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To: Michelle Gransee & Suzy Meneguzzo
Weatherization Assistance Program
Minnesota Department of Commerce - Division of Energy Resources

Re: Bipartisan Infrastructure Law & Weatherization Assistance Program Funding

From: Midwest Building Decarbonization Coalition
Co-Directors: Marnese Jackson, Jacob Serfling, Margaret Cherne-Hendrick

Minnesota Department of Commerce - Division of Energy Resources,

The Midwest Building Decarbonization Coalition (MWBDC) was founded in 2019 to achieve equitable decarbonization of the building sector in eight Midwest states (Minnesota, Wisconsin, Iowa, Missouri, Illinois, Indiana, Michigan, and Ohio) by 2050. Recognizing the shared challenges these cold climate states share in decarbonizing their building sectors, MWBDC has helped coordinate efforts across the region, facilitated sharing of best practices, and connected community-based groups with larger resources and expertise, centering equity along the way. MWBDC's definition of equity is important grounding for our set of comments:

Holding ourselves and one another accountable to inclusion in a society in which all can participate, prosper, have value, and reach their full potential. We recognize and work to dismantle injustices, systems, and barriers that prevent some from achieving this goal.

Further, MWBDC established a definition for equitable building decarbonization:

To remove the hazard of fossil fuel usage in buildings and facilitate access to carbon-free heating, water heating, and cooking, while prioritizing [Black, Indigenous, People of Color] BIPOC/ intersectional identities and empowering poor, low- and moderate-income households and underserved communities with clean technologies and infrastructure including:

- *Equitable outcomes in who produces and who benefits from decarbonization; and*
- *Leadership of enterprises and communities most impacted by the burdens of energy and environmental injustices.*

The MWBDC encourages the State of Minnesota and the Department of Commerce (DOC) to take actions that advance equity and shared goals of lowering energy burden for vulnerable communities and improving the health, safety, and efficiency of Minnesota homes through

equitable building decarbonization. Specifically, the U.S. Department of Energy (DOE) is preparing to invest [\\$76 million](#) into Minnesota's Weatherization Assistance Program (WAP) through the Bipartisan Infrastructure Law (BIL). MWBDC and our Minnesota partners submit the following recommendations and comments regarding the disbursement of these funds and other actions by the DOC.

Equity and Justice40

We encourage DOC to work closely with DOE on [Justice40](#) implementation, ensuring the investments from these increased WAP dollars benefit, *at a minimum*, 40% of "disadvantaged communities," as defined by the Administration in collaboration with Minnesota communities. One tool the Administration has created for determining which communities are disadvantaged is the [Climate and Economic Justice Screening Tool \(CEJST\)](#). Communities were encouraged to provide feedback to improve this tool, namely if their definitions of "disadvantaged communities" were reflected, so improvement to the tool is still underway. Nonetheless, MWBDC recognizes this tool as one of many that are useful for DOC to ensure equitable distribution of WAP investment. MWBDC encourages DOC to align its implementation strategies with the Justice40 Initiative. This alignment effort will require proactive strategy and tactic development that specifically addresses how input is received from and disseminated to WAP-eligible households, as well as ongoing monitoring and redress plans, to affect change in participation and the realization of benefits. We provide additional details on equitable implementation throughout our comments.

Fuel-Switching and Electrification

In previous informal conversations with DOC, MWBDC and our partners were encouraged to hear that the state had previously requested approval from DOE to administer a fuel-switching program under WAP and would continue doing so. However, it is also our understanding that even with this flexibility, electrification has not been a primary focus of DOC or their community agency partners, outside of some exciting pilot programs. BIL funding represents a prime opportunity for the state to shift its approach and continue expanding on these initial efforts.

The Program Notice for BIL WAP applications explicitly states 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. Page 31 of the 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. MWBDC understands that DOC is seeking additional guidance from DOE on how specific measures fit into these guidelines and encourages DOC to be as aggressive as possible within DOE's defined limits to help assist WAP participants in making an energy transition as well as improving home performance.

MWBDC also understands that DOC and regional WAP implementation agencies are cautious to implement electrification measures in some cases due to concerns around potential negative energy burden impacts, cold climate equipment performance, and DOE cost-effectiveness restrictions related to health and safety.

1. Energy Burden and Fuel Prices

DOC has indicated that historically the relatively low cost of natural gas compared to residential electric rates has prevented them from seriously considering electrification measures, either due to the potential for increased energy burden or not meeting the required Savings to Investment Ratio (SIR). However, [Minnesota's](#) natural gas prices have risen 62% between January and May 2022. The Energy Information Administration (EIA) forecasts indicate that DOC should plan on natural gas prices continuing to be volatile and not reverting back to their previous lows, indicating that the state can no longer rely on gas prices to be low and steady. On the other hand, [Electricity retail prices](#) in Minnesota didn't see as significant a price increase or volatility, only rising 14% between January and May 2022. The historical and expected impacts on electricity and gas prices indicate that switching to electric appliances can help families keep their utility bills stable and protect them from rising gas prices.

Additionally, a [Roosevelt Institute study](#) indicates that in some months over the past year energy-related expenses could account for as much as 70% of household cost inflation, largely due to fossil fuel cost increases. Lower income households are harder hit by these price spikes, projected to experience a 3% increase in household energy burden compared to 0.3% for high-income households. These spikes are driven by a variety of factors including extreme cold weather events and international turmoil. Due to the wider variety of fuels, including renewables, used in the electricity generation electric heating customers are more shielded from these types of energy cost spikes.

Additional Reference:

[Reality Check: The Myth of Stable and Affordable Natural Gas Prices - RMI](#)

2. Cold Climate Performance

High-performance cold-climate heat pumps function well in Minnesota's [cold climate](#) and have been successfully field tested in Minnesota, as well as other cold climate states like Wisconsin and [Maine](#). In addition to proven performance of existing units in similar climates, the U.S. Department of Energy has challenged manufacturers to develop more heat pump models specifically optimized for cold climate heating, with some [resulting models](#) already being planned for deployment in the near future.

Installing heat pumps also unlocks cooling for the program. Minnesota is getting hotter and people need [efficient cooling](#) that will not lead to peak electricity demand causing grid blackouts. Heat pumps are up to three times more efficient than their electric resistance counterparts and can efficiently deliver cooling to Minnesota homes.

In addition, heat pump water heaters are known to work efficiently, even in [cold climates](#). States such as [Maine](#) have demonstrated success in transforming the water heating market to majority heat pump water heater deployment. One of their programs support homeowners with instant rebates while another offers free water heaters to those in low income weatherization programs. Bulk buying, job training and maximum guaranteed price approaches used in Maine can also be used in Minnesota to accelerate deployment locally. Energy burden will not increase for anyone

whose water heater is powered with electric resistance or other delivered fuel oil. Doing the work during the weatherization process can limit administrative and installation costs for state and utility programs.

3. Health and Safety and Cost-Effectiveness

Electric appliances are crucial for the health and well-being of WAP applicants, and without easy access to fuel-switching, people will face long-term health impacts. Unvented gas appliances emit harmful indoor and outdoor air pollution which [studies](#) have found contribute to higher risk of heart and lung disease and premature mortality. Replacing fossil fuel appliances with efficient, electric alternatives, such as heat pumps, can reduce negative health outcomes for WAP's participants. Installing electric appliances can improve indoor air quality, reduce the risk of gas incidents, and still maintain a comfortable environment indoors. Fuel-switching is especially important for WAP participants because low-income communities experience disproportionate health burdens from air pollution.

Given the multiple benefits of electrification, we encourage the DOC to begin installing electric appliances and heat pumps. Retrofit projects with inefficient electric equipment, propane, or other delivered/unregulated fuels will also immediately benefit from efficient heat pumps retrofits. The DOC can also prepare for electrification efforts by investing in the infrastructure and labor needed for widespread adoption of electrification technologies in buildings. These efforts will ensure Minnesota can leverage expected updates to the SIR that will make electrification easier. With the passage of the Consolidated Appropriations Act of 2021, the scope of WAP's cost-effectiveness test has been expanded to include improved health and safety of eligible participants. This expansion will necessitate DOE to initiate a SIR modernization rulemaking that will make it easier for weatherization programs to administer electric appliances.

Limiting Health and Safety Deferrals

Weatherization measures don't cover health and safety interventions to homes such as building structural repairs, lead, mold, or asbestos that impact housing quality. Without addressing health and safety issues, houses can be deferred from WAP and left without assistance in helping them make these upgrades. While WAP funds cannot address all health and safety issues in a residence and deferrals may still occur, states can utilize some WAP funds for health and safety interventions that will reduce program deferrals. Per the DOE's guidance for BIL WAP applications and the latest Health and Safety Program Notice, WPN 22-7, states have new guidance on making the most of health and safety interventions with WAP funds.

This health and safety cost category will allow health and safety funds to be excluded from Average Cost Per Unit calculations and cost justification requirements, which could allow for greater investment in a residence to address more holistic interventions. Health and safety budget requests of up to 15% require only typical DOE review, states that wish to request more than 15% may do so but will trigger additional DOE review and justification requests. MWBDC is happy to see DOC follow our previously discussed recommendation to establish and submit a distinct and separate health and safety cost category in their budget and request a higher (18%) share of funds be utilized to address these issues.

We also recommend DOC ensure applications for [Program Year 2022 Weatherization Readiness funds](#) are complete and submitted. The Readiness funds are additional to the annual Program Year 2022 allocations and are specifically designed to avoid deferrals by funding critical pre-weatherization interventions like health and safety measures.

Workforce Development Plan

The DOE's BIL WAP application guidance and Program Notice encourage states to develop workforce development and training programs using Training and Technical Assistance (T&TA) funds. States should use this moment to further advance the Administration's equity and climate priorities. This should include:

- Adhering to Justice40 Initiative in the implementation workforce training efforts, including outreach and promotion
- technical training on electrification and pre-electrification interventions in a home to help increase the qualified workforce in a state that will assist in the implementation of the fuel-switching electrification initiatives also detailed in the application
- prioritization of training individuals historically under-represented in the clean energy and weatherization fields
- 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

Incorporating training on electrification and pre-electrification work is especially crucial for cold climate states like Minnesota. MWBDC is encouraged by the potential of DOC's indicated plans for a network portal to connect contractors and service providers. Earlier sections of these comments explain why it would be beneficial for the state and program participants to begin incorporating electrification fuel-switching into Minnesota's WAP - it will be crucial to make sure that electric heating and water heating appliance training is an emphasis of these new resources, in addition to traditional weatherization activities. Only [10% of Minnesota homes](#) currently use electricity as their main heating source, compared to 40% nationally. As a result, many contractors are unfamiliar with advances in air-source heat pump (ASHP) performance or feel less comfortable installing them in replacement or retrofit projects. The influx of T & TA funds via BIL is a significant opportunity to address this issue in Minnesota's heating, ventilation, and air conditioning (HVAC) workforce. Already in-state, the [Minnesota ASHP Collaborative](#), a partnership of the Center for Energy and Environment and several Minnesota utilities, provides a strong example of a contractor training and education program that is successfully addressing these issues.

Similarly, BIL funding represents a chance for Minnesota to help address the clean energy industries glaring equity and diversity issues. Nationally, [Black workers and women are drastically underrepresented in this growing and lucrative field](#). There are just 8 percent of Black clean energy workers versus 13 percent of workers economy wide, and 30 percent versus 48 percent for women. MWBDC echoes our previously discussed encouragement of DOC to use BIL funds to craft T&TA programs that help these and other under-represented groups enter and thrive in the clean energy and weatherization field. DOC has indicated that the intent of their T&TA plan is to develop localized training plans that can target underrepresented populations within the communities of implementing community agencies, as well as an intent to

pursue additional competitive funding for energy auditor training. MWBDC encourages DOC to actively center equity in the workforce as a goal for themselves and partnering agencies. A regional example of the type of programs DOC should seek to support and/or emulate is the [Faith and Solar](#) program conducted by Wisconsin Green Muslims in conjunction with the Midwest Renewable Energy Association. In addition to scholarships for the main training program, this partnership recognized the wide range of challenges facing newcomers from underrepresented groups entering a technical field without the benefit of an established support network, so it also includes funding for mentorship and guaranteed access to hands-on learning opportunities.

Ensure Leveraging Activities are Included in State Budget

According to a [American Council for an Energy-Efficient Economy \(ACEEE\) report](#), 25% of “West North Central” region, which includes Minnesota, have ‘high energy burden’ with low-income households experiencing energy burdens 2.5 times higher than the rest of the region. [Households](#) with high energy burdens often do not have the time or resources to invest in their home leading to unhealthy living conditions such as poor indoor air quality and unsafe indoor temperatures during extreme weather events. A whole-home approach which utilizes smart, efficient investments for comprehensive retrofits will deliver both energy and non-energy benefits to WAP participants. A whole-home comprehensive approach can improve health equity by creating more healthy living environments, thereby addressing disparate health impacts. To develop a program that delivers comprehensive retrofits, state weatherization programs will need to [braid funding](#) from other sources to deliver comprehensive retrofits to every eligible family.

MWBDC and partners were encouraged by examples DOC gave of these types of activities already underway. DOE recently released additional [guidance](#) on “leveraging activities” that will allow Minnesota to seek funding and partnerships in service of increasing low-income funding and delivering more comprehensive retrofits. Leveraging activities essentially allows agencies and subgrantees to carve out time and DOE WAP funding to seek opportunities and lasting partnerships that can improve and expand WAP activities in a state. This can include partnerships with local utilities, other state or local agencies with existing programs or funding streams, and more. Leveraged funds accessed via successful leveraging activities can run adjacent to DOE WAP funds to provide supplemental resources or services to a residence or a program such that they are more flexible and not subject to all DOE restrictions. States will indicate an intention to perform leveraging activities with WAP funds in the Annual File of the application. In previous conversations DOC has indicated a number of leveraging activities and leveraged funds already included in their WAP budget and state plan. However, the BIL investment of over \$3 billion creates a critical moment for states to build even more capacity, seek additional leveraged funds, and ensure partnerships and leveraged dollars can support continued high levels of WAP implementation after BIL funds are spent in the coming years, so MWBDC wants to continue emphasizing its importance.

In particular, the BIL WAP program in a state could be a critical moment to perform leveraging activities that aim to deliver comprehensive retrofits by funding health and safety interventions that include weatherization and appliance electrification. Alongside the Low-Income Home Energy Assistance Program (LIHEAP) dollars already braided with WAP funding, the DOC can

seek additional funding that can help them fill gaps, especially in electrification which currently lacks funding in the state. Possible connections could include the [State Energy Program](#), extended and improved federal [tax credits](#), or incoming electrification and weatherization [rebates](#) from the BIL and Inflation Reduction Act. Engaging with other organizations that have funding, resources, and labor will help WAP use the BIL funds to reduce deferrals and deliver healthy, affordable homes as equitably as possible.

Social Cost of Carbon

State WAP managers should consider including the social cost of carbon (SCC) in Minnesota's cost effectiveness test for WAP proposals if DOE finalizes and publishes guidance in time for the October 1st application deadline. The SCC is the monetary value of the net harm to society associated with adding a small amount of carbon to the atmosphere each year. Including the SCC will ensure the program is more accurately estimating the total economic costs Minnesotans are facing from greenhouse gas emissions. It will allow the state to more accurately estimate the economic impacts of gas and electric appliances and may make installing electric appliances easier. To include the SCC, states will need to request that it be included in the energy modeling in their application and work with DOE to define a procedure. DOE shared guidance in July, but has since taken down the guidance to complete additional work. We hope that DOE will publish new guidance well before October 1st and encourage states to review and incorporate the guidance to include the social cost of carbon in their plans.

Conclusion

In summary, the MWBDC encourages the State of Minnesota and DOC to take actions that advance equity and shared goals of lowering energy burden for vulnerable communities and improving the health, safety, and efficiency of Minnesota homes through equitable building decarbonization. We encourage DOC to utilize Justice40 tools and resources to ensure, *at a minimum*, that 40% of the WAP dollars are benefitting "disadvantaged communities," as defined by the Administration, DOC, and Minnesota community members. We encourage DOC to allow for equitable electrification of appliances and systems in buildings, consider the societal cost of carbon in calculations, and remove administrative barriers to fuel switching. DOC should help simplify administrative burdens for participants by making it easy for WAP funding to be braided with other sources that allow for heat pump installation. This will require training programs which should be focused on recruiting BIPOC individuals into clean and healthy building professions. Finally, we encourage DOC to limit the number of WAP program deferrals, and allow for health and safety upgrades for those who need it most. If these recommendations are done in alignment with the Administration's Justice40 Initiative, communities who have been historically underserved will benefit first, which MWBDC notes is of utmost importance in our path to equitable building decarbonization.

Thank you for your consideration.

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