



Market Transformation Advisory Board (MTAB) Meeting

2/19/2025

CalMTA is a program of the California Public
Utilities Commission and is administered by
Resource Innovations.

Agenda



Time	Agenda Item	Presenter
9:00 a.m.	1. Welcome & Agenda	Stacey Hobart
9:05 a.m.	2. COI Declarations & Review Draft MTAB Meeting Notes from Nov. 20-21, 2024	Stacey Hobart
9:10 a.m.	3. 2024 Request for Ideas: Phase I Update	Rick Dunn & Jeff Mitchell
10:25 a.m.	4. Key Performance Indicators (KPI) Scorecard Review	Karen Horkitz
10:35 a.m.	<i>Break (10 min)</i>	
10:45 a.m.	5. Application Update	Lynette Curthoys
11:05 a.m.	6. 2025 Operations Plan Overview	Lynette Curthoys
11:20 a.m.	7. 2024 Financial Update	Jim Giordano
11:35 a.m.	8. MTAB Recruitment Plan & Timeline	Stacey Hobart
11:40 a.m.	9. Public Comment	
11:50 a.m.	10. Next Meeting & Next Steps	Stacey Hobart
Noon	<i>Adjourn</i>	

Phone participants will be muted throughout the meeting and can raise their hand during the public comment period to be unmuted.

2

COI Declarations & Review Notes

Stacey Hobart | Principal, Stakeholder Engagement & Communications



MTAB Declaration of COI

MTAB Eligibility

- Can't receive funding from CalMTA or be in pursuit of funding

Recusal Requirements

- Can't bid on RFP/RFQ if giving input after Phase I
- Those with competitive interest can recuse from discussion, but must leave MTAB if responding to RFP
- Agree not to influence remaining MTAB
- Interpretation, if needed, done by CPUC staff

Transparency

- Public meetings & process where COI concerns can be raised by the public



CalMTA COI Policies



- The CalMTA program has robust COI policies to ensure decision-making is transparent, impartial, and unbiased.
- Resource Innovations employees and subcontractors who function in decision-making roles for CalMTA are firewalled from any ongoing work with California utilities or other covered entities and sign COI certifications.
- CalMTA seeks CPUC approval when there is a need to draw on specialized expertise from subject matter experts who also support work with covered entities.



MTAB Meeting Notes

DRAFT MTAB Meeting Notes

Nov. 20-21

3


2024 Request for Ideas: Phase I Update

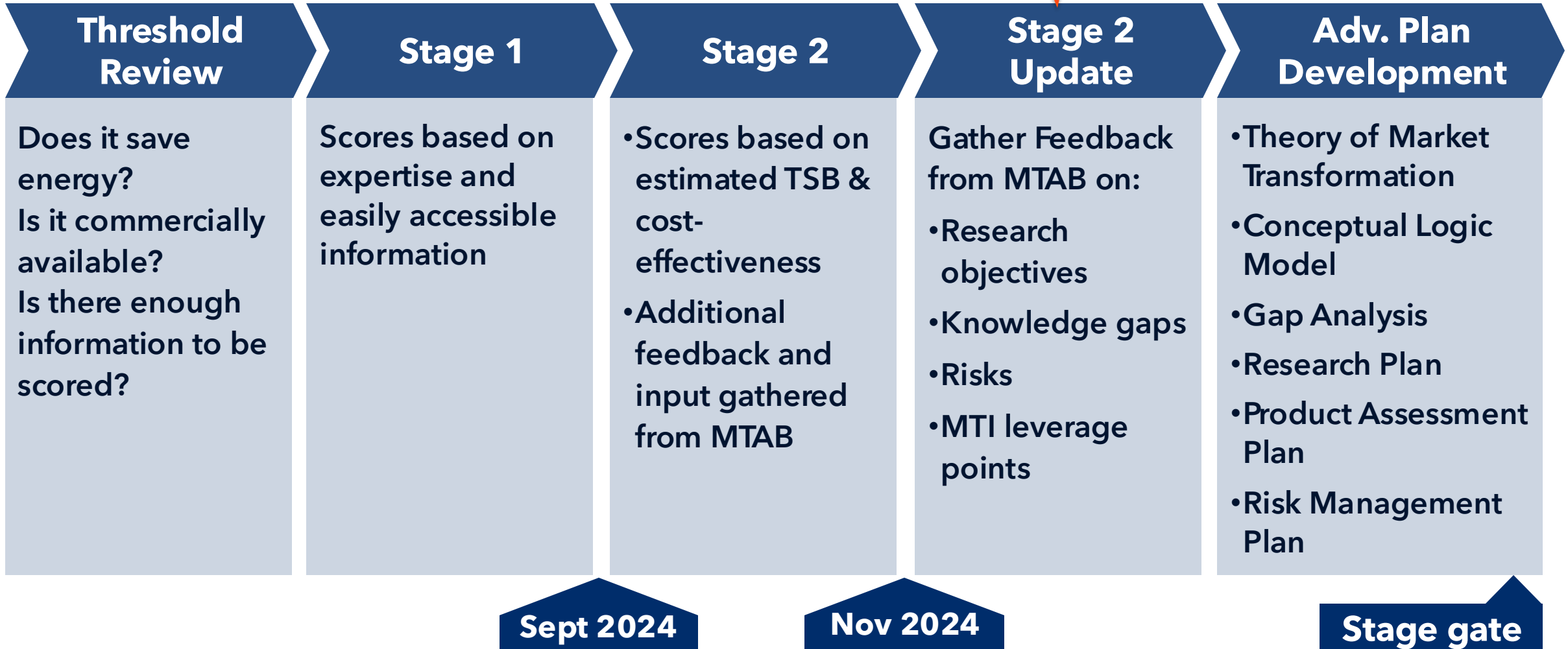
Rick Dunn | MTI Product Manager

Jeff Mitchell | Principal, Market Transformation

Scoring process overview



We are here 



Today's goals



- Rationale for Batch 3 MTI recommendation
- Rationale for ideas not recommended at this time
- Communicate and solicit MTAB feedback on:
 - Batch 3 MTI vision, CalMTA role
 - Preliminary MT Theory (Conceptual MT Theory comes later in the Advancement Plan)
 - MTI leverage points
 - Phase II priorities

Scoring summary: Stage 2



Idea #	Idea name	Stage 2
0085	Multifunction Heat Pump	8.11
0193	Building Performance Standard (BPS) Acceleration	7.22
0105	Efficient Streetlights	6.92
0024	VFDs on all pumps and fans >10 HP	6.82

Batch 3 priorities and considerations



High TSB and ramp rate

MT alignment - must be a good MT opportunity; should have a vision for how the market will respond to interventions and how savings will be locked-in

Equity - not all ideas have a strong equity component, but this can tip the scales

Incremental value - where can CalMTA add maximum incremental value to California's efficiency and decarbonization efforts

Recommendation Summary



Batch 3 Recommendation: BPS Acceleration

This MTI aims to:

- Influence the structure of BPS policy via ongoing collaboration with CEC
- Accelerate performance improvement of existing commercial building stock by preparing and equipping the market with the **value proposition** and capability to **respond early and constructively** to California's forthcoming policies on energy use and emissions reductions

Not recommending:

- Multifunction Heat Pump
- Efficient Streetlights
- VFDs on all pumps and fans > 10HP

Stage 2 Ideas - Not Recommended



Idea	Rationale
Multifunction Heat Pump	<ul style="list-style-type: none">• Space cooling technology gap: current products only perform space and water heating; space cooling is emerging tech• Savings estimates: would benefit from product performance research for all operating modes• GHG: refrigerant impact research needed• Savings overlap with existing RHP and HPWH MTIs
Efficient Streetlights	<ul style="list-style-type: none">• Phase I work revealed that interplay between controls and safety standards limit energy savings• Complicated ownership models contribute to complex financial barriers

Stage 2 Ideas - Not Recommended



Idea	Rationale
VFDs on all pumps and fans > 10 HP	<ul style="list-style-type: none">• Title 24 includes VFD requirements for many applications• Market actors do not value efficiency and, to date, a compelling value proposition that would drive diffusion has not been identified¹.• Lacks well-defined focal point for interventions: fragmented market, varied influencers, decisionmakers and paths to purchase• Further research needed to refine MTI scope, identify value proposition, leverage points & MT Theory, and understand impacts of existing and upcoming codes and standards

¹ Extended Motor Products Market Progress Evaluation Report #1, Report #E25-488, Prepared for NEEA by ADM Associates Incorporated, Jan 2025

Batch 3 - Recommend for Advancement Plan Development



Idea	Rationale
Building Performance Standard Acceleration	<ul style="list-style-type: none">• High TSB that also increases market leverage for other active CalMTA MTIs: ERTUs, CRAWs, etc.• Ramp rate: Leverages market opportunity generated by SB48 and CEC mandate to deliver to CA legislature, by July 2026, a strategy for reducing energy usage and emissions of existing buildings• Increases leverage for other statewide programs driving EUI and emissions reductions in the built environment• MT alignment: State policy provides strong diffusion mechanism for sustained benefits



Building Performance Standard Acceleration

Composition of an MTI

BPS Acceleration MTI

Preliminary Product Definition

BPS are policies, often in the form of performance-based standards, that require **existing commercial and multifamily buildings** to meet certain performance levels, typically for energy use and or GHG emissions.

BPS are typically phased in by **building size** with larger buildings (>50,000 sq ft) being regulated first, followed later by smaller buildings (>20,000 sq ft).

Preliminary product definition (cont.)



They typically include **date-certain deadlines** where performance requirements **ramp up** with each cycle, with **compliance based on measured and verified whole-building energy use**.

NOTE: Development of a statewide BPS is **not** a prerequisite for MTI success. Whatever recommendations are made to the legislature by the CEC to achieve the State's goals, this MTI will focus on collaboration within the state to develop the most effective policy for achieving California's energy efficiency and emissions goals, and developing complementary strategies and tools to simplify, accelerate, and maximize building owners' compliance with EUI and GHG reduction targets.



CalMTA role



This MTI will develop interventions to overcome the 'do nothing' option that many building owners choose in response to BPS and prepare the market for early and accelerated response to BPS or similar state policies.

We envision a role in addressing **policy-related barriers** as BPS are being designed and **market-related barriers** prior to and following BPS launch.



Market Impact



When successful, this MTI will:

- Help ensure the most effective policy structure
- Increase beyond a baseline the compliance rate and resulting (a) energy use and GHG emissions reductions and (b) increased energy affordability, indoor air quality, comfort, and productivity for building occupants.
- Enable ESJ communities to receive the benefits of BPS earlier than otherwise would happen and with lower financial impacts to rent and utility bills.



BPS Acceleration Preliminary MT Theory

Problem

- Commercial buildings are responsible 35% of electricity consumed in the US and 16% of the nation's carbon emissions¹
- In 2050, the majority of building energy use will be in buildings that are standing today²
- At the current retrofit rate of 1-2% annually, it will take over 50 years to reach all commercial buildings
- BPS in other jurisdictions have not experienced high rates of compliance³, indicating structural barriers that must first be addressed if CA is to achieve its energy efficiency and emissions reduction goals

BPS Acceleration Preliminary MT Theory

Opportunity

- SB-48 requires the CEC on or before July 1, 2026 to deliver to legislature a report and recommendations for using state energy benchmarking data to track and manage the energy and GHG emissions of covered buildings
- Department of Energy, CEC, the California Air Resources Board, ACEEE, IMT along with numerous jurisdiction-specific BPS hubs have developed tools, data repositories and compliance resources that this MTI can leverage to more quickly develop CA-specific interventions
- This MTI can leverage existing MTI activities such as energy modeling, savings analyses and supply chain relationships associated with CRTU, CRAWs, etc., further accelerating and amplifying impacts of CalMTA's MTI portfolio

BPS Acceleration Preliminary MT Theory



Barriers

- **Policy barriers include:**
 - Lack of harmonization between state and local policies
 - Compliance timelines that are not aligned with market best practices
 - Ineffective consequences for noncompliance
- **Market barriers include:**
 - Lack of value proposition for building-owner participation
 - Financial barriers related to the high capital costs of upgrades, with more complex challenges for ESJ communities
 - Rent impacts and split incentives in multifamily housing
 - Low awareness of, and limited workforce to support, active energy management

BPS Acceleration Preliminary MT Theory

Priority Activity

- Shape policy development with MT perspectives via continued coordination with the CEC; assist in development of the Building Energy Performance Strategy Report
- Coordinate outreach and engagement with existing BPS hubs to document lessons learned and best practices and identify gaps/interventions that CalMTA can help fill
- Analyze benchmarking data and conduct market characterization research to develop preliminary baseline and market adoption curves

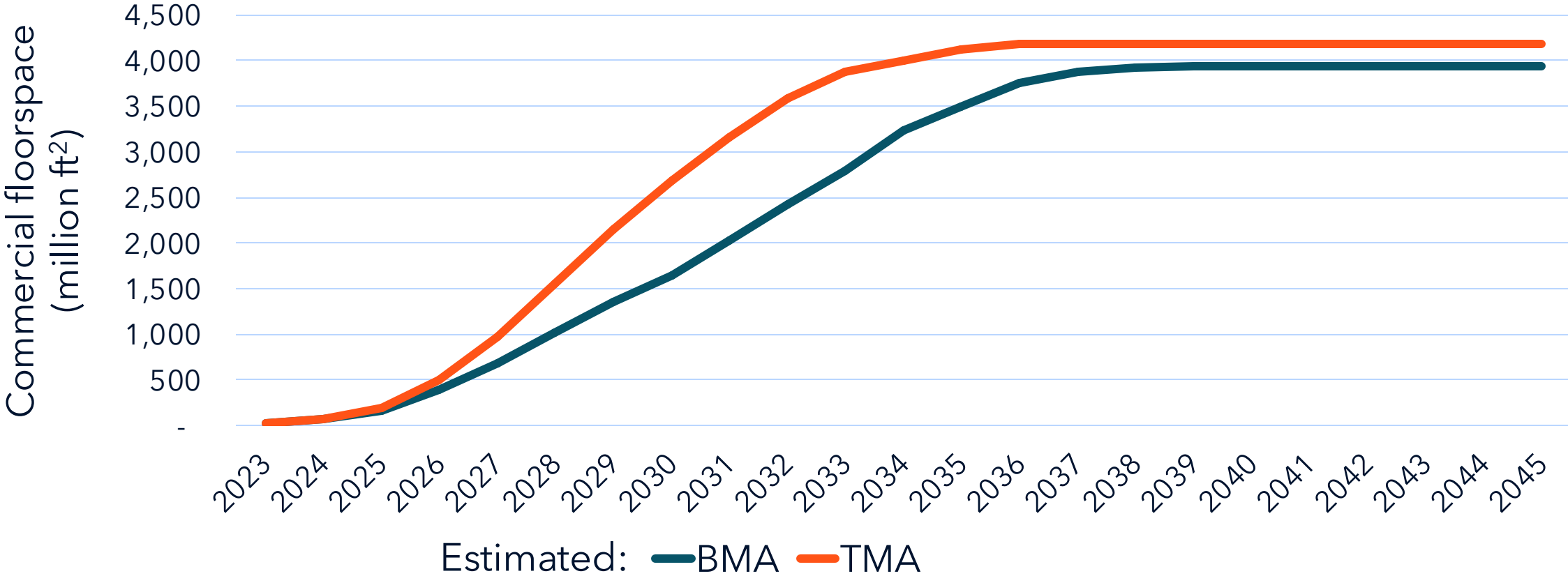
Outcomes

- Increase, beyond a baseline, the compliance rate and resulting (a) energy use and GHG emissions reductions and (b) increased energy affordability, indoor air quality, comfort, and productivity for building occupants

0193: BPS Acceleration



Conceptual Adoption of BPS



Portfolio Characteristics



Program Name	Geographic Sector Diversity	Technology Diversity	Sector	Ramp Rate/ Timing	ESJ	WE&T
BPS Acceleration	Statewide	Multiple	Comm	Med	Med	Med
Room Heat Pumps	Statewide	HVAC/HP	Res	High	High	Low
Induction Cooking	Statewide	Res Cooking	Res	High	High	Low
Commercial RTUs	Statewide	HVAC	Comm	Med	Med	High
Residential Heat Pump Water Heating	Statewide	WH/HP	Res	High	Low	High
Foodservice Water Heating	Statewide	Food Svc	Comm	Med	Med	Med
Commercial Replacement and Attachment Window Solutions	Statewide	Envelope	Comm	Low	Med	High

4 Key Performance Indicators (KPI) Scorecard Review

Karen Horkitz | Market Research and Evaluation



Break (15 min)
We will be back soon.



5

Application Update

Lynette Curthoys | Vice President, Market Transformation

Application update



On December 20, 2024, PG&E filed an Application to the Commission on CalMTA's behalf.

The Application included:

- Request for approval of the Room Heat Pumps and Induction Cooking MTIs
- Detailed cost-estimate for the first five years of implementation funding approved in D.19-12-021, OP 9, for the first two MTIs and future MTIs
- Request that future MTIs are approved through Tier 2 advice letters (consistent with D.19-12-021)
- Request to discontinue the filing of ABALs and replace the ABAL with a Trigger-Based Budget Advice Letter (TBBAL)

Opening Comments/Proceeding information



- Three parties filed Responses in support of the Application, including CEDMC, NEEA, and TURN
- Two parties filed Protests to the Application, including Cal Advocates and SCE/SDG&E (jointly)
- CalMTA filed a Reply to the Responses and Protests
- The Application, supporting Testimony, Exhibits, and “Opening Comments” are located here: [Regulation](#), under Case “Statewide Energy Efficiency Market Transformation Initiatives”
- The Application Proceeding is A.24-12-009 and is located here: [Proceeding Details](#)

Next Steps

- Follow the proceeding to stay up-to date ([Proceeding Details](#))
- Pre-Hearing Conference (PHC) - Date, time, and other details to be set in future notice or ruling
- Scoping Memo - The assigned Commissioner's Scoping Memo will determine the schedule, issues to be addressed (scope), and need for hearings

6 2025 Operations Plan Overview

Lynette Curthoys | Vice President, Market
Transformation



Looking back: 2024 by the numbers



- 9** MTAB meetings 
- 6** Ideas moved to Phase II 
- 3** Strategy Pilots deployed 
- 2** MTI Plans completed 
- 1** Application submitted 
- 1** RFI completed 
- 1** Evaluation Framework finalized 
- 6** Public comment opportunities 
- 20** Plans and reports published 
- 2** Advisory groups formed 
- ~30** Efficiency program coordination meetings held 
- 16** Industry events & conferences attended 
- 4** ESJ listening sessions held 

Key priorities for 2025



1

**Approval of
Induction
Cooking and
Room Heat
Pumps
Application**

2

**Prepare for
Induction
Cooking and
Room Heat
Pumps MTIs to
enter Phase III:
Market
Deployment**

3

**Develop the
next MTI Plans**

2025 Milestones: MTI Development



○	◐	●
To be started	In process	Completed

Milestone	Q1	Q2	Q3	Q4
Summary recommendation memo for Batch 3	●			
Kick off National Room Heat Pump Collaborative	○			
Release 2024 RFI Disposition Report		○		
Complete Strategy Pilot Assessment Reports: Chefluencer and RHP Self-Installation Practices		○		
CRAWS field study kick-off		○		

2025 Milestones: MTI Development cont.



○	◐	●
To be started	In process	Completed

Milestone	Q1	Q2	Q3	Q4
Advancement Plans for 1-2 MT idea(s) recommended to transition to Phase II: Program Development			○	
Residential HPWH Summit			○	
Complete Strategy Pilot Assessment Report: ESRPP			○	
CRTUs interim field study report			○	
Conclude window stock assessment research for RHP MTI			○	

2025 Milestones: MTI Development cont.



○	◐	●
To be started	In process	Completed

Milestone	Q1	Q2	Q3	Q4
Complete 120V induction stove data collection at Emerson Arms				○
CRTUs market characterization study report*				○
Public comment on CRTUs MTI Plan				○
Final CRTUs MTI Plan, including evaluation metrics, submitted to MTAB and Commission for approval to advance to Phase III: Market Deployment				○

*Carried over from 2024

2025 Milestones: Stakeholder Engagement and Communications



○	◐	●
To be started	In process	Completed

Milestone	Q1	Q2	Q3	Q4
Publish 2024 Annual Report	○			
Conduct a survey of CalMTA stakeholders*	○			
Launch redeveloped website		○		
Hold public comment on 1-2 CalMTA Advancement Plans			○	
Hold quarterly update webinars*	●	○	○	○
Host Equity Sounding Board meetings	●	○		○

*Stakeholder survey and Q1 quarterly update were carried over from 2024

2025 Milestones: Administration and Operations



○	◐	●
To be started	In process	Completed

Milestone	Q1	Q2	Q3	Q4
Develop and post initial KPI tracking on calmta.org (program/portfolio tracking)	●			
Recruit for MTAB members whose two-year terms expire in April 2025	◐			
Finalize Solicitation Protocols*	◐			
Open permanent Request for Ideas portal	○			
Seat new MTAB members for those whose two-year terms expired		○		

**Carried over from 2024*

2025 Milestones: Administration and Operations cont.



To be started

In process

Completed

Milestone	Q1	Q2	Q3	Q4
Issue an RFP to solicit a third-party to review CalMTA operational performance			○	
Finalize solicitation platform for RFP promotion and bids			○	
Anticipated approval of the Application			○	
Issue implementation RFPs for approved MTIs (assuming Application approval)				○
Develop 2026 Operations Plan				○
Hold MTAB meetings	●	○	○	○



7

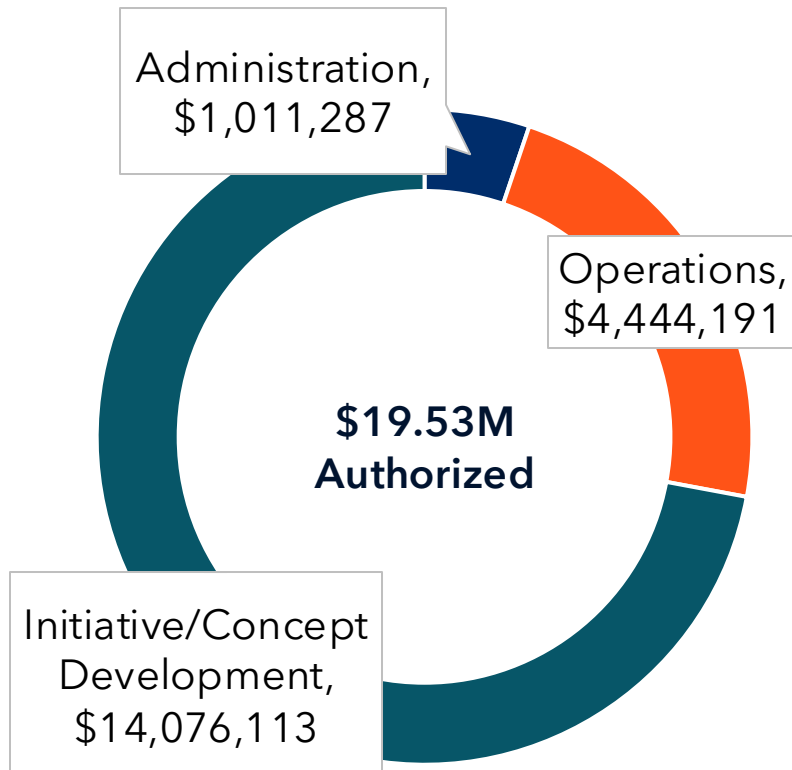
2024 Financial Update

Jim Giordano | Principal, Business Operations

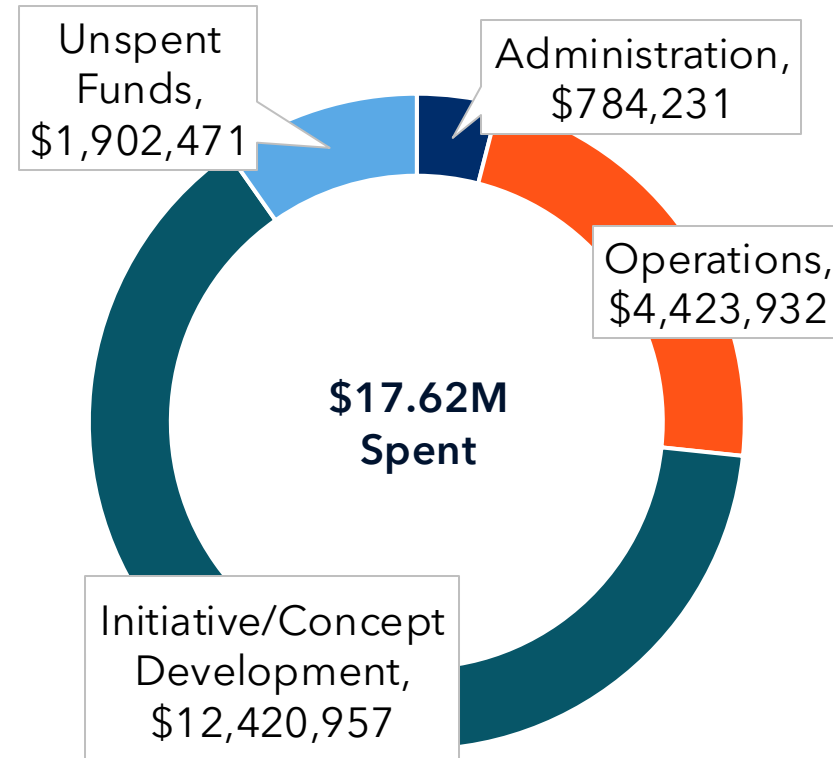
2024 Budgets and Final Expenditures



2024 Budgets (by Cost Category)



2024 Final Expenditures



Fourth Quarter Funding Reallocations

In the 4th quarter, finalizing the Application required high involvement by Project Management, Policy, and Stakeholder Engagement teams, necessitating the rebalancing of funding allocations within the Operations cost category.

- Moved \$40,000; \$60,000; and \$26,000 **from** MTAB Operations **to** Policy, Project Management, and Stakeholder Engagement, respectively.
- Moved \$190,000; \$50,000; and \$8,000 from Data Systems to Stakeholder Engagement, Policy, and Project Management, respectively.

Fourth Quarter Funding Reallocations



- Moved \$57,000 from Administration to Initiative/Concept Development.
- Only funding reallocation made between cost categories in 2024.

Final Spending Detail



Major Activities by Cost Category	ABAL Allocations	Final Spend Amounts	% of Original Allocation Spent
ADMINISTRATION			
1. Routine Financial & Administrative Tasks	\$ 1,011,287.00	\$ 784,230.68	78%
Administration Subtotals	\$ 1,011,287.00	\$ 784,230.68	78%
OPERATIONS			
2. Project Management	\$ 868,390.00	\$ 936,290.73	108%
3. MTAB Operations	\$ 510,259.00	\$ 378,743.40	74%
4. Policy	\$ 482,810.00	\$ 566,289.60	117%
5. Stakeholder Engagement and Communications	\$ 1,759,515.00	\$ 1,975,463.54	112%
6. Data Systems Development and Management	\$ 823,217.00	\$ 567,144.69	69%
Operations Subtotals	\$ 4,444,191.00	\$ 4,423,931.96	100%

Final Spending Detail



Major Activities by Cost Catgory	ABAL Allocations	Final Expenditure Amounts	% of Original Allocation Spent
INIATIVE/CONCEPT DEVELOPMENT			
Concept Development (Phase I Activities)	\$ 4,000,975.00	\$ 4,091,781.39	102%
7. Technology Scanning and RFI Support	\$ 1,055,500.00	\$ 432,326.23	41%
8. Outreach, Reporting, Research	\$ 482,278.00	\$ 562,593.44	117%
9. Preliminary Benefit Analysis & Forecasting Models	\$ 661,751.00	\$ 557,961.28	84%
10. Advancement Plan Development & Reporting	\$ 1,801,446.00	\$ 2,538,900.45	141%
Program Development (Phase II Activities)	\$ 10,075,138.00	\$ 8,329,175.80	83%
11. Program Strategy Development	\$ 5,575,138.00	\$ 6,375,422.58	114%
Policy Development & Evaluation		\$ 285,102.12	
Portable/Window HPs		\$ 2,150,170.80	
Induction Ranges & Cooktops		\$ 2,008,138.71	
ERTUs		\$ 1,350,970.43	
Food Service HPWH		\$ 149,277.21	
Res HPWH		\$ 267,773.97	
CRAWS		\$ 163,989.34	
12. Program Strategy Testing/Pilots	\$ 4,500,000.00	\$ 1,953,753.23	43%
Portable HP Self-Installation Pilot		\$ 658,364.80	
ESRPP for Equity Pilot (Non-Incentive Charges)		\$ 345,154.27	
ESRPP for Equity Pilot Incentives		\$ 646,250.00	
Chefluencer Pilot		\$ 303,984.16	
Initiative/Concept Development Subtotals	\$ 14,076,113.00	\$ 12,420,957.19	88%
Grand Totals	\$ 19,531,591.00	\$ 17,629,119.82	90%

8 MTAB Recruitment Plan & Timeline

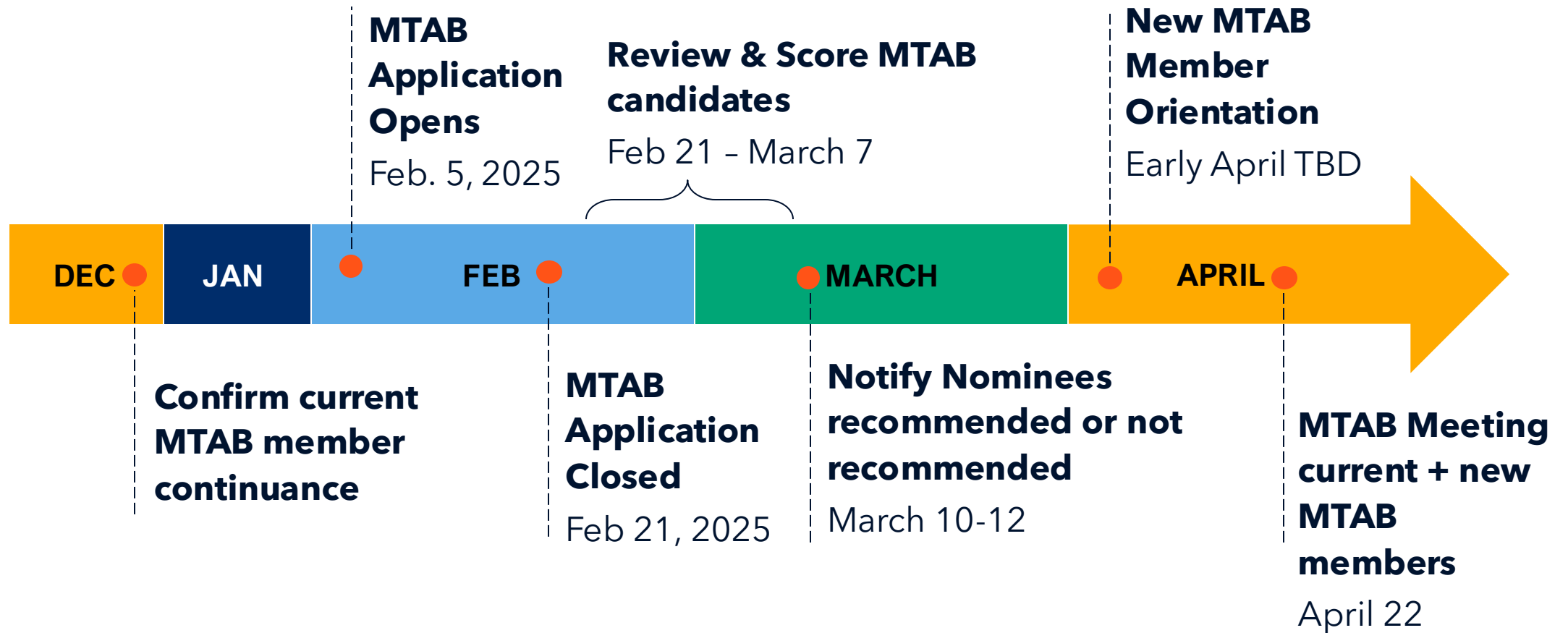
Stacey Hobart | Principal, Stakeholder Engagement & Communications

MTAB Member Seats



MTAB Member	Category Represented	Recruitment Process
Cyane Dandridge	Workforce and/or Labor	Reapply via MTAB application
Jeff Harris	National/Regional EE Policy Professional	Reapply via MTAB application
Ky-An Tran	CPUC (Ratepayer Advocacy/Protection)	Self-selecting
Karina Camacho	CCAs/RENs	Nominating candidates
Randall Higa	Replacement decided by IOUs	Self-selecting

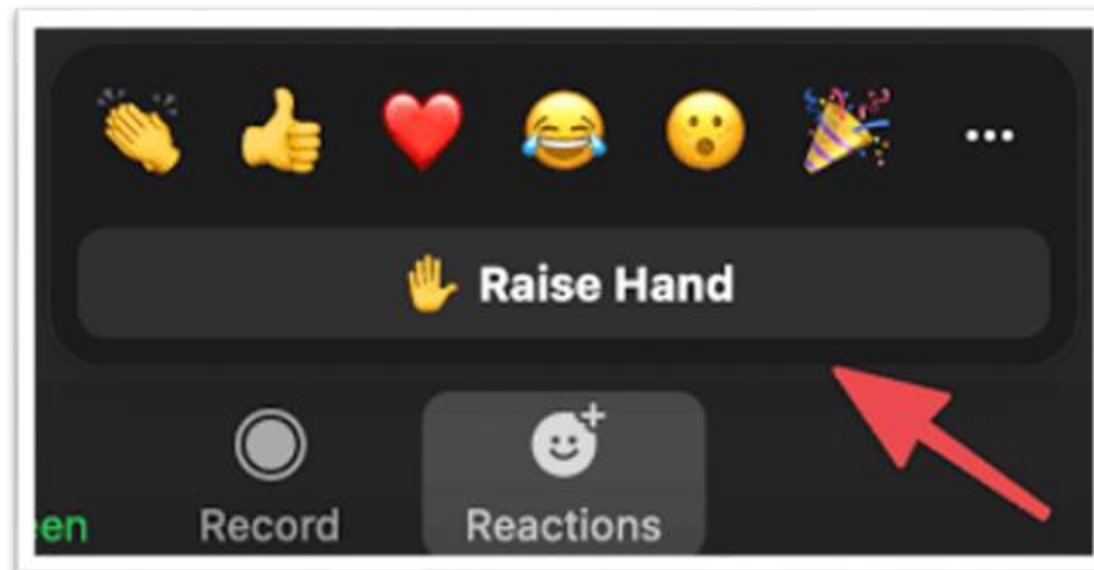
MTAB Recruitment Schedule



Public Comment



Raise your hand using the “Reactions” feature and we will allow you to unmute yourself.



8

Next Meeting & Next Steps

Stacey Hobart | Principal, Stakeholder Engagement & Communications

2025 MTAB Meetings

	Scheduled: APR 22	To be scheduled: JUNE 18 - 30	To be scheduled: AUG 18 - 29	To be scheduled: SEP 24 - 30	To be scheduled: NOV 10 - 20 <i>Two-day meeting</i>
Time	1 - 5 pm (4 hrs.)	TBD between 9 am - 5 pm (7 hrs.)	9 am - noon or 1 - 4 pm (3 hrs.)	9 am - noon or 1 - 4 pm (3 hrs.)	TBD between 9 am - 5 pm (5-7 hrs. each day)
Location	Virtual - Zoom	In-person Bay Area	Virtual - Zoom	Virtual - Zoom	In-person Bay Area
Topics			Idea to Initiative	Idea to Initiative	Idea to Initiative

The date ranges listed above exclude national and company holidays.



Transformative Energy Solutions for the public good

Market transformation is a proven approach that works to remove market barriers so that energy efficient, equitable, and climate-friendly approaches become the new standard practice for all Californians.

Sign up for updates at: calmta.org/contact/

Questions? Email info@calmta.org

Follow us at [linkedin.com/showcase/calmta/](https://www.linkedin.com/showcase/calmta/)