Embedding Equity in Market Transformation through a Participatory Engagement Approach

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ABSTRACT

While many best practices for prioritizing equity in energy efficiency work exist, engagement with equity audiences is often transactional (e.g., income-qualified utility programs) or timebound (one-off listening sessions). Building ongoing, mutually beneficial relationships that allow communities facing the greatest energy burden to participate in program design are much rarer – particularly in market transformation (MT) work, which often focuses on upstream interventions and demand aggregation through consumers perceived as traditional early adopters.

Recent work in California shows that longer-term participatory engagement can help center the reality of those not typically perceived as early adopters in market transformation initiative design, resulting in an approach that delivers benefits more quickly to environmental and social justice (ESJ) communities while mitigating any harmful impacts. Informed by an MT organization's experience forming and engaging a dedicated Equity Sounding Board, this paper will share:

- Facilitation strategies used to enable mutual learning, positioning Sounding Board members to provide more actionable feedback and MT teams to develop interventions that address unique barriers and opportunities in ESJ communities;
- Tools used to incorporate Sounding Board contributions into organizational guidance for conducting market research, developing logic models, and structuring market-level interventions;
- How to create a meaningful feedback loop that demonstrates the impact of Sounding Board engagement and enables members and MT teams to challenge each other's assumptions and learn together;
- Successful examples of how Sounding Board participation has resulted in more equity-informed research/program design and authentic relationship-building within ESJ communities, as well as lessons learned that will inform future work.

Introduction

Energy efficiency market transformation (MT) strategies often focus on influencing supply chain entities that offer market leverage (e.g., manufacturers, distributors, contractors, retailers, and organizations representing industries) or demand-side opportunities that offer market leverage rather than targeting specific end-use customer segments (CalMTA 2026). The diffusion of innovation curve developed by E.M. Rogers (see Figure 1) directs market transformation administrators to target risk-tolerant early adopters and the early majority while categorizing consumers with fewer resources or greater barriers to adoption as "laggards."

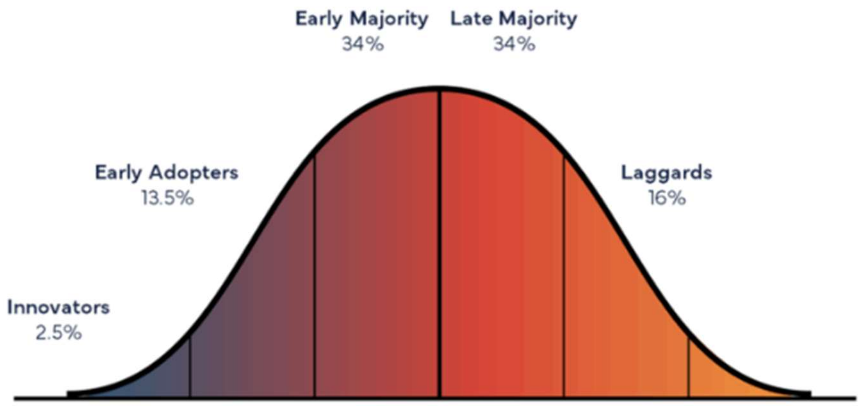

Figure 1. Diffusion of Innovation Model (Rogers 1962). *Source*: CalMTA 2026.

Market transformation initiatives (MTIs) therefore typically rely on efforts to increase market availability and influence enhanced codes and standards for energy-efficient products that yield benefits for the later-stage audiences rather than considering ways to bring those consumers into the early majority.

California's investment in statewide market transformation created the opportunity to strategically shift the way equity is addressed in MTI development. California Public Utilities Commission (CPUC) Decision 19-12-021, which created a Market Transformation Administrator (CalMTA), included an Adopted MT Framework that establishes high-level principles that every MTI should aim to achieve, including a directive to "integrate strategies to maximize equity" (CPUC 2019). In addition to supporting the state's ambitious energy efficiency and decarbonization goals, CalMTA therefore also seeks to support equity goals as established in the CPUC Environmental and Social Justice (ESJ) Action Plan (CPUC 2022).

Since launching in late 2022, CalMTA has worked to develop a consistent approach to embedding equity considerations across MTI development activities in order to make the benefits of these initiatives accessible to all Californians. Applying this equity lens allows CalMTA to strategically address the unique barriers and priorities of ESJ communities – in a state where nearly 35% of residents are living in or near poverty (PPIC 2025), where 44% of housing units are rented (Census Bureau 2024), and where about 45% of households speak a language other than English at home (Census Bureau 2024), this approach is also critical to holistic market transformation. A paper published in the 2024 Summer Study on Energy Efficiency in Buildings proceedings describes CalMTA's process for developing an MT-aligned equity lens and approach to addressing equity considerations in its first two years of MTI development (Good, Lopez, and Rezania 2024).

In 2025, CalMTA took a significant step forward in its work to prioritize equity in MT with the creation of a dedicated Equity Sounding Board. Comprised of eight professionals who advocate for or work within ESJ communities, this group guides CalMTA's equity-focused outreach, assists in identifying actions that would cause unforeseen harm, and acts as a ready resource for feedback on MTI development. The following paper details the motivation for forming this board; the processes used to recruit members, facilitate meetings, and enable participation in MTI activities; and key learnings that will be used to refine CalMTA's work moving forward – with the hope that this serves as a replicable template for other MT organizations interested in pursuing a participatory engagement approach to equity.

Background and Foundation of CalMTA's Equity Approach

The equity lens developed by CalMTA seeks to define market-level opportunities and areas of MTI development where ESJ considerations should be prioritized. Specifically, the approach established by CalMTA includes the following steps for integrating equity throughout MTI development:

- Include equity in scoring criteria for submitted MTI concepts, identifying and prioritizing initiatives that demonstrate positive benefits to ESJ communities
- Develop, maintain, and implement a series of equity guides that provide tools and best practices for integrating equity considerations into MTI development
- Align relevant MTIs with existing energy efficiency programs serving ESJ community members
- Engage with ESJ communities on field studies, pilots, and other research through trusted channels such as community-based organizations (CBOs)
- Conduct targeted outreach and listening sessions to better understand the unique barriers that ESJ communities face to inform development of market interventions and identify and mitigate unintended impacts of MTI implementation in ESJ communities
- Emphasize and promote the economic opportunities unlocked by MTIs to increase wealth-building opportunities through better access to workforce development options
- Apply best practices for supplier diversity for solicitation protocols for CalMTA's request for proposal (RFP) process
- Track and report on MTI development progress and equity impacts to enable continuous improvement of ESJ community interventions, providing transparency and accountability to communities
- Share learnings and successes of CalMTA's equity approach at industry events, and in publications
- Coordinate and collaborate with other market transformation and California-based organizations that are committed to equity.

Prioritizing equity in CalMTA's program design requires development of a unique set of tools and best practices with applicability to market transformation. Learnings from ESJ listening sessions conducted by CalMTA as well an internal assessment of best practices used to integrate equity into other industry's market-level research and interventions (e.g., healthcare and education) informed an initial set of guidance documents which were later refined with input from the Equity Sounding Board. Intended as a starting point for integrating equity considerations into MTI development, to be updated regularly as we gain new insight into this work, CalMTA's Market Transformation Equity Guidance (Rezania, Pulles, and Good 2026.) describes a practical approach to the following tools and practices.

- **Equitable research practices**. Equity should be a core consideration in the research process, with a focus on inclusiveness, accessibility, engagement, and representation across all segments of a population. Equity in research means intentionally designing the work to surface structural barriers and understand how they shape access and outcomes, so that we can then translate those findings into concrete actions that remove those barriers, so historically excluded groups have fair access to meaningful opportunities. In addition to recommended considerations when developing partnerships with individuals impacted by research work as well as relevant CBOs, prompts to consider biases and assumptions in conducting research and analyzing data, and best practices for knowledge-sharing, the document includes guidance on developing effective data collection instruments, addressing accessibility barriers and ensuring participant understanding, community involvement in data collection, and sampling considerations.

- **Equity-focused logic model development.** This component of the guidance seeks to bring a more structured and intentional equity perspective into the process of developing conceptual and final logic models – a key component of market transformation programs. The document lays out activities that would be beneficial to conduct prior to logic model development sessions, including questions to consider opportunities within the initiative to create more favorable equitable outcomes (e.g., "What potential benefits or risks to health and safety could be linked to this initiative's technology?") or identify barriers to equitable adoption (e.g., "Can sub-optimum housing/building conditions (panel capacity, asbestos, lack of insulation, broken windows, etc.) impact adoption?"). Guidance for work during logic model sessions includes both recommendations for conducting the meeting itself (e.g., creating time to reflect on and share initial assumptions or learnings) and questions that can be used to define the desired end-state, barriers and opportunities, intervention strategies, and outcomes from an equity-informed perspective.
- **Equity-oriented intervention strategy best practices**. Understanding opportunities to integrate equity considerations into interventions targeting both the supply- and demand-side enables an MTI to more effectively achieve its desired equity outcomes. Designed to serve as a dynamic resource, with best practices taken from other industries and grounded in the realities of MT, this section of the guidance includes questions used to inform strategy development but also identifies several market-level interventions that can directly address common barriers for ESJ communities, such as:
    - Partner with manufacturers and distributors to improve product availability, ensuring energy-efficient and cost-effective options are available to ESJ communities
    - Offering midstream or upstream incentives to reduce first-cost for a limited time and accelerate adoption in the early stage of market deployment
    - Influencing development of or enhancements to available financing solutions (e.g., zero-interest loans) with the goal of ensuring equitable access to these options
    - Conducting demonstration projects in ESJ communities to build awareness of MTI benefit in a real-world setting
    - Building technology awareness through trusted community partners, including existing informal networks such as *promotoras* (a predominantly Latina women-led workforce developed to connect community members with services and resources), equipped with educational materials that use plain language and are culturally/linguistically appropriate.

CalMTA highlights this equity integration guidance in staff onboarding, provides regular refresher training in full-staff and individual MTI team meetings, and continually reviews feedback captured from equity stakeholders to identify learnings that should be applied in that document. CalMTA updates the guidance annually or as needed throughout the year.

From One-Time Engagement to Ongoing Collaboration

CalMTA's equity lens and guidance documentation was informed directly by feedback from a series of listening sessions conducted by CalMTA in 2023 and 2024 with CBOs, workforce education and training entities, and independent consultants focused on energy equity (CalMTA 2024). While these listening sessions provided invaluable insights into the experiences of ESJ communities, they also revealed the value of ongoing access to community experts who can become familiar with the unique characteristics of MT. More sustained engagement provides MTI development teams with a readily available resource for equity-informed feedback, while also creating a more rewarding experience for participants – one in which they can see the impact of their input reflected in action. As envisioned by CalMTA, the Equity Sounding Board (referred to periodically in this paper as "ESB") provides direct input at key stages of MTI development, guides outreach to ESJ communities, and ultimately helps mitigate any unintended negative impacts of the organization's work.

Following the decision to form this group, CalMTA developed internal documentation that included a member handbook establishing guiding principles, a conflict-of-interest policy, term of appointment, process for meetings and individual consultations, and compensation provided for ESB participation. CalMTA then launched an active recruitment process through established communications channels (website, social media, e-newsletter), industry events, and its Market Transformation Advisory Board (MTAB), as well as direct outreach to past participants in listening sessions and other CalMTA activities, such as equity-focused strategy pilots. CalMTA specifically sought representation across the following sectors (1) Workforce, education, & training; (2) California Native American tribes; (3) Small business and ethnic chambers of commerce; (4) Affordable housing; (5) Public health; (6) CBOs; (7) Rural communities; and (8) Disability justice. CalMTA also targeted equitable coverage of the state's diverse regions, including historically underrepresented regions like the Central Valley, Inland Empire, and Tribal Lands.

With a goal of seating eight members, CalMTA received a total of 20 applicants spanning a wide range of sectors and geographical regions. Applicants were evaluated based on a simple scoring rubric, weighing the following factors across all applicants: (1) Equity expertise (environmental justice, economic justice, and health): 50%, (2) Energy efficiency experience: 20%, (3) Market transformation experience: 15%, and (4) Leadership and experience on other boards or committees: 15%. Letters of support were weighed qualitatively after the quantitative scoring was complete. CalMTA then reviewed the highest-scoring candidates from a qualitative perspective to ensure diverse demographic, sector, and geographic representation. CalMTA invited the following eight individuals to join the first iteration of its Equity Sounding Board:

- Adriana Ayala, Executive Director, Chicana Latina Foundation (Northern California)
- Alicia Bohigian, Assistant Program Director, Self-Help Enterprises (Central Valley)
- Federico Castillo, Lecturer/Researcher, UC Berkeley (Bay Area)
- Maria Dahlin, Tribe Council Member, N'de Apache Tribe (Northern California)
- Michelle Engel-Silva, CEO, Proteus, Inc. (Central Valley)
- Elisa Gallegos Jackson, Retired public health nurse and community advocate (Bay Area)
- Joaquin Narvaez, Owner, West Coast Green Builders LLC (Bay Area)
- Johng Ho Song, Executive Director, Koreatown Youth and Community Center (Southern California)

All Equity Sounding Board members serve two-year terms, with the opportunity to re-apply at the end of their term. In the first year of Equity Sound Board operation, CalMTA staggered terms to extend four members' terms by one year, mitigating a potential scenario in which the board had to be fully replaced.

Empowering Participatory Engagement

A December 2024 meeting welcomed Equity Sounding Board members and established the foundation for 2025 engagement, with pre-read materials and the meeting presentation focused on sharing ESB policies and objectives, providing an overview of CalMTA, and introducing members to MT theory and core concepts. Prompts encouraged members to brainstorm common aspects of MT logic models, including market-level barriers that might inhibit adoption of energy-efficient technologies and metrics that might be used to evaluate an MTI's equity impact.

After this first meeting, CalMTA scheduled one-on-one "meet and greet" conversations with each member to help both parties get to know each other better, identify areas of CalMTA's work each member was most interested in contributing to, and better understand opportunities to support members' in their ESB participation. Specifically, CalMTA asked members to identify the subject matter/topics they felt most strongly about engaging with: (1) technology and manufacturing, (2) Workforce education and training, (3) Utility rates and equitable rate structures, (4) financing, (5) the digital divide, (6) outreach, (7) split incentives, (8) health, (9) community program deployment, (10) gentrification mitigation, (11) affordable housing, (12) energy efficiency program landscape, (13) equitable RFPs and contracting practices, and (14) research. In addition to strengthening interpersonal connections between CalMTA's team and ESB members, this process informed development of a "skills matrix" used to match members with MTI teams' consulting requests.

The full ESB meetings coordinated by CalMTA in 2025 followed a consistent format, with specific topics identified based on MTI development milestones. Each three-hour virtual meeting began with a review of the established community guidelines:

- We will make "I" statements
- Recognize intent, acknowledge impact
- One mic; move up, move back
- Practice active listening
- Make no assumptions; ask questions
- Cultivate a brave space
- Honor differences
- Recognize your own and others' privilege
- Honor confidentiality
- Honor silence and time for reflection
- Agree to disagree, but not to disengage
- We can't be articulate all the time
- No one knows everything, we all know something and together we know a lot.

Recognizing that most members had limited experience with energy efficiency market transformation, each meeting then included a presentation of MT fundamentals. Topics covered included a review of the supply chain and areas where MT might seek to intervene, common market-level barriers addressed by MT, a comparison of MT and traditional energy efficiency resource acquisition programs, logic model inputs and development, and MT evaluation (e.g., market progress indicators). In all cases, prompts throughout the presentation of these concepts encouraged ESB members to engage with the content and consider real-world implications with relevance to the communities they represent.

Structured, interactive discussion served as the core of each ESB meeting and provided an opportunity for members to provide direct input on evolving MTIs. CalMTA typically used virtual breakout rooms for this portion of the meeting, creating smaller groups to enable more discussion and interaction between members.

In addition to full ESB meetings, CalMTA's consulting hours process creates an opportunity for smaller groups of members with specific skills and experience to provide insight as questions arise during MTI development. Each ESB member was allocated a dedicated pool of consulting hours, with their organization compensated for this time at the standard rate. The 74 hours of consultation scheduled with ESB members in 2025 provided CalMTA with greater flexibility in accessing their expertise and created a structure for smaller-group engagement and discussion.

CalMTA intends for the insight shared by ESB members in meetings and consultations to be an ongoing resource for MTI teams throughout development. As such, an Excel-based participatory engagement tracker was created to serve as a central repository of equity feedback. The following information is captured for each piece of input in the tracker:

- Feedback date and source
- Key takeaway captured
- What MT idea or topic the feedback relates to
- Feedback category (education/messaging, data/metrics, intervention strategies, research considerations, risk)
- Action taken: when feedback was shared with the relevant MTI team and whether it was incorporated into MTI materials (e.g., logic model) or saved for future consideration.

CalMTA's internal equity team regularly reviews the participatory engagement tracker to confirm key feedback informs MTI deliverables, identify beneficial follow-up activity, and archive items as needed.

Equity-Informed Market Transformation Initiative Plans

Throughout 2025, ongoing collaboration with the Equity Sounding Board enabled CalMTA to integrate ESJ community perspectives into market research, MTI logic model development, project strategy and implementation approach, and evaluation metrics. ESB engagement focused primarily on three developing MTI Plans: Commercial Rooftop Units (CRTUs), Commercial Replacement and Attachment Window Solutions (CRAWS), and Residential Heat Pump Water Heating (HPWH). In full meetings and consulting sessions, ESB members' insight resulted in a clearer, more defined equity approach for each MTI as described below. Specific feedback received and integrated into the CRTUs MTI Plan includes:

- Limited availability of accessible and experienced contractors in rural or lower-income communities results in higher service costs for businesses that are already cost-constrained. As expressed in the MTI logic model, Strategic Intervention #4 ("Increase training for contractors and marketing to business owners to increase awareness and comfort with connected controls and commissioning and variable speed RTUs") is

therefore linked to a medium-term outcome that specifies not only the general availability of trained and trusted installers across the state, but that there is no cost-premium for services in ESJ communities (Olson-Huddle and Fiore, 2026, 32-34).
- This same strategic intervention responds to feedback about the limited availability of equitable training opportunities in ESJ communities through partnerships with distributors, existing workforce development programs, small business industry stakeholders, local training hubs and CBOs. Through these partners, the MTI seeks to influence development of deployment of CRTU trainings that include culturally specific/multilingual resources, accommodate diverse learning styles, and outreach to encourage participation from ESJ community members.
- Businesses in less affluent areas require incentives to afford high-efficiency products, but complex rebate processes with requirements that vary widely across utilities/service providers can be a barrier to contractors who might otherwise promote the technology. One strategic intervention therefore targets a medium-term outcome in which upstream incentives address the incremental cost barrier for CRTUs with CalMTA's desired features (Olson-Huddle and Fiore, 2026, 34-36).

The Residential HPWH MTI Plan reflects Equity Sounding Board input in the following areas:

- Efforts to tie HPWH product development to California residential housing stock (Strategic Intervention #1: "Influence product development and match technology to housing stock") reflects insight into the diverse housing realities shared by ESB members. Identification of sub-markets for early demand aggregation efforts will take into account the unique conditions of Tribal communities, manufactured homes, multifamily properties, and areas with limited electrical service where many homes rely on propane or wood for heating (Allan, Teshima, and Kahn, 2026, 27-30).
- The awareness-building tactics that will accompany Strategic Intervention #2 ("Aggregate statewide buying power to attract market partners and build momentum in scalable submarkets") should engage a wide range of partners as trusted messengers to ESJ communities. In addition to CBOs established in these communities, ESB members identified groups outside the energy efficiency space – such as healthcare advocacy groups, public schools, and faith-based organizations – that may also be powerful communication channels. This awareness-building will also include development of consistent messaging to help customers and installers understand potential bill impacts when switching from a gas water heater, which reflects a desire for transparent communication shared initially by listening session participants and reiterated consistently by the Equity Sounding Board (Allan, Teshima, and Kahn, 2026, 30-32).
- As identified during discussions about potential barriers to adoption, households that are not proficient in English may struggle to receive accurate information about HPWH equipment needs, benefits, or proper operation and maintenance, making them more likely to have a negative experience with the technology. Strategic Intervention #3 ("Develop, support and coordinate a statewide operational infrastructure") therefore specifies development of multilingual templates, tools, and educational materials that programs, manufacturers, and installers can easily adopt, promoting consistent and effective messaging for all Californians (Allan, Teshima, and Kahn, 2026, 32-25).

The CRAWS MTI generated significant interest and discussion from ESB members, resulting in an MTI Plan that includes the following strategies:

- Efficient windows have traditionally faced greater barriers to adoption compared to other measures due to their cost and payback period. ESB members conveyed the resource challenges faced by potential target market segments, such as public schools and commercial businesses in ESJ communities, as a key barrier to adoption. The CRAWS logic model's market-level interventions target medium-term outputs that will mitigate the upfront cost of these products through increased availability of incentives for CRAWS products and evaluating envelope as part of HVAC upgrades. Additionally, Strategic Intervention #2 ("In-field demonstrations") seeks to ensure tailored and accessible mechanisms for ESJ financing. Strategic Intervention #3 ("Build "envelope-first" business case for commercial buildings") will also help clarify the overall return on investment for these products as a component of building energy performance (Dunn and Fiore, 2026, 25-31).
- ESB members flagged a significant need for window upgrades in schools located in high pollution areas and/or with high rates of childhood asthma, as well as other environmental impacts. In addition to informing CalMTA's decision to conduct the CRAWS field study at a public school in a high-pollution area, with the location identified through an Equity Sounding Board member, the MTI will focus initially on the MUSH market, which will benefit schools like these. Strategic Intervention #2, which focuses on in-field demonstrations, will build on this initial work with projects that can evaluate the technology's benefits to ESJ communities and create opportunities to engage with diverse CBOs for related workforce development.
- The need for more equitable and widely accessible financing surfaced repeatedly in conversations with ESB members. Strategic Intervention #7 ("Demand-generating marketing and support: awareness-building, education and financial tools") is designed to prioritize financing models with the potential to reduce or eliminate upfront costs in ESJ communities, such as green banks, green bonds, C-PACE, California's GoGreen Financing Program, and on-bill financing (OBF). Monetizing the non-energy benefits (NEBs) of CRAWS technology and educating financing providers about their value will further bolster the financial support available to consumers who most need it (Dunn and Fiore, 2026, 42-44).

Preparing for Market Deployment

The MTI Plans described above, pending CPUC approval, are scheduled for implementation in mid-2027. While finalized before the formation of Equity Sounding Board, the Room Heat Pumps MTI – the first initiative approved by the CPUC for market deployment in November 2025 – creates a unique opportunity for ESB input, beginning with development of CalMTA's first implementation RFP. The May 2025 ESB meeting provided valuable input on integrating equity considerations into this process.

After providing an overview of the MTI, CalMTA divided the Equity Sounding Board into breakout groups to hold focused discussions on strategic interventions identified in the Room Heat Pumps MTI Plan where equity considerations were deemed particularly important. The table below highlights select takeaways from this session and their alignment with components of the final Room Heat Pumps MTI Implementation RFP.

Table 1. Equity-Informed RFP Design Highlights

Equity Sounding Board Feedback	Alignment with RFP
Make sure RFP language is accessible and important information is upfront.	CalMTA's technical writing review of the RFP specifically identified areas for greater clarity and plain language.
Encourage participation from diverse firms. Be clear and specific about what is meant by "small" and "diverse" firms.	The RFP defines diverse firms as those with proof of certification from the [CPUC Supplier Clearinghouse](), which certifies women, minority, LGBT, persons with disabilities, and disabled veteran business enterprises, Diverse partner inclusion on the team is weighted at 5% of the scoring criteria and is a simple yes/no (if a certified diverse firm is on the team or not).
In their response, bidders should describe how they would partner on awareness-building with local organizations that have strong, trusted relationships within the communities and how they would approach language access and ensure culturally relevant communication.	The RFP scope of work related to building consumer market awareness asks bidders to identify community engagement channels and possible partnerships with entities like CBOs. It also seeks effective messaging tailored to the needs of key audiences, including ESJ communities and renters. Scoring criteria for this section includes whether bidders demonstrated experience with and a plan for increasing ESJ communities' market adoption of room heat pumps, with consideration of factors like cultural relevance and language needs.
Bidders should be asked to provide prior work products that show their experience working with ESJ communities, including impacts and how they defined and measured equity outcomes.	In addition to directing bidders to provide concrete examples of experience deploying proposed approaches successfully, RFP scoring criteria includes significant weighting for whether a bidder "demonstrated experience with program implementation involving ESJ communities."

CalMTA will continue to engage the Equity Sounding Board for insight in preparing for the market launch of this MTI, particularly once a third-party implementation contractor is in place. As a preliminary step, CalMTA aggregated and synthesized specific feedback received from the Equity Sounding Board to develop an additional guidance document for equity integration in market transformation implementation, which was reviewed and refined by the ESB. This guidance document addresses the unique structure of market transformation programs and the deployment of strategic market-level interventions to provide recommendations in the following areas:

- **Considerations when working with partners:** Because MTIs work at the market level, engaging partners and market actors is essential to ensure the desired equity outcomes of an initiative reach community members. The guidance describes MT-appropriate strategies for partnering with community-based organizations (CBOS) (e.g., collaboratively designing scalable outreach and engagement), ensuring that outreach and engagement channels include less traditional informal networks (e.g., community elders and faith leaders), best practices for setting expectations and providing tools to workforce partners, and coordinating with other programs to minimize harm and maximize alignment (Rezania and Good, 2026, 5-7).
- **Considerations for equitable outreach and messaging:** Market transformation interventions often rely on installation contractors, CBOs, retailers, property management firms, and other market actors to disseminate educational and awareness-building messaging or to conduct outreach for activities such as recruiting participants for demonstration projects, field studies, or other deployment efforts. The guidance describes strategies to ensure market actors use trusted messengers and deploy culturally and linguistically appropriate communications; that messaging tools encompass health, safety, and non-energy benefits as well as transparency into potential challenges; and that marketing and outreach supports a multigenerational approach and diverse outreach channels (e.g., non-digital collateral or promotions at school assemblies or local resource fairs) (Rezania and Good, 2026, 7-8).
- **Ensuring quality installation and follow-up:** In market transformation programs, workforce development activities are typically carried out by established education/training entities or other market actors, such as manufacturer representatives. The guidance describes how working with market actors to encourage clear pre- and post-installation communication helps set expectations and reduces the likelihood of surprises that can undermine trust or lead to project delays. It also encourages MT implementers to ensure that ESJ communities have access to the necessary workforce, as many rural and lower-income areas report a lack of trained local contractors (Rezania and Good, 2026, 8-9).
- **Create feedback loops with ESJ communities:** Organizations and individuals that understand the lived experience of ESJ communities, such as CBOs or groups engaged specifically to support market transformation work (e.g., CalMTA's Equity Sounding Board), are a critical resource to consult throughout implementation. The guidance provides specific recommendations for engaging ESJ partners in initial program implementation planning, before launching outreach, when conducting demonstration projects or field studies, at key milestones, and when unintended consequences arise. It also emphasizes that "implementation teams should create a mechanism that allows ESJ partners to address targeted questions as they arise (e.g., the consulting hours reserved for CalMTA's Equity Sounding Board), such as reviewing contractor training curricula, refining incentive structures, or troubleshooting specific community engagement challenges" (Rezania and Good, 2026, 9-10).

Process Refinements and Continuous Improvement

CalMTA intends for the Equity Sounding Board to be a continually evolving learning experience for both internal staff and ESB members. To understand members' experience during the first year of ESB participation and to identify opportunities to refine the approach in 2026, CalMTA distributed an online survey in December 2025. An end-of-year retrospective and visioning meeting created an opportunity for members to provide additional qualitative feedback, which CalMTA then integrated with survey results and synthesized to inform recommendations for process improvements. Key takeaways from these assessments included:

- ESB members expressed strong appreciation and satisfaction with the overall 2025 experience, with all members who completed the survey rating their experience with the structure, content, and logistics of both full meetings and consulting hours as "very good." In their narrative responses, members valued the respectful, non-performative environment and the opportunity to engage with peers from diverse professional, community, and lived-experience backgrounds. Many noted that the ESB felt productive and worth their time, particularly compared to other advisory spaces they had experienced. One respondent stated that "The overall conversations have been invaluable. The pre-Board meeting videos, outlines, and articles have provided an important context and reference point to better understand the community/individual implication and overall global impact."
- Members also identified several opportunities to enhance their experience: particularly, the desire for greater visibility into how ESB input is used, including clearer, more regular updates communicating how their feedback informs CalMTA's work. Narrative responses reiterated the importance of grounding market transformation discussions in real-world context, such as concrete examples of how technologies and strategies affect households and communities and hands-on technology demonstrations. Multiple members also flagged their interest in deeper relationship-building across the board, including the value of in-person meetings in addition to virtual engagement.

CalMTA subsequently plans to maintain core practices that were consistently praised by ESB members, including strong facilitation, clear objectives, and timely, accessible pre-work. As improvements, CalMTA now develops and distributes quarterly email updates summarizing how ESB input has informed CalMTA's work, as well as general updates on MTI development milestones for better transparency, which will be reiterated at the next full ESB meeting. As a component of the "MT fundamentals" portion of each meeting, CalMTA will seek to provide accessible real-world examples of MT in the implementation stage, using examples from other organizations while its first MTIs are still pending deployment. Finally, the 2026 Equity Sounding Board budget allocation was restructured to allow for one in-person meeting before the end of the year.

Concurrently, CalMTA distributed an internal assessment completed by core staff to assess awareness, adoption, and perceived usefulness of the equity guidance and Equity Sounding Board process created to support MTI development. Summary findings from this assessment included:

- CalMTA's equity approach is seen as important and mostly clear, with equity considerations viewed as well-integrated across MTI activities. 100% of respondents answered "fully" to the statement "I believe addressing equity considerations is an important and beneficial part of MTI development." Additionally, 83% of respondents said they "mostly" or "fully" had access to the support and resources needed to effectively prioritize equity in MTI development
- MTI teams know that equity resources exist, but usability can be improved. While all respondents expressed awareness of the equity guidance documentation and Equity Sounding Board, just 42% of respondents agreed or strongly agreed that they had used the equity guidance documentation and only half agreed/strongly agreed it was practical and usable. About two-thirds of respondents agreed that they knew how to access the Equity Sounding Board for input, while one-third said they planned to use ESB feedback in their work in the next six months.

CalMTA subsequently pursued several process refinements in response to assessment findings. Recognizing that many newer MTI team members were less familiar with cross-cutting equity efforts than longer-term staff, CalMTA worked to incorporate equity resource orientation into CalMTA's standard onboarding process and established a cadence for providing a refresher on these resources at staff meetings. The team also updated the equity guidance documentation with a more search-friendly format and "how to use" wayfinding section and edited the Equity Sounding Board scheduling process documentation to be clearer and more actionable.

Key Learnings and Next Steps

The first year of engagement with CalMTA's Equity Sounding Board allowed for deeper, more strategic application of its MT equity lens – resulting in more equity-informed market research and program design, authentic relationship-building within ESJ communities, and lessons learned that will inform future work. Other organizations interested in pursuing a similar structure for ongoing participatory engagement with equity entities may want to consider the following key learnings gleaned by CalMTA in 2025:

- Organizations focused on energy equity or serving ESJ communities do not typically work at the market-level. Creating a consistent, iterative process for sharing core MT fundamentals in meetings or consultations results in an engagement approach that yields actionable insight and positions participants to understand the impact of their feedback on MT work. CalMTA's equity-integration guidance and equity-informed MTI approaches have benefited from ESB members' ever-deepening understanding of MT and increased ability to consider market-level solutions.
- This journey of learning must be shared by internal teams. Staff members that have not historically been tasked with prioritizing equity in MT work may require regular prompts to engage with resources like the Equity Sounding Board and equity guidance. Sharing concrete examples of where equity feedback has enhanced other MTI activities can help clarify the value of these resources and encourage uptake internally.
- While virtual meetings are a cost-effective option that supports participation from geographically dispersed individuals, creative strategies are needed to encourage interactivity and relationship-building in this environment. Presented content should be

accompanied by clearly defined plain-language prompts that encourage members to reflect and respond with their own thoughts or questions; smaller breakout groups can enable more active discussion between members. Virtual meetings should also be designed with an understanding that individuals may have different degrees of comfort with digital tools and may require additional support or accommodation.

- It is critical to create a regular feedback loop that clearly shows participants how their input manifests in program design and deployment. Market research or logic model development informed by equity input can be less tangible than the community-based programs or direct customer interactions with which many equity organizations have experience. Taking the time to bring ESB members along in CalMTA's MT journey have helped them understand the value of their contributions and ultimately deepened their engagement with this work. CalMTA's process included regular check-ins with members about their experience, including in-person meet-ups as logistics allowed, to ensure that participation was meaningful and rewarding to them.

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