



Near-Term Strategies for Centering Equity in Building Decarbonization

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About NEEP

NEEP was founded in 1996 as a non-profit whose mission is to serve the Northeast and Mid-Atlantic to accelerate regional collaboration to promote advanced energy efficiency and related solutions in home, buildings, industry, and communities. Our vision is that the region's homes, buildings, and communities are transformed into efficient, affordable, low-carbon resilient places to live, work, and play.

Disclaimer: NEEP verified the data used for this brief to the best of our ability. This paper reflects the opinion and judgments of the NEEP staff and does not necessarily reflect those of NEEP Board members, NEEP Sponsors, or project participants and funders.

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Introduction

In order to center equity in decarbonization, decision-makers and policymakers first need to develop an understanding of what energy equity means and discern what current practices exacerbate inequities created by our social, economic, and energy systems. Leaders and decision-makers striving to make more equitable decisions should build relationships with historically marginalized communities to collaboratively create these definitions for shared understanding. NEEP's StoryMap [Recognizing Energy Inequities for Building Decarbonization](#) summarizes key energy equity concepts, provides history into practices that exacerbate inequities, and serves as a companion piece to this brief. To center equity into near-term energy policy development, energy decision-makers must acknowledge that energy policy decisions impact people, the environment, the economy, and society. This brief presents near-term strategies for integrating equity into processes, measuring equity impacts, prioritizing resident needs, and developing an equitable workforce.

Building decarbonization, or the elimination of greenhouse gas emissions from new and existing buildings, is necessary to combat the climate crisis. However, unless policymakers prioritize equity, this movement threatens to further harm those most impacted by climate change. As we move to decarbonize the buildings sector, energy policy and program decision-makers must account for environmental, social, and health costs and benefits while centering solutions that address this historical inequity. This brief outlines a foundational understanding of energy equity and provides a set of practices for decision-makers in the Northeast and Mid-Atlantic region to better collaborate with and defer to historically marginalized communities, measure those efforts, and center equity as a cornerstone of our future energy paradigm.

While centering equity requires deep, systems-level change, there are several near-term opportunities for advancing energy equity which decision-makers can take as first steps, like developing and tracking metrics that value non-energy benefits in order to measure equity impacts. Additional near-term opportunities for energy equity include creating resident-centered programs with restorative justice and investing resources to build a robust and diverse clean energy workforce. Before reading on, [please see the glossary of key terms here](#).

Key Takeaways

- Policies to advance energy efficiency, building decarbonization, and workforce development programs and policies are more effective when they center equity and restorative justice;
- Community members have valuable expertise from their lived experiences; states of delegated/shared power or community ownership are far more likely to result in equitable outcomes than simple community engagement;
- There are many new approaches to measuring equity and solutions should be selected to fit unique needs of a community – there is no one-size-fits-all approach;
- Decision-makers must account for societal, health, and environmental costs and benefits when designing, implementing, and evaluating clean energy programs

Integrating Energy Equity

Ultimately, centering energy equity means sharing decision-making power with historically marginalized communities who are also most impacted by the effects of climate change and who have the most to gain from policy and program implementation. There are several near-term strategies for centering equity in building decarbonization work. Developing equity committees, facilitating community-based decisions, implementing participatory processes, and conducting racial equity or health impact assessments are a few examples.

Equity Committees

Equity committees are important because they create an avenue for full participation from all community representatives, support distribution of decision-making power to historically marginalized communities, and solicit input from those directly impacted by that particular energy landscape. Equity committees can be effective in ensuring accountability and maintaining equitable priorities. Effective committees are interagency and include community representatives to maximize collaboration and participation. These committees should be explicit about participation from frontline communities and community members should be compensated. In order for equity committees to be effective, decision-makers must be sure equity committees are accessible, empowered, and included in the regulatory processes.

Providence Racial and Environmental Justice Committee (REJC)

An example of an effective equity committee is Providence, Rhode Island's [Racial and Environmental Justice Committee \(REJC\)](#).

"The REJC is the result of a partnership between the Environmental Justice League of Rhode Island, Groundwork Rhode Island, and the City of Providence's Office of Sustainability. This project team established the Racial and Environmental Justice Committee (REJC), made up of Black, Indigenous, and people of color representing communities living at the frontlines of environmental racism in Providence. The work began with anti-racism trainings, which presented a racial equity analysis for City and community members. The REJC then assessed the needs and priorities of community members and researched best practices for equitable sustainable community development. The result was the creation of Recommendations for a Just and Racially Equitable Providence, which was adopted by the Office of Sustainability in September 2017 and is now known as the "Just Providence Framework."¹

The city of Providence's Office of Sustainability and the REJC co-developed the Just Providence Framework to shift decision-making power over environmental justice and sustainability issues to Providence's frontline communities of color. They rejected the typical "input" model of community engagement and instead created space for frontline communities to become decision-makers. This approach acknowledges that the experts of racial equity in Providence are those who have been most affected by it--communities of color. Significant attention was also given to removing barriers to participation and an explicit focus on trust-building between these community members and the city. Going forward, the REJC will be identifying and implementing a process to operationalize this framework within the Office of Sustainability.

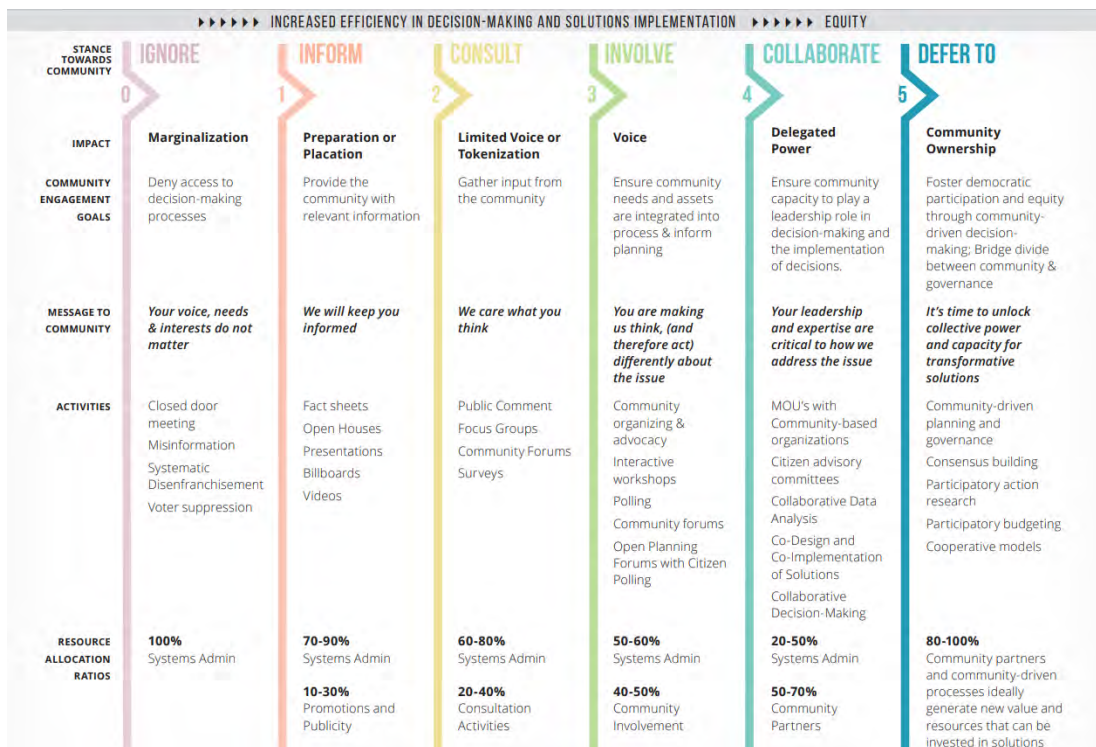
Community Participation and the Spectrum of Engagement to Ownership

Providing education and access to information is key in effectively developing and delivering a program that will reach a more diverse audience across a number of geographic and demographic factors. New approaches to program development and implementation are needed. Suggestions include:

- **Compensate community members for sharing their expertise.** In many cases, community members may require compensation for their time. This should be a standard offering, especially with low-income, communities of color, to ensure input is reflective of the community and the process is not extractive.

¹ "About Us", Racial and Environmental Justice Committee. <https://www.rejc401.com/>

- **Use diverse marketing channels.** Explore various kinds of media (print, online, word of mouth) to reach different communities and mandate multilingual outreach. Consider access to broadband when planning events and ensure call-in options to allow for participation.
- **Have accessible outreach.** Leverage existing networks and partner with community-based organizations that are established and trusted within the community to increase turnout, including hosting events in community venues familiar to residents, that are physically accessible, and near public transportation.
- **Allow for input of all forms.** Ensure all events, marketing materials, presentations, and forms are accessible to those with physical disabilities and accept input in multiple forms to accommodate various abilities or comfort levels.
- **Ensure transparency and accountability.** Create a feedback loop with community members so they know how their input is being listened to and acted upon. Create metrics for tracking commitments to transparency and accountability.
- **Schedule public sessions that work for the community.** Be conscious of work and family obligations when asking for public input, consider different hours for public sessions, offer reimbursements for travel, compensate participants or community-based organizations for time, provide on-site childcare or food.



Community ownership is the state of community-based decision-making with democratic processes. The [Community Engagement to Ownership spectrum](#) by Rosa González of Facilitating Power is a tool for communities to assess and transform community engagement practices. By providing indicators for each stage, it helps leaders acknowledge marginalization, articulate an equitable development process, and assess

community participation avenues to produce community-driven solutions. The developmental stages in the spectrum gauge a community's capacity for. Each stage, with the exception of marginalization, is an important step towards building community collaboration and governance goals, messages, activities, and resources. The "ignore" side of the spectrum denies community access to decision-making processes and sends negative messages to the community. Moving up the spectrum, more decision-making power and resources are shared with the community. Moving towards the "defer to" stage supports a shift towards [energy democracy](#). The success of these steps is measured by metrics covering goals, messaging, activities, and resources.

Racial Equity or Health Impact Assessments

Impact assessments are an important first step to understanding potential intended and unintended consequences of a project. Non-profit hospitals conduct [community needs assessments](#). Environmental impact assessments are a common tool to determine whether a project is likely to degrade the quality of an environment. Often times, these projects are looked at in isolation, but impact assessments look at the cumulative impacts on the community, accounting for the health and environmental impacts of all existing and proposed projects. Similarly, equity or health impact assessments also help to identify detrimental impacts posed by a project that cannot be seen when looking at it in isolation. These assessments provide decision-makers with important information to mitigate negative impacts of policy or program design on health and economic outcomes, and provide a baseline of current conditions in a community. For example, the [New Jersey Climate Change Alliance](#) commissioned a health impact assessment of the state's Draft Energy Master Plan to provide opportunities to integrate health equity.² The District of Columbia plans to develop an Equity Impact Assessment Tool to help the District immediately address racial inequities related to sustainability.³

Pew Charitable Trust's Health Impact Project provides a [toolkit](#) of health impact assessments and other resources for healthy communities. Race Forward provides a [toolkit](#) for racial equity impact assessments.

Measuring Equity

Decision-makers can explore a number of new and developing approaches to measuring equity. They should build equity metrics into traditional processes of cost-benefit analyses and evaluation, measurement, and verification. Just like other aspects of this work, determining the best measurement and evaluation processes should be done in collaboration with frontline communities.

Approaches to Measuring Equity

Energy policy leaders are striving to identify what equity means in the context of their work, and to show their commitment to building equity or breaking down inequities. To achieve this, decision-makers must make a multi-faceted commitment. First, they must understand how inequity is built into their work. Second, they must understand how current processes and policies reinforce those inequities. Third, they must commit to accountability by measuring the equity impacts of their decisions, having transparent and inclusive processes, and making changes if they fall short of achievements.

² Karen Lowry and Leigh Ann Von Hagen, "EAC produces report on health impacts of New Jersey's draft Energy Master Plan", Rutgers' Edward J Bloustein School of Planning and Public Policy, 2019. <http://eac.rutgers.edu/eac-team-conducts-rapid-hia-on-new-jerseys-draft-energy-master-plan/>

³ Sustainable DC, Equity. <https://sustainable.dc.gov/equity>

[History shows](#) that past energy practices can perpetuate inequity and create additional economic hardship for already overburdened communities. By using both qualitative and quantitative data, policymakers and implementers can provide a baseline understanding of how inequities are embedded in current programs, provide accountability during program design, and ensure measurable, tangible achievement. Energy equity measurement can also be modeled after existing equity measurement approaches employed in the housing, education, health, and environment sectors. Effective metrics are nuanced and program-specific. Program administrators and evaluators should develop metrics alongside community representatives. Some possible metrics include the demographics of participants in community engagement events, the number of marginalized residents served by a program, and relative differences in energy burden.

In [The State of Equity Measurement](#), authors offer four clarifying concepts of equity which are important for equity measurement presented in figure 1. The chart highlights dimensions of equity and concepts by which to measure them. Using these dimensions of equity to develop metrics can ensure that any policy or program addresses the many factors that contribute to inequity in our energy system, as equity can only truly be achieved by working on the root cause of the issue.⁴

Theoretical Background for Equity Dimensions

Dimension	Concept	Theoretical sources
Historical legacies	<i>Equity is measured cumulatively.</i> Current perceptions of equity implicate past disparities, discriminatory practices, and exclusion.	Sociology and psychology of race, ethnicity, and gender; legal, regulatory, and industrial history; science, technology and society studies; developmental education and psychology
Awareness of populations	<i>Equity is measured for relevant populations.</i> Measurers should identify and focus on both the demographic or behavioral groups in a region that have been historically treated unequally, and those who may be at a unique disadvantage in relation to the service or institution in question.	Public health; public policy analysis; government and political science theory; gender, race, and queer studies
Inclusion of other voices	<i>Equity is measured at different points in an intervention's life, starting with design and staffing.</i> Equity is inclusion during the conceptualization, design, and monitoring of a program, service, or institution. This "procedural fairness" includes full and sustained engagement with community members as well as leadership and employment that is representative of the community.	Public administration; organizational management; social welfare; participatory planning and engagement (urban planning)
Access discrimination	<i>Equity is measured by the ability of different groups of interest to become aware of, apply for or request, and access a service.</i> Services must be available and practically tenable to all groups equally, or specifically targeted at one group that suffers from other inequitable actions.	Legal and regulatory theory; civil rights history; communications and marketing
Output differences	<i>Equity is measured by the quality and completion of a service.</i> In many cases, different groups receive disparate treatment consciously and unconsciously. For example, the quality of service, customer satisfaction, or basic completion or performance may vary.	Housing discrimination history and sociology; social determinants of health (public health); educational finance and teacher quality; environmental justice scholarship
Disparate impacts	<i>Equity is measured by disparities in the desired outcomes across groups of interest.</i> Most services are	Sociology and anthropology of segregation; Public policy analysis

Figure 1

⁴ Carlos Martin and Jamal Lewis, Green and Healthy Homes Initiative, The State of Equity Measurement. <https://www.greenandhealthyhomes.org/publication/the-state-of-equity-measurement/>

Using equity metrics to design and judge the success of energy regulation, goals, plans, strategies, and even organizational business models enables policymakers and implementers to effectively advance energy equity for historically marginalized or excluded communities. To see more on how data has been used to expand program outreach see NEEP’s brief [on using data to design equitable programs](#). In designing metrics, it is important to value the full spectrum of benefits that centering equity can bring, from improvements to the energy system as a whole and to its participants as organizations and individuals. Methods for centering equity and metrics for success should be chosen with input from community representatives.

Just as there are a number of approaches to defining equity, there are many methods of measuring it – some more effective than others. Including both qualitative and quantitative metrics is useful in evaluating discrete data while not losing sight of the people who bear the brunt of the burden associated with the problem in question. Yet, many existing measurement and evaluation systems do not include equity metrics or capture the necessary data to fully understand equity impacts of programs or policies.

Efforts to Develop Equity Metrics

- [University of Michigan’s Urban Energy Justice Lab’s Energy Equity Project](#)
- [ACEEE’s Leading with Equity Initiative](#)
- [Initiative for Energy Justice’s Justice in 100 Metrics Report and Scorecard](#)
- [NEEP’s Blog Turning Policy into Performance: Measuring Equity to Achieve Restorative Justice](#)

Cost-Benefit Analyses

Our energy system has intersectional impacts: how much power is used and how it is created affects society and the environment around us. Cost-benefit tests are used to assess the cost-effectiveness of energy efficiency programs to ensure ratepayer investments result in ratepayer benefits. In traditional frameworks, still used by some states, the cost-benefit analysis includes only the costs and benefits from the perspectives of the utility and program participant. Cost-benefit analyses are continuing to evolve, but there is much opportunity for expanding upon the non-energy benefits included in energy efficiency program evaluation. While it is important to consider the financial costs of energy efficiency programs, externalities such as societal harms and benefits should be accounted for as well. Adding metrics to cost-benefit analyses that account for environmental impacts of programs – including health and air emissions – and encourage investment in low-income or small business programs can embed equity policy in cost benefit testing and encourage utilities and implementers to design portfolios that better incorporate equity in state policy. For example, [Vermont](#) has adopted a 15 percent low-income adder, recognizing there are unaccounted for benefits to low-income programs, such as reducing energy burden, increasing comfort, and increasing investment in homes.⁵ See the [National Standard Practice Manual for DERs](#) for more information on creating cost-benefit tests to more holistically account for all costs and benefits.

For states to incorporate these metrics into their own cost-benefit analysis, decision-makers can adopt the societal cost test or create their own local jurisdiction test that accounts for both externalities and additional non-energy benefits that result from energy programs. For more on the benefits of implementing a state test, reference [NEEP’s Implementation Guide for Jurisdiction-Specific Cost-Benefit Tests](#).

⁵ Vermont Public Utilities Commission Docket No. 19-0397-PET, Order date 07/06/2020

Evaluation, Measurement, and Verification

At the highest level, evaluation, measurement, and verification (EM&V) activities help program administrators to see the impacts of a policy, program, or event, and to adjust for the future. These activities fulfill the following needs: accountability; understanding; identifying improvements and optimizing performance; and transparency. The traditional EM&V framework evaluates energy efficiency programs based only on savings and spending, which can cause program administrators to overlook other important considerations in delivering programs—such as equity and accessibility. Embedding equity metrics in energy efficiency programs provides opportunities to address systemic racial inequities in housing, energy, and environmental policy through creating an accountability feedback mechanism. By using equity-related data, policymakers and implementers can provide a baseline understanding of how inequities are embedded in current programs and ensure measurable, real achievement. Evolving the EM&V framework can ensure that programs are successful and hold actors accountable when needed.

Putting Residents First

Putting resident needs at the center of program design is essential to building equitable and effective programs. Several program models including comprehensive weatherization services, energy standards, and resident protection policies can be employed to reduce [energy burden](#) and create healthier and more comfortable indoor environments.

Restorative Justice

“Restorative justice is a process where all the stakeholders affected by an injustice have an opportunity to discuss how they have been affected by the injustice and to decide what should be done to repair the harm” ⁶ - John Braithwaite

When applying restorative justice principles to energy inequities, it becomes clear that historically marginalized or excluded communities have often been the victims of injustices that have yet to be resolved. Moreover, these communities have typically been unable to participate in finding a resolution to these injustices. Efforts to establish trust fall short when not paired with principles of restorative justice and account for cumulative impacts of long-term disinvestment and marginalization. When investing resources in historically marginalized and/or excluded communities, decision-makers must account for all the years during which leaders chose not to allocate resources to these communities or involve them in decision-making. Simply making programs available to historically marginalized and/or excluded communities is not an effective equity effort; programs must be designed with community needs at the center and should be designed to disproportionately benefit those who have historically been disproportionately burdened by the way programs have historically been designed and delivered. Programs and policies should be designed to build wealth within the community it serves; they should be designed and delivered with community voices at the center of those efforts.

⁶ John Braithwaite, “Restorative Justice and De-Professionalization,” Penn State University Press, 2004. <https://muse.jhu.edu/article/175203>

Retrofitting Homes for Health and Energy Efficiency

While weatherization is a critical and effective strategy important for advancing equitable decarbonization, program implementers face many barriers to conducting this work. [Weatherization](#) may include insulating attics, walls, floors, water heater pipes, and furnace ducts; as well as weather-stripping or repairing doors and windows, patching holes and leaks in walls and roofs, and more.⁷ Residents with low incomes face heightened barriers to participation in energy efficiency and other state-offered programs when necessary home improvements are financially out of reach. Low-income weatherization programs offer funding for weatherization work, but these funds do not cover health and safety upgrades sometimes needed for weatherization. In addition, existing programs are not funded enough to meet the overall need. Weatherizing homes and improving building envelopes without first addressing health and safety barriers like mold or structural issues can be dangerous and harmful for residents as it results in worsened indoor air quality due to trapped toxins. Homes with significant health barriers are typically deferred from participating in weatherization programs until homeowners address these health issues. Structurally unsound homes prevent participation in program offerings. The resulting system forces people who have the least resources to pay the most for their energy bills. However, deferred homes are often most in need of weatherization services.

“Weatherization is often most necessary in older buildings occupied by [environmental and social justice] communities that have long been denied these upgrades by discriminatory policies and other cost barriers.” – Green and Healthy Homes Initiative, Leading with Equity and Justice in the Clean Energy Transition

Many homes served by current programs such as the U.S. Department of Energy’s Weatherization Assistance Project (WAP) and the U.S. Department of Health and Human Services’ Low-Income Home Energy Assistance Program (LIHEAP) first need to address health and safety issues like mold remediation or fixing a crumbling foundation. Though some LIHEAP funds [can be used](#) to address certain health and safety measures for weatherization, it can be difficult and time-consuming for some residents to enroll in and participate in these programs. Programs around the region are attempting to ease this issue through various methods:

- Philadelphia Energy Authority developed a pilot program, [Built to Last](#), to deliver coordinated support services to low-income customers. The program enables collaborative work across government agencies and identifies funding sources to pay for structural repairs, clearing the way for energy efficiency upgrades in homes. The platform coordinates screening, property audits, and the construction process for applicants.⁸
- Energize Delaware’s [Pre-Weatherization Program](#) uses Regional Greenhouse Gas Initiative (RGGI) funds to invest in repairs for Weatherization Assistance Program (WAP) deferrals. Administrators identify participants based on their inability to participate in the state’s weatherization program, and then use RGGI proceeds to cover repair costs that range from \$3,000 to \$7,500 per home.⁹ In addition to

⁷ Ruth Ann Norton et al., “Leading with Equity and Justice in the Clean Energy Transition”, Green and Healthy Homes Initiative. https://www.greenandhealthyhomes.org/wp-content/uploads/2021-GHHI-Leading-with-equity_wp_Final.pdf

⁸ Philadelphia Energy Authority, “Built to Last: An Initiative to Restore Safe, Healthy, and Affordable Homes”, August 2020. <https://philaenergy.org/wp-content/uploads/2020/08/8-2020-PEA-Built-to-Last-Overview.pdf>

⁹ Energize Delaware, Pre-Weatherization Program section of 2020 Annual Report, https://www.energizedelaware.org/wp-content/uploads/2021/03/DESEU-32810-FY21-Annual-Report_Full-Report_v4.pdf

providing funding, the program provides home inspections, contractor hiring, repair work scheduling, and performs a quality assurance post-inspection. From 2015 to 2020, over 380 homes have received pre-weatherization repairs. If the state were to replicate this model using its own RGGI funds, it would ensure no homes are turned away from participating due to health and safety barriers.

- New Jersey’s [Whole House Pilot](#) has a community-based approach that aligns lead poisoning prevention with energy efficiency programs to maximize benefits available to income-eligible households.¹⁰ At no cost to participants, the program offers an energy audit, in-home air leakage testing and air sealing, appliance safety testing, and a written report with recommendations for further improvements.

Rental Registries, Minimum Efficiency Standards, and Anti-Displacement Policies

Policies that advance [energy equity in rental housing](#) and gentrifying neighborhoods include housing anti-displacement policies, rental registries or licensing with energy efficiency requirements, and general minimum energy efficiency standards. Rental registries require landlords to register their property with the city, enabling greater transparency. Policymakers can include energy efficiency standards as a requisite for registration or license issuance, ensuring that all rental housing in the jurisdiction meets a minimum threshold for efficiency.¹¹ This strategy is most cost-effective when targeted at improving the worst-performing homes, so even if the program is structured so that costs of the energy investments are passed on to the tenant, bill savings are more likely to be greater than monthly cost of investment. To be implemented equitably, the policy should center the cost of living and quality of life of the resident.

- [Burlington, Vermont’s](#) ordinance mandates cost-effective minimum energy efficiency standards, with insulation being a top priority, to be achieved by the time of transaction for rental units.¹² The program first focuses on the most inefficient buildings so that upgrades are highly impactful and cost-effective.

Equitable decarbonization of homes, particularly rental properties, must also embed anti-displacement measures. Without these measures, the decarbonization of homes threatens to contribute to gentrification and rent increase, which in turn threatens displacement of the very residents who were supposed to benefit from decarbonization upgrades. There are various types of anti-displacement initiatives, such as implementing inclusionary zoning ordinances, incentivizing contributions to local community land trusts, providing discounted transit passes to low-income individuals, and creating residency preference plans prioritizing occupancy for historically marginalized residents. Increasing development and variety of affordable housing, preserving existing affordable and manufactured housing, [stabilizing small businesses](#), and implementing tenant and homeowner protections are also examples of residential anti-displacement strategies. [Resident protection measures](#) include just-cause eviction or tenant anti-harassment policies, multilingual tenant legal counseling programs, sources of income non-discrimination policies, rent review boards and/or mediation.¹³

¹⁰ State of New Jersey Board of Public Utilities, “[IN THE MATTER OF THE CONTRACT FOR CONSULTING SERVICES FOR NEW JERSEY’S WHOLE HOUSE PILOT PROGRAM](#)”, April 7, 2021.

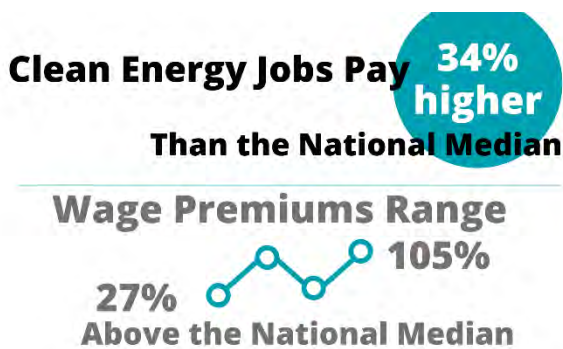
¹¹ Alisa Petersen and Radhika Lalit, “Better Rentals, Better City,” Rocky Mountain Institute, http://rmi.org/wp-content/uploads/2018/05/Better-Rentals-Better-City_Final3.pdf

¹² City of Burlington, 2021. “[An Ordinance in Relation to: Chapter 18 Housing – Change re Energy Efficiency and Weatherization in rental Housing](#)”

¹³ National Coalition for Asian Pacific American Community Development & Council for Native Hawaiian Advancement, “Asian American & Pacific Islander Anti-Displacement Strategies.” https://www.nationalcapacd.org/wp-content/uploads/2017/08/anti_displacement_strategies_report.pdf

Workforce Development

Clean energy jobs can be good paying jobs. At the same time, many of these careers require training and certifications for which there is a lack of compensation and support. As energy sources continue to shift to renewables and clean energy technology, higher concentrations of clean energy jobs are needed across the country. In order to create a diverse and equitable workforce, states and communities must first collect data to understand where gaps exist for women and people of color. From there, states and other decision-makers must implement strategies that support equitable job growth across under-represented groups and leverage existing pathways to employment in these communities. Equitable workforce development must also consider those already in the building and energy sectors whose work will soon be phased out as the market continues to move towards decarbonization. Workforce retraining opportunities allow career flexibility for those whose jobs are lost due to the decarbonization movement.



In a joint report by the National Association of State Energy Officials (NASEO), Energy Futures Initiatives, and BW Research Partnerships, researchers found that clean energy jobs paid 34 percent higher in median hourly wages than the national median of \$19.14 per hour.¹⁴ A [study by E4TheFuture](#) shows wages across all clean energy related industries were also higher than national median wages, with premiums ranging from 27-105 percent above the national median.¹⁵

Underpinning all energy efficiency programs is a community of companies and workers who face numerous new opportunities as these programs grow. Without accountability and purposeful program design, those developing the clean energy workforce could perpetuate inequities. [Research](#) on diversity in the U.S. energy workforce has shown that the energy sector has below-average representation of workers of color and women workers.¹⁶

Developing an equitable workforce does not just mean encouraging more women and racial and ethnic minorities to enter the clean energy workforce. It also means creating good paying jobs with good benefits and tracking if workers are able to stay in jobs long-term, building long careers. It also means supporting those workers once they enter the workforce. It also means ensuring that historically marginalized or underrepresented people have opportunities to secure work in an equitable manner. This may mean redesigning vendor solicitation or hiring practices to prioritize women- or minority-owned businesses or job candidates.

By incorporating diverse perspectives into the workforce, innovative ideas can produce more effective solutions that may have been previously overlooked. By ensuring money from the clean energy sector makes its way to historically marginalized communities, communities can build wealth and the energy sector can achieve a more democratic and just energy system. Metrics that track workforce growth and hiring practices can provide

¹⁴ National Association of State Energy Officials and Energy Futures Initiative, “Wages, Benefits, and Change: A Supplement to the Annual U.S. Energy and Employment Report,” 2020. <https://www.usenergyjobs.org/wages>

¹⁵ E2 and E4TheFuture, “Energy Efficiency Jobs in America,” November 2020. https://e4thefuture.org/wp-content/uploads/2020/11/National-Summary_EE-Jobs-in-America.pdf

¹⁶ E2, Alliance to Save Energy, American Association of Blacks in Energy, Energy Efficiency for All, Black Owners of Solar Services, and BW Research Partnership, 2021. Help Wanted: Diversity in Clean Energy, <https://e2.org/wp-content/uploads/2021/09/E2-ASE-AABE-EEFA-BOSS-Diversity-Report-2021.pdf>



accountability and access to help undo these barriers. For example, public-facing reporting on transactions with women-owned or minority-owned businesses can encourage companies to expand their relationships with these businesses. Reporting the number of workers hired and promoted from community training programs can also provide an incentive to create relationships with these locally-based organizations.

For more information on building an equitable workforce, see NEEP's [Equitable Workforce Best Practice Guidance](#).

Conclusion

While progress has been made and near-term solutions are attainable, there is much work to be done to achieve energy equity in the Northeast and Mid-Atlantic region. [Energy insecurity](#) permeates historically marginalized and/or excluded communities. Historical housing and financing practices such as redlining and community disinvestment have led to the inequities that persist today, worsened by the failure of energy and environmental policies to protect all residents from the harms caused by our dependence on fossil fuels and the institutional racism of our policy systems. The unequal distribution of energy efficiency benefits exacerbates existing inequities; solutions to correct this unfair distribution should incorporate deep, system-level change to realize the full benefits of [structural, distributional, procedural, and transgenerational equity](#).

The strategies presented here offer a starting point, but additional research and action are needed to reimagine our energy systems and policy processes to center the needs of historically marginalized communities. Policymakers should re-evaluate longstanding institutions, such as utility business and program models to allocate benefits towards low-moderate income populations and communities of color; innovative practices to subsidize efficiency investments in inefficient homes and buildings; and increased action to improve non-traditionally-served homes such as manufactured homes and rental units.

The level of large-scale building decarbonization that must occur to mitigate the effects of climate change cannot be achieved without also achieving energy equity, as low- and moderate-income people and people of color make up a significant portion of our region's population. A key first step towards implementing all of these changes is integrating voices of marginalized communities into energy efficiency work and planning processes and sharing decision-making power with those communities so that they can build wealth and resilience within their community.

Policymakers must prepare homes and buildings in historically marginalized and/or excluded communities for a clean and just energy transition by addressing health, safety, cost, and other barriers. Centering energy equity efforts in these communities and amplifying the voices of these residents is essential for building equity, righting past wrongs, and sharing decision-making power. When communities are healthy and secure with access to affordable resources and opportunities for growth, we can begin to repair injustices and build a better energy system for all.

Available Tools and Resources

- [DOE Low-Income Energy Affordability Data \(LEAD\) tool](#)
- [EPA EJScreen tool](#)
- [EPA Energy Savings and Impact Scenario tool](#)
- [EPA CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool](#)

- [EPA's Environmental Justice Collaborative Problem-Solving Model](#)
- [Pew Charitable Trust's Health Impact Project Health Impact Assessment toolkit](#)
- [Race Forward Racial Equity Impact Assessments toolkit](#)
- [The Spectrum of Community Engagement to Ownership](#)
- [Inclusive and Accessible Virtual Engagement](#)
- [Seattle's Inclusive Outreach and Public Engagement Guide](#)
- [Guide to Accessible Public Engagement](#)
- [Systems Change & Deep Equity](#)
- [Local and Regional Government Alliance on Race and Equity](#)
- [Equity in Burlington's Transportation Transformation](#)
- [ACEEE's Energy Equity Report](#)
- [Heat Islands and Equity](#)
- [Energy Democracy Project](#)
- [ACEEE's Guidance for Improving Rental Housing Efficiency at the Local Level](#)