

2023 ANNUAL REPORT

Breaking GROUND

Market transformation takes root in California

а мезsage from CalMTA leadership

In its climate-leading position, California has set ambitious goals for a clean energy transition that will cut air pollution, carbon, and other greenhouse gas (GHG) emissions while delivering benefits to communities that have been historically underserved. The State has also prioritized workforce expansion and development to provide economic and health benefits to all Californians. Energy efficiency is a critical strategy to achieve these goals.

In 2023, the California Public Utilities Commission (CPUC) launched the State's first-ever Market Transformation Administrator, called CalMTA, to help advance a portfolio of groundbreaking cost-effective, energy efficiency market transformation initiatives (MTIs). The approach of dedicated market transformation adds to California's cache of climate response strategies working

California's climate plan lays the roadmap to 2045

Cut air pollution **71%**



Slash greenhouse gas emissions 85%



Drop gas consumption 94%
 Create 4 million new jobs

Save Californians **\$200 billion** in health costs due to pollution



Market transformation will accelerate California's transition to an equitable clean energy future through strategic market interventions.

to accelerate the transition to a clean energy future. CalMTA will play a key role by developing strategic, market-level initiatives to remove barriers and accelerate adoption of energy efficient technologies and practices. CalMTA efforts, which will invest \$310 million over eight years, will achieve outcomes consistent with the goals of California's Climate Action Plan.

Market transformation is a proven strategic process of intervening in a market to create long-lasting change that delivers energy efficiency and decarbonization. To achieve this, CaIMTA is coupling high-value energy efficiency and low-GHG technologies and practices alongside activities that remove market barriers and jump-start market adoption. CaIMTA is also working to ensure that the benefits of market transformation are equitably shared by all ratepayers.

Office of Governor Gavin Newsom, State of California

UNIQUELY CALMTA

CalMTA is a unique program in California. The CPUC and Pacific Gas and Electric (PG&E), which is the contract administrator, selected <u>Resource Innovations</u> to launch and administer CalMTA because of the company's ability to bring experts to the program for rapid results. Resource Innovations, a woman-led company providing clean energy services for utilities and their customers, blended its own ethos with CalMTA's special role in the California efficiency landscape to create guiding principles for how we work. CalMTA is:

- Transformative: Working at the market-level to increase adoption of crucial technologies and practices that will deliver cost-effective efficiency and decarbonization.
- Credible: Establishing a highly skilled and experienced team, including staff from Resource Innovations and partnering firms, that operate in a transparent and open manner.
- Collaborative: Working with stakeholders to maximize impact and ensure our efforts are well-aligned with other programs.
- Innovative: Inspiring out-of-thebox thinking on strategies to combine promising technologies and practices with market-level interventions to deliver on our goals.



Margie Gardner Vice President, Strategic Advisor

These values are the basis of CalMTA's approach, which is to operate as an accountable program with a long-term plan to transition to a nonprofit organization by 2030. In the meantime, Resource Innovations is proud to be incubating and administering such a critical program. As we mark our first year of foundation setting, stakeholder outreach, and most importantly, the formation of ideas that will represent market transformation innovation in California, we are excited to share our accomplishments in this 2023 Annual Report.

It's an astounding body of work and we've only just begun. We have sincere gratitude to our allies, collaborators, and key stakeholders who have supported CalMTA's launch and its progress. We look forward to our second year where we will develop the first full MTI Plans for CPUC approval to move to market deployment (see our development process on page 6 for details).

Margie Gardner launched and led CalMTA until October 2023, when she assumed a strategic advisor role and transitioned the leadership role to Lynette Curthoys.



Lynette Curthoys Vice President, Market Transformation

FOUNDATIONAL activities

Throughout 2023, CalMTA worked to create the foundation for development of a portfolio of MTIs. In addition to Resource Innovation's market transformation experts working on the program, CalMTA is supported by a team of subcontracted firms with backgrounds in energy efficiency, market transformation, and equity. This team is dedicated to developing, managing, and tracking the progress of MTIs.

BUILT OPERATIONAL

The CalMTA team established best-practice systems to optimize dayto-day operations for exceptional staff performance. This included instituting systems and processes to create a collaborative and effective working environment across functional teams, and setting up financial and IT infrastructure systems. To guide our work, we developed an <u>Operations Plan</u> that provided a roadmap of activities for the year. Table 1 (p. 4) presents several of the major achievements of the CalMTA program by quarter.

DEVELOPED CALMTA POLICIES, INCLUDING CONFLICT OF INTEREST (COI) RULES

To guide our work, we developed a <u>Policy Manual</u> that summarizes the rules established by CPUC decisions that direct how CalMTA should operate. The Policy Manual serves as a reference document, similar to the CPUC's Energy Efficiency (EE) Policy Manual, to facilitate interested parties' understanding of the market transformation framework and CalMTA.

To ensure that decision-making by CalMTA is transparent, impartial and unbiased, Resource Innovations has developed a robust conflict of interest



policy and instituted a firewall between our work on the CalMTA program and work for other entities that could result in a potential conflict of interest. All program staff and contracting firms have signed documents committing to this process and the disclosure of any conflicts.

RECRUITED A TEAM OF EXPERT STAFF

Resource Innovations continues to recruit and hire employees to conduct the daily business of CaIMTA. We began 2023 with five staff members and doubled to 10 in March. By December, we expanded to a total of 17 employees dedicated full time to CaIMTA work.

Resource Innovations also executed agreements with five partnering firms as well as several individuals, acting as advisors and leads, to support the CalMTA program. These firms and individuals each bring a specialty in energy efficiency, market transformation, equity, evaluation, and market transformation program strategy. These partners are: Cadmus, 2050 Partners, Brio, The Ortiz Group, and Unrooz Solutions.



Table 1. CalMTA Quarterly Achievements

	Q1	Q2	Q3	Q4
MTI Development Activity Status	Established CalMTA as a new program in California intro- ducing its purpose and goals to stake- holders	Created MTI Devel- opment Process and outlined a three-phase stage- gate process to assess, develop, implement, and evaluate MTIs	Launched an open Request for Ideas (RFI), received 117 Ideas from 63 unique submitters	Delivered first three draft market trans- formation ideas recommended to advance to Phase II: Program Develop- ment
Advisory Board Activities	Defined purpose and qualifications for MTAB applicants	Established the 9-member MTAB board	Worked with the MTAB in public forums to create MTI criteria and scoring for the evaluation of ideas	Shared draft Advancement Plans and Disposition Reports with the MTAB and the public at the fifth MTAB meeting of the year
Policy/Document development	Developed CalMTA policies for finan- cial management including forecast- ing, reporting, and invoicing	Created an MT Policy Manual that describes how CalMTA operates, including Conflict of Interest policies	Created 2024 budget and filed Annual Budget Advice Letter (ABAL) with CPUC	Held 5 Listening Sessions and continued building relationships with Environmental and Social Justice community stake- holders
Infrastructure	Created IT infra- structure for the <u>CalMTA.org</u> domain and scoped tech- nology needed to support future work streams	Developed an MTI development and management platform including documentation of process and report- ing requirements	Used the MTI Development and Management Platform to catalog, manage and score RFI submissions	Released draft MTI Evaluation Framework with stakeholder input, developed and iterated a frame- work for evaluation of MTIs
Staffing	Created a staffing plan with roles, reporting structures, and job descriptions	Developed a team knowledge hub, onboarding materials, and protocols	Continued working with Resource Innovations talent acquisition to build the team	Built capacity for our needs as a growing program. 17 dedicated Resource Innovations employees joined the CalMTA team

See pages 24-26 for a full summary of work completed in 2023 per the activities described in the <u>2023 Operations Plan</u>.

ESTABLISHED AN ADVISORY BOARD AND HELD REGULAR, PUBLIC MEETINGS

The CPUC decision that set up the CalMTA program required the formation of a <u>Market Transformation Advisory Board</u> (<u>MTAB</u>). MTAB members provide expertise and unbiased, non-binding recommendations to CalMTA and the CPUC during the design and implementation of MTIs. The MTAB is a core component of California's market transformation framework and has an important role in contributing to the review and prioritization of the market transformation initiatives to be adopted by the CalMTA.

The nine-member body is comprised of representatives from diverse backgrounds and perspectives working at the intersection of energy efficiency, decarbonization, evaluation, consumer advocacy, and workforce development. Current MTAB members include industry experts recruited through a public process and approved by the CPUC via a <u>Tier 2 Advice Letter</u> in April 2023.

The MTAB met for the first time in May and four more times throughout the year at open meetings that provide information and transparency for stakeholders on decision-making at CalMTA. Public comment is welcomed during the meetings and on key documents.

LAUNCHED AN MTI DEVELOPMENT PROCESS

CalMTA developed a stage-gate process based on CPUC direction to select an initial set of ideas for potential MTI development. The three phases and seven stages of this process are illustrated below. Stage gates at the end of each phase require development of the plans or reports described below and provide a decision point to determine whether the idea advances to

Our Advisory Board

MTAB members contribute expertise in the review of MTI selection criteria, provide feedback on the market transformation ideas submitted to CalMTA for consideration, and track market transformation activities, budget, and schedules of initiative development and deployment. Our inaugural members include:

Cyane Dandridge, Founder & Executive Director of Strategic Energy Initiatives

Hayley Goodson, Managing Attorney with the Utility Reform Network

Fred Gordon, Director of Planning and Evaluation at the Energy Trust of Oregon

Jeff Harris, Chief Transformation Officer for the Northwest Energy Efficiency Alliance

Randall Higa, Codes and Standards Program Manager and lead for Zero Net Energy Strategies at Southern California Edison

Lujuana Medina, Environmental Initiatives Manager for County of Los Angeles and SoCal REN representative

Peter Miller, Senior Scientist with Natural Resources Defense Council

Christie Torok, Senior Regulatory Analyst at the CPUC

Ky-An Tran, Analyst for the CPUC Public Advocates Office

the subsequent phase. Decisions at each gate are made in consultation with the MTAB and the CPUC. The phases include:

• Phase I: Concept Development.

Through market scans and public submissions, CalMTA collects and scores potential market transformation ideas to identify the most promising. In consultation with MTAB, priority ideas are advanced for further development. This phase culminates with the finalization of an Advancement Plan, which describes the research and activities to be conducted in Phase II. CalMTA activities related to MTI development in 2023 were focused on Phase I.

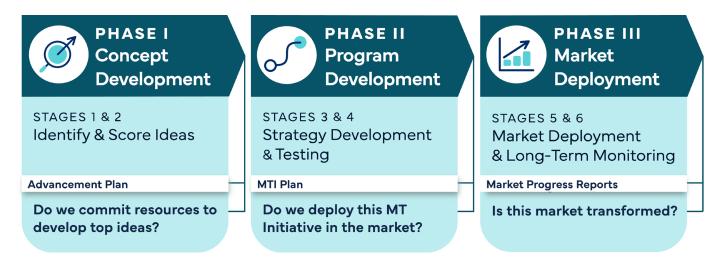
 Phase II: Program Development. During this phase, Advancement Plan activities are conducted to further develop market transformation strategies and test approaches, as needed. Baseline data, market characterizations,

The graphic below illustrates the development and deployment of MTIs as it takes place over the three phases (as described above) and the stages within each phase. logic models and other information are crafted to confirm a compelling case that market transformation will be an effective approach for the targeted efficient technology or practice. Phase II ends with an MTI Plan, which lays out the full set of activities to be conducted in Phase III along with a budget and timeline. The first batch of MTI Plans will be filed in an application for CPUC approval at the end of 2024.

Phase III: Market Deployment. Following approval by the CPUC, CalMTA conducts a competitive solicitation to select an implementer to deploy the MTI Plan for implementation within the market to catalyze the desired and predicted market changes. This phase also includes monitoring of key market indicators concurrent with MTI implementation. Periodic evaluation reports are produced to guide ongoing decisions about MTI implementation. Market Deployment of the first batch of MTIs is anticipated in 2026.

More information about MTI development phases can be found at <u>calmta.org</u>.

Figure 1. MTI development/deployment process



KICKING OFF THE "REQUEST FOR IDEAS" SOLICITATION

The Request for Ideas (RFI) is the first step to identify and administer a portfolio of MTIs that offer the best opportunity to advance California's energy efficiency and climate goals. CalMTA has built an RFI process that includes multiple avenues of promotion and for applicants to receive support with their submissions. Outreach included briefings with 32 organizations, including 11 ESJ stakeholder groups, to introduce CalMTA and the RFI opportunity. In addition, CaIMTA conducted two webinars with a total of 112 registrants and 32 on demand views. Office hours were held with 14 prospective submitters. RFI outreach activities are summarized in the figure below.

CalMTA received ideas through an RFI portal and scored and selected the most promising concepts for further development. CalMTA created an MTI management system to accept, track, and score submissions from

Figure 2. RFI outreach activities



Figure 3. RFI results

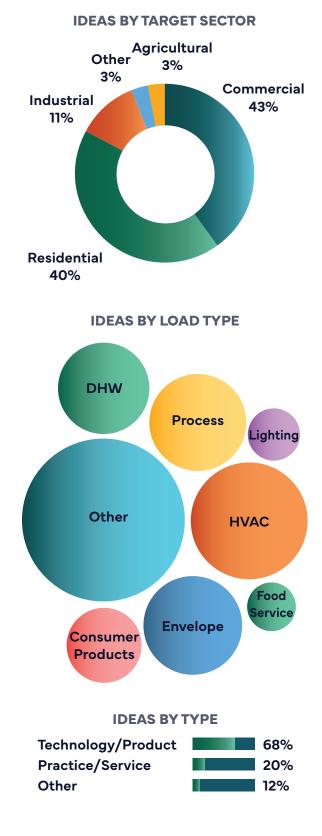
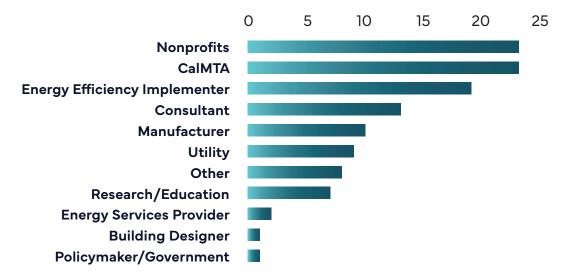


Figure 4. Submitter industry roles



an eight-week call for submissions, held over the summer of 2023. In all, 117 submissions from 63 contributing organizations or individuals were received, each describing various innovative technologies and practices that could drive energy efficiency and decarbonization goals through market transformation. Submissions spanned all energy sectors, although most targeted residential and commercial end uses with a variety of load types. A summary of the idea submissions and their status is summarized on page 12 of this report and in more detail in the Stage 1 Disposition Report.

ESTABLISHED RELATIONSHIPS WITH STAKEHOLDERS & MARKET ACTORS

In 2023, the team began building connections with key stakeholders across the State through briefings and other types of outreach to increase understanding of market transformation and provide updates on our progress. We started building relationships with program administrators and implementers, the codes & standards working group, emerging technologies teams, market actors, community-based organizations, and other prospective CalMTA advocates and allies. We focused on building early allies by connecting with contacts in the efficiency industry, manufacturing, research and academia, and others to introduce CalMTA and inviting them to submit to and share with their networks our RFI campaign. Through collaboration with these stakeholders, CalMTA aims to align market transformation with other efficiency efforts for more successful outcomes across the board to benefit ratepayers.

Ongoing communications and engagement take a multi-strategy approach including regular electronic mailings, social media, webinars, presentations at conferences and events, direct outreach, etc. to provide updates and indicators of CalMTA progress. In 2023, we established baselines for steady growth in our mailing list, website, and social media engagement.

To help educate stakeholders about CalMTA and our work, we offered virtual events, including a <u>Theory of Market Transformation</u> webinar, <u>RFI Briefings</u>, and a deep dive on the <u>MTI Evaluation Framework</u>. These events are available on demand at <u>calmta.org/news</u>.

ADOPTED A FRAMEWORK FOR EVALUATING MTIs

Evaluation is essential to ensure that market transformation programs are making progress and delivering costeffective energy savings for California's ratepayers and incremental system benefits to California's electrical grid. Evaluation informs the effective evolution of initiatives and ongoing investment decisions, and supports strong management accountability, which in turn can enhance stakeholder trust and collaboration.

In September 2023, CalMTA released its draft MTI Evaluation Framework, which summarized the policies, principles, and high-level approaches CalMTA will use to assess its initiatives. The Framework was shared with MTAB and stakeholders through direct outreach and via a twoweek public comment period. After addressing comments and updating the document, a final MTI Evaluation Framework will be released early in 2024.

Forecasting market transformation impact

MTIs seek to accelerate market adoption by deliberately inducing structural market changes that increase and accelerate market adoption and produce sustained market effects. CalMTA will adhere to the well-established approach to evaluating the impact of market transformation programs.

First, the approach requires forecasting baseline market adoption (BMA), the counterfactual market adoption likely to occur absent the MTI and related utility-funded interventions. Second, the approach requires tracking total market adoption (TMA), the actual market uptake that occurs over time. This approach also requires rigorous evaluation of the MTI program theory, including a causality assessment.

The graphic below illustrates this market transformation impact: the difference between BMA and TMA. The area between these adoption curves represents MTI-induced market adoption—that is, the increase in market adoption above the baseline that results from the MTI, including other related utility-funded interventions.

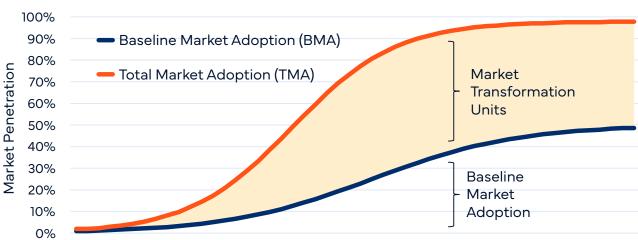


Figure 5. MTI-induced market adoption



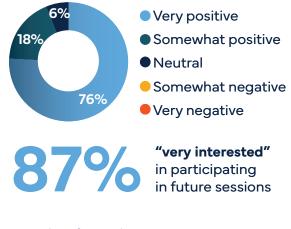
BEGAN DEVELOPING OUR APPROACH TO EQUITY

Recognizing the historical inequities of efficiency investments and in keeping with the CPUC's Environmental and Social Justice (ESJ) Action Plan, CalMTA is using an equity lens as we consider ideas and strategies for creating market transformation. The intent is to develop strong initiatives that incorporate components that also benefit ESJ communities whenever possible. To initiate this work, in 2023 CalMTA:

- Gathered information from existing income-qualified programs to inform future MTI development
- Included equity as a factor in scoring market transformation ideas in Phase I
- Conducted targeted outreach and Listening Sessions

"Including organizations that understand their community's experience and barriers will help guide the future of workforce development in a decarbonization economy." - Listening Session participant

Figure 6. Listening Sessions feedback



Results of an online survey to Listening Session participants inviting them to share feedback anonymously about their experience in the session.

LISTENING SESSION TAKEAWAYS

In November 2023, CalMTA held Listening Sessions with 25 participants from community-based organizations to better understand the unique barriers that ESJ communities face, and to inform market transformation intervention strategies to help overcome them. Participants were recruited from a list of identified stakeholders working with ESJ communities on energy-related topics, particularly those representing low-income communities, communities of color, Tribal lands, veterans, elders, workforce development, affordable housing, community resiliency, environmental health impacts, social justice, and public policy. Key takeaways informed the following recommendations for addressing equity in development of initiatives. These include:

- ldentify trusted CBOs and other entities with established community connections to help integrate the voices of ESJ communities into research, strategy development, messaging, and education.
- When promoting less-proven energy efficiency technologies, ensure that MTIs include strategies designed to minimize potential risk or unintended negative impacts.
- 3 Leverage upstream market interventions to share insights from ESJ communities with key market actors, demonstrating the potential for increased market share by making technologies more accessible to the communities that will benefit most from increased energy efficiency.
- Design residential initiatives targeting ESJ communities with an understanding of specific housing stock characteristics and needs, including partnerships with existing programs to support upgrades that will ready homes for more advanced energy efficiency and electrification measures.
- **5** In components of MTIs targeting ESJ community member participation (e.g., workforce development), ensure strong partnerships and collaboration with existing programs and support systems to leverage existing infrastructure and work to incorporate wraparound services like childcare or transportation assistance.
 - As much as possible, embed equity considerations and create mechanisms to prioritize the needs of diverse participants in procurement protocols.

<u>A summary report available on CalMTA's website</u> and shared with participants provides greater detail about Listening Session logistics, learning objectives, key findings, and recommendations.

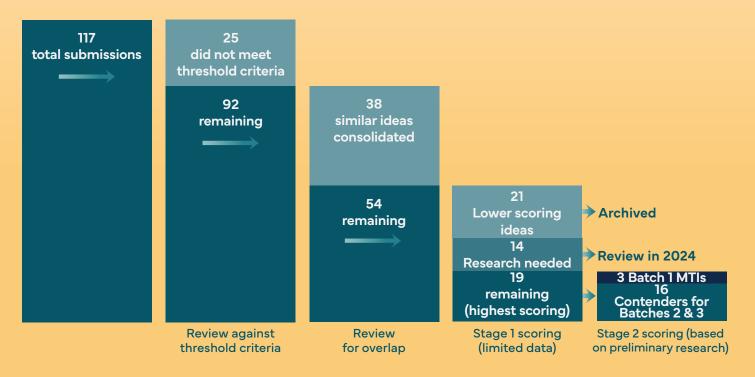
DEVELOPING MTIS for lasting change

As part of the <u>MTI development process</u>, described on page 6, CalMTA's MTI-development activities in 2023 focused on soliciting and processing the 117 ideas that were submitted during the RFI solicitation.

The graphic below describes the disposition of the ideas received. Twenty-five ideas did not meet the threshold criteria and an additional 38 that were similar to each other were combined to create stronger, more comprehensive market transformation concepts. Of the remaining ideas, 21 lower-scoring ideas did not advance to Stage 2 and were archived.

The CalMTA team ultimately selected 19 of the highest-scoring ideas for further development, including <u>three ideas</u>, which were recommended for expedited Advancement Plan development based on market transformation alignment, a clear role for CalMTA to bring long-term value for California, and commercial readiness. A set of portfolio characteristics were identified to represent the policy priorities that need to be sufficiently addressed within the portfolio but may or may not be addressed within each individual MTI (see Table 2). The remaining 16 ideas are currently under consideration for development over the next two years. Fourteen ideas were marked for further review and assessment.

Figure 7. Disposition of ideas received



MT Idea Name	Well-Defined Product Definition & Target Market	MT Theory	Program Logic	Leverage Points	CalMTA Role	Clear Research Needs
Portable/ Window Heat Pumps	Х	Х	Х	Х	Х	X
Induction Cooktops & Ranges	Х	Х	Х	Х	Х	X
Efficient Rooftop Units (ERTUs)		Х	Х	Х	Х	X*

Table 2. "Front runner" market transformation ideas

*Initial assessment did not identify clear research needs, but subsequent development of the Advancement Plan provided insight into critical path research needed.

Draft Advancement Plans for the first three ideas were published in 2023 and posted for comment on the CPUC's Public Document Area (PDA) website from Dec. 6-20, 2023. Draft Advancement Plans describe the research needed to determine whether the ideas are suitable for development into full MTI plans for eventual implementation following CPUC approval. The proposed ideas summarized in these plans include Efficient Rooftop Units (ERTUs), Portable/Window Heat Pumps, and Induction Cooktops & Ranges. They were chosen because of their relatively high market readiness that would allow faster deployment to market. Table 2 indicates the characteristics that qualified these ideas as "front runners." During the comment period we received 175 comments (see graphic for breakdown) with a large number falling across four themes:

- Engagement & Partnership,
- Product Definition & Technology Research,
- Strategy Pilots, and
- Market Adoption, TSB & Cost-Effectiveness Forecasting Assumptions.

These comment themes are summarized in the <u>MTI</u> <u>Advancement Plan Batch 1 Feedback Memo</u>, which was compiled late in 2023 and presented at the <u>January 25, 2024 MTAB meeting</u> along with feedback response documents for each idea.

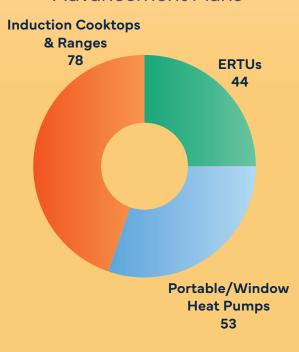


Figure 8. Public comments on

Advancement Plans

Efficient Rooftop Units (ERTUs)

Commercial heating, ventilation, and air conditioning (HVAC) systems represent a significant percentage of energy consumption in California, most commonly in low-rise, small- to mediumsized buildings. Rooftop units (RTUs) make up approximately two-thirds of buildings' HVAC systems. These are forced-air systems that package the evaporator, condenser coils, fans, and heating components into a single unit to serve a building's heating, cooling, and ventilation needs.

Three main design improvements addressing supply efficiency, heat recovery, and an improved shell can deliver 10-40% energy savings beyond today's minimum efficiency RTUs, yet product availability and adoption of these units remains low. Greater savings and grid benefits could also be achieved through the addition of advanced control strategies.

Table 3. Portfolio prioritiesfor Efficient Rooftop Units

Portfolio Priorities

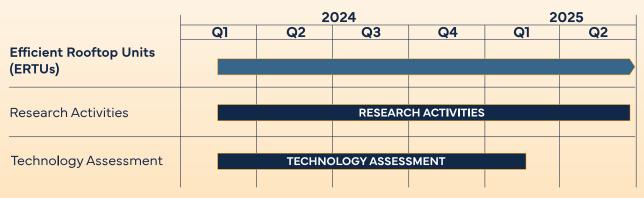
- ☑ Equity☑ WE&T☑ Energy Savings
- ☑ Grid Benefits
- ☑ GHG Reductions

CalMTA is pursuing Phase II activities to investigate the opportunities and barriers for efficient rooftop units (ERTUs) through manufacturer engagement on physical design improvements that would result in increased efficiency, improved availability, and more affordable products.

We are also investigating pathways on workforce development to support the installation of units, leveraging a national collaborative currently working on prescriptive and performance-based specifications, and creation of a California-appropriate multitiered rating system to define efficiency performance and support better equipment design and purchasing decisions.

CalMTA is also researching new, low global warming potential refrigerant specifications for these products. Figure 9 shows the most recent timeline of activities for advancing this market transformation idea.

Read the Efficient Rooftop Units Advancement Plan.



FRIGIDAIRE

Figure 9. Efficient Rooftop Units MT idea: overall timeline/schedule of activities (begins Q1 2024)

Portable/Window Heat Pumps

Heating and cooling represent the largest energy consumption end-uses for homes in California, with more than 50% of households still using gas appliances for heating. In coordination with California's decarbonization goals and targeted reduction in natural gas usage, portable and window heat pumps offer an affordable and highly efficient alternative for certain applications.

Portable and window heat pumps are self-contained consumer products that provide efficient heating and cooling for small spaces. These devices can be self-installed and

plugged into standard 110-volt outlets. Increased market adoption of portable heat pumps would provide an efficient electric alternative to electric resistance and gas space heat while also providing air conditioning and air filtration for improved air quality.

Table 4. Portfolio priorities for Portable/Window Heat Pumps

Portfolio Priorities

\mathbf{X}	Equity
	WE&T
\mathbf{X}	Energy Savings
	Grid Benefits
\mathbf{X}	GHG Reductions

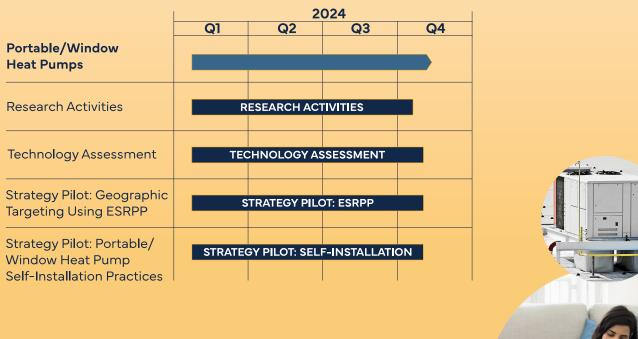
CalMTA is pursuing Phase II activities to investigate the opportunities and barriers to working with manufacturers to increase overall product availability, create lower-cost options, and seek opportunities to integrate air filtration and grid interactivity. CalMTA is also researching new, low global warming potential refrigerant specifications for these products. Strategies for this MT idea will couple proper recycling of older AC units that pose risk for refrigerant leakage and long-term disposal interventions for portable/window HP products.

We would engage distributors and retailers on promotions to increase awareness of the benefits of heat pump products versus

other window AC choices and drive sales, as well as collaborate with existing programs and platforms to support incentives and enable leveraging tax credits. Figure 10 below shows the most recent timeline of activities for advancing the MT idea.

Read the Portable/Window Heat Pumps Advancement Plan.

Figure 10. Portable/Window Heat Pumps MT idea: overall timeline/schedule of activities (begins Q1 2024)



Induction Cooktops & Ranges

As California continues its goal of decarbonization, induction cooktops and ranges represent one of the largest kitchen appliance opportunities. According to the U.S. Environmental Protection Agency (EPA), induction cooktops and ranges are highly efficient, delivering ~85% of the energy they consume to heat the food compared to ~75-80% for electric stoves and ~32% for gas stoves. In addition, induction offers more precise control of cooking temperatures and eliminates harmful gases that can negatively impact human health.

Gas ranges are the most prevalent cooking method in California single-family and multifamily units with over 70% market share. Induction cooking has been available for several years with most manufacturers offering models, but the product has yet to be widely adopted. This market transformation idea aims to increase the market share for induction cooktops and ranges that save energy through instant, direct, and efficient heat transfer from the range to the cookware.

CalMTA is pursuing Phase II activities to investigate the opportunities and barriers that would spur greater product availability and awareness by leveraging retail partnerships and programs that already target multifamily and single-family decarbonization. We will work to engage manufacturers to develop lower-priced models that include induction but without premium add-on features and

collaborate with direct installation programs to demonstrate an interested market for more affordable products. We will raise awareness about the benefits of induction through collaborations with retailers and other market channels for consumer education campaigns and product demonstrations. This MT idea will support California's transition to 100% Renewable Portfolio Standard (RPS)-certified, zero-carbon emissions by 2045. Figure 11 shows the most recent timeline of activities for advancing the MT Idea.

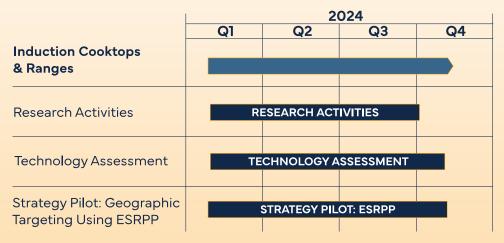
Read the Induction Cooktops & Ranges Advancement Plan.

Table 5. Portfolio priorities for Induction Cooktops & Ranges

Portfolio Priorities

X	Equity
	WE&T
\mathbf{X}	Energy Savings
	Grid Benefits
\mathbf{X}	GHG Reductions

Figure 11. Induction Cooktops & Ranges MT idea: overall timeline/schedule of activities (begins Q1 2024)





NOV. 2022 - DEC. 2023 financials

STARTUP BUDGET

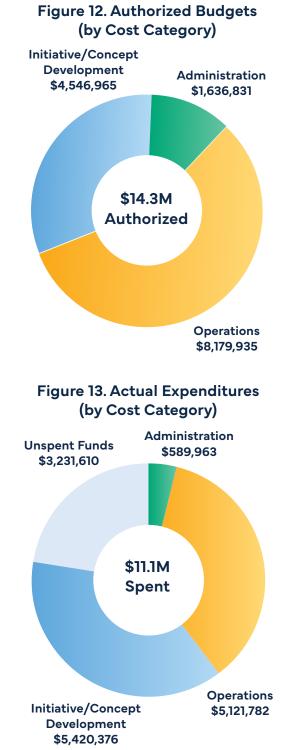
PG&E's Advice Letter 4674-G/6747-E authorized an initial startup budget from Nov. 23, 2022, through the end of 2023. The authorized budget, totaling \$14,363,731, was divided among three Cost Categories: Administration, Operations, and Initiative/ Concept Development.

The activities performed in 2022-2023 encompassed many discrete startup tasks, such as establishing the CalMTA brand and website, initial IT and data management infrastructure, administrative and operational procedures, plans for future staffing, introductory stakeholder engagement, creation of the MTAB, and initial tools and protocols to solicit and evaluate ideas for MTIs. Because of the focus on startup activities, two-thirds of total authorized funding was budgeted for Administration and Operations activities.

ACTUAL EXPENDITURES

During the initial startup period (November 23, 2022, through December 31, 2023), the CalMTA team met deadlines for every major deliverable while underspending on budget. Total expenditures for the period were \$11,132,121 — over \$3 million under budget.

In addition, the team shifted more quickly than anticipated from a focus on startup administrative and operations tasks to MTI development tasks. To facilitate this faster ramp to MTI-focused activity, over \$800,000 was shifted from the Administration and Operations budgets to the Initiative/Concept Development budget. The total budget authorization for the period did not change. During the program's first three years (the defined 'startup period'), unspent budget dollars may not be rolled forward to the next year. Therefore, CalMTA's efficient and rapid startup will result in \$3,231,610 in unspent funds.



2023 ACTIVITIES

The following list details activities outlined in the 2023 Operations Plan and subsequently completed throughout the year. The table indicates the quarter in which the activity was completed. A half-filled circle shows an activity still in progress.

Table 6. 2023 Activities summary

BUSINESS OPERATIONS ACTIVITIES	Ql	Q2	Q3	Q4
Finance and IT Activities	1			
Develop CalMTA policies for financial management including forecasting, reporting, and invoicing	•			
Create IT infrastructure including computer delivery and set up, common server for file sharing, email set up, staff billing and payroll, and travel and expense reimbursements	•			
Ensure IT systems meet firewall requirements	•			
Develop an MTI development and management platform including documen- tation of process and reporting requirements		•		
Create 2024 budget and file with CPUC in an advice letter (ABAL)				
Staffing Activities				
Create a staffing plan for CalMTA with roles and reporting structure	•			
Develop job descriptions for each role and work with Resource Innovations talent acquisition team to fill positions as scheduled and meeting diversity goals	•	•	•	•
Form an onboarding process to help new staff be productive immediately after start date with ongoing information sharing forums	•			
Ensure new staff receive IT safety and workplace harassment training	•	•	•	•
Develop a project management process and adopt a tool for project tracking	•			
Develop a guide of employee protocols that documents operational practices and cultural aspects for staff	•			
Create a Knowledge Hub that allows staff easy access to policies and procedures	•			
Legal & Contracting Activities				
Execute subcontracts with team of firms				
Create and implement a Conflict of Interest (COI) policy and corporate firewall with Resource Innovations leadership	•			
Establish a COI policy for subcontractors				

BUSINESS OPERATIONS ACTIVITIES	Q1	Q2	Q3	Q4
Legal & Contracting Activities				
Create policies for procurement and a process for approval, scoping, and contracting for vendor services, cloud-based tools and other needs	•			
Set up and monitor subcontractor compliance with COI policies	•			
Develop Draft Solicitation Protocols that will ensure fair and competitive RFP processes				٠
Advisory Board Activities				
Define purpose and qualifications for MTAB applicants				
Create a charter and Conflict of Interest policies	•			
Develop an online application form for interested candidates and publicize the opportunity to apply	•			
Review and assess applications recommending an MTAB member and alternate for each of the identified backgrounds	•			
Draft and submit an advice letter with the recommended members for CPUC approval; respond to protests	•			
Schedule and plan for a series of MTAB meetings to review the request for ideas solicitation, scoring and criteria, and prioritization of submissions	•			
Hold a public orientation meeting to introduce nominees to CalMTA and the MTI development process	•			
Hold public MTAB meetings in-person and virtually through 2023 to develop a set of MTI concepts for advancement		•	•	•
Share notices of the MTAB meeting schedule including agenda and packet materials on <u>calmta.org</u> and via email announcements		•	•	٠

STAKEHOLDER ENGAGEMENT ACTIVITIES	Ql	Q2	Q3	Q4
Create a logo and brand identity for CalMTA that is unique and recognizable and develop key collateral assets		•		
Develop an accessible website that provides information about CalMTA's goals and MTI development		•		
Create an annual operations plan for CalMTA including 1st quarter progress		•		
Create and send regular email or newsletter updates to share progress on CalMTA activities with stakeholders		•	•	•
Publicize public MTAB meetings and create opportunities for public comment either during the meetings or afterward		•	•	•
Conduct personal meetings with key stakeholders including program imple- menters and administrators to share information and collaborate		•	•	•

STAKEHOLDER ENGAGEMENT ACTIVITIES	Ql	Q2	Q3	Q4
Launch and execute a campaign promoting CalMTA's Request for Ideas that allows audiences to submit ideas for realizing market transformation			•	
Tap efficiency industry companies and organizations to help share information about the RFI and other CalMTA efforts			•	
Gather input on the prioritized RFI from targeted audience segments, such as ESJ communities			•	
Create and release a second quarter report on CalMTA activities to date and quarterly thereafter			•	•

MTI DEVELOPMENT ACTIVITIES	Q1	Q2	Q3	Q4
Create an MTI development process to describe the steps that CaIMTA will pursue	•			
Research existing programs to determine current gaps and opportunities for MTI concepts	•	•	•	•
Work with the MTAB in public forums to create MTI criteria and scoring for the evaluation of ideas			•	
Selection criteria will cover aspects such as long-term energy savings, equity/workforce development, cost-effectiveness, total system benefit, and GHG reduction potential	•			
Create an intake form with instructions and key questions for submitters to share their ideas	•			
Launch an open RFI, kicking off in June and running for two months, to gather MTI ideas		•		
Use the MTI Development and Management Platform to catalog, manage and score RFI submissions				•
Develop an approach to channel positive impacts to ESJ communities		•		
Coordinate with the MTAB to review submissions and prioritize MTI ideas for further development				٠
Work with the MTAB to develop overarching characteristics for the MT portfolio				●
Summarize the outcomes of all ideas submitted and deliver to the CPUC and MTAB as a Stage 1 Disposition Report				•
Develop draft MTI Advancement Plans for Batch 1 ideas that will move to Phase II: Program Development				•

QUESTIONS? Contact us

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RESOURCES

Access recordings of meetings and webinars, download reports, and learn more about our progress.

MTAB Meetings

Webinars

2023 Annual Operations Plan

MTI Development Process

Phase II Ideas

MTI Evaluation Framework

Listening Sessions Report

Market Transformation Policy Manual

Case Studies

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Cover: Napa Valley vineyard at sunset

- p. 1: Ventura Highway
- p. 14: ERTU installation, Helios
- p. 15: Portable heat pump, Frigidaire
- p. 16: ERTU, Danfoss
- p. 18: ERTU installation, Daikin





CalMTA is a program of the <u>California</u> <u>Public Utilities Commission</u> (CPUC) and is administered by <u>Resource Innovations</u>