

MTAB Meeting Notes

June 27, 2025 Virtual Meeting

Welcome, Agenda & Conflict of Interest Declarations

Stacey Hobart opened the meeting by welcoming attendees, facilitating introductions, and sharing the meeting agenda. She reviewed the conflict-of-interest policies established for both MTAB members and CalMTA staff and asked attendees to disclose any conflicts. While no conflicts of interest as established in the MTAB charter¹ were disclosed at that time, Stephen Miller, a proxy for Cyane Dandridge, noted later that SEI has an existing workforce development program that includes support of Building Performance Standards (BPS). Jeff Harris also mentioned later that the Northwest Energy Efficiency Alliance (NEEA)'s market transformation work in the Northwest includes programs that focus on some of the same markets as CalMTA's market transformation initiatives.

Stacey then welcomed Jennifer Green of MCE as a new MTAB member.

She asked MTAB members for any comments regarding draft notes from the previous meeting (4/22). There were none and the notes were made final.

Review Draft Advancement Plan: Commercial Building Efficiency Accelerator (CBEA)

Jeff Mitchell shared the purpose and structure of CalMTA's Advancement Plans, which describe the research and analysis needed to complete a full Market Transformation Initiative (MTI) Plan.

Rick Olson-Huddle presented an overview of the Commercial Building Efficiency Accelerator (CBEA) Advancement Plan, including preliminary MT opportunity, leverage points, conceptual logic model components, diffusion/lastingness mechanisms, research objectives, and budget.

MTAB questions and comments included:

- Questions about multiple topics that will be identified or clarified through Phase II research, such as:
 - o The size of the market and specific market segments CBEA will focus on
 - o The impact of high vacancy rates in commercial offices post-COVID

¹ https://calmta.org/wp-content/uploads/2025/04/Full-Charter-for-CalMTA-MTAB-1-7.pdf

- o The role of multifamily housing, which will likely require a unique playbook
- o Investigation of the work ESCOs are doing in California, which may include creative financing solutions, and the building types they are focused on
- Deeper exploration of available financing opportunities to build on the preliminary market scan
- Mechanisms for disseminating information to the market, including building decision-makers and current program administrators
- In considering available resources [leverage opportunities], has CalMTA considered the impact of recent federal deregulatory actions?
 - o Rick noted that the MTI's lifecycle extends well beyond the current administration and future regulatory policies are unknown. The MTI may have to adjust to policies as they evolve; strategies to respond to negative policy impacts are described in the Risks & Mitigation Strategies section of the Advancement Plan.
- High interest rates have significant impact on the commercial real estate sector's willingness to invest in building optimization.
 - Rick agreed with this and added that CalMTA staff believes that when banks or underwriters see the value and lower risk in upgrades, they may offer reduced interest rates for financing.
- In addition to the challenges supporting building energy management and BPS in rural areas (when compared to urban areas) as described in the Advancement Plan, SEI's work training and educating early career-building professionals indicates a similar discrepancy between individually owned and managed buildings vs. building portfolios, with the former more difficult to reach.
- NEEA has a parallel initiative in their portfolio and is very interested in collaborating
 across the West Coast as portfolio managers have properties in all states. This work
 indicates the need for innovative approaches to translate energy upgrades into
 financial benefits beyond simple payback (e.g., more leasable space or return on
 investment). Tax policy should be investigated further in California, as accelerated
 depreciation tax policies can be very influential on private capital investments.
- Investment cycles within a building can vary widely, and a pre-planned investment strategy focused on energy can influence proactive upgrades that benefit future upgrades (e.g., investing in envelope improvements before pursuing a planned HVAC system upgrade).
- Financing for multifamily properties is unique; many of these building owners tend to serve low- or moderate-income customers with different rules. The idea of using an ESCO or spending a lot of money on analysis for potential improvements is not as straightforward with this segment as it might be with other commercial buildings. Multifamily properties have limited capital so unless building improvements are nocost or significantly incentivized, they may not be possible even if interest rates are very low. Education for energy advisors focused on multifamily properties would be a valuable addition to this MTI.

- Segmentation is important to commercial building market transformation, as the
 commercial real estate; municipalities, universities, schools, and hospitals (MUSH), and
 multifamily segments are all very different. Engaging public agencies who work with
 affordable housing, such as the health department or structural remediation
 programs, can create a clearer value proposition. This is supported by recent research
 from the Energy Trust of Oregon.
- If the distribution is weighted to highlight the "worst performers" from a building energy consumption standpoint, how much will the MTI focus on a relatively small group vs. a larger array of buildings?
 - Rick replied that the ease of identifying the worst performers means they are
 often the focus of BPS efforts, so substantial opportunity exists. However,
 CalMTA would be excited to impact a significant proportion of the broader
 commercial building market after more data is collected to yield insights into
 this potential.
- Many programs have attempted to influence this approach to energy optimization in the commercial building market. CalMTA should engage closely with these programs, particularly those in California, to better understand lessons learned and potential best practices. A capital investment planning tool like that described in the Advancement Plan may help bring together the many programs working to optimize commercial building efficiency performance in California and will create more certainty and consistency.
- Barriers to understanding and accessing the various incentive/rebate programs
 available to this segment will also need to be addressed, as indicated by SEI's work
 with building owners in the San Joaquin Valley. Providing tools, messaging, and
 effective training to energy professionals can position them as a one-stop shop for
 building owners/operators who can help navigate program eligibility requirements
 and applications.
- Federal policy deregulation means it may be hard to reach the goal of a 30% reduction in energy consumption keeping things constant could be a sign of success if the market would otherwise fall back without MTI interventions.
 - o Karen Horkitz clarified that forecasting assumes a baseline energy consumption that will be reviewed annually. If energy consumption starts increasing, we would update our assumption of baseline consumption and forecast what would happen in the absence of the MTI. CalMTA's evaluation framework will identify factors that would trigger reforecasting (such as significant regulatory or market disruptions) in the third-party evaluation.
 - An MTAB member added that the MTI forecast is a long-term vision. Activity like recent federal policy tends to be temporal and if the MT theory is strong, the impact can often be addressed by many other factors.
- In the context of California, research may be most beneficial if it focuses on systemlevel opportunities that result in benefits that are meaningful to building owners (e.g., increased building comfort reduces tenant turnover, deep retrofits lead to synergies

like reduced load or optimized HVAC) rather than looking at the impact of individual end-uses.

- The intersection between this work and California's load flexibility work creates a significant opportunity. Whole building approaches with automated controls can help solve peak load concerns and could potentially create a new revenue stream for building owners.
- Market access programs like MCE's FlexMarket could serve as a significant driver if energy professionals trained in whole building approaches become load flexibility aggregators.
- Research should seek to better understand barriers for customers who have opted not to pursue building upgrades in addition to barriers faced by active participants.
- Load flexibility benefits need to be better understood (e.g., whether there are incentives linked to them). Incentives will need to be cost-effective for all customers and it will be important to bridge the gap between customer expectations and actual performance in terms of savings.

Public Comment

No public comments were received.

Commercial Rooftop Units (CRTUs) Preliminary Field Study

Nick Fiore presented the scope and preliminary findings from a field study conducted to assess the impact of an all-electric heat pump RTU replacing an existing mixed fuel unit. Nick noted that the final report will be released in October with findings incorporated into the full MTI Plan that will be provided for public comment in November and finalized in December.

MTAB feedback included:

- Anomalies like the spike in activity on April 1st should be investigated further.
- Has CalMTA thought about how proprietary software/capabilities in this CRTU unit would be addressed by manufacturers in other products?
 - Nick noted that the U.S. Department of Energy specifies the components software should track, but CalMTA is not currently seeking to influence an open-source version of this software.
- Recognizing that the higher cost of these models will be a barrier for many customers,
 CalMTA should consider a tear-down analysis to determine how much cost could be taken out without compromising performance.
 - Nick said that no tear-down analysis had been conducted yet, but that CalMTA has been collecting the incremental costs for adding certain features. He agreed that upfront cost was a challenge, but that back-end software and controls have significant savings potential and could be replicated by manufacturers without other components that drive up costs.

- Controls can be invisible and hard to see when customers are making their decision about what RTU product to select. What guidance will help customers define which are "good" controls?
 - Nick noted that consistency on which data points need to be recorded will be instrumental to controls being widely integrated into CRTUs.

Residential HPWH Idea & Market Acceleration Summit Overview

Alexis Allan reviewed key milestones and the timeline related to the Residential Heat Pump Water Heating (HPWH) market transformation idea that is under development. She also shared details of a planned market acceleration summit at the end of August, including objectives, participant criteria, and post-summit activities.

MTAB questions and comments included:

- Will manufacturers, distributors, and contractors be represented?
 - Alexis confirmed that leading manufacturers as well as new/emerging companies were invited, as well as workforce representatives and other supply chain entities.
- From a policy perspective, CalMTA should ensure that there are attendees who will address rate structure (electric vs. gas) and innovative rate design.
- While the summit is focused on the California market, it may be valuable to invite representatives from other regions who have been working in the heat pump water heating market for some time.
 - o Alexis agreed and noted that CalMTA was identifying additional invitees.

Application Update

Lynette Curthoys presented an update on the application filed to the California Public Utilities Commission (CPUC) on CalMTA's behalf in Dec. 2024, which would approve the Room Heat Pumps and Induction Cooking MTIs for market deployment. She identified all parties to the proceeding and related filing activity, summarized supportive and unsupportive issues, and reviewed the proceeding schedule. No MTAB feedback was received.

Overview of CalMTA Organizational Performance Review

Karen Horkitz shared scope considerations, preliminary scope and research questions, key tasks, and timeline for the organizational review of CalMTA that will be conducted by a third-party at the end of 2025.

MTAB feedback included:

 The future performance review is described in Decision 19-12-021. Is the organizational review also noted there, or is it a process proposed by CalMTA?

- Karen clarified that the Decision includes two mentions of an evaluation that CalMTA believes to be an organizational review and which we subsequently proposed conducting at an earlier stage than the performance review.
- The theme of transparency in operations (planning activities) should be woven throughout the scope. CalMTA is operating on behalf of the public and strives for transparency and trustworthiness, so working this into the questions can demonstrate that the program is serving the public well.
- While research questions are preliminary at this stage, they should be vetted and contributed to by the CPUC, MTAB, and other key stakeholders before finalizing.
- CalMTA's pool of stakeholder interviewees should include a wide range of those who
 have commented on CalMTA materials (e.g., MTI Plans) or engaged in other ways,
 even if they have not directly participated in meetings.
- Interview prompts should include an "other" category or open-ended place where interviewees can share feedback about issues that are important to them that don't relate to specific questions.
 - Karen noted that interviews will be conducted in a way that ensures
 interviewees are able to share their thoughts regardless of the question format;
 interviewers will have the flexibility to adjust as the conversation unfolds.
- What is the budget estimate for the organizational review and what portion of CalMTA's overall budget is allocated to it?
 - Karen replied that CalMTA estimates a \$75,000-\$100,000 budget based on scope. Lynette added that this is included in the implementation budget in CalMTA's CPUC application.
- Two MTAB members expressed their strong support for this plan. NEEA went through a similar process early on and it was very helpful to understand how the organization was fulfilling its desired mission.

CalMTA Equity Update

Rachel Good shared an update on CalMTA's work to apply an equity lens to MTI development, including processes to provide consistent guidance for the MTI teams on equity integration, the equity impacts of CalMTA's strategy pilots and field studies, and engagement of the Equity Sounding Board through full meetings and consulting hours. Two MTAB members expressed support and interest in seeing the integration of equity feedback show up in future implementation of the MTIs.

CalMTA Website & Collateral Overview

Stacey presented a brief overview of CalMTA's redesigned website (https://calmta.org/) and accompanying collateral materials.

Public Comment

No public comments were received.

Next Steps & Preview of 2025 Idea to Initiative Campaign

Stacey reviewed CalMTA's MTI development and deployment process as well as the components of each MTI Plan as a precursor to sharing the structure and milestones for the Idea to Initiative campaign that will introduce key elements of the CRTU MTI Plan. She also reviewed upcoming MTAB meeting dates, locations, and topics. MTAB feedback included:

• In the upcoming CRTU MTI Plan, it will be interesting to see how Phase II research and other activities scale to the market. This is a commodity market with a wide range of manufacturers and large number of RTUs sold, the MTI will need to identify which features it seeks to promote and how it will drive market adoption.

The meeting was adjourned.

Attendees

MTAB Members

- 1. Mary Anderson, PG&E
- 2. Jennifer Green, MCE
- 3. Jeff Harris, Northwest Energy Efficiency Alliance
- 4. Peter Miller, Natural Resources Defense Council
- 5. Stephen Miller, SEI (proxy for Cyane Dandridge)
- 6. Christie Torok, California Public Utilities Commission

Participating Staff & Consultants

- 1. Alexis Allan, Brio
- 2. Tagua Ammar, CalMTA/Resource Innovations
- 3. Lynette Curthoys, CalMTA/Resource Innovations
- 4. Nick Fiore, CalMTA/Resource Innovations
- 5. Rachel Good, CalMTA/Resource Innovations
- 6. Stacey Hobart, CalMTA/Resource Innovations
- 7. Karen Horkitz, Evaluation Lead, CalMTA
- 8. Jeff Mitchell, CalMTA/Resource Innovations
- 9. Rick Olson-Huddle, CalMTA/Resource Innovations

Guests

- 1. Mahlon Aldridge, Ecology Action
- 2. Don Arambula, Don Arambula Consulting
- 3. Peter Biermayer, CPUC
- 4. Rob Bohn, PG&E
- 5. Bryan Boyce, Energy Solutions
- 6. Paul Campbell, ICF
- 7. Cathy Chappell, TRC
- 8. Richard Chien, Bay Area Air District

- 9. Anders Danryd, SoCalGas
- 10. Lacy Estes-Hill, Rheem Manufacturing
- 11. Richard Fennelly, CoilPod LLC
- 12. Michael Flatt, Samsung HVAC
- 13. Erich Fleck, The Ortiz Group
- 14. Randall Higa, SCE
- 15. Bjorn Jensen, Consortium for Energy Efficiency
- 16. Ritika Kumbharker, Center for Energy and Environment
- 17. Jim Lutz, Hot Water Research
- 18. Cooper Marcus, QuitCarbon
- 19. Savannah McLaughlin, CPUC
- 20. Jim McMahon, Better Climate Research and Policy Analysis
- 21. Emily Pelstring, CPUC
- 22. Sepideh Rezania, Unrooz Solutions
- 23. Charlie Toledo, Suscol Intertribal Council
- 24. Carol Yin, Yinsight
- 25. Kate Zeng, SDG&E