Sunshine for All: A Survey of Statewide Low-Income Solar Programs



Prepared for The Environmental Law & Policy Center

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Published October 2021

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Please note that this paper was written during the COVID-19 pandemic. Some data from March 2020 to the time of publication may have been affected by program interruptions and operational adaptations.



Acknowledgements

I appreciate the peer review and valuable feedback provided by the following reviewers:

MeLena Hessel Senior Policy Advocate, Environmental Law & Policy Center

Andy Olsen Senior Policy Advocate, Environmental Law & Policy Center

Thank you Erin Fitzgerald, Sophie Lemisch (Environmental Law & Policy Center), **Don Wichert**, Devon Rood (Arizona Public Service), Zoey Burrows (GRID Alternatives), Jorge Rodriguez (Southern California Edison), **Robert Wright** (Southern California Edison), Eduyng Castano (Southern California Edison), Marisa Villarreal (Solar on Multifamily Affordable Housing), Thomas Bartholomew (D.C. Department of Energy & Environment), Gwen Yamamoto Lau (Hawaii Green Infrastructure Authority), Joanna Racho (Elevate), **Eric Steltzer** (Massachusetts Department of Energy Resources), Paul Helstrom (Minnesota Power), Katie Frye (Minnesota Power), Alexandre Mancuso da Cunha (NV Energy), and Matt Getchell (Energy Trust of Oregon) for your essential contributions in completing research for this project.





So you're thinking about a low-income solar program . . .

"There are no passengers on Spaceship Earth. We are all crew." — Marshall McLuhan

Despite the increasing prevalence and affordability of solar power, millions of low-income Americans lack access to clean energy. As a result, statewide programs have emerged to bridge this gap by providing financial incentives for solar systems for low-income individuals. Previous research has evaluated individual programs without comparing practices and results across all active initiatives. This study uses data from twelve statewide low-income solar programs and interviews with their administrators to identify **common obstacles, effective solutions, and best practices**. Resultant findings indicate that **accessibility, outreach, and environmental justice** are key components of a successful low-income solar program.

CJ Koepp

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"Environmental justice, for those of you who may not be familiar with the term, goes something like this: no community should be saddled with more environmental burdens and less environmental benefits than any other." — Majora Carter



Millions of low-income households in the United States face an energy burden higher than their wealthier peers yet cannot access the environmental and economic benefits of local solar resources. As solar systems become increasingly widespread and affordable, the nation's climate change response must include socioeconomically marginalized communities.

Low-income solar programs can help to address the disproportionately high energy burdens and pollution faced by underserved communities by providing financial relief to households struggling with volatile utility bills and local sources of clean energy. Furthermore, programs offering solar workforce development can open the door to living-wage jobs in the rapidly expanding solar industry.

At the time of publication, twelve statewide programs work to provide financial incentives for single family, multifamily, and community solar systems for low- to moderate-income residents. Each program takes a different approach, but all share the same goal: **to reduce the environmental burdens and increase the environmental benefits of lowincome populations by expanding their access to solar power.**

Program Map

Low-income solar programs included in this research include only statewide programs actively incentivizing solar electric systems for low-income households as of 2021.

ARIZONA

Solar Communities Program

CALIFORNIA

Single-Family Affordable Solar Homes Program

CALIFORNIA

Multifamily Affordable Solar Housing Program

CALIFORNIA

Solar on Multifamily Affordable Housing Program

Single-Family Solar Homes Program

CALIFORNIA Disadvantaged Communities

DISTRICT OF COLUMBIA

Solar for All Program

HAWAII

Green Energy Market Securitization Program ILLINOIS

Solar for All Program

MASSACHUSETTS

Solar Massachusetts Renewable Target Program

OREGON

Solar Within Reach

MINNESOTA

Low Income Solar Program

NEVADA Lower Income Solar Energy Program

WA ME MT ND OR MN ID ٧Y WI SD СТ WY MI RI PA IA -NJ NE NV OH DE ΪL IN UT CO MD CA VA KS MO DC KY NC TN OK ΑZ SC NM AR GA AL MS ТΧ LA FL AK

Altogether, these programs have provided households nationwide with over 740 megawatts of locally-sited clean energy. The bar graph below depicts the maximum power output of all solar installations funded by these initiatives, both over the course of the most recent (program or calendar) year and throughout the history of the program.

Generating Capacity in MW



To provide a more proportional reflection of data collected, an identical graph is provided below with the omission of projects sponsored by the Solar Massachusetts Renewable Target Program due to their sizeable generating capacity.



Some low-income solar programs have prioritized a greater number of smaller installations (such as single-family solar arrays) while others have devoted their resources to a smaller number of greater installations (for example, community solar projects). The bar graph below depicts the total number of solar system installations completed by programs surveyed, both over the course of the most recent (program or calendar) year and throughout the history of the program.

Installations Completed



To provide a more proportional reflection of data collected, an identical graph is provided below with the omission of projects sponsored by the Solar Massachusetts Renewable Target Program due to their sizeable number of installations.





Accessibility

Increasing equitable access to solar means that solar energy is **affordable and available** for all low-income individuals and communities.

Solutions

- Design programs to be simple, adaptable, and predictable
- Deploy **multifamily and community solar**
- **Reduce or eliminate the upfront cost** of solar system installation
- Offer customers on-bill repayment
- Source funding from **Community Development Financial Institutions**, **Community Development Entities**, and green banks



Why accessibility?

Low-income households encounter numerous barriers to services and technologies which render clean energy more affordable, such as solar photovoltaic or energy efficiency upgrades. These obstacles may include a lack of qualifying credit, inability to finance upgrades, limited energy and financial literacy, or renting rather than owning their homes. In this section, I discuss key methods for reducing or eliminating these barriers while addressing the energy burdens of lowincome customers.

Accessibility: Problems & Solutions

Problem *Residential solar systems are unsuitable for nearly three-quarters of residential rooftops in the United States.* Low-income communities are more likely to reside in multifamily and affordable housing units, limiting their control over decisions about energy sources and utilities. Individuals may move, and households may have inadequate solar resources (such as shading or poor roof conditions).



Solution

A low-income multifamily solar program can help affordable housing providers, building owners, or large apartment complexes install solar for their tenants' benefit. Decreasing energy use and costs through solar facilitates sustainable operating budgets and tenant services without increasing rental expenses for occupants. Simply by being a resident of the building, customers receive the financial and environmental benefits of solar energy, reducing the need for administrators to process individual applications. Multifamily solar can offset electricity use for tenants or common areas and be hooked up via a master meter, individual meters, or supply bill credits via virtual net energy metering (or, VNEM) in states which have enabled VNEM.

Successful strategies include:

- offering financial incentives that ensure benefits reach tenants,
- enabling virtual net energy metering if possible, and
- providing **technical assistance** to housing providers, participating contractors, and service providers.

Solution

Community solar allows multiple customers to subscribe to, or participate in, solar energy projects located elsewhere in their community. Participants receive a credit on their utility bill that clearly and properly compensates them for the long-term value of the clean energy produced. Community solar can make the most of siting potential in an area to maximize deployment and lower costs, as well as make securing financing for projects with low-income participants easier due to the simple transfer of subscriptions.



Successful strategies include:

- designing *flexible policies* to meet customers' different preferences and finances,
- providing immediate savings with no upfront or ongoing costs,
- securing **anchor subscribers** to underwrite low-credit participants and mitigate investor risk, and
- **collaborating with local communities and organizations** on siting to promote visibility and community connection.



Low-income solar program models can include **single-family solar**, which allows homeowners to install solar systems directly on their property to meet some or all of their energy needs; **multifamily solar**, so both property owners and tenants of multifamily residences can share a solar system; and/or **community solar**, wherein customers benefit from a shared offsite solar project. Additionally, some programs extend eligibility for financial incentives to **nonprofit organizations** and **public facilities** (particularly those intended to serve low-income communities).

	Single Family	Multifamily	Community Solar	Nonprofits	Public Facilities
AZ Solar Communities Program	\checkmark	\checkmark	×	\checkmark	\checkmark
CA Single Family Affordable Solar Homes Program	\checkmark	×	×	×	×
CA Disadvantaged Communities Single-Family Solar Homes Program	\checkmark	×	×	×	×
CA Multifamily Affordable Solar Housing Program	×	\checkmark	×	\checkmark	×
CA Solar on Multifamily Affordable Housing Program	×	\checkmark	×	\checkmark	×
DC Solar For All Program	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
HI Green Energy Money Saver Program	\checkmark	\checkmark	×	\checkmark	×
IL Solar For All Program	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MA Solar Massachusetts Renewable Target Program	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MN Low-Income Solar Program	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
NV Lower Income Solar Energy Program	×	\checkmark	×	\checkmark	\checkmark
OR Solar Within Reach Program	\checkmark	×	×	×	×

Problem

Solution

Low-income communities have **limited access to capital, disposable income, and reasonable credit options**. Additionally, many individuals may not be eligible for state and federal tax incentives for solar if they do not fall within a qualifying bracket.

Avoid:

- providing loans, loan forgiveness, and loan guarantees as a primary financial incentive,
- using credit requirements to determine program eligibility, and
- offering tax-based incentives without refunds, direct pay options, and/or a thirdparty financing entity which can monetize the credit available.

Reducing or eliminating customers' upfront cost of installation addresses the financial barriers of going solar for low-income individuals.

Successful strategies include:

- offering incentives such as grants, upfront rebates, and third-party ownership, and
- considering past bill repayment history to determine eligibility rather than credit scores.





of programs surveyed offer **loans** as as a primary or supplemental financial incentive.



of programs surveyed offer **loan forgiveness** or loan guarantees as a financial incentive. 42%

of programs surveyed offer tax credit as a supplemental financial incentive.



of programs surveyed utilize **credit checks** to determine an applicant's eligibility.



of programs surveyed utilize **bill payment history** to determine an applicant's eligibility.



of programs surveyed **reduce** or eliminate the upfront cost of solar system installations.



of programs surveyed offer **grants** as a primary or supplemental financial incentive.



of programs surveyed offer **rebates** as a supplemental financial incentive.



of programs surveyed offer **third-party ownership** as a primary or supplemental financial incentive.

Complicated program methodologies and processes decrease interest and participation among customers and solar providers.

Problem



of programs surveyed offer **Solar Renewable Energy Credits**, which may be purchased by

utilities to meet solar quotas set by statewide renewable portfolio standards, as a supplemental performance-based incentive.



of programs surveyed allow or required a **second energy bill** to be charged to program participants despite the confusion that can be caused by duplicate bills.

Solution

Program design should be **simple, adaptable, and predictable**, and obstacles to enrollment should be **minimal**.

Successful strategies include:

- minimizing paperwork required to apply or enroll,
- expanding program sign-up methods,
- allowing applicants to self-certify income,
- offering a wide range of incentives,
- including translation services for non-native English speakers, and
- providing **application assistance** as needed.

Avoid:

- complicated certification processes,
- requiring Internet access or a fee to apply,
- strict deadlines and rules under proposal requests,
- complex or time-consuming processes for selling Solar Renewable Energy Credits (or SRECs), and
- second energy bills.

Solution

On-bill financing allows a third party to pay the upfront cost of an energy upgrade, which is repaid by the customer over time through payments on their reduced utility bill. Because loan repayment is tied to the meter or property rather than the individual, financial institutions may use a reliable existing billing system to recover payment and the loan may be transferred to a new homeowner in the event of a sale or move.

Successful strategies include:

- establishing a minimum bill savings requirement, and
- **low or no interest rates** to contribute to bill neutrality.

On-bill financing or repayment is provided by



of programs surveyed.

Problem

Considering the high demand and lack of federal incentives for low-income solar energy, it can be difficult to source adequate funding for all applications submitted.



Each program surveyed is funded by state-level incentives developed to support energy efficiency, renewable energy, and low-income assistance programs (or, **public benefits funds**); revenue from California's **cap-and-trade program**; **utilities** (including compliance fees paid by electricity suppliers, revenue streams, and fees charged to customers by utilities as **rate reduction bonds**) or some combination of the three. A program's funding source largely depends on who or what initiated the program; however, Community Development Financial Institutions, Community Development Entities, and green banks provide opportunities to supplement a budget if it is unable to match consumer demand.



Community Development Financial Institutions (CDFIs) and **Community Development Entities** (CDEs) are mission-driven financial institutions, corporations, and partnerships founded to empower lowincome communities. CDFIs and CDEs have access to and experience with affordable financing strategies, government grants, tax credits, technical assistance, and other incentives.

Solution

Green banks are fully- or partially-funded state financial institutions that can offer affordable financing for clean energy projects. They can provide credit enforcement mechanisms, offer low-interest loans for project developers, and partner with private institutions for innovative financing techniques and long-term market development. Green banks can also reduce risk associated with financing low-income solar projects by guaranteeing the loan itself or offering a fund to which financiers can apply for repayment of defaulted loans.



Solution



Case Study: SMART Thinking

In Massachusetts, the **Solar Massachusetts Renewable Target (SMART) Program** has supported a whopping number of solar system installations – 25,418, to be exact – thanks to their tariff-based incentives paid directly by utilities to a broad and inclusive range of system owners. Community solar projects as well as solar systems for single-family residences, multifamily buildings, nonprofit organizations, and public facilities are all eligible for compensation, which can be received through net metering, qualifying facility tariffs, or an alternative on-bill crediting mechanism.

The graph below depicts the average annual and total budgets of all other programs.



Percentage of Program Budget Allocated to Administrative Overhead



Total Staff Size (FTE)



Of the twelve programs surveyed,



approve applications on a **first come**, **first served** basis.



approve applications using a **point method evaluation**.



charge an **application fee**.



determine program eligibility based in part upon the **address of the applicant**.



require **Internet access** to apply.



include an **income cap** as an eligibility requirement.



Outreach consists of a two-way communication between a program and its potential recipients to foster mutual understanding, promote participation, and provide information and education. A key component of outreach is mobility: in other words, meeting potential customers where they are.



- Understand the unique concerns, needs, and questions of low-income communities
- Work with community leaders and local action organizations
- Develop creative outreach tactics
- Offer financial, technological, and energy education
- Provide consumer protection support



Why outreach?

Reaching potential customers has been among the greatest challenges faced by low-income solar programs. Low-income customers may face language barriers, a lack of Internet access, or the time and resources to contemplate energy opportunities. Furthermore, because low-income demographics have been largely untargeted by solar marketing in the past, they may be skeptical of offers from unfamiliar entities or proposals which seem too good to be true.



This doesn't mean outreach is impossible—rather, low-income customers require alternate approaches which focus on establishing mutual understanding and trust. This section lays out some common obstacles and proven strategies for customer acquisition tailored to low-income individuals.

Outreach: Problems & Solutions

Problem *Reaching potential customers is a significant challenge.* Many demographics targeted by low-income solar programs are particularly difficult to reach, such as renters, foreign language-speaking households, residents in rural areas, seniors, undocumented immigrants, and people with disabilities.

Solution *Relational organizing is key!* Especially for less established programs or administrators, it's important to have a trusted messenger. Local action organizations and community leaders are best suited to advocate for and talk to community members. They can help individuals navigate different programs, provide customer acquisition assistance, and build up trust and rapport with target communities. They're often well-situated to support development of solar in their communities given their networks, expertise, and history of economic and social development work. However, they tend to be resource-constrained and tasked with tackling a wide range of issues to meet community needs.

Successful strategies include:

- working with local action organizations, community leaders, low-income developers, program administrators, IOUs, state housing departments, and homestead organizations to identify potential customers, and
- identifying communities who face energy insecurities but may not be participating in utility programs.

Solution *Get creative with your outreach tactics!* Meet community members where they are by tabling or advertise over radio, print, and social media. Beware: these efforts may have limited effect if you are not yet a well-established fixture in the community.

Successful strategies include:

- deploying targeted mail or robo-call campaigns,
- reaching out to recipients of other utility support programs or programs for which low-income individuals already qualify (i.e. LIHEAP, SNAP, or TANA), and
- offering direct signups at government benefit centers for customers.

Case Study: Outreach for All

While Washington D.C.'s **Solar For All Program** has acquired new customers using a variety of strategies, two outreach initiatives have been particularly successful. Firstly, their direct mail campaign targets enrollees of other energy assistance programs intended to support low-income households. Secondly, they offer direct enrollment at government benefit centers where potential participants have the time, mindset, and documentation they need to sign up. These initiatives are supplemented by a multilingual hotline, email address, and outreach team ready to answer any questions potential customers may have.





Solution



Often the targets of dishonest marketers, **low-income customers may be distrustful** when it comes to offers of utility bill savings or affordable solar energy.



of the twelve programs surveyed publish **publicly available performance reports**. Understand the unique questions, and concerns, low-income needs of customers. Programs should meet customers where they are and be prepared to answer questions respectfully and respond to unanticipated complications.

Successful strategies include:

- collecting pre-program surveys to understand the needs of low-income individuals,
- publishing publicly available performance reports, and
- maintaining a hotline or email address for questions.

Consumer protection support provided through the program can ensure that state and federal consumer protection laws are being adhered to and enforced.



of the twelve programs surveyed provide customers with **consumer protection support**.



Who is expected to contribute to outreach efforts?

Transparency, education, and enforcement of state and federal consumer protection laws are key to consumer protection when it comes to low-income solar program participants. Additional program elements can help overcome consumer skepticism and reward trustworthy providers. Of the twelve programs surveyed,



offer **solar panel warranties** to protect consumers against manufacturing defects, environmental issues, premature wear and tear, and more.

provide **inspections before installing solar systems** to ensure that a customer's roof and electrical system can handle the addition of solar panels and racking equipment.





include **an option to provide feedback** (such as an exit survey or hotline) to gauge customer satisfaction and identify areas for improvement within the program.

inspect solar panel systems post-installation to ensure that the systems have been installed correctly, do not pose a fire hazard, and operate efficiently.

Problem

Because low-income communities generally have not been targeted for solar development in the past, **they may not be immediately familiar with the benefits of solar programs.** Consumers should understand what they are agreeing to and not be subject to unfair, abusive, or deceptive practices.





of programs surveyed include an **educational component** to address financial and energy illiteracy.

Solution

Education should play a central role in low-income solar programs. Clearly communicating the long-term benefits of engaging in solar power and expanding information distribution channels are critical to address financial and energy illiteracy. Programs should be designed to protect consumers from risky financial arrangements, and should engage in a clear review of the substantive terms of the agreement with their customers.



Environmental Justice

Environmental justice is achieved when everyone receives **equal protection from environmental hazards** and **equal access to decision-making processes** about the environment in which they live, learn, and work.

Solutions

- **Prioritize low-income communities, organizations, and leaders** in decisionmaking processes
- Provide **immediate and tangible economic benefits** for low-income program participants
- Source funding from **utilities**, **private sectors**, **and energy suppliers**
- **Complement existing programs** to reduce overall household energy burden
- Invest in overburdened communities
- Offer solar workforce development



Why environmental justice?

Environmental justice is a human right. Lowincome communities, particularly communities of color, face higher rates of exposure to air and water pollution than their wealthier peers as a result of discriminatory siting, unequal regulation enforcement, and limited access to political power, education, and legal expertise. In this section, I discuss methods low-income solar programs can employ to address environmental injustices and support low-income communities.

I attempted to review data on average customer savings and demographics through low-income solar programs surveyed, but notably, none had substantial data collected nor published.

Environmental Justice: Problems & Solutions

Problem *Low-income communities and communities of color often lack access to environmental decision-making processes.* These populations are often unable to protect their local environments because they cannot afford the technical and legal expertise required to fight siting for pollution-producing facilities, lack access to information about the health effects of environmental hazards, or do not receive important information in their native language.



Solution *Disadvantaged population groups should be at the front and center of decisionmaking processes.* Low-income solar programs should prioritize community engagement throughout the entirety of program design, planning, implementation, and ongoing operations, ideally through partnerships with local community organizations and *leaders.* Programs should offer opportunities for participants to provide feedback to learn more about the experience of their customers and remedy errors or oversights.

Solution *Grants and technical assistance help community-based organizations* engage with solar installers, policymakers, and planners; assist with outreach to build support for solar adoption and spread information about the program; help with project development; and provide resources to support communication efforts with low-income customers.



58%

of programs surveyed incentivize projects that meaningfully involve, hire, or serve low-income community members.



of programs surveyed involve community partners, leaders, and/ or organizations in their outreach efforts.



of programs surveyed offer compensation for outreach and promotion as a financial incentive to community partners.



Low-income households spend a disproportionately high portion of their income on energy as a result of lower incomes, less efficient housing, and limited access to energy efficiency programs.



of the twelve programs surveyed include **production payments** as a supplemental financial incentive in order to fully compensate lowincome solar projects.



of the twelve programs surveyed offer **net metering** as a supplemental financial incentive.



of the twelve programs surveyed include a **bill savings requirement**.

Low-income solar programs should provide **immediate and tangible financial benefits** for participants and fully compensate low-income solar projects for the services and benefits they provide. Maximized direct incentives should take priority to effectively address disproportionately high household energy burdens.

Successful strategies include:

- subsidizing the subscription price for community solar or the cost of PV systems for customers,
- **supplementing bill credits** received by customers,
- returning the full retail value of solar power produced to customers via **net metering**,
- delivering direct cash payments to community solar facilities serving lowincome households, and
- including a bill savings requirement for program participants to ensure customers receive tangible economic benefits from outset.

Low-income solar programs should **complement existing programs** to reduce overall household energy burdens, increase energy efficiency, and offer a greater bill impact.

Successful strategies include:

- complementing national, statewide, and local energy efficiency or assistance programs (i.e. LIHEAP),
- complementing national, statewide, and local weatherization programs (i.e. WAP), and
- combining and/or coordinating existing solar incentive programs.



of the twelve programs surveyed include an energy efficiency or conservation component.

Problem

Overburdened communities, especially communities of color, are **disproportionately subject to fossil fuel development** and subsequently face **greater exposure to pollutants**.



Solution

Low-income solar programs should advance solar development through **place-based investments** specifically for areas (such as neighborhoods) exposed to disproportionate levels of pollution. Place-based investments can build community wealth and development without displacement by supporting local as well as minority- and women-owned businesses while meeting community-specific needs.

Solution

Polluting entities with access to financial resources such as **utilities**, **energy suppliers**, **and for-profit businesses** could pay to comply with renewable portfolio standards. This revenue could then be redirected towards solar projects serving low-income communities.





of programs surveyed prioritize projects in overburdened communities.



of programs surveyed reserve funding for projects in overburdened communities.



of programs surveyed incentivize projects supporting women- or minority-owned businesses.



Problem Low-income individuals face **barriers to employment**, including a lack of livingwage jobs in underserved communities, transportation costs, and limited access to affordable education.

Low-income solar programs should include a **workforce development component** that offers living-wage job training opportunities and direct pathways to employment for program participants. Job training should offer hands-on training opportunities that prepare participants for work in the expanding solar industry. Programs could also support labor unions by requiring or incentivizing unionized labor.

Successful strategies include:

- **engaging in outreach** to local educational institutions, employment organizations, housing authorities, and other entities designed to serve low-income populations,
- including appropriate wrap-around services for participants such as funding for childcare and transportation,
- incorporating professional and life skill development, and
- **establishing partnerships** with local solar industries, unions, and companies to promote hiring.

Case Study: California Trainin'

The Single-Family Affordable Solar Homes (SASH) Program, Disadvantaged Communities Single-Family Solar Homes (DAC-SASH) Program, Multifamily Affordable Solar Housing (MASH) Program, and Solar on Multifamily Affordable Housing (SOMAH) Program – in other words, all four lowincome solar programs in California – include solar workforce development and job training initiatives. These opportunities empower underserved communities by offering direct pathways to employment and creating a local workforce of skilled laborers to support the state's expanding solar job sector.





development component.



Conclusion

Low-income solar programs are an effective antidote to the disproportionately high energy burdens and pollution exposure faced by working class Americans. I hope that this research improves new and existing low-income solar programs by providing information, inspiration, and ideas to better expand equitable access to solar energy for underserved and overburdened communities by prioritizing program accessibility, outreach to potential customers, and environmental justice for all.



Appendix: Program Overviews

Solar Communities Program

Arizona

The Solar Communities Program was launched in 2018 by Arizona Public Service, an investor-owned utility which oversees and administers the program. The program is intended to expand access to solar energy to a broader group of customers by providing distributed generation for low-income residents, nonprofits, and public facilities.

Single-Family Affordable Solar Homes Program California

The California Solar Initiative's Single-Family Affordable Solar Homes (or, SASH) Program began in 2008 as a result of CA Assembly Bill 2723. The program is overseen by the California Public Utilities Commission and managed by GRID Alternatives, a 501(c)(3) nonprofit organization. SASH provides low-income distributed generation to achieve its stated goals, which are to "decrease electricity usage by solar installation and reduce energy bills without increasing monthly expenses, provide incentives for solar systems for low-income participants, offer the power of solar and energy efficiency to homeowners, decrease the expense of solar ownership with a higher incentive than the General CSI Program, develop energy solutions that are environmentally and economically sustainable, and provide job training and employment opportunities in the solar and energy efficiency sectors of the economy."

Disadvantaged Communities Single-Family Solar Homes Program California

The Disadvantaged Communities - Single-Family Solar Homes Program (or, DAC-SASH) Program was launched in 2019 as a result of CA Assembly Bill 327. The program is overseen by the California Public Utilities Commission and administrated by GRID Alternatives, a 501(c)(3) nonprofit organization. DAC-SASH provides low-income distributed generation to achieve its stated goals, which are to "maximize financial savings for low-income households in economically and environmentally disadvantaged communities, enhance long-term economic self-sufficiency in low-income communities by providing community members with access to green jobs training and solar employment opportunities, ensure consumer protection and long-term benefit, provide education on energy efficiency and existing programs that can provide further benefits to families, and ensure robust participation and access for households in PG&E, SCE, and SDG&E territories."

Multifamily Affordable Solar Housing Program California

The Multifamily Affordable Solar Housing (or, MASH) Program was launched in 2009 as the low-income multifamily component within the California Solar Initiative program. The program is overseen by the California Public Utilities Commission and administered by two investor-owned utilities (Pacific Gas & Electric Company and Southern California Edison) and the Center for Sustainable Energy, a nonprofit energy program administration and advisory services organization. MASH offers low-income distributed generation to "stimulate the adoption of solar power in the affordable housing sector; improve energy utilization and overall quality of affordable housing through the application of solar and energy efficiency technologies; decrease electricity use and costs without increasing monthly household expenses for affordable housing building occupants; increase awareness and appreciation of the benefits of solar among affordable housing occupants in developers," In 2013, CA Assembly Bill 217 set additional goals for the program: "maximize the overall benefit to ratepayers; require participants who receive monetary incentives to enroll in the Energy Savings Assistance (ESA) program; and provide job training and employment opportunities in the solar energy and energy efficiency sectors of the economy."

Solar on Multifamily Affordable Housing California

The Solar on Multifamily Affordable Housing (or, SOMAH) Program was created in 2019 as a result of the California Public Utilities Commission's Decision D.17-12-022. The program is overseen by the California Public Utilities Commission and administered by three nonprofits: the Association for Energy Affordability (AEA), the Center for Sustainable Energy (CSE), and GRID Alternatives. The program is statutorily mandated to provide incentives for the installation and interconnection of at least 300 MW CEC-AC of solar generating capacity on qualified multifamily affordable housing statewide by December 31, 2030.

Solar for All Program District of Columbia

The Solar for All Program was launched in 2017 by the Renewable Portfolio Standard (RPS) Expansion Amendment Act of 2016. The program is overseen by the District of Columbia's Department of Energy and Environment (DOEE) and administered by the DOEE and the DC Sustainable Energy Utility, a nonprofit. The Solar for All Program provides distributed generation for low-income residents, nonprofits, and public facilities as well as low-income community solar in order to bring the benefits of solar energy to 100,000 low- to moderate-income families in the District of Columbia.

Green Energy Market Securitization Program Hawaii

The Green Energy Market Securitization (GEMS) Program was launched by the Hawaii Green Infrastructure Authority in 2014 as a result of Act 211, Session Laws of Hawaii 2013. The program is governed by both the Hawaii Public Utilities Commission and the Hawaii Green Infrastructure Authority and is administered by the latter. GEMS offers distributed generation for low-income residents and nonprofits and other underserved ratepayers to make clean energy improvements more affordable and accessible for Hawaii ratepayers.

Solar for All Program Illinois

The Illinois Solar for All Program was created as part of the Future Energy Jobs Act and launched in 2019. The program was developed by the Illinois Power Agency, an independent state agency, and is administered by Elevate Energy, a nonprofit organization. Illinois Solar for All provides incentives that help make solar more affordable for residential properties, facilities that house nonprofits and public agencies, and community solar projects serving customers with low-incomes in order to promote equitable access to the solar economy.

Solar Massachusetts Renewable Target Program

Massachusetts

The Solar Massachusetts Renewable Target (or, SMART) Program was created in 2018 by the Massachusetts Department of Energy Resources (DOER) by 225 CMR 20.00. The program is overseen by DOER and investor-owned utilities Eversource, National Grid, and Unitil. SMART is administered by CLEAResult, a private entity. The program includes distributed generation for low-income residents, nonprofits, and public facilities as well as low-income community solar to create a long-term sustainable solar incentive program that promotes cost-effective solar development in the Commonwealth.

Low Income Solar Program Minnesota

The Low Income Solar Program was launched in 2017 by investor-owned utility Minnesota Power, which also oversees and administers the program. The program is designed to "expand participation in solar power by funding projects that explore innovative options for meeting the challenges associated with solar often faced by low-income customers and explore a variety of program structures and models to determine which would best support a long-term solar market for low-income customers in our region" by offering distributed generation for low-income residents, nonprofits, and public facilities as well as low-income community solar.

Lower Income Solar Energy Program Nevada

The Lower Income Solar Energy Program (or, LISEP) was officially launched in 2018 by Senate Bill 145. The program is overseen by the Nevada Public Utilities Commission and administered by the Nevada Governor's Office of Energy and investor-owned utility NV Energy. LISEP is intended to "support the installation of solar energy systems and distributed energy systems at locations throughout the service territories of NV Energy that benefit lower-income customers, including, without limitation, homeless shelters, low-income housing developments and public entities, other than municipalities, that serve significant populations of low-income residents" by providing distributed generation for low-income residents, nonprofits, and public facilities.

Solar Within Reach Oregon

Solar Within Reach was launched in 2019 by Energy Trust of Oregon, an independent nonprofit organization which also oversees and administers the program. Solar Within Reach offers increased incentives to help make solar energy more affordable for income-qualified households.