U.S.C § 48(a)(14)</u> (the **Energy Community ITC** Adder).

As changes are made, program designs adapted to local circumstances, and clarifications offered by federal agencies, we **strongly encourage** users of this template to thoroughly familiarize themselves with the NOFO, the Final Regulations, and relevant guidance and



to not rely solely on the information provided in this document. We have made our best efforts to be thorough while delivering resources to states quickly.

#### DISCLAIMER

This document was prepared by CESA. The document was neither created, sponsored, nor sanctioned by EPA. It does not constitute legal advice. Neither CESA, nor any of CESA's employees or consultants, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement or recommendation.



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# Section 1. Introduction

With the passage of the Inflation Reduction Act (IRA), federal funding is now available for states to launch programs that provide solar and solar+storage to disadvantaged communities and transform the low- and moderate-income (LMI) solar market. The Clean Energy States Alliance (CESA) has produced this document for states and other relevant stakeholders to design and launch programs utilizing funds from the U.S. Environmental Protection Agency (EPA)'s Greenhouse Gas Reduction Fund (GGRF) Solar for All competition as well as relevant tax credits, as enhanced in the IRA.

This document outlines program recommendations that states can use when developing programs for solar or solar+storage for multifamily affordable housing (**MFAH**). While the Solar for All program is open to many different types of applicants, the proposed design options are directed primarily towards states and their agencies.

This document is a product of discussions with state agency staff and research on policy options for MFAH. It is meant to be a starting point that can be adapted and modified based on a state's regulatory environment and the capacity of the applicant to replicate the recommendations. Some program design options may be unfeasible in a particular state, thus those elements must be excluded or modified.

Individuals and households living in MFAH are often left out of the solar market due to the constraints around financing, lack of community engagement, and regulatory hurdles. The policy recommendations below seek to ensure that funding for solar and solar+storage will meaningfully benefit LMI tenants of MFAH properties and support states in prioritizing tenants for clean energy expansion and benefits.

#### 1.1 About the Solar for All Competition

EPA issued the <u>Notice of Funding Opportunity (NOFO)</u> for the Solar for All Competition of the Greenhouse Gas Reduction Fund on June 28, 2023. You can find a summary of key features below. Please refer to the NOFO for additional details.

#### 1.1.1 Goals, Application Eligibility, and Deadline

The overall goal of the Competition is to expand the number of low-income and disadvantaged communities that are primed for investment in residential and community solar.<sup>1</sup> The Competition will provide up to 60 awards in total, ranging from \$25 million to \$400 million:

- (1) Up to 56 awards, one to serve each of the 56 states and eligible territories;
- (2) Up to 5 awards to serve American Indian and Alaska Native Communities; and
- (3) Up to 10 awards to serve similar communities across multiple states.

<sup>&</sup>lt;sup>1</sup> <u>GGRF Implementation Framework</u>, pg. 3



Eligible applicants are states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, Indian Tribes as defined in Section 302(r) of the Clean Air Act, municipalities as defined in Section 302(f) of the Clean Air Act, and eligible nonprofit recipients as defined in Section 134(c)(1) of the Clean Air Act.<sup>2</sup>

EPA will grant awards through a competitive process, with applications due on September 26, 2023.

#### 1.1.2 Use of GGRF Funds and Deployment Timeline

All Solar for All GGRF funds must flow to "low-income and disadvantaged communities," which include the following four categories:<sup>3</sup>

- (a) Communities identified as disadvantaged by the <u>Climate and Energy Justice</u> <u>Screening Tool</u> (**CEJST**) map;
- (b) A limited number of additional communities identified as disadvantaged by the <u>EJScreen mapping tool</u> (**EJScreen**);
- (c) Geographically dispersed low-income households; and
- (d) Properties providing affordable housing.<sup>4</sup>

Note that the Justice40 Initiative (**Justice40**) directs EPA to ensure that "at least 40% of the overall benefits from certain federal investments in climate, clean energy and other areas flow to disadvantaged communities," as defined by CEJST. States will be required to demonstrate compliance with this requirement. Serving households and communities that are low-income or otherwise defined as disadvantaged by the NOFO that sit outside of the areas delineated by CEJST will not count towards compliance with Justice40.

EPA anticipates it will announce its selection decisions in March 2024 and plans to issue awards by July 2024. All activities funded with the initial grant award must be completed within a negotiated program performance period of up to five years, which may include a year of planning work.<sup>5</sup>

GGRF funds can be used to support (a) residential rooftop solar, (b) residential-serving community solar, (c) associated storage, and (d) enabling upgrades,<sup>6</sup> so that depending on a state's goals, capacity, and ambition, an application may include one or multiple

<sup>&</sup>lt;sup>6</sup> See NOFO, pg. 9, for additional information.



<sup>&</sup>lt;sup>2</sup> An eligible recipient is an organization that meets all of the following requirements: (a) is a non-profit organization; (b) is designed to provide capital, leverage private capital, and provide other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services; (c) does not take deposits other than deposits from repayments and other revenue received from financial assistance provided using grant funds under this program; (d) is funded by public or charitable contributions; and (e) invests in or finances projects alone or in conjunction with other investors.

<sup>&</sup>lt;sup>3</sup> See NOFO, pgs. 10-12, for additional information.

<sup>&</sup>lt;sup>4</sup> Additional details are available in Section 4 (*Eligibility*) below.

<sup>&</sup>lt;sup>5</sup> See NOFO, pg. 26, for additional information.

programs, focused on any part of the LMI solar market such as LMI single-family homes, community solar, multi-family public affordable housing, naturally-occurring affordable housing, etc.<sup>7</sup> The NOFO further delineates how funds can be distributed across (1) financial assistance for the activities above and (2) administrative costs and technical assistance.

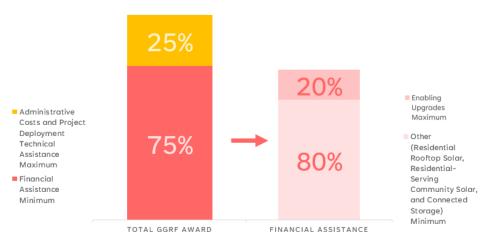


Figure 1 – Distribution of GGRF Funds as per NOFO<sup>8</sup> - Source: CESA

#### 1.2 Why Target Multi-Family Affordable Housing in a Solar for All Application?

MFAH properties represent an important share of the LMI housing market. Out of an estimated 123,560,181 households in the United States (including the District of Columbia and Puerto Rico), an estimated 51,411,059 (42%) are LMI households–defined here as below 80% Area Median Income (**AMI**)– of which 19,067,871 (37% of LMI households) reside in multi-family units.<sup>9</sup>

Further, in 2018, the National Renewable Energy Laboratory (**NREL**) estimated that solar technical potential on multifamily housing (both LMI and non LMI) was 316 TWh, as compared with 683 TWh for single-family buildings.<sup>10</sup>

LMI rentals alone –strongly correlating with multifamily housing– were estimated to have the potential to generate 212.7 TWh, slightly exceeding the solar technical potential of LMI owner-occupied buildings with 203.3 TWh.<sup>11</sup> Within LMI households only, multi-family buildings were estimated to represent 40.1% of the LMI-specific potential.<sup>12</sup>

information.

<sup>&</sup>lt;sup>12</sup> Id.



 <sup>&</sup>lt;sup>7</sup> For resources relevant to program designs for community solar and single family homes, consult <u>CESA's website</u>.
 <sup>8</sup> Please note that these percentages differ for Indian and Alaska Native communities and refer to the <u>NOFO</u> for further

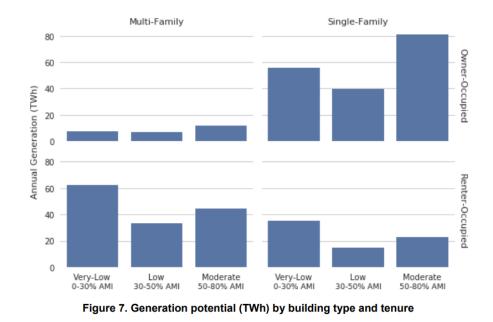
<sup>&</sup>lt;sup>9</sup> Low-Income Energy Affordability Data Tool, DOE

<sup>&</sup>lt;sup>10</sup> Benjamin Sigrin and Meghan Mooney, National Renewable Energy Laboratory, <u>Rooftop Technical Potential for Low-</u> to-Moderate Income Households in the United States, 2018

<sup>&</sup>lt;sup>11</sup> Id.

The size of the solar potential on LMI multi-family buildings alone makes it a good investment for a state seeking to pursue federal funding opportunities to use solar power to mitigate climate change.

Note, however, that each state has a different housing stock so these nation-wide numbers should not be relied on to make state-level policy decisions. Instead, states should consult existing tools and resources such as the DOE Low-Income Energy Affordability Data (LEAD) tool and engage with their housing agencies and relevant authorities for local data.



LEAD is available here: https://www.energy.gov/scep/slsc/lead-tool

Even where a state may have relatively few MFAH properties, including a program supporting solar and/or solar+storage on MFAH in a Solar for All application will ensure that federal funds intended to open new opportunities to underserved parts of the market are used to support solar access for households that will most benefit from it.

As shown in the graph above, the lowest income brackets are the second largest potential opportunity to capture solar generation technical potential, after single-family owneroccupied homes. These households also spend the largest share of their income on energy bills and have historically had less access to solar than other households, making providing access to MFAH both a matter of social justice and a critical tool for poverty alleviation as they stand to benefit most from solar savings.



Figure 2 – Generation potential by income group, building type, and tenue - Source: <u>NREL</u>

#### 1.3 Why Include Storage in a Solar for All Application?

As per the NOFO, financial and technical assistance funded through GGRF's Solar for All competition must enable low-income and disadvantaged communities to deploy and benefit from solar and storage. When targeting MFAH, a state can choose to focus on solar-only installations, on solar+storage, on storage only, or on both solar and solar+storage.

- **Stand-alone solar** is usually easier to implement and may be more cost-effective, especially if a state's electricity market and regulatory policies are not favorable for battery storage. If storage is not included, EPA funding will likely be able to be spread over more affordable housing properties.
- When solar is combined with storage, resilience benefits can accrue in the form of lowered health risks and critical services availability during power outages (refrigeration, medical device operation, cooling, heating, etc.). MFAH property managers can also lower a building's electricity expenses by carefully managing the use of the batteries. In addition to these household-level and building-level benefits, grid benefits occur in the form of savings where batteries are operated when power is most needed, reducing costs for all customers.
- **Opportunities for stand-alone storage** under Solar for All awards are somewhat limited by EPA in the NOFO, which allows only "associated storage" defined as "infrastructure to store solar-generated power for the purposes of maximizing residential rooftop and residential-serving community solar deployment, delivering demand response needs, aggregating assets into virtual power plants, and delivering residential power during grid outages."<sup>13</sup> The NOFO further requires that financial assistance for storage be "deployed in conjunction with" financial assistance for a connected solar PV system.<sup>14</sup> In this guidance, we do not offer any designs relevant to storage-only systems or retrofits. Please refer to Section 8 (*Other Tax Credit Considerations*) below for additional information relevant to storage.
- Offering support for both solar and solar+storage in a state program is a good strategy to stimulate market activity without prejudging, with limited information, what will be practically and economically feasible for market participants. Unlike single-family homes projects, which can be done in a more systematic or "cookie-cutter" way, solar and solar+storage projects on MFAH properties will all require significant amounts of tailoring for developers. The economics of solar+storage may not work for all projects, or all project goals (e.g., resilience goals vs. immediate savings goals). We recommend building flexibility in program designs so that storage is included but not required.

<sup>&</sup>lt;sup>14</sup> Id.



<sup>&</sup>lt;sup>13</sup> NOFO, pg. 9

# Section 2. How to Use this Guide

This guide is intended to streamline design choices and simplify the Solar for All application process for states considering adding a MFAH solar and/or solar+storage to their application by offering a simple design. As mentioned above, it is meant to be a starting point and states will make decisions based on their goals and circumstances. In all cases, states will need align their Solar for All designs with other federal funding programs' rules and requirements. These are briefly presented below and covered in more depth later in this guide.

#### 2.1 Aligning with Other Federal Funding Opportunities

This document is not a model application. It aims to highlight how a simple Solar for All design option for MFAH solar+storage can take advantage of federal funding opportunities by complying with the following federal rules or guidelines:

- (1) The Solar for All NOFO;
- (2) The <u>Final Regulations</u> published by the Internal Revenue Service (IRS) regarding the relevant to the tax credit bonus program under <u>26 U.S.C § 48(e)</u> (the LMI ITC Adder) published on August 15, 2023 in the Federal Register and that will become effective on October 16, 2023 (the Final Regulations); and
- (3) The preliminary rules relevant to <u>26 U.S.C § 48(a)(14)</u> (the **Energy Community ITC** Adder).

In addition, where relevant, we point to guidance from the U.S. Department of Housing and Urban Development (**HUD**) such as <u>Notice H 2023–09</u>, which consolidates existing guidance on solar benefits and household income. We strongly encourage states to thoroughly familiarize themselves with the NOFO, the Final Regulations, and relevant HUD guidance and to not rely solely on the information provided in this document. We have made our best efforts to be thorough while delivering resources to states quickly.

#### 2.2 Getting Started

To prepare an application for an impactful solar or solar+storage program for MFAH, states should at minimum take the following first steps:

- Use available resources. We recommend that you read this document and the <u>NOFO</u> in detail, as well as participate in meetings with other states to learn about their experiences, questions, challenges, and solutions. Regularly consult EPA's <u>FAQs page</u>.
- **Evaluate your housing stock and your customer base.** As stated above, states should evaluate and consider the local characteristics of their housing stock as well as the locations and preferences of disadvantaged communities. Given the



affordable housing focus, we recommend investigating what housing types and locations are most relevant for tenants within the lowest income brackets. Several tools exist to investigate these questions such as the LEAD tool <u>available here</u> or the U.S. Department of Housing and Urban Development (**HUD**)'s public housing data dashboard <u>available here</u>. Initial calls with your Department of Housing should orient you as to the relevant MFAH property types (e.g., public vs. HUDassisted) and stakeholders.

- Reach out to your local housing authorities. MFAH property owners will be most able to tell you what is needed and what barriers most need to be tackled. In addition to playing a critical role in go/no-go decisions with respect to upgrades such as solar, efficiency, and storage on their buildings, they can recruit tenants to a project and/or help coordinate other outreach to decide what benefits can be provided to tenants if individual financial benefits are not possible due to the building's metering structure. See Section 7 (*Tenants and Financial Benefits*) below for additional information.
- Assess your local policy context including MFAH. A successful low-income solar program rests on sound solar policy. Investigate all policies and programs that support the development and financing of solar energy in your state. These might include general solar policy such as renewable portfolio standards, clean energy standards, green banks, existing grants, or incentive programs, or tax credits and tax exemptions. Does your state already specifically encourage solar or solar+storage projects for multi-family properties? If so, does it include a capacity reservation –a "carve-out" for MFAH? The more certainty your state can offer about the policy framework, the more attractive your program will be to potential project owners and/or developers.
- **Consider how this program will interact with others.** To the extent your state has existing programs for energy efficiency upgrades, solar+storage, charging stations, and related programs, examine areas where programs could be leveraged, utilized, or aligned. Further, consider what procedural steps would be required to change existing programs. Can these changes be made in a timely manner?
- Identify new and existing sources of funding beyond Solar for All. Consider all possible sources of state and federal funding. These could include cap-and-invest programs, public benefit charges, ratepayer funds, or federal funding opportunities such as the other two GGRF competitions. Financing, credit enhancements, and equity investments should all be considered as companion tools to meet your state's goals. We recommend you make coordinating strategies with your state's green bank, Community Development Financial Institutions (CDFIs), and housing finance authority a priority.
- Self-evaluate any existing solar and solar+storage programs against Solar for All goals and grading criteria. Using Appendix A (Points Structure for the GGRF Solar for All Competition Program Narrative and Self-Evaluation Form) to this guide,



review any existing MFAH solar or solar+storage program in your state and determine its strengths and weaknesses.

### Section 3. Designing a MFAH Solar and Solar+Storage Program

#### 3.1 Criteria for a Successful Program

The NOFO lays out all requirements relevant to Solar for All applications and discusses opportunities to create new programs as well as to expand and enhance existing programs. Regarding program expansion, the NOFO specifically mentions:

- Increasing any existing program caps and/or carveouts;
- Increasing the subsidy size;
- Expanding eligibility;
- Supporting greater household savings;
- Supporting community ownership and workforce training programs;
- Introducing subsidies for storage of solar energy and eligible upgrades; and
- Supporting program administration and technical assistance needs.<sup>15</sup>

Under the GGRF criteria, the ideal program design will create favorable market conditions and mobilize capital to increase access to solar and solar+storage. A competitive Solar for All application will also address and achieve five meaningful benefits: (a) household savings, (b) equitable access to solar, (c) resilience benefits, (d) community ownership, and (e) workforce development and entrepreneurship. States should provide EPA with a comprehensive plan to demonstrate how they will deliver such benefits to MFAH tenants.

#### 3.2 Laying Out a Simple Program Design

A simple program design to promote the development and financing of solar and solar+storage projects on MFAH properties will, at minimum require (a) affordable and patient **capital**, (b) a strategic approach to **capacity**-building, and (c) partners to recruit **customers**, including the following elements:

• **Capital – Financing.** The lack of access to financing at a rate that makes solar+storage economic for MFAH properties is a major barrier to the development process. Solar for All financial assistance funds can be deployed in any number of ways, including revolving loan programs or other types of credit enhancements like loan loss reserves or guarantees. There are unresolved questions about what EPA would consider "deployed" in the context of credit enhancements, but we recommend that states either consider including a financing element to designs supporting MFAH, or coordinate closely with groups currently preparing applications under the other two GGRF competitions, the <u>National Clean</u>

<sup>&</sup>lt;sup>15</sup> NOFO, pg. 13



Investment Fund and the Clean Communities Investment Accelerator. Further, we do not recommend limiting such financing products or programs to a deployment model (like third-party ownership or direct ownership). MFAH solar and solar+storage projects are hard to implement; solutions will be bespoke, and require the state to be flexible in its approach to prioritize solar access for tenants. In particularly hard-to-reach cases, forgivable loans, or partially forgivable loans are also an option that should be considered.<sup>16</sup>

- ✓ See Section 5.2 (*Financing*) for additional information.
- **Capital Tax credits.** To take full advantage of the IRA's funding opportunities, states' Solar for All proposals should seek to incorporate all of the tax credits and tax credits adders that have been made available by the IRA. In practice, this will require state staffers to understand the details of the regulatory layering that will result from stacking tax credits, from 30 up to 70% of a project's eligible costs, across four different federal programs (i.e., GGRF, LMI ITC Adder, Energy Communities Adder, and Domestic Content Adder), and training MFAH property owners on these requirements as well. (See capacity bullets below.) For tax-exempt MFAH property owners that wish to directly own assets, direct pay (or elective pay) under <u>Section 6417 of the Internal Revenue Code</u> will be available, requiring the use of a financial product to bridge the construction-to-elective payment time gap. Here again, a state, a green bank, or another type of socially minded capital provider should provide low- to no-cost financing to enable projects.
  - ✓ See Section 4.2 (Eligible Properties under the LMI ITC Adder Rules), Section 4.3.2 (Prioritization Rules of the LMI ITC Adder), Section 7.4 (Tax Credits and Financial Benefits), and Section 8 (Other Tax Credit Considerations) for additional information on how a state program can take full advantage of tax credits in a Solar for All program.
- Capital Incentives for solar and solar+storage. Direct incentives for Solar and solar+storage on MFAH will be critical to ensure that savings and other resilience benefits accrue to low-income tenants. Should a state already have a multifamily solar or solar+storage program, a state should propose to incorporate solar and solar+storage equity provisions such as "elevated incentives" reserved for MFAH, and a capacity reservation sometimes known as a "carve-out." Capacity incentives will be the most straightforward incentive structure for states given the five-year performance period limitation of the NOFO. Performance-based incentives are also useful to reward and incentivize specific behaviors –for example letting a utility control batteries during peak events to reduce or eliminate

<sup>&</sup>lt;sup>16</sup> There are many ways that multifamily housing has traditionally accessed energy financing that are outside of the scope of this guidance. We recommend <u>this primer and resources from the DOE Better Buildings Initiative</u> for additional information about multifamily energy financing in general.



the need to turn on polluting peaker plants – but they will be harder to set up since they would need to continue beyond EPA's five-year timeline. If using performance-based incentives, we recommend that those be funded with non-GGRF funds.

✓ See Section 5.1 (*Incentives*) for addition information.

- Capital Incentives for enabling upgrades. Up to 20% of the GGRF financial assistance funds over the lifetime of the program can be used for "enabling upgrades." As per the NOFO, these are investments in energy and building infrastructure that are "necessary to deploy and/or maximize the benefits of" otherwise eligible solar and must be "deployed in conjunction with financial assistance for an eligible solar PV system."<sup>17</sup> These include behind-the-meter electrical system upgrades, roof repairs, and energy efficiency. Chiefly, states should justify to EPA how these upgrades address barriers that reduce the deployment of residential and residential-serving solar. In the context of MFAH solar and solar+storage where the building owner may be reluctant to make an investment that only benefits tenants, these upgrades could serve as an incentive to recruit building owners.
- **Capacity**. To develop a pipeline of projects for a solar+storage MFAH program, a state should consider both (a) offering grants to cover the costs of predevelopment activities and (b) coordinating or procuring direct technical assistance to build capacity for MFAH providers. These structures can provide services and tools at no cost to property owners and developers for feasibility assessments and project optimization, and allow project champions to receive information from a trusted independent third-party.
  - ✓ See Section 6 (*Technical Assistance*) for additional information.
- **Customers**. Recruiting participants for a solar program can be a costly component of solar projects directed at LMI customers. As a result, and to overcome trust issues that may exist, states should consider engaging early with property owners, both public housing authorities and other non-profit organizations that own affordable housing properties to recruit their tenants into the program. This recruiting work could be compensated via the technical assistance funding portion of the award. Building owners already have direct relationships with tenants, and critically will already need to be involved in the process of procuring solar+storage solutions for their buildings as part of a state support solar+storage program for MFAH.

<sup>17</sup> NOFO, pg. 9



Additional information about some of the design elements above can be found below. Before delving further into program design options, we present information pertaining to program eligibility.

### Section 4. Eligibility

The NOFO includes specific information about which communities and projects are eligible to benefit from Solar for All funding. EPA requires that applicants seek to leverage other existing federal and state funding, including tax credits,<sup>18</sup> so that their eligibility requirements should also be considered at the time of program design. This section summarizes both eligibility requirements under the NOFO and those relevant to tax credits. For ease of reference, available tax credits for solar (and in some circumstances storage) are summarized below.

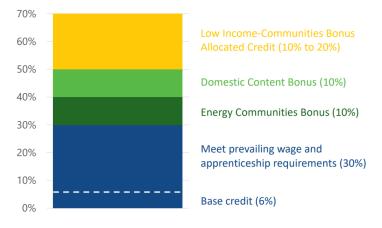


Figure 3 – The Tax Credit "Layer Cake" - Source: DOE

#### 4.1 Eligible Properties and Disadvantaged Communities under the NOFO

The IRA stipulates that federal funding must "enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies."<sup>19</sup> As stated above in Section 1.1.2 (*Use of GGRF Funds and Deployment Timeline*), the NOFO delineates four categories of eligible recipients, including "properties providing affordable housing"<sup>20</sup>, which are defined as follows:

- 1. Multifamily housing with rents not exceeding 30% of 80% AMI for at least half of residential units and with an active affordability covenant from one of the following federal or state housing assistance programs:
  - a. Low-Income Housing Tax Credit,

<sup>&</sup>lt;sup>20</sup> NOFO, pg. 11



<sup>&</sup>lt;sup>18</sup> See Financial Assistance Strategy, NOFO, pg. 44.

<sup>&</sup>lt;sup>19</sup> Section 134(a)(1) of the Clean Air Act (<u>42 U.S.C. § 7434</u>)

- b. A housing assistance program administered by the U.S. Department of Housing and Urban Development (HUD), including Public Housing, Section 8 Project-Based Rental Assistance, Section 202 Housing for the Elderly, Section 811 Housing for Disabled, Housing Trust Fund, Home Investment Partnership Program Affordable Rental and Homeowner Units, Permanent Supportive Housing, and other programs focused on the EJ Supplemental Indexes cover 12 environmental indicators: Particulate Matter 2.5, Ozone, Diesel Particulate Matter, Air Toxics Cancer Risk, Air Toxics Respiratory Hazard Index, Traffic Proximity, Lead Paint, RMP Facility Proximity, Hazardous Waste Proximity, Superfund Proximity, Underground Storage Tanks, and Wastewater Discharge. Within EJScreen, the EJ Supplemental Indexes can be found on the "Maps" tab by clicking the "Threshold Map." 12 goal of ending homelessness funded under HUD's Continuum of Care Program,
- c. A housing assistance program administered by USDA under Title V of the Housing Act of 1949, including under Sections 514 and 515 (7 CFR § 3560.1),
- d. A housing assistance program administered by a tribally-designated housing entity, as defined in Section 4(21) of the Native American Housing Assistance and Self-Determination Act of 1996 (<u>25 U.S.C. § 4103(22</u>),
- e. Any other housing assistance program designated by the EPA Administrator
- 2. Naturally-occurring (unsubsidized) affordable housing with rents not exceeding 30% of 80% AMI for at least half of residential units

Note that unlike other eligibility categories under the NOFO, this eligibility category is based upon building types and rent level, but not on building location or income qualification.<sup>21</sup> However, other location and income eligibility criteria are still relevant as part of other funding programs, such as the LMI ITC Adder.

#### 4.2 Eligible Properties under the LMI ITC Adder Rules

<u>Section 48(e)(2)(B)(i)</u> of the Internal Revenue Code provides that a facility will be treated as part of a qualified low-income residential building project (a "Category 3 project" as per Treasury's Final Regulations) and, assuming it meets other general requirements, receive a 20% additional ITC bonus if such facility is installed on:

- A residential rental building which participates in a covered housing program listed in <u>34 U.S.C. 12491(a)(3)</u>, or
- A housing assistance program administered by the Department of Agriculture under <u>Title V of the Housing Act of 1949</u>,
- A housing program administered by a tribally designated housing entity as defined in 25 U.S.C. 4103(22), or

<sup>&</sup>lt;sup>21</sup> For additional information about other eligibility requirements under the NOFO (outside of MFAH) please refer to CESA's previous guides available on the <u>CESA website</u>



• Such other affordable housing programs as the Secretary may provide.

Treasury published a long list of affordable housing programs and policies that meet the requirements of Section 48(e)(2)(B)(i). It is available here:

https://www.energy.gov/sites/default/files/2023-08/Category%203%20Eligible%20Housing%20Programs.pdf

Additional requirements beyond property eligibility under the IRA will influence whether a project can receive the LMI ITC Adder and at what rate. Relevant information is available in Section 4.3.2 (*Prioritization Rules of the LMI ITC Adder*) and Section 8 (*Other Tax Credit Considerations*) below.

To implement the IRA, Treasury issued Final Regulations pertaining to the LMI ITC Adder. The Final Regulations were published in the <u>Federal Register</u> on August 15, 2023, and will come into effect on October 16, 2023.

Should a MFAH property that meets the NOFO requirements for "properties providing affordable housing"<sup>22</sup> not meet the requirements set for so-called Category 3 projects as described above, either because they are not listed or because they fail to meet another program requirement, these projects may be considered under Category 1 (located in a "low-income community") or Category 2 (located on "Indian land").<sup>23</sup> Precise definitions for these areas are available in **Appendix E** (*Selected Tax Credit Definitions*) below. In that instance, the rate of the adder will be reduced from 20% to 10%.

#### 4.3 Geographic Considerations

#### 4.3.1 Summary

The table below summarizes most of the geographic elements to consider when creating a Solar for All program that successfully leverages both federal tax credit programs and GGRF funding. Section 4.3 (*Geographic Considerations*) provides further details as needed.

Program	Relevant Areas and Online Resources <sup>24</sup>
Justice40	• <u>CEJST</u> (any)
GGRF NOFO	<ul> <li><u>CEJST</u> (any)</li> <li><u>EJScreen</u> supplemental index (any)</li> <li><u>EJScreen</u> Tribal Lands</li> </ul>

<sup>22</sup> NOFO, pg. 11

<sup>23</sup> Note that Under Section 48(e)(1)(A)(i), a Category 1 or Category 2 facility that also qualifies as a Category 3 or Category 4 facility is considered a Category 3 facility or Category 4 facility (as applicable).

<sup>&</sup>lt;sup>24</sup> "()" indicates the index or category from a particular screening tool that is relevant to program compliance.



Program	Relevant Areas and Online Resources <sup>24</sup>	
LMI ITC Adder	<ul> <li>Category 1: <u>New Market Tax Credits</u></li> <li>Category 2: Energy Policy Act Indian Land</li> <li>Categories 3 or 4: Not geographic</li> </ul>	
LMI ITC Adder Prioritization Criteria	<ul> <li><u>CEJST (energy burden)</u></li> <li><u>CEJST</u> (PM 2.5)</li> <li><u>Persistent Poverty County</u></li> </ul>	
Energy Community Tax Credit Adder	<u>Energy Community</u>	
Other	<ul> <li>Utility territories</li> <li>Local policy priorities</li> <li>Energy efficiency state programs</li> </ul>	

#### 4.3.2 Prioritization Rules of the LMI ITC Adder

Unlike other tax credits, the LMI ITC adder requires that project owners apply to receive an allocation. In addition, the IRA caps the LMI ITC Adder on an annual basis and under the Final Regulations, Category 3 projects –those most relevant to affordable housing described above– will be capped at 200 MW per calendar year.

To prioritize which projects will receive the LMI ITC Adder, the Final Regulations provide a process including geographic components that states should be aware of and weave into their program designs to help the market promote areas in which projects will trigger prioritized allocations of the LMI ITC Adder by Treasury. Within each project category, Treasury will reserve at least 50% of the capacity for projects that meet at least one of two additional selection criteria that Treasury created, based on ownership and on location.

 Location. As part of the location criterion, Treasury will prioritize projects located in a <u>Persistent Poverty County</u> or in a census tract that is designated in CEJST as disadvantaged based on energy burden and particulate matter (PM) 2.5 indicators. A Persistent Poverty County is generally defined as any county where 20% or more of residents have experienced high rates of poverty over the past 30 years. <u>A</u> <u>Persistent Poverty County map is available here</u>. Note that the NOFO mentions that EPA expects the program to maximize the breadth and diversity of households in the program, including Persistent Poverty Counties.<sup>25</sup> States should examine where these areas are located and decide how to incorporate and/or prioritize them in their Solar for All applications.

<sup>&</sup>lt;sup>25</sup> NOFO, pg. 6



• **Ownership**. In addition, Treasury will prioritize projects owned by "a Tribal Enterprise, an Alaska Native Corporation, a renewable energy cooperative, a qualified renewable energy company meeting certain characteristics, or a qualified tax-exempt entity." See <a href="https://www.federalregister.gov/d/2023-17078/p-506">https://www.federalregister.gov/d/2023-17078/p-506</a> for additional details about each one of these categories.

#### 4.3.3 Energy Communities

In addition to the LMI ITC Adder, states should consider the extent and location of Energy Communities (as defined by the IRA) in their state and consider whether and how they overlap with areas considered disadvantaged under the NOFO. Projects located in an Energy Community will be eligible to receive an additional 10% ITC bonus. A precise definition of Energy Communities is available in **Appendix E** (*Selected Tax Credit Definitions*) below.

#### 4.3.4 Justice40 Compliance

As stated above, while GGRF funds must be spent for the benefit of disadvantaged communities and low-income households, Justice40 compliance requires that 40% of overall program benefits go to communities located in areas identified as disadvantaged by the <u>Climate and Economic Justice Screening Tool (CEJST)</u> mapping tool.<sup>26</sup>

#### Section 5. Capital

As introduced in Section 3.2 (*Laying Out a Simple Program Design*), the lack of access to capital, or the lack of access to affordable capital, is the first and most obvious barrier to solar and solar+storage for low-income customers and disadvantaged communities. Approaches to incentives and financing are further detailed in this section.

EPA specifically includes grants, rebates, subsidies, and incentives along with "debt (including loans, partially forgivable loans, forgivable loans, soft loans, subordinate debt), and other financial products," as part of its definition of financial assistance under the NOFO.<sup>27</sup>

One of GGRF's three overarching program objectives is to "mobilize financing and private capital" to stimulate climate mitigation and "facilitate market transformation by addressing the barriers to mobilizing private capital into clean technology projects in undercapitalized markets."<sup>28</sup> As per the NOFO, EPA will seek additionality, and states

<sup>&</sup>lt;sup>28</sup> NOFO, pg. 6



<sup>&</sup>lt;sup>26</sup> As stated above, projects located in other areas, even those that meet the overall goals and eligibility of the NOFO, will not matter for purposes on Justice40 compliance. Only CJEST does. For more information on Justice40 requirements, refer to the <u>White House's Justice40</u> page.

<sup>&</sup>lt;sup>27</sup> Products have to be "consistent with the definition of Federal financial assistance in <u>2 CFR § 200.1</u> and Participant support costs in <u>2 CFR § 1500.1</u>." NOFO, pg. 9

should work to develop "favorable market environments."<sup>29</sup> Examples of capital metrics relating to market transformation include:

- Grant funds deployed
- Financial assistance deployed (including subsidies and loans for example)
- Total private sector financing mobilized
- Financial assistance deployed to consumers with limited credit history

A state's financial assistance strategy will be evaluated based on how well the strategy (a) complements, and does not duplicate, existing sources of capital and financial assistance; (b) is designed to ensure program longevity and market transformation beyond the five years of the performance period; (c) plans to "leverage innovative financing structures such as renewable energy credits, tax credits, debt financing, leases, power purchase agreements, other third-party ownership options, revolving loan programs, green bonds, guarantees, or other financing products;" and (d) includes engagement with other capital providers including private and public sources of capital such as the GGRF other two competitions, National Clean Investment Fund (**NCIF**) and Clean Communities Investment Accelerator (**CCIA**).<sup>30</sup>

#### 5.1 Incentives

Incentives are a critical step towards increasing solar and solar+storage deployment that reduces cost and risk barriers. They are traditionally organized in two categories: capacity incentives and performance-based incentives.

#### 5.1.1 Capacity Incentives

A capacity incentive that is paid upfront will alleviate the additional costs and risks that MFAH property owners face by reducing the initial investment that solar and solar+storage require. We recommend that incentives also apply both to direct ownership and to third-party ownership to increase program participation and accessibility for all customers.

A few examples of upfront capacity incentive from existing programs are available below:

• **Connecticut**'s <u>Energy Storage Solutions program</u> adopted declining-block upfront incentives that reduce a battery's cost in exchange for allowing the battery to be set to a passive dispatch default setting to provide backup power to the grid and reduce demand during summer peak periods for a term of 10 years.<sup>31</sup> Residential incentives –which Connecticut has ruled to include MFAH– are the smaller of (a) the rated energy capacity (kWh) \* [\$200/kWh], (b) 50% of the total installed cost,

<sup>&</sup>lt;sup>31</sup> The utility will use up to 80% of the battery during the summer months from 3pm to 8pm on non-holiday weekdays. Additional details about such passive dispatch are available in the <u>Energy Storage Solutions Program Manual</u>



<sup>&</sup>lt;sup>29</sup> Id.

<sup>&</sup>lt;sup>30</sup> NOFO, pg. 54

or (c) \$7,500 per unit.<sup>32</sup> Adders are available for low-income, underserved, and grid-edge customers. For example, for residential underserved customers including MFAH residents, the program offers a rate of \$300/kWh. However, adders are not necessary for the Solar for All Competition as all funds must be deployed to benefit LMI households and disadvantaged communities.

- **California**'s <u>Self Generation Incentive Program (SGIP)</u> offers a declining-step upfront incentive structure starting at a baseline of \$500/kWh for residential properties and increasing based on equity and resiliency criteria.<sup>33</sup> For states adapting existing programs, it is useful to keep in mind that the California program was only successful at reaching low-income customers once a carve-out was added on top of incentive adders.
- New York's <u>Energy Storage Market Acceleration Bridge Incentive program</u> offers another example of a similar program.

#### 5.1.2 Performance-Based Incentives

Performance-based incentives (**PBI**) can be an effective tool for solar+storage programs to ensure that installations remain operational and deliver the intended benefits. A PBI will be most meaningful and effective where there are supportive utilities, storage-friendly regulations, effective outreach and marketing, active third-party developers and aggregators, and the additional availability or low- and no-cost financing.<sup>34</sup>

A PBI is calculated based on storage output and performance, and can be structured to support specific state goals over time. These could include supporting the grid in areas that are congested, providing outage resilience benefits to disadvantaged communities or critical facilities, shaving demand peaks, and many other things. However, because GGRF Solar for All funds must be spent within five years, PBIs will not be easy to use for any type of performance-based payments over time. As you can see below, PBIs are typically paid over a long period. Therefore, this part of a MFAH solar+storage program will have to be funded through another source. PBIs could be offered and managed by utilities, possibly through their efficiency programs. For example, currently:

• **Connecticut**'s <u>Energy Storage Solutions program</u> includes an active dispatch program component, which takes precedence when called over the passive dispatch schedule in the event of increased demand. It includes a performance incentive paid twice a year for 10 years based on how much average power the battery contributes to the grid during critical periods. For the program, Connecticut offered a rate of \$200/kW in the summer and \$25/kW in the winter for the first five years, moving towards a rate of \$115/kW in the summer and \$15/kW in the winter for the following five years.<sup>35</sup> Note that these performance incentives are based on

<sup>&</sup>lt;sup>35</sup> See <u>Energy Storage Solutions webpage</u>.



<sup>&</sup>lt;sup>32</sup> Id.

<sup>&</sup>lt;sup>33</sup> See <u>SGIP Handbook</u>

<sup>&</sup>lt;sup>34</sup> Todd Olinsky-Paul 2023 Internal Memo, CESA

average kW-AC contribution during the season, determined by actual system performance during events as indicated by inverter data, and not based on nameplate capacity.<sup>36</sup>

- **Massachusetts'** <u>ConnectedSolutions program</u> offers similar rates and leverages other incentives and financing products<sup>37</sup> in the absence of an upfront incentive. Over a five-year contract, "customers are compensated on a pay-for-performance basis for the average kW they curtail during dispatch events over the summer season" at a rate of \$275/kW, with a 25,000 lifetime cap<sup>38</sup> in exchange for enrolling a battery into the program.<sup>39</sup> Past iterations of the program have included lower winter rates.<sup>40</sup> The program administrators provides a list of the brands of inverters that can be enrolled in the programs.
- **Rhode Island**'s <u>ConnectedSolutions program</u> offers both summer and winter rates for 30 to 60 events per year in the summer with rates for enrolling into a five-year contract with the state's main utility. On average the utility will pay out \$1,500 per year to residential consumers for small systems. Participating in the program requires that the battery storage system be charged from an on-site renewable resource, such as a solar PV system.

A range of barriers can still limit program uptake by MFAH owners and developers even if the financial incentives above are offered. Those barriers may include lack of name recognition of the battery vendors participating in the program, interconnection-related costs and delays, supply chain costs and delays, permitting and sitting barriers, regulatory barriers, and utility opposition.<sup>41</sup>

#### 5.2 Financing

Although grants and incentives are an important part of a successful strategy to support solar and solar+storage on MFAH, access to project financing is equally critical. States should consider including financing products as part of their Solar for All applications.

Broadly speaking, a state's financing strategy can offer products that will broaden the supply of capital and/or reduce the cost of capital. Recognizing that local circumstances could lead to a vast number of structures, it will be most helpful to ensure that a state's strategy covers the two most common deployment models used: (a) third-party ownership by a developer and (b) direct ownership by a MFAH property owner, using one or more of the tools presented below.

<sup>&</sup>lt;sup>41</sup> Todd Olinsky-Paul 2023 Internal Memo, CESA



<sup>&</sup>lt;sup>36</sup> See Energy Storage Solutions Program Manual.

 <sup>&</sup>lt;sup>37</sup> For example, customers can also apply for a 0% no-money down <u>HEAT Loan</u> for the cost of the battery system.
 <sup>38</sup> Program Materials for ConnectedSolutions for Small Scale Batteries

<sup>&</sup>lt;sup>39</sup> For additional information about Massachusetts' <u>ConnectedSolutions</u> impact on affordable housing properties, see Seth Mullendore, Todd Olinsky-Paul, Geoff Oxnam, Travis Simpkins, and Amy Simpkins, <u>ConnectedSolutions: The New</u> <u>Economics of Solar+Storage for Affordable Housing in Massachusetts</u>, 2021.

<sup>&</sup>lt;sup>40</sup> See for example <u>this 2021 Boston Solar Blog</u>.

- Third-party owned solar+storage systems located on a MFAH will best be supported by offering financing products to the third-party owner rather than the MFAH property owner.
- **Direct ownership** will require that financial assistance be provided primarily to MFAH property owners, but also, more rarely, to other groups such as local community-based organizations or cooperatives that may be organized to provide services to tenants. These organizations would necessarily have to work in close partnerships with MFAH property owners that will control the site in order to offer the resilience benefits of onsite solar+storage to tenants.

Financing, in this context, could, among other things, include the following:

- Direct low- or no-cost lending for all system costs is a straightforward option. It has, however, limited market transformation effects as it does not train lenders or developers in working with MFAH providers and does not build the local lending capacity. Nonetheless, this option should still be examined for projects that conventional capital providers will deem too costly to take on, with major issues like deferred maintenance or other problems affecting the capacity of a borrower to take on debt.
- Loans (low-cost or no-cost) or recoverable grants for the part of the system costs that will ultimately be recovered by federal tax credits and related adders can help tax-exempt entities access direct pay when they otherwise have limited access to capital. A revolving fund for this purpose could be deployed quickly because tax equity investors are not necessary, keeping transaction costs low, and ensuring a more perennial structure can be created with federal funds that otherwise have a five-year expiration date. The remainder of the system costs could be funded through other capital providers.
- Direct low- or no-cost lending for part of the system costs as subordinated debt reduces the amount of funding that needs to be sought from other capital providers as well as lowers the risks for such lenders, including community-based lenders with direct ties to the communities in which projects are deployed. This option could be useful for states that wish to recruit private sector lenders to build very large projects, working with large MFAH providers.
- Other credit enhancements are possible to lower risks (real or perceived) for capital providers. These credit enhancements can lower interest rates or lengthen the term of the loan or security, making capital accessible and affordable, and training the market, such as:
  - Interest rate buy-downs, i.e., a purchase of points off an interest rate, possibly very useful in the current high interest rate environment
  - **Debt service reserve funds**, i.e., a promise to pay late payments so that payment default provisions in a loan agreement are not triggered, which could have catastrophic consequences for the borrower



- **Loan loss reserve funds**, i.e., the setting aside of funds for potential partial losses on loans
- **Guarantees**, i.e., a promise to pay all or a substantial portion of a loan if a borrower fully defaults on a loan

Regardless of the chosen pathway, states should consider how they will offer technical assistance and engage with local lenders to ensure that their Solar for All program serves to get financial institutions used to providing financing to the MFAH solar and solar+storage market. States should also investigate and consider how other sources of funding beyond traditional capital providers will be incentivized to participate in this market. For example, philanthropic foundations can be a useful source of funding to offer additional credit enhancements, and utility funds could be leveraged for those utilities with efficiency and/or climate goals that may benefit from focusing on reducing demand from large, often poorly insulated properties such as MFAH.

Note that the distinction between incentives and financing can sometimes be blurry as grants/incentives can be folded into a strategy that primarily relies on other financing structures. Below is a summary of some financial program design elements released by states preparing Solar for All applications with a MFAH component:<sup>42</sup>

- The Connecticut Department of Energy and Environmental Protection and the Connecticut Green Bank will prospectively propose increased incentives for the Energy Storage Solutions program presented above to address barriers to solar+storage and ensure savings for participants as well as MFAH solar+storage lease or PPA financing for residential solar and associated storage projects benefiting low-income and disadvantaged communities. Connecticut will also likely provide credit enhancements for its existing green bonds programs specifically to raise additional capital for MFAH properties for residential solar, associated storage, and/or enabling upgrades benefiting low-income and disadvantaged communities.
- The Massachusetts Department of Energy Resources and the Massachusetts Clean Energy Center will prospectively offer a dual approach, for public housing and for privately owned affordable housing. (a) For public housing, Massachusetts would offer (i) initial funding to public housing authority partners to establish a solar development entity that will conduct a Request for Qualifications (**RFQ**) for "energy management services for solar deployment to serve housing authorities regionally or state-wide," (ii) seed funding for a revolving loan to cover the 30-50% of system cost to be later refunded by the ITC to reduce upfront cost, and (iii) credit enhancements that will be proposed by the RFQ respondents, as approved by program administrators, for PPA, lease, or low-income community shared solar

<sup>&</sup>lt;sup>42</sup> Links to program descriptions are provided in each bullet point. All citations refer to the relevant program design document in the relevant link.



products "as needed to enable financing products to meet resident benefits provisions and enabling roof upgrade cost." (b) For privately-owned affordable housing, Massachusetts would offer partially forgivable bridge loans up to 100% of the value of solar PV systems installed, "with loans to come due within 30 days of ITC receipt by the owner, and forgiven at loan value minus the ITC (30-50% of system cost) and owner equity contribution." Benefits to residents could include "building-wide free broadband internet access, savings funded building upgrades, direct cash payments or gift cards, or community resilience hubs established by owners with technical assistance through this program."<sup>43</sup>

 The Washington State Department of Commerce Energy Division would prospectively provide (a) no-interest, forgivable loans for enabling upgrades like roof repair, electrical upgrades, and energy efficiency improvements at properties that commit to installing solar and (b) a no-interest revolving loan fund for on-site solar or solar+storage that will leverage direct pay tax credits. The program will utilize both an existing program – the Washington State University Community Solar Expansion program – for projects between 12 kW and 199 kW, and a new low-income community solar program for projects between 200 kW and 1 MW

Of note, the Solar for All program specifically authorizes program designs that generate program income.<sup>44</sup> EPA points to EPA-specific rules regarding program income, which are available at <u>2 CFR § 1500.8</u>; while EPA will negotiate terms and conditions governing program income with a successful Solar for All applicant that uses EPA funding to capitalize revolving loan funds, the Code of Federal Regulations provides that recipients "may use EPA grant funding prior to using program income funds generated by the revolving loan fund (...) [and] keep program income at the end of the assistance agreement as long as they use these funds to continue to operate the revolving loan fund or some other authorized purpose as outlined in their closeout agreement."<sup>45</sup>

### Section 6. Technical Assistance

Technical assistance (TA) is an important component of a state's program for solar or solar+storage for MFAH and it is required by EPA as part of a Solar for All program. We cannot overstate how important TA is for this market segment. Projects for this market face significant non-financial barriers and TA can help property owners and project developers access expertise to overcome those barriers. The availability of TA can help convince property owners that successfully tackling a solar or solar+storage project for their building is possible.

<sup>&</sup>lt;sup>45</sup> This does not apply to Brownfields Revolving Loans, Clean Water State Revolving Funds, and Drinking Water State Revolving Funds. See <u>2 CFR § 1500.8</u>.



 <sup>&</sup>lt;sup>43</sup> See Section 7 (*Tenants and Financial Benefits*) for additional information about tenant benefits under Solar for All.
 <sup>44</sup> NOFO, pg. 9

TA is especially valuable to assess technical and economic feasibility in the predevelopment stage and to ensure project optimization to deliver benefits to tenants. TA should be provided **at no cost** to the MFAH property owners and developers to reduce cost barriers that MFAH clean energy projects can face. Solar for All grant funding should be allocated for this purpose.

TA activities can take various forms and should be tailored to the needs of the individual MFAH property and/or project being served. TA activities authorized under the NOFO include project technical and economic analysis, project deployment assistance, including but not limited to siting, permitting, and interconnection support, coordination with utilities, workforce training and development, community outreach and education, and assessments. The programs below could serve as models for states preparing a Solar for All application.

- New York's <u>NY-Sun program</u> provides predevelopment grants that can be used for "early-stage project planning, project team organization, and site identification, organizing a project business model and securing financing, procurement and contracting, customer outreach and enrollment, preliminary site assessments, development of cooperative or community ownership model, development of project models that allocate benefits to an environmental justice (EJ) community, [and] resiliency enhancements activities for LMI households, EJ communities, or disadvantaged communities by solar and/or storage projects."<sup>46</sup>
- **Massachusetts**' <u>Solar Technical Assistance Retrofit (STAR) program</u> Phase II offers TA in partnership with Local Initiatives Support Corporation, Massachusetts Association of Community Development Corporations, and Resonant Energy. MFAH property owners are eligible for the program. Grants are awarded for staff consultations and technical analysis services, primarily for solar feasibility studies. Currently, grant opportunities under this program are available to (a) build organizational capacity & explore innovative solutions (\$5,000 to \$50,000 grants), or (b) implement solutions (\$50,000 to \$300,000 grants).<sup>47</sup>
- **Multistate**. Funds can also be used to coordinate technical assistance through an intermediary structured like our sister nonprofit Clean Energy Group's <u>Technical Assistance Fund</u>. In this structure, TA is outsourced to a third-party vendor, which administers the program on behalf of states.

To comply with the requirements laid out in the NOFO and in the context of challenging MFAH solar+storage programs, it is strongly encouraged that states propose a detailed technical assistance strategy and define program characteristics in their application.

<sup>&</sup>lt;sup>47</sup> Mass CEC, <u>The Challenge: Prioritize Underserved Populations in our Clean Energy Future</u>



<sup>&</sup>lt;sup>46</sup> <u>NY-Sun Affordable Solar and Storage Predevelopment and Technical Assistance webpage</u>

## Section 7. Tenants and Financial Benefits

This section offers information about the types of benefits that can or must be offered to MFAH tenants as per the NOFO, HUD regulation, and tax credit adder programs. Tenants will fall into two categories based on how the property is metered—either mastermetered or unit-metered. There are administrative consequences and complications with the types of financial benefits that can be transferred to each type of tenant.

#### 7.1 Minimum LMI Tenant Qualification for Properties

When focusing on MFAH properties for the GGRF funding opportunity, states do not necessarily need to set a minimum percentage of LMI households in the properties or income qualifications. If a property is classified as MFAH, it should qualify for the GGRF Solar for All program so that a minimum percentage is unnecessary.

However, if a state plans on expanding an existing program so that multifamily housing, affordable or not, receives support for solar and solar+storage financing and deployment, capacity minimums should be created to ensure strong equity consideration. For example, the <u>Connecticut Green Bank's multifamily financing programs</u> utilize a minimum of 60% LMI tenants for a property to be eligible for financing.

#### 7.2 NOFO and Financial Benefits

Qualifying programs must guarantee that households directly or indirectly benefit from solar or solar+storage. As per the NOFO, a minimum of 20% of the average household electricity bill in the utility territory must be translated into direct or indirect benefits for participating households.<sup>48</sup> This includes both master-metered and unit-metered tenants.

To calculate the target 20% savings, states must use averages of both the energy and fixed cost portions of the bill, and exclude any associated cost (solar subscriber fees or indirect costs) for households. Refer below to **Appendix D** (*NOFO Household Savings Guidance*) which is excerpted from the NOFO and the EPA's <u>Frequent Questions about</u> <u>Solar for All</u> page for additional guidance.

We have received many questions relating to this savings requirement, which a state could construe in many different ways. For example, should a state consider utility customer tiers? Is the requirement for the lifetime of the asset, or the lifetime of a contract, or some other duration? What is the impact of utility rate fluctuations on this requirement? While there are many unknowns, EPA has stated there is some flexibility in the sense that this requirement is <u>not a threshold eligibility requirement</u>.

<sup>&</sup>lt;sup>48</sup> NOFO, pg. 51



However, because it is one of the meaningful benefits identified by EPA as a priority,<sup>49</sup> we recommend that states simply pick an approach that will meet the overall program goals and their local circumstances and market, and be ready to justify their choice to EPA in the application. Applicants who demonstrate plans to deliver these benefits will be regarded more favorably than ones that do not.

In all cases, the financial benefits of the program must be designed and offered to all customers served. Credits on utility bills are most readily adaptable for unit-metered tenants to receive these savings. Households that do not receive individualized utility bills can instead receive benefits other than a reduction in their electricity bills, including nonfinancial benefits. Recommendations for these substitute benefits are detailed below.

#### 7.3 HUD and Financial Benefits

#### 7.3.1 Direct Financial Benefits

Benefits to tenants from solar and solar+storage projects should be structured in a way that does not affect income and eligibility requirements for other income-qualified federal programs. HUD has issued a clarification regarding the treatment of certain benefits as part of their <u>Community Solar Credits</u> guidance for HUD multifamily housing. The guidance applies to the treatment of on-bill virtual net energy metering credits from a tenant's participation in a community solar program in cases where the tenant is in charge of paying their own electricity bill and where the solar credit appears as a negative amount on the electricity bill.<sup>50</sup> In most instances, HUD has clarified that a credit from solar is considered a discount or coupon rather than an income increase that would trigger a rent increase. Note however that the guidance is not a blanket approval and, in a few instances, renters may still be at risk of seeing their utility assistance payment (or allowance) adjusted. For example, if the credit they receive on a utility bill is "tied to the cost of consumption," a utility adjustment will be submitted. Additional details can be found in the guidance.

#### 7.3.2 Financial Benefits Equivalent

Household savings can be delivered as a non-financial benefit at an equivalent financial value for those tenants residing in master-metered multifamily buildings or without utility bills. Benefits for master-metered properties may take a variety of forms but must meaningfully improve the lives of households directly. A chart from HUD's 2022 Guidance detailing which tenant benefits can be offered without risk of being considered income can be found in **Appendix C** (*Treatment of Certain Benefits in Annual Income Calculation*).

<sup>&</sup>lt;sup>50</sup> See <u>HUD Guidance Regarding the Treatment of Community Solar Credits on Tenant Utility Bills</u>



<sup>&</sup>lt;sup>49</sup> NOFO, pg. 12

In <u>California's Solar on Multifamily Affordable Housing</u> (**SOMAH**) program, direct benefits include, "requiring owners to maintain property affordability, ensuring rents do not increase due to utility allowance changes, or providing other direct tangible benefits to residents." Indirect benefits of the program include, "providing improved amenities and services to residents."<sup>51</sup>

Amenities and services can be provided in several ways. Options under tenant benefit agreements are as follows:

- Job training and workforce development
- Facility upgrades
- Free or reduced-cost high-speed internet service
- Increased operating or replacement reserves for the property
- Resilience centers

#### 7.3.3 Additional Guidance

In August 2023, HUD issued <u>Notice H 2023–09</u>, which consolidates existing guidance referred to above and provides confirmation that the policy applies to rooftop/on-site solar facilities as well as community solar. Further, HUD indicated that the new notice is also applicable to the benefits that may result from the LMI ITC Adder and covers the following scenarios:

- (a) Electricity is individually metered, and the tenant receives a financial benefit (a virtual net metering credit) that appears as a negative amount on the tenant's electricity bill.
- (b) Electricity is individually metered or sub-metered, but it is administratively infeasible or not legally possible for the financial benefit to be distributed via individual discounts on tenants' electricity bills, so the owner must find another means of distributing the financial benefits.
- (c) Electricity is master-metered, such that residents do not receive individual electricity bills, and the owner must find another means of distributing the financial benefits.

Consult <u>Notice H 2023–09</u> for additional information.

#### 7.4 Tax Credits and Financial Benefits

Layered on top of the NOFO-required 20% savings based on the average utility bill in the service territory sits a requirement to pass on benefits from energy production in order to qualify for the 20% LMI ITC Adder. Treasury defined how much of such production should be passed on, as well as how those benefits should be distributed.

#### 7.4.1 Amount of Benefits

Under §1.48(e)-1(e) (*Financial benefits for a Category 3 Facility*) of the Final Regulations, **at least 50% of the financial value of the energy must be passed on to residents**, where

<sup>&</sup>lt;sup>51</sup> Stewards of Affordable Housing for the Future, <u>Community Solar and HUD Subsidized Housing</u>



financial value is defined as the greater of (i) 25% of the gross financial value of the annual energy produced by the energy property, or (ii) the net financial value of the annual energy produced by the energy property. Relevant definitions for this calculation are available in **Appendix E** (*Selected Tax Credit Definitions*) below.

#### 7.4.2 Distribution of Benefits

Under the LMI ITC Adder Final Regulations, the financial benefits of the electricity produced by a Category 3 facility must be "allocated equitably among the occupants of the dwelling units of such building,"<sup>52</sup> which will depend on whether financial value is distributed to building occupants (a) via utility bill savings or (b) through different means.

- (a) If financial value is distributed via utility bill savings, benefits will be considered to be equitably allocated if they are distributed as utility bill savings in equal shares to each building dwelling unit among LMI tenants, or in proportional shares based on each low-income dwelling unit's square footage or number of occupants. Further, any portion of the financial value that would otherwise be distributed to tenants who elect not to participate in a solar program must instead be distributed to *all* participating tenants, as long as 50% or more of the LMI tenants participate.
- (b) If financial value is not distributed via utility bill savings, benefits will be considered to be equitably allocated if **at least 50% of the financial value of the energy produced by the facility is distributed to occupants using one of the methods described in HUD guidance.**

The facility owner will be required to prepare a "Benefits Sharing Statement" detailing all calculations referred to in this section for Treasury.

# Section 8. Other Tax Credit Considerations

This section briefly introduces other tax credit considerations that may influence a state's Solar for All program design.

- LMI ITC Adder maximum size. The maximum net output of a solar project must stay below 5 MW<sub>AC</sub> for a project owner to be eligible to apply for the LMI ITC Adder.<sup>53</sup>
- Location. Treasury clarified that solar and solar+storage may be installed next to the LMI ITC Adder-qualifying building, if the facility is installed on land that is either the same or an adjacent parcel of land as the qualifying building. This

<sup>&</sup>lt;sup>53</sup> Note that this size limitation is different from the GGRF limitation, which is expressed as a nameplate capacity maximum. Treasury recently clarified that it will aggregate into a single facility the facilities of the same type (solar) that are "operated as part of a single project consistent with the single-project factors provided in Section 7.01(2)(a) of <u>Notice 2018–59</u>, 2018–28 I.R.B. 196 or Section 4.04(2) of <u>Notice 2013–29</u>, 2013–20 I.R.B. 1085, as applicable." Refer to §1.48(e)-1(b)(2)(3) of the Final Regulations for details about Treasury's factors of single project determination.



<sup>&</sup>lt;sup>52</sup> §1.48(e)-1(b)(2)(iii) of the Final Regulations

clarification allows property owners to install solar on adjacent carport or groundmount solar on the same parcel.

• **Direct pay**. As stated above in Section 3 (*Designing a MFAH Solar and Solar+Storage Program*) many MFAH property owners are tax-exempt entities that can potentially utilize direct pay under <u>Section 6417 of the Internal Revenue Code</u>. Complying with domestic content requirements is necessary for tax-exempt entities to utilize direct pay fully. The rate of the tax credits available for direct pay will *decrease* over time until 2025, at which point direct pay will not be available for entities that do not meet domestic content requirements. Note that facilities smaller than 1 MW<sub>AC</sub> are not subject to this phase-down. For additional general information about how public organizations can utilize direct pay, refer to this <u>guide for governments, schools, and nonprofits</u> from the BlueGreen Alliance.

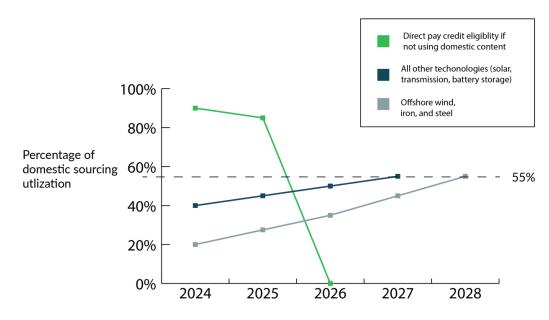


Figure 4 - Direct Pay Phase-Down for Projects 1MW AC or Greater - Source: BlueGreen Alliance

As direct pay is likely to be a significant source of funding for nonprofit organizations and public housing authorities, it is critical that states include direct pay in their program design and in their communications with tax-exempt entities that may not be aware of this opportunity. Also note that waivers are available when complying with domestic requirements would increase the project cost by more than 25% or US-made components are not available in sufficient quantity or quality.<sup>54</sup> However, as per Norton Rose Fulbright tax attorneys in May 2023, "**a project cannot waive into a bonus credit, according to the Congressional tax committee staffs**. Their view is the waivers are relevant only for avoiding a domestic content penalty, meaning inability for tax-exempt and state and local government entities, the Tennessee Valley Authority, Indian tribes and rural electric

<sup>&</sup>lt;sup>54</sup> See <u>DOE FAQs here</u>.



cooperatives to receive full direct cash payments."<sup>55</sup> Further, EPA has indicated that Build America Buy America (**BABA**)'s local content requirements would apply to certain projects under Solar for All.<sup>56</sup> These requirements are fairly similar to the tax credits' domestic content requirements.

- Storage. Storage is eligible under the LMI ITC Adder if it is considered "installed in connection with" other eligible solar. Treasury clarified that this means that (i) storage and solar (a) are owned by a single legal entity, (b) are located on the same or contiguous pieces of land, (c) have a common interconnection point, and (d) are described in one or more common environmental or other regulatory permits together with the wind or solar it is connected with, and that (ii) storage is charged no less than 50% by the connected solar. The Final Regulations include a safe harbor that deems storage to be charged "at least 50 percent by the facility if the power rating of the energy storage technology (in kW) is less than 2 times the capacity rating of the connected wind facility (in kW AC) or solar facility (in kW direct current (DC))." So, if a solar installation has a rated capacity of 100kW DC, then the power rating of attached storage would have to be less than 200kW DC for storage to qualify for the LMI ITC Adder.
- No deployment preference. A so-called "Category 3 project" includes direct ownership or third party-owned solar and solar+storage units for affordable housing rental properties.

<sup>&</sup>lt;sup>56</sup> NOFO, pg. 63



<sup>&</sup>lt;sup>55</sup> Norton Rose Fulbright Domestic Content Explainer

# Appendix A. Points Structure for the GGRF Solar for All Competition Program Narrative and Self-Evaluation Form

This appendix summarizes the distribution of points available for the program narrative part of your application (175 points total) copied here from Section V. of the <u>NOFO</u>. In addition to the program narrative, applicants also must submit a program administration narrative (50 points) and programmatic capabilities and environmental results past performance (20 points) which should not be neglected.

The rightmost column has been left empty for you to use to evaluate your own application and prioritize which elements to bolster to make your application more competitive. You could either use the self-evaluation column by grading your own application, or (recommended) assign yourself a low, medium, or high grade.

Note that the names of the sub-categories are our own interpretation of what is being requested by EPA within the NOFO. You should refer to the NOFO for details and accuracy.

Category	Sub-Category	Points	Self-Evaluation
Impact Assessm	ent	20	
Meaningful Bene	efits	30	
	Savings	10	
	Access	5	
	Outage Resilience	5	
	Ownership	5	
	Workforce Investment	5	
<b>Distributed Sola</b>	r Market Strategy	30	
	NEM	6	
	ΤΡΟ	5	
	Interconnection	5	
	RPS	5	
	Community Solar Landscape	4	
	Jurisdictional Landscape	5	
Financial Assiste	ance	30	
	Maximize Number of Beneficiaries	10	
	Strategic and Comprehensive	10	
Prudency	of Storage and Enabling Upgrades	5	
	Long-Term Planning	5	
Project Deploym	ent Technical Assistance	20	
Wo	orkforce Training and Development	10	
	Interconnection Challenge Plan	5	
	Technical Assistance	5	



Equitable Access and Meaningful Involvement	30	
Plan		
Community Diversity Support	10	
Participatory Governance	10	
Education and Outreach Plan	5	
Customer Acquisition	5	
Program Planning Timeline and Workplan	15	
Timeliness	5	
Coordination	5	
Planning for Refinement and Commitment to Best	5	
Practices		
Program Narrative Total	175	



# Appendix B. Connecticut Energy Storage Solutions Incentive Rates

The following incentive charts are from Connecticut Green Bank's Energy Storage Solutions.<sup>57</sup> Connecticut offers a residential upfront incentive for battery storage for which qualified customers, including those who are underserved or low-income, can receive higher adders of up to \$7,500. Additionally, residential customers who reside in the top 10% of circuits with the highest and longest outages can qualify for the Grid Edge Adder.<sup>58</sup>

	Installed Capacity	Baseline	Underserved	Low-Income
Step 1	10 MW	\$200	\$300	\$400
Step 2	15 MW	\$170	\$300	\$400
Step 3	25 MW	\$130	\$300	\$400
Grid Edge	+ 50%	+ 50%	+ 50%	+ 50%
Adder				

#### Residential Upfront Incentive (\$/kWh)

A performance-based incentive is also available for batteries over a 10-year period based on average kW-AC contribution during the season, determined by actual system performance during events as indicated by inverter data, and not based on nameplate capacity.<sup>59</sup> The rates per year and season are detailed in the chart below.

#### Residential Performance Incentive (\$/kW)

All Customers				
Year	Year(s) 1-5		Year	rs 6-10
Season	Summer	Winter	Summer	Winter
Incentive	\$200	\$25	\$115	\$15

<sup>&</sup>lt;sup>59</sup> See Energy Storage Solutions Program Manual.



<sup>&</sup>lt;sup>57</sup> See Energy Storage Solutions Webpage.

<sup>&</sup>lt;sup>58</sup> See Energy Storage Solutions Grid Edge.

# Appendix C. Treatment of Certain Benefits in Annual Income Calculation

HUD released a memo entitled "<u>Treatment of Solar Benefits for Residents in Master-</u> <u>metered Buildings</u>" to guide stakeholders' compliance for HUD Multifamily Housing solar programs. In August 2023, <u>Notice H 2023–09</u> consolidated existing guidance on solar benefits and household income, including the "Treatment of Certain Benefits in Annual Income Calculation" chart below, which provides examples of benefits that can be offered to tenants without such benefits being considered income.

Benefit	Description	Treated as family income?
Job training and workforce development	A combination of social services, community support, job training and/or education that positions an individual for success in the workforce. These services exclude any cash benefits, reimbursements, stipends, or gift cards to a family.	This benefit is not annual income. Services provided are not included in the income calculation for determining family rent or eligibility for HUD assistance.
Additional support staff	Hiring of additional staff to serve residents and/or building needs. Examples include resident services staff, building security guards, leasing specialists, maintenance staff, etc.	This benefit is not annual income. Additional staff being hired to support the residents and/or building are not 2 Annual Income is defined in 24 CFR. 5.609 included in the income calculation for determining family rent or eligibility for HUD assistance.
Facility upgrades	Improvements to the building and/or its grounds. Examples include energy efficiency upgrades, playgrounds, community gardens, renovation, bike racks, etc.	This benefit is not annual income. Facility upgrades, including new building amenities, are not included in the annual income calculation for determining family rent or eligibility for HUD assistance

#### Treatment of Certain Benefits in Annual Income Calculation



Benefit	Description	Treated as family income?
	Free Wi-Fi provided throughout the	Free Wi-Fi is an amenity and is not
Free or reduced cost	building and/or in common areas or the	included in the family's annual
high-speed internet	owner negotiates Wi-Fi services for the	income. Discounted Wi-Fi services
service	building and the residents are offered a	would also not be treated as
	discounted service.	annual income to the family. <sup>60</sup>
	Programs and services aimed at	
	developing one's financial literacy to	
	improve personal finances. May include	This hap of it is not approximation
Financial literacy	access to free training, classes, and/or	This benefit is not annual income.
Financial literacy	resources related to budgeting, managing,	Services provided are not included
programs and services	and paying off debts, and understanding	in the income calculation for
services	credit and investment products. These	determining family rent or eligibility
	services exclude any cash benefits,	for HUD assistance.
	reimbursements, stipends, or gift cards to	
	a family.	
	Wellness programs and services provided	
	to residents as a preventive measure to	This benefit is not annual income.
	help avoid illness while improving and	Items that are an amenity are not
Wellness programs and services	maintaining general health. These services	included in the income calculation
and services	exclude any cash benefits,	for determining family rent or
	reimbursements, stipends, or gift cards to	eligibility for HUD assistance.
	a family.	
	s Free shuttle services for residents can	
	include a variety of paratransit services	This benefit is not annual income.
	that use small buses or vans to provide	Items that are an amenity are not
Shuttle services	shared mobility services. These services	included in the income calculation
	exclude any cash benefits,	for determining family rent or
	reimbursements, stipends, or gift cards to	eligibility for HUD assistance
	a family.	
	Hosting events for residents and/or	This benefit is not annual income.
Community events	providing financial support for resident	Items that are an amenity are not
and/or support for	associations. These services exclude any	included in the income calculation
resident associations	cash benefits, reimbursements, stipends,	for determining family rent or
	or gift cards to a family.	eligibility for HUD assistance.

<sup>&</sup>lt;sup>60</sup> The Affordable Connectivity Program discounts up to \$30 per month toward broadband service for eligible households and up to \$75 per month for qualifying households on qualifying Tribal lands. The benefit also provides up to a \$100 per household discount toward a one-time purchase of a computer, laptop, or tablet if the household contributes more than \$10 and less than \$50 toward the purchase through a participating broadband provider. HUD has previously determined that the FFC Affordable Connectivity Program (ACP) does not count as annual income, see: <a href="https://www.hud.gov/press/press\_releases\_media\_advisories/HUD\_No\_22\_090">https://www.hud.gov/press/press\_releases\_media\_advisories/HUD\_No\_22\_090</a>.



Benefit	Description	Treated as family income?
Increased operating or replacement reserves for the property	Accounts established by property owners to pay for operating and/or large property expenses like long-term major repairs and unexpected expenses, like emergencies.	This benefit is not annual income. Items that are an amenity are not included in the income calculation for determining family rent or eligibility for HUD assistance
Resilience center	Creation or designation of a space to provide critical services during a power outage and/or a weather-induced extreme event. Examples include community facilities for cooling or heating during periods of extreme heat or cold and access to refrigeration, power to charge devices, and telecommunications during a power outage.	This benefit is not annual income. Access to community facilities is not included in the income calculation for determining family rent or eligibility for HUD assistance.
Non-monetary donations	Non-monetary, in-kind donations, such as food, clothing, or toiletries.	HUD cannot definitively say whether this benefit would be counted as annual income to a family. A number of factors must be considered, including the frequency of the nonmonetary donations.
Gift cards or cash payments	Gift cards provided to families, including gift cards for gas, groceries, and department stores.	Generally, gift cards and cash payments to a family would be included in family annual income unless an income exclusion under 24 CFR 5.609(c) applies. For example, if a family receives one gift card, it would likely be excluded as a temporary, nonrecurring, or sporadic gift under 24 CFR 5.609(c)(9). Or, if a family receives one lump sum cash payment, it would be excluded as a lumpsum addition to family assets under 24 CFR 5.609(c)(3).



# Appendix D. NOFO Household Savings Guidance Excerpt

This information is available on page 78 of the NOFO.

"The first of the five meaningful benefits of residential rooftop and residential-serving community solar is "household savings", which is defined as delivering a benefit of at least 20% of average household's electricity bill, including households that do not have individual electricity bills.

Applicants should calculate 20% household savings from the average electricity expenditures of the average household in the utility territory. This financial benefit does not need to be calculated for each individual household and can be based on averages in the utility territory the applicant is serving. Applicants should calibrate the calculation of this financial benefit to the frequency financial benefits are delivered to the households (i.e., monthly bill credits should deliver 20% household savings based on the monthly electricity bill). Each applicant will need to design a financial subsidy or product that delivers this financial benefit or the equivalent to all households served under this program.

Applicants may consider working with electric utilities and using data from the U.S. Energy Information Administration (including the <u>Residential Energy Consumption Survey</u> and <u>electricity</u> data) to calculate the average household annual utility costs.

Applicants will need to deliver these benefits net of any costs households incur from participating in the program. For example, if the program requires applicants to pay a subscriber fee, then the savings must exceed the fee so that households still experience a financial benefit of 20% the average household electricity bill. Applicants should ensure that if the program incurs any indirect costs on households, such as an increase in tax burden, the household savings calculation incorporates those costs and exceeds the 20% household savings accordingly.

For additional HUD Multi-family buildings, see <u>guidance from U.S. Department of Housing</u> and <u>Urban Development (HUD)</u> on how to treat on-bill virtual net metering credits.

Delivering household savings for projects serving households who do not receive individual electricity bills (e.g., households master-metered, multi-family buildings) requires additional consideration since typically these savings are applied to electricity bills. For these households, household savings should be delivered as 20% the average household electricity bill as a financial or non-financial benefit with an equivalent financial value that meaningfully improves the lives of households directly, as described in guidance from U.S. Department of Housing and Urban Development. Applicants should explain how the program will appropriately honor the household savings benefit for households without



electricity bills. For example, if a building is delivering household savings as a financially equivalent one-time investment, the value of the one-time investment should be calculated as if households benefiting from the program received 20% household savings for the entire lifetime of the asset."



# Appendix E. Selected Tax Credit Definitions

#### LOW-INCOME COMMUNITIES

"Category 1 facilities" may be eligible for the LMI ITC Adder if they are located in a lowincome community as defined by the "New Markets Tax Credits", i.e., <u>Section 45D(e)(1) of</u> <u>the Internal Revenue Code</u>. This means a census tract:

- A. Where the poverty rate is at least 20%, or
- B. Where the median family income does not exceed 80% of *statewide* median family income, or
- C. If within a metropolitan area, where the median family income for such tract does not exceed 80% of the *greater* of *statewide* median family income or the *metropolitan area* median family income.

DOE published a new map of these areas. It is available here, along with some criteria that Treasury will use to prioritize applications (See Section 4.3.2 (*Prioritization Rules of the LMI ITC Adder*) above):

https://experience.arcgis.com/experience/12227d891a4d471497ac13f60fffd822/page/Pag

#### **INDIAN LAND**

"Category 2 facilities" may be eligible for the LMI ITC Adder if they are located on Indian land is, as defined in Section 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2)):

- A. Any land located within the boundaries of an <u>Indian reservation</u>, pueblo, or rancheria;
- B. Any land not located within the boundaries of an <u>Indian reservation</u>, pueblo, or rancheria, the title to which is held
  - i. in trust by the United States for the benefit of an <u>Indian tribe</u> or an individual Indian;
  - ii. by an <u>Indian tribe</u> or an individual Indian, subject to restriction against alienation under laws of the United States; or
  - iii. by a dependent Indian community;
- C. Land that is owned by an <u>Indian tribe</u> and was conveyed by the United States to a <u>Native Corporation</u> pursuant to the <u>Alaska Native Claims Settlement Act</u> (43 <u>U.S.C. 1601</u> et seq.), or that was conveyed by the United States to a <u>Native</u> <u>Corporation</u> in exchange for such land;
- D. Any land located in a census tract in which the majority of residents are Natives (as defined in Section 3(b) of the <u>Alaska Native Claims Settlement Act</u> (<u>43 U.S.C.</u> <u>1602(b)</u>); and



E. Any land located in a census tract in which the majority of residents are persons who are enrolled members of a federally recognized Tribe or village.

#### **ENERGY COMMUNITIES**

The Energy Community ITC Adder is available for projects sited in any area designated as an "<u>energy community</u>" under <u>26 U.S.C § 45(b)(11)(B)</u> (the **Energy Communities**) for purposes of benefitting from the Energy Community ITC Adder, i.e.:

- (1) A brownfield site as defined <u>42 U.S.C. § 9601(39);</u> or
- (2) A metropolitan statistical area or non-metropolitan statistical area which:
  - a) Has (or, at any time during the period beginning after December 31, 2009, had) 0.17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport, or storage of coal, oil, or natural gas (as determined by the Secretary of the Treasury or her delegate), and
  - b) Has an unemployment rate at or above the national average unemployment rate for the previous year (as determined by the Secretary of the Treasury or her delegate); or
- (3) A census tract:
  - a) In which:
    - i) After December 31, 1999, a coal mine has closed, or
    - ii) After December 31, 2009, a coal-fired electric generating unit has been retired, or
  - b) A census tract directly adjoining to any census tract described above.

#### **CATEGORY 3 PROJECT GROSS FINANCIAL VALUE**

Under §1.48(e)-1(e) (*Financial benefits for a Category 3 Facility*) of the Final Regulations, gross financial value of the annual energy produced by the facility is calculated as the sum of:

- The total self-consumed kilowatt-hours produced by the qualified solar or wind facility multiplied by the applicable building's metered volumetric price of electricity,
- ii) The total exported kilowatt-hours produced by the qualified solar or wind facility multiplied by the applicable building's volumetric export compensation rate for solar or wind kilowatt-hours, and
- iii) The sale of any attributes associated with the facility's production (including, for example, any Federal, State, or Tribal renewable energy tax credits or incentives), if separate from the metered price of electricity or export compensation rate.



#### **CATEGORY 3 PROJECT NET FINANCIAL VALUE**

Under §1.48(e)-1(e) (*Financial benefits for a Category 3 Facility*) of the Final Regulations, net financial value is defined different depending on whether the facility also owns the energy asset.

- i) If the facility and Qualified Residential Property are commonly owned, net financial value is defined as the gross financial value of the annual energy produced minus the annual average (or levelized) cost of the qualified solar or wind facility over the useful life of the facility (including debt service, maintenance, replacement reserve, capital expenditures, and any other costs associated with constructing, maintaining, and operating the facility).
- ii) If the facility and the Qualified Residential Property are not commonly owned and the facility owner enters into a PPA or other contract for energy services with the Qualified Residential Property owner and/or building occupants, net financial value is defined as the gross financial value of the annual energy produced minus any payments made by the building owner and/or building occupants to the facility owner for energy services associated with the facility in a given year.

