

## UPDATE:

### Achieving Cooperative Community Equitable Solar Sources (ACCESS)

#### Research on Using Low Income Home Energy Assistance Program (LIHEAP) Funds to Achieve Solar Affordability for Co-op Communities in Need

##### Key Highlights

- The U.S. federally funded Low Income Home Energy Assistance Program (LIHEAP) offers grants to address the energy needs of those in need.
- In FY2023, Congress appropriated \$4 billion in block grants with another \$2 billion in supplemental funds. Under the Infrastructure Investment and Jobs Act, \$100 million has been added as a supplement for the same year. This funding is managed by the Department of Health and Human Services (HHS).
- NRECA members serve 92% of counties and county-equivalents defined by the U.S. government as Persistent Poverty Counties (PPCs).
- Through a project called ACCESS, the U.S. Department of Energy (DOE) awarded NRECA Research with funding to research ways to ensure that solar generation is available and affordable for consumers who have low-to-moderate-income levels (LMI).
- As part of this research, NRECA and its ACCESS project partners explored if LIHEAP funding may offer an opportunity to extend the benefits of solar energy to LMI consumers as a long-term solution for reducing energy burdens.

##### Background

In 2019, the U.S. Department of Energy (DOE), through the Solar Energy Technology Office (SETO), awarded NRECA Research funding to explore how to make solar energy affordable for rural communities with fewer financial resources. NRECA's project, [\*Achieving Cooperative Community Equitable Solar Sources \(ACCESS\)\*](#), the flagship project of our [\*Advancing Energy Access for All\*](#) initiative, explored and amplified the use of innovative, cost-effective energy access programs to serve co-op consumer-member households with low-to-moderate-incomes (LMI). The objective of this program is to reduce the soft costs in order to increase solar affordability, uptake, and savings for more communities, particularly for those communities with fewer financial resources. As part of its project objectives, ACCESS explored the hybridization of energy efficiency and solar programs. This included the possibility of leveraging federal energy assistance programs such as LIHEAP to extend the benefits of solar to LMI consumer-members.



The Low Income Home Energy Assistance Program (LIHEAP) is a U.S. federal government-funded program enacted in 1981 that aims to help low-income households with their energy needs. States, tribes and territories receive LIHEAP funds as block grants, which give them flexibility on how to use the funds and which households are eligible for funding assistance within established federal guidelines. LIHEAP funds can be used for managing costs related to home energy bills (heating and cooling), energy crises, weatherization assistance and minor home energy repairs.

### What is the impact on cooperatives?

Electric cooperatives serve an estimated 42 million people, which includes 92 percent of the United States’ [Persistent Poverty Counties \(PPCs\)](#).<sup>1</sup> PPCs are counties and county equivalents identified by the U.S. Census Bureau as having a very high percentage of households with incomes below the poverty level over a period of many years. In these economically depressed counties, the share of households with incomes below the poverty threshold ranges from 20 to 60 percent.<sup>2</sup>

Research has shown that, in general, low-income households spend a disproportionately higher percentage of their income on home energy bills when compared to higher-income households. In addition, rural households throughout the U.S. spend a higher share of household income on energy bills than urban/suburban households. Nationally, low-income rural households experience the highest median energy costs at 9 percent of household income, almost three times greater than the 3.1 percent median share for non-low-income rural households. Some low-income households are even worse off – in several regions, one-quarter of the low-income rural households have a median energy cost greater than 15 percent.<sup>3</sup> See Figure 1 for more information on the national median rural energy burden.

NATIONAL MEDIAN RURAL ENERGY BURDEN BY DEMOGRAPHIC		
Demographic		Rural
Total	Rural households	4.40%
	Metropolitan households	3.10%
Income	Low-income (<200% FPL)	9.00%
	Non-low-income	3.10%
Housing type	Manufactured	5.80%
	Small multifamily (2-4 units)	4.90%
	Large multifamily (5+ units)	4.60%
	Single-family	4.10%
Age	Elderly	5.60%
	Non-elderly	3.90%
Housing tenure	Renters	5.30%
	Owners	4.10%
Race	Nonwhite	5.10%
	White non-Hispanic	4.30%

**Figure 1: National Median Rural Energy Burden by Demographic**

Source: ACEEE “The High Cost of Energy in Rural America, July 2018”

To serve their communities and members who struggle to pay their bills, some co-ops have both developed their own energy assistance programs and utilized public programs, including LIHEAP. These co-ops are

<sup>1</sup> NRECA. “Electric Co-op Facts & Figures.” electric.coop, September 2023. <https://www.electric.coop/electric-cooperative-fact-sheet>

<sup>2</sup> A map showing areas of persistent poverty overlaid by electric cooperative service areas can be found at: <https://www.cooperative.com/programs-services/bts/Documents/Advisories/Member-Advisory-on-Persistent-Poverty-Counties-June-2018.pdf>

<sup>3</sup> <https://www.aceee.org/sites/default/files/publications/researchreports/u1806.pdf>

generally willing to set up and explore various opportunities to use established and innovative methods to serve their members and ensure energy access for all or to reduce energy burden. The breakout box provides some examples of the range of co-op programs designed to create choice and opportunity for members.

### Examples of Cooperative Programs to Help Consumer-Members Manage Energy Expenses

- On-Bill Financing/Pay as You Save (PAYS), as seen in Roanoke’s [Upgrade to \\$ave](#), Ouachita’s [HELP PAYS®](#) program, Midwest Energy’s [How\\$mart](#) program or San Miguel’s [I.Q. Programs](#).
- The [Help My House](#) pilot program established by the Electric Cooperatives of South Carolina.
- [Energy efficiency and weatherization models](#), such as those developed by the Electric Cooperatives of Arkansas.
- The growth of community solar programs, such as the collaboration between co-ops in Colorado and the [state energy office](#).
- Innovative rate plans, such as those developed by [Mid-Carolina Electric Cooperative](#) and [Cobb EMC](#).
- The increase in co-ops offering [broadband services](#) to their members.
- Prepay and various other energy access programs.
- Use of existing federal assistance programs designed to help reduce households’ energy bills, such as LIHEAP.

### What do cooperatives need to know?

Currently, most grantees of LIHEAP funds use the program to provide heating and cooling programs for consumers in need. Appendix A provides details on the current break-down of grantees and details on the qualifications for LIHEAP awards.

While the LIHEAP statute does not expressly call out renewable energy and photovoltaics (PVs) as a possible use of the LIHEAP funds, supplemental LIHEAP funding is available for current grantees to “receive competitive grants to implement **innovative** plans to help LIHEAP eligible households reduce their home energy vulnerability.” LIHEAP grantees would pursue this additional funding through the REACH<sup>4</sup> program. This supplemental funding has presented an opportunity for extending benefits to the LMI community in the past. As of the 2023 fiscal year, however, the REACH program has not received any additional funds.

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<sup>4</sup> Residential Energy Assistance Challenge Program (REACH): The law allows HHS to award supplemental LIHEAP funding for current grantees to receive competitive grants to implement innovative plans to help LIHEAP eligible households reduce their home energy vulnerability. <https://www.acf.hhs.gov/ocs/resource/liheap-fact-sheet-0>

LIHEAP is managed by the U.S. Department of Health and Human Services (HHS), while another energy assistance program for low-income consumers, the Weatherization Assistance Program (WAP),<sup>5</sup> is managed by the U.S. Department of Energy (DOE). The LIHEAP statute [section](#) referenced here gives grantees the flexibility to use LIHEAP funds for weatherization projects and to choose whether HHS, DOE, or a combination of both agencies' rules will be used to administer the projects. This gives grantees the opportunity to think creatively as to which weatherization projects to undertake for their communities. Section 2605(b)(16), also known as Assurance 16, also allows grantees to use LIHEAP funds to provide services that help households reduce their energy needs and by doing so, reduce their need for assistance.<sup>6</sup>

Examples exist of grantees who have explored using state-managed federal funds (including LIHEAP and WAP funds) to extend the benefits of solar energy and energy efficiency to low-income households in their communities. The following case studies indicate options for utilities interested in partnering with their states and local governments to extend the benefits of clean energy and weatherization to their LMI consumer-members. Potential partnerships could include a well-timed pilot opportunity or an effort to leverage existing assistance funds. Discussions on the use of funds in this manner take place with the state's office in charge of administering these funds. While the strategies are unique and targeted to the needs of each state/entity, co-ops may find these experiences useful as they explore designing their own LMI programs.

### Case Study 1: Colorado Energy Office (CO)

As an early adopter of community solar legislation in 2010, Colorado enabled innovation in the applications of community solar. In 2015, the Colorado Energy Office (CEO) launched a multi-faceted strategy to reduce energy burdens for LMI consumers through the deployment of community solar using funding from the U.S. Department of Energy Weatherization Assistance Program (WAP).<sup>7</sup> The CEO strategy included three goals:

- 1) Supporting LMI consumers through community solar projects,<sup>8</sup>
- 2) Incorporating solar energy into its weatherization program, and
- 3) Promoting utility investments in LMI solar programs.

While the community solar project did not use federal funding options – LIHEAP or WAP funds – CEO did pursue LIHEAP and WAP for the rooftop PV part of the program so that LMI households could benefit from rooftop solar energy as well. State recipients for LIHEAP and WAP can potentially use both pools of funding for PV deployment at LMI households.

While funds from LIHEAP and WAP can be used for PV, they have different approval and program requirements. CEO first pursued using WAP program funds for PV, and once it was granted approval, it also requested to use LIHEAP funds. Before WAP funds can be used for renewable energy, DOE must approve a state's plan, which must show that the use of solar energy as a weatherization measure in general

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<sup>5</sup> <https://www.energy.gov/eere/wap/weatherization-assistance-program>

<sup>6</sup> <https://liheapch.acf.hhs.gov/pubs/LCIssueBriefs/solar/renewable.pdf>

<sup>7</sup> <https://www.nrel.gov/docs/fy18osti/70965.pdf>

<sup>8</sup> For the community solar portion of the program, CEO awarded GRID Alternatives, a 501(c)3 nonprofit low-income solar developer, a \$1.2 million grant with a compulsory 2:1 funding match from utility partners. GRID Alternatives partnered with eight utilities including the following co-ops: Empire Electric, Delta-Montrose, Grand Valley, Holy Cross, Poudre Valley, San Miguel and Yampa Valley

and in specific individual projects is likely to be cost-effective.<sup>9</sup> CEO worked with DOE to identify a method for proving effectiveness of the projects that could be approved by DOE.

For LIHEAP funding for solar energy projects, CEO followed a different path. The staff worked with the Division of Food and Energy Assistance (DFEA) within the Colorado Office of Economic Security, because LIHEAP funds are distributed by HHS to the state via DFEA. Although Colorado's LIHEAP funds have been used for weatherization purposes before, this project marked the first time PV was included as a weatherization tool in the state's LIHEAP plan. The plan also included rooftop PV as an "other weatherization" measure that could be used when changing a key heating system. HHS approved the plan.<sup>10,11</sup>

For more detailed information on CEO's approach, lessons learned and resources developed, see the report, [\*Reducing Energy Burden with Solar: Colorado's Strategy and Roadmap for States.\*](#)

## Case Study 2: Cherryland Electric Cooperative (MI)

Cherryland Electric Cooperative in Michigan pursued a different path in its effort to bring the benefits of solar energy to LMI households. In 2018, the co-op partnered with the Michigan Agency for Energy (MAE) on a project to reduce the energy bills for LMI households by combining solar energy and weatherization measures. The project was funded partly by the U.S. Department of Energy's Clean Energy for Low Income Communities Accelerator (CELICA) program and did **not** use LIHEAP or other existing assistance programs.<sup>12</sup> The MAE, which was participating in the federal CELICA program, told Cherryland that \$80,000 was available for a pilot project aimed at energy efficiency and community solar which would be targeted specifically at LMI households. Cherryland supplemented the project with \$190,000 of its own funds. For more information on the Cherryland project, see the case study, [\*Advancing Energy Access for All: Bringing the Benefits of Solar to Low-Income Households – The Case of Cherryland Electric Cooperative.\*](#)

## Exploring federal assistance funds for solar opportunities through ACCESS

NRECA's [ACCESS](#) project is engaging a wide range of industry stakeholders for the purpose of exploring diverse opportunities for achieving affordable solar options for LMI consumer members. One opportunity may be how cooperatives and other utilities can use existing assistance funds such as LIHEAP. Research has shown that there are differing opinions on the idea of leveraging existing federal assistance programs for renewable energy projects.

On the one hand, because the funding usually available for assistance programs is limited relative to the documented needs of the population, proponents of the status quo prefer that these funds be used only for the purpose of direct assistance for LMI households in covering costs related to home-energy bills. On the other hand, proponents of exploring "innovative" uses for assistance programs advocate that integrating

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<sup>9</sup> Ibid, page 7

<sup>10</sup> Ibid, page 10

<sup>11</sup> DOE funds WAP while HHS funds LIHEAP

<sup>12</sup> <https://betterbuildingsolutioncenter.energy.gov/accelerators/clean-energy-low-income-communities>

*"The Clean Energy for Low Income Communities Accelerator (CELICA) was a voluntary partnership between the U.S. Department of Energy (DOE) and state and local governments to lower energy bills for low-income communities. Partners worked to better understand and address low-income energy challenges, and to demonstrate a wide range of locally designed energy efficiency and distributed renewable energy solutions."*

solar energy into these programs could provide enduring reductions in LMI households' energy spending and reduce overall demand for energy assistance.

Through the ACCESS project, NRECA and its partnering stakeholders have developed tools and resources to assist electric cooperatives in pursuing a path to solar affordability suitable for each co-op – and have helped individual co-ops successfully deploy solar projects to benefit LMI consumers. The ACCESS project team recognizes that each electric cooperative has unique circumstances with the consumer members they serve, their own requirements and goals, and each state's particular offerings and mandates. Whichever path is of interest, the use of LIHEAP, REACH, WAP and/or other such funds will require coordination with the respective state's office in charge of administering these funds.

### Low-Income Clean Energy Connector

In an effort to lower the energy burden of LIHEAP recipients, the U.S. Department of Energy (DOE) National Community Solar Partnership (NCSP) is partnering with the U.S. Department of Health and Human Services (HHS) to make community solar – solar projects that are shared among multiple customers – more accessible to LIHEAP recipients. This effort is called the Low-Income Clean Energy Connector. The Connector is a digital tool that will connect LIHEAP recipients to community solar subscriptions that have verified savings and strong consumer protections in participating states. The initiative, which is still in its pilot phase as of late 2023, would support solar developers in scaling development and customer acquisition for low-income subscribers, while also increasing access to community solar subscriptions with strong consumer protections and savings for LIHEAP-eligible households. The Connector is launching in 2024 in the pilot states of Illinois, New Mexico, and the District of Columbia, with the opportunity to roll out to additional states in 2024 and beyond. This presents yet another promising opportunity for rural electric cooperatives to bring solar benefits to their LIHEAP recipient members.

### LIHEAP and Community Solar

In June of 2023, the Office of Community Services released a memo for LIHEAP grant recipients to inform them that LIHEAP funds can be used for community solar subscription fees, and to provide recommendations to consider.<sup>13</sup> The memo recognizes that community solar is particularly useful in reducing LIHEAP households' overall energy costs and notes that states can utilize LIHEAP funds to “encourage, facilitate, or support opportunities to provide community solar power to low-income households.”<sup>14</sup> Though States, Tribes, and territories cannot use LIHEAP funds for financing the construction of solar facilities, they can use them to support subscription fees. The memo confirms the possibility of using LIHEAP funds for providing solar energy funds to LIHEAP households and could be pursued by cooperatives.

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<sup>13</sup> Office of Community Services, “LIHEAP IM 2023-04 Community Solar and LIHEAP Considerations,” <https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2023-04-community-solar-and-liheap-considerations>

<sup>14</sup> Ibid.

## Share Your Experiences

Has your cooperative used **LIHEAP**, **REACH** or **WAP** funding for innovative ways to serve LMI consumer-member needs? If so, we want to hear from you! Your insights will be very helpful to our research to identify ways to provide affordable solar energy options for communities in need. Please email our team at: [SolarAccessProject@nreca.coop](mailto:SolarAccessProject@nreca.coop).

### Additional Resources

- [ACCESS Website](#)
- [Advancing Energy Access for All initiative](#)
- [Department of Energy's Low-Income Energy Affordability Tool](#)
- [Preliminary Assessment Guide for Integrating Renewable Energy into Weatherization](#)
- [Solar Energy Technologies Office \(SETO\)](#)
- [National Community Solar Partnership](#)
- [Low-Income Clean Energy Connector](#)

### Contact for Questions

ACCESS Team at: [SolarAccessProject@nreca.coop](mailto:SolarAccessProject@nreca.coop)

NRECA's *Achieving Cooperative Community Equitable Solar Sources* (ACCESS) Project is funded as a collaborative partnership between NRECA and the U.S. Department of Energy's Solar Energy Technology Office (SETO) under Award Number DE-EE0009010.

## APPENDIX A

### Details on LIHEAP

#### Breakdown of LIHEAP Grantees

Most states and tribes use the funds to provide heating assistance, while about half of states provide cooling programs. Figure A-1 provides a summary of the allocation of LIHEAP Block Grants in 2022:

FY 2022: States and Washington DC	
Component	Grantees Providing
Heating	51
Cooling	24
Crisis Assistance	49
Weatherization	47

**Figure A-1: Grantees FY 2022 Plans for LIHEAP Block Grants**

Source: LIHEAP Clearinghouse review of FY 2022 Plans

#### LIHEAP Components

In addition to standard home energy bills from heating and cooling, LIHEAP funds can be used for energy crises, weatherization assistance and [Assurance 16](#) programs provided for in section 2605(b)(16) of the LIHEAP statute. Assurance 16 programs are energy education programs to encourage and empower households to reduce their energy use. These programs are capped at 5% of the grant funds available to each grantee. Average benefit varies by program type and by region across the U.S.

Grantees can intervene in energy crisis situations. The LIHEAP statute defines energy crisis to be weather-related and instances or shortages in energy supply and other household emergencies. Grantees are given the latitude to define crises and set eligibility criteria.<sup>15</sup>

Weatherization is an optional use of LIHEAP funds.<sup>16</sup> Grantees can use up to 15% of grant funds to provide weatherization for eligible households. Any grantee seeking to spend greater than 15% can apply for a waiver to spend up to 25% of grant funds. Grantees also have the latitude to decide which home repairs will be included in their weatherization plan. Because the Department of Energy (DOE) oversees the [Weatherization Assistance Program \(WAP\)](#), grantees can use DOE's program guidelines to manage their weatherization programs only, LIHEAP guidelines only or a combination of both programs' guidelines.<sup>17</sup> In

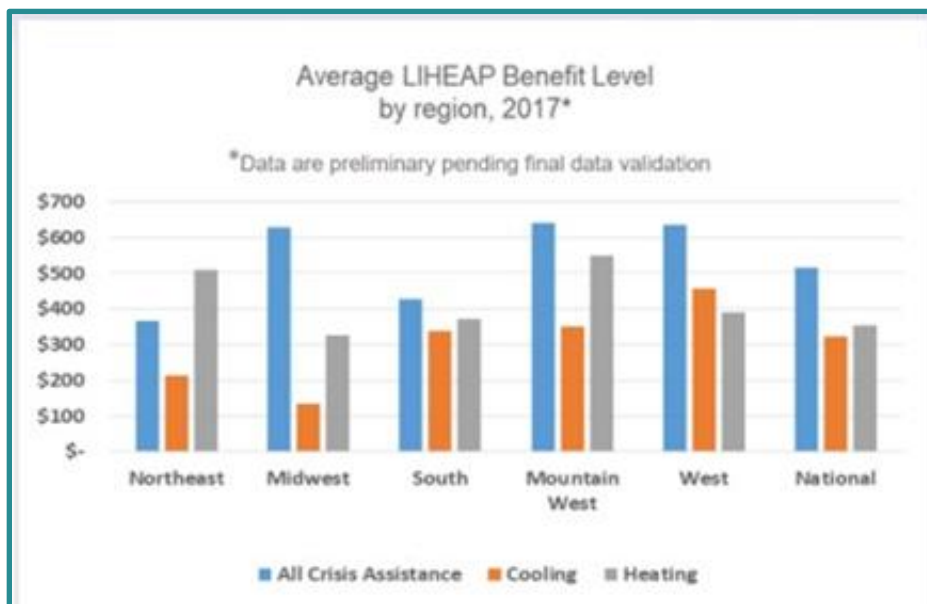
<sup>15</sup> [https://liheapch.acf.hhs.gov/delivery/stats\\_regs.htm#:~:text=They%20establish%20rules%20for%20provision,sites%20for%20the%20physically%20infirm](https://liheapch.acf.hhs.gov/delivery/stats_regs.htm#:~:text=They%20establish%20rules%20for%20provision,sites%20for%20the%20physically%20infirm).

<sup>16</sup> <https://www.acf.hhs.gov/ocs/resource/optional-use-of-doe-weatherization-rules-for>

<sup>17</sup> Ibid



at least 20 states, the same agency manages the LIHEAP and WAP programs. Grantees must measure the effectiveness of weatherization programs on the lives of households who have received weatherization assistance.



**Figure A-2: Average LIHEAP Benefit Level by Region, 2017**  
 Source: LIHEAP Performance Management Data Warehouse Report

## Income Eligibility and Target Population

1. LIHEAP requires that benefits must be targeted to households with low incomes. Grantees must cap LIHEAP income-eligibility at:
  - a. No more than “the greater of 150 percent of the federal Poverty Guidelines (FPG) or 60 percent of the State Median Income”; and
  - b. No less than 110 percent of FPG.<sup>18</sup>
2. Grantees must also give higher benefits to households with the greatest home energy need relative to household income and number of household members.
3. Grantees must also target benefits to households with members who are elderly, disabled, or have a young child.
4. Grantees are also free to automatically enroll a household if at least one member of said household is enrolled in [Temporary Assistance for Needy Families \(TANF\)](#), [Supplemental Nutrition Assistance Program \(SNAP\)](#), [Supplemental Security Income \(SSI\)](#) and certain means-tested veterans programs<sup>19</sup>

<sup>18</sup> <https://www.acf.hhs.gov/ocs/resource/liheap-eligibility-criteria>

<sup>19</sup> For LIHEAP Categorical Eligibility, visit <https://www.acf.hhs.gov/ocs/resource/liheap-eligibility-criteria>