

# ILLUME



**PROJECT:**

Preliminary Equity  
Assessment

**PROJECT SPONSOR :**

Connecticut Energy Efficiency Board

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# INTRODUCTION

The ILLUME DEI Team (the Team) was contracted by the Energy Efficiency Board (EEB) in April 2022 to advise on Diversity, Equity, and Inclusion (DEI)-related issues affecting Conservation and Load Management (C&LM) programs over a three-year contract; specifically, equity benchmarks and metrics, community outreach strategies, supplier and workforce diversity, and other ad hoc services as identified by the EEB. The purpose of this report is to lay the groundwork for C&LM programs to set equity goals and metrics consistent with the vision outlined in the Equitable Energy Efficiency (E3) Phase 1 Final Determination.<sup>1</sup>

## 2022 DEI Team Focus and Report Structure

This report serves as the first deliverable provided to the EEB, drawing on the Team's workplan submitted to the EEB in July 2022, following the Team's introduction in June 2022. As outlined in the workplan, the first six months of our Team's work identified gaps that need to be addressed to achieve the State's Equitable Energy Efficiency (E3) Proceeding's final determination's goals with a focus on E3 Goal 3, Action 3.3, aimed at developing new equity metrics for C&LM programs. To achieve this, the Team's 2022 activities focused on gathering foundational information required to develop equity metrics. Our activities included:

- Developing an understanding of how equity is currently being considered and measured within C&LM programs,
- Identifying potential gaps in policy and program design that may hinder understanding, measuring, and pursuing equity within C&LM programs,
- Proposing solutions to close the gaps, and
- Developing an inventory of existing equity-related indicators, benchmarks, and metrics and providing an approach to propose, socialize, and agree upon a framework once key gaps are addressed.

In this report, we provide our findings from the first six months of engagement as the DEI Consultant to the EEB, drawing on the activities outlined in the following section. The report is structured to set the stage for an informed and thoughtful process to address E3's equity goals within the context of C&LM programs. ***Note that a Summary of Recommendations appears beginning on page***

We present the following information as a part of this assessment

- **Assessment Approach:** the key activities we completed to inform our findings and recommendations.
- **Stakeholders and Decision-Making:** information relating to the history of E3 in Connecticut, other equity-related efforts, stakeholders involved, and related decision-making processes.

<sup>1</sup> E3 Phase 1 Final Determination (accessed on January 9, 2023). <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-E3-Phase-I-Determination.pdf>.

- **Gap Analysis:** a review of the current state, gaps identified, challenges introduced, and recommendations to close the gap in the current state. Our gap analysis focuses on definitional areas of equity, including who is in a priority population and what equity means – two key components that lay the groundwork for metrics.
- **Benchmark and Metrics Approach:** a review of current equity-related metrics and how they relate to E3, and a recommended approach for structuring and identifying future equity metrics.
- **Summary Recommendations:** a synopsis of all recommendations included in the report.

## Assessment Approach

To complete the activities listed above, the DEI Team reviewed relevant background materials, interviewed key stakeholders, conducted a gap analysis, and developed a preliminary equity metrics approach. These tasks are described below.

### Materials Review

The DEI Team reviewed relevant materials to better understand current C&LM program offerings and operations, the vision, and goals of the E3 proceeding, as well as how other states and jurisdictions approach measuring the impacts of equity investments.

Materials reviewed included program plan filings, including the most recent 2022-2024 C&LM plan and 2023 update, the E3 final determination, the Governor’s Council on Climate Change Report, previous evaluation studies, board and committee materials related to equity metrics, and relevant literature from other jurisdictions and research organizations pertaining to equity metrics. A complete list of materials reviewed is included in Appendix A.

### Stakeholder Interviews

The DEI Team held interviews with 14 representatives from the Technical Consultants, the Companies, Department of Energy and Environmental Protection (DEEP), EEB Board members, as well as other community representatives. We designed interviews to obtain an understanding of the following: 1) how equity is currently defined and approached within programs; 2) if and how equity is being measured within programs; and 3) barriers that may impact C&LM programs’ ability to achieve E3’s vision.

Note that our interviews were not designed to speak with an exhaustive list of stakeholders. Rather, the purpose of the interviews was to speak with stakeholders familiar with the E3 vision and goals to inform our understanding of the current state of E3 within C&LM programs. The future stages of work will engage additional stakeholders and community members at the EEB’s direction.

A list of groups interviewed is included in Appendix B.

### Gap Analysis

Drawing on the information gathered in our materials review and stakeholder feedback, we performed a high level gap analysis to identify important next steps to achieve E3’s goals. Our analysis identified potential obstacles or limiters present in C&LM programs that may impact the programs’ ability to achieve and measure

equity based on E3’s Phase 1 Determination. For the purposes of this deliverable, our team focused on 1) defining priority populations (such as target populations and priority communities named in E3, see 12) served through equity efforts, 2) defining “what” is equitable, and 3) examining the current equity-related metrics in place.

Drawing on our findings, the Team identified recommendations aimed at closing the gap between the current state of C&LM programs and a more equitable future state as envisioned in the E3 vision and goals.

## Equity Benchmarks and Metrics Approach

In this report, we provide an approach to developing benchmarks and metrics and outline the key decisions that will need to be made to deliver a unified and agreed-upon measurement framework for C&LM programs. We provide an inventory of potential metrics to be considered when metrics are developed in 2023. We also illustrate how an indicator of equity needs to be specified to measure whether C&LM programs are achieving their equity goals. Our inventory of metrics was developed based on ILLUME’s evaluation expertise, our work on equity in multiple jurisdictions, and other efforts underway.

### About the term “Priority Populations”

Many different words are used to describe communities that may experience disproportionate impacts related to climate change and/or energy service delivery. At both the national and state level, there is no singular term to encompass these communities, and terms have specific meanings in certain contexts. It is challenging to have different, often nuanced definitions – and to align them with company and policy objectives. The future of equitable service will require new forms of collaboration between utilities, communities, stakeholders, and government; coordination around common terminology will be essential in designing initiatives and directing funds toward the end goal of equitably serving all communities.

This document broadly references “priority populations” to encompass the myriad of indicators that may result in customers that have been (and may continue to be) marginalized. We acknowledge that other jurisdictions, utilities, communities, and stakeholders may use other terms to describe vulnerable customers and communities.

# STAKEHOLDERS AND DECISION - MAKING

Over the last several years, the State of Connecticut has worked to center equity within its climate change and clean energy focused initiatives, policies, and programs. As Connecticut's leading energy efficiency and load management intervention, C&LM programs have an important role to play within the State's larger efforts to bring equitable outcomes to its citizens. Here, we include an overview of the entities and efforts across the State of Connecticut that affect equity in energy related decision-making processes, and C&LM program's role within this.<sup>2</sup>

## Governor's Council on Climate Change

In 2019, the Governor's Council on Climate Change ("the Council") was re-established to consider adaptation, resilience, and mitigation strategies in the face of climate change impacts to meet a goal of achieving a 45% reduction in greenhouse gases by 2030.<sup>3</sup> To identify these strategies, the Council convened Working Groups in the following areas: equity and environmental justice, climate change mitigation strategies, working and natural lands (forests, wetlands, rivers, agriculture, and soils), infrastructure and land use, public health and safety, adaptation and resilience, and science and technology. These Working Groups met together over the course of 2020 and 2021, producing an initial set of recommendations to put forward to the full Council. In 2021, the Council published its Phase 1 Report, integrating these recommendations and setting out near-term actions.<sup>4</sup>

Per the Phase 1 Report, one of these recommendations included the creation of a statewide mapping tool to visually represent environmental and climate health vulnerabilities across the state. To fulfill this recommendation, DEEP partnered with the University of Connecticut's Institute for Resilience and Climate Adaptation (CIRCA) in August 2021.<sup>5</sup> CIRCA's work includes an iterative process of collecting and reviewing indicators and data sources for comprehensiveness, administering a community feedback process across the state, and creation of the final map viewer itself. The project timeline is expected to extend through the summer of 2023.<sup>6</sup> Once the tool is completed, DEEP may re-evaluate the definition for Environmental Justice Communities.<sup>7</sup>

<sup>2</sup> Note that we did not perform a comprehensive review of State efforts related to equity; rather we focused primarily on identifying key efforts that may help to inform equity within C&LM programs.

<sup>3</sup> Governor's Council on Climate Change webpage (accessed on January 9, 2023). <https://portal.ct.gov/DEEP/Climate-Change/GC3/Governors-Council-on-Climate-Change>

<sup>4</sup> Governor's Council on Climate Change, Phase 1 Report (accessed on January 5, 2023). [https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3\\_Phase1\\_Report\\_Jan2021.pdf](https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3_Phase1_Report_Jan2021.pdf)

<sup>5</sup> DEEP and UConn CIRCA Partner to Develop Mapping Tool for Environmental Justice Communities (accessed January 5, 2023). <https://portal.ct.gov/DEEP/News-Releases/News-Releases---2021/DEEP-and-UConn-CIRCA-Partner-to-Develop-Mapping-Tool-for-Environmental-Justice-Communities>

<sup>6</sup> UConn Environmental Justice Mapping Tool webpage (accessed January 5, 2023). <https://connecticut-environmental-justice.circa.uconn.edu/about/>

<sup>7</sup> DEEP Environmental Justice Communities (accessed December 28, 2022). <https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities>

The Equity and Environmental Justice Working Group also identified four core concepts of equity to inform the Council’s recommendations and near-term actions. These are summarized in Table 0-1 below.

Table 0-1. E3 Core Concepts of Equity

CORE CONCEPT OF EQUITY	DESCRIPTION
Distributive	Relates to the distribution of benefits, costs, and calls for directing resources to the most vulnerable communities.
Procedural	Relates to planning processes and calls for open, accessible planning processes in partnership with low-income communities and communities of color.
Contextual	Recognizes the legacy of racial and income equality, among other factors, in the development of policy.
Corrective	Recognizes that the most vulnerable communities often lack traditional forms of economic resources or political influence and calls for a process by which communities can hold institutions accountable.

These four forms of multidimensional equity are mutually reinforcing, each informing how Connecticut will achieve its objectives. For example:

- Corrective equity seeks to identify and address a lack of traditional forms of economic or political resources among vulnerable communities and calls for processes to remedy that. This form of equity points to *increasing input and decision-making processes* that, in theory, should improve the state’s success in achieving contextual and distributive equity. Efforts to increase corrective equity should focus on more inclusive decisionmaking processes in support of the state’s equity goals.
- Procedural equity, like corrective equity, focuses on ensuring that vulnerable populations can engage in policy and program life cycles, from design through evaluation. This form of equity should refine and reform existing processes to ensure accessible planning.
- Distributive is an outcome metric, focusing on the extent to which policies and programs are successful in providing equitable resources and benefits to vulnerable communities. Distributive equity is the most understood and widely measured form of equity in energy efficiency programs. Notably, distributive equity does not necessarily address past harm or a history of disinvestment in vulnerable communities. For this reason, distributive equity largely looks at the balance of ~~current~~ *current* benefits across populations, but does not explicitly tend to “righting” past harms or current disparities that result from historical factors, such as redlining, planned disinvestment, poor infrastructure maintenance, etc.
- Contextual equity is aimed at recognizing the legacy of racial and income inequality (among other factors) in policy development. Contextual equity often points to *who* policymakers and program designers should prioritize setting equity goals. This can include who benefits from public investment (priority populations) from market actors through end users. Depending on the need, this form of equity may require increases in funding for historically underserved and marginalized populations to ensure

equitable access to benefits and that homes, businesses, and underlying infrastructure are “ready” for energy efficiency programs.

The E3 Final Determination highlights several examples of how these equity concepts—especially procedural and distributive equity—may be applied in action. For instance, Goal 6, Action 6.1—“*develop community engagement practices that align with the goals outlined in this Proceeding and the C&LM Plan*” is an example of procedural equity. In another example, Goal 3, Action 3.2 identifies the Energy Efficiency Equity baseline (E3b) as a metric to assess utility investment in low-income populations and illustrates a form of distributive equity. The E3 Proceeding is discussed in greater detail in the sections below.

## Department of Energy and Environmental Protection (DEEP)

DEEP has several energy-related responsibilities to achieve Connecticut’s Energy Agenda.<sup>8</sup> These include (but are not limited to) procuring affordable and reliable electricity, updating the State’s Comprehensive Energy Strategy and Integrated Resource Plan, administering the State’s Weatherization Assistance Program, and overseeing C&LM programs.

At an agency-wide level, DEEP’s Environmental Justice Program incorporates principles of equity and environmental justice into its program development, policy making, and regulatory activities.<sup>9</sup> It accomplishes this through several avenues, including but not limited to the following: developing strategies to increase public participation in the agency’s decision-making processes, identifying health concerns in consultation with local and state health departments, and decreasing language barriers. Additionally, in 2021 the Governor established by executive order the Equity and Environmental Justice Advisory Council (EEJAC) within DEEP, to advise on environmental justice, pollution reduction, energy equity, climate change mitigation and resiliency, health disparities, and racial inequity.<sup>10</sup>

Concurrent with the work of the Governor’s Council on Climate Change and in its oversight role of the C&LM program, DEEP launched the E3 proceeding, with a goal of defining equity in the context of C&LM.<sup>11</sup> In 2021, DEEP released its E3 Phase 1 final determination, which set out a vision statement for what equitable energy efficiency programs will accomplish:

The E3 Phase 1 Proceeding laid out a vision for equity within energy efficiency and identified an initial set of goals and action items to integrate key principles into the C&LM programs. This vision statement is included below:

<sup>8</sup> Connecticut’s Energy Agenda (accessed January 5, 2023). <https://portal.ct.gov/DEEP/Energy/Energy-Proceedings>

<sup>9</sup> DEEP’s Environmental Justice Program (accessed January 5, 2023). <https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Program-Overview>

<sup>10</sup> Executive Order 21-3 (accessed on January 5, 2023). <https://portal.ct.gov/ConnecticutClimateAction/Executive-Order/Executive-Order-No-21-3>

<sup>11</sup> DEEP’s E3 website (accessed January 5, 2023). <https://portal.ct.gov/DEEP/Energy/Conservation-and-Load-Management/Equitable-Energy-Efficiency>



## E3 Vision Statement

*“Energy efficiency is one of the most effective energy resources and has the potential to reduce energy burdens, cut carbon emissions, and promote community resilience. However, conscious effort is required to ensure that these benefits are conferred equitably among Connecticut residents. Equitable energy efficiency programs will:*

*Alleviate high energy burdens for low-income and underserved households*

*Recognize and remediate past harm by prioritizing historically under-resourced communities*

*Mitigate and eliminate barriers to low to moderate-income participation in energy efficiency programs*

*Drive accessible and transparent process to incorporate residents’ priorities and lived experiences into program design and decision-making*

*Ensure equitable access to the benefits of energy efficiency.”*

The E3 final determination also sought to align with the four concepts of equity identified above by the Governor’s Equity and Environmental Justice Working Group. DEEP notes in the final determination that its Phase 1 goals and actions integrate some of these concepts, and that future phases of the proceeding will advance additional ones. As shown in Table 0-2 below, the goals identified for Phase 1 largely focus on distributive and procedural equity.

Table 0-2. E3 Phase 1 Goals and Related Core Equity Concept

E3 PHASE 1 GOAL	CORE CONCEPT OF EQUITY
Goal 1: Embed greater equity in decision-making	<i>Procedural</i>
Goal 2: Enhance tracking of equity indicators in C&LM programs	<i>Distributive</i>
Goal 3: Develop metrics and goals to assess equitable distribution of energy efficiency funding	<i>Distributive</i>
Goal 4: Improve program participation and impacts among moderate-income customers	<i>Distributive, Procedural</i>
Goal 5: Streamline the eligibility process for low-income programs	<i>Procedural</i>
Goal 6: Improve outreach to high-need or high-impact populations	<i>Procedural</i>
Goal 7: Address health and safety barriers to low-income weatherization access	<i>Contextual</i>
Goal 8: Address and remove barriers to participation among renters	<i>Procedural</i>

# Conservation and Load Management Programs

Connecticut State Statutes, §12-45m, (d)(1), state that electric distribution companies, in coordination with the gas companies (“the Companies”) submit a plan every three years “to implement cost-effective energy conservation programs, demand management and market transformation initiatives.” This plan is submitted to the EEB, which advises the Companies on the plan and approves it prior to submitting to the DEEP Commissioner for approval.

As a part of the E3 proceeding, DEEP directed the EEB to hire a DEI Consultant to provide guidance on achieving equity within energy efficiency programs. In this assessment, the DEI Team focuses its attention on the application of E3’s vision within C&LM programs and policies, while also acknowledging the larger context of other equity related work taking place within the State.

At the time of the submittal of this report, C&LM programs have just begun their second year in a three-year cycle (2022–2024). The Team anticipates that recommendations from this report may be partially integrated into the remainder of this cycle, and more fully integrated for the 2025–2027 planning cycle. Additional details on the expected timing of our activities are included in the proposed 2023 workplan, which accompanies this report as a separate attachment.

## Recommendation 1: Support a Clear Process for Addressing Equity within C&LM Programs by Creating an Equity Subcommittee, and Delineating Areas that will be Explored in Future E3 Phases

As we highlight in this section, C&LM programs and related equity efforts exist within the larger context of equity-focused efforts in the State and at DEEP. C&LM program activities and decisions also engage and affect several groups – including but not limited to DEEP, the EEB, the Companies, Technical Consultants, and numerous community organizations and individuals. Given the number of concurrent equity related efforts in the State and the number of groups involved, the DEI Team will need a core group of stakeholders to vet information and proposed decisions for the EEB’s consideration as recommendations within the assessment are further explored and implemented.

Additionally, the vision of E3 is expansive, and fully implementing it will require a thoughtful process. The DEI Team believe that additional thought should be given to what aspects of equity are best addressed in future phases of E3.

Based on these factors, the DEI Team recommends that the EEB consider the following:

Consideration 1: The EEB should consider creating an Equity Subcommittee. The DEI Team was hired to advise on equity related efforts within C&LM programs, however, the Team does not make decisions on behalf of the EEB, DEEP, or the Companies. At the same time and as noted, C&LM programs exist in a larger universe of initiatives at the State and DEEP. Multiple initiatives and several stakeholders must be considered to ensure effective coordination and collaboration. To start, the Team recommends that the subcommittee include representatives from the EEB, DEEP, and the Companies. As the subcommittee’s work progresses, additional representatives may be added. Like the role of the Technical Consultants on the other subcommittees, the DEI Team would lead in setting subcommittee agendas, producing related content (with the support of other

stakeholders as needed), and proposing approaches and options for discussion and consideration. We appreciate that all potential sub-committee members have a myriad of other responsibilities; therefore, this sub-committee would only meet (virtually) as needed when key decisions need to be made. The goal of the sub-committee is not to create extra work, but to ensure that key decisions get made in an efficient and consistent manner.

Consideration 2: As goals for future phases of E3 are charted out, the EEB should consider recommending that DEEP explore how (and if) C&LM programs can address corrective and contextual equity. As noted within the E3 final determination, Phase 1 of the proceeding characterizes the current state of equity for C&LM programs and identifies short-term action to address known challenges and barriers. While the Phase 1 goals address several forms of distributive and procedural equity, they do not fully address contextual or corrective equity. For example, this could include further integrating priority populations into decision-making processes (corrective), using a framework such as the Spectrum of Community Engagement to Ownership.<sup>12</sup> This framework goes beyond public participation processes and illustrates what it looks like to move towards community collaboration and ownership in decision-making.

<sup>12</sup> González, Rosa. “The Spectrum of Community Engagement to Ownership” Community Commons. (2020). <https://www.communitycommons.org/entities/3aec405c-6908-4bae-9230-f33bef9f40e1>.

# GAP ANALYSIS

The DEI Team's 2022 workplan included identifying the potential gaps for understanding, measuring, and pursuing equity within programs. This section provides a summary of our analysis. First, we provide an up-front discussion on how to actionably define equity objectives in simple terms (who, what, how, and when). Then, we assess two critical alignment areas necessary to effectively implement and measure equity initiatives:

1. Defining who to target as a priority population
2. Defining what it means for C&LM programs to be equitable

Multiple jurisdictions, including the federal government's Justice40 Initiative, have or are attempting to define and operationalize equity into a set of strategies that will be implemented to achieve more equitable outcomes (see Appendix A for a summary of regional and national efforts). In each case, the regions are engaged in the process of more clearly articulating their equity goals and translating them into more specific goals and parameters that can be addressed by interventions and measures to assess programs' success.

To create more equitable energy programs and services, it is critical to consider how equity goals will be operationalized in Connecticut. Because the C&LM program is one initiative within the larger context of the State's efforts to center equity in its programs and services, the EEB must also consider how equity within energy efficiency programs ties to the broader definitions and strategies being set forth by the State of Connecticut. Considering this broader context, and within that—what equity means for the C&LM program—the following questions must be addressed to establish equity goals and metrics:

- Who are we trying to serve by addressing inequities in C&LM programs? Specifically, which households, businesses, and/or communities are to realize more equitable outcomes? And importantly, how do we define these populations? What data will we use to identify them? The answers to these questions serve as the definition of our priority populations.
- What outcomes are the focus of our equity efforts? For example, what specific *benefits* can be achieved? What specific *harms* and *burdens* can be reduced or avoided? The answers to these questions identify the specific equitable outcomes we aim to achieve.
- How can we achieve greater equity? Which processes, programs, and services will be held to equity goals? The answers to these questions serve as our primary interventions and investments.
- When do we begin to achieve more equitable outcomes? By what years? In what planning or implementation cycles? The answer to these questions informs the milestones we will achieve to reach our equity goals.

Combined, the answers to these questions should create a clearly articulated, unified equity goal used to create a set of strategies designed to achieve it. Further, the clarity achieved by answering these questions will inform the specific metrics, benchmarks, and indicators recommended for the C&LM program.

For example, New York’s CLCPA legislation specifies the who, what, and how, as shown below (bolded text added for emphasis):<sup>13</sup>

*“State agencies, authorities and entities, in consultation with the environmental justice working group and the climate action council, shall, to the extent practicable, invest or direct available and relevant programmatic resources in a manner designed to achieve a goal for disadvantaged communities (who) to receive forty percent of overall benefits of spending (what) on clean energy and energy efficiency programs, projects, or investments (how) in the areas of housing, workforce development, pollution reduction, low-income energy assistance, energy, transportation, and economic development (what), provided however, that disadvantaged communities shall receive no less than thirty-five percent of the overall benefits of spending on clean energy and energy efficiency programs, projects, or investments.”*

New York’s legislation specifies the “when” as a component of its larger goal to achieve 100% zero-emissions electricity by 2040.

The federal government’s Justice40 Initiative also addresses the who, what, and how through executive order (bolded text added for emphasis):<sup>14</sup>

*“Within 120 days of the date of this order, the Chair of the Council on Environmental Quality, the Director of the Office of Management and Budget, and the National Climate Advisor in consultation with the Advisory Council, shall jointly publish recommendations on how certain Federal investments might be made toward a goal that 40 percent of the overall benefit (what) flow to disadvantaged communities (who). The recommendations shall focus on investments in the areas of clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; the remediation and reduction of legacy pollution; and the development of critical clean water infrastructure (how). The recommendations shall reflect existing authorities the agencies may possess for achieving the 40-percent goal as well as recommendations on any legislation needed to achieve the 40-percent goal.”*

The executive order also addresses the “when” as a part of its larger goal to “put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050.”

## Create Actionable and Aligned Definitions

Determining who should be served to achieve what equitable outcomes is a critical first step in translating E3’s goals into actionable—and measurable—program goals. In this section, we discuss two immediate

<sup>13</sup> New York State Senate Bill S6599, §70117. Investment of funds (accessed on December 28, 2022). <https://www.nysenate.gov/legislation/bills/2019/S6599>

<sup>14</sup> Executive Order 14008, Section 22 (accessed on December 28, 2022) <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>

needs: 1) defining priority populations, and 2) defining what “equitable” means in the context of C&LM programs.

## Defining Priority Populations (who)

The C&LM program targets several different groups and populations in its equity efforts. However, there is a need to clarify a priority population that all stakeholders can come together on, as well as consider how C&LM programs may (or may not) align with other efforts, such as at the state or federal level, to define priority populations.

### Current State and Gaps Identified

From our review, we identified thirteen (13) different targeted groups and populations that benefit from equity-focused C&LM initiatives. These populations are defined by individual household/business characteristics or geographies drawn from the E3 Final Determination, the 2022 – 2024 C&LM Plan, and the Department of Economic and Community Development (DECD) and DEEP websites, among other sources.<sup>15</sup> In Appendix C, we list the targeted groups and populations identified in our materials review, the sectors to which they apply, their definitions, and sources. We further summarize this information in Table 0-3 below, indicating the targeted populations we identified by sector as well as whether they are geographically bound or defined at the individual household/business level.

Table 0-3. Summary of Targeted Groups and Populations Identified by Sector\*

SECTOR	PRIORITY POPULATIONS REFERENCED
Residential	<ul style="list-style-type: none"> <li>• Households with energy burdens greater than 6% (individual)</li> <li>• Communities of color (geographic)</li> <li>• Areas with high rates of arrearages and utility shutoffs (geographic)</li> <li>• Underserved households (definition not specified)</li> <li>• Historically under-resourced communities (geographic)</li> <li>• Moderate income households (individual)</li> <li>• Low-income households (individual)</li> <li>• Distressed municipalities (geographic)</li> <li>• Environmental justice communities (geographic)</li> <li>• Distressed census tracts (geographic)</li> <li>• Non-English speaking or limited English proficiency customers (individual)</li> <li>• Customers enrolled in hardship programs (individual)</li> </ul>
Business	<ul style="list-style-type: none"> <li>• Certified minority-owned, women-owned, and veteran-owned businesses (individual)</li> </ul>

\*Individual or geographic definition specified in parentheses.

<sup>15</sup> 2022-2024 C&LM Plan (accessed on December 28, 2022) <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final2022-2024Plan-to-EEB1112021.pdf>

The targeted populations in Table 0-3 above vary in their focus, with six defined by geographic boundaries, and six defined at the individual or household level (one population was unspecified). Several residential populations also draw on income levels as a defining data point, while several others, like Distressed Municipalities, integrate additional socioeconomic factors like unemployment and aging housing stock. The number of different targeted populations and variation in definitions suggests a lack of clarity on *who* the C&LM program targets in its equity efforts.

This lack of clarity on who should be targeted was echoed further in our Stakeholder interviews. Stakeholders had outstanding questions about what factors should be taken into consideration when defining a priority population, what data should be relied upon, how to apply definitions to the business sector, and how closely C&LM definitions should track with other state efforts.

Table 0-4. Areas of Improvement Cited by Stakeholders

AREA OF IMPROVEMENT	INTERVIEW INSIGHTS
Alignment of Priority Populations within and outside of CT	<ul style="list-style-type: none"> <li>One stakeholder suggested that it may not make sense for C&amp;LM programs to create its own definition for priority populations, when elsewhere in the State, efforts like the Governor’s Council on Climate Change are attempting to make a more broadly applicable statewide definition. A challenge cited was that programs want to make an impact now, making it difficult to wait.</li> </ul>
Criteria used to determine Priority Populations	<ul style="list-style-type: none"> <li><i>“I mean, how they determine what is an environmental justice community. It’s based on demographics. And income level, but it’s not based at all on proximity to environmental hazards.”</i></li> <li>Another stakeholder questioned whether programs should rely on census tract data for demographics, such as race.</li> </ul>
Application of Priority Populations in the Business Sector	<ul style="list-style-type: none"> <li>Other stakeholders had questions about how to define and apply priority populations to the business sector. One stakeholder commented that it is not always appropriate to use geographic boundaries. For example, large multi-national corporations or national franchises—most of which do not face historical inequities—may be in Environmental Justice Communities.</li> </ul>

As noted above by one stakeholder, the Governor’s Council on Climate Change is also exploring the topic of priority populations. In its Phase 1 Report, the Governor’s Council recommended the creation of a statewide mapping tool to visually represent environmental and climate health vulnerabilities across the state. DEEP has partnered with CIRCA to fulfill this recommendation. As mentioned, CIRCA’s work includes a process of reviewing indicators and data sources, administering a community feedback process, and creation of the final map viewer itself. The project timeline is expected to extend through the summer of 2023. When the tool is completed, DEEP may re-evaluate the definition for Environmental Justice Communities.

## Challenges Introduced

Having too many targeted population definitions in use can cause confusion among stakeholders, resulting in misalignment on where programs should target their efforts and resources. Specifically, a lack of clarity on who the C&LM program intends to target may lead to inefficient (and potentially ineffective) program designs as well as challenges in measuring progress to better understand the needs of priority populations.

In addition, we illustrated that there are many units of measurement in operation, each with their own pros and cons. Using a geographic unit of measure is supportive of a community-based intervention approach and can identify concentration effects or compounding indicators of vulnerability. However, tracking only through geographically determined variables can hinder identifying vulnerable communities or households outside of targeted geographic boundaries. Some states, like Illinois, allow communities to self-designate. Alternatively, focusing on households alone may fail to capture the contextual equity challenges faced by vulnerable communities. Regardless of the unit of measure, the most critical component is establishing a common understanding between stakeholders for how the priority population is defined and what method(s) should be used.

In defining its priority population, the C&LM program must also consider larger initiatives within the State, such as the effort in-process by the Governor's Council on Climate Change to identify vulnerable communities, as well as federal efforts via the Justice40 Initiative. If the C&LM program were to define priority populations outside of statewide efforts, it may cause inconsistencies and misalignment with other state programs and services. Similarly, defining priority populations too far outside of Justice40 definitions may also introduce misalignment with federal investments.



## Recommendation 2: Identify a Unified Definition of Priority Populations

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The DEI Team will work with DEEP, EEB, and communities to establish and agree upon a definition of **priority populations**. The DEI Team understands that there are other efforts, such as those of the Governor's Council on Climate Change and the Justice40 Initiative, that are also defining priority populations. For this reason, the EEB may wish to recommend that DEEP assign an interim definition from existing targeted populations in Connecticut, and then coordinate closely with state and federal efforts to identify a more permanent definition for the medium and long term. To achieve this objective, we recommend that the EEB consider the following:

Consideration 1: The EEB should consider identifying an interim definition for priority populations to recommend to DEEP for C&LM programs. As noted by one stakeholder, the C&LM program is targeting equity efforts now, and the EEB may want to consider identifying a stopgap approach to ensure consistency in definitions in the near term. As a part of this, the EEB must determine the unit of measure, meaning whether to define priority populations at the individual household/business level, by geographic region, or both. Multiple states (such as New York, Massachusetts and California), as well as the Justice40 Initiative, are defining or have defined priority populations by geographic region, informed by demographic characteristics (such as household income) or environmental features (such as environmental justice communities). How a priority population is defined is an important consideration for program intervention and consideration. There are pros and cons to each approach. Existing targeted populations in Connecticut (as shown in Table 0-3) include definitions with a mix of different units of measure. Once a unit of measure is decided, the EEB may wish to choose an interim definition from this list of existing targeted populations.

Consideration 2: The EEB should consider the value and risks in aligning C&LM programs' priority populations with other efforts underway (e.g., those underway by the Governor's Council on Climate Change or Federal Justice40 definition). Electing to align with Justice40, for example, may enable greater integration of federal investments with existing Connecticut programs. However, depending on the direction of the Governor's Council, doing so may introduce misalignment with other Connecticut programs and services. As a part of this effort, we recommend that the EEB closely coordinate with these efforts at the state and federal level to better understand how they may affect equity efforts and to identify areas of alignment and misalignment.

Consideration 3: **After the items above are addressed, we recommend that the EEB consider identifying how to define and address priority populations for the business sector. If necessary, establish clear priority population definitions by sub-sector** (e.g., retail, grocery, etc.). Identifying priority populations for certain sectors, such as commercial and industrial (C&I) will require different considerations than those of residential customers. For example, a priority C&I customer could be defined as one operating in and serving a distressed community. This definition would enable investments that could reduce certain harms to the community itself, such as pollutants, depending on the targeted outcomes (which we discuss in the next section).

## Define “ what” is Equitable

Connecticut has had multiple operating definitions of what it means to serve its constituents equitably. Currently, the state’s primary focus on equity within C&LM programs is defined by ensuring cost-to-benefit parity within customer sectors. However, additional efforts must be made to define an equity goal for the C&LM program in a way that meets the vision of E3.

### Current State and Gaps Identified

What is equitable is currently defined as cost-to-benefit parity or ensuring that the benefits that customers receive are commensurate with the financial costs they pay as ratepayers into C&LM funds. E3’s goals and objectives are not in direct contradiction with the parity-focused definition of equity that has been operationalized in the past. However, E3 implies a meaning and goal for equity that goes beyond parity as it is currently defined. The vision and goals set forth by E3 (cited within this document on Page 7) point to improvements in C&LM program delivery to provide additional access and investment in low-income and other targeted populations, which will increase the level of distributive and procedural equity. These include the following: (1) mitigating and eliminating barriers to low- and moderate-income customer participation, (2) driving accessible and transparent processes to incorporate residents’ priorities and lived experiences into program design and decision-making, and (3) ensuring equitable access to the benefits of energy efficiency.

The definition and goal for equity as implied in the E3 Phase 1 goals, which speak to distributive and procedural equity, is not yet enshrined in C&LM policies. To arrive at this conclusion, we reviewed four key sources in this assessment that attempt to bring shape around what it means for C&LM programs to be equitable. These sources as shown in Table 0-3 below, include two documents published prior to E3: the 2018 Equitable Distribution Report and EEB Operating Procedures.<sup>16, 17</sup> It also includes the E3 Final Determination and the 2022 – 2024 C&LM Plan that followed E3.

Both the Equitable Distributions Report and EEB Operating Procedures focus on the definition and goal of cost-to-benefit parity, although each define this somewhat differently. The Energy Efficiency Equity Baseline (E3b) does go beyond cost-to-benefit parity by comparing utility investment in low-income programs to the proportion of low-income customers in its service territory.<sup>18</sup> However, this definition is limiting as it only focuses on the low-income sector, and it does not consider other factors beyond household economics as a determinant of additional funding. Finally, while the 2022 – 2024 C&LM Plan does not define equity, it includes a description of program strategies designed to attempt to achieve equity.

<sup>16</sup> 2018 Equitable Distribution Report (accessed on December 28, 2022). <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/2018-EQD.pdf>

<sup>17</sup> EEB Operating Procedures (accessed on December 28, 2022). [https://energizect.com/sites/default/files/documents/EEB%20Operating%20Procedures\\_adopted%20Dec.%202013\\_revised%201.13.19.pdf](https://energizect.com/sites/default/files/documents/EEB%20Operating%20Procedures_adopted%20Dec.%202013_revised%201.13.19.pdf)

<sup>18</sup> University of Michigan, A Multi-state Analysis of Equity in Utility-Sponsored Energy Efficiency Investments for Residential Electric Customers (accessed on December 28, 2022). [https://poverty.umich.edu/files/2021/03/Energy\\_efficiency.pdf](https://poverty.umich.edu/files/2021/03/Energy_efficiency.pdf)

Table 0-5. Defining What Equitable Means for C&LM Programs

SOURCE	HOW EQUITY IS DEFINED
(1) 2018 Equitable Distributions Report	<p>Cost-to-benefit parity for specific priority populations: DEEP must annually evaluate whether small load customers in distressed census tracts have “received investment and services from the C&amp;LM programs and Connecticut Green Bank programs commensurate with the financial contribution of those customers through surcharges on their utility bills.”<sup>19,20</sup> Census tracts receiving an <i>equal or greater percent of total incentives</i> than that tract’s <i>C&amp;LM bill contributions</i> will have achieved “equitable distribution.”</p> <p>Within this report, DEEP also performs other analyses to understand distribution of benefits <del>and</del> costs across other priority populations, including HES and HES -IE customers and Distressed Municipalities.</p>
(2) EEB Operating Procedures	<p>Cost-to-benefit parity geographically and by different classes and sub -classes: The EEB must “review and approve plans proposed by the utility administrators, municipal electric cooperatives, and other parties including reviewing program proposals, new initiatives, budgets, and budget allocations, <i>ensuring both geographic and class and sub -class parity in EEF benefits relative to revenues received when viewed over time</i>” (Section 1, 1ii)</p>
(3) E3 Final Determination	<p>Energy Efficiency Equity Baseline (E3b) for low -income populations: E3 Goal 3, Action Item 3.2, proposes an additional measure of equity to be included in the annual Equitable Distribution Reports, with a goal of maintaining the baseline . This measure is based on the University of Michigan’s Energy Efficiency Equity baseline (E3b) metric, which estimates equitable utility investment by looking at the proportion of low-income population within a utility service territory compared to the percent of low-income investment in the energy efficiency residential portfolio .</p>
(4) 2022– 2024 C&LM Plan	<p>C&amp;LM activities to address equity: The 2022– 2024 plan provides high level activities and action items to illustrate how equity will be addressed within programs, primarily through improvements to <i>procedural equity</i>. While the plan does not definitively state what it means to be equitable, the Energy Efficiency Equity baseline (see No.3 above) is referenced</p>

Our stakeholder interviews also suggest that most actors are clear on the ~~current~~ parity-focused definition of equity. In addition, stakeholders also cited a need to determine how to align C&LM’s definition and goal for equity better with the vision of E3. In Table 0-6, we summarize the primary concerns that emerged from Stakeholders in our initial interviews.

<sup>19</sup> Per Conn. Gen. Stat § 6-245ee small load customers are defined as customers “with a maximum average monthly peak demand of one hundred kilowatts in census tracts in which the median income is not more than sixty per cent of the state median income.”

<sup>20</sup> Natural gas funding is not included in the Equitable Distribution Report.

Table 0-6. Equity Considerations Raised by Stakeholders

AREA FOR CONSIDERATION	STAKEHOLDER INSIGHTS
<p>Including Definitions of Equity that Exceed Parity</p>	<ul style="list-style-type: none"> <li>• <i>“In the past parity has been the way that the energy efficiency board has directed (the program) to look at it and there is a major shift now where we’re looking at things, you know, differently from that perspective.”</i></li> <li>• <i>“Traditionally we’ve really tried to stay very close to the specific language that drives our mission without kind of looking beyond those parameters; you know, staying in our lane.”</i></li> <li>• <i>One stakeholder noted that the question of what equity means and how this will work in practice is outstanding, suggesting that it’s likely not equitable (in the context of E3) for people to benefit solely based on how much they pay in bill contributions, when vulnerable communities may have not been reached by programs and have gone several years without benefit.</i></li> <li>• <i>One stakeholder noted that the question of equity goes beyond funding and brings up questions related to how you work towards outcomes. For example is an infrastructure in place to support equity efforts (i.e., contractor network, the right outreach efforts, etc.) What is the desired result? When do you want it by?</i></li> </ul>
<p>Aligning with Other State Policies</p>	<ul style="list-style-type: none"> <li>• <i>“(There are) other state policies that that DEEP is trying to accomplish here, and they amended the law a couple times and I think to some degree. One of the lines is consistency with other state policies, but there’s not a clear mandate for (programs) to go out and have the clear objective of advancing those policies.</i></li> </ul>

Questions remain on whether C&LM will aim to address contextual and corrective equity – including when and how. These forms of equity may require the development of policy or legislation and were not as thoroughly addressed in E3’s Phase 1 Proceeding. If it is the intention to address these forms of equity, it is valuable to work on defining how they will be approached in C&LM programs prior to Phase 2 to ensure alignment, clarity, and actionability of DEEP’s goals.

### Challenges Introduced

As noted, the current definitions and goals for equity—including the primary definition of cost-benefit parity—are not aligned with E3’s vision and goals. If this misalignment is not resolved, the intended outcomes of E3 will be more challenging to achieve.

As a result, program administrators may have—or will likely set—different targets or goals across and within programs. For example, reaching parity within customer classes for a particular year may be achieved, but it may not address the need to direct more resources to priority populations to reach distributive equity. As Connecticut further explores other forms of equity in future E3 proceedings, the gap between parity and E3’s vision will continue to grow wider. For example, parity does not address historical disinvestment in particular communities and the investment that may be needed to achieve contextual equity.

### Recommendation 3: Formalize a Definition of, and Goal For, Equity in C&LM Programs that Aligns with E3's Vision and Goals.

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The DEI Team suggests that the EEB recommends to DEEP a definition and goal for equity that supports the larger vision and goals of E3. As C&LM programs continue to apply an equity lens to their policies and offerings, having a unified meaning in place for what is equitable will help to align efforts and ensure they are mutually supportive. At this time, and during E3 Phase 1, this definition may be largely focused on the distributive concept of equity, with other core concepts being addressed later. The Team also understands that state statutes may still require other measurements to be reported, such as in the annual Equitable Distributions Report, but stakeholders should define what equity means in the context of E3 for C&LM programs and set an associated goal.

The DEI Team will work with the EEB to establish and agree upon a definition of equity that can be recommended to DEEP and operationalized into a C&LM program goal for use in future years. To do this, we recommend that EEB consider the following:

Consideration 1: The EEB should consider setting an equity goal to recommend to DEEP, in collaboration with Stakeholders. This goal will define what it means for C&LM programs to be equitable. The goal should clearly address the who, what, when, and how it will deliver the benefits, as illustrated at the beginning of this section on page 10. If appropriate, this goal may be modeled after other states in the region like New York, or the federal government's Justice40 Initiative. Like the previous discussion on priority populations, the EEB must also ensure that C&LM programs are considering larger equity goal setting initiatives within DEEP for the State of Connecticut should those exist and what role or part C&LM programs may play within them.

Consideration 2: Once consideration #1 is addressed, the EEB may wish to explore how (and if) goals for other forms of equity —such as corrective and contextual—may be achieved with in C&LM programs. One largely open question needs to be addressed in future years: should C&LM programs address equity goals that go beyond distributive and procedural equity and address other forms, such as contextual equity? This may call for broader policy changes or investing a larger amount of funding in regions that have been historically underserved to remedy past harms. And, if so, for what customer classes? These, and other related questions, may be best explored as a part of E3's Phase 2 Proceeding , as further described in Recommendation 1

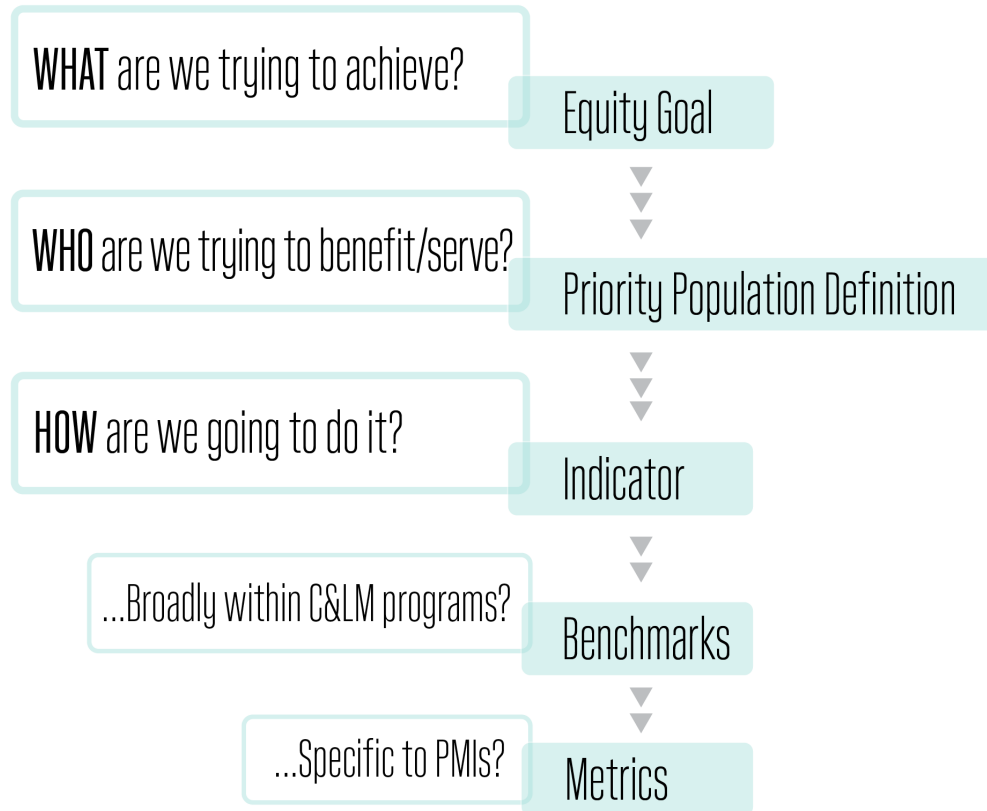
# BENCHMARK AND METRICS APPROACH

Here, we pivot from a discussion on equity goals and priority populations to one around how to *measure* progress. The development of indicators, benchmarks, and metrics logically flow from an understanding of *what* CT wants to achieve through its C&LM programs (i.e., the equity goal) and *who* it wants to impact on equity benchmarks (i.e., defining priority populations). In this section, we discuss the use of different data that may be used to assess the effectiveness of C&LM programs in achieving an equity goal within priority populations. For the purposes of this discussion, we use the following definitions to describe these data

- **Indicators:** An indicator is one or more data points that may be collected to measure the effectiveness of C&LM programs. An indicator is an umbrella term for empirical data that could be used as a *benchmark* or a *metric*.
- **Benchmark:** A benchmark is an indicator that is used to assess the progress made by a program or set of programs in achieving its goals. However, not all benchmarks rise to the importance level of a *metric*.
- **Metrics:** Metrics are indicators that rise to the level of Performance Management Incentive (PMI), following the nomenclature used in Connecticut. We call out that “metric” is used more globally in other regional contexts but, for the purposes of this work, we refer to metrics as those items that are used to assess the Companies’ performance against an equity goal (once defined).

We illustrate the relationship between the equity goal and refinement of priority populations (discussed in the previous section) with the development of indicators, benchmarks, and metrics in Figure 0-1 below.

Figure 0-1. Equity Goals, Priority Populations, and the Development of Indicators, Benchmarks, and Metrics



Following the logic of the previous sections, we discuss the potential use of different indicators by covering the following items:

- 1) An overview of current state indicators in use. We provide an overview of the current state of indicators in use in C&LM programs – including PMIs or “metrics” - by defining those articulated in the documents described in Appendix C.
- 2) Gaps that need to be resolved and the challenges those gaps introduce. To illustrate the rationale for our approach, we outline the challenges and gaps introduced by different indicators for C&LM programs.
- 3) An approach to develop benchmarks and metrics. Here, we discuss how to approach developing benchmarks and metrics once clear equity goals and priority populations are established.

# Creating Benchmarks and Selecting PMI from Aligned Goals and Priority Populations

Once aligned on who should be served to achieve what equitable outcomes, the immediate next step is to operationalize these goals into metrics and strategies (e.g., interventions or program goals) to achieve the goals. Then, the Companies can determine how to achieve greater equity and through which processes, programs, and services. In all cases, each metric should have a clear timebound goal, indicating when DEEP and the EEB expect to see results from C&LM investments in equity.

## Current State and Gaps Introduced

To understand what indicators are currently in use in C&LM programs, the DEI Team identified equity-focused indicators within the 2022 – 2024 C&LM Plan, the 2018 Equitable Distribution Report, the 2022 Education, Workforce Development, and Community Engagement Evaluation, and the 2021 Annual Legislative Report.

Connecticut’s current indicators focus on two goals that serve as a throughline to C&LM programs’ working definitions of equity: 1) ensuring cost-to-benefit (incentives) parity within customer classes and across subgroups, and 2) increasing participation among income-qualified customers in the state of Connecticut.

These themes are echoed in the 2022 performance management incentives (PMI) metrics, called out in Table 0-7 below. There are two types of PMIs, primary and secondary. Equity-related metrics fit under the Secondary Metrics category, designating one equity metric for each sector (Residential and Commercial and Industrial). In Table 0-7 below, we present the equity metrics outlined in the 2022 – 2024 C&LM Plan.<sup>21</sup>

Table 0-7. 2022 – 2024 PMI Secondary Equity Metrics, 2022 – 2024 C&LM Plan

SECTOR	METRIC	DESCRIPTION
Residential	Percent of hardship customers participating in HES and HES-Income Eligible	The Companies will track the participation in 1–4-unit HES or HES-Income Eligible from Jan. 1, 2022 through Dec. 31, 2022 of all electric heat customers that are coded "hardship" (Eversource MPP, IE, New Start and UI Forgiveness Programs) on Nov. 1, 2021
Commercial and Industrial	Increase the equitable distribution of savings across all customer quartiles	This metric is designed to increase savings from customers in the Quartile 1 Healthcare sector, the Quartile 2 Financial, Real Estate & Insurance sector, the Quartile 3 Healthcare sector, and the Quartile 4 Retail sector (relative to the baseline average). Quartiles may change over term. These specific sectors in each quartile were chosen as the result of an analysis of participation and savings data over the previous 5 years.

<sup>21</sup> 2022-2024 C&LM Plan (accessed on December 28, 2022). <https://portal.ct.gov/-/media/DEEP/energy/ConserLoadMgmt/Final-2022-2024-Plan-to-EEB-1112021.pdf>.



We understand that the Technical Consultants and the Companies arrived at these secondary metrics with the intention of revising them to better align with E3 once our team became engaged in the work. We see this alignment as a core task in our 2023 workplan. That said, it is worth discussing these PMIs, as well as other indicators in use that measure equity to illustrate the Current State – and to discuss how we envision establishing a more cohesive benchmark and metrics framework for C&LM programs moving forward.

Notably, the current PMI metrics support C&LM programs’ existing approaches to equitable service from a parity perspective and do factor in hardship customers as a population of interest for increasing equity in the residential sector. However, these two metrics do not address the how E3’s Phase 1 vision may have expanded the definition of equity for C&LM programs.

As a first step to developing a more comprehensive framework to achieve E3 Goal 3, Action 3.3 (the development of new equity metrics), DEEP, the EEB, and the Companies will need to come to agreement on a unifying definition of “equity” (see *Recommendation 10* in this document). This will ensure that our framework produces clear, consistent, and measurable metrics across C&LM programs that will help the State meet its C&LM equity goal.

Our interviews with Stakeholders echoed this need. Across all interviews, Stakeholders seek clarity on (and how) E3 will impact their programs— now and into the future. Specifically, stakeholders acknowledged that E3 brings about a different set of questions that must be asked of programs to ensure they are successful. They also raised the question of how equity benchmarks and PMI metrics may interplay with other indicators being set by the state.

In the tables below, we first summarize the results of our review of the current indicators in use across C&LM programs (Table 0-8), then document the primary concerns that emerged from Stakeholders in our initial interviews (Table 0-9). For each indicator in Table 0-8, we document the type of equity it addresses, the category it falls into (such as being a benefit or about increasing access), who is being targeted, the desired impact (such as an increase or decrease), how it is measured, and the source where we found the indicator. These details align with our overall approach to defining indicators, which we discuss in Table 0-10.

Table 0-8. Current Equity-Focused Indicators

TYPE OF EQUITY	INDICATOR CATEGORY	INDICATOR	TARGET POPULATION	DESIRED IMPACT	MEASUREMENT APPROACH	SOURCE	
Distributive	Benefit	Energy savings (compared to bill contributions)	C&I Customer Segments within Electric Usage Quartiles	Equitable Distribution	Proportion	2022 – 2024 C&LM Plan (Performance Management Incentive Metrics, or <b>PMIMetrics</b> )	
Distributive	Benefit	HESIE Savings	Income Eligible Homes	Increase	Quantity		
Distributive	Access	Participation in HES or HESIE	Hardship Customers	Increase	Proportion		
Distributive	Access	Homes weatherized	Income Eligible	Increase	Quantity		
Distributive	Access	Participation in targeted programs (HESIE, SBEA, Multifamily Initiative, Demand Response)	Distressed Municipalities or EJ Communities	Increase	Quantity		Community Partnership Initiative (CPI) program
Distributive	Access	HES and HESIE incentives Allocated	Distressed Tracts vs. Non-distressed Tracts	Equitable Distribution	Proportion		2018 Equitable Distribution Report
Distributive	Access	Low-Income Households Served	Income Eligible	Increase	Quantity		2021 Annual Legislative Report
Distributive	Access	Projects	Small Businesses in Distressed Municipalities	Increase	Quantity	2021 Annual Legislative Report	

TYPE OF EQUITY	INDICATOR CATEGORY	INDICATOR	TARGET POPULATION	DESIRED IMPACT	MEASUREMENT APPROACH	SOURCE
Distributive	Cost	C&M incentives Received	Small load customers in distressed census tracts	Equitable Distribution	Proportion	2018 Equitable Distribution Report
Distributive	Cost	C&M incentives Received	All Customer Load Types in distressed census tracts	Equitable Distribution	Proportion	2018 Equitable Distribution Report
Distributive	Cost	Supplemental Benefit-Cost Ratio: Bill contributions paid compared to the sum of C&M incentives and resulting annual energy cost savings	Distressed Municipalities	Equitable Distribution	Proportion	2018 Equitable Distribution Report

Table 0-9. Stakeholder Feedback on Equity Indicators

AREA FOR CONSIDERATION	STAKEHOLDER INSIGHT
Aligning Measurement with Updated Equity Goals	<ul style="list-style-type: none"> <li>• <b><i>“I would say that we probably would have to rethink how we measure ourselves and how we measure success. You know, right now we measure ourselves based upon energy savings period and we look at lifetime savings of these measures (against) how much we’re spending so we look at this benefit cost ratio very closely.”</i></b></li> </ul>
Aligning Equity Metrics Across Programs	<ul style="list-style-type: none"> <li>• <b><i>“What I do know is that we are looking to update the metrics in light of some of the other programming that we’re anticipating. So whether it’s inflation reduction act related programming, we do want some level of consistency across programs as it relates to DE metrics.”</i></b></li> </ul>
Aligning Strategies with Metrics	<ul style="list-style-type: none"> <li>• <b><i>“I was wondering as we go down this path on equity (and measuring equity) should (we) be doing different product offerings or different things and immediately provide relief to customers?”</i></b></li> <li>• <b><i>One stakeholder commented that when they understand the overall goal and issues they need to address they can start to work towards it and identify potential solutions or approaches</i></b></li> </ul>

The current state of indicators introduces several gaps that—to remedy—will require defining what impacts the C&LM programs should aim to achieve among its priority population, and which impacts will take priority in program-level decision-making. These decisions will determine the focus of C&LM programs and should be carefully considered. These gaps include:

Current equity metrics and indicators are established at the program level and do not “roll up” to a unified framework. For C&LM programs to achieve broader equity goals—as outlined in E3 and suggested by the Governor’s Council on Climate Change—the programs need to have a governing framework that all indicators align with. To do this well, we see the DEI Team’s role as developing indicators that serve as both benchmarks to track progress over time and ultimately support goal-focused PMI metrics.

Parity-focused indicators alone do not address the relative need of vulnerable populations. The current parity-focused indicators used in the Equitable Distribution Report do not address the underlying disparities between income-qualified or vulnerable populations relative to other populations. For example, due to historic or “contextual” equity concerns, health and safety issues may need to be remedied to serve households with energy efficiency measures ultimately requiring additional funding to result in the same benefit – energy efficiency. DEEP and C&LM programs are currently working to address these issues by braiding program dollars with other funding sources, such as DEEP’s Weatherization Barrier Remediation

program.<sup>22</sup> This serves as a clear example of the ways that performance goals focused on “equity” may require different strategies than performance goals focused on “parity.”

Programs primarily focus on energy savings, whereas E3 emphasizes the alleviation of multiple forms of economic hardship. Because energy efficiency programs are aimed at reducing energy usage (electric and gas), usage is the most consistent units of measure (kilowatts and BTUs) across programs. While this is appropriate, it will be important to consider how to measure whether energy savings are alleviating high energy burden. While energy efficiency programs may support this goal by reducing bill costs, energy burden requires a much more complex set of indicators—and ultimately—may require a broader set of interventions to alleviate.

Current indicators are primarily distributive and do not address other forms of equity – including procedural, contextual, and corrective. While Phase 1’s focus is to drive distributive and procedural equity, C&LM programs will benefit from a clear set of benchmarks within a single framework to understand what is and will be expected of programs and by when, and which rise to the level of ~~riest~~.

## Challenges Introduced

As a result of the limitations of the current landscape of equity benchmarks and indicators, DEEP and the EEB cannot fully assess the effectiveness of C&LM programs in achieving equity-related outcomes. This has several implications, including:

1. Reducing C&LM programs’ ability to track and monitor the effectiveness of C&LM program investments in achieve E3’s goals overall and over time.
2. Introducing confusion as to who the programs have had an impact on, the cumulative (positive) effect of serving specific populations, and why populations were targeted in the first place to remedy inequities.
3. Undermining the ability of C&LM programs to demonstrate their effectiveness in meeting Federal Justice40 goals should the programs or the state seek co-funding from these programs.

That said, identifying a framework for benchmarks and metrics *prior to* establishing a clear equity goal and priority populations will only introduce greater confusion as C&LM programs seek to align under E3 and with Justice40 and the Governor’s Council on Climate Change

For this reason, our recommendations throughout this document prioritize alignment— that is, aligning on an equity goal and defining priority populations . Once alignment is achieved, then a framework can be

<sup>22</sup> Weatherization Barrier Remediation Program webpage (accessed on January 9, 2023).  
<https://portal.ct.gov/DEEP/Energy/Conservation-and-Load-Management/Weatherization-Barrier-Mitigation>.

empirically established based on C&LM program’s goals, priorities, and the feasibility of collecting data to support the indicators selected for our final framework.

## Approach to Establishing Multidimensional Metrics (how)

In Phase 1, E3 sets out an objective to characterize the current state of energy efficiency programs across multiple dimensions of equity while taking short-term actions to enhance equity based on known barriers and challenges. In this section, we discuss:

- 1) How to define clear, multidimensional indicators
- 2) Example indicators for decision-making
- 3) Recommendations for establishing multidimensional indicators, establishing benchmarks, and selecting metrics

### How to Define Clear, Multidimensional Indicators

Once DEEP, the EEB, and other Stakeholders identify a unifying equity goal, the goal can then be translated into a specific framework that can be used to measure C&LM progress against its goal. Expanding on New York State’s example, C&LM programs should establish a goal that can be readily adopted by the programs expected to achieve it. Below, we provide an example goal statement from which benchmarks and metrics can be developed for Connecticut.

*Connecticut’s [insert priority population s] will receive [insert quantity] of [insert equitable outcome] from the State’s Conservation and Load Management Programs [insert date] .*

Such a statement in Connecticut may look like:

*Connecticut priority populations will receive 40% of the benefits from the State’s Conservation and Load Management Programs by 2030.*

This goal can then be readily translated into a set of indicators that will capture the extent to which C&LM programs are achieving its goals.

On designing a framework : All indicators should be stated as variables that can be measured in any population. For example, the indicator “energy savings” can be measured on any population of interest. To determine if Connecticut is achieving an equitable outcome related to energy savings, the indicator should be measured among the priority population *and* the comparison population to determine if energy savings are higher, lower, or equal to the comparison population.

When specifying each indicator, it is important to tease out its components to make sure that all stakeholders are clear on what any benchmark or metric is measuring. This ensures that all stakeholders, C&LM program

designers, and implementers align in approach to track the performance of C&LM programs against equity goals. In Table 0-10 below, we describe the elements that will need to be defined for any selected indicator that we may choose to include in our framework.

Table 0-10. Elements in an Indicator

INDICATOR ELEMENT	DESCRIPTION
Type of Equity	Outlined as specified in previous sections. (e.g., Distributive, Procedural, etc.)
Indicator Category	What the indicator relates to, such as a cost or benefit, representation, etc.
Indicator	Empirical measure that informs progress toward achieving E3 goals.
Hierarchy	Ranking priority: a primary indicator (such as a goal) or a secondary indicator (such as a measure of progress).
Outcome metric	An indicator that measures the result of an action.
Input metric	An indicator that measures a stimulus activity or investment.
Desired Impact	An indicator’s predicted performance in meeting an E3 goal, such as an increase or decrease in the indicator’s measure or elements.
Measurement Approach	How we anticipate quantifying (#) the indicator to determine if programs are successful, such as an increase in the quantity of a n indicator or change in the proportion of the indicator in a population (%). This may also include aggregation of different measurements to create a composite.

**Example Indicators for Decision -Making**

In Table 0-11 below, we outline several indicators that can serve as a starting place for our discussions with stakeholders. We do not recommend that Connecticut adopt all these indicators into a framework. Instead, these may act as examples to begin the process of decision-making. Ideally, we recommend no more than one primary indicator per equity goal that Connecticut aims to achieve, supported by benchmarks that will help in the attainment of E3’s Vision.

In Table 0-11, we also identify which of these indicators map to the objectives outlined in E3’s vision statement. The indicators provided here were informed by: ILLUME’s own expertise as social scientists, our work in other jurisdictions, the University of Michigan’s School for Environmental and Sustainability, Energy Equity Project Report (2022). To arrive at this starting list, we focused on those indicators that either 1) align with the E3 Vision, and/or 2) can be impacted by C&LM program design, implementation, and incentives.

Table 0-11. Example Indicators for Consideration once Goals and Priority Populations are Finalized

EQUITY INDICATORS			ELEMENTS OF E3 VISION (ABBREVIATED)				
Type of Equity	Potential Indicators <sup>23</sup>	Desired Impact	Alleviate High Energy Burden	Remediate Historically Under-Resourced Communities	Mitigate and Eliminate barriers to LMI EE Participation	Incorporate Residents' Priorities and Lived Experiences	Ensure Equitable Access to EE Benefits
Contextual	Pollutants (outcome)	Decrease		X			
Contextual	Health and Safety Violations Addressed (outcome)	Increase		X	X	X	X
Contextual	Infrastructure readiness costs (outcome)	Decrease		X	X	X	X
Contextual	Home readiness costs (electrical upgrades, etc.) (outcome)	Decrease	X	X	X	X	X
Contextual	Ownership of Clean Energy (outcome)	Increase	X	X	X	X	X
Corrective	Participation in Policy and Program Design (Input)	Increase	X	X	X	X	X
Corrective	Inclusive Governance Structure (outcome)	Increase				X	
Corrective	Inclusive Decision-Making (input)	Increase				X	
Distributive	Energy Savings (outcome)	Increase	X		X		X
Distributive	Participation in Programs (input)	Increase	X		X		X

<sup>23</sup> “Inputs” = Measures leading action/stimulus that causes an “outcome”  
 “Outcomes” = Measures result or impact of an investment.



EQUITY INDICATORS			ELEMENTS OF E3 VISION (ABBREVIATED)				
Type of Equity	Potential Indicators <sup>23</sup>	Desired Impact	Alleviate High Energy Burden	Remediate Historically Under-Resourced Communities	Mitigate and Eliminate barriers to LMI EE Participation	Incorporate Residents' Priorities and Lived Experiences	Ensure Equitable Access to EE Benefits
Distributive	Participation in Delivery of Programs (input)	Increase		X			X
Distributive	Living Wages (outcome)	Increase		X			X
Distributive	Energy Careers (outcome)	Increase		X			X
Distributive	Energy Efficiency Jobs Worked (input)	Increase		X			X
Distributive	Energy Burden (outcome)	Decrease	X				
Distributive	Arrears (outcome)	Decrease	X				
Distributive	Shutoffs (outcome)	Decrease	X				
Distributive	Cost-to-Service Parity (input)	Decrease					X
Distributive	Overall Marketing (input)	Increase			X		X
Distributive	Awareness of C&LM Programs (outcome)	Increase			X		X
Distributive	Completed Participation in C&LM Programs (outcome)	Increase	X		X		X
Procedural	Ease of Enrollment (input)	Increase			X		X
Procedural	Drop-out or Active Non-participants in C&LM Programs (outcome)	Decrease			X		X
Procedural	Participation in Metric Development (input)	Increase				X	
Procedural	Data Disclosure Requirements (input)	Increase				X	

## Recommendation 4: Consider Updates to the 2024 PMI Equity Metrics, While Also Building the Foundation for a Long-term Equity Indicator Framework

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We recognize that the Companies are interested in updated secondary PMI equity metrics for 2024 that better align with the goals of E3. To create greater consistency over time, we recommend that this effort run parallel to a process to align on an equity goal, priority populations, and a long-term framework of benchmarks and indicators that may be more fully implemented in the 2025 – 2027 planning cycle. To pursue these priorities, we recommend that the EEB consider the following:

Consideration 1: Determine the most expedient approach to updating PMI equity metrics while ensuring long-term viability and consistency. The Companies have expressed a desire to better align 2024 PMI equity metrics with the broader goals of E3. Any updates that are made for 2024 should also be balanced with an eye towards implementing a long-term equity indicator framework, which will aim to fully align stakeholders on equity goals and priority populations. There are optics to consider in changing metrics more than once or from cycle to cycle, such as concerns from community stakeholders who may raise questions around why metrics are changing.

Consideration 2: Determine whether there is a benefit to increasing funding in 2023 to support long-term equity indicator framework development for 2024 and beyond. We understand that there is a desire to have both updated PMI equity metrics in place for 2024, as well as a long-term equity indicator framework (per Recommendation 5 below). However, to achieve both objectives with an eye toward enduring metrics and benchmarks, additional funding will be needed in 2023 to support this effort. These dollars will ensure greater collaboration, alignment, and buy-in to a final equity indicator framework. *Alternatively, the EEB may want the DEI Consultant Team to use 2024 dollars to complete this task, which means that a final framework will be in place for the 2025-2027 cycle. Budget options for the EEB's consideration are included in the proposed 2023 DEI Workplan, which accompanies this report.*

## Recommendation 5: Prioritize the Development a Long-Term Equity Indicator Framework after Alignment on Goals and Priority Populations

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Once there is alignment on a consistent set of equity goals and priority populations, we recommend developing equity benchmarks and updated PMI metrics that both support E3 goals and C&LM program objectives, identifying how these indicators work together to create a cohesive metrics framework capable of measuring C&LM programs' progress over time. We recommend that the EEB consider working through a clearly defined decision-making process with Stakeholders to create a framework that measures the effectiveness of C&LM program activities in creating multidimensional equity.

Consideration 1: Determine which stakeholders should be involved in guiding and approving the proposed indicators. Establishing clear and cohesive metrics will require pre-identifying which actors will need to be involved in guiding the DEI Consultant Team's efforts. Specifically, we envision representatives from DEEP, the EEB, and the Companies will need to be actively engaged in the metric development process. Similarly, we will need to identify which regional and community Stakeholders—if any—should be included in the metric development process and decision-making. This recommendation should be considered in context with Recommendation 1, which asks the EEB to consider establishing an equity subcommittee. If an equity subcommittee is created, we envision that it will serve as the group of stakeholders to guide and approve—for the EEB's consideration—equity metrics.

Consideration 2: Enable a process to prioritize equity indicators and to determine what criteria will be used to make decisions. Equity indicators should be considered within the context of other program goals and within PMI metrics to prioritize what matters most. To prevent confusion and unintended consequences, we recommend that the EEB enable a stakeholder process that clearly identifies if and how equity-related indicators should be prioritized against primary PMI metrics. Within an equity framework, PMI metrics should be paired with a set of benchmarks within a single framework for understanding C&LM programs' progress in equity.

Consideration 3: Ensure indicators have clear short-, medium-, and long-term focuses. To achieve the goals set forward in E3, C&LM programs will need to make gradual, yet focused changes to their program designs. Recognizing this need, any new metrics and benchmarks should include a clear sense of timing, addressing which outcomes are expected by which programs, and by when. When factoring in the phases of E3, we recommend that equity metrics are phased to align with Phase 1 and Phase 2. That said, we strongly recommend that all current and future equity benchmarks be identified in the near term to support strategic planning.

Consideration 4: Determine whether it is feasible to align C&LM program indicators with Federal and State efforts. Where possible, align measurement to create opportunities to compare outcomes across interventions, regions, and populations. We recommend that the EEB consider aligning with Justice40 and Connecticut statewide efforts for the purposes of cross-comparison—and in the case of Justice40—program integration.

The EEB may also want to align its efforts with the approaches other states have taken. For example, New York State is in the process of developing a Benefits Framework (due to go public is Q2, 2023) to measure progress toward meeting the equity goals established in the Climate Leadership and Protection Act. To measure how the state is serving priority populations (called "Disadvantaged Communities" or DACs in New York), the Benefits Framework established one compliance indicator (the "primary benefit") related to spend in DACs, as well as a series of other indicators (called "co-benefits") related to health, jobs, transportation, and bill savings. Both the primary benefit and all co-benefits are measurable metrics that New York State will use to measure how effectively its programs and investments are serving DACs. ILLUME is working with NYSERDA and other New York agencies to develop the Benefits Framework and can readily align our terminology and approach if desired.

# SUMMARY OF RECOMMENDATIONS

Below, the DEI Team summarizes recommendations for the EEB's consideration based on its assessment findings. Note that specific timing and tasks are outlined in the Team's proposed 2023 workplan, which accompanies this report as a separate attachment.

## Recommendation 1. Support a Clear Process for Addressing Equity within C&LM Programs by Creating an Equity Subcommittee, and Delineating Areas that will be Explored in Future E3 Phases.

C&LM programs exist in a larger context of equity-focused efforts in the State and at DEEP. Additionally, there are several parties that inform C&LM programs and related equity efforts, prompting the need for a core group of stakeholders to vet information and proposed decisions for the EEB's consideration. E3's vision for equity is also expansive, and thought must be given to what aspects of equity are best addressed in future phases. To clarify these areas, the Team recommends that the EEB consider the following:

- Consideration 1: The EEB should consider creating an Equity Subcommittee. The DEI Team was hired to advise on equity-related efforts within C&LM programs; however, the Team does not make decisions on behalf of the EEB, DEEP, or the Companies. At the same time and as noted, C&LM programs exist in a larger universe of initiatives at the State and DEEP. To start, the Team recommends that the subcommittee include representatives from the EEB, DEEP, and the Companies. As the subcommittee's work launches, additional representatives may be added such as community representatives. Like the role of the technical consultants on the other subcommittees, the DEI Team would lead in setting subcommittee agendas, producing related content (with the support of other stakeholders as needed), and proposing approaches and options for discussion and consideration. We appreciate that all potential sub-committee members have a myriad of other responsibilities; therefore, this sub-committee would only meet (virtually) as needed when key decisions need to be made. The goal of the subcommittee is not to create extra work, but to ensure that key decisions get made in an efficient and consistent manner.
- Consideration 2: As goals for future phases of E3 are charted out, the EEB should consider recommending that DEEP explore how (and if) C&LM programs can address corrective and contextual equity. As noted within the E3 final determination, Phase 1 of the proceeding characterizes the current state of equity for C&LM programs and identifies short-term action to address known challenges and barriers. While the Phase 1 goals address several forms of distributive and procedural equity, they do not fully address contextual or corrective equity.

## Recommendation 2. Identify a Unified Definition of Priority Populations.

The DEI Team will work with the EEB to establish and agree upon a definition of priority populations. The Team understands that there are other efforts to define priority populations, such as those of the Governor's Council on Climate Change and the Justice40 Initiative. For this reason, the EEB may wish to recommend that DEEP assign an interim definition from existing targeted populations in Connecticut.

and then coordinate closely with state and federal efforts. To achieve this objective, we recommend that the EEB consider the following:

- Consideration 1: The EEB should consider identifying an interim definition for priority populations to recommend to DEEP for C&LM programs. As noted by one stakeholder, the C&LM program is targeting equity efforts now, and the EEB may want to consider identifying a stopgap approach to ensure consistency in definitions in the near-term. As a part of this, the EEB must determine the unit of measure, meaning whether to define priority populations at the individual household/business level, by geographic region, or both. How a priority population is defined is an important consideration for program intervention and consideration. There are pros and cons to each approach. Existing targeted populations in Connecticut (as shown in *Table 0-12*) include definitions with a mix of different units of measure. Once a unit of measure is decided, the EEB may wish to choose an interim definition from this list of existing targeted populations.
- Consideration 2: The EEB should consider the value and risks in aligning C&LM programs' priority populations with other efforts underway (e.g., those underway by the Governor's Council on Climate Change or Federal Justice40 definitions). Electing to align with Justice40, for example, may enable greater integration of federal investments with existing Connecticut programs. However, depending on the direction of the Governor's Council, doing so may introduce misalignment with other Connecticut programs and services. As a part of this effort, we recommend that the EEB closely coordinate with these efforts at the state and federal level to better understand how they may affect its equity efforts and to identify areas of alignment and misalignment.
- Consideration 3: After the items above are addressed, we recommend that the EEB consider identifying how to define and address priority populations for the business sector. If necessary, establish clear priority population definitions by sub-sector (e.g., retail, grocery, etc.). Identifying priority populations for certain sectors, such as commercial and industrial (C&I), will require different considerations than those of residential customers. For example, a priority C&I customer could be defined as one operating in and serving a distressed community. This definition would enable investments that could reduce certain harms to the community itself, such as pollutants, depending on the targeted outcomes.

### Recommendation 3. Formalize a Definition of, and Goal For, Equity in C&LM Programs that Aligns with E3's Vision and Goals.

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The DEI Team suggests that the EEB recommends to DEEP a definition and goal for equity that supports the larger vision and goals of E3. As C&LM programs continue to apply an equity lens to their policies and offerings, having a unified meaning in place for what is equitable will help to align efforts and ensure they are mutually supportive. At this time, and during E3 Phase 1, this definition may be largely focused on the distributive concept of equity, with other core concepts being addressed later. The Team also understands that state statutes may still require other measurements to be reported, such as in the annual Equitable Distributions Report, but stakeholders should define what equity means in the context of E3 for C&LM programs and set an associated goal.

The DEI Team will work with the EEB to establish and agree upon a definition of equity that can be recommended to DEEP and operationalized into a C&LM program goal for use in future years. To do this, we recommend that EEB consider the following:

- Consideration 1: The EEB should consider setting an equity goal to recommend to DEEP, in collaboration with Stakeholders. This goal will define what it means for C&LM programs to be equitable. The goal should clearly address the who, what, when, and how will deliver the benefits, as illustrated at the beginning of this section on page 11. If appropriate, this goal may be modeled after other states in the region like New York, or the federal government's Justice40 Initiative. Like the previous discussion on priority populations, the EEB must also ensure that C&LM programs are considering larger equity goal setting initiatives within DEEP or the State of Connecticut, and those exist, and what role or part C&LM programs may play within them.
- Consideration 2: Once consideration #1 is addressed, the EEB may wish to explore how (and if) goals for other forms of equity —such as corrective and contextual —may be achieved within C&LM programs. One largely open question needs to be addressed in future years: should C&LM programs address equity goals that go beyond distributive and procedural equity and address other forms, such as contextual equity? This may call for broader policy changes or investing a larger amount of funding in regions that have been historically underserved to remedy past harms. And, if so, for what customer classes? These, and other related questions, may be best explored as a part of E3's Phase 2 Program, as further described in Recommendation 1

#### Recommendation 4. Consider Updates to the 2024 PMI Equity Metrics, While Also Building the Foundation for a Longterm Equity Indicator Framework.

We recognize that the Companies are interested in updated secondary PMI equity metrics for 2024 that better align with the goals of E3. To create greater consistency over time, we recommend that this effort run parallel to a process to align on an equity goal, priority populations, and a longterm framework of benchmarks and indicators that may be more fully implemented in the 2025-2027 planning cycle. To pursue these priorities, we recommend that the EEB consider the following:

- Consideration 1: Determine the most expedient approach to updating PMI equity metrics while ensuring long-term viability and consistency. The Companies have expressed a desire to better align 2024 PMI equity metrics with the broader goals of E3. Any updates that are made for 2024 should also be balanced with an eye towards implementing a longterm equity indicator framework, which will aim to fully align stakeholders on equity goals and priority populations. There are optics to consider in changing metrics more than once or from cycle to cycle, such as concerns from community stakeholders who may raise questions around why metrics are changing.

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- Consideration 1: Determine which stakeholders should be involved in guiding and approving the proposed indicators. Establishing clear and cohesive metrics will require pre-identifying which actors will need to be involved in guiding the DEI Consultant Team’s efforts. Specifically, we envision representatives from DEEP, the EEB, and the Companies will need to be actively engaged in the metric development process. Similarly, we will need to identify which regional and community Stakeholders—if any—should be included in the metric development process and decision-making. This recommendation should be considered in context with Recommendation 1 which asks the EEB to consider establishing an equity subcommittee. If an equity subcommittee is created, we envision that it will serve as the group of stakeholders to guide and approve—for the EEB’s consideration—equity metrics.
- Consideration 2: Enable a process to prioritize equity indicators and to determine what criteria will be used to make decisions. Equity indicators should be considered within the context of other program goals and within PMI metrics to prioritize what matters most. To prevent confusion and unintended consequences, we recommend that the EEB enable a Stakeholder process that clearly identifies if and how equity-related indicators should be prioritized against primary PMI metrics. Within an equity framework, PMI metrics should be paired with a set of benchmarks within a single framework for understanding C&LM programs’ progress in equity.

- Consideration 3: Ensure indicators have clear short -, medium -, and long-term focuses. To achieve the goals set forward in E3, C&LM programs will need to make gradual, yet focused changes to their program designs. Recognizing this need, any new metrics and benchmarks should include a clear sense of timing, addressing which outcomes are expected by which programs, and by when. In factoring in the phases of E3, we recommend that equity metrics are phased to align with Phase 1 and Phase 2. That said, we strongly recommend that all current and future equity benchmarks be identified in the near term to support strategic planning.

The EEB may also want to align its efforts with the approaches other states have taken. For example, New York State is in the process of developing a Benefits Framework (due to go public in Q2 2023) to measure progress toward meeting the equity goals established in the Climate Leadership and Protection Act. To measure how the state is serving priority populations (called “Disadvantaged Communities” or DACs in New York), the Benefits Framework established one compliance indicator (the “primary benefit”) related to spend in DACs, as well as a series of other indicators (called “co-benefits”) related to health, jobs, transportation, and bill savings. Both the primary benefit and all co-benefits are measurable metrics that New York State will use to measure how effectively its programs and investments are serving DACs. ILLUME is working with NYSERDA and other New York agencies to develop the Benefits Framework and can readily align our terminology and approach if desired.



# APPENDIX

## Appendix A Regional and National Context

States such as Massachusetts and New York, as well as the federal government's Justice40 Initiative, have also made efforts to further define what equity means in the context of programs. These examples are briefly discussed below for reference. We focus our discussion on states near Connecticut to provide regional context for the reader.

### Massachusetts

In 2021, Massachusetts enacted new legislation entitled, "An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy."<sup>24</sup> This legislation amends a previous law, directing state agencies to set greenhouse gas emissions limits every five years, and codifies the state's long-term emissions limit of net zero emissions by 2050.

**Priority Populations:** In addition to other commitments to renewable energy and building codes, the law also addresses priority populations by defining an environmental justice population as a neighborhood that meets at least one or more of the following criteria:<sup>25</sup>

- An annual median household income is not more than 65% of the statewide annual median household income
- Minorities comprise 40% or more of the population
- At least 25% of households lack English language proficiency, or
- Minorities comprise 25% or more of the population and the annual median income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income.

**Performance Metrics:** Beyond the legislation above that further defines priority populations, the Massachusetts Energy Efficiency Advisory Council (MA EEAC) created the Equity Working Group (EWG) in 2020.<sup>26</sup> The EWG is comprised of representatives from the utilities, environmental justice organizations, the Low-income Energy Affordability Network, and MA EEAC consultants. This subcommittee provides oversight of energy efficiency plans and implementation efforts to ensure equitable outcomes. In October 2021, the EWG developed equity targets (or metrics) to guide investments in equity and assess the performance of the utilities' 2022 – 2024 Energy Efficiency Plan. Targets were established for environmental justice

<sup>24</sup> Massachusetts Climate Legislation (accessed on December 28, 2022). <https://malegislature.gov/Bills/192/S9/>

<sup>25</sup> Environmental Justice Definition (accessed on December 28, 2022). <https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts>

<sup>26</sup> MAEEAC EWG Targets (accessed on December 28, 2022). <https://ma-eeac.org/wp-content/uploads/Attachment-B-Equity-Targets-Framework-Final.pdf>

municipalities (precursor to environmental justice populations defined above), workforce development, partnerships, renters, moderate income, English isolated, and small business.

## New York State

New York's Climate Leadership and Community Protection Act (CLCPA) was signed into law in 2019. This law aims to transform New York's markets by setting requirements and goals for reaching carbon neutrality and significant renewable energy expansion, while also expanding benefits to disadvantaged communities.<sup>27</sup> The CLCPA specifies that 70% of the state's electricity will be generated by renewable energy by 2030, and 100% of electricity will have zero emissions by 2040. Among its key provisions, the law also sets out what it means to be equitable by requiring the state to invest resources to ensure that at least 35% of the benefits of spending, with a goal of 40%, are directed to disadvantaged communities (DACs).

**Priority Populations:** To ensure that disadvantaged communities benefit from CLCPA investments, New York created the Climate Justice Working Group (CJWG), which includes environmental justice representatives from across the state.<sup>28</sup> The CJWG was integral in developing the state DAC criteria and continues to advise on how to incorporate this priority population's needs into the state's climate plans.

New York State and the CJWG undertook an extensive process to define their priority population (i.e., disadvantaged communities), including not only the methodology of the definition but also how to engage the public.

- **Method:** 150 indicators related to environmental burdens, climate change risks, population characteristics, and health vulnerabilities were considered. The CJWG assessed these indicators for quality, level of granularity, and correlation with other indicators, narrowing them down to 45. A scoring methodology was then developed to determine which communities are disadvantaged.<sup>29</sup>
- **Public Engagement:** The draft criteria were released for a 120-day public comment period, including an interactive map and a list of disadvantaged communities. New York State also held 11 public hearings across the state to receive input (both written and verbal) on the criteria.<sup>30</sup>

**Benefits Framework:** New York State is in the process of developing a Benefits Framework (due to go public in Q2 2023) to measure progress toward meeting the equity goals established in the CLCPA. As mentioned above, the state requires that at least 35% of the benefits of clean energy/energy efficiency spending, with a goal of 40%, are directed to DACs. To measure its progress against the 35% requirement, the Benefits Framework established one compliance indicator (the "primary benefit") related to spend in DACs, as well as a series of other indicators (called "co-benefits") related to health, jobs, transportation, and bill savings. Both

<sup>27</sup> New York's Climate Act website (accessed on December 28, 2022). <https://climate.ny.gov/>.

<sup>28</sup> New York Climate Justice Working Group webpage (accessed on December 28, 2022). <https://climate.ny.gov/resources/climate-justice-working-group/>.

<sup>29</sup> New York Disadvantaged Communities Criteria Development Frequent Questions (accessed on December 28, 2022). <https://climate.ny.gov/-/media/project/climate/files/Disadvantaged-Communities-Frequently-Asked-Questions.pdf>.

<sup>30</sup> Disadvantaged Communities Criteria, Public Hearings (accessed on December 28, 2022). <https://climate.ny.gov/disadvantaged-communities-criteria/>.

the primary benefit and all co-benefits are measurable metrics that New York State will use to measure how effectively its programs and investments are serving DACs.

## Justice40 Initiative

Through an executive order, the federal government launched the Justice40 Initiative in a commitment to environmental justice for communities that are marginalized, underserved, and overburdened by pollution.<sup>31,32</sup> Within its purpose and goal, this initiative has set out what it means to be equitable – 40% of the overall federal investments must benefit disadvantaged communities. Investments falling under the Justice40 Initiative include the following categories: climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and the development of critical clean water and wastewater infrastructure.

**Priority Populations:** In addition to setting out a clear goal for what equity means, the White House Council on Environmental Quality has released the Climate and Economic Justice Screening Tool, Version 1.0, to identify Justice40's priority populations (i.e., disadvantaged communities).<sup>33</sup> The tool identifies communities as disadvantaged if they are in a census tract that meets the threshold for at least one category of burden, or if they are on land within the boundaries of a federally recognized Tribe. Burdens are related to climate change risks, environmental risks and pollution, health risks, and lack of economic opportunity. The tool will be updated each year based on public feedback and the availability of new data.

**Performance Metrics:** The White House Environmental Justice Advisory Council (WHEJAC) made recommendations to the federal government on measures to ensure accountability of Justice40 funds.<sup>34</sup> Specifically, WHEJAC recommended that “federal agencies should track several cross-cutting metrics for Justice40 investments, including direct dollar investment in disadvantaged communities, percentage of dollars invested in Justice40 communities, carbon emissions reduced, pollutants reduced, and number of people and businesses benefitted.” The Council also noted that relevant metrics should be incorporated into performance evaluations at all agency levels.

<sup>31</sup> Executive Order 14008, (accessed on December 28, 2022). <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

<sup>32</sup> Justice40 Initiative Overview, (accessed on December 28, 2022). <https://www.whitehouse.gov/environmentaljustice/justice40/>.

<sup>33</sup>

Biden-Harris Administration Launches Version 1.0 of Climate and Economic Justice Screening Tool (accessed on November 22, 2022). <https://www.whitehouse.gov/ceq/news-updates/2022/11/22/biden-harris-administration-launches-version-1-0-of-climate-and-economic-justice-screening-tool-key-step-in-implementing-president-bidens-justice40-initiative/>.

<sup>34</sup> WHEJAC J40 Implementation Recommendations, August 2022 (accessed January 3, 2023). <https://www.epa.gov/system/files/documents/2022-08/WHEJAC%20J40%20Implementation%20Recommendations%20Final%20Aug2022b.pdf>.

## Appendix B. Materials Reviewed

The DEI Team includes a list of key materials reviewed for this assessment below. Other references related to specific text are included in the body of the report via footnotes.

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## Appendix C. Stakeholder Groups Interviewed

The DEI Team interviewed 14 individuals from the stakeholder groups noted below.

- Avangrid/United Illuminating (2)
- Department of Energy and Environmental Protection (3)
- Efficiency for All (1)
- Energy Efficiency Board Members (2)
- Energy Efficiency Board Technical Consultants (3)
- Evaluation Administrator (1)
- Eversource (2)

## Appendix D. Summary of Targeted Populations by Sector and Source

Table 0-12. Targeted Populations or Groups in Connecticut

	Targeted Populations or Groups (source where it is referenced)	(Unit of Measurement) Individual or Geographic Definition	Sector Referenced	Definitional Information, as Provided	Programs/Initiatives Targeting the Population
1	Households with energy burdens greater than 6% (E3)	Individual	Residential	The affordability threshold for household energy burden, the percentage of household income spent on energy costs	Referenced in E3, Goal 2 (Enhance tracking of equity indicators in C&LM programs)
2	Communities of color (E3)	Geographic	Residential	These communities are defined using a racial diversity index that employs the U.S. Census Bureau's American Community Survey race and ethnicity variables to calculate the percentage of non-Caucasian people in each census tract	
3	Areas with high rates of arrearages and utility shutoffs (E3)	Geographic	Residential	Illustrated via a heat map that shows the magnitude of arrearages and utility shutoffs across the state. The heat map would identify areas with high concentrations of customers in arrears and instances of utility shutoffs.	
4	Underserved households (E3)	Unspecified	Residential	E3 suggests that this broader category encompasses the three priority populations listed above (#13)	Referenced in E3 Vision Statement
5	Historically under-resourced communities (E3)	Geographic	Residential	Not defined	

	Targeted Populations or Groups (source where it is referenced)	(Unit of Measurement) Individual or Geographic Definition	Sector Referenced	Definitional Information, as Provided	Programs/Initiatives Targeting the Population
6	Moderate income households (E3, 2022 – 2024 C&LMPlan)	Individual	Residential	A household whose income is at or below 80% of the State Median Income (SMI) and above 60%	Home Energy Services (HES)
7	Low-income households (E3, 2022 – 2024 C&LMPlan)	Individual	Residential	A household whose income is no more than 60% of the SMI	Home Energy Services – Income Eligible (HES-IE), Multifamily Initiative, Weatherization Assistance Program (WAP), Weatherization Barrier Remediation Program
8	Distressed Municipalities (Conn. Gen. Stat. § 32-9p, DECD website)	Geographic	Residential	A distressed municipality should be based on high unemployment and poverty, aging housing stock and low or declining rates of growth in job creation, population, and per capita income.	Community Partnership Initiative (CPI), Small Business Energy Advantage (SBEA), other DEEP and DECD initiatives
9	Environmental Justice Communities (Conn. Gen. Stat § 22a-20a, DEEP website, Governor’s Council on Climate Change Report)	Geographic	Residential	Environmental Justice communities are defined as a municipality on the list of Distressed Municipalities or in a defined US census block. These defined census blocks are in municipalities that are not “distressed;” however, they have census block groups with 30% of their population living below 200% of the federal poverty level.	CPI, other DEEP initiatives
10	Distressed census tracts (Conn. Gen. Stat § 16-245ee)	Geographic	Residential	Tracts in which the median income is not more than 60% of the state median income	Equitable Distribution Reports

	Targeted Populations or Groups (source where it is referenced)	(Unit of Measurement) Individual or Geographic Definition	Sector Referenced	Definitional Information, as Provided	Programs/Initiatives Targeting the Population
11	Non-English speaking or limited English proficiency customers (2022 – 2024 C&LMPlan, CPI application)	Individual	Residential	Not defined beyond broader categories	CPI
12	Customers enrolled in hardship programs (E3, 2022 – 2024 C&LMPlan)	Individual	Residential	Customers enrolled in the Matching Payment Program (MPP), Income Eligible, New Start and Forgiveness Programs	HES, HES-IE
13	Certified minority-owned, women-owned, and veteran-owned businesses (2022 – 2024 C&LMPlan)	Individual	Business	Not further defined in source	Utility competitive vendor RFPs