



# Residential Heat Pump Water Heating Market Transformation Initiative

## Appendix E: External Program Alignment & Coordination

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## List of Abbreviations

<b>MTI</b>	<b>Market Transformation Initiative</b>
3PIs	3P Implementers
AWHI	Advanced Water Heating Initiative
BAAD	Bay Area Air District
BayREN	Bay Area Regional Energy Network
C&S	Codes And Standards
CAHPP	California Heat Pump Partnership
CARB	California Air Resources Board
CEC	California Energy Commission
CPUC	California Public Utilities Commission
DOE	Department Of Energy
EPA	Environmental Protection Agency
EPIC	Electric Program Investment Charge
ESJ	Environmental And Social Justice
HPWH	Heat Pump Water Heating
HPWHs	Heat Pump Water Heaters
IOU	Investor-Owned Utility
MT	Market Transformation
MTAB	Market Transformation Advisory Board
NEEA	Northwest Energy Efficiency Alliance
PA	Program Administrator
PDA	Public Document Area
PG&E	Pacific Gas & Electric
RA	Resource Acquisition
RFP	Request for Proposal
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SoCalREN	Southern California Regional Energy Network
SVCE	Silicon Valley Clean Energy
WE&T	Workforce Education and Training
NOx	Zero-nitrogen Oxide



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# 1 Introduction and background

This document describes CalMTA's approach to engaging with external programs and efforts throughout development of the Residential Heat Pump Water Heating (HPWH) Market Transformation Initiative (MTI) as well as future plans for coordination with these entities during MTI implementation.

The Market Transformation (MT) Framework attached to the California Public Utilities Commission (CPUC) [D.19-12-021](#), which established CalMTA, called for MT ideas that are developed to "carefully consider" potential impacts on resource acquisition (RA) program(s) and codes and standards (C&S) implementation. The framework recognizes the value of collaboration within a target market, noting that CalMTA and "any impacted [program administrator(s)] [PAs], 3P implementers (3PIs) of RA programs, and C&S teams each have a role in charting a course that enhances the efficiency outcomes [...] of the proposed MTI as well as of RA and C&S programs. Each may also have a role in eliminating or minimizing and mitigating any conflict between the MTIs and RA/C&S programs. The parties should work collaboratively toward these objectives as much as possible."<sup>1</sup>

CalMTA built on this guidance and proactively engaged external program stakeholders at each stage of our MTI development process to effectively leverage and align with other programs and efforts in a mutually beneficial way. MT views the presence of other programs working in a target market as leverage – the type of "positive overlaps" described in [D.19-12-21](#).<sup>2</sup> Traditional RA or incentive programs serve as a point of leverage the MTI will use to drive increased adoption and sustained market change; the strategic market-level interventions identified for the MTI will in turn complement and add value to existing energy efficiency efforts in the state for the mutual benefit of each program. CPUC Decision 25-11-023, which approved CalMTA's first MTIs for market deployment, affirmed this, stating: "Our thinking is most aligned with the comments of the Northwest Energy Efficiency Alliance (NEEA), where they point out that [MTIs and resource acquisition programs that are coordinated can achieve synergies and deeper savings than either approach may be able to accomplish on its own](#)."<sup>3</sup>

As such, CalMTA's coordination with external programs seeks to identify "points of alignment" that explain how an MTI will work synergistically with an existing program and will be critical to successful MT implementation in order to: 1) limit consumer and market confusion, 2) enhance the ability of programs to achieve their goals, 3) overcome barriers to a program serving a unique market segment, and 4) ensure effective use of program and CalMTA resources by aligning activities. Because the MT ideas under development vary, their relationship and need for alignment with established or emerging programs in the energy efficiency portfolio vary.

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<sup>1</sup> See [D.19-12-021](#), p. 133.

<sup>2</sup> See [D.19-12-021](#), p. 134.

<sup>3</sup> See [D.25-11-023](#), p. 51.



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However, our approach and process for minimizing overlap of these MTIs with existing efforts and optimizing alignment for the benefit of both the MTI and the established program are for the most part consistent across all MTIs under development.

Although CalMTA applies these guiding principles to each MTI, we recognize the importance of customizing our approach to each market. Since residential HPWHs are a more mature technology that many programs and policies in California have promoted for years, this MTI seeks to fill gaps in market activities not currently addressed by other parties. Our coordination approach therefore focuses on equipping external programs with tools, resources, and support to help accelerate their individual progress toward HPWH installation goals, while simultaneously pursuing market-level interventions that will aggregate demand to reduce upfront product cost and break down remaining barriers to adoption. We also recognize the importance of aligning our strategy with complementary efforts, particularly statewide initiatives like TECH Clean California and the California Heat Pump Partnership (CAHPP).

MTI intervention strategies respond to specific market needs identified through collaboration with external programs, as described in Section 2.2. By uniting the robust program landscape around shared resources, messaging, and delivery approaches, this MTI seeks to create a more consistent experience for consumers, contractors, and market actors, resulting in a stronger value proposition and greater return on investment. Similarly, cross-program alignment on product needs will send a clear, compelling signal to manufacturers and distribution channels - who might otherwise experience competing or burdensome requests - to ensure that widely available HPWH product types meet the needs of California homes.

The sections below describe the types of engagement completed to date as well as plans for formalizing the ways in which the Residential HPWH MTI and external programs will align in Phase III: Market Deployment to maximize leverage and enhance each program's outcomes.

## 2 Alignment in each development phase

CalMTA conducts engagement activities for each MTI throughout our [three-phase development process](#). Recognizing that Phase III activities will commence after the MTI Plan is approved by the CPUC, we have described the activities that will be undertaken at that time in Section 2.3, "Collaboration from MTI Plan finalization through Phase III delivery." While Phase I activities and preliminary outreach on Phase II activities are complete as of the time this plan was filed, ongoing engagement will take place to further evolve collaborative relationships and understand points of alignment between the MTI and external programs prior to market deployment.

At every phase, this coordination intends to identify points of alignment that: 1) eliminate duplication or redundancy in market activities; 2) ensure that the MTI adds value to the market and fills any gaps needed to drive long-term market change; 3) increase scalability and the



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efficiency with which desired results are achieved by leveraging existing work; and 4) identify opportunities for aggregation that align with an MT approach.

## 2.1 RFI to Advancement Plan finalization

CalMTA identified the Residential HPWH idea through a Request for Ideas conducted by CalMTA in June 2023. Staff officially prioritized this idea in collaboration with the Market Transformation Advisory Board (MTAB) through threshold review, two stages of scoring, and approval to move forward to Phase I in January 2024.

During Phase I, CalMTA identified a preliminary set of local, state, and national programs for future coordination and summarized in Section 6 of the [Residential HPWH Advancement Plan](#) that concluded Phase I development. This Advancement Plan was finalized in September 2024.

Channels to engage directly with these and other interested parties during the development and review of the Advancement Plan included direct collaborative meetings that allowed for an exchange of information, as well as formal opportunities to provide feedback on the plan through public meetings and public comment through the CPUC Energy Division's Public Document Area (PDA). These engagements sought to identify additional programs or activities to consider for coordination as well as to assess the extent of potential overlap between the MT idea with current energy efficiency and other related programs. Specifically, CalMTA's external engagement activities included the following:

- **MTAB meetings**, which are open to the public, allow CalMTA to share information about developing MT ideas. MTAB members can ask questions and make comments; public attendees can also do so at a designated time and via an online form. In 2024, the Residential HPWH MTI was discussed at MTAB meeting on [January 25](#) (preliminary product definition and MT theory), [June 14](#) (draft Advancement Plan), and [August 26](#) (Advancement Plan comment/response summary).
- **Official opportunities to comment** on the Residential HPWH Advancement Plan were offered via the CPUC's PDA site from June 20-July 11, 2024. A total of twenty-one comments were received on the plan from four submitters, including the CPUC, the Advanced Water Heating Initiative (AWHI), and MTAB members. CalMTA provided [a formal response to these comments](#) and integrated feedback into the final Advancement Plan when possible.
- **Regular meetings were held with the Investor-Owned Utility (IOU) C&S working group**, which includes representatives of the Statewide Codes and Standards Advocacy Program and related subprograms. These meetings allow CalMTA to identify relevant codes/standards activities that can be leveraged in each market, ensure alignment and consistency with market actors, and share key findings from each team's product research and testing.



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- **Regular coordination calls with CalNEXT** inform participation in CalMTA’s RFI and public comment processes and seek to enable collaboration related to CalNEXT’s Technology Priority Maps and focused pilot scoping. Initial review of CalNEXT’s active and completed residential HPWH projects helped CalMTA apply recent findings from the California market to our MTI development process and identified subject matter experts on the CalNEXT team for ongoing engagement.
- **Direct engagement with key stakeholders and programs working in this market** allowed CalMTA to gather important market insight and align our MT strategy with external market activities. Advancement Plan development and refinement benefited from early engagement with the following entities during this phase:
  - a) **NEEA** shared their substantial experience with residential HPWH MT in the Northwest, which began in 2011, including lessons learned and best practices from an MT perspective.
  - b) The **TECH Clean California** program team received an initial briefing on CalMTA’s MT theory for this market and discussed their own experience with residential HPWHs in California, which was followed by ongoing coordination and strategy check-ins throughout MTI development.
  - c) Meeting with the New Building Institute’s **AWHI** team ensured the MTI was informed by national efforts and yielded insight into new product developments with potential value to the California market.
  - d) **Opinion Dynamics**, evaluator for the TECH program, identified statewide market gaps and opportunities to accelerate adoption based on their analysis of HPWH installation and program participation trends.
  - e) Meetings with the **California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), and Bay Area Air District (BAAD)** provided CalMTA with a deeper understanding of evolving zero-emissions/zero-nitrogen oxide (NOx) appliance regulations that would impact HPWH adoption in California.
  - f) As the **CAHPP** launched, CalMTA met with the California Energy Commission (CEC), directly with the CAHPP team, and jointly with CAHPP and TECH to understand programmatic goals and opportunities to complement the CAHPP’s work moving forward.
  - g) Engagement with the U.S. Environmental Protection Agency’s (EPA) **ENERGY STAR® program** team provided insight into national trends and opportunities to capture the voice of the California market at the federal level.
- To support CalMTA’s work to center equity in MTI development whenever possible, we facilitated a focused **Residential HPWH Listening Session with representatives of environmental and social justice (ESJ) communities** in June 2024. Attended by workforce development organizations and trade allies, community-based organizations, and firms



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implementing equity programs, these sessions gathered feedback on challenges and success stories related to HPWH adoption in ESJ communities, workforce needs, and proposed equity metrics for incorporation in the final Advancement Plan.

## 2.2 Phase II Advancement Plan research to MTI Plan finalization

Throughout Phase II, the activities described in Section 2.1 continued but expanded to gain deeper knowledge about other program/research efforts and how they related to the developing MTI.

External coordination and alignment was central to one of the Residential HPWH MTI team's most significant Phase II milestones: A CalMTA-hosted [Residential HPWH Market Acceleration Summit](#) in August 2025, which convened nearly 40 attendees representing HPWH manufacturers, California utilities, policymaking groups, workforce entities, program implementation and evaluation firms, and ESJ entities to help define pathways with the potential to make HPWHs the preferred choice for California homes. CalMTA developed the summit's design, objectives, and attendee list with feedback from key organizations, including TECH Clean California, the CAHPP, the CEC, the Advanced Water Heating Initiative, and the U.S. EPA/ENERGY STAR.

Supported by key findings from the Phase II market characterization study and other research, group discussion and small-group working sessions surfaced the following challenges:

- market insight and actionable next steps related to complex HPWH product and installation requirements (e.g., connectivity and demand response participation)
- an extensive landscape of overlapping and differently structured incentive programs
- low customer demand and resulting supply chain impacts
- market characteristics that can make switching to HPWHs less cost-effective (e.g., the high rate of existing natural gas water heaters, perceived lower cost of gas fuel, and landlord-tenant split incentive).

Summit participants then worked to identify innovation pathways to accelerate HPWH adoption and areas where CalMTA's support would be most valuable, which directly inform the strategic interventions proposed in CalMTA's HPWH MTI Plan.

CalMTA shared all information documented at the summit including key outputs resulting from summit work groups, and draft innovation pathways developed with participants to further encourage market alignment and engagement. Follow-up meetings with key organizations that attended the summit allowed CalMTA to share the MT theory and proposed intervention strategies yielding feedback that helped refine our approach prior to finalizing the MTI Plan. Regular communication with summit attendees and other identified priority stakeholders included invitations to join and provide public comment at MTAB meetings where components of



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the MTI Plan were presented, as well as to ensure awareness of the formal public comment process for the MTI Plan through the CPUC Energy Division's PDA site.

Other external program alignment and coordination activities in Phase II included the following:

- **Expanded research.** The initial list of potentially overlapping energy efficiency programs was expanded through additional research and discovery. These programs and related organizations are currently active in the target market for this MTI and offer opportunities for potential leverage, need for alignment, or co-creation/partnership. Related programs with potential alignment needs are described in Section 3 of this Appendix.
- **Market characterization study.** Structured market characterization interviews with nearly twenty-five HPWH subject matter experts and stakeholders, including PAs, implementers, regulatory entities, MT organizations, and workforce development specialists, helped deepen CalMTA's understanding of the current market and informed our MT approach, as summarized in Appendix D: Market Characterization Report.
- **Ongoing coordination.** Throughout Phase II of development, CalMTA provided updates on the Residential HPWH MTI at regular checkpoints with MTAB and CalMTA's strategic advisors as well as in recurring meetings with the IOUs' C&S team and CalNEXT. CalMTA is acknowledged in CalNEXT's California Multifamily Split-System Heat Pump Water Heater Market Study report following our review of and feedback on this document.
- **Direct engagement.** In addition to these ongoing meetings, CalMTA's MTI research and development efforts in 2025 were supported by ongoing engagement with key programs across California and at the national level, including **TECH Clean California, CAHPP, AWHI, the CEC, and the CPUC.** In addition to periodic check-ins and communication to ensure these parties were kept current on CalMTA's MTI development milestones, CalMTA held meetings with each organization to gain feedback on the design, objectives, and attendee list for the summit. CalMTA also reviewed and contributed feedback on the blueprint developed by CAHPP outlining near-term strategies to address technical, market, and policy barriers to heat pump adoption and advance the state's goal to install six million electric heat pumps by 2030.
- **Applying an equity lens.** Facilitated discussions with CalMTA's Equity Sounding Board helped validate, refine, and strengthen equity-focused aspects of the MTI Plan, including evaluation metrics, strategic interventions, and innovation pathways. CalMTA also conducted a series of briefings with workforce education and training (WE&T) entities, specifically those working in ESJ communities, to inform strategies targeting HPWH installation contractors. Detailed results of this engagement are described in Section 2.4 below.
- **Idea to Initiative Educational Campaign.** To help educate MTAB members, program representatives, and other interested parties about the Residential HPWH MTI Plan, CalMTA deployed an educational campaign with a series of presentations to share vital



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aspects of the plan. Individual sessions focused on the MT theory and logic model, product assessment, market characterization research, market progress indicators, market forecasts, cost-effectiveness analysis, and other vital components. Information delivered through the Idea to Initiative educational campaign can be found at <http://www.calmta.org/idea-to-initiative>.

- **MTAB and Public Review of Draft MTI Plan.** The Draft MTI Plan was posted for review and comment by MTAB members and the public via the CPUC’s PDA site on April 22, 2026.<sup>4</sup> A summary of CalMTA responses to comments from MTAB members and the public are appended to the MTI Plan via Appendix I.

## 2.3 Planning for collaboration in Phase III: Market Deployment

Prior to moving the Residential HPWH MTI into Phase III implementation, CalMTA will continue to engage external programs and entities promoting this technology to stay current on the changing mix of program offerings, continue to strengthen relationships, and ensure the MTI adds value to the market while avoiding duplication of efforts. Because the MTI is unlikely to enter the market deployment phase until mid-2027, we anticipate that new programs will have launched and that current programs may ramp down or evolve by then. Our ongoing engagement will help us refine our coordination strategy as needed upon CPUC approval of this MTI.

Critically, CalMTA will engage with PAs and third-party implementers of related programs to define activities that will avoid market confusion, ensure points of alignment are maintained and leveraged, and identify opportunities to adjust MTI strategies. Early Phase III collaboration with external programs will be critical to specific MTI activities and will provide important points of leverage. Representative areas of collaboration with external programs identified by CalMTA include:

- In developing the Market Intelligence Hub, the MTI will coordinate data requests with market partners (i.e., manufacturers, distributors, and retailers) and programs to create a real-time snapshot of the HPWH market in California. This data can be used to inform the ongoing MTI strategy, other program efforts, and provide beneficial guidance to the market.
- Collaborating with the supply chain and California programs offering HPWH incentives on Scale-Up Plans for targeted submarkets will aggregate statewide buying power, while CalMTA’s ability to negotiate bulk purchasing agreements with manufacturers will make lower-cost products available to programs and contractors.
- CalMTA’s extensive market research and supply chain engagement, coupled with insight from external programs promoting HPWH adoption across California, provide a strong foundation

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<sup>4</sup> Appendix E draft to be posted to the website prior to the draft HPWH MTI Plan, so this date is currently an estimate. To be updated upon finalization.



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for consistent, market-informed messaging on the technology's benefits that can be collaboratively developed for individual program use.

Planned activities in this stage include the following:

- **Coordination agreements with external programs.** CalMTA recognizes the need for formal documentation, developed jointly with PAs working in markets that have potential overlap with the Residential HPWH MTI, describing the coordination approach used 1) eliminate duplication or redundancy in market activities, 2) ensure that each MTI adds value to the market and fills any gaps needed to drive long-term market change, and 3) increase scalability and the efficiency with which CalMTA and PA offerings achieve their respective goals. The resulting memos will document identified areas of alignment between the Residential HPWH MTI and relevant PAs' portfolios, as well as the agreed-upon approach to mitigating overlap between our respective work. Memos will be updated annually or as needed and will guide the cadence and intensity of coordination efforts based on potential for overlap.
- **Ongoing monitoring and tracking.** As previously mentioned, CalMTA understands that the statewide and national energy efficiency market will evolve before this MTI moves into Phase III and will closely monitor planned future programs with potential alignment/overlap to supplement the list of currently identified programs found in Section 3.1. As new programs launch or existing programs re-launch, we will meet with PAs and implementation teams to ensure early alignment on implementation planning and coordinate related activities between that program and the MTI. This engagement may result in deeper collaboration that allows for co-creation or co-delivery of mutually beneficial activities, such as workforce development or product testing.
- **Request for Proposal (RFP) planning.** After CPUC approval of the Residential HPWH MTI Plan expected in 2027, CalMTA will issue an RFP to solicit an implementation contractor for the MTI. Leading up to that event, CalMTA will use the regular meetings with key stakeholders to further develop details related to the points of alignment between the MTI and energy efficiency programs. Ultimately, this coordination will surface and provide transparency on issues that may need to be addressed in the future.
- **MTI contracting and implementation.** In alignment with guidance in the CPUC MT Framework, the future RFP for Residential HPWH MTI implementation will include a distinct scope of work related to external program coordination and alignment. Describing their approach to this implementation area will require bidders to, as described in the CPUC Decision, "include a discussion of how their potential MTIs would dovetail with existing RA/C&S implementation effort(s)."<sup>5</sup>
- **Implementation collaboration.** CalMTA and external program implementation teams will work together to coordinate on specific MTI activities, such as the execution of Scale-Up Plans,

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<sup>5</sup> See D.19-12-021, p. 136.



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and will provide important points of leverage, such as PAs’ existing relationships with customers, local workforce, and community-based organizations. After the MTI moves into market deployment, we will report on and discuss collaborative efforts through regular meetings with IOUs and third-party implementers of related programs. These touchpoints will help avoid market confusion, ensure points of alignment stay consistent, and provide an opportunity to adjust strategies, if needed. In addition, coordination with CalMTA will allow us to support external programs as described in the “Reciprocal support from MTI and CalMTA” column in Table 1 below.

- **Market progress evaluation.** As part of the MTI implementation, a third-party contractor will also be secured to review ongoing activities and measure progress toward MTI objectives. These Market Progress Evaluation Reports are public documents and will be shared with efficiency program leads and other interested parties to inform goal-setting activities conducted by external programs. If the case should arise that a strategic intervention as described in the logic model does not result in the expected outcomes, the MTI may change course and new external program coordination approaches may be required. In that case, CalMTA program managers will work with energy efficiency program leads to adjust as needed.

### 3 Future coordination with external programs

The robust ecosystem of active programs and organizations working to promote HPWH adoption in California provides this MTI with significant market leverage but requires robust collaboration to avoid duplication of efforts in a crowded market. As detailed in Appendix D: Market Characterization Report, CalMTA’s initial research identified more than thirty active programs offering incentives to lower the cost of HPWHs, as well as numerous relevant demand response programs, HPWH loaner programs, workforce education and training programs, research projects and pilots, and financing programs. CalMTA’s work to engage and coordinate with key stakeholders in this market at each stage of MTI development, ensuring early alignment and building mutually beneficial relationships, is summarized in Section 2 of this Appendix.

Table 1 below summarizes representative active programs or organizations identified by CalMTA as having important points of alignment and coordination for the Residential HPWH MTI during Phase III: Market Deployment. While prioritizing California-based programs and organizations, this work also captures national and regional efforts that could support the MTI’s scalability and long-term impact on the market. Identification of external programs was conducted by CalMTA’s stakeholder engagement team in close coordination with the market characterization research led by research and evaluation leads. We do not intend for this to be a fully comprehensive list but rather illustrative of CalMTA’s proposed approach to coordinating with specific types of



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programs. We also recognize the program landscape is dynamic and will update our coordination plan prior to moving this MTI into implementation.

**Table 1. Residential HPWH MTI external program coordination approach<sup>6</sup>**

MTI alignment goal	Representative programs	Possible reciprocal support from MTI/CalMTA
<p><b>C&amp;S programs and other regulatory efforts</b> provide a critical point of coordination and leverage as CalMTA seeks to align MTI activities with California code development/enforcement and federal test procedures, standard-setting, and qualified product lists. We will seek to understand and encourage opportunities for collaboration, specifically related to preparing the California market for compliance with the 2029 federal residential water heater standards, supporting the new construction market to maximize inclusion of HPWHs in alignment with Title 24 2025 requirements, aligning on policies related to use of lower-Global Warming Potential refrigerants or standards for zero-emissions/zero-NOx appliances, and participating in flexible demand communication and performance validation standards development.</p>	<p>IOU C&amp;S Program</p> <p>CARB</p> <p>BAAD</p> <p>SCAQMD</p> <p>U.S. Department of Energy (DOE)</p> <p>ENERGY STAR</p> <p>Consortium for Energy Efficiency (CEE)</p> <p>Residential Electric Water Heating Specification</p> <p>Air-Conditioning, Heating, &amp; Refrigeration Institute (AHRI) 1430</p>	<p>Support product development/enhancements at the manufacturer level with a focus on increasing availability of products aligned with California housing stock and other market needs</p> <p>Provide market data as MTI moves into implementation</p>
<p><b>Existing research and development projects/ programs</b> provide leverage for CalMTA to develop and launch the MTI more quickly. Collaboration on research, including pilots, and data</p>	<p>CalNEXT (IOUs' statewide electric emerging technologies program)</p> <p>CEC Electric Program Investment Charge (EPIC) program</p>	<p>Share relevant market and pilot data to create a shared understanding of current opportunities and challenges regarding product features</p> <p>Support product development/enhancements at the manufacturer</p>

<sup>6</sup> Acronyms for organizations and programs only referenced once in this Appendix are included in Table 1 because the acronym is frequently the industry-recognized name. They will not be included in the list of abbreviations if only mentioned once.



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<b>MTI alignment goal</b>	<b>Representative programs</b>	<b>Possible reciprocal support from MTI/CalMTA</b>
<p>sharing will help stakeholders working in this market better understand product performance and necessary enhancements while minimizing duplication of effort and aggregating any “asks” to manufacturers.</p>	<p>Energy Transition Coordinating Council (ETCC) research</p> <p>U.S. DOE National Labs (e.g., Lawrence Berkeley National Laboratory, Pacific Northwest National Laboratory) and research universities (e.g., University of California, Davis Western Cooling Efficiency Center)</p>	<p>level based on research findings, with the goal of “right-sizing” what the California market is asking of manufacturers</p>
<p>Ongoing coordination with large-scale <b>programs focused on accelerating heat pump adoption or residential electrification</b> to ensure that the MTI reflects current California market conditions, leverages these external resources to achieve MT more quickly and at greater scale, and fills gaps to help these external entities be even more successful in meeting their own goals. These programs also provide an important opportunity to aggregate demand and send a clear signal to manufacturers. We are also interested in synergies with programs that promote load-shifting or time-of-use participation. While each program has unique goals, CalMTA’s MTI will holistically mitigate market-level barriers and fill gaps not currently addressed by these programs.</p>	<p>TECH Clean California</p> <p>CAHPP</p> <p>CEC Equitable Building Decarbonization Program</p> <p>Self-Generation Incentive Program (SGIP)</p> <p>PG&amp;E Watter-Saver</p> <p>SCE SmartShift Rewards</p> <p>The Switch Is On</p>	<p>Support development of a consistent statewide infrastructure that creates alignment across programs, including consistent market-informed messaging and identification of targeted sub-markets that can quickly aggregate the demand needed to reduce upfront cost</p> <p>Collect and share market data identified as valuable to statewide programs, including aggregated sales data and residential housing stock data, through a central statewide Market Intelligence Hub</p> <p>Provide real-world case studies from deployment of Scale-Up Plans to increase the consistency and impact of statewide marketing efforts</p>
<p><b>Local energy efficiency programs that install HPWHs</b> will be critical points of leverage for the MTI’s Scale-Up Plans. The MTI will equip PAs/</p>	<p>HPWH rebates offered by Los Angeles Department of Water &amp; Power (LADWP), Northern Rural Energy Network,</p>	<p>In addition to the statewide infrastructure components described above:</p>

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MTI alignment goal	Representative programs	Possible reciprocal support from MTI/CalMTA
<p>implementers with information that can help target customers with a strong value proposition for HPWH installation - including identification of "easy-to-install" households or neighborhoods as well as segmented, market-informed messaging and contractor-training tools - or supplement their existing information by engaging adjacent programs to aggregate efforts across territories. This approach will contribute to these programs' increased success while also creating the market momentum needed to reduce product cost, increase contractor confidence, and accelerate manufacturers' commitment to HPWHs.</p>	<p>Peninsula Clean Energy, Sacramento Municipal Utility District (SMUD), Silicon Valley Clean Energy (SVCE), Sonoma Clean Power, Tri-County Regional Energy Network (3C-REN), and others</p> <p>Bay Area Regional Energy Network (BayREN) Efficiency and Sustainable Energy (EASE) Home Program</p> <p>Southern California Edison (SCE) Clean Appliance Rebates Program</p>	<p>Provide program trade allies with the information they need to quickly find households with a clear value proposition for HPWH adoption and therefore a strong likelihood of participation– increasing supply chain confidence in the technology and strengthening the business case for HPWH promotion</p> <p>Facilitate manufacturer connections to enable volume pricing for Scale-Up Plan deployment</p> <p>Develop consistent multilingual messaging and marketing/training tools to promote HPWHs to specific sub-markets, including resources to help understand bill impacts</p> <p>Communicate program participant and implementer feedback to manufacturers to influence product development</p> <p>Leverage manufacturer engagement to support initial "test bed" of easy, high-value-proposition installations</p>
<p><b>WE&amp;T programs</b> are critical to ensuring customers across California receive quality HPWH installation, including right-sized products and accurate information. CalMTA's statewide market monitoring will position the MTI to support these programs and help program participants see HPWHs as a valuable addition to their business or practice.</p>	<p>Pacific Gas &amp; Electric (PG&amp;E) Energy Center Courses</p> <p>SCE Contractor Demand-Building Program</p> <p>Southern California Regional Energy Network (SoCalREN) E-Contractor Program</p> <p>SVCE FutureFit Fundamentals Contractor Training</p> <p>TECH Clean California</p>	<p>Document and share best practices related to HPWH installation and equipment selection/placement, including learnings from specific sub-markets</p> <p>Provide workforce-oriented HPWH messaging aligned with consistent statewide infrastructure to help WE&amp;T program participants grow their business through HPWH installations and create a more consistent experience for end-use consumers</p> <p>Share lessons-learned and key findings from WE&amp;T programs with manufacturers/distributors to ensure</p>

**Appendix E: External Program Alignment & Coordination for Residential Heat Pump Water Heating**

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MTI alignment goal	Representative programs	Possible reciprocal support from MTI/CalMTA
		the trainings they offer reflect the needs of the California market
As the MTI engages the market to develop a shared statewide product roadmap, identify opportunities to leverage the work of <b>entities outside of California seeking to drive HPWH adoption</b> to increase market momentum and motivate manufacturer participation.	NEEA AWHI New England Heat Pump Accelerator	Share California market data to ensure national efforts reflect the state’s needs and opportunities  Collaborate on manufacturer engagement to streamline market asks and create a clear, consistent demand signal that aggregates the voice of the California market
Market feedback indicates that <b>all-electric new construction programs</b> are already including HPWHs as a pathway to Title 24 compliance. However, if data indicates lagging HPWH adoption in the new construction market, the MTI can provide additional support to ensure that this technology is prioritized by builders and developers.	PG&E California Energy-Smart Homes Program  CEC California Electric Homes Program  CEC Building Initiative for Low-Emissions Development (BUILD) Program  SCE Rebuilding Incentives for Sustainable Electric Homes (RISE) Homes	Facilitate manufacturer connections to increase availability and accessibility (including lower cost) of desired HPWH products  Coordinate on bulk purchase agreements or layered incentives for builders and remodelers  Communicate program participant and implementer feedback to manufacturers to influence product development  Provide marketing support (i.e., benefits messaging, educational content, manufacturer assets, collateral templates)

CalMTA actively monitors the program landscape to identify opportunities for engagement, alignment, and collaboration. Recent public notices and the PAs' March 2026 applications for approval of their Energy Efficiency 2028-2035 Business Plans and 2028-2031 Portfolio Plans indicate multiple new programs with potential alignment, including:

- PG&E’s Application includes a downstream Heat Pump Adoption Program Placeholder (2028-onward) that will support and incentivize heat pump adoption for Residential customers. PG&E also proposes placeholders for programs focused on targeted electrification and both contractor and customer support for electrification.
- SCE will present plans to open a Heat Pump Water Heater Program via public webinar in May 2026.

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- SoCalREN’s Application includes a Residential Resiliency Program that will offer enhanced incentives and targeted outreach to drive adoption of high-efficiency measures, including HPWHs. The planned Single-Family Solutions program will also include HPWHs.
- Marin Clean Energy’s Application indicates that it will expand its Home Energy Savings program (currently focused on equity customers) to include market-rate customers, with education about the benefits of electrification and fixed rebates on measures that include HPWHs.

## 4 Applying an equity lens

The Adopted MT Framework attached to D.19-12-021 establishes high-level principles that every MTI should aim to achieve, including a directive to "integrate strategies to maximize equity."<sup>7</sup> To better understand how to apply [CalMTA’s equity lens](#) to development of the Residential HPWH MTI with ESJ community needs, we conducted an MTI-specific listening session in June 2024 with representatives from organizations who have supported energy efficiency work in these communities. Session facilitation sought to gather insight and receive feedback into barriers to adoption, potential benefits and negative impacts of the MTI, past experiences with HPWH technology and related programs, and preliminary metrics used to evaluate the equity impact of the MTI. The following organizations participated in the Residential HPWH Listening Session: Association for Energy Affordability, Bear Mechanical HVAC, Community Resource Project, Inc., Maroma Energy Services, Reliable Energy Management, Inc., Proteus, Inc., Self-Help Enterprises, and Sheet Metal Workers Local 104. [A summary report documenting key takeaways from this listening session](#) and how they were applied to the final Residential HPWH MTI Advancement Plan can be found on CalMTA’s website.

In 2025, formation of CalMTA's [Equity Sounding Board](#) enabled additional engagement that helped shape the Residential HPWH MTI Plan. Comprised of professionals who advocate for or work within ESJ communities, the Equity Sounding Board seeks to ensure that MTIs positively impact ESJ communities by guiding outreach activities, identifying actions that may cause unforeseen harm, and serving as a resource of equity-oriented feedback on CalMTA's work. The Equity Sounding Board provided input on the Residential HPWH MTI through facilitated discussions at two meetings, with findings from these meetings used to help shape the MTI logic model as well as the market progress indicators used to measure success in achieving equitable outcomes. An Equity Sounding Board member also participated in CalMTA’s Residential HPWH Market Acceleration Summit, elevating ESJ community needs in these critical discussions.

Specific feedback received from the Equity Sounding Board and listening session participants that was integrated into this MTI Plan includes:

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<sup>7</sup> See D.19-12-021, p. 102.



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- Efforts to tie HPWH product development to California residential housing stock (Strategic Intervention #1) must consider diverse housing realities, including the unique conditions of Tribal communities, manufactured homes, multifamily properties, and areas with limited electrical service where many homes rely on propane or wood for heating.
- The awareness-building tactics that will necessarily accompany MTI work to aggregate demand and build market momentum (Strategic Intervention #2) should engage a wide range of partners as trusted messengers to ESJ communities. In addition to Community Based Organizations established in these communities, groups outside the energy efficiency space – such as healthcare advocacy groups, public schools, and faith-based organizations – may all be powerful communication channels. This awareness-building will also include development of consistent messaging to help customers and installers understand potential bill impacts when switching from a gas water heater, which reflects a desire for transparent communication of this issue shared in the June 2024 listening session as well as by CalMTA’s Equity Sounding Board.
- Households that are not proficient in English may struggle to receive accurate information about HPWH equipment needs, benefits, or proper operation and maintenance, making them more likely to have a negative experience with the technology. The statewide operational infrastructure described in Strategic Intervention #3 therefore specifies development of multilingual templates, tools, and educational materials that programs, manufacturers, and installers can easily adopt, promoting consistent and effective messaging for all Californians.
- In the June 2024 listening session and January 2025 Equity Sounding Board meeting, ESJ community representatives identified the complexities and inconsistencies of current HPWH incentive programs as a barrier to participation. Because incentives provide a valuable tool for reducing the upfront cost of adoption, particularly for lower-income households, the MTI’s efforts to build a more consistent and streamlined statewide program infrastructure will seek to increase the accessibility of these offerings.



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