



MTAB Meeting Notes

April 22, 2025

Virtual Meeting

Welcome, Agenda, & Introductions

Stacey Hobart opened the meeting by welcoming attendees, facilitating introductions, and sharing the meeting agenda.

CalMTA First Quarter Activity Report

The first half of this Market Transformation Advisory Board (MTAB) meeting was allocated to a special presentation of CalMTA's Q1 2025 Activity Report, which provided updates on operational and Market Transformation Initiative (MTI) development milestones, including financial updates. Substantive MTAB comments and questions included the following.

- Regarding Phase II activities for the Room Heat Pump MTI:
 - What assumptions were made for simulated outdoor air in the room heat pump lab testing?
 - Elaine Miller confirmed that the lab test is load-based and tests units across a range of simulated outdoor air temperatures.
 - While it's important to look at the longer-term bill impacts of a technology, it is also valuable to report on early impressions of bill impacts and then dispel them as data becomes available moving forward, as CalMTA is doing.
 - CalMTA has identified incorporation of this measure into existing income-qualified programs as an intervention/point of leverage. Has there been any qualitative feedback from partners about this?
 - Elaine replied that overall existing programs are excited about the potential of this measure although most have not incented or installed room heat pumps at this time. CalMTA is actively supporting development of a measure package to include room heat pumps in the IOUs' ESA program in partnership with PG&E and Gradient.
 - The Self-Installation Practices Strategy Pilot identified that most participants needed help with room heat pump installation. What would have happened re: installation if they were not supported by the strategy pilot?
 - Elaine noted that this could vary widely and that building staff or retail stores' "white glove service" were two potential options.
 - Upfront cost is an identified barrier for product adoption at this time. It would be helpful to understand how low the cost would have to be for consumers to consistently choose this over a portable AC unit?

- Elaine agreed that this would be a key aspect of the market to understand, although the cost barrier mainly applies to saddlebag versions of the product. Other types have a much lower purchase price.
 - Regarding product cost and installation difficulty, at some point the room heat pump market may intersect with the DIY ductless heat pump market, as the 115-120V systems are just over \$1,000 now and have fairly low installation requirements, although drilling a hole in the wall is not insignificant.
- Regarding the Induction Cooking Chefluencer Strategy Pilot, these events seem to be capable of shifting the opinions of consumers who attend them. Does CalMTA have a plan to expand the influence of the Chefluencers beyond event attendees?
 - Jeff Mitchell explained that CalMTA has explored testing Chefluencer events in retail locations to influence retail staff to become induction influencers themselves. CalMTA will also be participating in a buyer's event with a large retailer in May 2025 and will coordinate a similar event there.
- Regarding Phase II activities for the CRTU MT Idea:
 - Why does the CRTU product definition not include heat recovery and energy recovery (ERVs)?
 - Nick Fiore replied that CalMTA has conducted significant research into ERVs and found a very substantial cost adder (nearly double the cost of an RTU without an ERV); the preponderance of mild climate areas whereas ERVs are most cost-effectiveness in cold to very cold climates; and long payback period.
 - In follow-up communication via email, Nick reiterated that ERVs are not currently a target of this idea because they are less effective in California's milder climate zones and have a high cost of equipment/lack of cost-effectiveness. The below chart illustrates ERV energy savings compared with other RTU features in CalMTA's most recent energy modeling.
 - There's interest in better understanding the impact of ERVs on peak load management, which may be more significant than the value of the ERV during average operating conditions.
 - Nick confirmed that this was part of CalMTA's modeling that will be followed up on when data is available.
 - Fault Detection and Diagnostics (FDD) has been around for a long time but not yielded significant benefits. Does any new data show benefits beyond notifying operators when a system component breaks?
 - Nick replied that as units become more complex with variable speeds, having these sensors will be important to home in on the exact issue when a unit isn't performing properly.
 - In a follow-up communication, Nick shared resources that informed CalMTA's decision to target Automated Fault Detection and Diagnostics (AFDD) through the CRTU MT idea. Regarding energy savings, the

Western Cooling Efficiency Center found that if all new RTUs in California had AFDD, annual energy use would be reduced by 12% ([30,000 MWh savings over 15 years](#)); a [study from LBNL](#) found that savings from proper commissioning range from 5-16% depending on type of program and building type; and another [study from Berkeley Lab](#) found a median savings of 9% whole building energy savings. Regarding prevalence of faults, a [Berkeley Lab study](#) found 21 faults that occurred in 20% of the AHUs in their dataset of 60,000 units. On any given day, 40% of AHUs and 30% of air terminal units reported a fault of some kind.

- CRTUs are a highly optimized commodity product with costs negotiated down to the penny. CalMTA should look ahead 10 years and envision the new standard to which manufacturers could cost-optimize.
- If the primary energy savings benefit from CRTUs is on the cooling side, why isn't CalMTA considering rooftop units with gas heating sections in cooling-dominated climates?
 - Nick explained that CalMTA's product definition is currently fuel agnostic and does not exclude dual fuel systems.
- Regarding federal policy impacts for the Residential Heat Pump Water Heating MT idea, the instantaneous water heater standard is the only federal residential water heater standard that can legally be pulled back. A lack of enforcement for these other standards could impact compliance but won't likely impact the upcoming standards outside of instantaneous water heaters.
- Regarding the Foodservice Water Heating MTI, cost to the end-use customer will vary widely given rate differentials. Without a new rate structure, end-use customers could pay more to run a heat pump water heater. Special rates could recognize time of charging or leverage solar energy.

Review of Draft Meeting Notes and Annual MTAB COI Training

The agenda transitioned to MTAB business. Stacey asked MTAB members for any comments regarding draft notes from the previous meeting (2/19/25). There were none.

She shared the MTAB recruitment and application process and welcomed Mary Anderson of Pacific Gas and Electric (PG&E), the newly seated investor-owned utility (IOU) representative on the MTAB, followed by a review of the MTAB charter and conflict of interest policies. This represented the annual COI training required for MTAB members. Stacey asked the members to disclose any conflicts. There were none.

CalMTA Application Update

Lynette Curthoys presented a summary of recent activity related to CalMTA's application to the CPUC, which would authorize funding for implementation of the Room Heat Pumps and Induction Cooking MTIs. Items discussed included the March 17 Pre-Hearing Conference, list

of parties to the proceeding, the final scope of the proceeding, and the application proceeding schedule. MTAB questions included:

- What are the expectations for MTAB members regarding response to questions in the scoping memo for this proceeding?
 - Lynette confirmed that most MTAB members' organizations are participating as parties in the proceeding so all input should be given with the formal CPUC process.
- Why did the CPUC sunset the ABAL process for Program Administrators since the decision that resulted in CalMTA's creation?
 - Lynette directed interested parties to D.21-05-031, the decision that eliminated ABALs.
 - Christie Torok of the CPUC explained the process as an eight-year application with four-year funding allocation and forecast, with a mid-cycle filing and true-up advice letter after two years.

Review of Disposition Report for 2024 Request for Ideas

Jennifer Barnes shared a recap of MTAB comments received on the draft Disposition Report for the 2024 Request for Ideas, including changes made to the report in response to those comments and planned next steps. There was no further feedback from MTAB members.

Public Comment

There were no public comments made during the comment period.

Next Meeting & Next Steps

Stacey presented CalMTA's plan for MTAB meetings in 2025, including dates and locations (virtual and in-person).

The meeting was adjourned.

Attendees

MTAB Members

1. Mary Anderson, Pacific Gas & Electric
2. Cyane Dandridge, SEI
3. Hayley Goodson, The Utility Reform Network
4. Fred Gordon, Energy Trust of Oregon
5. Jeff Harris, Northwest Energy Efficiency Alliance
6. Peter Miller, Natural Resources Defense Council
7. Christie Torok, California Public Utilities Commission

Participating Staff & Consultants

1. Jennifer Barnes, 2050 Partners (on the CalMTA team)

2. Lynette Curthoys, CalMTA/RI
3. Marcus Dimeo, CalMTA/RI
4. Rick Dunn, CalMTA/RI
5. Nick Fiore, CalMTA/RI
6. Jim Giordano, CalMTA/RI
7. Rachel Good, CalMTA/RI
8. Stacey Hobart, CalMTA/RI
9. Karen Horkitz, KSH Advising (on the CalMTA team)
10. Marlee Konikoff, CalMTA/RI
11. Elaine Miller, CalMTA/RI
12. Jeff Mitchell, CalMTA/RI
13. Alex Pipari, CalMTA/RI
14. Katie Teshima, CalMTA/RI
15. Alex Wurzel, CalMTA/RI

Guests

1. Katie Abrams, Birch Road Consulting
2. Rebecca Barker, Earthjustice
3. Kjellen Belcher, Earthjustice
4. Jenny Berg, self
5. Rob Bohn, PG&E
6. Alamelu Brooks, Energy Solutions
7. Jonathan Budner, Franklin Energy
8. Paul Campbell, ICF
9. Sarah Chinberg, Midea
10. Roy Christian, SoCalGas
11. Maria Dahlin, N'de Apache Tribe
12. Anders Danryd, SoCalGas
13. Michael Daukoru, CalTF
14. Mori Farid, SoCalGas
15. Richard Fennelly, CoilPod LLC
16. Natalie Flores-Rios, SCE
17. Carlo Gavina, SoCalGas
18. Sandra Gonzalez, SoCalGas
19. Jennifer Green, MCE
20. Andrew Guerra, Ecology Action
21. Sue Hanson, EMC Insights
22. Randall Higa, SCE
23. Brynn Holbrook, ICF
24. Jennifer Holmes, Michaels Energy
25. Lore James, Ecology Action
26. Matthew Joyce, Tierra Resource Consultants

27. Floyd Keneipp, Tierra Resource Consultants
28. Justin Kjeldsen, Franklin Energy
29. Jay Luboff, Jay Luboff Consulting LLC
30. Christopher Malotte, SCE
31. Normand Marchand Jr, ClearWall Corporation
32. Savanna McLaughlin, CPUC
33. Mark Ouellette, ICF
34. Emily Pelstring, CPUC
35. Ralph Prah, Prah & Associates
36. Michelle Ralston, Common Spark Consulting
37. Dennis Roberts, Energy Efficiency Done Right
38. Rebecca Rothman, VEIC
39. Steve Schiller, Steven Schiller Consulting
40. Rohini Srivastava, ACEEE
41. Brian Stevens, CPUC
42. George Tagnipes, CPUC
43. Lindsey Tillisch, PG&E
44. Charlie Toledo, Suscol Intertribal Council
45. David Vehslage, Whirlpool
46. Carol Yin, Yinsight