

**United States House of Representatives
Select Committee on the Climate Crisis**

Hearing on April 7, 2022

**“Cost-Saving Climate Solutions: Investing in Energy Efficiency to Promote
Energy Security and Cut Energy Bills”**

Questions for the Record

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The Honorable Kathy Castor

- 1. How would the energy efficiency investments in the Bipartisan Infrastructure Law, such as the \$3.5 billion for the Weatherization Assistance Program, funding for energy code adoption, and grants for schools and non-profits help advance energy efficiency across the nation? How would the House-passed climate investments build on that foundation?**

The energy efficiency investments included in the Infrastructure Investment and Jobs Act (IIJA), signed by President Biden on November 15, 2021, will support a number of crucial residential energy efficiency programs. As you noted, IIJA included an historic \$3.5 billion in funding for the Weatherization Assistance Program, which focuses on bringing energy efficiency to communities that need it most and improving home performance for low-income households. These investments will not only lower utility bills and reduce greenhouse gas emissions but will also improve occupant comfort and health¹ in underserved communities that have historically been left behind. With rising energy prices stemming from Russia’s war in Ukraine, these high-energy-burden communities have suffered disproportionately—so this historic investment could not come at a more important time.

Additionally, IIJA included other funding to drive additional energy efficiency adoption, including: \$550 million for the Energy Efficiency and Conservation Block Grant Program (EECBG) to support implementation of energy audits and retrofits to improve both residential and commercial energy efficiency; \$500 million for grants for energy efficiency and renewable energy improvements at public school facilities; \$250 million to support an energy efficiency revolving loan fund for residential and commercial buildings; and \$225 million to enable

¹ <https://e4thefuture.org/occupant-health-benefits-of-residential-energy-efficiency/>. As I noted in my initial testimony, this report from E4TheFuture, entitled “Occupant Health Benefits of Residential Energy Efficiency” which reviews existing research on the link between resident health benefits and energy efficiency upgrades, found that residential energy efficiency upgrades can produce significant improvements in asthma symptoms and help improve overall physical and mental health.

sustained, cost-effective implementation of updated building energy codes within the DOE Building Technologies Office (BTO). These programs will all drive demand for energy efficiency upgrades in buildings across the country, including in homes, businesses, and schools.

While the historic investments from IIJA - in WAP in particular - will improve home performance in underserved communities, this funding alone is not enough. One key issue facing WAP is that many low-income homes have other issues – such as structural deficiencies, and health issues such as mold and asbestos– that have to be addressed before they are eligible for WAP. Nationally, 10-30% of income-eligible weatherization clients are deferred because of one or more of these problems.² We need to address these health and safety issues so that this backlog of homes can become eligible for the program. Many deferred income-eligible weatherization clients are located in low-income, historically disadvantaged communities—the very same communities facing disproportionately high energy burdens and health risks.

I was pleased to see the enacted Fiscal Year 2022 Appropriations package appropriate \$15 million for a Weatherization Readiness Fund to address these issues, and I applaud the leadership of Sen. Reed (D-RI), Sen. Collins (R-ME), Sen. Coons (D-DE), and Sen. Shaheen (D-NH) in the Senate for introducing legislation (S. 3769, the Weatherization Assistance Program Improvements Act of 2022) to authorize this FY22 appropriation and support potential additional appropriations in FY23. Congressman Tonko (D-NY-20) is leading the effort on the House side, and I hope Chairwoman Castor and the other members of this committee will consider supporting Congressman Tonko’s bill upon introduction. President Biden requested \$30 million in his FY23 budget for the Weatherization Readiness Fund, and the Building Performance Association (in conjunction with E4TheFuture) submitted FY23 appropriations requests to both House and Senate offices in support of \$37.5 million for the fund.

Beyond these weatherization readiness issues, access and awareness challenges in underserved communities are also critical barriers to broader adoption and program success. As I mentioned in my testimony before the committee, to connect with hard-to-reach populations, we must first listen to them. To do otherwise stymies information sharing, limits participant enrollment in energy efficiency programs, and exacerbates the divide between those participating in the fight to address climate change, and those forced to remain on the sidelines.

The House-passed climate investments from last year’s Build Back Better package would make crucial investments in residential energy efficiency via both direct funding and tax credits (including an expanded and extended 25C residential energy efficiency tax credit). Most notably, the HOPE for HOMES Act, included in the package that passed the House last fall, would provide funding to small businesses for training contractors in new skills and rebates to homeowners for upgrading their home’s energy performance (doubling rebates for middle- and lower-income Americans). I applaud Chairwoman Castor for her leadership cosponsoring HOPE for HOMES and ensuring its inclusion in Build Back Better, and I thank her for her continued advocacy in support of this bill this year.

² https://e4thefuture.org/wp-content/uploads/2022/04/E4-EFG_Weatherization-Barriers-Toolkit-4-7-2022.pdf.

2. Could you please share one or two specific insights from your on-the-ground experience on how energy efficiency improvements have helped families enjoy a higher quality of life?

Our firm's work is largely performed in disinvested, economically challenged communities. The disparities associated with this demography include, but are not limited to, limited access to information and resources resulting in them being placed in the "hard to reach" category. Respecting the customer's confidentiality, I'm going to use "Mrs. Jones" to reference the customer experience. Mrs. Jones lives on the Southside of Chicago and happened to be home the day our firm was providing retrofit work for her neighbor. She inquired about the work and wanted to know how she could receive the services and associated cost. After explaining to her the benefits of living in an energy efficient home (cost savings, comfort, and health and safety), she was sold. She was connected to the program administrator and, when she was approved to receive the services at no cost, she was ecstatic.

During the energy audit, it was discovered that Mrs. Jones had asbestos in her attic that was disturbed, and a furnace that was over 30 years old with a cracked heat exchanger. Additionally, due to the age of the furnace and neglected maintenance, the furnace was contributing to higher levels of CO₂ in the home, creating an additional health and safety risk. The presence of asbestos in the attic would have caused the retrofit services to be deferred until the asbestos was remediated, but our firm was able to leverage our social capital to get the asbestos remediated (\$8500.00) at no cost to the homeowner. This action allowed the retrofit work to proceed as planned. The value add to the customer is as follows:

1. She was made aware of the energy efficiency program offerings.
2. She was educated on the benefits of living in an energy efficiency home.
3. She received the retrofit upgrade to enjoy cost savings, increased comfort, and remedied the health risks.
4. She received a brand new furnace.
5. She became an ambassador for the program and energy efficiency more broadly.
6. She remains an advocate for our work, energy efficiency, and participates in our referral program to get new customers enrolled.
7. We have experienced a 35% increase in customer participation from that community year over year.

There are many examples of "Mrs. Jones" in low- and middle-income communities across the country—folks who need critical home energy upgrades, but face other issues - including structural deficiencies and health issues such as mold and asbestos - that must be addressed before they are eligible for key programs like WAP. These important "readiness" upgrades would be supported by the Weatherization Readiness Fund, mentioned in more detail above under Question #1.

3. In your testimony, you mention the need to deliver reliable energy services at lower costs. What kinds of investments will help ensure equitable access to reliable and affordable electricity?

Significant investments in energy efficiency and an expanded energy efficiency workforce, with a particular emphasis on underserved communities, can help ensure equitable access to reliable and affordable electricity—while also creating jobs, reducing demand on the electric grid, lowering household utility bills, cutting greenhouse gas emissions, and improving energy independence. As I noted in my testimony to this committee, deploying energy efficiency reduces demand for primary energy and generating capacity needs and therefore lowers the overall costs of shifting to a low-carbon energy system. Energy efficiency is cleaner and cheaper than building new low-carbon or carbon-free energy generation resources.

Nowhere is this need clearer than in residential buildings. In 2021, residential buildings accounted for 21% of total U.S. energy consumption.³ Unlike other sectors of the economy, the residential sector is notoriously difficult to address, with approximately 140 million housing units nationwide⁴ that make up a patchwork of varying household income levels, awareness, and access to key energy efficiency solutions. These circumstances make the residential sector particularly challenging to decarbonize. Policies like the rebate program contained in the HOPE for HOMES Act (H.R. 3456) would expand access to more affordable residential energy solutions, particularly via larger rebates available for middle- and lower-income homeowners, leading to more affordable electricity and energy bills. Additional training funding included under HOPE for HOMES would also expand training opportunities for contractors, growing and diversifying the energy efficiency workforce.

The cost to upgrade a home’s energy efficiency is growing, as are the costs for contractors to carry out these upgrades. The pandemic-led workforce shortage and supply chain constraints have driven these price increases, making it less likely that a homeowner will make those investments without federal subsidies providing the incentives. These upgrades are even more cost-prohibitive for lower-income homeowners, underscoring the crucial importance of rebate proposals like HOPE for HOMES.

4. How should Congress ensure that all communities, including environmental justice communities, are included in climate policy development and benefit from the transition to a clean energy economy? Could you please elaborate on why it is important for communities to have a seat at the table when Federal, state, and local governments are exploring climate solutions?

Traditionally, BIPOC communities are the last to adopt emerging energy efficiency technologies. This delay should not be interpreted as a lack of interest, but rather reflects existing barriers to adoption (awareness, access, and affordability). The top-down approach usually causes an information gap, leaving social identity groups that are considered the “outgroups” with limited or late information. We can close this gap by adopting Procedural Justice⁵ best practices, to ensure policies are equitable and require the inclusion of diverse perspectives. Those perspectives should be shared by the stakeholders and thought leaders that have the “lived experience” and understand the challenges and needs of the demography they represent. It’s not enough for these communities to just be at the table—their perspectives should inform and

³ https://www.energy.gov/sites/prod/files/2019/04/f61/bto-geb_overview-4.15.19.pdf

⁴ <https://www.census.gov/quickfacts/fact/table/US/HCN010212>.

⁵ [Procedural justice - Wikipedia](#)

influence the policies being drafted in a way that is equitable. The existential threats are too great to continue transactional policy making. We need to embrace diversity, prioritize inclusion, and demand transformative policy making that serves the greater good of humanity.

5. Energy efficiency can be complementary to other climate solutions like rooftop solar energy. Could you please describe the holistic approach your firm has taken to helping families benefit from complementary climate solutions? What lessons could we draw for Federal policy development?

At Urban Efficiency Group (UEG), we are focused on advancing energy equity by all means necessary. While we are fully supportive of decarbonizing our electric grid and shifting to renewable energy sources, we must also recognize the significant equity issues that can arise from electrification, particularly in the absence of proper information and awareness in our most underserved communities. We must first focus our attention on providing these communities with accurate and straightforward information about what fuel switching entails – the benefits to health and the environment but also the costs – both short and long term. We should not, and cannot, expect our low- and moderate-income communities to absorb the cost of fuel switching. In the example of rooftop solar energy, many of the low- and moderate-income homes we serve do not have the rooftop integrity to support PV arrays, and still lack needed weatherization, health, and structural measures (which could be addressed via the Weatherization Readiness Fund, as mentioned in more detail above under Question #1).

We must also recognize that various mechanisms bringing renewable energy sources to underserved communities – for example power purchase agreements – can also present equity issues in terms of asset ownership and profitmaking. We must make sure to shape policy in a way that can bring low-carbon energy to our underserved communities while also helping these communities increase resiliency and human capital, not in a way that leads to continued/renewed exploitation.

While Congress works to get those policies crafted, we should be focusing primarily on energy efficiency. As I mentioned in my written testimony submitted to the committee, the cleanest and the cheapest energy is the energy you don't use in the first place. A 2019 report from the American Council for an Energy-Efficient Economy (ACEEE) found that energy efficiency can cut GHG emissions by about 50 percent by 2050.⁶ Buildings deliver 33% of the total emissions reductions in the report's model, and upgrades to existing buildings, homes, appliances, and equipment are identified as some of the largest cost-effective opportunities to achieve these reductions.

We have seen these savings firsthand at UEG, and the on-the-ground success of deploying these energy efficiency measures offers important lessons for Federal policy development: energy efficiency is a vastly untapped resource that our communities can unleash—with adequate financial support and a focus on equity. Initial investments from the Infrastructure Investment and Jobs Act, and further proposals like the HOPE for HOMES Act contained in the House-passed Build Back Better package, can bring crucial energy efficiency measures directly into millions more homes in the communities where they are needed most.

⁶ <https://www.aceee.org/fact-sheet/halfway-there>.

Importantly, a holistic approach to helping our most vulnerable and underserved communities must involve not just clean energy and energy efficiency investments, but investments to grow the human capital in these communities via well-paying clean energy and energy efficiency jobs, with particular attention to diversity, equity, and inclusion. Like many trades, the energy efficiency industry has historically been a white, male-dominated industry.⁷ There is a real need to focus on training and workforce development that incentivizes greater diversity and equity, prioritizing minorities and women for training. Residential energy efficiency businesses – the vast majority of which have fewer than 25 employees – are crucial to our communities, providing local jobs that cannot be outsourced. They know how to do more with less and should have equal access to funding sources to bring on local workers and train them for growing demands. Supporting small businesses will generate economic growth and could help avoid unintentional exclusion of communities of color who have been historically overlooked by unions who may not have deep ties to these specific communities, thus opening opportunities to expand workforce diversity and allowing local communities to build and maintain human capital.

Chairman Rush’s Blue Collar and Green Collar Jobs Act (HR156) will be crucial to building this workforce. The bill includes an important Energy Workforce Grant Program and I urge the members of the Select Committee to co-sponsor this important legislation. I elaborate further on the importance of this bill in the question below.

The Honorable Mike Levin

- 1. According to Department of Energy estimates, households participating in the Weatherization Assistance Program save on average \$372 dollars each year. Not only will this funding provide critical assistance to low-income households, but it will also help grow the energy efficiency job sector. This sector already employs 2.1 million people, more than twice as many workers as work in the entire U.S. fossil fuel sector. That is why I am also glad that the bipartisan infrastructure law recognizes the need to recruit and train more Americans for careers in this sector by including \$10 million dollars for energy efficiency career skills training grants. Can you talk about why it is important to pair energy efficiency program investments with parallel investments in developing the energy efficiency workforce?**

Pairing energy efficiency program investments with investments in the energy efficiency workforce is critical—one cannot fully advance without the other. I was pleased to see funding for energy efficiency career skills training grants included in the Infrastructure Investment and Jobs Act (IIJA), but much more support is needed, as that funding focuses on non-residential sectors. As I noted in my testimony before this committee, the costs associated with training, equipment, and certifications are often steep, and constitute significant barriers to expanding and

⁷ According to the [2021 Energy Efficiency Jobs in America](#) report, a large majority of workers in the US energy efficiency industry are white males.

diversifying the energy efficiency workforce. Like many trades, the energy efficiency industry has historically been (and remains) a white, male-dominated industry.⁸

Directly pairing investments in energy efficiency with workforce investments is smart strategy, and there is legislation that would do just that. The HOPE for HOMES Act (H.R. 3456) pairs workforce training grants with a direct rebate program for homeowners to ensure workforce needs are met alongside critical home performance upgrades. A budget reconciliation version of HOPE for HOMES was included in the Build Back Better package that passed the House last year. Thank you for your vote of support for HOPE for HOMES in this reconciliation package, and I urge you to continue supporting this bill during legislative negotiations this year. The “HOPE” training will help small businesses make investments in their workers that they are currently disincentivized to do as the workforce is unstable and the fear of losing a newly trained employee challenges those investments. By subsidizing this training, we are ensuring that both the work is done well and that small businesses embrace the training as a part of business, raising the education level and expertise of the industry.

Additional federal investments via legislation like the above-mentioned Blue Collar and Green Collar Jobs Development Act (HR 156) can increase the contractor diversity in the energy efficiency sector and create a more diverse workforce. That legislation, sponsored by House Energy & Commerce Energy Subcommittee Chairman Bobby Rush (D-IL-01) includes a vital Energy Workforce Grant Program that provides grants directly to small businesses, among others, to support on-the-job training and external training of employees in the clean energy and energy efficiency industries, with an emphasis on minority and women-owned businesses. Small residential energy efficiency businesses like ours, the Urban Efficiency Group (UEG), are the perfect vehicles for this workforce funding—we know how to do more with less. Supporting small businesses will generate economic growth and could help avoid unintentional exclusion of communities of color who have been historically overlooked by unions who may not have deep ties to these specific communities, thus opening opportunities to expand workforce diversity and allowing local communities to build and maintain human capital. I urge the members of this Select Committee to co-sponsor this important legislation and hope to see it passed before the end of the 117th Congress.

As I mentioned in my written testimony before the committee, our firm, UEG, developed a quasi-small business incubator (Energy+) to remove some workforce cost barriers and increase supplier diversity. This comprehensive approach to developing and deploying more minority business enterprise (MBE) firms in the energy efficiency space, or “business in a box” concept was successful in launching two (2) minority owned energy efficiency contracting firms that boast a six-figure net profit year over year.

2. What efforts are you working on to build the future of the energy efficiency workforce and how can your experiences inform our work here in Congress?

We are vested in solving the challenges of an illiquid clean energy workforce by localizing training opportunities for diverse participants. Additionally, we understand the workforce challenge will continue as we are losing practitioners through attrition. This challenge has

⁸ https://e4thefuture.org/wp-content/uploads/2021/10/Energy-Efficiency-Jobs_2021_All-States.pdf.

influenced the creation of a training program for high school students, to provide early exposure and engagement to the energy efficiency and home energy performance industry. Our youth initiative, [Green Generation](#), is entering its second year and we have experienced an increase in enrollment. This program not only focuses on energy efficiency, but also includes leadership training, advocacy, and sustainability. Upon high school graduation, the students will have secured six Building Performance Institute certifications, qualifying them to enter the clean energy workforce immediately if college is not the plan after high school. The impact of this program was covered by the Department of Energy in an article [here](#).⁹ I believe it is imperative that Congress considers making larger investments in youth focused clean energy programs to ensure the next generation leaders are prepared to enter these emerging markets.

⁹ <https://www.energy.gov/eere/wipo/articles/eere-success-story-building-green-generation-chicago>.