



September 16<sup>th</sup>, 2022

To: Rob Mock, Fiscal and Administrative Manager  
Division of Energy  
Missouri Department of Natural Resources

From: Missouri Energy Efficiency for All Coalition

Re: Missouri's Low Income Weatherization Assistance Program State Plan for Bipartisan Infrastructure Law Funding

Since 2014, the [Missouri Energy Efficiency for All](#) (EEFA) coalition has worked to improve energy efficiency and affordability in low-income multifamily housing. Missouri EEFA is committed to repairing historical racial inequities around energy and housing and pursuing racial justice through all aspects of our work. Missouri's Low Income Weatherization Assistance Program (LIWAP) is central to this mission, with its goal of lowering utility bills and improving comfort while ensuring health and safety for the state's low-income households. As the U.S. Department of Energy (DOE) prepares to invest \$77+ million into LIWAP through the Bipartisan Infrastructure Law (BIL), Missouri EEFA member organizations submit the following recommendations and comments regarding the disbursement of these funds and other actions by Missouri's Department of Natural Resources' Division of Energy (DE).

Affordable multifamily homes are the least likely type of housing to have energy efficiency upgrades. Renters in multifamily affordable housing have little to no control over energy management decisions, and because energy costs are generally paid by renters, property owners are not adequately incentivized to pay the upfront costs of energy efficiency improvements. As a result, low-income renters, often people of color, face high energy burdens and risks of utility shutoffs, evictions, and homelessness. In Kansas City and St. Louis, a quarter of all low-income multifamily households spend more than 11.1% and 12.9% of annual income on energy, respectively. This is three times higher than the average energy burden of higher income households, who spend 3.5% of their income on energy.<sup>1</sup> Across Missouri, 68% of extremely low-income renters (households making at or below 30% of area median income) pay more than half of their income towards rent and utilities combined.<sup>2</sup>

Missouri's LIWAP aims to lower utility bills and improve comfort while ensuring health and safety for the state's low-income households, but overwhelmingly serves only single-family households. Over 90% of the housing units weatherized in LIWAP are single family homes.<sup>3</sup>

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<sup>1</sup> Drehobl, Ariel, Lauren Ross, and Roxana Ayala, *How High Are Household Energy Burdens?* White Paper, American Council for an Energy Efficient Economy, 2020. <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>

<sup>2</sup> National Low-Income Housing Coalition tabulations of 2020 American Community Survey, <https://nlihc.org/housing-needs-by-state/missouri>

<sup>3</sup> Missouri PY 2022 Weatherization State Plan Master File, 2022. <https://dnr.mo.gov/document-search/annual-application-fiscal-2023-us-department-energy-funding-master-file-0>

While we recognize the regulatory, technical and cost barriers that have traditionally prevented more multifamily projects from taking place in LIWAP, the advent of the Bipartisan Infrastructure Law (BIL) funds offers the opportunity for DE to pursue more flexible pathways to serve low-income households in multifamily buildings.

Through informal conversations with DE staff, we are encouraged to learn that DE will use the following processes to streamline multifamily projects in LIWAP, thus reducing burdens on both subgrantee agencies and impacted households:

- Take advantage of [WAP's expanded categorical eligibility](#) by using U.S. Department of Housing and Urban Development's (HUD's) means-tested program lists to qualify income eligibility of households in multifamily properties. These lists include:
  - Housing owned and operated by Public Housing Authorities listed on HUD's [PHA contact page](#).
  - Privately owned multifamily buildings receiving project-based assistance on the [WAP Assisted Multifamily Properties list](#).
  - Privately-owned multifamily buildings that house residents receiving tenant-based assistance (Section 8 vouchers) (verified by contacting property owners).
- Adopt the [Regional Priority List](#) for Low-Rise Multifamily projects that allows for energy audits to be conducted using a predefined Priority List when “similar dwelling units without unusual energy-consuming characteristics” exist.
- Eliminate or reduce the landlord contribution requirement for multifamily projects of 5+ units. We understand that DE will eliminate the landlord cost share requirement of 25% of estimated project costs for buildings with 5+ units that are government owned, owned by a non-profit entity, or receive HUD assistance. Such buildings owned by for-profit entities have had their cost share requirement reduced from 25% to 20%.

**Based on our experience and expertise, we offer six principal recommendations to DNR's Division of Energy (DE) to help subgrantee agencies aggressively ramp up equitable multifamily housing retrofits.** Detailed recommendations follow below.

1. Target multifamily buildings in historically underserved communities of color
2. Provide comprehensive Training & Technical Assistance in multifamily housing retrofit work for agencies and provide in-house multifamily energy audit approval
3. Accelerate multifamily projects through subgrantee agency incentives
4. Request leveraging activity funds to facilitate additional non-federal weatherization funding
5. Add fuel switching to Missouri's BIL WAP state plan, to allow program participants the flexibility to choose beneficial electrification
6. Allow the use of LIWAP funds for utility-administered low-income solar subscription programs

#### **1. Target multifamily buildings in historically underserved communities of color**

Missouri EEFA calls on DE to be intentional in using the historic influx of BIL WAP funds to target multifamily weatherization projects in Black, Indigenous, and people of color (BIPOC) communities. A history of divestment in the housing infrastructure of communities of color has led to greater energy burdens and poor housing quality for BIPOC families. Temperatures in formerly redlined urban

neighborhoods can be as much as seven degrees Celsius higher than non-redlined neighborhoods. This impacts the personal health and wellbeing of multifamily housing residents. Heat-related illnesses have increased across races as climate change intensifies, but the rate of increase is nearly three times higher for Black and Hispanic households compared to white households.<sup>4</sup> According to the EPA, Black households are 40% more likely to live in areas with the highest projected increases in premature mortality due to climate-driven changes in extreme temperatures.<sup>5</sup> Weatherization improvements can reduce energy costs and indoor health hazards faced by communities of color.

To redress these inequities, Missouri EEFA recommends DE help subgrantee agencies target multifamily buildings in historically underserved communities of color through the following activities:

- Offering workshops on equity topics, including expanding services to underserved communities, understanding the administration's [Justice40](#) initiative, and reaching out to rural/remote populations.
- Working with sub-grantees to develop a local plan that includes Place Based Implementation of WAP. This involves building community based trusted relationships and microtargeting weatherization outreach to address historically underserved areas or demographic groups. This approach has the advantage of lowering the overall cost of service through efficiencies of scale, where bulk buy and bundled services allow contractors to bid for a group of jobs.
- Developing a Client Education and Outreach Toolkit to recruit historically underserved clients and educate them about weatherization.
- Creating a new Equity & Innovation Coordinator position at DE to support subgrantees on the above tasks.

We also recommend DE explore the following screening tools to target underserved communities of color:

- The [Climate and Economic Justice Screening Tool \(CEJST\)](#) created by the federal Council on Environmental Quality to identify communities that are disadvantaged for the purposes of the Justice40 Initiative. Using U.S. Census tract data, the tool identifies communities marginalized, underserved, and overburdened by pollution.
- The [Environmental Justice Index \(EJI\)](#), released in partnership between the Centers for Disease Control and Prevention, the Agency for Toxic Substances and Disease Registry and the Department of Health and Human Services' Office of Environmental Justice. The EJI delivers a single score for each community so that public health officials can identify and map areas most at risk for the health impacts of environmental burdens.

## **2. Provide comprehensive Training & Technical Assistance in multifamily housing weatherization work for agencies and provide in-house multifamily energy audit approval**

The DOE's BIL WAP application guidance and Program Notice encourage states to develop workforce development and training programs using Training & Technical Assistance (T&TA) funds. Missouri's

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<sup>4</sup> Nambi Ndugga and Samantha Artiga, "Extreme Heat and Racial Health Equity," Sep 08, 2021, <https://www.kff.org/policy-watch/extreme-heat-racial-health-equity/>

<sup>5</sup> EPA. 2021. Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency, EPA 430-R-21-003. [www.epa.gov/cira/social-vulnerability-report](http://www.epa.gov/cira/social-vulnerability-report)

DE should use this moment to provide subgrantee agencies with dedicated training in multifamily weatherization retrofit work, including multifamily energy audits, installations and program management.

Currently DE contracts with an out-of-state training provider to provide a minimum of two trainings per year for the National Renewable Energy Lab Job Task Analyses. Most additional T&TA funds are provided directly to subgrantee agencies to use at each agency's discretion. Rather than leaving multifamily training to the agencies, Missouri EEFA recommends:

- Contracting with a training provider specializing in multifamily retrofits to provide comprehensive training in energy modeling using multifamily auditing tools; evaluating and installing HVAC and hot water equipment systems (especially advances in high efficiency electric heat pumps) and building envelope measures, as well as the administration and program management of multifamily weatherization projects. Such providers could include the Community and Economic Development Association of Cook County, IL (CEDA), the Association of Energy Affordability (AEA), and the New York State Weatherization Directors Association (NYSWDA), among others.
- Offering workshops on expanding services to multifamily renters, partnering with HUD assisted and NOAH properties, and addressing barriers to reaching more renters.
- Offering multifamily Energy Auditor and Quality Control Inspector (QCI) training and certification.
- Creating a new multifamily focused Technical Assistance Liaison position at DE to guide, educate and support subgrantee agencies in multifamily projects.

A strong example of this approach is outlined in Minnesota's [Bipartisan Infrastructure Law Weatherization Assistance Program for Low-Income Persons application](#). The state's Department of Commerce is proposing a suite of inter-related services to support subgrantee agencies as they ramp up multifamily weatherization projects.

Division of Energy in-house multifamily energy audit approval: While DOE's Priority List can be used to evaluate low-rise multifamily buildings, DE should also drive more retrofits of larger multifamily buildings, which require full multifamily energy audits. To streamline approval of these audits, Missouri EEFA recommends DE use T&TA funds to train and certify a DE staff member in multifamily energy auditing (using NEAT, MulTEA, TREAT, EA-QUIP or an engineering assessment), who is then available to approve multifamily building audits. This person can also provide more frequent multifamily audit training to subgrantee staff as needed.

Workforce Development: BIL funding represents a chance for Missouri to help address the clean energy industry's glaring equity and diversity issues. Nationally, Black workers (8% of clean energy workers versus 13% of workers economy wide) and women (30% versus 48%) are drastically underrepresented in this growing and lucrative field.<sup>6</sup> Missouri EEFA supports the Midwest Building Decarbonization Coalition's (MWBDC's) workforce development recommendation to prioritize training of individuals historically under-represented in the weatherization fields. We encourage DE to incentivize subgrantee

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<sup>6</sup> *Clean Energy has a Diversity Problem*, E2, September, 2021. <https://e2.org/reports/diversity-in-clean-energy-2021/> Based on 2021 U.S. Energy and Employment Report (USEER), U.S. Department of Energy, <https://www.energy.gov/policy/us-energy-employment-jobs-report-useer>.

agencies to develop partnerships with local unions, community colleges, community based organizations, and BIPOC-, women-, and veteran-owned or led businesses or organizations to deliver a high quality workforce development program. Please see the MWBDC's detailed comments on this topic.

### **3. Accelerate multifamily projects through subgrantee agency incentives**

Missouri EEFA understands that DE plans to hold 20% of subgrantee agency BIL WAP funds in reserve, to award to the highest performing agencies (e.g. those agencies meeting several criteria for project completions achieved on schedule, etc.). We recommend that DE include successfully doing multifamily weatherization projects as part of the explicit criteria that defines what "highest performing agencies" means. We recognize that not all of Missouri's subgrantee agencies have a wealth of multifamily buildings in their region; therefore, we advise DE to adopt a simple point system that corresponds to various specific criteria, allowing subgrantee agencies to choose the most appropriate pathway to achieving "highest performing agency" that suits their situation. Assigning high value points to doing multifamily projects will incentivize agencies with multifamily buildings in their area to overcome the inevitable administrative and technical growing pains of new and unfamiliar multifamily projects.

### **4. Request leveraging activity funds to facilitate additional non-federal weatherization funding**

Using LIWAP's limited federal funds to leverage non-federal additional funds is critical to reducing project deferrals or to addressing measures that don't meet DOE's WAP cost effectiveness requirement. DOE's [Weatherization Program Notice 22-9](#) acknowledges the formidable time and effort required to build partnerships with non-federal weatherization funders: "for some Grantees, leveraged partnerships have been decades in the making". Thus DOE has made a provision under WAP to help facilitate leveraging opportunities. 10 CFR 440.14(c)(6)(xiv) allows Grantees to use a percentage (up to 15% of their WAP allocation) of their grant to undertake leveraging activities which may provide additional funding. Leveraging funds can be used for a variety of activities to build long term relationships with reliable funding partners in health care, philanthropy and more.

Missouri EEFA recommends that DE include a request in its BIL WAP state plan for leveraging activity funds, to take advantage of significant opportunities for leveraging, including utility energy efficiency programs under the Missouri Energy Efficiency Investment Act (MEEIA), as well as opportunities to build partnerships with organizations like AmeriCorps. Public health focused philanthropies such as the Missouri Foundation for Health, non-profit hospitals that must spend public benefit dollars within their communities, managed care organizations, and others are also excellent organizations to partner with.

DE could use leveraging activity funds:

- To create a leveraging specialist position within DE to explore and develop partnerships with potential non-federal weatherization funders, and
- Provide technical assistance to subgrantee agencies to help them explore and apply for grants and other funding to supplement DOE weatherization dollars.

A strong example of this approach is outlined in Minnesota's [Bipartisan Infrastructure Law Weatherization Assistance Program for Low-Income Persons application](#). The state's Department of Commerce is proposing a *Framework for Effective Leveraging* to offer subgrantee agencies the resources, knowledge and skills to maximize leveraging and partnership opportunities. Through workshops and targeted TA, the program will:

- Share best practices between organizations, provide a template for a local plan and the TA to develop the plan.
- Work with subgrantee agencies to identify local opportunities, internal barriers, staff capacity, and organizational priorities.

Minnesota will offer subgrantee agencies up to \$50,000 annually to implement the steps in their local plans.

**5. Add fuel switching to Missouri's BIL WAP state plan, to allow program participants the flexibility to choose beneficial electrification**

The U.S. Department of Energy's Program Notice for BIL WAP applications says that states are encouraged to utilize fuel-switching to help use WAP to achieve the Biden Administration's goal of delivering more equitable clean energy. The DE should seek state fuel switching approval from DOE to reduce barriers for program participants who, over the next five years, may wish to switch from combustion appliances to efficient, electric alternatives.

Beneficial electrification is defined as replacing direct fossil fuel use (e.g., natural gas, propane, heating oil) with electricity in a way that reduces both emissions AND energy costs. Doing so will allow participants to reduce overall energy consumption while reducing the harmful effects of indoor and outdoor air pollution caused by combustion appliances. The primary air pollutants produced by combustion are NO<sub>2</sub>, PM<sub>2.5</sub>, and CO, which [studies](#) have found contribute to poor indoor and outdoor air quality and a higher risk of heart and lung disease and premature mortality.

Further, failure to prioritize electrifying the homes of low-income households will create significant long-term financial risk for these households. Over the long term, utility customers who continue using natural gas are likely to experience rate increases from declining throughput, when other customers electrify and exit the gas system. There is a significant risk that low-income customers remaining in the natural gas system could bear the brunt of gas rate increases, leading to higher monthly bills. In Maryland, a study found that gas delivery rates could increase more than 20 times for consumers left on the gas system in a "high electrification" scenario.<sup>7</sup>

The current Missouri LIWAP program does not allow fuel switching (with a very limited exception for homes heated with wood). This may be related to the Missouri Energy Efficiency Investment Act's rule that energy efficiency measures (EEMs) that displace electrical energy use or natural gas to another fuel (i.e., fuel switching) are not Qualifying EEMs. Or it may be related to HB734, which prohibits cities and counties from adopting bans on natural gas hookups in newly constructed buildings. However neither of

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<sup>7</sup> Montgomery County, MD Council, "Economic Impact Statement: Bill 44-21, Montgomery County Green Bank – Funding – Fuel Energy Tax Revenue, 2020, <https://www.montgomerycountymd.gov/OLO/Resources/Files/eis/2021/EIS-Bill44-21.pdf>.



these statutes have jurisdiction over projects funded with federal WAP funds, and many other states, including other Midwest states, do allow fuel-switching with federal WAP dollars.

BIL WAP funding represents a prime opportunity for the state to shift its approach. The Program Notice for BIL WAP applications encourages fuel-switching to high efficiency electric equipment, such as heat pumps. Page 31 of the 22-1 and 22-2 Program Notice provides guidance for state agencies to incorporate fuel switching in their BIL WAP applications, which should be included in the Miscellaneous section of the Annual File included in the state's full application.

Missouri EEFA understands that DE and subgrantee agencies are cautious to implement electrification measures due to concerns surrounding potential negative energy burden impacts, cold climate equipment performance, and DOE cost-effectiveness restrictions related to health and safety. We echo the Midwest Building Decarbonization Coalition's (MWBDC's) comments that address and allay these concerns and encourage DE to review the MWBDC's letter on this topic.

Over the next five years, we expect market demand for high efficiency air source heat pumps and heat pump water heaters (HPWH) to increase due to federal, state and utility incentives, increasing public awareness of the health and safety benefits of all electric households, and the need to reduce CO<sup>2</sup> emissions. We recommend DE provide specific statewide opportunities to train subgrantee agencies on the evaluation of buildings for potential fuel switching and installation of air source heat pumps and HPWH heaters.

To meet market demand, we also recommend DE coordinate opportunities to braid WAP funding with federal, state and utility incentives—such as the recently passed [Inflation Reduction Act's \(IRA's\) HOMES Rebate Program and High Efficiency Electric Rebate Program](#) for low income households. Even before IRA funds kick in, LIWAP subgrantee agencies have the opportunity to get eligible homes ready for electrification with pre-electrification upgrades to the building envelope. They can also work to reduce clients' energy usage and bills by replacing low efficiency electric resistance equipment with high efficiency heat pumps. Although these steps are not fuel switching, they will help agencies become more comfortable with advanced high efficiency equipment and pre-electrification needs.

#### **6. Allow the use of LIWAP funds for utility-administered low-income solar subscription programs**

Over the past several years, Missouri electric utilities have received approval to offer solar subscription programs to their customers. These programs offer customers the chance to receive solar energy from a utility-owned solar generation system under a separate tariff and pricing schedule. More recently, utilities have begun developing low-income solar subscription programs that offer a reduced subscription rate to income-qualified customers as a way to use solar to reduce customer bills. (See Evergy's most recent rate case, File No. ER-2022-0129.) But in order for these low-income solar subscription programs to make a true impact in customers' lives, customers' bills need to be reduced by a significant amount (e.g. 10-50%). These programs represent a potential useful outlet for those weatherization funds that subgrantee agencies may be struggling to spend.

Using weatherization funds to subsidize or buy down the participation cost of low-income subscriber solar programs has several clear advantages. First, these programs can reduce low-income customers' bills



over the long-term. Solar systems can last upwards of 30 years, meaning that customers can stay subscribed and receive service under the same tariff for decades. Second, these programs can be made easily available to all types of low-incomes, including renters in multifamily buildings. Perhaps the greatest drawback to the LIWAP model nationwide is that weatherization services rarely reach renters in multifamily buildings, a demographic which is overrepresented in the low-income community. Using LIWAP funds in this way ensures that all low-income customers can see a reduction in their energy burden, not just single-family dwellings. Finally, using LIWAP funds for solar development furthers the aim of supporting clean energy, consistent with the aims of the Federal weatherization program.

This proposal could be considered for all LIWAP funds (including Federal funds), or simply for utility contributions to weatherization agencies. Allowing only utility contributions to be used for low-income subscriber solar programs could avoid some of the complications with restrictions on the use of Federal LIWAP dollars, and would simply involve repurposing some of utilities' current LIWAP contributions toward another mechanism that also reduces customer bills and supports clean energy development.

### Conclusion

We thank the Division of Energy staff for their time and engagement with us as they lead this valuable weatherization work for Missouri's most vulnerable citizens. To ramp up weatherization projects in Missouri's most underserved multifamily buildings, strong incentives, training, leveraging activities and flexibility to allow fuel switching are the key to ensuring all of Missouri's citizens have affordable, healthy and energy efficient homes.

Sincerely,

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