

Testimony of Leticia Colon de Mejias
CEO of Energy Efficiency Solutions and
Policy Co-Chair of the Building Performance Association

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Making the Case for Climate Action: Creating New Jobs and Catalyzing Economic Growth

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Chair Castor, Ranking Member Graves, and members of the Select Committee, thank you for the opportunity to testify today on the opportunities and benefits of climate action through sensible and expanded investments in energy efficiency for homes and buildings.

I am Leticia Colon de Mejias, CEO of Energy Efficiency Solutions, and Policy Co-Chair of the Building Performance Association. I founded the home performance company Energy Efficiency Solutions (EES) in Windsor, CT in 2010. My direct service companies, EES, Best Insulation of Connecticut, and Green Eco Warriors, which I also co-founded, have completed weatherization and comprehensive energy efficiency upgrades in over 14,000 Connecticut homes and 10 million square feet of multifamily properties. Additionally, we have provided educational outreach and community engagement on the topics of energy conservation, energy efficiency, climate action, and energy equity in CT, MA, RI, NY, and CA. We are currently engaged in energy educational efforts in Chicago.

As Policy Co-Chair of the Building Performance Association, I am honored to help identify policies and opportunities to advance the residential energy efficiency industry, which in turn create career opportunities and improved policy outcomes locally and across the nation. Energy efficiency provides benefits to our economy, human health, grid stability, and environmental justice goals in every state in the nation, while simultaneously making our country's residential building stock more efficient, resilient, safe, healthy, comfortable, and affordable by reducing energy bills for millions of Americans through proven home retrofits and demand reduction technologies. Energy efficiency does this while putting Americans to work in family sustaining, stable career paths resulting in national economic growth.

America is a diverse, innovative, and amazing melting pot of people with unlimited ideas and solutions. I strongly believe that together we can create a responsible, equitable, inclusive, diverse clean energy future that will sustain and grow our nation while protecting human health and lifting our communities. As we rebuild our nation's energy grid to implement the best possible solutions with the least possible harm to our society, it is critical that we invest in expanded energy efficiency for homes and buildings.

Energy efficiency is the best path forward to draw down carbon emissions and create high return on investments, while also generating numerous societal benefits. The benefits of efficiency reach all communities across our nation, creating and sustaining local jobs, lifting communities

by addressing barriers to safe and healthy housing, improving energy affordability, and mitigating waste and pollution. Through energy efficiency retrofits we can address the climate crisis while we prioritize basic needs including safe, affordable, energy efficient, resilient shelter for **all Americans**. An affordable, clean energy future should be built on a foundation of energy efficiency.

ECONOMIC GROWTH

Investments in energy efficiency are a proven job creator and result in direct economic stimulus. There is a huge opportunity to simultaneously build a skilled clean energy workforce, support small businesses, and dramatically improve and decarbonize America's building stock. According to a recent report from E2 and E4TheFuture, if Congress directed \$60.7 billion to the energy efficiency sector, over a 5-year period it would **add \$254.7 billion to our nation's economy and create 737,200 full-time jobs across every region and state**.¹ Investing in a robust workforce of skilled energy efficiency workers will help power our economic recovery and our nation.²

Investing in the nation's energy efficiency and building retrofit workforce will not only protect and create many jobs, but it will also help American families save money on utility bills and make their homes safer and more comfortable, while supporting a sustainable energy future for the country. These investments can increase purchasing power for working families and support economic growth and revitalization, especially for historically disenfranchised communities.³

Congress should provide **robust appropriations for federal energy efficiency programs**. Dollar for dollar, federal investments in energy efficiency will create more jobs than investments in the utility sector or fossil-fuels.⁴ Federal investments in the U.S. Department of Energy (DOE) programs that support energy efficiency – like the Building Technologies Office, Weatherization Assistance Program, and State Energy Program - consistently result in job creation and economic growth.

The following programs at DOE deserve the support of American taxpayers as these programs are proven to provide a significant return on their investment. When funded they will continue to provide energy cost relief to households, support American-based industry and American jobs, strengthen the aging electrical grid, and support national security goals.

- **Building Technologies Office (BTO)** develops critical technologies, tools, and solutions that help U.S. consumers and businesses achieve peak efficiency performance in new and existing homes and buildings across all sectors of our economy, including through its important **Residential Building Integration (RBI)** program.

¹ <https://e4thefuture.org/wp-content/uploads/2020/07/E2E4-Build-Back-Better-Faster-Stimulus-Projection-Report-July2020.pdf>

² <https://www.youtube.com/watch?v=e8j-YJdbWZY&t=247s> https://www.eesi.org/files/Leticia_Colon_de_Mejias_093020.pdf

³ <https://rooseveltinstitute.org/publications/economic-recovery-begins-at-home-retrofitting-housing-jobs-health-savings-climate/>

⁴ <http://aceee.org/files/pdf/fact-sheet/ee-economic-opportunity.pdf>

- **State Energy Program (SEP)** provides funding and technical assistance to states to enhance energy security, advance state-led energy initiatives, and maximize the benefits of reducing energy waste. The Oak Ridge National Laboratory found that every dollar invested in SEP by the federal government yields over \$10 leveraged for energy-related economic development and realizes \$7.22 in energy cost savings for U.S. citizens and businesses⁵ – an excellent return on investment.
- **Weatherization Assistance Program (WAP)** helps low-income and rural families, seniors, and individuals with disabilities in every county in the nation make lasting energy efficiency improvements to their homes. WAP has a proven track record of creating jobs and contributing to the economy through the program’s large supply chain of vendors, suppliers, and manufacturers. Each dollar that goes toward weatherization assistance returns \$2.78 in non-energy benefits, in addition to the direct energy cost savings.⁶

In addition, I want to note the importance of the Low-Income Heating Energy Assistance Program (LIHEAP) at the U.S. Department of Health and Human Services. LIHEAP is a vital program that helps Americans pay their utility bills. However, this critical program may also be used to increase home energy efficiency, thus reducing those bills permanently. To better support low-income communities, LIHEAP allowable measures and cost per unit should be expanded to remove barriers to weatherization which would allow long-term solutions to energy affordability, rather than band aid solutions. Unfortunately, many low-income households are struggling with indoor health contaminants such as mold, asbestos, and other asthma triggers. These programs could offer multiple opportunities to improve human health through expanded building retrofits.⁷

Ultimately, energy efficiency is one of the most cost-effective ways to draw down carbon emissions while simultaneously producing all these added societal benefits.⁸ Addressing our aging infrastructure through holistic efficiency upgrades will also support a more reliable, resilient energy system, which is critical to our current and future economic growth and our national security.

CREATING JOBS

Energy efficiency is the largest energy sector in the U.S., employing over 2 million Americans.⁹ Our industry was also the fastest growing jobs sector in energy prior to the pandemic, employing twice as many workers as the entire fossil fuel industry.¹⁰ Energy efficiency jobs are inherently

⁵ https://www.eesi.org/files/fy07_021406_oakridge.pdf

⁶ <https://www.energy.gov/eere/wap/about-weatherization-assistance-program>

⁷ <https://efficiencyforall.org/wordpress/2021/03/01/addressing-health-and-affordability-challenges-for-low-income-families/>

⁸ https://efficiencyforall.org/wordpress/wp-content/uploads/2019/02/EE-Health_2-18-2019_Flyer.pdf

⁹ <https://e4thefuture.org/energy-efficiency-jobs-are-best-bet-for-recovery-in-2021-report-reveals/>

¹⁰ The 2020 Energy Efficiency Jobs in America Report, published by E4TheFuture:
https://e4thefuture.org/wp-content/uploads/2020/11/EE_Jobs_America_2020.pdf

local and cannot be outsourced, since upgrading our nation's building stock requires "boots on the ground." These jobs are in every state in the country, across urban and rural areas, and most of the companies in our industry are small businesses like mine. Energy efficiency is an economic engine, creating and sustaining high-quality local jobs and career pathways for the American workforce.

Like so many industries, ours was hard hit by the pandemic, resulting in a 10% cumulative workforce loss (338,500 clean energy jobs were lost between February of 2020 and February 2021).¹¹ My company suffered greatly when the utility-run efficiency programs across Connecticut shut down on March 15th of 2020. Our work came to a screeching halt, leaving my staff and I with no way to work until late June. This was true for all efficiency contractors in my state. Ultimately, we were able to work with our local Department of Energy and Environmental Protection leadership to create a safe path forward to serve the ratepayers of Connecticut. Through a combination of virtual assessments, new safety protocols, and PPE upgrades, we were able to successfully get our entire team back to work. Many other contractors in my state were also able to get back to work, and even more of us are now looking to grow our teams, companies, and business offerings.

The pandemic has continued to shine a light on the need to invest in energy efficiency expansion. As we sheltered in place it became all too clear that safe, resilient shelters are critically necessary in a crisis. I see this realization as an opportunity to spark new career options for displaced workers across our nation by expanding energy efficiency workforce programs nationally. Crises like the recent grid collapse in Texas demonstrate why expanded investments in improving thermal boundaries and increasing home efficiency could increase our national resilience to extreme weather or other crisis situations that require people to shelter safely at home. These investments in EE simultaneously work to lower peak demand, stabilize our energy grids, and allow that same saved energy generation to be reallocated to electrification efforts.

To prepare more American workers for quality jobs in energy efficiency and bolster the economy, Congress should act to support workforce development and jobs training, by passing the **Blue Collar to Green Collar Jobs Development Act (H.R. 156, 117th Congress, sponsored by Chairman Rush)**. The bill includes a vital **Energy Workforce Grant Program** that provides grants directly to small businesses to support on-the-job training for new and existing employees in the energy efficiency, renewable energy, grid modernization, and other energy industries. This would significantly help small and medium sized businesses invest in their employees, allowing workers to expand their skill set, earn higher wages, and provide improved services and technologies.

The **Blue Collar to Green Collar Jobs Development Act** would support small businesses like mine that are the backbone of the efficiency industry. Small businesses across our nation need assistance to help train our new hires and provide ongoing education to existing employees. We have a real need to ramp up the implementation of workforce programs to provide support and ensure there are qualified workers to fill these vital American jobs.

¹¹ <https://e4thefuture.org/wp-content/uploads/2021/02/Clean-Energy-Jobs-December-COVID-19-Memo-Final-Revised.pdf>

Importantly, the legislation would give priority to businesses that recruit employees from local communities, minorities, women, veterans, and workers transitioning from fossil fuel sector jobs - and it would also support critical on-the-job training and reskilling for these workers. The bill was passed by the U.S. House of Representatives in the 116th Congress as part of H.R. 2 and H.R. 4447.

We must ensure that funds and activities to support energy efficiency workforce development are accessible to small businesses and include flexibility to use funds for on-the-job training. There is no Department of Labor code for energy efficiency, so it has been very difficult to access federal and state funds for energy efficiency apprenticeship programs, particularly in the residential sector. The Department of Energy has a much better understanding of this industry and its support for residential energy efficiency businesses is crucial. These small businesses are helping to lighten the load on our national energy grid: we draw down pollution, carbon emissions, and strengthen our nation's infrastructure, while lowering energy burdens, and increasing positive health outcomes. Efficiency is simply efficient.

SUPPORTING FRONTLINE & DISADVANTAGED COMMUNITIES

Climate change poses the greatest threat to those communities that are least prepared to adapt – particularly low-income populations, disabled, elderly, young working families, and historically underrepresented communities. These communities already experience disparities in health outcomes, inequities in living conditions, and often historically lack political power. Such disparities place low-income communities and many underrepresented communities at greater risk while limiting capacity to adapt. Many of these same communities are struggling with energy affordability, barriers to safe and healthy housing, and financial insecurity. These challenges are all issues which building science and efficiency retrofits can improve. Equity-driven energy efficiency can help uplift these frontline communities, through healthier homes, lower energy bills, improved safety and increased financial security, all while offering local career opportunities.¹²

EQUITABLE TRANSITION

Taking climate action through robust investment in energy efficiency will create skilled jobs and stable career pathways with opportunities for growth in every state, not just for the moment, but for the long-term. With access to workforce development and robust short-term training programs, struggling Americans can become fully equipped to fill existing jobs and new careers in this emerging clean energy economy.

At my company for example, all our company managers started out as entry-level laborers. Over time and with training they developed into leaders at EES. Our industry boasts employees whose highest educational degree may be a GED or high school diploma, yet these staff are earning upwards of \$80,000 annually. Furthermore, three past EES employees now own companies like

¹² https://publichealth.yale.edu/climate/YCCCH_CCHC2020Report_395366_5_v1.pdf

EES. This is a wonderful demonstration of real career paths for real Americans, “Real Jobs for Real People.” My past employees are now business owners who are also hiring their own staff from their own communities. **Unfortunately, we are all struggling to hire people with the skill sets we need. Therefore, it is critical that Congress supports and budgets for energy efficiency training programs for small businesses, which will offer the opportunity for Americans to join us in this amazing work.**

We are presented with an unprecedented opportunity to lift underserved communities by supporting displaced workers, and career changers, through recruitment and training for careers in energy efficiency. Supporting employer-based on-the-job (OJT) training networks can help ensure that the residential home energy retrofit workforce continues to advance and expand to drive middle class job growth.¹³ With expanded training we can connect displaced and transitioning workers, underrepresented populations, and historically disadvantaged populations to these job opportunities. My company currently employs 20 staff members, 18 of whom are people of color who were unemployed or underemployed prior to working at EES. Beyond our EES staff we also provide work to a network of subcontractors who represent a diverse group of contractors such as: window installers, manufacturers, insulators, HVAC contractors, electricians, mold remediators, solar installers, trainers, marketing teams, community engagement workers, and sales staff.

Congress can take immediate action to lift energy burdens, strengthen our energy grid, improve health outcomes, and lift communities by supporting nationwide investments in residential energy efficiency for Americans of all income levels by passing the following legislation:

The **HOPE for HOMES Act** (H.R. 7325/S. 4052, 116th Congress, pending bipartisan introduction in the House by Representatives Welch and McKinley) is groundbreaking legislation that will help to support contractors and homeowner rebates for energy efficiency home upgrades, including enhanced support for moderate-income and working families that do not qualify for weatherization assistance.

- **HOPE for HOMES Training:** The legislation allocates \$500 million to support small businesses in training their staff to undertake energy efficiency upgrades. This training is offered on-line to increase access (even during a pandemic) and allow contractors around the country to support continued improvement of their staff’s skill sets. It will also increase the general understanding of the importance of building science and the business opportunities in improving home performance.
- **HOPE for HOMES Partial Performance:** The “Partial Performance Rebate” is a direct rebate provided to a homeowner for 30% of the cost of an energy efficiency improvement up to \$800 for installing air-sealing and insulation and rising to \$1500 to include high efficiency HVAC. This is doubled for moderate income families making less than 80% of median area income.
- **HOPE for HOMES Full Performance:** The full performance program will be run by State Energy Offices according to building science driven guidelines — ensuring the

¹³ <https://rooseveltinstitute.org/publications/economic-recovery-begins-at-home-retrofitting-housing-jobs-health-savings-climate/>

energy savings paid for is achieved in a manner that most effectively leverages the state's energy goals and workforce. For the "Full Performance Incentive" the rebates will be 50% of the cost of the project with rebates ranging from approximately \$2000-\$4000 depending on the percent of energy savings achieved. **This support is also doubled for moderate income families making less than 80% of median area income.**

The HOPE for HOMES Act was passed by the U.S. House of Representatives in the 116th Congress as part of H.R. 2 and H.R. 4447, and is currently in the CLEAN Futures Act (H.R. 1512) and the LIFT Act (H.R. 1848) in the 117th Congress.

The **25C Tax Incentive** is complementary to HOPE for HOMES and is another key piece of legislation providing incentives to homeowners at their point of decision-making. Simple and current, this incentive is the only energy efficiency tax incentive available for homeowners who have a tax liability at filing. It allows homeowners to take a discount off their tax bill when they purchase high efficiency products and systems during the tax year. Congress should support a long-term, forward-looking extension of the 25C credit by updating goals and consider transitioning the credit into a permanent performance-based instead of prescriptive incentive.

ENERGY SECURITY & AFFORDABILITY

Energy efficiency is one of the most effective tools to drive cost savings, increase property value, and protect financial security for American families while reducing energy burdens. My company provides residential retrofits across Connecticut, which have proven to reduce energy demand by 33% and generally have a return on investment of between 1-3 years. Nationally, studies have shown that weatherization measures such as insulation and air sealing can reduce energy use by 25-35%. **Cutting down on energy waste lowers peak demand, resulting in improved affordability and energy security for all Americans, especially the most vulnerable.**

New research shows that 25% of all U.S. households face a high energy burden, and for low-income households that number rises to 67%.¹⁴ Furthermore, Black, Hispanic, Native American, and seniors, as well as families residing in low-income multifamily housing, manufactured housing, and older buildings, experience disproportionately high energy burdens. In the face of unaffordable energy costs, nearly one in three U.S. households have reported facing a challenge in paying energy bills or sustaining adequate heating and cooling in their home, which can in turn impact health.¹⁵ Investment in energy efficiency generates lasting savings and is a critical solution for addressing energy affordability and protecting the health and safety of American families.

¹⁴ <https://www.aceee.org/research-report/u2006>

¹⁵ <https://www.eia.gov/todayinenergy/detail.php?id=37072>;
https://publichealth.yale.edu/climate/policy_practice/YCCCH%20Extreme%20heat%20issue%20brief_407652_284_48542_v2.pdf

Congress should improve access to energy efficiency among low-income and disadvantaged communities by supporting and expanding the Weatherization Assistance Program (WAP), including through robust appropriations for FY2022, as noted above.

Upfront costs are a huge barrier preventing many American households from investing in energy efficiency upgrades that would save money in the long run and improve their energy security.

In addition to the **Weatherization Assistance Program** and incentives like **HOPE for HOMES** and the **25C tax credit** which reduce the upfront costs, it is important that the energy efficiency upgrades are shown to have a return on investment. The **SAVE Act** (pending introduction in the Senate by Senator Bennet and to be included in Representative Perlmutter's GREEN Neighborhoods Act) would enable proper valuation of energy efficiency and energy generation features in a home's appraisal. This will help inform and engage Americans in the conversation on energy and increase demand for energy-efficient homes and retrofits of existing homes. It will also spur job creation in the construction, remodeling, and manufacturing sectors while simultaneously lowering Americans' energy bills, and decreasing carbon emissions from the housing sector.

In Addition to the programs and legislation mentioned above, educating Americans in the importance of energy efficiency and its economic and societal benefits will greatly improve the adaptation and success as we transition to a clean energy economy. Unfortunately, in many cases youth and families located in underrepresented, at-risk populations are still missing access to critical Science, Technology, Engineering, Art, and Math (STEAM) applied learning skills. STEAM could build a foundation for our future workforce needs and help us diversify the workforce. This type of systemic change will require investments in energy and environmental conservation education to increase the general population's understanding of how energy is connected to all things. If we desire to engage historically underrepresented populations in these career opportunities, we must invest in leveling the educational playing field and support applied science and energy education in public schools across our nation. We must invest in enhancing access to the information which would help connect these underrepresented populations to our vital work to transition to a clean energy economy.

At Green Eco Warriors, we collaborate with schools, families, communities, and leaders to achieve the following goals:

- Engage youth and families in meaningful learning activities such as environmental research and civic engagement and sustainability leadership, through the implementation of in-person and online education and motivation of youth and families.
- Engage underrepresented communities in preparing for growing energy workforce opportunities.
- Educate energy consumers on their role in energy consumption with special focus on at risk and minority populations, climate science, and energy equity.
- Create and provide equal access to engaging science-based educational tools aligned with national education standards.
- Reduce carbon emissions, pollution, energy waste, and energy disparities through the reduction of residential and commercial energy usage nationally.
- Educate communities on sustainable energy plans and water protection.

- Teach youth and families how to protect natural resources such as water, air, land, people, and the planet.

Green Eco Warriors has connected with thousands of youth and families which, prior to working with us, had no information on climate change, energy infrastructure, or their connection to energy, and therefore did not see themselves as a critical part of the solution or planning process. **If we desire meaningful engagement, we must ensure equal access to information that allows people to make informed decisions, and to be engaged meaningfully.**

PROTECTING PUBLIC HEALTH

Energy efficiency improvements in our buildings will create both immediate and long-term benefits for public health.¹⁶ Home performance contractors like myself address homes from the ridge line to the frost line, assessing the whole home and addressing the interconnections between the thermal envelope and the heating and cooling systems. Using building-science-based approaches, efficiency retrofits can dramatically improve the health and safety in homes by identifying and fixing underlying issues which cause mold, unhealthy indoor air, extreme temperatures, and health factors.

The health and safety benefits of energy efficiency retrofits are well documented, including significant improvements in asthma symptoms and other respiratory illness, reduced thermal stress, and improved overall physical and mental health. Weatherization measures, like insulation and air sealing, also improve the durability of homes and minimize residents' exposure to wind, moisture and temperature extremes, which are critical to keeping people safe in unexpected storms or power outages. In dollar terms, these positive health outcomes are significant. In my state of Connecticut, research shows that a 15% reduction in energy use could [reduce health impacts by \\$73 per capita annually](#). On a national scale, a recent study from the American Council for an Energy-Efficient Economy (ACEEE) shows that by targeting four common health risks — asthma, falls, and exposure to extreme heat or cold — existing weatherization programs could save almost \$3 billion dollars in avoided health harms over a ten-year period.¹⁷

Energy efficiency supports public health outside of the home as well. In the U.S., air pollution leads to almost 250,000 annual premature deaths per year.¹⁸ Building retrofits and efficiency measures save energy and lower peak demand, thereby helping reduce harmful pollution from coal- and gas-fired power plants.¹⁹ Oftentimes these dirty “peaker” plants are in or near underrepresented at-risk populations and low-income communities, threatening the health of those populations and making it an important equity concern. In

¹⁶ <https://rooseveltinstitute.org/publications/economic-recovery-begins-at-home-retrofitting-housing-jobs-health-savings-climate/>

¹⁷ <https://www.aceee.org/research-report/h2001>

¹⁸ <https://oversight.house.gov/news/press-releases/oversight-committee-and-top-experts-examine-new-data-on-the-health-and-economic>

¹⁹ <https://rooseveltinstitute.org/publications/economic-recovery-begins-at-home-retrofitting-housing-jobs-health-savings-climate/>

my own state, over 10 years energy efficiency programs reduced emissions by 11.4 million tons, the equivalent of taking 2.4 million cars off the road.²⁰

CONCLUSION

Comprehensive climate action that advances energy efficiency in buildings across the U.S. will strengthen our nation's economy and infrastructure and help generate a cascade of societal benefits including creating good-paying jobs for Americans, improving public health and well-being, and supporting our most vulnerable communities. The building sector is one of the largest contributors to our carbon emissions, and it is also a key part of the solution. It is time to address our aging, inefficient building stock and invest in these proven solutions that will provide a lasting return on investment for families, businesses, communities, and this country. The time for action is now. As a proud American and small business owner, I know that together we can create a responsible path forward to ensure an inclusive transition to a clean, resilient, stable energy economy, which will benefit all Americans regardless of economics or social standing.

²⁰ <https://www.energizect.com/about/annual-legislative-report-2019>