Caldad4.25.24Market TransformationAdvisory Board (MTAB)Meeting

## 1 Welcome & Agenda





Time	Agenda Item	Presenter	Time	Agenda Item	Presenter
1:00 p.m.	1. Welcome & Agenda	Stacey Hobart	3:10 p.m.	8. MTI Portfolio Characteristics	Lynette Curthoys
1:05 p.m.	2. Introductions	MTAB & CalMTA	4:00 p.m.	9. CalMTA Program-level KPIs	Karen Horkitz
1:20 p.m.	3. Review MTAB meeting Notes: 1/25	Stacey Hobart	4:45 p.m.	10. Public Comment	
1:25 p.m.	4. MTAB & COI Requirements	Lynette Curthoys	4:55 p.m.	11. MTAB Review Schedule	Stacey Hobart
1:35 p.m.	5. Draft MTI Plan Template	Jeff Mitchell	5:00 p.m.	Adjourn	
2:00 p.m.	7. Progress Report: Phase II MTIs	Jeff Mitchell, Elaine Miller & Alexis Allan	Attendees will be muted throughout the		
3:00 p.m.	Break (10 min)		r	meeting and can raise their hand during the public comment period to be unmuted.	

# 2 Introductions

2.1

## **MTAB Members**



Name	Organization	Category Represented
Christie Torok	CPUC Energy Division	CPUC Representative
Cyane Dandridge	Strategic Energy Initiatives	Workforce and/or Labor Representative
Fred Gordon	Independent (formerly Energy Trust of Oregon)	Evaluation Professional
Hayley Goodson	The Utility Reform Network (TURN)	Ratepayer Advocacy/Protection
Jeff Harris	Northwest Energy Efficiency Alliance (NEEA)	National/Regional EE Policy Professional
Karina Camacho	Western Riverside Council of Governments	REN/CCA
Ky-An Tran	CPUC Public Advocates Office	Ratepayer Advocacy/Protection
Peter Miller	Independent (formerly NRDC)	Environmental Advocacy
Randall Higa	Southern California Edison (SCE)	IOU Representative



# 3

# **MTAB Meeting**

# <u>Notes</u>

# <u>Jan. 25, 2024</u>



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# 4 MTAB & COI Requirements Refresher

Lynette Curthoys Vice President, Market Transformation



## **Charter: Roles & Responsibilities**



The 9-member MTAB is a non-authoritative body, making non-binding recommendations.



# **Charter: Other Aspects**





#### Terms

• Two-year terms starting April 25, 2024, through April 2026



## Stipend

- MTAB members are volunteers and not employees
- Stipend from meetings will be provided and travel expenses covered



#### Meeting Notices & Public Comments

- Public meetings announced at least 4 business days prior
- Members of the public can comment at meetings and online at <a href="https://calmta.org/mtab-comments/">https://calmta.org/mtab-comments/</a>

## **Meeting Notes**



- MTAB meeting notes will summarize discussion and recommendations
  - Notes serve as the record of MTAB recommendations
  - Each MTAB meeting will ask for acceptance or edits of the prior meeting notes
  - Any member may choose to write a summary of their own view, which will be appended to the meeting notes



#### **MTAB Member Expectations**



- Member should attend at least 80% of the meetings
- If a member can't make a meeting, notify CalMTA in advance and someone else from the organization can attend as proxy
- Recommendations should be constructive
- Silence means agreement

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## **Conflict of Interest Rules**

# **MTAB Declaration of COI**

#### **MTAB Eligibility**

Can't receive funding from CaIMTA or be in pursuit of funding

#### **Recusal Requirements**

- Can't bid on RFP/RFQ if giving input on MT idea after Phase I
- If you have competitive interest in an MTI or strategic prioritization, can recuse from that 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 CaIMTA is a program of the California Public Utilities Commission and is administered by Resource Innovations



MTAB Charter with Conflict of Interest



# **MTAB COI Public Disclosure Form**



#### **MTAB** Public Disclosure form will be sent for electronic signature:

- Prior to joining MTAB; annually; and at conclusion of service
- Or if become aware of COI not previously reported

#### **Questions:**

- Do you (et al) provide services to CaIMTA?
- Do you (et al) have, or are planning to have, a financial relationship with RI, Cadmus, 2050 Partners, Brio, Unrooz Solutions, or Ortiz Group?
- Are you aware of other circumstances that could be an actual or perceived conflict of interest?

Disclosure forms will be posted on CaIMTA website once signed.

Signed COI MTAB Disclosure Forms



# **CalMTA COI Policies**



- CalMTA has robust COI policies to ensure decision-making is transparent, impartial, and unbiased
- Resource Innovations' team that administers CaIMTA has deep experience implementing market transformation and other energy efficiency programs



# **CalMTA COI Policies**



- RI employees and subcontractors, who function in decision-making roles for CaIMTA, sign COI certifications and are firewalled from any ongoing work with California utilities or other covered entities
- Seek CPUC approval when there is a need to draw on specialized expertise from SMEs who also support work with covered entities

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## 5 Draft MTI Plan Template

Jeff Mitchell Principal, Market Transformation

#### market development and evaluation activities that will be implemented

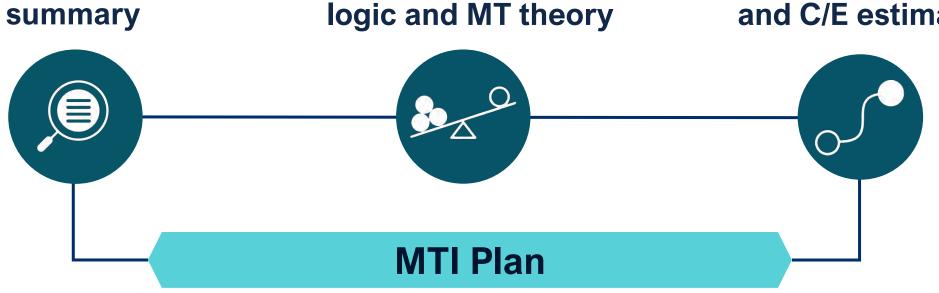
Phase II research

**MTI Plan** 

during Phase III: Market Deployment.

**Include updated market** adoption curves, TSB, and C/E estimates





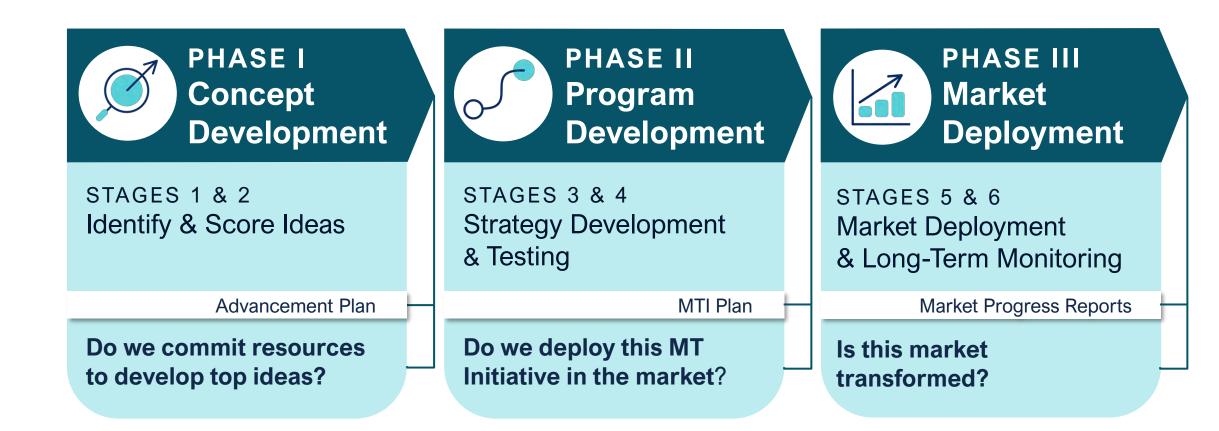
**Complete program** 

The MTI Plan describes the business case supporting the MTI and the



## **MTI Development/Deployment Process**





#### **MTI Plans Elements per Decision 19-12-021**

- Target markets
- Target technologies, behaviors, sectors, or applications
- Current product performance data & relevant research
- EE potential, competing products, costs & benefits
- Supply chain map

- Market drivers and barriers
- Program theory and logic model, leverage points, and intervention strategies
- BMA and TMA curves
- Data needs assessment
- Savings forecast, budget & cost effectiveness
- Resource Acquisition coordination plan

- Market progress indicators & milestones
- Evaluation plan
- Risk review & risk mitigation strategies
- Desired market end state & market exit strategy
- Stakeholder engagement & reporting plan
- Decision Link



# **Discussion Topic #1: 'Offramps'**



#### 2.3 Initiative Budget & Outcomes

This subsection describes the anticipated critical market outcomes/impacts expected to validate continued CaIMTA investment. Depending on the program logic, the years are subject to change to reflect the appropriate timeline for the MTI.

Phase III - Market Development Budget (Estimate of total MTI cost):					
1-Year	Short Term	Med Term	Long Term		
Critical Activities: • •	Critical Outcomes: • •	Critical Outcomes: • •	Critical Outcomes: • •		

## **Discussion Topic #2: Stakeholders**



#### 5.1 Stakeholder Engagement Strategy

Stakeholder/Program	Summary of Offering/Support	Coordination Strategy

#### 5.2 Market Engagement Strategy

Market Actor	Role	Coordination Strategy

# **Discussion Topic #3: Additional Detail**

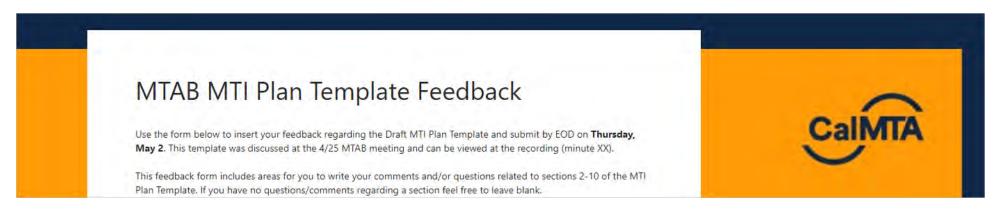


- Appendix A: Logic Model
- Appendix B: Forecasting Model Documentation
- Appendix C: Product Assessment Report
- Appendix D: Product Plan
- Appendix E: Baseline Market Characterization Report
- Appendix F: Stakeholder Engagement Plan
- Appendix G: Evaluation Plan
- Appendix H: Risk Management Plan
- Appendix I: Budget (Initial implementation period (2026-2030) and Lifecycle)





- MTAB will receive an email after this meeting with a link to a form to complete feedback on the draft MTI Plan Template
- Please complete your review by EOD 5/2/2024
- Note: MTAB comments will be appended to the meeting notes and posted on our website within two weeks of this meeting



# 6 Progress Report: MTIs in Phase II

Jeff Mitchell Principal, Market Transformation

Alexis Allan Advisor, Market Transformation

Elaine Miller Senior Manager, MT Strategy



## **Phase II: Program Development**



Characterize market and define proposed technology or practice

Fill gaps in knowledge

Confirm market barriers and market leverage point(s)

Update market adoption models, savings estimates, and C/E estimates

#### Draft MTI Plan

# **MTIs in Phase II**

- Induction Cooktops & Ranges
- Portable/Window Heat Pumps
- Efficient Rooftop Units







# Advancement Plan: Induction Cooktops & Ranges

Elaine Miller

Senior Manager, Market Transformation Strategy

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# Induction Cooktops & Ranges



#### **Product Definition/Features**

- Current: Electric ranges or cooktops that use electromagnetic induction to heat cookware directly
- Future: More 24", 120V products and more affordable price points



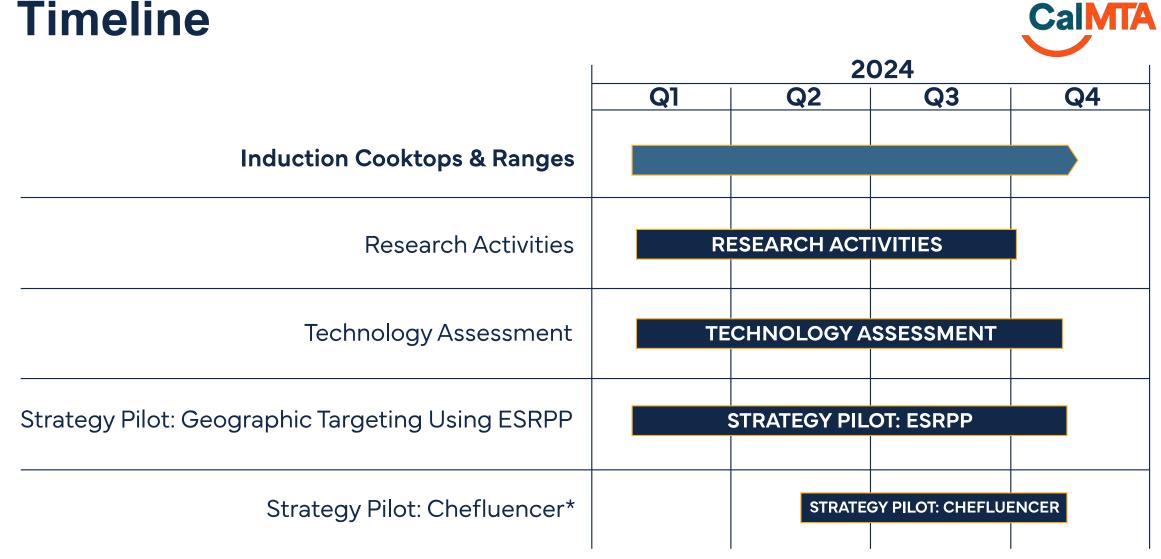
# Induction Cooktops & Ranges



**Target market:** All residential new and existing (MF and SF) properties with a focus on ESJ customers

**Possible leverage points:** Retail channel, Title 24/building codes, California Air Resources Board, ENERGY STAR, IRA funding, production builders

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#### \*in development

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## Tech Assessment – Initial Capacity Analysis – 240V Induction Appliance

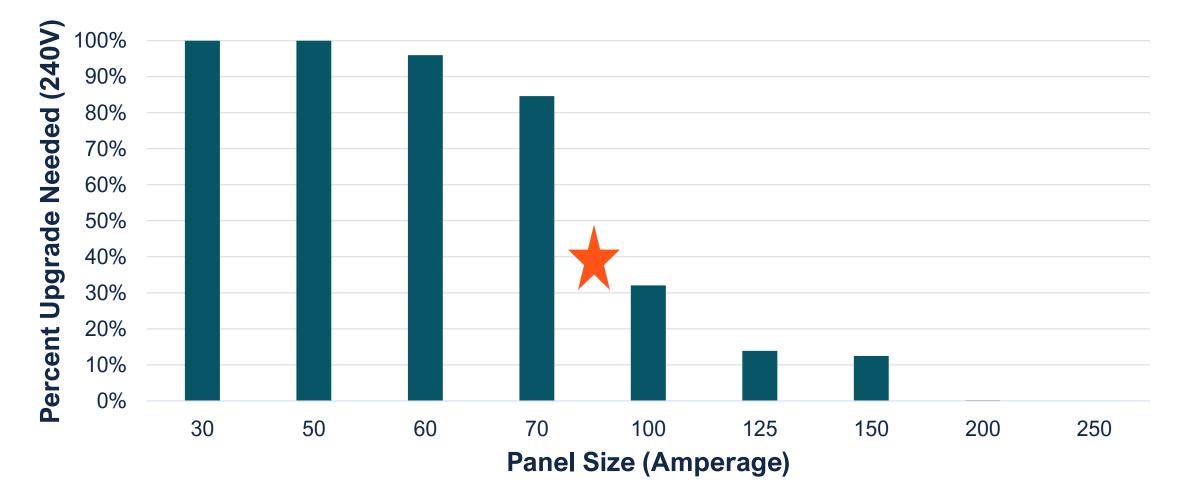


Modeled worse-case scenario for induction stoves:

- Specifications for 36" induction stoves call for 40–50 Amp circuits<sup>\*</sup>
- NEC analysis shows 12,000-watt capacity circuit for stove & oven\*\*
- Installing a 50A @ 240V (12,000 Watt) appliance analysis based on HEA utilization study
- If we just focus on 240V, almost all panels <100A would need to be replaced

\* https://images.thdstatic.com/catalog/pdflmages/15/15632ce2-e1bc-5195-b0f5-3a11cac6214b.pdf CaliNTA is a program of the California Public Utilities Commission and is administered by Resource Innovations \*\* https://www.pecanstreet.org/wp-content/uploads/2021/08/Pecan-Street-Panel-Sizing-Whitepaper-Update.pdf

## Tech Assessment – Initial Capacity Analysis – 240V Induction Appliance

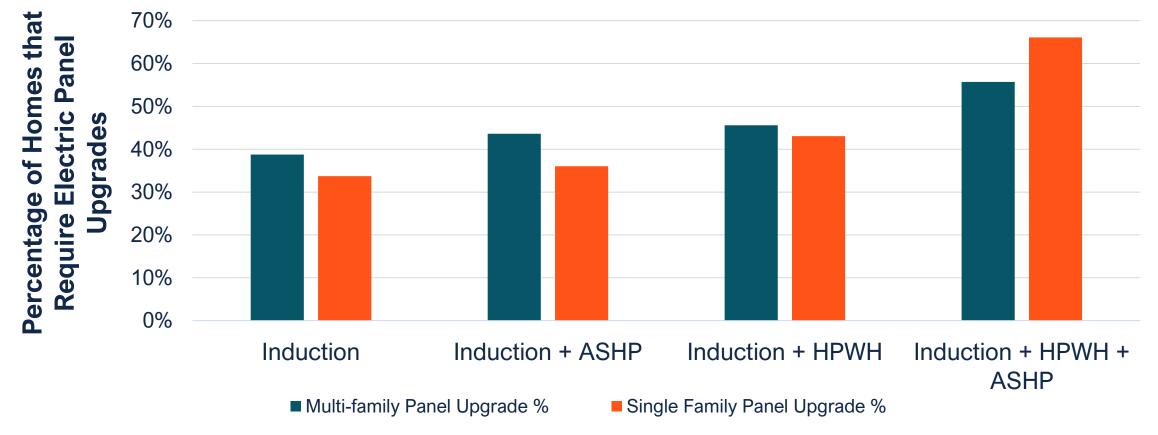


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# Tech Assessment – Induction as Part of Electrification



#### **Electrification Combination**



ASHP = Air Source Heat Pump HVAC system

## Market Characterization Key Takeaways – California Stakeholders



Existing electrical capacity a major concern when it comes to induction upgrades



Loaner programs and exposure to induction cooking is effective in overcoming biases or concerns about cooking experience



Pairing installs with complimentary cookware also helped mitigate customer concerns/challenges

## Early Findings – Multi-family Building Owners



#### **Perceived Benefits of Induction:**

Appearance

"I'm all about looks. It definitely gives the apartment a more expensive or modern appearance."

Safety

"[Induction] is interesting to me because of the liability factor with gas and potential improper use. **Gas leaks**...."

#### Increased Rents or Decreased Vacancy

"So, I think the key really is, what are people looking for? ..if it helps rent the unit faster, that's less downtime, less loss of money."

#### Early Findings – Multi-family Building Owners Perceived Barriers of Induction:



Cost (unit + maintenance)

Perceived Tenant Preference

Durability

"...cost of repairs if repairs are needed... are there appliance vendors that we can easily find that can repair these things as needed?"

"Some tenants don't know induction... They loop it in with electric. Nobody's going, "Hey, it's really great cooking with induction!" At least in terms of tenants. **They like gas because of being able to cook a lot easier.**"

"Tenants don't take care of things like that.. same reason we don't use glass top electric stoves. ... If you're in a high-end, a property where people are paying big rents, it would be worth it, but not in general Class B or C property."

#### **Strategy Pilots – ESRPP**



Contract with data implementer signed and engaging retailers

Determining QPL for both induction and portable heat pumps + ACs

Finalized zip code lists for ESJ areas

Acquire data from ESRPP implementer

Engaging implementer + CBO on old AC turn-in event



#### Strategy Pilot in Development – Induction demonstrations

- Building Decarb Coalition (BDC) has a "Chefluencer" program to educate consumers on the benefits and ease of induction cooking
- CalMTA to build on BDC induction cooking demonstrations and apply to retailer environment
- Can this be a successful strategy to change hearts and minds?
- Working on SOW & budget now for MTAB review

#### What's Coming Next?



**Market Characterization** – Continued engagement with manufacturers, homebuilders and remodelers to strengthen understanding of market conditions

**Product Assessment** – Further refinement of product specification and assessments of competitive landscape, lifecycle reliability, cost of ownership

**Pilots** – Finalize:

- ESRPP implementors and retailers, launch pilot
- Chefluencer program, get approvals, and launch with retailer

**Coordination** – CalMTA has conducted C&S meeting with our IOU partners and will continue to do so with market actors and stakeholders

### Advancement Plan: Portable/Window Heat Pumps

Elaine Miller

Senior Manager, Market Transformation Strategy





# Portable/Window Heat Pumps CalMTA

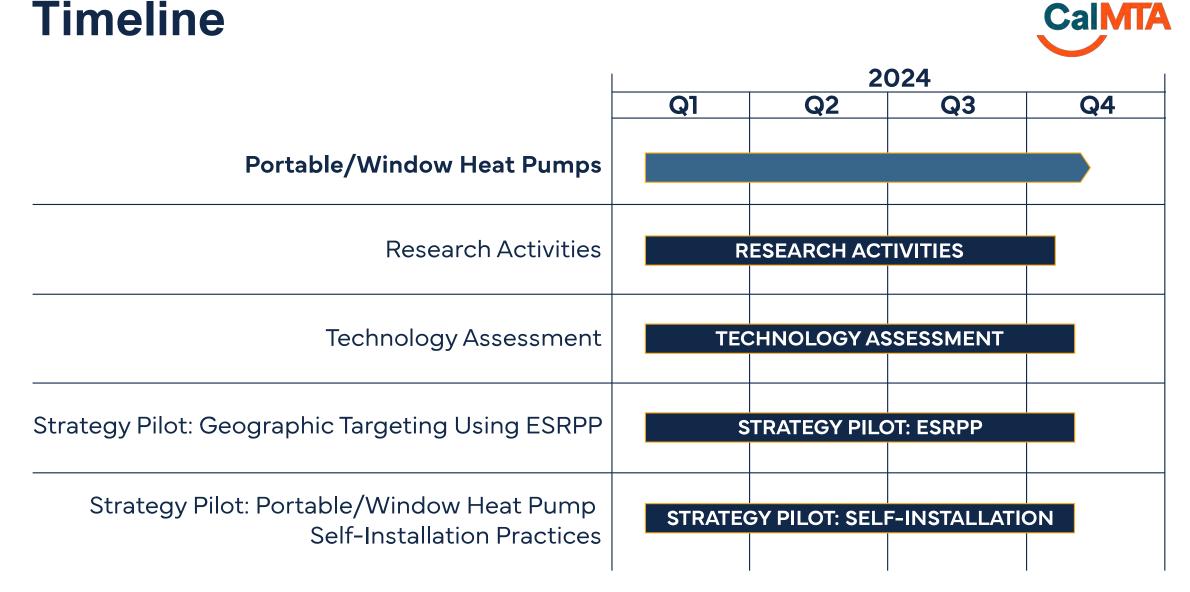
#### **Product Definition/Features**

- Current: Self-contained, self-installed efficient heating and cooling products for small spaces
- Future: More affordable, cold climate capacity, dual-ducted, air filtration, grid enabled, and use of lower GWP refrigerants



## Portable/Window Heat Pumps Cal

- **Target market:** Existing multifamily and smaller single-family homeowners and renters
- Possible leverage points: DOE test procedures, CalNEXT, CEE, ENERGY STAR, IRA funding, NYSERDA + NEEA, retail channel, multifamily and public health programs

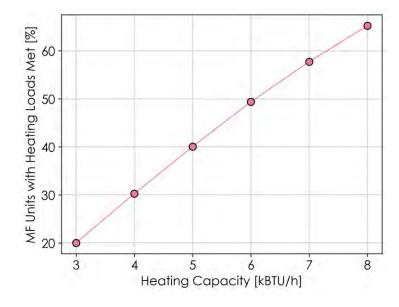


#### **Tech Assessment**

- Approximately 70% of MF units have heating & cooling demands that could be met by rated performance of portable and window HPs
- Need more investigation on HP capacity at lower temperatures
- DOE's newly released test procedure for window • heat pumps will report heating performance at 47°F, 35°F, 17°F, and 5°F, enabling CalMTA to identify products that can perform in CA climate



#### CA Multi-Family Units, < 2,000 sf



Analysis using NREL ResStock, 2022 dataset

Between CA's mild climate and large MF market, these **KEY TAKEAWAY:** products offer a great opportunity CalMTA is a program of the California Pu

39% of California households own either portable heater, cooler, or both

Source: EIA RECS 2022

#### Market Characterization – Market Size



Percentage of Households in California in 2020 with Portable Heater or Cooler by Housing Segment

SEGMENT	% OWNING A PORTABLE HEATING OR COOLING DEVICE
Single Family	35%
Multifamily	47%
Mobile Homes	48%
All Sectors	39%

#### **Market Characterization – Market Size**



#### Reliance on Portable Heating and/or Cooling Units for Primary Space Conditioning in 2020

SEGMENT	TOTAL CA HHs (in Millions)	RELY EXCLUSIVELY ON PORTABLE UNITS FOR			
		Heating Only	Cooling Only	Both Heating and Cooling	
Single Family	8.55	2%	5%	1%	
Multifamily	4.17	5%	19%	6%	
Mobile Homes	0.46	5%	18%	4%	
All Sectors	13.18	3%	10%	3%	

25% of MF households rely on portable AC exclusively for cooling needs, compared to 6% of SF

Source: EIA RECS 2022

#### Key Takeaways – California Stakeholders



Far less experience with portable/window heat pumps

Program Administrators have questions on how product will be used

Some skepticism around PHPs in place of a more permanent and efficient central system

PHPs offer opportunities to address barriers in MF

Form types that work with slider windows are important

#### Early Findings – Multi-family Building Owners



#### **Perceived Benefits of Portable/Window Heat Pumps**

Tenant Comfort + Convenience

Short-Term Solution

**Enhanced Rentability** 

"It would be nice to have the option as a tenant during that week out of the year when it's 85 and you want that extra AC and then put it away when you don't need it anymore.."

"If we're waiting for a repair to their main source of heat or cooling, that this would be a great option."

"It's going to be much easier to rent apartments with that."

#### Early Findings – Multi-family Building Owners



#### **Perceived Barriers to Portable/Window Heat Pumps**

Cost

Safety, Physical Form, Electrical Load

Sufficient Heating and Cooling

"The only potential challenge is likely the financial one."

"The issue is the venting piece. Making sure the back can work well and because then does the window or door still function properly? **Does it latch properly? Can it be secured properly**?"

> "Would the housing department... Would the building department, consumer affairs, all of these kinds of entities, would they consider this as a source of heat to satisfy for habitability?"

# Status of Strategy Pilots – Portable/Window HP Installation



- Working with orgs in three CA regions: in San Mateo, LA, and Humbolt counties
- Assess ease of installation of 4 form factors
- Ordering product based on installation parameters at each site
- Orgs recruiting participants with installs to happen in June-July timeframe
- In some cases, will have opportunity to analyze usage and monthly bills



Redwood Village Apartments in Redway, Humbolt County, CA

#### What's Coming Next?



Market Characterization – Continued engagement with Manufacturers, Homebuilders and Remodelers to strengthen CaIMTA understanding of Market Conditions

**Product Assessment –** Further updating of the product specification as well as assessments of competitive landscape, lifecycle reliability, and cost of ownership based on climate modeling

**Pilot** – Assessment of feedback on the installation pilot process, usage, and monthly billing

**Coordination -** CalMTA has conducted C&S meeting with our IOU partners and will continue to do so with market actors and stakeholders

### Advancement Plan: Efficient Rooftop Units

Alexis Allan

Senior Advisor, Market Transformation



#### **Efficient Rooftop Units**



#### **Product Definition/Features:**

 Forced-air systems that package evaporator, condenser coils, fans, and heating components into a single unit



#### **Efficient Rooftop Units**



#### **Product Definition/Features:**

- Components that enable this system to save energy may include:
  - Insulated RTU box (to R-12)
  - Low leakage dampers and improved economizer performance
  - Increased HP efficiency through sizing or variable speed
  - Use of energy or heat recovery (E/HRV)
  - Control improvements (i.e., sensors, connected thermostats, automated fault detection)



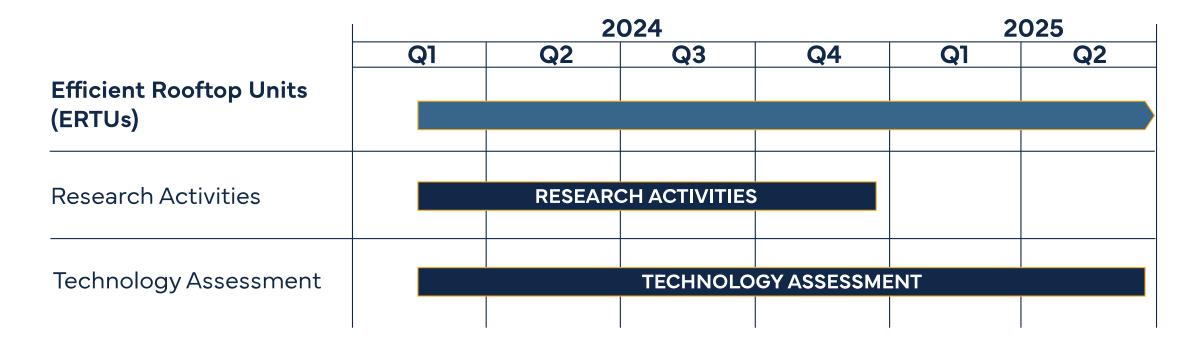
#### **Efficient Rooftop Units**



- Target market: Small- to mid-sized commercial properties
- **Possible leverage points:** CalNEXT, CASE, DOE, ENERGY STAR, CEE, MT organizations, ASHRAE, AHRI



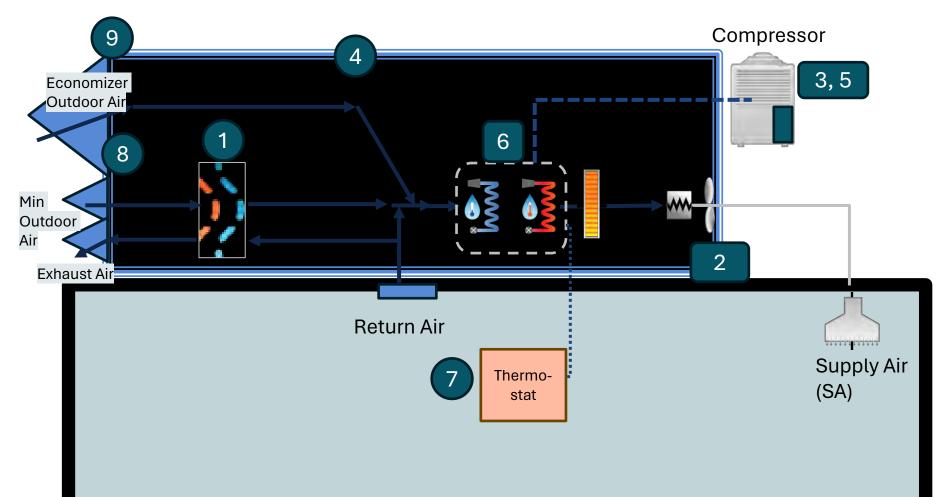




Measure #	Feature Description
1	Heat / Energy Recovery Ventilator (HRV / ERV)
2	Variable Speed Fans, Fan Efficiency
3	Compressor Efficiency, Variable Capacity Compressor
4	Insulated Box / Enclosure
5	Optimized Heat Pump (HP) Sizing
6	Advanced Controls for HP Defrost, HP Backup Heating
7	Connected/ Smart Thermostat
8	Low Leakage Dampers
9	Improved Economizer Performance

#### Diagram of RTU System Highlighting Efficiency Features



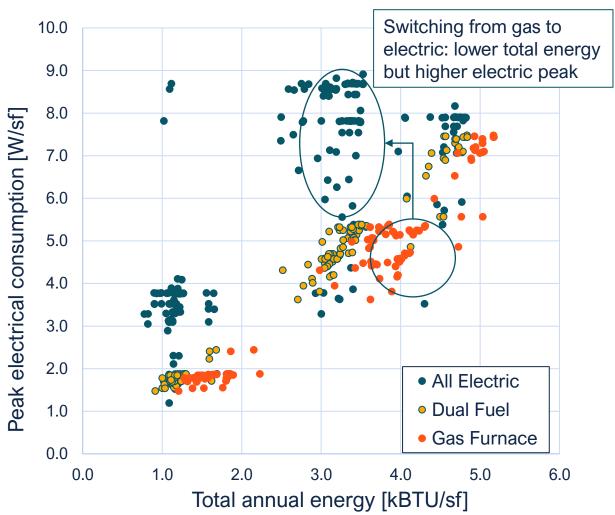


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#### **Tech Assessment Update – Early Modeling**

- Over 500 building energy models to identify optimum efficiency measures over different climate zones, building types, and fuel types
- Currently working to develop efficiency packages based on balancing annual energy consumption, peak electric demand, bill impacts, and avoided costs
- Fuel switching: moving from gas furnaces to all-electric heat pumps reduces energy consumption but can significantly increase winter electrical peaks





## Tech Assessment Update – Early Modeling Cal



All-electric RTUs can see a significant electrical peak from heating in the winter; larger than the summer cooling peak

Heat Recovery Ventilation (HRV) can play an important role in minimizing peak electrical loads despite relatively low impact on annual energy savings

RTU box insulation appears less important for mild CA cold weather compared with colder northern climates

Exploring collaborative energy modeling effort with NEEA



# Market Characterization Update



#### Stakeholder Interviews:

- Created stakeholder interview guides
- Conducted early interviews with NEEA and Comfortably California (CLEAResult)
- Team continues to schedule interviews and have upcoming meetings with CalNEXT and HARDI



# Market Characterization Update



- Researching RTU HVAC contractor industry data sources and possible data sharing partnerships
- Built a tool to project estimated annual bill impacts to apply to Tech Assessment energy modeling results

#### What's Coming Next?



**Modeling** – Continued modeling efforts and ongoing discussion with NEEA about collaborative modeling efforts to support ASHRAE advocacy and national efforts on advancing efficiency of RTU equipment

**Market Characterization** – Continued engagement with market partners and stakeholders to deepen CalMTA understanding of current market conditions including workforce development opportunities

**Product Description Updates** – Based upon modeling results update initiative product description to best represent California climate needs and socialize update with partners

**Field Study –** Explore and identify possible field sites targeting data collection in 2024 heating season



#### Break (10 min) We will be back soon.



#### 7 MTI Portfolio Considerations

Lynette Curthoys VP, Market Transformation

Rick Dunn Senior Manager, Emerging Technology

Jeff Mitchell Principal, Market Transformation



### **Envisioning the Future MTI Portfolio**



CaIMTA and MTAB recommend the ultimate portfolio composition

- MTI Plans are the gate to advance ideas to Phase III: Market Deployment
- CPUC-approved MTI Plans will comprise the portfolio





#### **Envisioning the Future MTI Portfolio**



No MT ideas have been fully vetted enough to be recommended for Phase III

We don't anticipate all 7 ideas in Phase I and Phase II will advance to Phase III

D. 19-12-021 defines the size and scope of the initial implementation phase

- 5 years beginning upon approval of the first MTI Plans
- \$250 million funding allocation



# How many more MT ideas can be accommodated by the current budget allocation?

Budget estimates for all 7 MT ideas currently in Phase I and Phase II were developed for Stage 2 scoring

## Budgets from Stage 2 Scoring CalMTA

- CalMTA performed high-level MTI lifecycle modeling for the purpose of prioritizing MT ideas during Stage 2 based on:
  - Preliminary MTI lifecycle budget estimate
  - Preliminary estimates of incremental impact and cost effectiveness
- MTI lifecycle modeling is updated during Phase II for the MTI Plan
- MTI Plan budgets will include estimates for both lifecycle and 5-year view

We estimate CalMTA should advance 1-3 more MT ideas to Phase II

### Additional Ideas Needed

- Backfill MT ideas that do not advance to Phase III
- Replace MTIs that fail or accelerate faster than anticipated
- Create a pipeline with a continuous flow of MT ideas for the future

#### **Portfolio Characteristics**



Portfolio Characteristic	Key Portfolio Question
MTI Diversity	Is there sufficient balance and coverage across market sectors, end uses, and technologies? Do the initiatives' potential benefits sufficiently cover California?
Ramp Rate/Timing	How quickly will impacts accrue?
ESJ Relevance	Does the portfolio sufficiently address equity?
WE&T Support	Does the portfolio sufficiently address WE&T?
Risk Profile	Is the risk profile of the portfolio acceptable?
Investment Required	What mix of MTIs optimizes the portfolio budget?
Policy Alignment	Does the portfolio align with California's clean energy and climate goals?

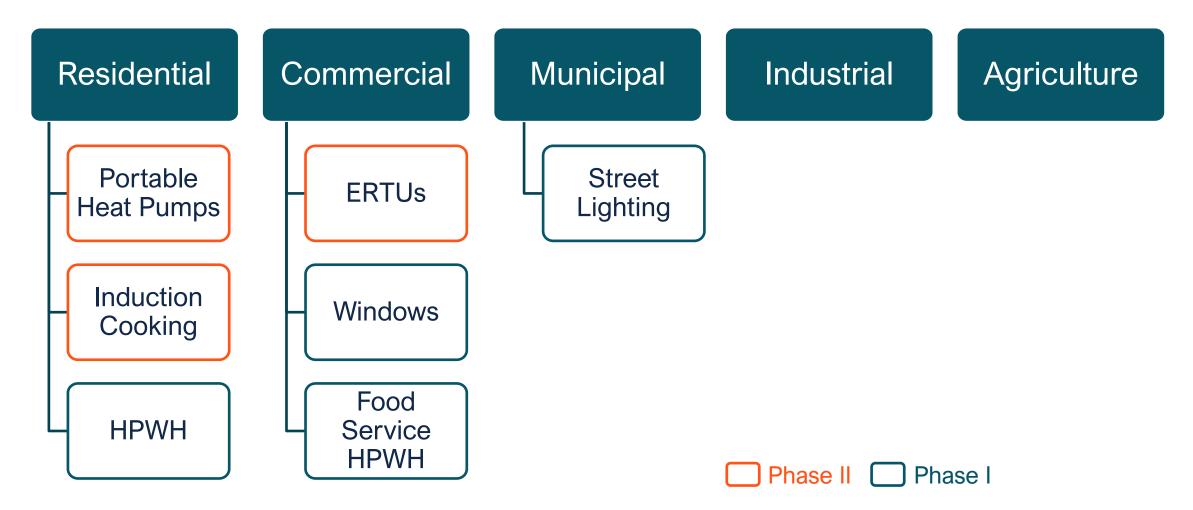
#### **Portfolio Priorities**



Program Name	Geographic Sector Diversity	Technology Diversity	Sector	Ramp Rate/Timing	ESJ	WE&T
Portable Heat Pumps	SW	HVAC/HP	Res	High	High	Low
Induction Cooking	SW	Res Cooking	Res	Med	High	Low
Efficient RTUs	SW	HVAC	Comm	Med	Med	High
Residential Heat Pump Water Heater	SW	WH/HP	Res	High	Low	High
Foodservice Water Heating	SW	Food Svc	Comm	Med	Med	Med
Efficient Streetlighting	SW	Lighting	Muni	Low	High	Low
Single Pane Replacement	SW	Envelope	Comm	Low	Med	High

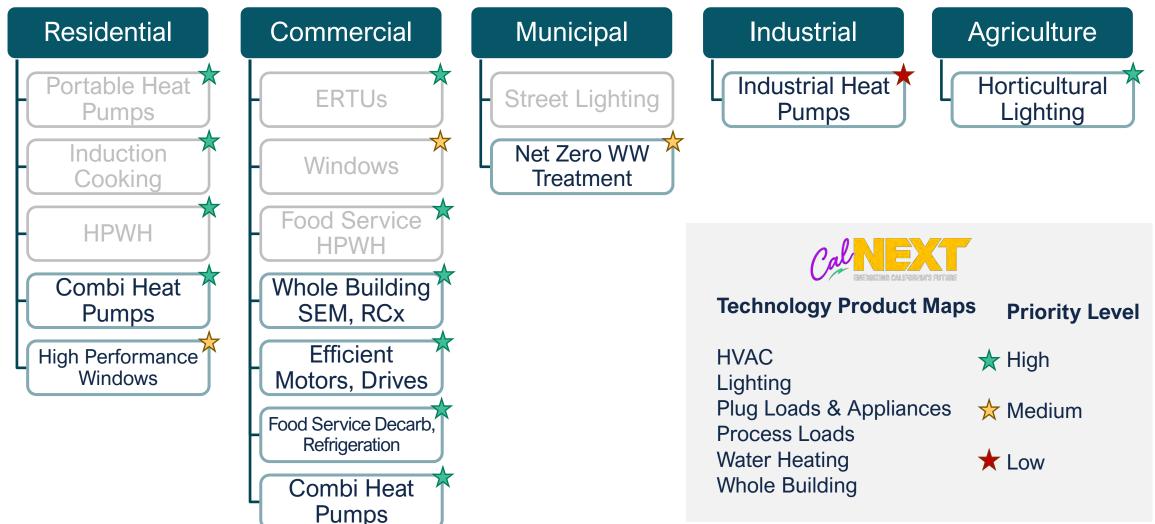
#### **Current MT Ideas by Market Sectors**



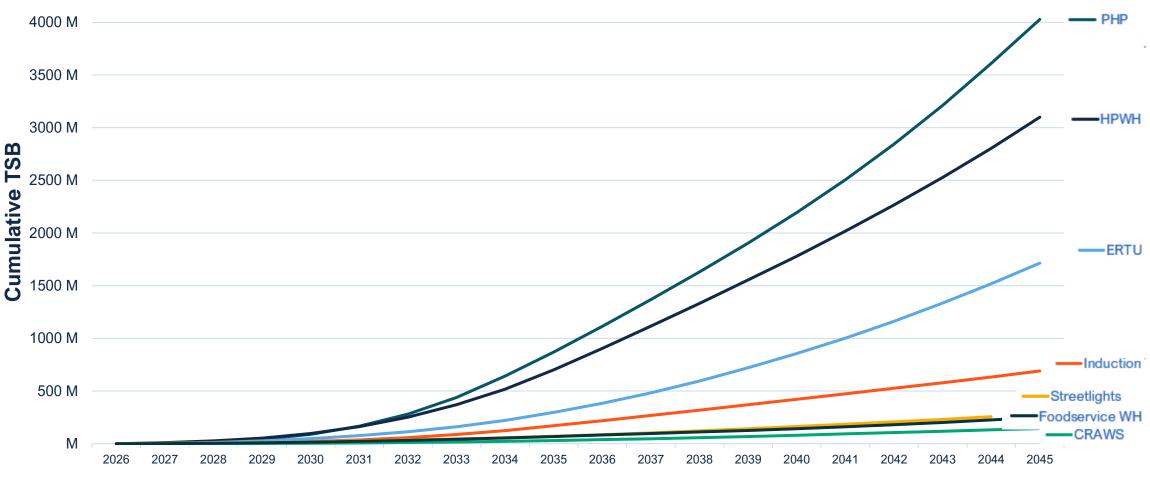


#### **Examples of Current CalNEXT Priorities**

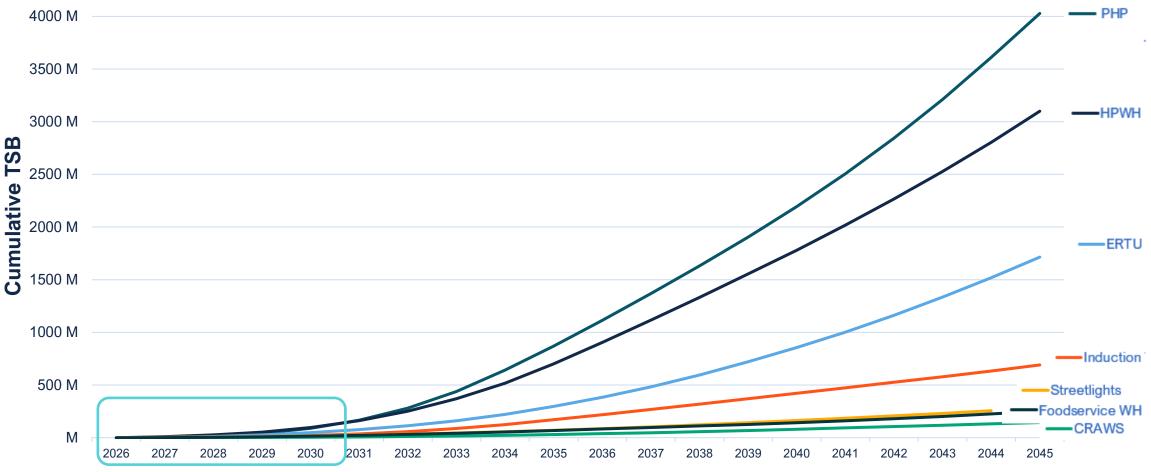


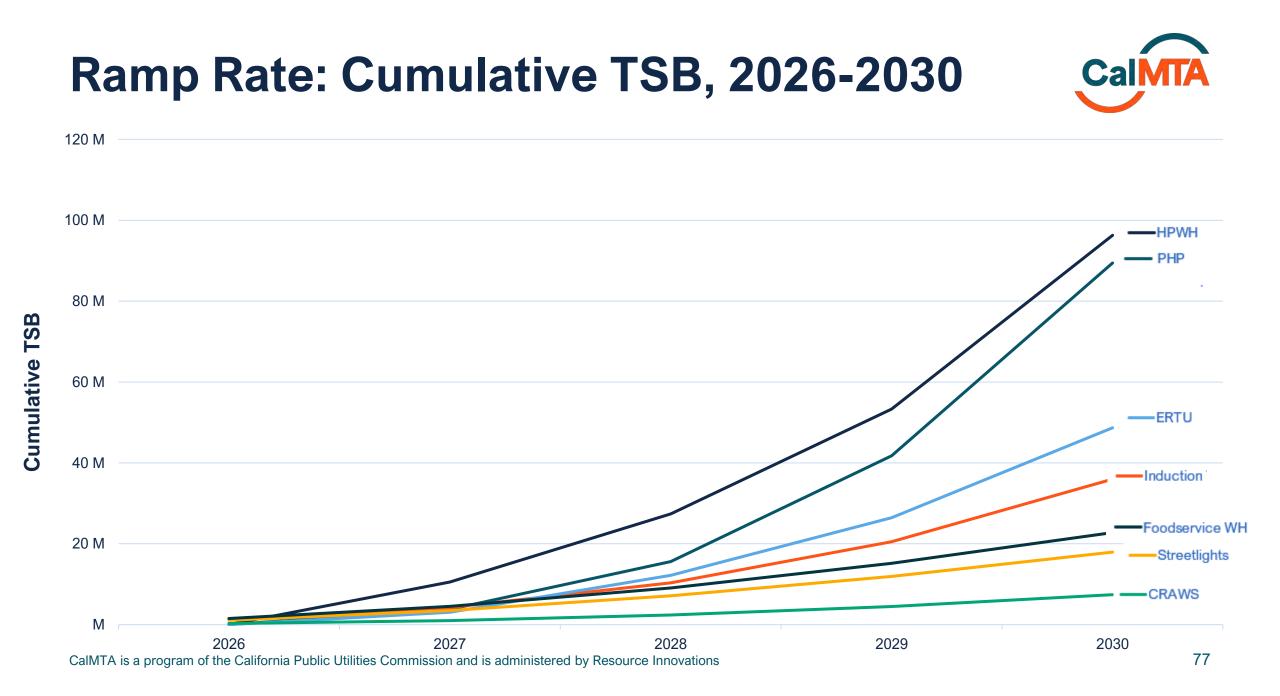














### BREAKOUT GROUP Priority Discussion & Ranking

Rank (1-5) how important each factor should be in selecting the next MT ideas to advance through the process. BREAKOUT GROUP Priority Discussion & Ranking



Fill gaps for missing market segments (e.g., agriculture, industrial)

Receive ideas incubated by CaINEXT that are suitable for MT

Select ideas with quick ramp rate to demonstrate early wins and proof of concept

Choose ideas with the highest lifecycle TSB to have the greatest impact

Focus on ideas that will be cost effective sooner

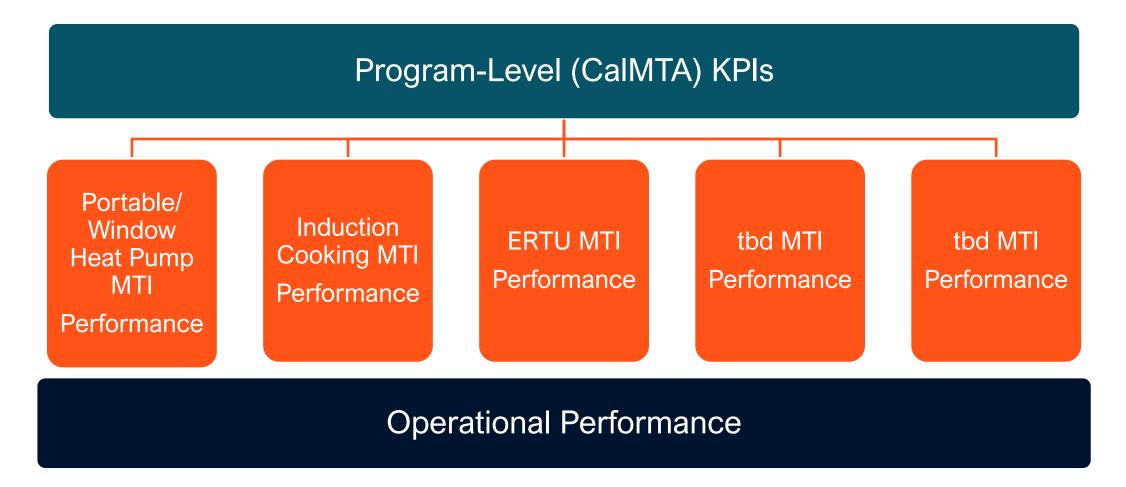
#### 8 CalMTA Program-level KPIs

Karen Horkitz Lead, Market Research and Evaluation

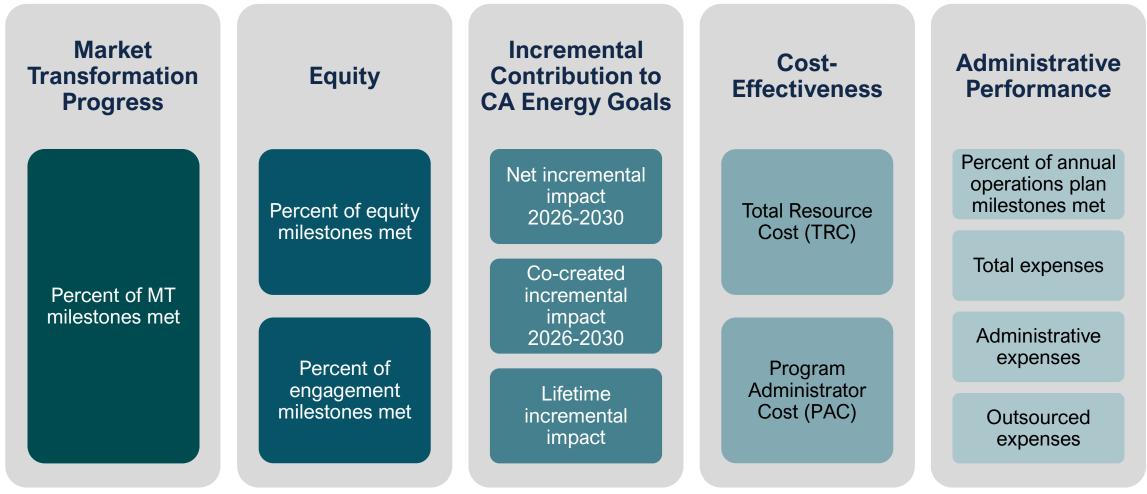


#### CaIMTA Program-Level KPIs Summarize Overall CaIMTA Performance





# CalMTA Key Performance Indicators align with program goals



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CalMTA

#### **Proposed CaIMTA KPIs (with illustrative values)**



Performance Category	КРІ	Target (per plan)ª	Fore- cast <sup>b</sup>	Reported to date	Status/ Updated <sup>c</sup>
MT Progress	<ol> <li>Achievement to Phase III MTI market progress milestones (% of current year milestones met)<sup>d</sup></li> </ol>	100%	90%	90%	1/31/27
Equity/ Environmental and Social Justice (ESJ)	<ol> <li>MTI Equity Milestone Attainment (% of current year MTI equity milestones met)<sup>de</sup></li> <li>Percent of ESJ engagement milestones achieved (current year)</li> </ol>	100% 100%	100% 100%	100% 100%	1/31/27 1/31/27
Incremental Savings and Benefits towards CA Goals	<ul> <li>4. 2026-2030 Net Incremental TSB (\$)</li> <li>5. 2026-2030 Co-Created TSB (\$)</li> <li>6. Lifetime Net Incremental TSB (\$)</li> </ul>	\$2.3B \$2.9B \$12.4B	\$2.0B \$2.9B \$12.4B	\$50M \$100M \$50M	1/31/27 1/31/27 1/31/27
Portfolio Cost Effectiveness	7. Forecasted B-C Ratio, TRC 8. Forecasted B-C Ratio, PAC	1.0 1.0	1.3 3.2		1/31/27 1/31/27
Administrative Performance	<ul> <li>9. Percent ops plan milestones achieved (current year)</li> <li>10. Current Year Budget Expenditures (\$M)</li> <li>11. Admin percent of total expenditures (current year)</li> <li>12. Budget accrued to third parties as percent of total</li> </ul>	100% \$50M 10%	95% \$48.7M 9.7%	95% \$48.7 9.7%	1/31/27 1/31/27 1/31/27
	program expenditures (current year) 13. Budget accrued to third parties as percent of total program expenditures (2026-2030 cumulative)		20%	20% 4%	1/31/27 1/31/27

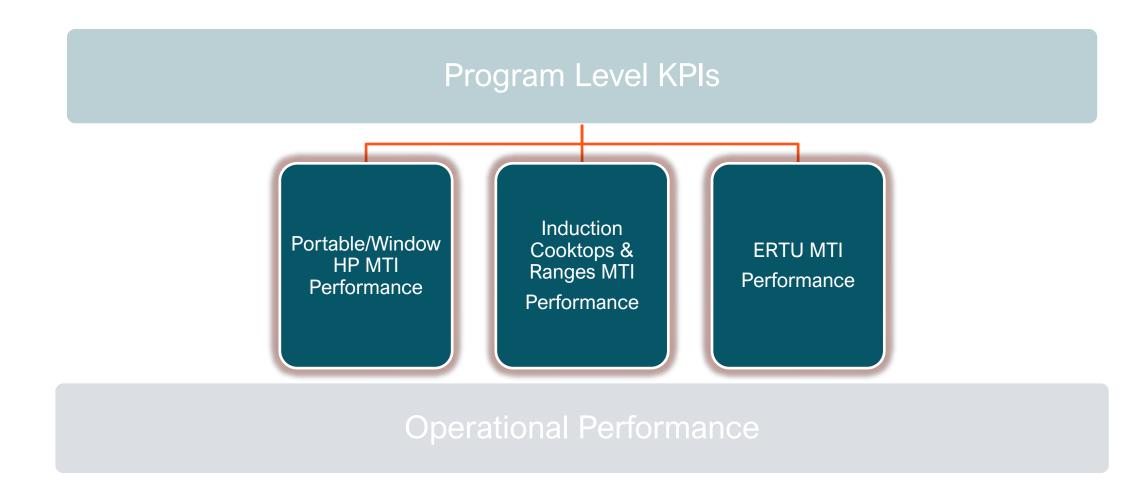
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#### **Drill-down example**



Performance Category		КРІ		Target (per plan)"	Fore- cast <sup>b</sup>	Reported to date	Status/ Updated <sup>e</sup>				
MT Progress	<ol> <li>Achievement to Phase III MTI market progress milestones (% of current year milestones met)<sup>d</sup></li> </ol>		100%	90%	90%	1/31/27					
Equity/ Environmental and		MTI Equity Milestone Attainment (% equity milestones met) <sup>de</sup>	of current year MTI	100%	100%	100%	1/31/27				
Social Justice (ESJ)	3.	Percent of ESJ engagement milesto (current year)	ones achieved	100%	100%	100%	1/31/27				
Incremental String	4.	2026-2030 Net Incremental TSB (\$)		\$2.3B	\$2.0B	\$50M	1/31/27				
and Benefits towards CA Goal											
Portfolio Cost	4		2026-2030 Net I 2026-2030 Net I			iergy Savings	3	\$2.3B	\$2.0B	\$50M	
Portfolio Cost Effectiveness Administrat <mark>iv</mark>	4 4a 4b			ncremental E ncremental C	lectric Er		3	\$2.3B 500 45	\$2.0B 500 35	\$50M 10 1	1/31/2027 1/31/2027 1/31/2027
Portfolio Cost Effectiveness Administrativ Performanc	4a	Incremental Savings and Benefits towards CA Goals	2026-2030 Net I Forecast (GWh) 2026-2030 Net I	ncremental E ncremental ( erms)	lectric Er Gas Energ	y Savings		500	500		1/31/2027





#### **Q&A**, **Discussion**



- What are your thoughts about the proposed KPIs?
- What if anything is missing?
- Achievement to annual Operations Plan Milestones is the primary relevant program-level KPI until 2027.

#### **Proposed CaIMTA KPIs (with illustrative values)**



Performance Category	КРІ	Target (per plan)ª	Fore- cast <sup>b</sup>	Reported to date	Status/ Updated <sup>c</sup>
MT Progress	<ol> <li>Achievement to Phase III MTI market progress milestones (% of current year milestones met)<sup>d</sup></li> </ol>	100%	90%	90%	1/31/27
Equity/ Environmental and Social Justice (ESJ)	<ol> <li>MTI Equity Milestone Attainment (% of current year MTI equity milestones met)<sup>de</sup></li> <li>Percent of ESJ engagement milestones achieved (current year)</li> </ol>	100% 100%	100% 100%	100% 100%	1/31/27 1/31/27
Incremental Savings and Benefits towards CA Goals	<ul> <li>4. 2026-2030 Net Incremental TSB (\$)</li> <li>5. 2026-2030 Co-Created TSB (\$)</li> <li>6. Lifetime Net Incremental TSB (\$)</li> </ul>	\$2.3B \$2.9B \$12.4B	\$2.0B \$2.9B \$12.4B	\$50M \$100M \$50M	1/31/27 1/31/27 1/31/27
Portfolio Cost Effectiveness	7. Forecasted B-C Ratio, TRC 8. Forecasted B-C Ratio, PAC	1.0 1.0	1.3 3.2		1/31/27 1/31/27
Administrative Performance	<ul> <li>9. Percent ops plan milestones achieved (current year)</li> <li>10. Current Year Budget Expenditures (\$M)</li> <li>11. Admin percent of total expenditures (current year)</li> <li>12. Budget accrued to third parties as percent of total</li> </ul>	100% \$50M 10%	95% \$48.7M 9.7%	95% \$48.7 9.7%	1/31/27 1/31/27 1/31/27
	program expenditures (current year) 13. Budget accrued to third parties as percent of total program expenditures (2026-2030 cumulative)		20%	20% 4%	1/31/27 1/31/27

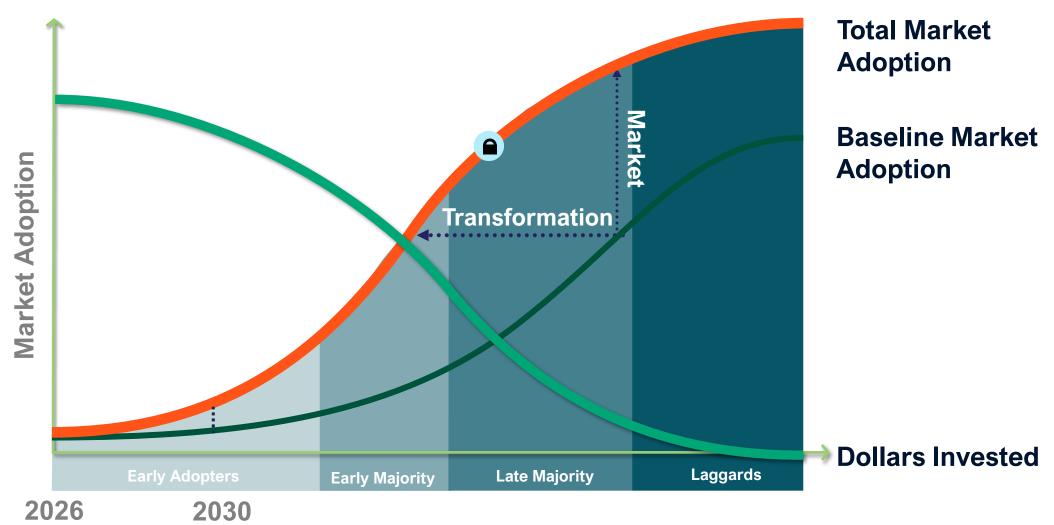
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#### Reference

10 mar March

#### **MTIs are long-term investments**





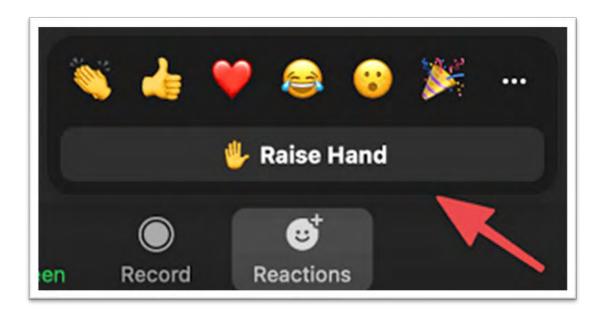
CalMTA is a program of the California Public Utilities Commission and is administered by Resource Innovations

Source: Adapted from 2015-19 NEEA Business and Strategic Plans, http://neea.org/about-neea/neea-strategic-planning.



#### 9. Public Comment

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



#### 10 Next Meeting & Next Steps

Stacey Hobart Principal, Stakeholder Engagement & Communications



#### Phase I Ideas



	2024					
	Q1	Q2	Q3	Q4		
Attachment Window Solutions (CRAWS)						
Residential Heat Pump Water Heating (HPWH)		CRAWS & HPWH				
Advancement Plans & Phase II Activities	DRAFT	ADVANCEMENT PLANS	(2)			
MTAB & Public Review of Advancement Plans						
Efficient Streetlighting Foodservice Water Heating	EFFICIENT ST	REETLIGHTING & FOODSER	VICE WATER HEATING			
Advancement Plans & Phase II Activities	DRAF	T ADVANCEMENT PLAN	IS (2)			
MTAB & Public Review of Advancement Plans						

#### **MTAB Review Timeline**

	<b>April</b> Packet posted: 4/18 MTAB meeting: 4/25	Мау	<b>June</b> Packet posted: 6/6 MTAB meeting: 6/14	<b>July</b> Packet posted: 7/3 MTAB meeting: 7/12
MTI Template	<ul> <li>Draft in MTAB packet</li> <li>MTAB comments collected via form after meeting</li> </ul>	Written comments due	<ul> <li>Final shared with MTAB with comments addressed as possible</li> </ul>	
Phase I Disposition Report		<ul> <li>Draft report sent to MTAB for review</li> <li>MTAB comments collected via form</li> </ul>	<ul> <li>Comment summary review at MTAB meeting</li> <li>Final Phase I Disposition Report posted</li> </ul>	
Advancement Plans & Strategy Pilots • HPWHs • Windows			<ul> <li>Draft Adv. Plans (2) review &amp; discussion</li> <li>Public Comment Period</li> </ul>	
Advancement Plans & Strategy Pilots • Streetlighing • Foodservice				<ul> <li>Draft Adv. Plans (2) review &amp; discussion</li> <li>Public Comment Period</li> </ul>
2025 ABAL			<ul> <li>Draft 2025 ABAL review &amp; discussion</li> <li>2025 ABAL comment form sent to MTAB</li> </ul>	Final recommended     2025 ABAL shared

# **Transformative Energy Solutions**for the public good

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