



# **Energy efficiency and equity efforts nationwide: Examples of equity-related energy and climate programming to inform Massachusetts' 2022-2024 Energy Efficiency Plan**

**December 2021 – White Paper**

**Applied Economics Clinic**

**Prepared on behalf of the Green Justice Coalition**

**Authors:**

**Bryndis Woods, PhD**

**Elizabeth A. Stanton, PhD**

**[www.aeclinic.org](http://www.aeclinic.org)**

**December 3, 2021**

**[AEC-2021-12-WP-02]**

## Executive Summary

Massachusetts' energy efficiency programming leads the nation. However, historically, energy efficiency programs have been more accessible to affluent suburbs with single-family homes than to underserved communities with high proportions of lower income households and renters. With the Commonwealth's commitment to ensuring that energy efficiency benefits are more equitable in the future than they have been in the past, Massachusetts energy efficiency program administrators have an opportunity to target underserved communities that have historically lagged behind and to be transparent about their progress.

This white paper serves as a companion to two other another Applied Economics Clinic (AEC) white papers: one that provides recommendations for how to measure progress towards the goals of the Green Justice Coalition—builds on the equity recommendations of the Energy Efficiency Advisory Council's (EEAC) Equity Working Group (EWG) and Green Justice Coalition (GJC) for the 2022-2024 Three-Year Energy Efficiency Plan, and another that examines Massachusetts towns identified as underserved and the 38 towns newly identified for targeted equity investments by energy efficiency program administrators, the EWG and the EEAC.

This AEC white paper presents the results of our search for publicly available examples of equity in energy efficiency programming from elsewhere in the United States. Examples of programs that explicitly incorporate and prioritize equity are few and far between: In some cases, to find any examples at all, we had to move beyond the energy efficiency sphere. In other cases, we were unable to find detailed public information, leaving some questions unanswered, such as whether program performance data is transparently reported or whether programs have operationalized their equity goals with clear, measurable metrics. The result is a list of nationwide examples that provide interesting and informative ways to approach equity in efficiency, energy, and climate programs but also highlights how much progress is needed across the country in terms of prioritizing equitable efficiency outcomes.

Examples of equity-focused programming in practice include:

1. **Targeting efficiency benefits at underserved communities, vulnerable, and historically marginalized:** For example, New York State requires utilities to target low-income communities and communities of color with energy efficiency retrofits, funding, worker training, and jobs and to track the impacts of these efforts.
2. **Ensuring that efficiency programs are simple to use and language-appropriate:** For example, New York's Long Island Power Authority's Household Assistance Program automatically enrolls customers for a credit on their electric bills who receive assistance through various federal and state programs.
3. **Making efficiency data more detailed and transparent:** For example, Hawai'i Energy utilizes equity performance indicators in its data tracking efforts to ensure low-income and underserved communities are reached.
4. **Ensuring that efficiency creates opportunities for a just, green transition:** For example, Oregon's Energy Trust has specific goals to increase diversity and representation in the energy efficiency workforce.

5. **Ensuring efficiency efforts are aligned with broader climate goals:** For example, the City of Ann Arbor, Michigan is planning for a Sustainable Energy Utility (SEU) that would help the City meet its carbon neutrality target, invest in energy efficiency, and enhance equity.
6. **Ensuring that the people involved in efficiency efforts are representative of the communities that comprise the Commonwealth:** For example, Wisconsin requires utilities to provide workforce diversity data for the board of directors and all employees.

## Table of Contents

Introduction .....	5
1) Make It Targeted.....	7
2) Make It Simple .....	8
3) Make It Transparent.....	9
4) Make It Just .....	10
5) Make It Climate Conscious.....	11
6) Make It Representative.....	13

## About the Applied Economics Clinic

Based in Arlington, Massachusetts, the Applied Economics Clinic (AEC) is a mission-based non-profit consulting group that offers expert services in the areas of energy, environment, consumer protection, and equity from seasoned professionals while providing on-the-job training to the next generation of technical experts.

AEC's non-profit status allows us to provide lower-cost services than most consultancies and when we receive foundation grants, AEC also offers services on a pro bono basis. AEC's clients are primarily public interest organizations—non-profits, government agencies, and green business associations—who work on issues related to AEC's areas of expertise. Our work products include expert testimony, analysis, modeling, policy briefs, and reports, on topics including energy and emissions forecasting, economic assessment of proposed infrastructure plans, and research on cutting-edge, flexible energy system resources.

Founded by Clinic Director and Senior Economist Elizabeth A. Stanton, PhD in 2017, AEC's talented researchers and analysts provide a unique service-minded consulting experience. Dr. Stanton has had two decades of professional experience as a political and environmental economist leading numerous studies on environmental regulation, alternatives to fossil fuel infrastructure, and local and upstream emissions analysis. AEC professional staff includes experts in electric, multi-sector and economic systems modeling, climate and emissions analysis, green technologies, and translating technical information for a general audience. AEC's staff are committed to addressing climate change and environmental injustice in all its forms through diligent, transparent, and comprehensible research and analysis.

## Introduction

All over the United States, states, cities, and utilities are offering energy efficiency programs that include specific provisions intended to address equity concerns and ensure an equitable distribution of program benefits. This AEC white paper—prepared on behalf of the Green Justice Coalition—describes examples of best practices to enhance equity in energy efficiency programming from elsewhere in the country. A second Applied Economics Clinic (AEC) white paper provides recommendations for how to measure progress towards the goals of the Green Justice Coalition, building on the equity recommendations of the Energy Efficiency Advisory Council’s (EEAC) Equity Working Group (EWG) and Green Justice Coalition (GJC) for the 2022-2024 Three-Year Energy Efficiency Plan.

In this white paper, we describe state, city, and utility efforts to enhance equity in energy efficiency programming from around the country, related to six policy priority areas:

1. Targeting efficiency benefits at underserved communities, vulnerable, and historically marginalized;
2. Ensuring that efficiency programs are simple to use and language-appropriate;
3. Making efficiency data more detailed and transparent;
4. Ensuring that efficiency creates opportunities for a just, green transition;
5. Ensuring efficiency efforts are aligned with broader climate goals; and
6. Ensuring that the people involved in efficiency efforts are representative of the communities that comprise the Commonwealth.

As Massachusetts’ energy efficiency program administrators develop their program offerings under their proposed 2022-2024 statewide energy efficiency plan, they should build upon progress made to-date and take inspiration from best practices elsewhere in the country as they relate to enhancing equity in energy efficiency programming.

## Equity Objectives of Massachusetts’ 2022-2024 Efficiency Plan

Massachusetts’ 2008 Green Communities Act encouraged municipalities to become more sustainable, control energy costs, and develop clean energy technologies and practices by offering “Green Community” designations—that, once achieved, mean financial and technical assistance for clean energy and energy efficiency development—for communities that meet certain criteria. Initial grants totaled \$125,000 for each designated Green Community, “plus additional amounts tied to per capita income and population” meant to enhance equity.<sup>1</sup>

Massachusetts’ Clean Energy and Climate Plan for 2030 includes a commitment to equity, acknowledging that “without thoughtful intervention...the ability of Massachusetts residents to participate in the transition to a low-carbon economy—such as owning an electric vehicle or retrofitting their homes to be more energy efficient—will differ according to income-level, ability to access and

---

<sup>1</sup> Mass.gov. No date. “Green Communities.” Available at: <https://www.mass.gov/doc/green-communities/download>.

benefit from available resources, location in urban and rural settings, proficiency in English, and previous marginalization.”<sup>2</sup>

In the draft Three-Year Plan released in April 2021, Massachusetts energy efficiency program administrators include strategies for more equal access to and participation in efficiency programming:

*“The [program administrators] have made equity one of the key strategic priorities of the 2022-2024 Plan. Equity, as used herein, is defined as the process of establishing more equal access to and participation in energy efficiency, particularly among those groups who have historically participated at lower rates, including renters/landlords, moderate-income customers, English-isolated families, and microbusinesses. Across all Sectors, the [program administrators] are working to increase participation among the above-referenced groups by researching and deploying the most effective strategies to engage these customers, including through increased collaboration with community partners, enhanced incentives, improved language access, and targeted messaging.”<sup>3</sup>*

Massachusetts efficiency program administrators’ definition of equity and approach to equity improvements is intentional and enlightened—there is a reason that Massachusetts consistently ranks among the top energy efficient states in the nation. However, a commitment to equity also means continually striving to identify potential improvements, implement them, monitor their outcomes and be transparent about progress towards equity goals. At present efficiency benefits are not equitably distributed across the Commonwealth. More must be done—and now is the time to ramp up commitment to equity.

Massachusetts’ Environmental Justice Policy requires all state agencies to publish a public participation strategy for key agency actions. As part of that effort, agencies must ensure they schedule public meetings at times and locations convenient to the affected populations, encourage permit applicants to meet before-hand with community stakeholders, and offer translation services for those with limited English language ability.<sup>4</sup>

The Massachusetts EEAC convened the EWG in 2020 to collaborate with stakeholders and develop equity recommendations, with a particular focus on reaching “nonparticipant” or “underserved” customer groups identified in previous evaluation research (low- and moderate-income customers, renters, English-isolated households, and households without a college degree). The EWG’s membership includes representatives from: the EEAC, the Department of Energy Resources, the Low-Income Energy Affordability Network (LEAN), the energy efficiency program administrators, environmental justice organizations, and the EEAC consultant team.<sup>5</sup> To guide the trajectory of the three-year plan, the EWG

---

<sup>2</sup> The Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs. December 30, 2020. “Clean Energy and Climate Plan for 2030.” Available at: <https://www.mass.gov/doc/interim-clean-energy-and-climate-plan-for-2030-december-30-2020/download>. Page 10.

<sup>3</sup> Massachusetts Program Administrators. April 30, 2021. “Massachusetts Statewide Energy Efficiency Plan.” MA EEAC. Available at: <https://ma-eeac.org/wp-content/uploads/Mass.-Statewide-Energy-Efficiency-Plan-Submitted-April-30-2021.pdf>. Page 15-16.

<sup>4</sup> Executive Office of Energy and Environmental Affairs. June 2021. *Environmental Justice Policy*. Available at: <https://www.mass.gov/doc/environmental-justice-policy6242021-update/download>.

<sup>5</sup> MA EEAC Equity Working Group. July 13, 2021. “Equity Targets for 2022-2024 Three-Year Plan—Draft.”

has been working to identify inequities in the distribution of efficiency benefits and develop equity recommendations for the full EEAC to consider.

## 1) Make It Targeted

---

*Energy efficiency programming enhances equity when it (1) targets and (2) allocates additional resources to underserved, vulnerable, and marginalized communities, such as: towns and cities underserved by Mass Save, low-income communities, communities disproportionately impacted by COVID, and language-isolated communities.*

---

Massachusetts contracted a study—*The Residential Nonparticipant Market Characterization and Barriers Study*—which took an important first step to identify which communities are least likely to be included in efficiency programs. The study assessed the relationship between efficiency program non-participants and characteristics like renter status, income and English language capacity as well as common barriers to participation.<sup>6</sup> Low program participation is a challenge to be solved, not a permanent condition or a community characteristic, and Massachusetts has begun the process of identifying solutions to nonparticipation through the EEAC EWG. The program administrators' proposed 2022-2024 energy efficiency plan should include detailed, targeted plans and budget allocations to target specific neighborhoods and communities in order to: implement the EWG's recommendations, track the impact of those actions, and iterate until all communities are reached—especially historically underserved communities.

### “Targeted” Examples

The Harlem-based community organization WE ACT for Environmental Justice advocated for energy efficiency legislation that would direct utilities to set equity targets for energy efficiency, use resources to address the needs of low-income residents and New Yorkers of color, and direct the New York State Energy Research and Development Authority (NYSERDA) to track progress.<sup>7</sup> In March 2021, the New York State Senate passed the Energy Efficiency Equity and Jobs Act—an updated version of the legislation proposed by WE ACT for Environmental Justice. The bill ensures energy efficiency benefits reach low-income communities and communities of color by: requiring utilities to ensure a distribution of energy efficiency funding and jobs; requiring energy efficiency retrofits be deployed in those communities; requiring the state to allocate funds for energy efficiency worker training in these

---

<sup>6</sup> Navigant, Illume, Cadeo. February 27, 2020. “Residential Nonparticipant Market Characterization and Barriers Study.” *Prepared for The Electric and Gas Program Administrators Of Massachusetts Part of the Residential Evaluation Program Area*. Available at: [https://ma-eeac.org/wp-content/uploads/MA19R04-A-NP-Nonpart-MarketBarriersStudy\\_Final.pdf](https://ma-eeac.org/wp-content/uploads/MA19R04-A-NP-Nonpart-MarketBarriersStudy_Final.pdf).

<sup>7</sup> WE ACT for Environmental Justice. No date. “Energy Efficiency.” Available at: <https://www.weact.org/campaigns/energy-efficiency/>

communities; requiring NYSERDA to publicly track energy efficiency benefits; and broadening energy efficiency funding to include lead, mold, and asbestos mitigation as part of energy retrofits.<sup>8</sup>

## 2) Make It Simple

---

*Energy efficiency programming enhances equity when it makes it simple to receive benefits by: (1) streamlining eligibility processes; (2) streamlining onboarding, initial audits, and measure implementation; and (3) offering programs to more and different types of underserved, vulnerable and marginalized communities.*

---

Efficiency program administrators should expand low- and moderate-income eligibility thresholds to make efficiency benefits more widely available to vulnerable households. Programs in other states indicate that the Commonwealth should raise the income to qualify for low-income efficiency programs to be more reflective of local cost of living circumstances: for example, including households with incomes up to 80 percent of the state median income (for Massachusetts, \$65,000)<sup>9</sup> or even 300 percent of the federal poverty limit (for a family of four, \$80,000).<sup>10</sup> The Commonwealth should also work towards a single point of contact to facilitate the entire efficiency program process and offer a greater number of languages—including information, forms, websites, phone- and email-based assistance, and in-home evaluation and service in English, Spanish, Portuguese, Mandarin, Cantonese, Haitian Creole, Vietnamese, and Arabic.<sup>11</sup>

### “Simple” Examples

Minnesota’s new Energy Conservation and Optimization Act eases eligibility requirements for its suite of energy efficiency programs to better target lower income communities.<sup>12</sup> The bill requires utilities to set

---

<sup>8</sup> WE ACT for Environmental Justice. March 4, 2021. “Landmark Energy Efficiency Legislation Passes NY Senate; Energy Efficiency Equity and Jobs Act Now Primed for Assembly.” Available at: <https://www.weact.org/wp-content/uploads/2021/03/Landmark-Energy-Efficiency-Legislation-Passes-NY-Senate-1.pdf>.

<sup>9</sup> United States Census Bureau. N.d. “QuickFacts: Massachusetts.” Available at: <https://www.census.gov/quickfacts/fact/table/MA/INC110219>

<sup>10</sup> Office of the Assistant Secretary for Planning and Evaluation (ASPE). 2021. “U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Federal Programs.” Available at: <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2021-poverty-guidelines>

<sup>11</sup> United States Census Bureau. N.d. “2019: ACS 5-Year Estimates. Languages spoken at home.” Available at: <https://data.census.gov/cedsci/table?q=United%20States&t=Language%20Spoken%20at%20Home&g=0100000US0400000US25&tid=ACST1Y2019.S1601>.

<sup>12</sup> KSTP. July 27, 2021. “Gov. Walz signs Energy Conservation and Optimization Act of 2021.” Available at: <https://kstp.com/minnesota-news/governor-tim-walz-signs-energy-conservation-and-optimization-act-of-2021/6185444/>.



eligibility standards such that specified portions of their average three-year revenues are spent on energy efficiency programs for low-income households.<sup>13</sup>

New York's Long Island Power Authority's Household Assistance Program provides a credit on electric bills and automatically enrolls customers who receive assistance through various federal and state programs, including:

- Home Energy Assistance Program (HEAP),
- Medicaid,
- Supplemental Nutrition Assistance Program (SNAP),
- Supplemental Security Income (SSI),
- Temporary Family Assistance (FA),
- Temporary Safety Net Assistance (SNA),
- Veteran's Disability Pension, and
- Veteran's Surviving Spouse Pension.<sup>14</sup>

### 3) Make It Transparent

---

*Energy efficiency programming enhances equity when detailed information regarding the distribution of measures, savings, benefits, spending, emission reductions, and energy burdens is transparent and accessible to the public.*

---

The 2020 *Residential Nonparticipant Market Characterization and Barriers Study* found that Massachusetts' energy efficiency benefits are not distributed equitably; participation rates in energy efficiency programs are lower among renters, low- and moderate-income households, households without a college degree, and non-English speaking customers. The study also concluded that non-participating households are less likely to be aware of efficiency programs, to understand them, to trust them, and to have the time or resources to prioritize them.<sup>15</sup>

Efficiency program administrators should commit to leveling the playing field by providing a higher level of data disaggregation in publicly available efficiency program reporting. Currently, publicly available data in Massachusetts is inadequate to assess the equity impacts of energy efficiency programming. Data need to be disaggregated by as many categories of vulnerability as possible, but at a minimum, should include data on emission reduction, efficiency savings and benefits, and program spending

---

<sup>13</sup> Minnesota Office of the Revisor of Statutes. May 14, 2021. *HF 164*. Available at: <https://www.revisor.mn.gov/bills/text.php?number=HF164&type=ccr&session=ls92&version=0>.

<sup>14</sup> PSEG Long Island. 2021. "Household Assistance Program." Available at: <https://www.psegliny.com/myaccount/customersupport/financialassistance/householdassistance>.

<sup>15</sup> Navigant. February 2020. "Residential Nonparticipant Market Characterization and Barriers Study." *Prepared for MA EEAC and the Mass Save Program Administrators*. Available at: <https://illumeadvising.com/files/Residential-Nonparticipant-Market-Characterization-and-Barriers-Study.pdf>.

disaggregated by income level, energy burden, language isolation, race/ethnicity, and environmental burdens at the town level, program level and customer class level.

### **“Transparent” Examples**

Hawai’i Energy’s 2019-2020 Triennial Plan includes data tracking efforts to ensure its benefits reach low income and “hard-to-reach” communities, a performance indicator for inter-island equity, and performance indicators to reward the number of communities of “hard-to-reach” customers reached by its various programs.<sup>16</sup>

Knoxville, Tennessee works with its municipal utility to offer a consolidated bill for electric, natural gas, water, and sewer costs.<sup>17</sup> By tracking energy consumption for more than 1,000 utility accounts, the City determined that it had achieved a 13 percent reduction in greenhouse gas emissions in 2014 relative to 2005.<sup>18</sup> Using the consolidated bills, the City can also verify savings from energy efficiency upgrades and retrofit projects in buildings and city infrastructure.<sup>19</sup>

## **4) Make It Just**

---

*Energy efficiency programming enhances equity when its implementation helps redress past harms, creates new relationships of power, assures representative diversity in related jobs and procurement, provides diversity-enhancing job training, and takes action to guard against efficiency improvements that price historically marginalized households out of their neighborhoods.*

---

The interconnected nature of characteristics like race, income, English-language isolation, and immigration status overlap and intersect with one another in ways that create interdependent vulnerabilities. For example, all low-income households are vulnerable to high energy costs, but a low-income household that is English-isolated household is also less likely to be able to access and/or find translated materials on energy assistance programs. A just energy transition acknowledges and explicitly addresses the way that intersectionality impacts awareness of, access to, and the benefits and burdens that result from energy efficiency programs.

Program administrators need to target training opportunities and workforce development at vulnerability hotspots; provide multilingual training opportunities and workforce development; track training and workforce development opportunities; and commit to providing publicly available updates

---

<sup>16</sup> Hawai’i Energy and Leidos. N.d. *Triennial Plan 2019-2021*. Prepared for Hawai’i Energy. Available at: [https://hawaiienergy.com/files/resources/AnnualPlan\\_PY19-21.pdf](https://hawaiienergy.com/files/resources/AnnualPlan_PY19-21.pdf).

<sup>17</sup> McDonald, C., and S. Earni. *Best Practices in Energy Data Collection and Tracking*. Weatherization and Intergovernmental Programs Office. Available at: <https://www.energy.gov/sites/default/files/2016/09/f33/energy-data-management-part1.pdf>.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

that include information on diversity. Massachusetts should also work to ensure that energy efficiency and electrification improvements do not cause property value, property tax, and rent increases that displace local community residents.

### **“Just” Examples**

Oregon’s Energy Trust has a diversity, equity, and inclusion operations plan with ambitious workforce development goals including increasing customer participation in energy efficiency and renewable energy programs by 20 percent, increasing the number of contracts completed by women and minority-owned businesses by 15 percent, and to increase the Trust’s participation in the Trade Ally Network, a network of Oregon trade specialists in HVAC and lighting by 50 percent.<sup>20</sup>

A Senate Bill in New York (SB3126B)—which has passed the Senate but has yet to pass Assembly or be signed/vetoed by the Governor—seeks to require utilities to “hire and train employees who are from priority populations or living in areas designated as environmental justice communities”<sup>21</sup> as part of any energy efficiency proceeding or utility program, where “priority populations” include “veterans, veterans, individuals with disabilities, low-income individuals, unemployed power plant workers, previously incarcerated individuals, persons aged eighteen through twenty-four participating in work preparedness training programs, or residents of disadvantaged communities.”<sup>22</sup>

## **5) Make It Climate Conscious**

---

*Energy efficiency programming enhances equity when climate, efficiency and equity goals are all integrated. Emission reductions from energy efficiency programs (and efficiency savings benefits) should be equitably distributed among towns, income-levels, race/ethnicities or other household or business characteristics and should be integrated with broader climate planning and goals.*

---

Efficiency program administrators must report emission reductions by measure, sector, and customer type. Emission reduction targets need to be created for each customer type in a way that prioritizes underserved, vulnerable, and historically marginalized communities.<sup>23</sup> To get efficiency programs off the ground in Massachusetts, program administrators have largely targeted savings at the biggest energy users because that is where the cheapest dollar per kilowatt-hour (and dollar per ton of emissions)

---

<sup>20</sup> Energy Trust of Oregon. N.d. *2021 Diversity, Equity, and Inclusion Operations Plan*. Available at: <https://www.energytrust.org/wp-content/uploads/2021/03/2021-DEI-Operations-Plan.pdf>. Page 2-3.

<sup>21</sup> The New York Senate. N.d. “Senate Bill S3126B.” Available at: <https://www.nysenate.gov/legislation/bills/2021/S3126>.

<sup>22</sup> State of New York. January 27, 2021. “3126—B.” Available at: <https://legislation.nysenate.gov/pdf/bills/2021/S3126B>.

<sup>23</sup> Massachusetts Executive Office of Energy and Environmental Affairs. July 15, 2021. “Greenhouse Gas Emissions Reduction Goal for Mass Save.” Available at: <https://ma-eeac.org/wp-content/uploads/2021-07-15-Mass-Save-GHG-Goal.pdf>. Page 3.

reductions can be achieved. While that approach is efficient and economical, it cannot get Massachusetts—or the states following in its footsteps—to the scale of efficiency improvements required, particularly when it comes to issues of equity. To continue providing energy savings and complying with greenhouse gas emission reduction targets, program administrators will have to find new and creative ways to serve low- and moderate-income households, renters, and small businesses<sup>24</sup> in an economic fashion. It is possible for the Commonwealth to reach more homes and businesses with energy efficiency measures that reduce greenhouse gas emissions at a lower cost than many other mitigation measures.

### **“Climate Conscious” Examples**

While not specific to energy efficiency, in California, AB 1550 requires that 25 percent of all Greenhouse Gas Reduction Fund revenues must be invested in projects located in disadvantaged communities and provide benefits to local residents.<sup>25</sup> Energy efficiency programs can and should make similar commitments, though it is important that funding for disadvantaged and underserved communities is supplemental to existing sources of funding.

In 2006, voters in Boulder, Colorado passed a carbon tax on electricity consumption<sup>26</sup> that—annually—reduces emissions by more than 100,000 tons and generates about \$1.8 million.<sup>27</sup> The tax was structured such that the largest polluters (industrial electricity customers) pay the largest share on an annual basis, thereby minimizing the financial burden on residents and small businesses.<sup>28</sup> The revenue generated by the tax is used to offer rebates for energy efficiency equipment for businesses and homeowners, expand bike lanes in the city, and provide funding for communities to reduce energy consumption.<sup>29</sup>

In October 2021, the City of Ann Arbor, Michigan released a report detailing plans for a Sustainable Energy Utility (SEU) that would be publicly owned, powered by 100 percent local renewable energy,

---

<sup>24</sup> The 192<sup>nd</sup> General Court of the Commonwealth of Massachusetts. January 19, 2021. Bill S.9. “An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy.” Available at: <https://malegislature.gov/bills/192/S9>.

<sup>25</sup> Mueller, J., and A. Ronen. January 2015. *Bridging the Solar Income Gap*. GW Solar Institute. Available at: [https://downloads.ctfassets.net/ntcn17ss1ow9/33nwKgGBbl4pGAyR7HmleJ/cdea4f4bb881ca158b86713c9b294d31/GWSI-Bridging\\_the\\_Solar\\_Income\\_Gap\\_Working\\_Paper.pdf](https://downloads.ctfassets.net/ntcn17ss1ow9/33nwKgGBbl4pGAyR7HmleJ/cdea4f4bb881ca158b86713c9b294d31/GWSI-Bridging_the_Solar_Income_Gap_Working_Paper.pdf).

<sup>26</sup> Brouillard, C. and Van Pelt, S. February 2007. “A Community Takes Charge: Boulder’s Carbon Tax.” Available at: [https://www-static.bouldercolorado.gov/docs/boulders\\_carbon\\_tax-1-201701251557.pdf](https://www-static.bouldercolorado.gov/docs/boulders_carbon_tax-1-201701251557.pdf).

<sup>27</sup> Sadasivam, N. November 2, 2015. “How Boulder Taxed its Way to a Climate-Friendlier Future.” *Inside Climate News*. Available at: <https://insideclimatenews.org/news/02112015/boulder-taxed-its-way-climate-friendlier-future/>.

<sup>28</sup> Dane, A. and Petersen, A. May 6, 2021. “6 Innovative Ways to Fund Climate Action and Equity in US Cities.” *WRI*. Available at: <https://www.wri.org/insights/funding-models-climate-equity-cities-us>.

<sup>29</sup> Sadasivam, N. November 2, 2015. “How Boulder Taxed its Way to a Climate-Friendlier Future.” *Inside Climate News*. Available at: <https://insideclimatenews.org/news/02112015/boulder-taxed-its-way-climate-friendlier-future/>.

enhance energy reliability and equity, and help the City meet its carbon neutrality by 2030 target.<sup>30</sup> The SEU would invest in local energy efficiency, energy generation resources like solar and geothermal, energy storage, and electrification. Ann Arbor’s planned SEU will enhance equity by offering locally-focused energy solutions and novel financing options like on-bill financing, green leases, and shared savings agreements.

## 6) Make It Representative

---

*Energy efficiency programming enhances equity when there is diverse representation in leadership positions—leadership that looks like the Commonwealth itself. Representative diversity would entail more diverse racial, language, income, and renter representation among decision-makers.*

---

Decision-makers have the power to define both problems and solutions, which is why diverse representation is so important. When diversity among decision-makers is lacking, it means that the experiences, outlooks, and viewpoints of certain Bay Staters are not being accounted for. If decision-makers in the Commonwealth were representative of its population, they would come from a range of incomes, racial/ethnic backgrounds, homeowner and renter statuses, immigration statuses, and language capabilities: Half of Massachusetts’ households make less than \$81,000,<sup>31</sup> 30 percent make less than \$50,000, and 15 percent make less than \$25,000. Nearly a third of Commonwealth residents are people of color, more than 60 percent rent their homes, 17 percent were born outside of the United States, and 6 percent live in English-isolated households.

It is important that decision-makers in the Commonwealth represent of the diversity of the Commonwealth in positions of leadership at all levels (for example, among state legislators). However, for the purposes of enhancing equity in energy efficiency specifically, decision-makers from the EEAC, Department of Public Utility (DPU) commissioners, Department of Energy Resources (DOER) senior staff, DOER’s consultants to the EEAC process, and program administrators’ senior staff (at the program and the utility level) should be representative of the diversity of the customers they aim to serve, particularly those populations that have historically been underserved. To date, low-income households and renters across the Commonwealth have been underserved by energy efficiency programming and efforts to boost their representation in positions of leadership have, thus far, failed to close the gap.

In 2020, Cape Light Compact filed a petition with the Massachusetts DPU to approve a program called the “Cape and Vineyard Electrification Offering” (CVEO) as part of the *2019-2021 Three-Year Energy*

---

<sup>30</sup> The City of Ann Arbor. October 2021. “Ann Arbor’s Sustainable Energy Utility.” Available at: [https://www.a2gov.org/departments/sustainability/Sustainability-Me/Documents/A2\\_Sustainable\\_Energy\\_Report\\_2021\\_v7.pdf](https://www.a2gov.org/departments/sustainability/Sustainability-Me/Documents/A2_Sustainable_Energy_Report_2021_v7.pdf).

<sup>31</sup> United States Census Bureau. N.d. “QuickFacts: Massachusetts.” Available at: <https://www.census.gov/quickfacts/fact/table/MA/INC110219>.

*Efficiency Plan*.<sup>32</sup> The DPU did not approve the CVEO in 2019, but allowed Cape Light Compact to submit a revised proposal for consideration as part of the *2022-2024 Three-Year Energy Efficiency Plan*. On November 5, 2021, the DPU rejected Cape Light Compact's revised CVEO proposal to provide 250 low- and moderate-income customers currently heating their homes with oil, propane, or old-fashioned electric resistance with modern electric heat pumps, battery storage, and rooftop solar panels at low to no cost.<sup>33</sup> DPU's order denying the request commended Cape Light Compact for "its desire to address the barriers for low-income access to the proposed CVEO technologies" but concluded that "solar PV is not an energy efficiency resource" and therefore "cannot be funded using energy efficiency funds."<sup>34</sup>

### **"Representative" Examples**

In February 2021, Wisconsin's Public Service Commission required all utilities, regardless of size or ownership, to provide workforce diversity data on the board of directors as well as all employees.<sup>35</sup> The demographic categories for reporting include women, racial and ethnic minorities, veterans, and individuals with disabilities.<sup>36</sup>

In 2015, California Public Utilities Commission's (PUC) General Order 156 established rules to increase the participation of women, racial minorities, disabled veteran, and LGBT business enterprises in utility contract procurements and required that all utilities include information about supplier diversity in their annual reports to the PUC.<sup>37</sup> In their annual reports, utilities must summarize their contract procurement diversity, list any complaints received, describe their diversification efforts and program activities, and their plans to recruit among groups where representation has been low.<sup>38</sup> California's *2020 Supplier Diversity Report Card* indicates that—of their total spending on external suppliers—public utilities allocated an average of 23 percent of their spending to minority-owned businesses.<sup>39</sup>

---

<sup>32</sup> Department of Public Utilities. November 5, 2021. Docket 20-40-A. "Order." Available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14163875>.

<sup>33</sup> Low-income customers would receive all three technologies at no cost, while moderate-income customers would "be required to pay 25 percent of the cost of the solar PV and battery storage system, capped at \$5,000, with the potential to finance this contribution." (Ibid. Page 11).

<sup>34</sup> Ibid. Page 32.

<sup>35</sup> PSC of Wisconsin. February 15, 2021. *PSC Announces Requirement for Utilities to file Workforce and Supplier Diversity, Affordability Data*. Available at: [https://apps.psc.wi.gov/APPS/NewsReleases/content/PDF\\_download.aspx?id=679](https://apps.psc.wi.gov/APPS/NewsReleases/content/PDF_download.aspx?id=679).

<sup>36</sup> Ibid.

<sup>37</sup> California Public Utilities Commission. June 11, 2015. General Order 156. Available at: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M152/K827/152827372.pdf>.

<sup>38</sup> Ibid.

<sup>39</sup> Goodman, P. and Moya G. 2020. "2020 Supplier Diversity Report Card: Uneven Progress in Challenging Times." Available at: <https://greenlining.org/publications/2020/2020-supplier-diversity-report/>. Page 12.