Proceeding:	A.26-03-
Exhibit No.:	MCE – 01
Date:	March 16, 2026
Witness(es):	Alice Havenar-Daughton Jennifer Green Alex Valenti

MARIN CLEAN ENERGY

EXHIBIT 1

TESTIMONY OF MARIN CLEAN ENERGY REGARDING ITS 2028-2031 ENERGY EFFICIENCY PORTFOLIO PLAN AND 2032-2035 ENERGY EFFICIENCY BUSINESS PLAN

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1. Brief Description of Application

In this Business Plan Application ("Application"), Marin Clean Energy ("MCE") requests California Public Utilities Commission ("CPUC" or "Commission") approval of its four-year energy efficiency ("EE") Portfolio Plan for program years ("PYs") 2028-2031, as well as its eight-year Strategic Business Plan ("Business Plan") covering PYs 2028-2035. Exhibit 1 of MCE's testimony describes the four-year Portfolio Plan in detail, and also lays out MCE's eight-year Business Plan, which is philosophically consistent with and underpinned by the same core principles, goals, and strategies driving MCE's Portfolio Plan. Over the four-year Application period, MCE requests a total budget of $65,251,000 for its EE programming, broken out by sector in the table below (and detailed in **Chapter 4: Forecast Methodology and Zero-Based Budgeting**). Informed by its experience administering programs in its PYs 2024-2027 portfolio as well as by the ongoing energy affordability crisis in California—which necessitates greater scrutiny of the Commission's use of ratepayer funds[1]—MCE requests a $14.8 million reduction in its 2028-2031 budget as compared to the prior portfolio period (*i.e.*, a 19 percent four-year budget reduction).[2]

[1] Sierra Club, California's Affordability Crisis: Utilities Asking for More Money for Shareholders, November 2025, available at: https://www.sierraclub.org/articles/2025/11/california-s-affordability-crisis-utilities-asking-more-money-shareholders; Executive Department State of California, EXECUTIVE ORDER N-5-24, October 30, 2024, available at: https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf, pp. 1-2; Assembly Bill 3264 (Petrie-Norris), sections 1(b), 3(b).

[2] Decision ("D.") 23-06-055, p. 94 (authorizing a 2028-2031 $80,063,445 budget forecast for MCE).

Table 1-1: 4-year Portfolio Budget Forecast Summary (2028-2031)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)					
	2028	**2029**	**2030**	**2031**	**Total (4 Years)**
Total Budget	$15,577	$16,454	$16,556	$16,664	$65,251
Resource Acquisition Segment Budget	$9,502	$10,037	$10,099	$10,165	$39,803
Market Support Segment Budget	$765	$808	$813	$818	$3,203
Equity Segment Budget	$4,687	$4,951	$4,982	$5,014	$19,635
Codes and Standard Budget	$0	$0	$0	$0	$0
EM&V	$623	$658	$662	$667	$2,610
Administration	$1,020	$1,460	$1,499	$1,539	$5,518
ED Portfolio Oversight	$0	$0	$0	$0	$0

MCE's 2028-2035 strategic Business Plan builds on the foundation of MCE's robust track record of designing and implementing innovative and cost-effective EE programming since 2012. The Business Plan will also remain flexible to ensure that MCE can adapt in real-time to serve the evolving needs of its customers and of the state. MCE's long-term vision for EE prioritizes greater affordability, cost-effectiveness, electrification, equity, and reliability. Over the eight-year Business Plan period, MCE will aim to maximize Total System Benefits ("TSB") through the implementation of cost-effective EE (and demand management)[3] programs, while also supporting the sustained growth of the EE market in its service area and ensuring that all customers, especially those historically underserved by EE, receive the benefits of EE—including non-energy benefits ("NEBs"). MCE requests a total of $133,096,000 for its eight-year Business Plan, which is again informed by MCE's experience administering programs in its PYs 2024-2027 portfolio, and by California's ongoing energy affordability crisis, and reflects an eight-year budget that is $25 million smaller than its last eight-year budget.[4]

As discussed in **Chapter 2: Portfolio Summary (Service Territory)** and **Chapter 6:**

[3] MCE defines "demand management" as the umbrella term for customer responsiveness to price, behavior or equipment-driven signals which enable load shifting, load shedding, load shaping, and demand response ("DR").

[4] D.23-06-055, pp. 93-94 (authorizing a $158,280,761 eight-year budget for MCE).

Segmentation and Sector Strategies, MCE's Application includes diverse strategies to serve all sectors of its service area customers including residential, commercial, industrial, agricultural, and public customers. In **Chapter 6: Segmentation and Sector Strategies**, MCE proposes a variety of cost-effective and Equity strategies to serve customers with Resource Acquisition, Market Support, and Equity segment programs. MCE maximizes its commitment to serving Equity customers with beneficial programs delivering both energy savings and NEBs like bill savings, and improved health, safety, and comfort by proposing a 30 percent Equity segment budget.[5]

MCE deeply values stakeholder engagement and community-led design. MCE's portfolio programs are heavily influenced by both ongoing stakeholder outreach activities and discrete stakeholder engagement activities completed for the purposes of this Application. As discussed in **Chapter 8: Stakeholder Engagement**, MCE regularly conducts a variety of ongoing stakeholder outreach activities to continuously seek feedback from the customers and communities it serves. During PYs 2024-2027 of its EE portfolio, MCE conducted 20 interviews with local contractors, completed 119 surveys of residential customers on electrification barriers and equitable electrification, and distributed 223 surveys to Home Energy Savings program participants following their receipt of direct install measures. Additionally, MCE surveyed 81 small businesses on their EE needs and conducted nine interviews with local permitting authorities on permitting barriers to decarbonization and direct installs. MCE also maintains the MCE Community Power Coalition—a network of 160 social, racial, and environmental justice organizations that do feet-on-the-street work to address inequities in service area communities—and this Coalition was invited to a virtual discussion on MCE's draft Application.

Overall, in the development of this Application, MCE conducted 12 stakeholder activities and

[5] MCE requests a 30 percent Equity segment and 5 percent Market Support segment budget (collectively a 35 percent Equity and Market Support budget) as discussed in **Chapter 11: Policy Recommendations**.

engaged over 30 stakeholder organizations for direct feedback. Feedback was welcomed through roundtable discussions, individual conversations, existing meetings, over email, and via a written survey. MCE received robust, detailed, and valuable feedback from stakeholders that directly informed MCE's Application. MCE's specific actions and responses to stakeholder engagement are discussed in detail in **Chapter 8: Stakeholder Engagement**. In **Chapter 8: Stakeholder Engagement**, MCE also discusses its ongoing multilingual and culturally competent outreach activities to customers and stakeholders that help ensure easy access to EE program participation.[6]

2. Regulatory and Legislative Content

A robust regulatory and legislative environment informs MCE's eight-year EE Business Plan, and four-year Portfolio Plan. Regulatory requirements—as established by Commission decisions—in particular shape MCE's budget, its technical inputs, its goals (TSB and energy savings) and its strategies in this Application. Here, MCE outlines a summary of the relevant EE regulatory history, CPUC compliance requirements, and legislative drivers for its Application.

MCE has administered EE funds under California Public Utilities Code ("Code") Section 381.1(a)-(d) since 2013. Pursuant to Article 2 of the Commission's Rules of Practice and Procedure, Code Section 381.1, and Decision ("D.") 21-05-031, MCE filed its 2024 EE Application on March 4, 2022.[7] On July 3, 2023, the Commission issued D.23-06-055 approving MCE's 2024 Application and MCE's proposed EE portfolio for PYs 2024-2027. In D.23-06-055, the Commission approved a four-year budget cap of $78,217,316 for MCE, and specifically approved all of MCE's proposed programs except for its PeakFLEXmarket program.

On September 5, 2025, the Commission issued D.25-08-034 Adopting Energy Efficiency

[6] MCE provides a streamlined online public resource for customers to find and explore programs and rebates they may qualify for: https://mceecleanenergy.org/explore-programs-and-offers/ (program and rebate locator).
[7] A.22-03-012, *Application of Marin Clean Energy for Approval of 2024-2031 Energy Efficiency Business Plan and 2024-2027 Energy Efficiency Portfolio Plan* (March 4, 2022) ("MCE 2024 Application").

Goals for 2026-2037. On November 4, 2025, MCE submitted its Mid-Cycle Advice Letter ("MCAL"), and the Commission accepted it with an effective date of January 20, 2026. In February 2026, Energy Division Staff issued the final *EE Business Plan Application Template* and *Business Plan Application Workbook* (collectively, the "Templates").[8] MCE submits this Application pursuant to the Templates and in compliance with the relevant controlling Commission decisions (including but not limited to D.21-05-031 (rolling portfolio and segmentation requirements); D.23-04-035 (phase-out of natural gas incentives); D.23-06-055 (approval of 2024-2027 EE portfolios and 2024-2031 business plans); and D.25-08-034 (approval of 2026-2037 EE potential and goals)).

As discussed throughout this Application, MCE designed its EE portfolio to advance the Commission's Environmental and Social Justice ("ESJ") Action Plan goals.[9]

The legislative and state policy drivers shaping MCE's EE portfolio and budget include, but are not limited to, the following:

- Senate Bill ("SB") 350 (De León, 2015) – Clean Energy and Pollution Reduction Act;
- Assembly Bill ("AB") 802 (Williams, 2015) – Benchmarking and Changes to Energy Efficiency Baselines;
- AB 3264 (Petrie-Norris, 2024) – Energy: Cost Framework: Residential Rates: Demand-Side Management Programs Report: Electrical Transmission Grid Study;
- Executive Order N-5-24 – Electric Service Affordability;
- SB 1221 (Min, 2024) – Zonal Decarbonization: Priority Neighborhood Decarbonization Zones; and
- SB 1013 (Lara, 2018) – Fluorinated Refrigerants: Low-Global Warming Potential Refrigerants in Energy Efficiency Programs.

[8] Issued via email. *See also* CPUC, Rolling Portfolio Program Guidance, available at: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/rolling-portfolio-program-guidance.

[9] CPUC, ESJ Action Plan Vol 2, April 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf. MCE's Application maintained a specific focus on Goal 1: Consistently integrate equity and access considerations throughout CPUC regulatory activities; Goal 2: Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health; Goal 5: Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs; and Goal 7: Promote high road career paths and economic opportunity for residents of ESJ communities.

Chapter 2: Portfolio Summary

Marin Clean Energy ("MCE") is a local government entity and community choice aggregator ("CCA") that provides clean electricity service and clean energy programs to 38 member communities across Contra Costa, Marin, Napa, and Solano Counties.[10] The MCE service area has grown from its founding years in Marin County to encompass an area that now includes communities in four diverse Bay Area Counties – Marin County, Napa County, the majority of Contra Costa County, and portions of Solano County (including Benicia, Vallejo, and Fairfield), and unincorporated areas within the counties. As MCE's geographic footprint has grown, it has extended its reach to nearly 586,000[11] customers of all types – residential (single-family and multifamily), commercial, industrial, and agricultural.

[10] MCE is a local not-for-profit public agency that provides electricity service and cutting-edge energy programs to more than 1.5 million people in 38 member communities in Contra Costa, Marin, Napa, and Solano Counties. MCE is a "joint powers authority" defined as a public agency consisting of two or more public agencies that may jointly exercise common powers as a separate legal entity consistent with California Government Code Section 6500 *et seq.* MCE is a "community choice aggregator," which is defined by California Public Utilities Code section 331.1(b) (codifying Assembly Bill 117 (Migden, 2002)) to include: "(b) Any group of cities, counties, or cities and counties whose governing boards have elected to combine the loads of their programs, through the formation of a joint powers agency established under Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code." MCE is a load-serving entity.

[11] MCE, About Us, available at: https://mcecleanenergy.org/about/.

Figure 2-1: Map of the 38 Communities MCE Serves Across Four Bay Area Counties

Figure 2-2: List of the 38 Communities MCE Serves Across Four Bay Area Counties

Contra Costa	Marin	Napa	Solano
• Concord • Danville • El Cerrito • Hercules • Lafayette • Martinez • Moraga • Oakley • Pinole • Pittsburg • Pleasant Hill • Richmond • San Pablo • San Ramon • Unincorporated Contra Costa • Walnut Creek	• Belvedere • Corte Madera • Fairfax • Larkspur • Mill Valley • Novato • Ross • San Anselmo • San Rafael • Sausalito • Tiburon • Unincorporated Marin	• American Canyon • Calistoga • Napa • St. Helena • Unincorporated Napa • Yountville	• Benicia • Fairfield • Unincorporated Solano • Vallejo

MCE's service area overlaps with the service areas of two other California Public Utilities Commission ("CPUC") Energy Efficiency Portfolio Program Administrators ("PAs"): Pacific Gas and Electric Company ("PG&E") and Bay Area Regional Energy Network ("BayREN"). MCE's coordination with those PAs is discussed further in **Chapter 7: Portfolio Coordination**.

1. Diversity in MCE's Service Area

MCE's expanded service area features a diverse population, as is illustrated by various demographic measures. Nearly a quarter of the residents in MCE's service area[12] were born outside the United States.[13] In addition, nearly one-third of the population of residents in MCE's service

[12] Consistent with Application ("A.") 22-03-005, *Application of Marin Clean Energy for Approval of 2024-2031 Energy Efficiency Business Plan and 2024-2027 Energy Efficiency Portfolio Plan* (Mar. 4, 2022), because of data availability, this section describes the characteristics of MCE's service area by referencing data from the four counties comprising MCE's service territory.

[13] United States Census Bureau, Quick Facts (accessed March 9, 2026), available at: https://www.census.gov/quickfacts/fact/table/CA,solanocountycalifornia,napacountycalifornia,marincountycalifornia,contracostacountycalifornia/POP815219?#qf-headnote-b.

area speaks a language other than English at home, with Marin County having a lower concentration of non-English speakers than the other three counties.[14]

Household incomes in MCE's service area also vary by county, (*see* Table 2-1), with median household income ranging from $100,027 in Solano County to $139,644 in Marin County.[15] Household incomes are generally higher in Marin and Contra Costa Counties, and comparatively lower in Napa and Solano Counties.

Table 2-1: Household Incomes in MCE's Service Area[16]

Income	Marin	Napa	Contra Costa	Solano
Under $50K	19%	23%	19%	24%
$50K to $100K	20%	23%	22%	26%
$100K to $200K	25%	33%	31%	34%
Above $200K	37%	21%	28%	16%

Income disparity also varies across MCE's service area, as Table 2-2 indicates.[17] The 20th percentile for household income is nearly $13,000 lower in Solano County than in Marin County, indicating a higher proportion of lower incomes in Solano.

[14] United States Census Bureau, Quick Facts (accessed March 4, 2026), available at: https://www.census.gov/quickfacts/fact/table/napacountycalifornia,contracostacountycalifornia,marincountycalifornia,solanocountycalifornia/PST045224.

[15] 2023 American Communities Survey, viewed on Census Reporter (accessed March 4, 2026), available at: https://censusreporter.org/profiles/05000US06041-marin-county-ca/; https://censusreporter.org/profiles/05000US06055-napa-county-ca/; https://censusreporter.org/profiles/05000US06013-contra-costa-county-ca/; https://censusreporter.org/profiles/05000US06095-solano-county-ca/.

[16] *Id.*

[17] "Vital Signs: Income." Metropolitan Transportation Commission and Association of Bay Area Governments. Data originates from 2023 American Communities Survey, available at: https://vitalsigns.mtc.ca.gov/indicators/income.

Table 2-2: Household Income by Percentile and County

County	20th Percentile	50th Percentile	90th Percentile
Contra Costa	$50,976	$122,342	$352,957
Marin	$53,423	$140,286	$511,594
Napa	$43,839	$102,971	$289,543
Solano	$40,679	$100,932	$249,476

2. Customer Types and Energy Consumption Patterns

As mentioned above, MCE's service area includes all major customer sectors – residential (single-family and multifamily), commercial, industrial, and agricultural. Nearly half of the electricity consumption and 43% of the gas consumption in MCE's service area is attributable to residential accounts. In contrast, within the state of California, the residential sector utilized 35.3% of electricity in 2024.[18] Given the relatively higher proportion of residential energy consumption in MCE's service area, MCE's customer programs must obtain a larger portion of energy savings from the residential sector. This presents a potential challenge to MCE's comprehensive programming because statewide many residential energy efficiency ("EE") programs historically have achieved less energy savings per dollar as compared to non-residential programs with larger baseline energy consumptions per customer. MCE, however, effectively balances its portfolio to achieve cost-effective energy savings as described in **Chapter 3: Portfolio Strategies**.

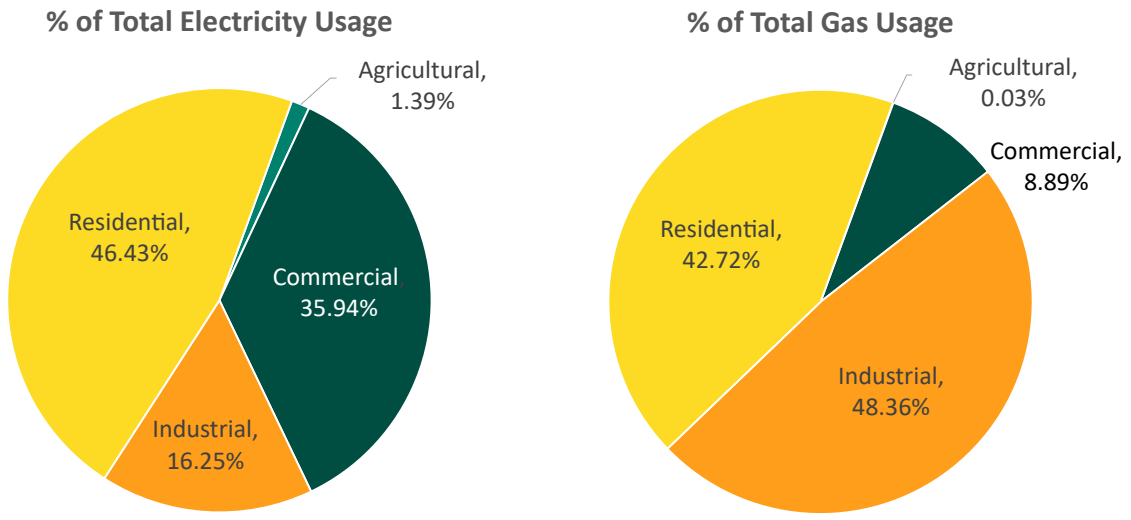
Housing in MCE's service area is characterized by relatively high home ownership rates, with owner-occupied units comprising 68% of units in Contra Costa County, 65% in Marin

[18] "Energy Consumption." California Energy Commission (accessed March 12, 2025), available at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0.

County, and 63% in Solano County. All figures exceed the California state average of 56%.[19] This larger proportion of home ownership indicates good opportunities for single-family programs within MCE's service area.

Within the non-residential sectors in MCE's service area, the commercial sector is the largest in terms of electricity usage (34% of MCE load) and number of customers (93% of non-residential accounts). However, it represents a very small share of overall gas consumption at just under 9%. Customers in the industrial sector have the highest energy consumption per account—three times higher than the non-residential sector overall. The industrial sector is also the largest consumer of natural gas, representing 48% of gas usage in MCE's service area despite being only 0.5% of accounts. Agriculture (4% of all accounts) represents a small percentage of MCE electrical load at just over 1%, and a negligible proportion of the gas consumption at 0.03%.

Figure 2-3: Energy Consumption by Sector (June 2024 – June 2025)



[19] US Census Bureau, Quick Facts (accessed March 4, 2026), available at: https://www.census.gov/quickfacts/fact/table/CA,solanocountycalifornia,napacountycalifornia,marincountycalifornia,contracostacountycalifornia/HSG010219.

3. Unique Characteristics of MCE's Service Area

MCE's service area is relatively small compared to the other portfolio service areas. This means MCE must achieve a similarly balanced portfolio with a comparatively smaller pool of customers. An additional challenge associated with MCE's service area is that the population and employment centers in MCE's service area are predominantly located in several dispersed, small and medium-sized cities, rather than being concentrated in a large urban center. This characteristic is important for MCE to consider and may influence the selection of program implementers to ensure programs are available throughout MCE's entire service area. This also influences the customer acquisition strategies MCE deploys to bring in new projects to manage customer acquisition costs. MCE must consider these important service area characteristics as it designs and implements cost-effective and beneficial programs.

On the other hand, MCE's service area size brings certain advantages—it allows MCE to be nimble and responsive to locally defined customer needs, which is necessary to adapt programs to changing rules and meet the evolving needs of MCE's diverse customer base.[20] Moreover, MCE, as a mission-driven organization and non-profit CCA, is motivated to be a flexible and innovative partner in delivering customer-oriented services. MCE's mission is "…to confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits."[21] MCE's vision is to "…lead California to an equitable, clean, affordable, and reliable energy economy by serving as a model for community-based renewable energy, energy efficiency, and cutting-edge, clean-tech products and programs."[22]

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[20] The Greenlining Institute, Equitable Electrification Framework, 2019, available at: https://greenlining.org/wp-content/uploads/2019/10/Greenlining_EquitableElectrification_Report_2019_WEB.pdf, pp. 5-6 (assess and respond to community needs).
[21] MCE, About Us, (accessed March 6, 2026) available at: https://mcecleanenergy.org/about/.
[22] *Id*.

MCE's community-focused mission and vision support its continued investment in strong relationships and existing partnerships with diverse local stakeholders, community-based organizations ("CBOs"), and its customers. These local relationships and partnerships are essential for MCE's locally-led EE program design and implementation processes.[23] For further discussion of CBO partnerships, see **Chapter 8: Stakeholder Engagement**.

4. Geographic Trends by Sector

4.1 Residential

Residential electricity use has in MCE's territory been flat or slightly declining per household, thanks to more efficient appliances and solar adoption, but total load is increasing with population growth and electrification trends.[24] The residential and commercial gas usage in these counties is also large because many homes use gas heating and some of the area has cooler winters (especially in inland valleys). Forecasts anticipate electricity demand growth over the next decade due to electric vehicle ("EV") adoption, data centers and building electrification, partly offset by efficiency gains.[25]

Marin has the lowest rate of single-family homes across the four counties, comprising 67% of its housing stock.[26] All counties are predominantly single-family in housing type which means

[23] CPUC, Environmental and Social Justice Action Plan Vol. 2, 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf ("Goal 5: Continued to improve outreach and engagement with community-based organizations and the public[.]"), p. 3.

[24] California Energy Commission, California Energy Resource and Reliability Outlook, 2025, (accessed March 6, 2026) available at: https://www.energy.ca.gov/publications/2025/california-energy-resource-and-reliability-outlook-2025, pp. 5, 11, 12, 29, 41, 59, 70 (forecasting increases in electric demand due to population growth, electrification of buildings and transportation and increased loads from data centers).

[25] *Id*.

[26] Data originally from American Community Survey 2023, sourced from Census Reporter on November 12, 2025, available at: https://censusreporter.org/profiles/05000US06041-marin-county-ca/; https://censusreporter.org/profiles/05000US06055-napa-county-ca/; https://censusreporter.org/profiles/05000US06095-solano-county-ca/; https://censusreporter.org/profiles/05000US06013-contra-costa-county-ca/.

residential energy programs can often be tailored regionally (*e.g.*, attic insulation is needed in a majority of homes across all four counties). Contra Costa County contains the highest rate of owner-occupied units, at 68% of the housing stock.[27] The median home value of owner-occupied units differs significantly from the highest in Marin County at $1,547,000 to Solano County at $629,700.[28]

A number of overlapping policy initiatives are expected to cause natural gas demand to plateau or decline gradually in MCE's territory over the next years and decades. For example, local regulations that apply as early as 2027 will promote the sale of electric space and water heating appliances.[29] Statewide natural gas demand is also expected to plateau or decline gradually through 2040,[30] as new buildings shift to all-electric appliances, and compliance requirements arrive for both local and state climate targets. In PG&E's Northern California service area,[31] average-year gas demand is forecasted to decline at an annual average rate of 3.0 percent between 2024 and 2040 in response to the state's decarbonization policies.[32] MCE must balance knowledge of this expected natural gas use decline and increased electrical demand when selecting measures that support fuel-switching, electrification, and gas savings.

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[27] *See id.*

[28] *See id.*

[29] The Bay Area Air District, whose rules govern MCE's entire service area, adopted Rule 9-4: Nitrogen Oxides from Fan Type Residential Central Furnaces and Rule 9-6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters in March 2023 which, at the time of filing, place point of sale restrictions on certain natural gas appliances beginning in 2027. The Bay Area Air District has discussed potential amendments to these rules. MCE is tracking related efforts closely and will work to align its EE programs with any controlling requirements. Bay Area Air District, CONCEPTS FOR RULE 9-6 AMENDMENTS: Affordability and Availability Considerations for Zero NOx Small Water Heaters, October 2025, available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/rule-09_06-concepts-paper_final-v1-pdf.pdf?rev=9eac6fc7a84e4b259fd2017c838de68c&sc_lang=en.

[30] CALIFORNIA GAS AND ELECTRIC UTILITIES, 2024 California Gas Report, available at: https://www.socalgas.com/sites/default/files/2024-08/2024-California-Gas-Report-Final.pdf, p. 4.

[31] Which includes MCE's service area.

[32] CALIFORNIA GAS AND ELECTRIC UTILITIES, 2024 California Gas Report, available at: https://www.socalgas.com/sites/default/files/2024-08/2024-California-Gas-Report-Final.pdf, p. 35.

4.2 Non-residential

Differences across counties are pronounced in the commercial and industrial sectors. Total energy consumption is highest in Contra Costa County, which is both a reflection of its larger population and its high concentration of more energy-intensive industries. Contra Costa and Solano Counties host heavy industries like oil refineries, large manufacturing plants, and power stations that drive much higher industrial energy consumption. Industrial facilities and oil refineries draw significant power, though some generate electricity on-site. Natural gas usage in Contra Costa County is substantial – the refineries are major consumers of natural gas (for process fuel and hydrogen production). Marin and Napa Counties lack such industries; their economies are largely service and tourism based, with correspondingly lower energy intensity. These differences require MCE to implement correspondingly different greenhouse gas emission and energy reduction strategies in these different areas. In Contra Costa and Solano Counties, MCE must work closely with industry on greater efficiency and fuel-switching measures, whereas in Marin and Napa Counties, MCE must focus more on measures impacting buildings, vehicles, and small business efficiencies.

5. Electrification Trends by County

Electrification standards and goals vary across counties in MCE's service area. Marin County proposes a series of plans through its countywide Electrification Roadmap (2024),[33] which recommends actions such as permit streamlining for gas-to-electric conversions, implementing Marin's Electric Vehicle Acceleration Strategy, and continuing to advance new electrification readiness standards and reach codes that are in sync with statewide update cycles.[34]

[33] "Electrification Roadmap Plan," County of Marin. Last updated September 6, 2024, available at: https://www.marincounty.gov/departments/cda/sustainability/electrify-marin/policy-dev/roadmap/plan.
[34] In August 2025, the California legislature passed Assembly Bill 130 which temporarily freezes residential code updates (including local reach code updates) until the 2031 code cycle, pausing new local residential

Napa County is similarly leading in its electrification efforts. Its proposed Regional Climate Action and Adaptation Plan (2025)[35] aims to implement energy retrofit programs for existing residential and non-residential buildings in order to transition 25 percent of its existing buildings to be "zero carbon" by 2030 and 100 percent of its existing buildings by 2045.

Contra Costa County and Solano County are also advancing building electrification. On March 17, 2025, Contra Costa County adopted a series of reach codes including electric readiness requirements and more stringent source energy compliance margins for non-residential, single-family, and multi-family buildings (Ordinance 2024-17).[36] The Commission also identified 13 potential zonal decarbonization pilot sites implementing Senate Bill 1221 (Min, 2024) known as "priority neighborhood decarbonization zones" within Contra Costa County.[37] Solano's 2011 Climate Action Plan[38] notes its interest in implementing energy efficiency upgrades to its building stock, since most buildings in its unincorporated county were built prior to the adoption of California Energy Code (Title 245) in 1978.

Beyond local policies advancing electrification, all of MCE's service falls within the jurisdiction of the Bay Area Air District ("BAAD"). BAAD adopted two policies in March 2023 to advance building electrification and limit air pollution from natural gas appliances. BAAD specifically adopted Rule 9-4: Nitrogen Oxides from Natural Gas-Fired Furnaces – 2023

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reach code changes statewide. However, nonresidential code updates continue their usual cycle. A.B. 130 (Wicks, 2025)

[35] "Regional Climate Action and Adaptation Plan: Public Draft," Napa County. August 2025, available at: https://www.napacounty.gov/3732/Regional-Climate-Action-Adaptation-Plan-.

[36] Contra Costa County Ordinance 2024-17 Source Energy Margins, available at: https://www.contracosta.ca.gov/DocumentCenter/View/86230/Ordinance-2024-17-Source-Energy-Margins-PDF.

[37] Decision 25-12-042, Appendix A: PRELIMINARY NEIGHBORHOOD DECARBONIZATION ZONES.

[38] Solano County Climate Action Plan. June 2011, available at: https://www.solanocounty.gov/government/resource-management/planning-services/environmental-management-sustainability/climate-action-plan-sea-level-rise.

Amendment[39] and Rule 9-6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters – 2023 Amendment[40] which, at the time of filing, place point of sale restrictions on certain natural gas appliances beginning in 2027 across the 9 counties it serves.[41] Additionally, statewide standards such as California's 2025 Building Code,[42] and the forthcoming California Air Resources Board ("CARB") Zero-Emission Space and Water Heater Standard[43] will play a major role in coordinating electrification efforts across all four counties. MCE will continue to track and engage with relevant building decarbonization standards impacting its service area throughout the portfolio period. MCE will, as appropriate, design and leverage EE programs in close coordination with relevant building decarbonization standards in its service area for the advancement of shared objectives.

6. Climate Trends and Impacts

MCE's service area spans three different climate zones ("CZs"), which dictate building design, equipment specification, and the effectiveness of various efficiency measures. The CZs include:

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[39] BAAD, Regulation 9 Rule 4: Nitrogen Oxides from Natural Gas-Fired Furnaces – 2023 Amendment, available at: https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces?rule_version=2021%20Amendment.

[40] BAAD, Regulation 9 Rule 6: Nitrogen Oxide Emissions from Natural Gas-Fired Water Heaters – 2023 Amendment, available at: https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-6-nitrogen-oxides-emissions-from-natural-gasfired-water-heaters?rule_version=2021%20Amendment.

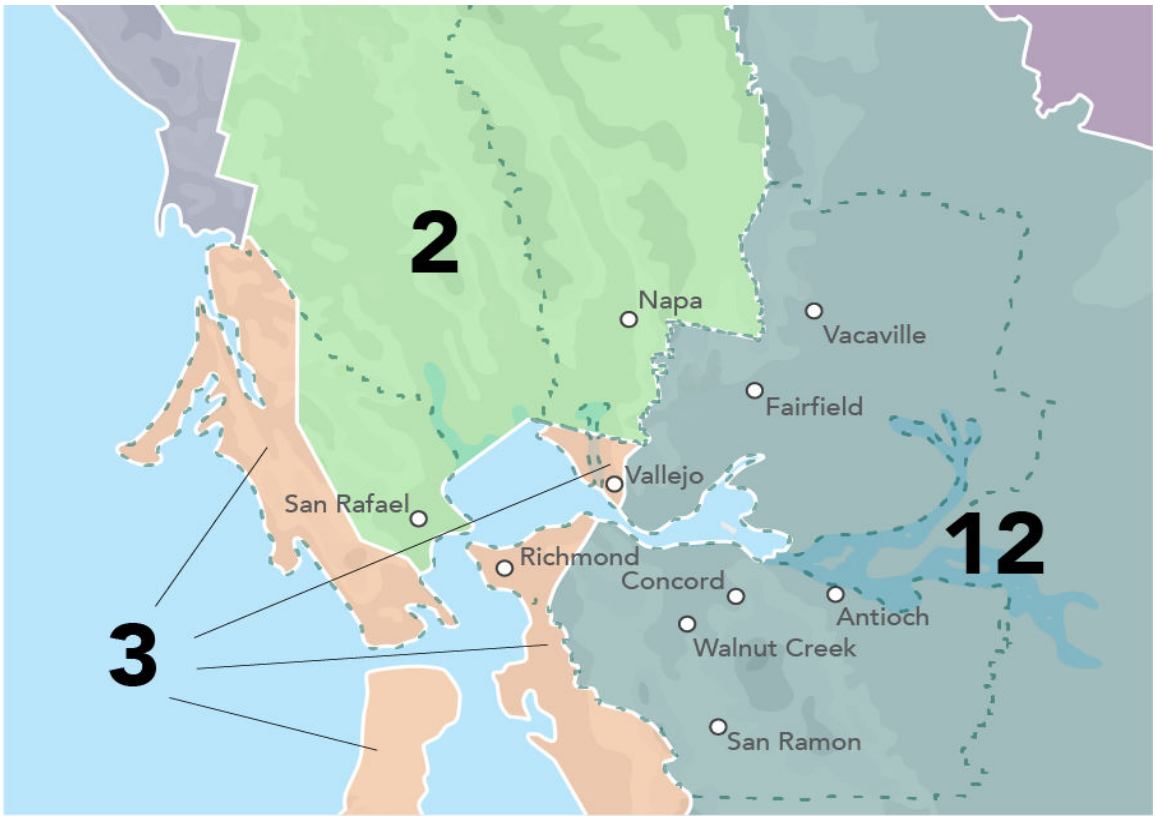
[41] Bay Area Air District released a Concepts Paper considering and discussing potential amendments to its building appliance rules in October 2025. The Bay Area Air District is actively soliciting public comments and considering potential amendments to building appliance rules at the time of Application filing. MCE will continue to track and coordinate with relevant efforts as they evolve. *See*, *e.g.*, BAAD, Appliance Rules Concept Paper Overview, October 2025, available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/appliance-rules-concept-paper_12_2_25-pdf.pdf?rev=bc39e07f66724bb6abb2b4f7d6400cc9&sc_lang=en.

[42] California Energy Commission, 2025 Building Energy Efficiency Standards, available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency.

[43] CARB, Zero emission Space and Water Heater Standards, available at: https://ww2.arb.ca.gov/our-work/programs/zero-emission-space-and-water-heater-standards (no final rule at time of filing).

- CZ2 – Coastal Marin County: heating degree day ("HDD") dominated, where temperatures are cooler than standard;
- CZ3 – Inland Marin County, Napa County, Western Contra Costa County: HDD is the design concern, but relatively mild; and
- CZ12 – Eastern Contra Costa County and Solano County: while still HDD dominated, there are significantly more cooling degree days ("CDD") than in CZ2 or CZ3. Temperatures are warmer than standard with highs reaching 100 degrees Fahrenheit.[44]

Figure 2-4: Climate Zones in MCE's Service Area



Over the past century, the climate in MCE's service area and California as a whole has trended warmer, leading to an increase in CDD with a corresponding decline in HDD.

[44] California Energy Commission, Climate Zone tool, maps, and information supporting the California Energy Code, available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/climate-zone-tool-maps-and.

Furthermore, the counties in MCE's service area fall within California's "climate divisions"[45] that have experienced the largest percentage increase in CDD over the last century. Whereas the number of CDD in August in California increased by approximately 106% since 1895,[46] the number of August CDD in California Climate Division 1 (the "North Coast Drainage" which includes Marin and portions of Napa and Solano Counties) increased by 190% over the same time frame. In addition, the number of August CDD in California Climate Division 4 (the "Central Coast Drainage," which includes portions of Contra Costa County) increased by 174% over the same time frame. Moreover, the trend of increasing CDD has accelerated over the past decade.[47] Adapting to this hotter climate will lead to more energy consumption directed at space cooling from both existing and newly installed equipment. The increase in energy consumption for space cooling will likely be accompanied by a corresponding but smaller reduction in energy consumption from space heating.

The changing climate presents heightened fire risks in the wildland-urban interface ("WUI") areas[48] of MCE's service area. Recognizing this, and the potential for overhead utility power lines to spark fires, the Commission developed fire threat maps to set areas of higher fire

[45] NOAA's Climate Division Dataset divides each state into six to ten climate divisions and then averages all daily temperature and precipitation observations in each climate division into areal and monthly averages. This is the only long-term temporally and spatially complete dataset from which to generate historical climate analyses (1895-2013) for the contiguous United States. It was originally developed for climate division, statewide, regional, national, and population-weighted monitoring of drought, temperature, precipitation, and heating/cooling degree day values.

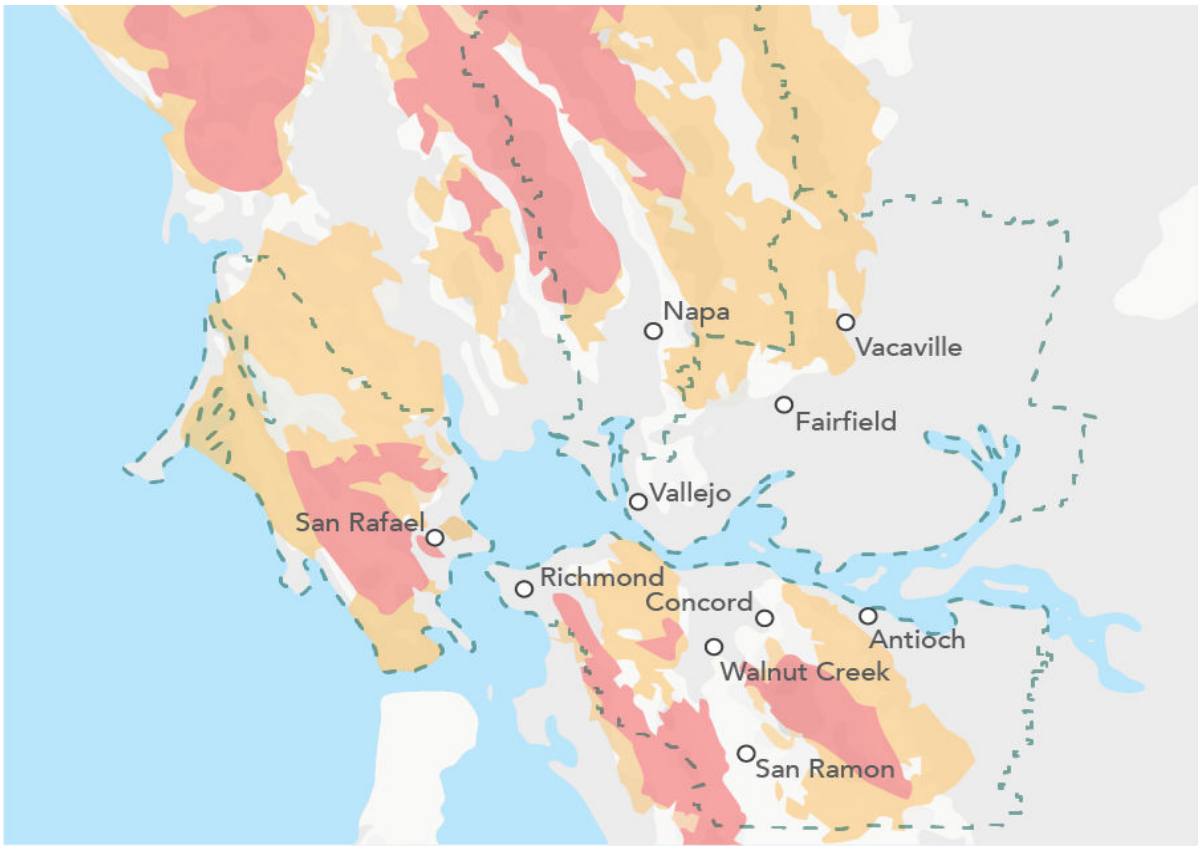
[46] Nat'l Oceanic and Atmospheric Administration, Climate at a Glance, Statewide Time Series, Cooling Degree Days over 12 months, available at: https://www.ncdc.noaa.gov/cag/statewide/time-series. The baseline used is 1895.

[47] Nat'l Oceanic and Atmospheric Administration, Climate at a Glance, Divisional Time Series, available at: https://www.ncdc.noaa.gov/cag/divisional/time-series.

[48] WUI is defined as "the zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels." *See* U.S. Fire Administration, "What is the WUI", available at: https://www.usfa.fema.gov/wui/what-is-the-wui/.

risk where stricter fire-safety regulations should apply.[49] These maps indicate that most of Marin and Napa Counties, and nearly half of Contra Costa County are located in Commission-designated High Fire Threat Districts ("HFTDs") – Tier 2 (elevated – displayed in yellow in Figure 2-6 below) and Tier 3 (extreme – displayed as red in Figure 2-6 below).

Figure 2-5: High-Fire Threat Districts in MCE's Service Territory[50]



7. Conclusion

Overall, MCE's service area presents both challenges and opportunities to effectively administer EE programs. MCE has experience consistently overcoming those challenges by implementing a locally tailored, flexible program design and deployment strategy that evolves to

[49] *See* Cal. Pub. Util. Comm'n, PUC Fire Safety Rulemaking Background, available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking.
[50] *See* Cal. Pub. Util. Comm'n, HFTD map, available at: https://www.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2.

meet its customers' needs throughout portfolio implementation. For the 2028-2031 program cycle, MCE is proposing to deploy a suite of strategies that will help it continue to overcome the implementation barriers associated with its unique service area, and provide solutions that maximize system benefits and optimize customer outcomes.

8. Summary Tables

MCE provides the below Tables summarizing its expected performance metrics for the four- and eight-year budget requested:

Table 2-3: 4-year Portfolio Budget Forecast Summary (2028-2031)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)					
	2028	**2029**	**2030**	**2031**	**Total (4 Years)**
Total Budget	$15,577	$16,454	$16,556	$16,664	$65,251
Resource Acquisition Segment Budget	$9,502	$10,037	$10,099	$10,165	$39,803
Market Support Segment Budget	$765	$808	$813	$818	$3,203
Equity Segment Budget	$4,687	$4,951	$4,982	$5,014	$19,635
Codes and Standard Budget	$0	$0	$0	$0	$0
EM&V	$623	$658	$662	$667	$2,610
Administration	$1,020	$1,460	$1,499	$1,539	$5,518
ED Portfolio Oversight	$0	$0	$0	$0	$0

Table 2-4: 4-year Portfolio Forecast Summary (2028-2031)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)						
	2028	**2029**	**2030**	**2031**	**Resource Acquisition Segment Only (Total 4-Year)**	**Total (4 Years)**
Total System Benefit (TSB)	$16,737	$17,452	$18,224	$19,012	$58,392	$71,426
Total Resource Cost (TRC) Ratio	0.98	0.97	1.00	1.03	1.23	1.00
Program Administrator Cost (PAC) Ratio	1.07	1.06	1.10	1.13	1.43	1.09
Societal Cost Test (SCT) Base	1.30	1.29	1.33	1.37	1.59	1.35
Societal Cost Test (SCT) High	1.30	1.29	1.33	1.37	1.60	1.35
Ratepayer Impact Measure Test Ratio (RIM)	0.58	0.58	0.59	0.59	0.71	0.58
Lifecycle GWh[51]	27	27	27	27	192	109
First Year MW	1,467	1,467	1,467	1,467	5.553	5,868
Lifecycle MMTherms	7	7	7	7	16	26.3
Lifecycle CO2 Metric Tons	4,739	4,044	3,952	3,931	14,577	16,666

[51] Resource Acquisition segment GWh savings exceed Total (4 Years) GWh savings due to the high volume of electrification measures forecasted within the Equity segment.

Table 2-5: 4-year Portfolio Budget Forecast Summary (2032-2035)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)					
	2032	**2033**	**2034**	**2035**	**Total (4 Years)**
Total Budget	$16,777	$16,896	$17,021	$17,151	$67,845
Resource Acquisition Segment Budget	$10,234	$10,306	$10,383	$10,462	$41,385
Market Support Segment Budget	$824	$829	$835	$842	$3,330
Equity Segment Budget	$5,048	$5,084	$5,122	$5,161	$20,415
Codes and Standard Budget	$0	$0	$0	$0	$0
EM&V	$671	$676	$681	$686	$2,714
Administration	$1,585	$1,633	$1,682	$1,732	$6,632
ED Portfolio Oversight	$0	$0	$0	$0	$0

Table 2-6: 4-year and 8-year IOUs Total System Benefit Forecast (w/out C&S) vs. Goals

4-Year and 8-Year Total System Benefit Forecast vs. Goals ($000)			
Year	**Total System Benefit Forecast**	**Total System Benefit Goals**	**Percent of TSB Goal**
2028	$16,737	$16,737	100%
2029	$17,452	$17,452	100%
2030	$18,224	$18,224	100%
2031	$19,012	$19,012	100%
Total (4 years)	$71,426	$71,426	100%
2032	$19,818	$19,818	100%
2033	$20,642	$20,642	100%
2034	$21,542	$21,542	100%
2035	$22,413	$22,413	100%
Total (4 years)	$84,416	$84,416	100%
Cumulative (8 years)	$155,842	$155,842	100%

Chapter 3: Portfolio Strategies

In this Chapter, Marin Clean Energy ("MCE") discusses all the Portfolio Strategies identified in the California Public Utilities Commission ("CPUC" or "Commission") Energy Division staff issued *EE Business Plan Application Template*.[52] MCE utilizes each of the strategies discussed in this Chapter to accomplish the Commission's energy efficiency ("EE") goals. Some of these strategies target specific sectors or segments, while others apply more broadly across all of MCE's programs. Collectively, these strategies operate synergistically to accomplish the ambitious and wide-ranging EE goals laid out by the Commission, the state, and stakeholders in MCE's service area. MCE discusses additional sector specific strategies in **Chapter 6: Segmentation and Sector Strategy**.

1. Advance affordability and mitigate overall rate impacts

MCE's EE programs advance affordability and mitigate overall rate impacts by reducing energy consumption, lowering energy burdens, and decreasing systemwide demand during the most expensive hours on the grid. By delivering targeted efficiency upgrades—particularly in income-qualified homes and historically underserved small businesses—these programs help customers directly lower their monthly energy bills while also reducing arrearages and long-term energy insecurity. At the system level, efficiency measures and load-shifting strategies decrease overall procurement costs by both reducing peak demand and overall demand, thereby helping to moderate rates for all customers. MCE designed its Equity segment program offerings to maximize bill savings for customers experiencing the highest energy burdens. MCE committed the maximum budget cap to Equity and Market Support segments and suggests altering the cap to better mitigate energy affordability challenges, as discussed further in **Chapter 11: Policy Recommendations**.

[52] Final version issued February 4, 2026.

In addition to the general reduction of rates described above, MCE layers its EE offerings with other complementary programs, rebates, and offerings, with the goal of leveraging its approved EE budget so that it may have the maximum impact possible. MCE has designed these programs to incentivize participation; maximize Total System Benefit ("TSB"); enhance cost-effectiveness of ratepayer dollars; deliver greater non-energy benefits ("NEBs") like improved health, safety, and comfort; and lower customers' bills. For example, MCE's Small Business Energy Advantage Program ("SBEA") amplifies affordability benefits by connecting eligible customers in disadvantaged communities with MCE's Cares Credit—a $25/month bill relief discount alongside EE opportunities.[53] Similarly, MCE stacks Transformative Climate Community ("TCC") funds with MCE's Home Energy Savings ("HES-E") funds to offer deeper direct install retrofits to more customers in the city of Richmond.[54] Together, these efforts support MCE's mission to deliver equitable, affordable, and reliable service while reducing cost pressures across the portfolio.

Advancing affordability and producing bill savings is especially critical during the 2028-2031 portfolio period. California has entered an energy affordability crisis[55] and rates are predicted to continue increasing through 2028.[56] Affordability-focused EE strategies are one of the only tools

[53] MCE's Board of Directors approved $5 million dollars in funding for bill relief for low-income customers and small businesses. MCE, MCE Cares Credit, June 2024, available at: https://mcecleanenergy.org/as-electricity-bills-soar-mce-offers-relief/.

[54] Unlike certain EE funds, TCC funds can be used for purposes of electrical readiness like mold/pest remediation, electrical repair, measure drainage, electrification-related home repair (drywall repair, platform construction, etc.). Richmond Rising, Learn About the Projects, available at: https://richmondrisingca.org/projects/ (Resilient Homes and Landscapes).

[55] Sierra Club, California's Affordability Crisis: Utilities Asking for More Money for Shareholders, November 2025, available at: https://www.sierraclub.org/articles/2025/11/california-s-affordability-crisis-utilities-asking-more-money-shareholders.

[56] CPUC, 2025 Senate Bill 695 Report, 2025, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/office-of-governmental-affairs-division/reports/2025/2025-sb-695-report_093025.pdf, p. 2 ("…electric bundled residential average annual rate (RAR) increases over the period 2016 – 2024 were about 11 percent, 8 percent, and 7 percent for PG&E, SCE, and SDG&E, respectively, compared to an

customers can use to protect themselves against high rates while simultaneously helping to reduce system-wide power procurement costs and greenhouse gas ("GHG") emissions. If customers cannot reduce their usage, they are at greater risk of arrearages and disconnection, which present tremendous health and safety risks to impacted customers and California.[57]

2. Optimize TSB achievement and cost-effectiveness, as well as TSB achieved per ratepayer dollar spent

MCE's core strategies to optimize TSB achievement and maintain portfolio cost effectiveness are to: (1) align program payments with TSB whenever possible, (2) focus on the promotion and installation of high TSB measures, (3) promote behavioral-based programs, which typically offer WO or no-cost measures with significant TSB, and (4) continuously and iteratively improve MCE's programs by prioritizing and deploying learnings.

MCE's primary strategy to maximize TSB is to align program payments with TSB wherever possible. This strategy leverages the important role of normalized metered energy consumption ("NMEC") programs, which provide incentives based on measured performance. In addition, MCE's programs will tie implementer compensation directly to delivered TSB through pay-for-performance incentives. This dynamic creates clear economic motivation for implementers to deliver high-TSB projects, which in turn allows MCE to maintain a cost-effective portfolio.

Second, MCE will continue to deploy and promote high TSB programs. This includes expanding its Strategic Energy Management ("SEM") program and growing its Residential and

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inflation rate of 3.5 percent over the same period and are expected to continue increasing above inflation through 2028.").

[57] The Utility Reform Network ("TURN"), Living Without Power: Health Impacts of Utility Shutoffs in California, 2018, available at: https://downloads.ctfassets.net/ntcn17ss1ow9/2AXQK5Lv4gwQkgD88IAGDY/f9b42f76d4d3bde79c4e84060bce9710/2018_TURN_Shut-Off-Report_FINAL.pdf, p. 5 (connecting shutoffs to hunger, respiratory illness, early childhood development risks, stress, fire risks, life support and chronic illness impacts).

Commercial Flex Market programs.[58] This effort is based on strong implementer partnerships and begins with selecting program implementers with the expertise to deliver strong results, developing effective outreach strategies, and deploying high-TSB measure projects.

Third, to improve cost effectiveness, MCE will continue to develop strategies to help customers identify low- to no-cost EE opportunities through behavioral-based programs. MCE plans to expand its SEM program and recruit additional large industrial and commercial customers to this program. Large industrial and commercial programs present tremendous cost-effective energy savings opportunities due to their high baseline energy consumption. In addition, MCE plans to launch a new behavioral focused subprogram for small and medium business within the Energy Management program.[59] Lastly, MCE will grow its integrated demand-side management ("IDSM") programming[60] to provide high-TSB with low program costs.[61]

MCE's portfolio design is built on the strong foundation of its existing programs that it believes will continue to achieve cost-effectiveness in the next business plan application cycle. MCE is also committed to iteratively improving its programs based on lessons learned in previous program years, and continuously striving to optimize the TSB achieved. Further, as described in **Chapter 9: Evaluation, Measurement & Verification** ("EM&V"), MCE will conduct E&MV projects that MCE anticipates will generate additional portfolio efficiencies.

[58] MCE's SEM program and MCE's Residential and Commercial Flex Market programs are described in detail in **Chapter 6: Segmentation and Sector Strategy**.
[59] The Energy Management program, is described in detail in **Chapter 6: Segmentation and Sector Strategy**.
[60] MCE AL 74-E (proposing MCE's IDSM program); CPUC, Resolution E-5387 Proposals submitted by Pacific Gas & Electric Company ("PG&E"), Southern California Edison Company ("SCE"), Southern California Gas Company ("SoCalGas"), San Francisco Bay Area Regional Energy Network ("BayREN"), Inland Regional Energy Network ("I-REN"), Marin Clean Energy (MCE), Southern California Regional Energy Network ("SoCalREN"), and Tri-County Regional Energy Network ("3C-REN"), detailing their intended multi-distributed energy resource integrated demand side management frameworks and programs.
[61] MCE's IDSM programming is described in detail in **Chapter 6: Segmentation and Sector Strategy**.

3. Advance building decarbonization activities in EE portfolios

MCE's EE portfolio incorporates building decarbonization as a foundational principle across all programs, sectors, and customer segments. Advancing affordable, equitable, and community-led decarbonization solutions is key to MCE's mission.[62] Because EE is itself a decarbonization strategy, all MCE programs inherently contribute to GHG reduction. Over time, MCE's portfolio has evolved to prioritize program design and implementation that promotes building electrification, and does not include incentives or services for gas-fired appliances.[63]

3.1 Decarbonization Incentives

MCE's Equity programs, including the Home Energy Savings Equity program ("HES-E"), Multifamily Energy Savings Equity program ("MFES-E"), and the SBEA provide incentives for multifamily, single-family, and commercial property owners and tenants, respectively, with a focus on moderate- and low-income households and commercial customers within disadvantaged communities. The programs pinpoint the best fit for effective and efficient electrification and EE measures, while providing education to customers on the advantages of electrification. Each program begins with a comprehensive onsite energy assessment to determine optimal project design that includes a combination of electrification and EE measures and approaches. Expert implementers next recommend comprehensive projects that integrate electrification with EE

[62] MCE, About, https://mcecleanenergy.org/about/ ("Our mission is to confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.").

[63] *See e.g.*, Opening Comments of Marin Clean Energy on Administrative Law Judge's Ruling on Providing Notice and Opportunity to Comment on Staff Proposal for Policy on Natural Gas Energy Efficiency Incentives, pp. 1-4 (describing MCE's building electrification programs within the EE portfolio and its support for policies that enable greater electrification).

measures to maximize affordability, health, safety, and comfort benefits. MCE regularly layers external funds to serve additional customers and provide deeper electrification focused retrofits.[64]

For the Resource Acquisition ("RA") segment, MCE has built on the success of the equity residential programs, namely MFES-E and HES-E, and has launched RA programs that mirror the project process and successful programmatic elements. MCE's MFES-R[65] and HES-R programs offer incentives for electrification upgrades that begin with the same comprehensive onsite energy assessment to determine project design. MFES-R and HES-R programs suspend the Equity segment eligibility requirements of MFES-E and HES-E to allow more customers facing barriers to electrification to participate. Incentives for the installation of heat pumps and other efficient electric measures support decarbonization across MCE's market-rate residential customers. MCE designed the MFES-R and HES-R programs to deliver short-term cost-effective avoided-cost benefits to the electricity and natural gas systems. By focusing on electrification measures that reduce the use of natural gas, the MFES-R program supports progress on the state's GHG emissions reductions and decarbonization goals.

For commercial customers, MCE's Residential Efficiency Flex Market program offers upfront incentives to aggregators for installing cost-effective decarbonization measures. By stacking MCE and partner program incentives, the Residential Efficiency Flex Market helps bring higher-cost and less common decarbonization technologies, such as heat pumps, closer to cost parity while expanding contractor experience in these installations.

[64] Including, but not limited to the Transformative Climate Communities: Richmond Rising, Equitable Building Decarbonization program, and MCE's self-funded ancillary measures fund. MCE is also actively involved in implementing S.B. 1221 (Min, 2024) for neighborhood decarbonization pilots and exploring layering options.

[65] MCE submitted the program launch request for MFES-R in MCE AL 91-E, pp. 10-12. The Commission accepted MCE AL 91-E with an effective date of January 20, 2026.

3.2 Evaluation, Measurement, and Verification (EM&V)

MCE's EM&V activities focus on improving the overall design, implementation, and performance of building decarbonization programs to ensure effective service delivery across sectors. In this Application, MCE proposes an EM&V study focused on identifying cost-effective retrofit strategies to support the decarbonization of existing manufactured homes within its service area. Manufactured homes represent a critical equity and emissions-reduction opportunity, as these households often face higher energy burdens, limited access to capital, and unique structural challenges that complicate electrification.[66] MCE plans to assess retrofit and electrification pathways for manufactured homes in its service area. MCE's Manufactured Homes Electrification EM&V study will explore:

- Passive design and weatherization improvements suitable for existing manufactured housing stock;
- Sealing, insulation, and ventilation measures that can enhance comfort and reduce energy loss;
- Pathways for electrification retrofits, including efficient space conditioning, water heating, and cooling technologies;
- Financing and implementation models that make upgrades more accessible to low-income and fixed-income residents; and
- The impacts of the above on total system benefits and the total resource cost ratio for this historically underserved housing type.

Study findings will inform future program design guidance, regional decarbonization policy coordination, and MCE's broader equity and decarbonization strategies. This data will also support advancing equitable building decarbonization statewide in alignment with state policies.[67] MCE discusses additional EM&V details in **Chapter 9: Evaluation, Measurement and Verification**.

[66] *Id*.
[67] AB 806 (Connolly, 2025).

3.3 Decarbonization Workforce Support

MCE's Market Support program (the Green Workforce Pathway Program ("GWPP"))[68] advances building decarbonization by expanding workforce capacity to install and maintain advanced EE and electrification technologies while creating sustainable employment in the developing electrification industry. Through the GWPP, MCE specifically supports decarbonization by:

- Aiding the development of a workforce that advances electrification and supports statewide and regional EE and GHG reduction goals.
- Fostering growth of the decarbonization economy through collaboration between job seekers and contractors.
- Building partnerships between MCE and industry professionals that help reduce costs of electrification by providing needed training to expand providers in MCE's service area and encourage customer adoption of decarbonization and EE measures.

Growing and strengthening regional coalitions among municipalities, community-based organizations, community choice aggregators, and Load Serving Entities ("LSEs") to align efforts around decarbonization.

4. Focus electric savings at peak times with high avoided cost and TSB

The Flex Market and IDSM programs are focused on delivering electric savings at peak times, by offering incentives that are tied to the measure load shape, higher during peak hours, and lower during off-peak hours. Within these programs MCE utilizes data analytics to identify customers who have high peak load and market the program directly to those customers.[69] Part of this analysis identifies potential end uses, such as heating, cooling, and lighting, that can also inform the customer identification.

Another way that MCE promotes the shift out of the peak period is through education and marketing activities, both within CPUC-funded programs and through its broader non-CPUC-

[68] This program is described in detail in **Chapter 6: Segmentation and Sector Strategy**.

[69] MCE is committed to offering EE programs to all its customers, complying with all applicable data privacy laws, ensuring equitable access to its programs, and following Commission requirements for program administration. MCE's use of its data analytics tool is rooted in those core principles.

funded outreach activities. MCE's SBEA program provides customers an educational collateral, as well as energy coaching during the recruitment and enrollment process. MCE's SEM program also has an educational module which includes the discussion of IDSM and the importance of load management and reducing usage during the peak period. Lastly, MCE's marketing team runs an annual campaign of reducing 4-9pm usage to all MCE customers. Historically the messaging has been via both digital and print media.[70]

5. Use of meter-based savings measurement

MCE has leveraged meter-based savings measurement in its RA portfolio for many years and will continue into this business plan application cycle. For example, MCE's Flex Market program has been a successful population-NMEC program since 2022. In addition, MCE will continue to run its SEM program, which leverages meter data in the assessment of Behavioral Retro-commissioning and Operational ("BRO") measures. MCE is building on these successful projects with a new Low-GWP Refrigerant Accelerator program,[71] which will include population NMEC based savings, in addition to the Refrigerant Avoided Cost Calculator ("RACC") TSB value derived from ultra-low global warming potential technologies.

In this cycle MCE would like to utilize custom load shapes[72] based on metered savings, assuming the functionality is available in the Cost-Effectiveness Tool ("CET").[73] Custom load shapes would demonstrate actual, real-world savings and grid conditions which may be greater

[70] *See* MCE, Check the Time from 4 to 9, available at https://mcecleanenergy.org/4-9-energy-savings/.
[71] This program is described in detail in **Chapter 6: Segmentation and Sector Strategy** and Low-GWP Refrigerant Accelerator Program Card in **Exhibit 2: Program Cards**.
[72] CPUC, California Energy Data and Reporting System ("CEDARS"), Load Shapes, available at: https://cedars.cpuc.ca.gov/deer-resources/tools/load-shapes/ (defining and discussing load shapes).
[73] CPUC, Memo: CPUC MEASURE PACKAGE GUIDANCE FOR LOAD SHAPES, December 2021, available at: https://cedars.cpuc.ca.gov/deer-resources/tools/load-shapes/file/118/download/#:~:text=11-,Cost%20Effectiveness%20Tool%20(CET).,hourly%20end%20use%20load%20shapes ("Cost Effectiveness Tool (CET). The CET is used to calculate the cost effectiveness of a measure and/or portfolio of measures. The CET uses the avoided cost combo values developed from the avoided costs and the hourly end use load shapes.")

than those that would be valued using a modeled load shape on a deemed measure basis. Adopting custom load shapes for measurement and verification aligns the hourly savings valuation and subsequent TSB calculation.

6. Promote and deploy "exempt measures" in the equity segment, including targeted outreach and engagement and pilots to identify and develop solutions for key barriers, needed education and training/workforce readiness and technical assistance, and other relevant elements.

The Commission defines "exempt measures" as gas-saving measures that do not burn gas, such as insulation, air sealing, efficient windows and doors, smart thermostats, low-flow fixtures, behavioral programs, and energy audits.[74] Electrification measures also qualify as exempt, as they generate gas savings without burning gas. MCE strongly supports prioritizing equity and market support customers in the Commission's decarbonization policies within the EE portfolio. Equity customers, especially, are disproportionately impacted by the varied health impacts of natural gas appliances in California.[75] Equity customers simultaneously face greater barriers to electrification, often require additional ancillary EE measures prior to electrification, and are historically underserved by EE programs more broadly.[76] Equity customers also experience higher energy burdens, devoting more than two to three times the percentage of their income to energy costs than other customers.[77]

[74] D.23-04-035, Conclusion of Law 1; CPUC Energy Division Staff, Energy Efficiency Natural Gas Incentive Phase-Out Staff Proposal (DRAFT), December 2025, p. 1.
[75] UCLA Fielding School of Public Health Department of Environmental Health Sciences, 2020, available at: https://coeh.ph.ucla.edu/effects-of-residential-gas-appliances-on-indoor-andoutdoor-air-quality-and-public-health-in-california/ (finding disproportionate impacts for low-income and environmental justice communities due to a variety of compounding factors like greater exposure to outdoor air pollution, low housing quality, living in a smaller unit, older building age, etc.).
[76] Evergreen Economics, Evaluation of MCE's Low Income Families and Tenants (LIFT) Program, 2024, pp. 30-32 (detailing retrofit costs and barriers for low-income electrification projects).
[77] ACEEE, Drehobl, Ariel, Lauren Ross, and Roxana Ayala, How High Are Household Energy Burdens?, 2020, available at: https://www.aceee.org/sites/default/files/pdfs/u2006.pdf, pp. iii, v.

MCE began phasing out incentives for non-exempt gas measures within the Equity segment in 2021, starting with the HES-E (formerly Single-Family Direct Install) program, followed by common area and in-unit projects in the multifamily segment through the MFES-E and Low-Income Families and Tenants ("LIFT") programs.[78] The SBEA program incentivizes exempt measures as well. In addition, the GWP Market Support program assists job seekers and contractors by promoting education and training in home electrification and exempt measures.

MCE's Equity programs (HES-E, MFES-E, and SBEA) will continue to provide a variety of exempt measures and services at no- or low-cost to the customer, including:

- In-home assessments;
- Insulation;
- Duct and air sealing;
- Faucet aerators;
- Heat pump technologies;
- Induction cooking;
- Smart thermostats;
- Smart timers and outlets;
- Variable frequency drive motors; and
- Pipe insulation.

[78] MCE launched the Low-Income Families and Tenants ("LIFT") pilot program offered incentives to low-income multifamily properties from 2017 through 2023. LIFT goals were to reduce energy burden and improves the quality of life of residents in income-qualified multifamily properties in MCE's service area. The Program offered EE, electrification, and health, safety, and comfort upgrades. *See* Evergreen Economics, Evaluation of MCE's Low Income Families and Tenants (LIFT) Program, 2024.

Key barriers to deploying exempt measures among residential and commercial equity customers include split incentives,[79] customer awareness gaps, [80] cost and disruption concerns, and building diversity.[81] MCE addresses these challenges through comprehensive program design and ongoing adaptation.

First, to overcome split incentives between property owners and tenants, the MFES and SBEA programs provide incentives for both in-unit and common area upgrades. These programs offer generous incentives to cover installation costs that directly benefit tenants while providing owners with property value enhancements and health, safety, and comfort improvements through whole-building upgrades.

Second, to address tenant and property owner awareness and education gaps, MCE's program implementers and vendors provide technical assistance and project management to property owners and tenants to support informed decision-making, to clarify and refine best-fit options, and to align with financing opportunities where needed and applicable. The GWPP Market Support program similarly connects experienced and educated contractors with MCE programs and projects to promote electrification expertise and build work pipelines.

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[79] American Council for Energy Efficient Economy, Expanded Split Incentives in Buildings' Value Chains, (2024), available at: https://www.aceee.org/sites/default/files/proceedings/ssb24/assets/attachments/20240722160818906_fd1c24d3-02a5-4dc8-bf5c-7421b7fa6adf.pdf, p. 2 ("A split incentive is when the benefit of a transaction is not accrued by the payer, discouraging the transaction. The classic example of this is the relationship between landlord and tenant. The landlord could install a more efficient heating system that would lower heating bills. However, if the tenant pays the heating bill, the landlord does not have a personal financial incentive. In fact, the landlord has a disincentive, as they would have to pay for the improvements and never make their money back. Therefore, the conflicting interests of the landlord and the tenant prevent energy efficiency from being implemented.").

[80] DNV, MCE LOW-INCOME FAMILIES AND TENANTS PILOT PROGRAM EVALUATION, 2021, p. 34 ("Given the newness of the technology [electric heat pumps] and the lack of customer exposure to it, there could be potential misconceptions about and misuse of heat pump technology.").

[81] Fadali, Lyla, Michael Waite, and Paul Mooney, ACEEE, The Value of Decarbonizing Equitable, Efficient Building Electrification, 2024, available at: www.aceee.org/researchreport/b2405, pp. 3-10.

Third, concerns regarding cost and project disruption are mitigated through substantial incentives that offset upgrade expenses, particularly for resource-constrained property owners and tenants in all Equity segment programs. MCE's portfolio integrates multiple funding sources by stacking incentives from sources external to the CPUC for upgrades not included in CPUC programs. This enables installation and remediation of ancillary projects that support exempt measures installations, such as electrical panel or wiring improvements, light construction, and mold/pest remediation prep work.

Lastly, given the diversity in size, age, condition, and system type among all properties served by Equity segment programs, MCE continuously refines its program designs and offerings based on property feedback and field insights to meet a broad range of needs. For example, MCE, via its implementer, conducts post-install surveys with HES-E customers 72 hours following the installation of EE and electrification measures. These surveys provide vital data to support customers through program participation and refine programmatic implementation based on real-time customer satisfaction data.

To further strengthen implementation, MCE plans to develop targeted building decarbonization pilots across diverse building types to evaluate delivery models, cost, and logistics. Lessons learned from these pilots will inform refinements to program delivery and identify scalable approaches. Data collected on energy savings, tenant comfort, and owner satisfaction will be used to develop case studies and best practices that can assist in further education for existing, previous, and new program participants. Existing plans for pilot programs are discussed in **Chapter 6**: **Portfolio Strategies**, **Chapter 7: Portfolio Coordination**, and **Chapter 9: Evaluation, Measurement & Verification**.

Finally, MCE submits for the Commission's consideration that there are additional Commission-imposed constraints to serving Equity segment customers with exempt measures. While exempt measures in Equity segment programs are not subject to cost-effectiveness tests, they can be resource- and budget-intensive. Equity segment program funding remains capped at 30 percent of the overall portfolio, limiting the scale of deployment. From MCE's research and understanding of its service area, this 30 percent cap is not proportional to the size of the Equity segment, and specifically, to Equity segment building decarbonization needs.[82] Direct install strategies, though effective, require significant resources and may remain constrained without additional budget allocations. MCE recommends revisiting this 30 percent cap in **Chapter 11: Policy Recommendations**. Nevertheless, by using pilots, leveraging complementary funding sources, and strategically targeting high-need properties, MCE can continue to maximize the impact and reach of its exempt measure initiatives in Equity and Market Support segment programs within these constraints.

7. Increase progress on the CPUC ESJ Action Plan Goals.

Programs in MCE's Equity segment deliver EE services to hard-to-reach, underserved, and disadvantaged communities, in alignment with the Commission's Environmental and Social Justice ("ESJ") Action Plan.[83] In this application, MCE refers to all categories of customers eligible for its proposed Equity segment programs using the umbrella term "Equity customers." MCE defines "Equity customers" as residential customers and businesses in ESJ communities. ESJ communities are defined by the Commissions ESJ Action Plan (2022),[84] although MCE

[82] MCE discusses a policy recommendation to allow PAs to raise the Equity and Market Support segment caps to a level proportional to their Equity segment customers in detail in **Chapter 11: Policy Recommendations**.
[83] CPUC, ESJ Action Plan (Version 2.0), April 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf.
[84] *Id.*, p. 2.

applies an additional income modifier for those customers it targets with the HES-E program.[85] Expanding access to EE programs in ESJ communities not only advances energy savings goals, but also delivers vital co-benefits such as improved comfort, safety, indoor air quality, and lower utility bills, consistent with the ESJ Action Plan.[86]

7.1 ESJ Action Plan Goal #2: Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health

MCE's Equity segment programs combine the goals of providing health and air quality benefits to customers with a commitment to serving ESJ communities. By using the following strategies, MCE addresses disparities in access to EE programs and promotes resilience, health, comfort, safety, energy affordability, and energy savings while reducing energy-related GHG and criteria pollutant emissions.

a. Partnering with Trusted Implementers Experienced in Serving ESJ Communities

MCE uses a competitive selection process and chooses implementation partners with demonstrated experience in the Equity sector and serving Equity customers. As energy equity focused programs are most effective when conducted by trusted messengers,[87] MCE selects implementation partners based on their experience serving ESJ communities and customers with culturally competent and in-language methods for communities where English is not the primary language. MCE also selects implementation partners with documented experience in delivering

[85] Described further in **Chapter 6: Segmentation and Sector Strategy**.
[86] *Id.*, p. (Goal 2: Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health), pp. 22-23.
[87] California Energy Commission, Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities, 2016, p. 9 ("The Legislature should direct funding for all state programs to collaborate with trusted and qualified community-based organizations in community-centric delivery of clean energy programs, in coordination with local government").

programs that provide GHG emissions mitigation and NEBs including bill savings, health, safety, and comfort benefits through installation of the appropriate technologies for each unique homes' needs, including EE and electrification measures.

b. Low- or No-Cost Options Solve Cost Issues

MCE provides accessible, no- or low-cost energy assessments, installations, and technical assistance. By combining multiple financing sources and incentive streams, MCE effectively reduces or eliminates customer out-of-pocket costs, removing a key barrier to participation for households and businesses with limited discretionary income.[88]

To further enable electrification readiness and success, MCE identifies self-funding and external funding stacking opportunities for projects that provide NEBs such as electrical circuit repair, light construction, and mold remediation.[89] These investments are especially important within residential equity programs, where such conditions often prevent participation in conventional upgrade offerings.

c. Range of Upgrades Allows Projects to Proceed

Each MCE Equity segment program provides customers with upgrade options tailored to the property and their unique needs. For multifamily properties, MFES-E options include small-space measures ideal for in-unit projects. Single family homes are provided with items not typically required for multi-family properties in the HES-E program (*e.g.*, insulation and air sealing). The SBEA offers measures selected for commercial utility, like vending machine controls and advanced lighting systems.

[88] Fadali, Lyla, Michael Waite, and Paul Mooney, ACEEE, The Value of Decarbonizing Equitable, Efficient Building Electrification, 2024, available at: www.aceee.org/researchreport/b2405, pp. 3-10.

[89] For example, TCC funds can be used for purposes of electrical readiness like mold/pest remediation, electrical repair, measure drainage, electrification-related home repair (drywall repair, platform construction, etc.). Richmond Rising, Learn About the Projects, available at: https://richmondrisingca.org/projects/ (Resilient Homes and Landscapes).

7.2 ESJ Action Plan Goal 5: Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs

Community-based organizations ("CBOs") can play a vital role in supporting ESJ customers' and businesses' participation in EE programs and program related decisions. [90] MCE regularly partners with trusted CBOs in its service area to share programmatic offerings, channel energy education, and seek community feedback on program design and implementation.[91] MCE's administration experience has found that its Equity customers benefit from meeting those customers where they are—engaging customers at a neighborhood or multi-family property level. MCE uses email, social media, public and community-based events, and canvassing, to introduce predominantly moderate- and low-income customers to programs and program offerings. Interested customers receive no-cost assessments and participation incentives.

As discussed in **Chapter 8: Stakeholder Engagement**, MCE regularly conducts a variety of ongoing stakeholder outreach activities to continuously seek feedback from the customers and communities it serves. During program years 2024-2027 of its EE portfolio, MCE conducted 20 interviews with local contractors, completed 119 surveys of residential customers on electrification barriers and equitable electrification, and distributed 223 surveys to Home Energy Savings program participants following their receipt of direct install measures. Additionally, MCE surveyed 81 small businesses on their EE needs and conducted nine interviews with local permitting authorities on permitting barriers to decarbonization and direct installs. MCE also maintains the MCE Community Power Coalition—a network of approximately 160 social, racial,

[90] BEEP Coalition, Building Energy, Equity & Power (BEEP) Coalition: Findings from Statewide Listening Sessions Presentation to the AB 32 Environmental Justice Advisory Committee (April 2022), available at: https://ww2.arb.ca.gov/sites/default/files/2022-04/BEEP%20Slides_4.26.22.pdf at p. 5 ("Equitable Process + Meaningful Engagement.").

[91] *See* MCE discussion of EE CBO partnerships and community engagement activities in **Chapter 8: Stakeholder Engagement**.

and environmental justice organizations that do feet-on-the-street work to address inequities in our local communities—and invited Coalition members to a virtual discussion on MCE's draft Application. Overall, in the development of this Application, MCE conducted 12 stakeholder activities and engaged over 30 organizational stakeholder organizations for direct feedback. Feedback was welcomed through roundtable discussions, individual conversations, existing meetings, over email, and via a written survey. MCE's partnership and engagement with coalition members is discussed in detail in **Chapter 8: Stakeholder Engagement**.

7.3 ESJ Action Plan Goal #7: Promote economic and workforce development opportunities in ESJ communities

As discussed above, MCE offers the GWPP, serving contractors, job seekers, and decarbonization policy goals. MCE designed the GWPP to offer meaningful workforce development opportunities for contractors and job seekers in ESJ communities.[92] By participating in the GWP program, contractors gain the expertise and technical capacity to implement EE and electrification projects that advance ESJ Action Plan goals and benefit their communities. This knowledge benefits both their engagement in MCE programs and their broader business practices serving hard-to-reach, disadvantaged, and low-income customers with EE and electrification measures across MCE's service area.

Through the GWPP, participating contractors gain access to a pipeline of vetted, job-ready candidates. On-the-job training covers both direct install measures—such as insulation, smart thermostats, lighting, and exhaust fans—and advanced electrification technologies like heat pump HVAC, water heating, and air and duct sealing. Community-based partners further strengthen these efforts by supporting outreach, program design, and delivery, boosting both local economies

[92] MCE discusses its focus on high-road employment specifically *infra* in **Chapter 3: Portfolio Strategies** and in **Chapter 6: Segmentation and Sector Strategy**.

and customer service. Through this program, contractors can be equipped with the skills and knowledge about EE and electrification that can help them serve ESJ communities by participating in MCE programs, as well as for their day-to-day business practices serving MCE's hard-to-reach, disadvantaged, and low-income customers.

8. If you would like to pursue integrated demand-side management (IDSM) activities within your portfolio, propose your strategy including technologies, target customer engagement tools, etc.

IDSM measures and activities within MCE's EE portfolio support strengthening its cost-effectiveness, TSB, grid reliability, bill savings, and customer satisfaction in program participation. IDSM programs allow the flexibility necessary for MCE's programs to produce more valuable energy savings at key times of electric grid stress that simultaneously benefit the participant customers and the non-participant customers using the electric grid.[93] As California's reliability[94] and affordability[95] needs evolve, MCE finds IDSM programs integrated within EE portfolios to be essential. To advance this integration, MCE proposes a cross-functional program, the Peak Flex Market program, that delivers load flexibility through IDSM, by optimizing existing equipment and leveraging new equipment installed with non-CPUC funding. MCE will leverage the same strategy that optimizes the delivery of TSB by aligning program payments with savings that deliver the most value (in terms of hourly avoided cost associated with demand reduction). The most value is found where avoided costs are highest – across the summer's peak hours – which

[93] American Council for an Energy-Efficient Economy, ENABLING INDUSTRIAL DEMAND FLEXIBILITY: ALIGNING INDUSTRIAL CONSUMER AND GRID BENEFITS, February 2024, available at: https://www.aceee.org/sites/default/files/pdfs/enabling_industrial_demand_flexibility-aligning_industrial_consumer_and_grid_benefits.pdf, p. 5.

[94] Cal. Energy Comm'n, Staff Report: California Energy Resource and Reliability Outlook, 2025, July 2025, available at: https://www.energy.ca.gov/publications/2025/california-energy-resource-and-reliability-outlook-2025, p. 108 ("Electricity Demand: California's electricity demand continues to rise, peaking in summer. The 2024 IEPR Update forecasts a coincident peak of nearly 46,000 MW for the California ISO in summer 2025.").

[95] Executive Order N-5-24.

therefore strengthens the value proposition for demand management as a project type or intervention that will be rewarded. The financial signal to MCE's program partners and customers will be clear – savings that are generated during peak hours can be compensated at considerably higher rates.

MCE's IDSM program[96] will deploy managed EV charging, battery energy storage, thermal energy storage, heat pump water heaters, and controllable HVAC systems. MCE will conduct E&MV to ensure that it builds off the initial program results in 2026-2027, incorporating programmatic improvements during this next business plan cycle.

MCE is also currently developing a Virtual Power Plant ("VPP")[97] that will enable an array of devices to be controlled centrally—an asset that is ripe for IDSM program participation. By 2028 MCE anticipates there will be a significant portfolio of managed load which will be able to participate in MCE's IDSM program. MCE will provide additional details in its future implementation plans pursuant to Commission requirements.

9. Increase workforce education and training to better deliver quality EE installations

MCE proposes to continue to administer the GWPP—a workforce education and training initiative that strengthens the capacity of the electrification workforce. The program equips contractors and job seekers with the skills needed to install and maintain advanced EE and electrification technologies, while creating sustainable, high-road employment opportunities within the growing clean energy sector. MCE's GWPP provides long-term, relevant support and

[96] *See also* MCE AL 74-E.

[97] MCE, MCE's Virtual Power Plant Pilot in Richmond Energy that's cleaner for Richmond and more reliable for everyone, available at: https://mcecleanenergy.org/virtual-power-plant/ ("Currently the City of Richmond is the only eligible community, however, we intend to expand the program throughout our service area, including Contra Costa, Marin, Napa and Solano counties. The Richmond pilot is anticipated to run through 2025. We will be announcing when the project opens up to additional communities.").

education for EE and electrification contractors and their staff, and provides on-ramping opportunities for job seekers into sustainable and long-term career paths. MCE achieves these goals through the following methods:

- Industry outreach to EE industry professionals, workforce development groups, CBOs, and local governments;
- Education and in-the-field technical training opportunities for contractors, EE professionals, and job seekers;
- Individualized job seeker support towards a career in the energy industry, including interview and resume coaching, connections to local industry experts, and paid training opportunities with local contractors; and
- Identification and removal of barriers faced by contractors seeking to upskill their staff and grow their business by providing onboarding support, personalized education and training, and stipends to defray costs of training.

10. Propose your preferred approach to regular reporting of demographic energy efficiency program participation information, as required by D.23-06-055 (COL 38)

Decision 23-06-055 directs all PAs to work with the Reporting Policy Coordination Group ("Reporting PCG") to jointly develop a report addressing the demographic reporting questions listed in Section 7.7 of the Decision.[98] The PCG Demographic Data Working Group completed this report in August 2025, summarizing areas of consensus, areas of divergence, and feasible approaches for demographic reporting across all PAs. MCE's positions below draw from the Working Group's findings and reflect our preferred approach for inclusion in MCE's 2026 EE Portfolio Application.

[98] D.23-06-055, at OP 23.

10.1 Feasible Options for Assessing Demographic Participation

MCE's preferred approach is to use census-based geographic data, California Alternate Rates for Energy/Family Electric Rate Assistance ("CARE/FERA") enrollment, CalEnviroScreen scores, Medical Baseline flags, customer type, usage, and rate class to assess demographic participation. This avoids the need to collect sensitive demographic information directly from participants, reduces administrative burden, and maintains consistency and privacy across the portfolio. Direct collection of sensitive demographic characteristics is recommended through voluntary, targeted EM&V studies when necessary.

10.2 Demographic Data Already Collected

MCE currently collects several demographic data points through existing customer and program systems, including address, census-derived attributes, income indicators (CARE/FERA), preferred language (program-dependent), customer type, usage, and rate class. These data support demographic analysis for most customer-facing EE programs.

10.3 Demographic Data That Could Be Collected

MCE supports limiting demographic data for routine reporting to non-sensitive, feasible attributes such as census tract, DAC designation, CARE/FERA status, language, customer sector, and usage characteristics. Additional elements such as household size or race/ethnicity should only be collected through EM&V or voluntary surveys where appropriate.

10.4 Programs and Sectors for Which Data Should Be Collected

MCE recommends applying demographic participation reporting to Residential, Public, and Commercial programs where customers are identifiable. Upstream, midstream, Workforce Education & Training, Industrial, Agricultural, and Codes & Standards programs should not be required to report demographic participation data. Industrial and Agricultural programs consist of

business entities rather than households, and demographic constructs such as income, language, or race/ethnicity do not meaningfully apply. These customers often operate multiple facilities across numerous census tracts, making census-based demographic analysis unlikely to yield reliable or meaningful results.

10.5 Where Demographic Data Should Be Reported and Stored

Participant-level identifiers and addresses should remain within MCE's internal systems. Aggregated demographic metrics that provide appropriate privacy protections should be reported to the CPUC using existing reporting channels such as annual reports and CEDARS claims. Mapping of addresses to census tracts should be completed by the PA using established tools to ensure accuracy and consistency.

10.6 Timeline for Beginning Demographic Participation Reporting

MCE recommends beginning demographic reporting no earlier than 6-12 months after CPUC final requirements are adopted in the 2026 Application decision, allowing sufficient time for system updates and data validation. Preliminary voluntary reporting may occur during the transition period.

10.7 Frequency of Reporting

MCE recommends annual reporting for demographic participation metrics and quarterly updates for any claim-level data tied to CEDARS submissions, consistent with Working Group consensus and existing reporting cadences.

10.8 Conclusion

In short, MCE favors a demographic reporting approach that uses geographic data, respects customer privacy, aligns with current CPUC processes, and limits administrative burden, while still enabling deeper demographic analysis through EM&V as appropriate.

11. Overcome sector and segment specific challenges (e.g., market support, equity, residential, multifamily, industrial, etc.)

The energy transition presents diverse sector and segment-specific challenges that impact EE market reach, equity outcomes, and program delivery across California's residential and non-residential segments. MCE strives to overcome these barriers by developing strategies rooted in equity, technical assistance, workforce development, and strong local partnerships. These strategies are discussed in more detail in **Chapter 6: Segmentation and Sector Strategy**. MCE's equity-focused initiatives are designed to ensure that hard-to-reach, disadvantaged, and ESJ communities fully participate in and benefit from the state's clean energy transformation, consistent with CPUC's EE and decarbonization policy framework.

11.1 Equity (Intended Beneficiaries: Multifamily and Single-Family Hard-to-Reach, Disadvantaged, and Underserved Communities)

MCE's programs deliver comprehensive energy education and technical assistance throughout the upgrade process for disadvantaged, underserved, and hard-to-reach customer segments. The MFES-E program engages property owners, managers, and tenants from project inception to completion, addressing sector barriers such as complex property types, varied retrofit scopes, and the split-incentive challenge. MCE's HES-E program provides residents with home-specific assessments conducted by trained professionals, ensuring that each project scope maximizes benefit and compliance with efficiency standards. MCE's SBEA program aims to deliver meaningful bill savings and EE education to small businesses located in ESJ communities and businesses that meet the definition of Hard-to-Reach ("HTR") through free onsite assessments and energy upgrades including electrification measures.

Each program tailors technology selections to property characteristics and unique customer needs. For example, MFES-E implements in-unit ductless systems for efficient heating and cooling in small spaces; HES-E incorporates air sealing and insulation for housing stock below energy

code; and SBEA emphasizes technologies suited for small business applications, such as advanced lighting and vending controls.

a. Neighborhood and Community-Based Approach

To expand program access, MCE deploys neighborhood-based outreach strategies in hard-to-reach and disadvantaged areas identified using CalEnviroScreen and census data. Outreach channels include community events, canvassing, digital engagement, and word-of-mouth referrals. These localized approaches strengthen community trust, promote program awareness, and foster long-term participation. Additionally, in the MFES-E program, MCE partners with local governments, housing providers, and CBOs to leverage established networks that increase visibility and participation.[99] MCE also partners with CBOs and implementers to routinely receive customer satisfaction and real-time program participation feedback. MCE uses customer feedback to guide and update its implementation of programs.[100]

b. Expert-Led Assessment and Comprehensive Evaluation

MCE's programs rely on expert-led, whole-building assessments that evaluate each property as an integrated energy system. This technical assistance identifies holistic improvement opportunities that reduce total energy demand and associated GHG emissions. Following assessment, MCE presents tailored upgrade recommendations that align energy savings potential and TSB with property characteristics while incorporating cost-effective, high-efficiency technologies.

c. Commitment to Safety and Non-Combustion Measures

Across its portfolio, safety and environmental health are foundational to MCE's electrification and EE programs. MCE exclusively promotes non-combustion, electric heat pump

[99] *See* further discussion of activities in **Chapter 8: Stakeholder Engagement**.
[100] *Id*.

technologies that provide NEBs by eliminating risks associated with gas combustion such as leaks or indoor air quality hazards. Measures including high R-value attic insulation, air and duct sealing, and thermal envelope improvements help improve comfort, safety, and indoor air quality. MCE ensures that Equity program participants understand and can benefit from this commitment.

d. Quality Assurance and Continuous Improvement

MCE maintains strict quality assurance ("QA") and quality control ("QC") standards to ensure program integrity, customer safety, and that the goals of the Equity programs are accomplished. Key QA/QC activities include:

- Comprehensive desktop reviews for project accuracy and compliance;
- Periodic measure list updates to integrate emerging, high-performance technologies;
- Systematic tracking of GHG emission reductions to align with CPUC climate and savings goals;
- Customer feedback evaluation to inform continuous program improvement; and
- Pre- and post-installation inspections by trained specialists to validate installation quality.

11.2 Market Support (Intended Beneficiaries: Electrification and EE Workforce)

Through its GWPP, MCE addresses workforce capacity barriers by developing accessible, stackable training opportunities that prepare workers for high-road careers in the electrification and EE sectors. GWPP establishes and maintains partnerships among contractors, job seekers, and CBOs to close workforce gaps, increase retention, and promote equitable participation among disadvantaged workers.

Key components include:

- Recruitment and ongoing engagement with local contractors to build program participation and training capacity.
- Onsite and virtual skill development sessions, with stipends for contractor-selected training modules.
- Collaboration with CBOs and workforce providers to target disadvantaged workers and connect them with paid training opportunities tied to MCE program projects.
- Program design enhancements informed by participant feedback, such as job completion bonuses and stipends for necessary equipment purchases.

Further, MCE also utilizes the Residential Building Decarbonization Job Quality & Labor Standards Toolkit ("Toolkit")[101] published by Rising Sun Center for Opportunity and the Bay Area Residential Decarbonization High Road Training Partnership ("HRTP") in its administration of the GWPP. The Residential Building Decarbonization Job Quality and Labor Standards Toolkit is an implementation resource designed to help program administrators advance High Road labor standards,[102] in publicly funded or subsidized residential building decarbonization programs in the Bay Area. MCE thinks it is critical to match vetted job seekers with entry-level positions at companies that promote living wages, benefits, career enrichment opportunities, as well as safe environments compliant with controlling local, state, and federal standards.

Labor standards include, but are not limited to:

- Fair Wages and Benefits, including wages, healthcare, and retirement;
- Regional and Targeted Hire;
- Compliance and Accountability; and
- Training, Certification, and Career Advancement.

MCE supports high-road employment and ensures that participating GWPP contractors demonstrate their commitment to these standards. If contractors do not meet minimum high road standards, MCE encourages contractors to work toward achievement and to re-apply when they offer sufficient benefits to their employees. MCE's GWPP also provides Electrification Training stipends to allow contractors and their staff to advance their technical electrification skills as well as soft skills. Participants in GWP can apply to receive funds for any training that fits their unique needs as a contractor. MCE reviews and approves the training request if it is substantive and

[101] Rising Sun and Bay Area Building Decarbonization HRTP, Job Quality & Labor Standards Toolkit, December 2024 available at: https://risingsunopp.org/wp-content/uploads/HRTP-Res-Decarb-Job-Quality-and-Labor-Standards-Toolkit-v2.pdf.

[102] Rising Sun and Bay Area Building Decarbonization HRTP, HRTP Residential Building Decarbonization Summary, available at: https://risingsunopp.org/wp-content/uploads/Rising-Sun-Bay-Area-Residential-Building-Decarb-HRTP-Summary.pdf.

promotes safety practices, sales, home performance upgrades, electrical, plumbing, or any field that fits within the electrification industry's needs.

Within the GWPP, MCE partners with local and regional CBOs to lead training for HVAC, plumbing, electrical, and general contractors with an emphasis on recruiting Minority, Women, and Disadvantaged Business Enterprises ("MWDBE"). For example, MCE completed a six-session training series with Emerald Cities called the E-Contractor Academy.[103] A total of 15 MWDBE contractor firms participated in the E-Contractor Academy. Over the six sessions, topics included: High Road Contracting with UA Local #342, Public Contracting, Diversity Certifications, Bonding & Insurance, Intro to Marketing and Capability Statements, as well as other technical training around building decarbonization topics.

By prioritizing equitable access and professional development, MCE's workforce programs address industry-wide challenges—including limited training access, time constraints on contractors, and workforce retention difficulties—while enabling scalable program delivery aligned with California's EE and decarbonization targets.[104]

11.3 Agricultural

The agricultural sector presents a unique challenge for MCE programs, in that the number of customers in its service is small and the project opportunities for significant energy savings and TSB are also small. MCE will continue to creatively and effectively market its services to this customer segment and explore ways to establish a cost-effective delivery of services.

MCE's strategies to meet TSB goals and provide value to its agricultural customers include: (1) efficiently implement agricultural programs within the overarching MCE Energy

[103] Emerald Cities Collaborative, E-Contractor Academy, available at https://emeraldcities.org/our-work/e-contractor-academy/.
[104] D.25-08-034, Decision Adopting Energy Efficiency Goals for 2026-2037 at OP 1-2.

Management Program umbrella; (2) deploy EE projects with measures designed to meet agricultural customers' unique business needs; (3) identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform; (4) market program benefits by engaging with local agricultural partner organizations (*e.g.*, county farm bureaus); and (5) promote and encourage customer enrollment in other complementary sustainability, affordability, and energy initiatives (referred to as the "Any Open Door" strategy).

11.4 Industrial

The Industrial sector has been a growth area for MCE EE programs in recent years. Although Industrial customers' usage patterns do present a challenge, and establishing relationships with multinational organizations can also be difficult, its SEM program has proven successful and will continue to expand its services into this sector.

MCE's strategies to ensure that its industrial program delivers value to its industrial customers, while also achieving or exceeding TSB goals, largely parallel the agricultural sector strategies. MCE strategies include (1) holistic program design and implementation that cost-effectively addresses the needs of industrial customers (MCE's Energy Management program) and mitigates common customer pain points; (2) deploy SEM and custom projects with measures designed to meet industrial customers' unique business needs; (3) scale incentives based on TSB; (4) identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform; and (5) support streamlined customer enrollment in other complementary programs. (referred to as the "Any Open Door" strategy). Through its Energy Management program, MCE will also serve public sector facilities whose operations resemble industrial processes, including facilities such as water and wastewater treatment plants.

11.5 Commercial

MCE's commercial sector presents unique challenges for developing multi-measure or uniquely non-lighting projects. With the significant impact of participant costs in the cost effectiveness calculation (TRC), commercial programs will need to consider creative ways to simultaneously promote customer benefits and portfolio cost-effectiveness.

This sector includes programs that reach a diverse customer base, including Equity small business customers, for whom capital investment in EE equipment is challenging. Many of these customers are also customers facing well-known incentive misalignment problems. The tenant businesses pay for energy while landlords manage the properties. MCE's program tries to address this through tenant education, building owner education, and by offering direct install measures.

MCE uses a variety of strategies to meet or exceed TSB goals in this sector, to provide value to its commercial customers, and to ensure that commercial Equity customers have equitable access to EE program funding. Those strategies include: (1) efficiently implement commercial programs within the overarching MCE Energy Management Program umbrella; (2) deploy SEM and custom projects with measures designed to meet commercial customers' unique business needs; (3) scale incentives based on TSB; (4) identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform; (5) incorporate low global warming potential equipment installations; (6) assist customers to access and enroll in creative financing opportunities offered by other entities; and (7) support streamlined customer enrollment in other complementary programs (referred to as the "Any Open Door" strategy).

11.6 Residential

MCE began offering residential EE programs in 2013 and has since grown its residential EE offerings. During this time, MCE has observed several challenges in this sector which are outlined below.

Multifamily properties face challenges unique to the relationship between property owners, managers, and tenants of those properties. Typically, there is the issue of "split incentives", *i.e.*, benefits may not be realized by the entity responsible for covering the costs of the EE upgrade. For example, the property owner or manager may have difficulty supporting an EE project where upgrades will cost them money and provide a benefit to the tenant in the form of lower bills and new, efficient appliances. Because of this, it is more common for property managers and/or owners to take an interest in common area upgrades that could result in energy and cost savings for them rather than the tenants. Property managers and/or owners also typically have several competing tasks and obligations related to the properties they oversee, which makes it difficult to focus on energy-saving matters. On the tenant side, on the other hand, there is little incentive to pay for in-unit upgrades that stay with and enrich the property owner upon move-out. This challenge applies to market rate, moderate- and low-income properties alike.

MCE has also experienced challenges specifically related to serving tenants in multifamily settings. Contractors and program implementers often experience greater difficulty gaining access to units because of a lack of trust by tenants and sometimes property managers or owners. It is difficult to get access to in-unit usage data without express consent of tenants, which requires communication and trust-building by the contractor. This can be time- and effort-intensive, leading to high program administrative costs. Determining tenant income levels, where necessary to

establish which program is appropriate for a given property, presents an additional challenge for program implementers.

Reaching and serving single-family residential customers has its own set of challenges. A HTR segment of this sector is property owners with incomes that exceed low-income EE and electrification program income levels (*e.g.*, the State's Energy Savings Assistance ("ESA") program),[105] but who still lack the resources to fund home upgrades. In addition, even if these customers receive incentives for EE and electrification measures, the cost for ancillary measures (*e.g.*, electric panel upgrades, support structures, light carpentry, safety testing) often prevents them from participating in programs. For single-family residential customers, providing cost-effective and scalable, broad-reaching programs is a challenge. With a four-county footprint, MCE customers span all demographics, and programs need to be nimble enough in outreach and offerings to serve all of them.

MCE's goals for the residential sector are two-fold, based on the income level of the target customers. First, MCE intends to serve low- to moderate-income customers with comprehensive offerings that save energy and money while providing additional NEBs. Second, MCE plans to serve market-rate residential customers with programs that meet or exceed TSB thresholds. Underlying these goals is the need to reach a broad swath of customers, geographically, demographically, and economically. This requires programs that are easy to launch and manage, succeed at providing education and sparking interest in EE and electrification, and deliver a high TSB.

[105] Energy Savings Assistance ("ESA") Program provides no-cost weatherization services to consumers who meet the CARE income limits. CARE income guidelines can be found at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/california-alternate-rates-for-energy.

MCE is proposing to reach these goals through implementing the following programmatic strategies: (1) identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform; (2) align incentives by using pay-for-performance programs; (3) expand existing programs to reach moderate-income customers; (4) support streamlined customer enrollment in other complementary programs (referred to as the "Any Open Door" strategy); and (5) invest in community engagement. MCE discusses these strategies in **Chapter 6: Segmentation and Sector Strategy**.

12. Promote responsible management and disposal of removed refrigerant and incorporate low-GWP refrigerants/ultra-low GWP refrigerants

MCE supports and has been committed to incorporating low-global warming potential ("GWP") refrigerants into its EE portfolio.[106] MCE still believes that "shifting away from high [GWP] refrigerants to low-GWP refrigerants through EE programs presents a unique and valuable opportunity."[107] Senate Bill 1013 (Lara, 2018) requires the Commission to "consider developing a strategy for including low-GWP refrigerants in equipment funded by the energy efficiency programs overseen by the Public Utilities Commission."[108] Following Senate Bill 1013, Decision ("D.") 21-05-031 correspondingly directs PAs to develop "[p]rograms that encourage the use of lower-GWP refrigerants than current 'standard practice' or regulation."[109] The Decision also "encourages the program administrators to seek out all cost-effective opportunities to incorporate low-GWP measures in the energy efficiency portfolios."[110] MCE plans to promote the installation of low and ultra-low GWP refrigerants throughout its portfolio.

[106] MCE 2024 Application, Exhibit 2, p. 1-16 (incorporating low-GWP measures into its efficiency market programs).
[107] *Id*.
[108] Senate Bill 1013 (Lara, 2018), sec. 2.
[109] D.21-05-031, p. 53.
[110] *Id.*, p. 60.

MCE will align its programs with other agencies and future regulations. This includes collaboration with the California Air Resources Board's ("CARB") Fluorinated Gas Reduction Incentive Program, BayREN's Refrigeration Replacement Program, and the statewide Technology and Equipment for Clean Heating program. MCE will also seek to collaborate with other utilities, community choice aggregators, and other regional agencies on low and ultra-low GWP programs.

MCE is also working to close gaps it has identified. In this Application, MCE proposes launching a new program (the Low-GWP Refrigerant Accelerator program) which addresses a gap in service of small and medium-sized businesses which operate refrigeration systems that will not be regulated by CARB regulations. This program will leverage a performance-based program framework to pay incentives that align with the TSB of refrigerant conversion projects and the associated EE benefits of a whole building approach, leveraging population-NMEC metrics and verification. In the deployment of this program, MCE will require installers to provide record of the proper recapture and disposal of the existing and/or newly installed refrigerant, to ensure safe handling. The program will evaluate the field data against the RACC and provide real-world examples of refrigerant management.

Lastly, MCE will work with industry groups, such as the North American Sustainable Refrigeration Council ("NASRC"), to educate contractors on the proper handling of refrigerants. NASRC has a track record of providing refrigeration workshops in Southern California Edison's service area and MCE will explore similar offerings in its service area. In addition, MCE's GWPP can be a potential pathway for educational opportunities for contractors in its service area.

13. Spur innovation to advance a technology, marketing strategy, or delivery approach in a manner different from previous efforts in your EE portfolios

13.1 Utilize Customer Data Analytics

The MCE Data and Analytics team has created a customer data analytics platform, rooted in CALTRACK methods, which enables the EE programs team to identify customers with the greatest potential to benefit from specific programs.

The platform references customer Advanced Metering Infrastructure ("AMI") data and creates a load profile for each customer. The team is then able to use several demographic and usage filters, along with analytic parameters to create reports. The platform can identify customers with specific end-use patterns, flagging customers who have high cooling, heating, lighting, and other load types.

This tool will be integral in the refinement of program design, the identification of appropriate ME&O activities, and in maximizing TSB and ongoing M&V of customers. MCE will utilize this information to better market programs directly to customers and assist its implementor partners. This has been an MCE funded effort to date that will provide a direct benefit to the CPUC program portfolio.

13.2 Increase program participation among market rate residential customers.

MCE proposes multiple activities to promote greater program participation from market rate residential customers in its EE portfolio. MCE is redesigning its Residential Flex Market Program to offer upfront incentives combined with performance-based incentives. MCE received feedback from the contractor community that purely performance-based programs were too risky for a smaller residential contractor to take on. MCE is therefore working to identify the appropriate mix of incentives to best balance participation and performance.

MCE is also creating new information resources. MCE provides a contractor directory on its website that includes information about what programs customers are prequalified to participate in, what type of work they specialize in, and union membership.

Additionally, MCE is expanding its market rate offerings. MCE is creating a Resource segment version of its successful Home Energy Savings Equity program ("HES-E"), which is focused on serving low-to moderate income customers. This new program, HES-R, will use the same successful program delivery and marketing channels as HES-E, but will offer lower rebates and focus on more cost-effective measures for market rate residential customers.

14. Incorporate community-based program design in relevant existing and planned EE programs that promote meaningful community involvement, advances equity, and ESJ Action Plan goals (D.23-06-055, OP 31)

MCE is committed to meaningfully engaging with stakeholders, especially local CBOs during the design, implementation, and evaluation of its EE portfolio programs.[111] As a PA since 2013, MCE finds that ongoing stakeholder engagement and opportunities for customers and communities are essential ingredients for the success of its EE programs.[112] MCE regularly conducts a variety of ongoing stakeholder outreach activities to continuously seek feedback from the customers and communities it serves. Additionally, MCE conducted significant stakeholder outreach for the preparation and submission of this EE Business Plan Application.[113]

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[111] *See* The Greenlining Institute, Equitable Building Electrification Framework (2019), available at https://greenlining.org/wp-content/uploads/2019/10/Greenlining_EquitableElectrification_Report_2019_WEB.pdf. ("Rich community input and engagement strengthen the overall program design quality with stronger cultural competence, ensure local buy-in and investment, and deliver tangible local benefits rooted in the lived experiences of everyday people. Partner with community-based organizations to develop a decision-making process that ensures that decisions are based on community needs and priorities.")

[112] BEEP Coalition, Building Energy, Equity & Power (BEEP) Coalition: Findings from Statewide Listening Sessions Presentation to the AB 32 Environmental Justice Advisory Committee (April 2022), available at: https://ww2.arb.ca.gov/sites/default/files/2022-04/BEEP%20Slides_4.26.22.pdf at p. 5 ("Equitable Process + Meaningful Engagement.").

[113] *See* discussion in **Chapter 8: Stakeholder Engagement**.

MCE incorporates community-based program design throughout its EE portfolio to ensure meaningful community involvement, advance equity, and align with the goals of the ESJ Action Plan. Across programs, MCE prioritizes centering community voices and integrating feedback into program design, implementation, and continuous improvement. For example, all participants in the HES-E program receive follow-up calls and feedback surveys to gather direct input on customer experience, barriers, and opportunities for improvement. Insights from these conversations are routinely used to refine both outreach strategies and program delivery. MCE also partners with CBOs to expand access and trust, compensating CBOs for their role in marketing and educating customers about available programs—an approach that ensures culturally responsive engagement and supports local capacity. Additionally, MCE presents regularly to its Community Power Coalition[114] to share program updates, gather input from community leaders, and strengthen alignment between community priorities and program offerings. Together, these practices embed community-centered design principles across MCE's portfolio, ensuring programs are responsive, equitable, and grounded in the lived experiences of the communities we serve.

As is explained in more detail in **Chapter 8: Stakeholder Engagement**, MCE conducted the following ongoing community-based design stakeholder outreach activities related to its EE portfolio during PYs 2024-2027:

- **Local Contractors**: MCE conducted 20 interviews with local contractors on electrification and permitting barriers.

[114] MCE's Community Power Coalition is a network of 160 social, racial, and environmental justice organizations that do feet-on-the-street work to address inequities in its local communities. MCE partners with coalition members to: address climate change and eliminate the use of fossil fuels in its communities; create learning opportunities about climate justice for community-based organizations; expand access to renewable energy services and customer programs; and encourage participation in the design and execution of MCE's energy equity programs and policies. See Appendix 1 in **Chapter 8: Stakeholder Engagement** for full list of members and participants.

- **Residential Customers**: MCE completed 119 surveys of residential customers on electrification barriers and equitable electrification.
- **Low-and Moderate-Income Program Participants**: MCE distributed 223 surveys to Home Energy Savings-Equity program participants following their receipt of direct install measures. MCE staff called direct install participants directly. Seventy-eight completed program feedback surveys. Of respondents, 96 percent of participants were 100 percent satisfied.
- **Small Business**: MCE surveyed 81 small businesses on EE needs and participation barriers when developing its Small Business Energy Advantage ("SBEA"). MCE surveyed small businesses via online workshops and online and telephone surveys.
- **Local Permitting Authorities**: MCE conducted nine interviews with local permitting authorities on various topics including permitting barriers to decarbonization and direct installs.
- **Contractor Power Breakfast**: MCE hosted a contractor power breakfast in August 2025 seeking feedback from local contractors and labor unions on a variety of EE program, decarbonization workforce issues, and program design/implementation strategies. Twenty-six representatives of local contractors and labor unions participated.
- **Municipal Engagement**: MCE staff regularly hold 1:1 sessions with MCE's 38 member communities to ensure the agency supports local priorities. This flexible approach allows MCE to provide deeper and more attuned assistance to highly active communities, while also facilitating multi-city collaborative efforts to advance shared regional goals. Through these interactions, MCE Community Engagement staff regularly share program updates, and solicit feedback from municipal staff on ways to support community members.

MCE will continue ongoing stakeholder engagement activities with its Community Power Coalition, CBO partnerships, Municipal engagement meetings, contractors, and program specific work in PY 2028-2031, and will update its activities and methods of outreach as needed pursuant to community feedback.

Chapter 4: Forecast Methodology and Zero-Based Budgeting

Marin Clean Energy ("MCE") proposes a reasonable Application budget request optimized to balance annual spending while achieving a cost-effective and comprehensive portfolio consistent with energy efficiency ("EE") goals. This section provides an overview of MCE's annual spending budgets and supporting analysis for development of the zero-based budget.

The following framework guided MCEs annual spending budgets for EE programs: (1) regulatory and statutory requirements and legislative guidance; (2) MCE's mission and vision; (3) analysis of program performance during current cycle; (4) assessment of emerging opportunities and (5) analysis of other cost drivers, including staffing, implementation contracts and incentive costs. The sections below describe each, in turn.

1. Analysis of Program Performance

First and foremost, MCE's portfolio planning relies on its experience providing successful EE programming to its customers since first launching programs in 2012 on an Elect-to-Administer basis[115] and operating them on an Apply-to-Administer basis since 2013.[116] MCE's proposed EE programming for PYs 2028-2031 builds upon MCEs existing portfolio to achieve evolving goals and redress existing gaps.

MCE evaluated its existing programs using multiple performance factors to identify which program offerings to expand, maintain, modify, or scale back. These findings include:

- Under performance of the Normalized Metered Energy Consumption ("NMEC") programs relative to Total System Benefit ("TSB") forecasts.
- Under performance of Multifamily ("MF") Strategic Energy Management ("SEM") programs relative to Total Resource Cost ("TRC") goals.

[115] Resolution E-4518, August 2012, Ordering Paragraph 1 ("Marin Energy Authority's 2012 energy efficiency program administration plan, as submitted on June 22, 2012, is certified pursuant to Public Utilities Code Section 381.1(f).") (MCE was formerly Marin Energy Authority).

[116] Decision ("D.") 12-11-015, *Decision Approving 2013-2014 Energy Efficiency Programs and Budgets* at 50, Ordering Paragraph ("OP") 1 at 130 (November 15, 2012) (approving MCE EE portfolio).

- High participation in the Home Energy Savings ("HES-E") and Multifamily Energy Savings ("MFES-E") Equity segment programs, and the opportunity to build on the successful elements of those programs to offer additional cost-effective, market rate programs.

2. Assessment of Emerging Opportunities

MCE is constantly looking for underserved communities or gaps in its existing programs to identify emerging opportunities. MCE ultimately determined that two emerging opportunities are worthwhile additions to MCE's EE portfolio given the current state of programs and energy use in its service territory.

First, MCE identified an opportunity to support the deployment of low global warming potential ("GWP") refrigerants in small businesses within its territory. While there are regulations relating to the use of low GWP refrigerants in larger businesses, small businesses do not face the same regulatory requirements and do not have sufficient incentives to switch to low GWP refrigerants. MCE developed and now proposes a budget that is designed to create a program to support the deployment of low-GWP refrigerants in this market segment. This budget was based on a market analysis of MCE's service area and further advances the Commission's progress on Senate Bill 1013 (Lara, 2018).[117]

Second, MCE is looking to incorporate newly approved integrated demand-side management ("IDSM") funding into its overall program budgeting.[118] MCE's IDSM and EE work in its service territory will be coordinated together. MCE reevaluated its budget given the new opportunity it has to design and implement IDSM programs in its territory pursuant to Resolution E-5387, which will enable daily load shifting and load reduction during peak hours and coexist with EE efforts. MCE's proposed IDSM program, the Peak Flex Market, will also leverage similar

[117] Senate Bill 1013 (Lara, 2018), sec. 2.
[118] Resolution E-5387 (Sept. 18, 2025) (approving MCE AL 74-E).

participation and measurement and verification frameworks as MCE's existing Commercial and Residential Efficiency Market programs.

3. Analysis of Cost Drivers

3.1 Staffing and Operational Costs

MCE generally recovers staffing costs for active EE programs from its approved EE budget. Some cost categories are supplemented by MCE's retail generation service revenue. For example, some components of MCE's information technology, legal, and public affairs departments are funded from its General Operating Account, so those costs are not included in the EE budget forecast.

Certain cross-cutting activities—such as compliance, regulatory support, reporting, and data tracking—provide benefits to all programs. MCE determined support levels for these activities based on current staffing, and scaled accordingly to account for the program changes proposed in this application, which include the new programs for Integrated Demand-Side Management and low-GWP refrigerants, which will require additional staff resources. Cross-cutting expenses were then allocated evenly across all programs.

MCE analyzed the staffing needed for each program's unique delivery strategy; contracting structure; evaluation, measurement, and verification ("EM&V"); and other administrative and implementation needs. Full-time employee percentages were assigned to various positions. Staffing budgets consider salary and benefits for each employee and increase annually based on MCE's compensation approach. Salary expenses charged to the EE portfolio reflect staff time-tracking records.

MCE staff perform both implementation and administrative activities, and staffing costs are allocated between these categories based on estimated hours spent.

3.2 Implementation Costs

Per D.21-05-031, all costs associated with implementation contracts must be assigned to program implementation. Forecasting methods vary by program and by contract. MCE categorizes programs into four implementation structure types: Flex Market programs, Equity programs, non-metered pay-for-performance ("P4P") programs, and Market Support programs.

Table 4-1: Programs by Implementation Structure Type

Implementation Type	Programs
Flex Market Programs	Commercial and Residential Flex Market, Peak Flex Market, Low-GWP Refrigerant Accelerator Program
Equity Programs	HES-E, MFES-E, SBEA
Non-metered P4P Programs	SEM, HES-R, MFES-R
Market Support Programs	GWP

a. Flex Market Program Implementation Costs

Budgets and associated implementation contract values for Efficiency Market programs are based on the current assessment of market opportunity and the performance of these programs in the current program cycle. The primary implementation contract covers data analytics (*e.g.*, NMEC assessments), aggregator engagement, and Marketplace platform operations. MCE does not contract directly with participating aggregators. Cost of service is grounded in performance-based principles, with payments calculated as a percentage of forecasted benefits. Thus, budget needs scale with TSB delivery, and the program bears minimal cost not tied to outcomes.

Under these programs, the aggregator's share of performance payments passed on to customers is counted as an incentive, while the share retained by aggregators is classified as an implementation cost. Total payment to aggregators is determined by project TSB and TRC. The primary implementation contract cost is combination of fixed fees and performance payments. Customer costs reflect average forecasts from aggregators. MCE expects aggregators to pass on

about 20 percent of their performance payment to customers as rebates.

b. Equity Program Implementation Costs

Equity program implementation contracts account for the additional support services needed by Equity customers. Costs are not exclusively P4P. Implementers provide hands-on technical assistance, manage installation teams, and support comprehensive project delivery. Contract costs are a combination of performance payments, fixed monthly costs and reimbursement for direct install labor and materials.

c. Non-Metered Pay-for-Performance Program Implementation Costs

Programs under this category include custom and deemed rebate programs, as well as Strategic Energy Management ("SEM"). Implementation contracts are paid on a performance basis ($/unit savings), aligning expenditures with delivered results. In SEM, payments are based on forecasted savings and are trued up after final model approval.

Annual implementation budgets are based on forecasted savings potential multiplied by performance rates. Savings forecasts for SEM reflect recent program results and data-driven identification of optimal participants. Recruitment focuses on customers flagged as strong candidates based on consumption profiles.

d. Market Support Program Implementation Costs

MCE operates a single Market Support program: Green Workforce Pathways Program ("GWPP"). The budget for this program is based on time-and-materials rates for a defined scope of work, with rates established through a competitive solicitation process.

4. Program Modifications from 2024-2027 portfolio cycle

MCE agrees with the Commission's, the Governor's, the State Legislature's, community-based organizations', and ratepayers' focus on ensuring PAs maximize the benefits of any

ratepayer funds dedicated to their programming.[119] MCE considers it a priority to remain a good steward of ratepayer funds, and that is especially true for the upcoming portfolio when energy burdens are expected to remain high.

In developing its budget, MCE closely reviewed its program forecasts and pipelines for EE opportunities in its unique service territory and identified the optimal mix and size of program offerings that can meet the EE program requirements. As a result of this analysis, MCE is proposing a decrease in its overall EE budget for the years 2028-2031 from $80.1M[120] to $65.3M. This is a decrease of $14.8M, reflecting a 18.5% decrease.[121]

MCE's proposed budget reflects the number of customers and projects it believes can reasonably be served and accomplished in its territory through current and proposed program offerings. After analyzing which programs were meeting their goals and which were falling short in the current program period, MCE proposed to increase the percentage of its budget going towards its Equity and Market Support programs. This new percentage is more closely aligned with the percentage of equity customers in its service area. MCE does not believe that this will have a negative impact on its portfolio's performance, as MCE's current Equity program offerings have been a strong performer on metrics while generally remaining fully enrolled each year.

By pursuing these new opportunities and expanding currently successful programs, MCE has developed the proposed 2028-2031 budget that is best tailored to accomplish the Commission's

[119] *See*, *e.g.*, Executive Department State of California, EXECUTIVE ORDER N-5-24, October 30th, 2024, available at: https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf, pp. 1-2; Assembly Bill 3264 (Petrie-Norris), sections 1(b), 3(b); Sierra Club, California's Affordability Crisis: Utilities Asking for More Money for Shareholders, November 2025, available at: https://www.sierraclub.org/articles/2025/11/california-s-affordability-crisis-utilities-asking-more-money-shareholders.

[120] D.23-06-055 at 94. This calculation uses nominal dollars.

[121] Comparing the full $158.2M 8-year budget approved in D.23-06-055 at pp. 93-94 with the $133M 8-year budget request in this application reflects a 16% nominal dollar reduction.

policy goals in MCE's service territory while minimizing the need for scarce ratepayer funds.

4.1 Closed Programs from the 2024-2027 Cycle

MCE did not close any programs following D.23-06-055 approving its PY 2024-2027 EE portfolio.[122] While MCE is not closing its Energy Management program, MCE has determined that it will not continue to offer certain underperforming SEM subprograms (the Multi-family SEM and Agricultural SEM subprograms) at the end of its 2024-2027 cycle.[123]

4.2 Launched Programs for the 2024-2027 Cycle

Table 4-2: New Programs for the 2024-2027 Cycle

New Programs in 2024-2027 4-Year Application Cycle			
Name of New Program/Placeholder Program	**Segment**	**Sector**	**High Level Program Description/Purpose**
Small Business Energy Advantage – MCE AL 77-E (effective date July 24, 2024).	Equity	Commercial	Free, on-site energy assessments, tailored efficiency plans, and financial incentives to help local small businesses install energy-saving upgrades.
Integrated Demand-Side Management/Peak Flex Market Program – MCE AL 74-E (effective date Sept. 18, 2025).	Resource Acquisition	Commercial and Residential	Incentives for daily load shifting and load reduction during peak hours.
Multi-Family Energy Savings-Resource Program – MCE AL 91-E (effective date of Jan. 20, 2026).	Resource Acquisition	Residential	Free energy assessments, technical support, and rebates of up to $6,000 per unit for energy-efficient, electric, and water-saving upgrades to reduce utility costs and improve building efficiency.

[122] MCE closed the Home Energy Rebates program following the submission of its MCE 2024 Application prior to D.23-06-055. MCE AL 64-E (effective date Sept. 30, 2022).

[123] Despite significant outreach and effort to identify and model savings, MCE has concluded that there was insufficient demand for these programs in its territory, a low potential for energy savings, and a difficulty of modeling savings. These subprograms were described in MCE's 2022 Application in the CEDARS filings MCE01c: Multifamily Strategic Energy Management, and MCE11c: Agricultural Strategic Energy Management.

4.3 Launched Programs for the 2028-2031 Cycle

Table 4-3: New Programs in 2028-2031 4-Year Application Cycle

New Programs in 2028-2031 4-Year Application Cycle			
Name of New Program/Placeholder Program	**Segment**	**Sector**	**High Level Program Description/Purpose**
Home Energy Savings-Resource Program	Resource Acquisition	Residential	The Home Energy Savings-Resource Program focuses on implementing a direct installation strategy designed to help customers adopt electrification space and water heating systems. The single-family program will provide a fixed rebate per electrification measure and provide the homeowner with an assessment and installation contractor. Rebates will be based on market research and will be commensurate with other successful rebate programs.
Low GWP Refrigerant Accelerator	Resource Acquisition	Commercial	The MCE Low-Global Warming Potential (GWP) Refrigerant Acceleration Program focuses on helping small grocery and restaurant businesses retrofit old refrigeration systems to run on low Global Warming Potential ("GWP") refrigerants. Low GWP refrigerant measures identified by the Program include condensing unit replacements, monoblock walk-in cooler units, and standalone display cases. The Program also provides incentives for additional EE measures typical to commercial spaces such as LED lighting, refrigeration, and HVAC, which are quantified through metered energy savings. The Program combines both low-GWP refrigerant and EE incentives to reduce typical installation costs by between 25 and 50 percent.

Chapter 5: Portfolio Management

1. Overview for 4-year plan and 8-year plan: Key metrics and outcomes

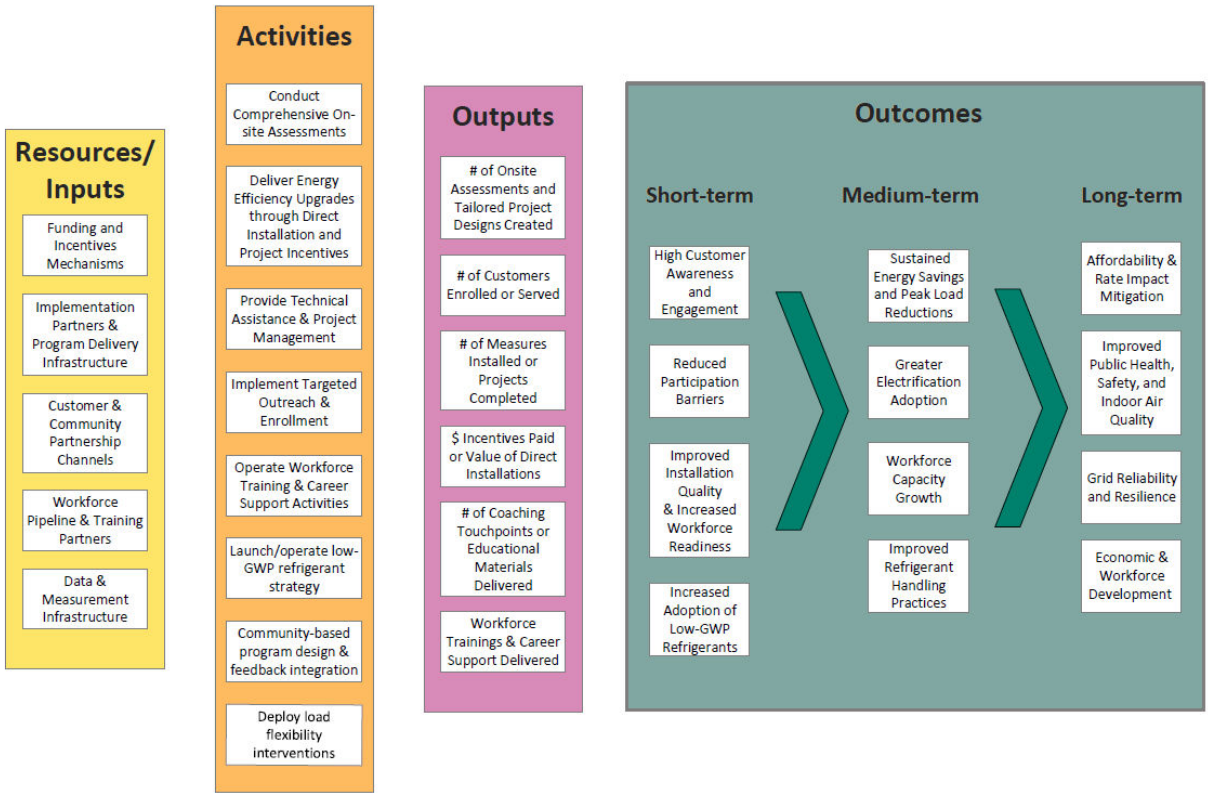
Marin Clean Energy ("MCE") has developed a logic model that serves as a roadmap showing how MCE's program portfolio turns resources into measurable outcomes over time.

The logic model is organized in six linked columns:

- Resources/Inputs – What basic elements are required to run programs.
- Activities – What the portfolio does with those resources.
- Outputs – What we deliver through those activities.
- Outcomes (Short-term → Medium-term → Long-term) – The changes we expect as a result of these outputs, sequenced over time:
    - Short-term outcomes reflect early movement;
    - Medium-term outcomes capture portfolio performance shifts; and
    - Long-term outcomes represent the portfolio's ultimate impacts.

Read left-to-right, the model describes the portfolio's program theory: targeted investments and delivery activities produce concrete outputs that lead to measurable customer and market changes, which ultimately drive system benefits and community impacts. This structure also clarifies what we will track each year (outputs and short-term outcomes), what we expect to strengthen over the business plan cycle (medium-term outcomes), and how these changes support MCE's longer-run strategic goals (long-term outcomes).

Figure 5-1: Logic Model



The logic model shows a clear connection between near-term delivery (assessments, installations, outreach, coaching, workforce supports) to the portfolio outcomes that matter most over the next four years (near-to-mid outcomes and measurable performance) and the next eight years (durable, system-level impacts).

Short/Medium-Term Goal Alignment (four years)

- **Total System Benefit ("TSB") achievement and stronger cost-effectiveness:** The medium-term outcomes center on sustained energy savings and peak load reductions and greater electrification adoption—the two main drivers for growing system benefits over a four-year horizon. These outcomes are supported by activities like comprehensive assessments, direct installs, project incentives, technical assistance, and load flexibility interventions, which increase participation and throughput while improving measure performance.

- **Advancing energy efficiency ("EE") in equity communities**: The short-term outcomes explicitly include reduced participation barriers and high customer awareness/engagement. Those are the prerequisites for achieving four-year equity goals such as higher enrollments in environmental and social justice ("ESJ") communities, higher completion rates, and

improved customer experiences. The inputs (community partnership channels, workforce partners, delivery infrastructure) and activities (targeted outreach and enrollment; community-based feedback integration) are designed to address known barriers—trust, time, complexity, and upfront cost.

- **Improved delivery quality and workforce readiness to support electrification goals:** The short-term outcomes also include improved installation quality and increased workforce readiness, which are critical to hitting four-year goals for more electrification installs, fewer rework/quality assurance ("QA") issues, and faster implementation. By investing in workforce training and career support as a core activity, the plan strengthens the delivery system that underpins MCE's electrification goals.

Longterm Goal Alignment (eight years)

- **Affordability and rate impact mitigation:** Over eight years, the cumulative effect of sustained savings and peak demand reduction supports the long-term outcome of affordability and rate impact mitigation—through both customer bill impacts and system-level avoided costs.

- **Grid reliability and resilience:** Load flexibility interventions lead to a medium-term outcome of sustained peak reduction and a long-term outcome of grid reliability and resilience. That reflects an eight-year trajectory where flexible loads and program-enabled controls mature into a meaningful reliability resource.

- **Public health, safety, and indoor air quality improvements**: The long-term outcomes include improved public health, safety, and indoor air quality, which is the long-term result of scaling building upgrades and electrification—especially when paired with barrier reduction to ensure interventions land where they are needed most.

- **Economic and workforce development:** The workforce pathway in the model (inputs → training/career support activities → workforce outputs → readiness/capacity outcomes → long-term economic development) supports an eight-year goal of building a durable "high-road" delivery ecosystem, particularly in equity communities.

- **Sustained adoption of low global warming potential ("GWP") refrigerants and better handling practices:** The short- and medium-term outcomes around improved refrigerant handling and adoption support a longer-term transition to better refrigerant management norms—realizing decarbonization and environmental benefits over an eight-year horizon.

2. MCE's Strategies to Optimize Portfolio and Manage Risk

2.1 Use of TSB Goals and Cost-Effectiveness Metrics to Maximize Portfolio Performance

MCE embeds TSB goals and cost-effectiveness metrics into all stages of its portfolio management including program design, implementation, and review. MCE establishes portfolio

goals using both sector- and segment-specific targets to ensure each program meaningfully contributes to its portfolio-wide savings, TSB outcomes, and cost-effectiveness. MCE tracks program performance in its Program Management Platform, which captures real-time data on energy savings, budget expenditures, project counts, project developments, and project commitments. MCE staff reviews this information monthly to assess its progress toward goals and to identify any emerging issues or needed areas for improvement. In addition, MCE monitors customer-type data to maintain balanced participation across market segments. If MCE identifies over- or under-participation across market segments, MCE takes steps to ensure that no single customer category is over- or underrepresented.

To ensure success, MCE relies on performance-based contracting wherever feasible with contracting parties within the Resource Acquisition segment, which requires incentives to be aligned with TSB wherever feasible to maximize delivered value relative to cost. MCE also prioritizes the use of low- and no-cost measures, such as those identified through Strategic Energy Management ("SEM") programs for industrial, agricultural, commercial, and multifamily customers. These measures deliver high cost-effectiveness, meaningful energy savings and support broad customer engagement. For Market Support and Equity programs that do not maximize TSB goals, MCE tracks performance using the adopted metrics for those segments, which capture both energy, affordability and non-energy benefits ("NEBs").[124]

2.2 Risk Management and Flexibility in Addressing Underperformance

MCE employs a flexible, data-driven approach to manage the risk of underperformance across its portfolio. MCE's Program Management Platform provides ongoing performance

[124] California Public Utilities Commission ("CPUC"), Resolution E-5351, *Clarification and revisions to adopted indicators and metrics related to energy efficiency portfolios in compliance with Decision (D.) 23-06-055* (June 12, 2025).

monitoring, with data on energy savings, budget expenditures, and project pipeline activity reviewed by MCE staff on at least a monthly basis. This allows staff to detect any early signs of underperformance, such as falling short of savings targets, low cost-effectiveness results, QA concerns, or declining project pipelines. MCE's tracking of customer engagement metrics further helps it identify participation gaps that could hinder program and portfolio performance.

When MCE identifies underperformance, MCE begins by accurately diagnosing the root cause and then tailoring a unique solution to the actual cause. Diagnostic actions include reviewing program reporting including customer surveys, communicating with any implementers or program partners, assessing feedback from any relevant stakeholder engagement activities, and reviewing Evaluation Measurement and Verification ("EM&V") materials including recommendations. Underperformance may stem from program design challenges, market conditions or changes, implementer capacity, or customer uptake and interest in a particular program. MCE may respond to any underperformance with targeted adjustments, such as modifying incentives or expanding customer outreach, or more significant changes, such as redesigning the measure mix or altering the delivery model of a program. If needed, MCE shifts portfolio resources toward higher-performing programs or measures, and in cases where recovery is not feasible, MCE may close programs and reallocate budgets.[125]

To preserve responsiveness, MCE retains the flexibility to make mid-cycle adjustments without formal reauthorization, to reallocate funds between programs and segments as priorities

[125] For example, MCE detailed its efforts to identify, address and redress underperformance of its former Home Energy Reports program in MCE Advice Letter 64-E. MCE closed the program pursuant to Commission requirements and completed the ENERGY DIVISION PROCESS CHECKLIST TO ENERGY EFFICIENCY PROGRAM ADMINISTRATORS FOR PROGRAM CLOSURES AND LAUNCHES (12/31/2021). MCE AL 64-E, pp. 2-4.

shift, and to pilot or rapidly deploy new strategies in response to changes in policy, regulation, research findings, or market conditions.

2.3 Procurement Practices and Risk Management

MCE's procurement practices are designed to both create value and reduce risk in forecasting, expenditures, program implementation, and regulatory compliance. Risk management practices are focused on the risks to program cost-effectiveness, overspending total budget or overspending on capped budget categories, and project underperformance. Performance-based contracts with implementers link any payment to verified results, ensuring that cost-effectiveness is achieved at the project level. This structure aligns implementer incentives with portfolio TSB and savings goals, reinforcing accountability and high-value project delivery.

Risk is further mitigated through contractual performance thresholds, which prevent spending on non-cost-effective projects, and through the use of meter-based analytics to identify customers with the greatest potential to deliver savings during high avoided-cost hours. These analytical methods improve the accuracy of forecasts and enhance the likelihood of achieving portfolio goals. Ongoing and regular oversight of implementer contracts ensures adherence to regulatory requirements, reducing the risk of disallowed expenditures. Finally, by diversifying its implementers and delivery models, MCE limits reliance on any single vendor or strategy, creating a more resilient and adaptable portfolio.

3. Statewide Assessment

MCE recommends the Commission scope statewide EE program assessment processes into Rulemaking ("R.") 25-04-010. Pursuant to Decision ("D.") 23-06-055 Conclusion of Law 7, MCE participated in the joint program administrator ("PA") activities in 2025 and 2026 facilitated by Pacific Gas & Electric Company ("PG&E") to propose and draft an assessment process for statewide programs. MCE attended meetings, participated in discussions, offered written

suggestions, completed the circulated survey and commented on draft submissions. Joint PAs submitted the *Statewide Energy Efficiency Program Assessment Criteria Report: D.23-06-055 OP 2 Statewide Assessment Framework* ("Statewide EE Assessment Report") to Energy Division staff on February 12, 2026. MCE appreciated the opportunity to work with its fellow PAs, but offers its qualified support for the Statewide EE Assessment Report submitted by Joint PAs. MCE highlights the following critical points for the Commission to consider in its review of the Statewide EE Assessment Report and statewide programs more broadly:

1. Based on the diversity of PA opinions and the potential implications of assessment processes for statewide programs including dramatic changes to program attributions, customer experiences, and program measure mixes, MCE recommends the Commission scope the assessment of statewide EE programs into R.25-04-010. As documented in the Statewide EE Assessment Report, all PAs offered qualified support for the statewide assessment proposal.[126] All PAs offered a diverse range of complementary additions or qualifiers to the proposal. MCE believes the Commission would benefit from a public record that includes non-PA stakeholders, and a holistic conversation on all related statewide program issues in concert with other portfolio issues in the general EE proceeding.

MCE is particularly concerned that non-PA stakeholders, especially Equity customers historically underserved by EE programs and their advocates, were not yet provided an opportunity to share their opinions on statewide EE program assessments and programs. Goal 5 of the Commission's Environmental and Social Justice Action Plan requires the Commission to "[e]nhance outreach and public participation opportunities for ESJ communities to meaningfully

[126] Statewide EE Assessment Report, Appendix B, p. 15.

participate in the CPUC's decision-making process and benefit from CPUC programs."[127] MCE finds the statewide or local administration model and specific administrator of programs critical questions that would benefit from providing ESJ customers the opportunity to comment explicitly. MCE recommends the Commission scope the application of the Statewide EE Assessment Report in R.25-04-010.

2. The Statewide EE Assessment Report's threshold criteria is one of the topics that would benefit from the Commission scoping the application of the Statewide EE Assessment Report into the EE policy proceeding (R.25-04-010). MCE does not agree with the Statewide EE Assessment Report's threshold criteria for each set of scoring questions and notes that there are logical errors in the proposed thresholds. MCE finds merit in the questions presented. However, MCE disagrees with the scoring and application of the proposed criteria. MCE submits that, for some programs evaluation, a "majority" of satisfied criteria may not be sufficient, and a program should pass all screening criteria to be considered for statewide implementation.[128] There should be further discussion to refine the threshold criteria for each section.[129] Each of the criteria in the Statewide EE Assessment Report points to critical functions of the programs, obligations to customers and existing compliance requirements. A simple scoring rubric valuing all criteria equally obscures those critical functions, obligations to customers and existing compliance requirements that could be impacted by a change of administration model and administrator. MCE finds these determinations factually specific, complex, and in need of additional stakeholder input, which should occur in R.25-04-010.

[127] CPUC, Environmental and Social Justice Action Plan Vol 2, April 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf, p. 5.
[128] *Id.* at 6-9.
[129] *Id*.

3. Another topic that would benefit from the Commission scoping the use of the Statewide EE Assessment Report and statewide administration issues into R.25-04-010 is the question of what the appropriate procedural vehicle is to elevate a program to statewide program status. MCE submits the appropriate procedural vehicle for elevation of a program to a statewide program status is an application. The Commission's application process[130] provides the required public process, public record, and regulatory oversight to ensure elevation is in the best interest of ratepayers.

If the Commission decides to use the proposed process to select programs for statewide implementation that are currently administered by a community choice aggregator ("CCA") like MCE, the Commission must address the resulting cost-effectiveness implications. This challenge is unique to CCA PAs, because investor-owned utility ("IOU") PAs receive attribution for statewide programs while CCAs do not.[131] As a result, a program that is cost-effective under local administration could transition to statewide delivery and improve the cost-effectiveness of an IOU PA's portfolio (particularly if additional efficiencies are realized at scale), while creating significant negative impacts on a CCA portfolio and its ability to meet cost-effectiveness requirements. MCE requests the Commission scope statewide program issues into R.25-04-010 and not its isolated EE applications decision.

[130] CPUC, Rules of Practice and Procedure, California Code of Regulations Title 20, Division 1, Chapter 1, Article 2.1 - Article 2.9.

[131] D.16-08-019, Ordering Paragraph 7 ("The budget for each statewide program in each utility territory shall be counted toward the cost-effectiveness of each utility's energy efficiency portfolio and each utility shall be given energy savings and Energy Savings Performance Incentive credit consistent with their customers' funding and program participation.").

Chapter 6: Segmentation and Sector Strategy

1. Portfolio Sector Strategy

Marin Clean Energy ("MCE") deploys different strategies across the various sectors it serves, targeted to take advantage of these sectors' unique opportunities and address their unique challenges. MCE is constantly revising these strategies, and uses them to identify promising topics for E&MV that will, in turn, better inform these strategies. MCE is committed to sector and segmentation strategies that advance the Commission's energy efficiency ("EE") goals, MCE's mission, and related state policy objectives, and that meet the needs of its customers and service area.

Table 6-1: Budget Distribution by Sector

Budget Distribution by Sector ($000)									
	Sector								
Budget	**Residential**	**Commercial**	**Industrial**	**Agricultural**	**Public**	**Cross-Cutting**	**EM&V**	**Portfolio Support**	**Total Budget**
2028	$5,007	$5,460	$1,910	$100	$0	$1,674	$623	$803	**$15,577**
2029	$5,289	$5,823	$2,018	$106	$0	$1,712	$658	$848	**$16,454**
2030	$5,322	$5,866	$2,031	$106	$0	$1716	$662	$853	**$16,556**
2031	$5,356	$5,910	$2,044	$107	$0	$1721	$667	$859	**$16,664**
Total (4-year)	**$20,974**	**$23,059**	**$8,003**	**$419**	**$0**	**$6,823**	**$2,610**	**$3,363**	**$65,251**
2032	$5,393	$5,880	$2,058	$108	$0	$1,803	$671	$865	**$16,777**
2033	$5,431	$5,922	$2,072	$108	$0	$1,816	$676	$871	**$16,896**
2034	$5,471	$5,966	$2,088	$109	$0	$1,829	$681	$877	**$17,021**
2035	$5,513	$6,012	$2,104	$110	$0	$1,843	$686	$884	**$17,151**
Total (4-year)	**$21,808**	**$23,779**	**$,8321**	**$436**	**$0**	**$7,290**	**$2,714**	**$3,497**	**$67,845**
Cumulative Total (8-Year)	**$42,782**	**$46,838**	**$16,324**	**$854**	**$0**	**$14,113**	**$5,324**	**$6,860**	**$133,096**

1.1 Agricultural Sector

MCE serves 3,200 agricultural accounts within its service area that collectively consume over 89,000 megawatt hours ("MWh") annually (representing three percent in terms of non-residential load and one percent of MCE's total electricity load). While agricultural load is a relatively small portion of MCE's non-residential customer base, the agricultural sector's demand

is growing statewide,[132] and MCE expects increasingly intense fire seasons and long-duration droughts to amplify the sector's evolving energy needs.[133] MCE employs several strategies to meet TSB goals and provide value to its agricultural customers.

Table 6-2: MCE's Agricultural Sector Strategies

1)	Efficiently implement programs within the overarching MCE Energy Management Program umbrella. - Thoughtful approach to investing in agricultural sector considering the comparatively small size, small load, and corresponding opportunity of EE measures. - MCE optimizes its Energy Management program umbrella for greater cost-effectiveness. - MCE's Energy Management program design reduces customer confusion. - MCE's Energy Management program design limits administrative burdens.
2)	Deploy EE projects with measures designed to meet agricultural customers' unique business needs. - Agricultural customers present unique needs for EE with distinct profit margins, diverse load shapes, seasonally distinct load shapes, and specific technological needs. - MCE selects EE measures in response to customers' individual and sector-based needs.
3)	Identify customers with the greatest savings and Total System Benefit ("TSB") potential using MCE's Data Analytics Platform.[134] - MCE's Data Analytics Platform allows the agency to optimally identify customers for participation thus streamlining outreach methods and supporting cost-effective programs and program administration.

[132] CAISO, Large load: The California ISO's role in large loads, available at: https://www.caiso.com/generation-transmission/load/large-load#:~:text=California%20faces%20a%20surge%20in,and%203.3%20GW%20by%202035 ("California faces a surge in electricity demand driven in part by new large loads and the California Independent System Operator (ISO) is committed to meeting new energy demand reliably, affordably, and equitably. Data centers present the largest use-case but electric vehicle charging, electrification of agricultural and industrial processes also will contribute to this growth.").

[133] Li, S., Banerjee, T. Spatial and temporal pattern of wildfires in California from 2000 to 2019. *Sci Rep* **11**, 8779 (2021), available at: https://doi.org/10.1038/s41598-021-88131-9; California, California Climate Adaptation Strategy, Summary of Projected Climate Change Impacts on California, available at: https://climateresilience.ca.gov/overview/impacts.html#:~:text=major%20economic%20impacts.-,Drought,or%20state%20small%20water%20systems (wildfire and drought).

[134] In 2025, MCE Technology and Analytics Team Staff developed a searchable customer information database tool to support improved program design, administration, and evaluation for MCE staff. MCE is committed to offering EE programs to all its customers, complying with all applicable data privacy laws, ensuring equitable access to its programs, and following Commission requirements for program administration. MCE's use of its data analytics tool is rooted in those core principles.

	- MCE's Data Analytics Platform helps it identify key customers with peak loads ideal for shifting and customers with seasonal loads presenting high values for load shifting measures, strengthening grid reliability and the cost-effectiveness of the program. - Customer data analysis allows MCE to design programs beneficial to both the participants and all ratepayers using the grid.
4)	Market program benefits by engaging with local agricultural partner organizations (*e.g.*, county farm bureaus). - Marketing through appropriate channels leads to greater success in this challenging segment. - With the diversity of agricultural operations in MCE's service area, collaborations with County farm bureaus and other sustainability-based organizations are crucial for driving and retaining participation in programs. These entities are trusted by customers in the agricultural sector and effective communicators. - MCE can leverage its existing communication channels and streamline its corresponding outreach and administrative costs. - MCE can also deepen its understanding of agricultural customers' needs and priorities through local partnerships. MCE can then use this information to continue refining its program design and administration for the agricultural sector.
5)	Promote and encourage customer enrollment in other complementary sustainability, affordability, and energy initiatives (referred to as the "Any Open Door" strategy). - MCE informs customers interested in EE programs of other complementary sustainability, affordability, and energy programs for which they may be eligible. - This strategy supports customers receiving greater value and energy education from EE program participation. - Complementary programs like energy bill discounts often inspire customers to participate in EE programs and vice versa.

1.2 Commercial Sector

MCE serves approximately 55,000 commercial accounts, as well as an additional 4,000 non-residential customers that have no further secondary segment classification per their North American Industry Classification System codes. MCE treats these 4,000 customers as part of the commercial sector. MCE's commercial sector customers consume an estimated 2.6 million MWh annually (representing roughly 65 percent of all MCE non-residential consumption, and 35 percent of MCE's total electricity load).

MCE additionally serves its public sector customers (roughly 6,800 public sector accounts) with its commercial sector offerings, because these customers collectively have similar energy usage and program needs. These customers are eligible to participate in MCE's Energy Management program and in the Flex Market programs.

MCE's commercial programs reach a diverse customer base, allowing for flexible strategies and nimble program structures that leverage a broad network of EE service providers. MCE uses a variety of strategies to meet or exceed TSB goals in this sector, to provide value to its commercial customers, and to ensure that commercial Equity customers benefit equitably from EE program funding.

Table 6-3: MCE's Commercial Sector Strategies

1)	Efficiently implement programs within the overarching MCE Energy Management Program umbrella. - Thoughtful approach to investing in commercial sector considering their diversity of load shapes including large loads and corresponding opportunity of EE measures. - MCE optimizes its Energy Management program umbrella for greater cost-effectiveness. - MCE's Energy Management program design reduces customer confusion. - MCE's Energy Management program design limits administrative burdens.
2)	Deploy Strategic Energy Management ("SEM") and custom projects with measures designed to meet commercial customers' unique business needs. - MCE proposes to focus on individual customer needs through SEM programming. SEM provides customers with a single point of contact for their energy journey and a personally tailored focus on a specific customer's operations. - Commercial customers are extremely diverse and often have complex energy needs. SEM is well suited to offer individualized guidance, education, and measures for the customer's benefit. - SEM helps identify customers' energy pain points and opportunities for efficiency, with the aim of delivering no- and low-cost savings. - SEM provides a valuable opportunity to build strong relationships with customers and to explore additional beneficial EE projects, or demand management opportunities. - SEM savings are grounded in hourly interval data, which may provide opportunities to introduce time-dependent savings valuations based on their avoided cost value. Leading with SEM and scaling payments to attract

	beneficial projects will result in an outcome in which programs optimize TSB and savings for customers.
3)	Scale incentives based on TSB. - MCE will continue to scale incentives for commercial customers based on TSB. - Scaling incentives based on TSB ties program expenditures to the benefits delivered. By tying incentives directly to TSB, programs can deliver more cost-effective solutions and benefits overall.
4)	Identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform. - A data-centered approach helps MCE identify customer profiles that indicate significant energy savings potential during high value periods and can suggest specific offerings to reduce energy consumption. - MCE's Data Analytics Platform allows the agency to optimally identify customers for participation, thus streamlining outreach methods and supporting cost-effective programs and program administration. - MCE will encourage commercial customers to adopt measures that reduce peak usage and shift load to off-peak periods by offering higher incentive rates for peak period reductions. - Customer data analysis allows MCE to design programs beneficial to both the participants and all ratepayers using the grid.
5)	Incorporate low-global warming potential ("GWP") equipment installations - Low-GWP product incentives can reduce the financial impacts of fuel switching measures and allow greater commercial sector greenhouse gas ("GHG") emissions reductions. - MCE will encourage adoption of energy-efficient, low-GWP technologies and will leverage population NMEC and the Refrigerant Avoided Cost Calculator to deliver measurable and meaningful TSB.
6)	Assist customers to access and enroll in creative financing opportunities offered by other entities. - Funding capital projects can be challenging for commercial customers and low interest financing can help. - MCE will support commercial customers in accessing beneficial financing opportunities. - This includes promoting available financing pathways, partnering with financial institutions such as National Energy Improvement Fund to provide direct financing solutions to customers, facilitating access to PG&E's on-bill financing ("OBF") programs,[135] and other opportunities available during the portfolio cycle.
7)	Support streamlined customer enrollment in other complementary programs (referred to as the "Any Open Door" strategy). - MCE informs commercial customers interested in EE programs of other complementary sustainability, affordability, and energy programs for which they may be eligible.

[135] *See e.g.* PG&E, On-Bill Financing Program, available at: https://www.pge.com/assets/pge/docs/save-energy-and-money/energy-savings-programs/fs_obf.pdf.

	- This strategy supports customers receiving greater value and energy education from EE program participation. - Complementary programs like energy bill discounts often inspire customers to participate in EE programs and vice versa. - Commercial sector EE offerings serve as a bridge for participants (either vendors or customers) to engage in other energy management, affordability, and GHG-reduction activities.

1.3 Industrial Sector

MCE serves approximately 6,000 industrial accounts, collectively consuming approximately one million MWh annually (representing 30 percent of MCE's non-residential load and 16 percent of MCE's total electricity load). Characteristics of industrial customers and their energy priorities are highly variable. MCE designed strategies to ensure that its industrial program delivers value to its diverse industrial customers, while also achieving or exceeding TSB goals. Through MCE's Energy Management program, MCE will also serve public sector facilities whose operations resemble industrial processes, including facilities such as water and wastewater treatment plants.

Table 6-4: MCE's Industrial Sector Strategies

1)	Holistic program design and implementation that cost-effectively addresses the needs of industrial customers (MCE's Energy Management program) and mitigates common customer pain points. - MCE employs a thoughtful approach to investing in the industrial segment considering the diversity of load shapes, including large loads, in this segment, and corresponding opportunity of EE measures. - MCE optimizes its Energy Management program umbrella for greater cost-effectiveness. - MCE's Energy Management program design reduces customer confusion. - MCE's Energy Management program design limits administrative burdens.
2)	Deploy SEM and custom projects with measures designed to meet industrial customers' unique business needs. - MCE proposes to focus on individual customer needs through SEM programming. SEM provides customers with a single point of contact for their energy journey and a personally tailored focus on a specific customer's operations. - Industrial customers are diverse, with varying energy needs according to their needed industrial processes. SEM is well suited to offer individualized guidance, education, and measures for the customer's benefit.

	- SEM helps identify customers' energy pain points and opportunities for efficiency, with the aim of delivering no- and low-cost savings. - SEM provides a valuable opportunity to build strong relationships with customers and to explore additional beneficial EE projects, or demand management opportunities. - SEM savings are grounded in hourly interval data, which may provide opportunities to introduce time-dependent savings valuations based on their avoided cost value. Leading with SEM and scaling payments to attract beneficial projects will result in an outcome in which programs optimize TSB and savings for customers.
3)	Scale incentives based on TSB. - MCE will scale industrial customers' incentives based on TSB. - Scaling incentives based on TSB ties program expenditures to the benefits delivered. By tying incentives directly to TSB, programs can deliver more cost-effective solutions and benefits overall.
4)	Identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform. - A data-centered approach helps MCE identify customer profiles that indicate significant energy savings potential during high value periods and can suggest specific offerings to reduce energy consumption. - MCE's Data Analytics Platform allows the agency to optimally identify customers for participation, thus streamlining outreach methods and supporting cost-effective programs and program administration. - MCE will encourage industrial customers to adopt measures that reduce peak usage and shift load to off-peak periods by offering higher incentives rates for peak period reductions. - Customer data analysis allows MCE to design programs beneficial to both the participants and all ratepayers using the grid.
5)	Support streamlined customer enrollment in other complementary programs. (referred to as the "Any Open Door" strategy). - MCE informs industrial customers interested in EE programs of other complementary sustainability, affordability, and energy programs for which they may be eligible. - This strategy supports industrial customers receiving greater value and energy education from EE program participation. - Complementary programs like energy bill discounts often inspire customers to participate in EE programs and vice versa. - MCE will look to connect industrial customers to available local and regional offerings (*e.g.*, water districts), and where possible, introduce representatives from these programs during the delivery of programs. - Industrial sector EE offerings serve as a bridge for industrial customer participants to engage in other energy management, affordability, sustainability, and GHG-reduction activities.

1.4 Residential Sector

MCE serves approximately 619,000 residential accounts in MCE's service area, representing nearly 90 percent of MCE's total customer accounts. Residential customers consume approximately 2.9 million MWhs annually (representing 46 percent of total electricity load in MCE's service area). Approximately 26 percent of MCE's residential customers live in multifamily properties, with the remaining 74 percent of residential customers living in single family properties. MCE will offer comprehensive EE programs to both single-family and multifamily properties, with some programs focusing on delivering greater benefit to the residents (*e.g.*, homeowner or renter), and others focusing on delivering greater benefit to the property owners and managers to address split incentive challenges.[136]

MCE proposes two primary goals for its residential sector customers: (1) serve low- to moderate-income customers with comprehensive offerings that save energy and produce bill savings while providing additional non-energy benefits ("NEBs") like improved health, safety, and comfort; and (2) serve market-rate residential customers with programs that meet or exceed TSB requirements.

MCE will reach these goals by adopting the strategies described in Table 6-5.

[136] American Council for Energy Efficient Economy, Expanded Split Incentives in Buildings' Value Chains, (2024), available at: https://www.aceee.org/sites/default/files/proceedings/ssb24/assets/attachments/20240722160818906_fd1c24d3-02a5-4dc8-bf5c-7421b7fa6adf.pdf, p. 2 ("A split incentive is when the benefit of a transaction is not accrued by the payer, discouraging the transaction. The classic example of this is the relationship between landlord and tenant. The landlord could install a more efficient heating system that would lower heating bills. However, if the tenant pays the heating bill, the landlord does not have a personal financial incentive. In fact, the landlord has a disincentive, as they would have to pay for the improvements and never make their money back. Therefore, the conflicting interests of the landlord and the tenant prevent energy efficiency from being implemented.").

Table 6-5: MCE's Residential Sector Strategies

1)	Identify customers with the greatest savings and TSB potential using MCE's Data Analytics Platform. - The Data Analytics Platform enables MCE to identify customers with distinct characteristics, including high electricity usage, elevated renter-to-homeowner ratios, and geographic and climate factors associated with higher loads.
2)	Align incentives by using pay-for-performance programs. - Pay-for-performance programs reduce risk to ratepayers by tying payments to actual savings rather than forecasts, providing greater incentives to individual customers while remaining cost-effective.
3)	Expand existing programs to reach moderate-income customers. - As noted in MCE's recent Mid-Cycle Advice Letter 91-E Multifamily Energy Savings-Resource program launch request, moderate-income customers often cannot afford efficiency measures yet fall outside the income thresholds for low-income program eligibility.
4)	Support streamlined customer enrollment in other complementary programs (referred to as the "Any Open Door" strategy). - MCE informs residential customers interested in EE programs of other complementary sustainability, affordability, and energy programs for which they may be eligible. - This strategy supports residential customers receiving greater value and energy education from EE program participation. - Complementary programs like energy bill discounts often inspire customers to participate in EE programs and vice versa. - MCE will look to connect residential customers to available local, regional, and state offerings when applicable. - Residential sector EE offerings serve as a bridge for residential customer participants to engage in other energy management, affordability, sustainability, and GHG-reduction activities.
5)	Invest in Community Engagement. - MCE will engage communities and customers through multiple approaches to build trust with customers that enable deeper energy upgrades and positive impacts for participants and MCE's service area. - MCE will continue to engage residential customers through multiple channels including but not limited to written and phone surveys. - MCE's approach includes multilingual outreach and program materials that ensure communities have access to information in their primary languages.

2. Portfolio Segmentation Strategy (RA, MS, E, C&S) – Four Year and Eight Year

MCE's strategy for distributing its portfolio budget between the Resource Acquisition, Market Support, and Equity segments is based on the defined objectives of each segment. To determine the appropriate allocation of funding across the three segments, MCE first projected the

budget for the Resource Acquisition segment of the portfolio, based on a zero-based budgeting approach.[137] The zero-based budgeting process determines budgets at a program level, grounded in an assessment of Total System Benefit ("TSB") potential by program and the implementation, administrative and market support needed to achieve that potential. MCE designed its budget for Equity and Market Support segment programs based on the specific delivery needs, scope of work, and expected outcomes of each program rather than applying a uniform budget formula. MCE also considers past performance, anticipated participation, implementation complexity, and the percentage of customers in the service area who may qualify for these programs.

The following table shows the budget distribution for the 8-year Business Plan period among segments.

Table 6-6: 4-year Portfolio Budget Forecast Summary (2028-2031)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)					
	2028	**2029**	**2030**	**2031**	**Total (4 Years)**
Total Budget	$15,577	$16,454	$16,556	$16,664	$65,251
Resource Acquisition Segment Budget	$9,502	$10,037	$10,099	$10,165	$39,803
Market Support Segment Budget	$765	$808	$813	$818	$3,203
Equity Segment Budget	$4,687	$4,951	$4,982	$5,014	$19,635
Codes and Standard Budget	$0	$0	$0	$0	$0
EM&V	$623	$658	$662	$667	$2,610
Administration	$1,020	$1,460	$1,499	$1,539	$5,518
ED Portfolio Oversight	$0	$0	$0	$0	$0

[137] MCE describes its zero-based budgeting approach for portfolio planning in more detail in **Chapter 4: Forecast Methodology and Zero-Based Budgeting**.

Table 6-7: 4-year Portfolio Forecast Summary (2028-2031)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)						
	2028	**2029**	**2030**	**2031**	**Resource Acquisition Segment Only (Total 4-Year)**	**Total (4 Years)**
Total System Benefit (TSB)	$16,737	$17,452	$18,224	$19,012	$58,392	$71,426
Total Resource Cost (TRC) Ratio	0.98	0.97	1.00	1.03	1.23	1.00
Program Administrator Cost (PAC) Ratio	1.07	1.06	1.10	1.13	1.43	1.09
Societal Cost Test (SCT) Base	1.30	1.29	1.33	1.37	1.59	1.35
Societal Cost Test (SCT) High	1.30	1.29	1.33	1.37	1.60	1.35
Ratepayer Impact Measure Test Ratio (RIM)	0.58	0.58	0.59	0.59	0.71	0.58
Lifecycle GWh[138]	27	27	27	27	192	109
First Year MW	1,467	1,467	1,467	1,467	5.553	5,868
Lifecycle MMTherms	7	7	7	7	16	26.3
Lifecycle CO2 Metric Tons	4,739	4,044	3,952	3,931	14,577	16,666

[138] Resource Acquisition segment GWh savings exceed Total (4 Years) GWh savings due to the high volume of electrification measures forecasted within the Equity segment.

Table 6-8: 4-year Portfolio Budget Forecast Summary (2032-2035)

4-year Portfolio Budget Forecast Summary (2028-2031) ($000)					
	2032	**2033**	**2034**	**2035**	**Total (4 Years)**
Total Budget	$16,777	$16,896	$17,021	$17,151	$67,845
Resource Acquisition Segment Budget	$10,234	$10,306	$10,383	$10,462	$41,385
Market Support Segment Budget	$824	$829	$835	$842	$3,330
Equity Segment Budget	$5,048	$5,084	$5,122	$5,161	$20,415
Codes and Standard Budget	$0	$0	$0	$0	$0
EM&V	$671	$676	$681	$686	$2,714
Administration	$1,585	$1,633	$1,682	$1,732	$6,632
ED Portfolio Oversight	$0	$0	$0	$0	$0

Table 6-9: 4-year and 8-year IOUs Total System Benefit Forecast (w/out C&S) vs. Goals

4-Year and 8-Year Total System Benefit Forecast vs. Goals ($000)			
Year	**Total System Benefit Forecast**	**Total System Benefit Goals**	**Percent of TSB Goal**
2028	$16,737	$16,737	100%
2029	$17,452	$17,452	100%
2030	$18,224	$18,224	100%
2031	$19,012	$19,012	100%
Total (4 years)	$71,426	$71,426	100%
2032	$19,818	$19,818	100%
2033	$20,642	$20,642	100%
2034	$21,542	$21,542	100%
2035	$22,413	$22,413	100%
Total (4 years)	$84,416	$84,416	100%
Cumulative (8 years)	$155,842	$155,842	100%

MCE determined the distribution of budgets for each sector using a bottom-up budgeting process based on each program's projected energy savings (for Resource Acquisition programs), or the program's planned activities (for Market Support and Equity programs). To develop its sector budgets, MCE first determined the potential in each sector for the programs discussed in this Business Plan, based on past experiences, feedback from implementation partners, industry stakeholders, and an assessment of its service area. This potential informs MCE's estimate of the TSB that it expects each sector to achieve, which in turn determines the incentive and implementation payments for many of MCE's programs. For these types of programs, MCE uses

the potential energy savings or TSB to calculate the performance-based implementation budget and the incentive. MCE then adds in the costs that are not tied to performance, such as the programs' proportional share of administrative budget associated with policy support or data tracking and reporting. For programs that are not compensated based on TSB, MCE conducted a zero-based budgeting exercise to account for all the costs associated with program implementation activities. MCE also attributed its administrative labor costs to each program based on that program's proportional share of administrative support. Finally, MCE tallied up program costs for each sector.

Table 6-10 below shows the budget and the percentage of MCE's total portfolio budget attributable to each sector of the eight-year Business Plan period. The percentages budgeted for each sector remain fixed across the four- and eight-year planning periods because MCE does not expect a ramp up in spending in any sector between the periods. This budget allocates more funds to the commercial and residential sectors (about 35 percent and 32 percent, respectively), and less to the industrial and cross-cutting sectors (about 12 percent and 10 percent, respectively) and very little to the agricultural sector (0.06 percent) given its small share of MCE service area's gas and electric load. This is appropriate as both the residential and commercial sectors in MCE's service area have unique characteristics that merit a greater focus in MCE's EE programming. As noted above, the residential sector makes up the highest number of MCE customer accounts (around 90 percent of total customer accounts). The commercial and industrial sectors, on the other hand, have high energy usage and provide the greatest opportunities for achieving cost-effective savings.

Table 6-10*: Budget Distribution by Sector*

Budget Distribution by Sector ($000)									
	Sector▪								
Budget	Residential	Commercial	Industrial	Agricultural	Public	Cross-Cutting	EM&V	Portfolio Support	Total Budget
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$15,577
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$16,454
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$16,556
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$16,664
Total (4-year)	$20,974	$23,059	$8,003	$419	$0	$6,823	$2,610	$3,363	$65,251
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$16,777
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$16,896
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$17,021
▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪	▪▪▪▪▪	▪▪▪▪▪	▪▪▪▪▪	$17,151
Total (4-year)	$21,808	$23,779	$,8321	$436	$0	$7,290	$2,714	$3,497	$67,845
Cumulative Total (8-Year)	$42,782	$46,838	$16,324	$854	$0	$14,113	$5,324	$6,860	$133,096

3. Resource Acquisition

MCE's Resource Acquisition segment includes a combination of new and existing programs that build on the successful components of MCE's current PY 2024-2027 EE portfolio. The Resource Acquisition segment focuses on maximizing TSB while maintaining overall portfolio cost-effectiveness.

The Commission defines the Resource Acquisition segment to have "a primary purpose of, and a short-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems."[139] The PUC defined "short-term" as covering only "the approved budget period for the portfolio[.]"[140] The PUC placed on this segment the burden of "mak[ing] up the bulk of savings to achieve TSB goals."[141]

MCE anchors its Resource Acquisition segment in its successful Energy Management and Flex Market programs, both of which are designed to reduce ratepayer risk, maximize cost-effectiveness, and deliver meaningful value to customers. MCE will continue those programs in

[139] D.21-05-031, p. 14.
[140] *Id*., p. 14.
[141] *Id*., p. 14.

PY 2028-2031. Additionally, in this PY 2028-2031 Application, MCE proposes expanding its Resource Acquisition segment programs with two new residential programs that extend its existing services in the residential sector—(1) Home Energy Savings Resource program ("HES-R") and (2) Multifamily Energy Savings Resource program ("MFES-R").[142] These programs will build on MCE's PYs 2024-2027 existing Equity segment offerings that are already delivering building decarbonization, electrification, and EE direct install measures. The HES-R and MFES-R programs focus on high-impact, cost-effective measures that deliver significant energy savings. By focusing on electrification measures that reduce the use of natural gas, the HES-R and MFES-R programs support progress on the state's GHG emissions reductions and decarbonization goals. The HES-R and MFES-R programs are consistent with MCE's portfolio strategies because they:

- Advance affordability and mitigate overall rate impacts;[143]
- Support electrification and building decarbonization efforts;[144] and
- Work to maximize TSB.[145]

The Resource Acquisition segment offering will deepen the benefits of MCE's EE programs by strengthening the cost-effectiveness of measures and serving a more diverse range of customers.

MCE also plans to introduce a Low-GWP Refrigerant Accelerator program targeting small and medium grocery stores, restaurants, and other customers with refrigeration equipment. This program will encourage adoption of energy-efficient, low-GWP technologies and will leverage population NMEC and the Refrigerant Avoided Cost Calculator to deliver measurable and meaningful TSB.

[142] The Commission approved the launch of MCE's MFES-R program in its acceptance of MCE AL 91-E (with an effective date of January 20, 2026). See MCE AL 91-E, pp. 10-12 (program description).
[143] **Chapter 3: Portfolio Strategies**, Section 1.
[144] *Id.*, Section 3.
[145] *Id.*, Section 4.

Overall, MCE's Resource Acquisition programs aim to foster a robust EE market in MCE's service area, integrating efficiency and demand management measures to reduce peak demand and improve grid reliability. This will position MCE's territory as an attractive place for customer and industry investment in EE. Throughout the Business Plan period, MCE will continue pursuing innovative, tailored strategies to maximize TSB from the Resource Acquisition segment. Specific strategies employed by the Resource Acquisition segment are detailed below.

a. Continue to deploy successful programs

MCE will continue the successful implementation of combined agricultural, industrial, and commercial programs under an overarching program umbrella, referred to as the MCE Energy Management program. MCE is consolidating its existing non-residential offerings (like the Agricultural and Industrial Resource ("AIR") and Commercial Program) into this Energy Management program to offer a streamlined administration of successful measures and strategies for an improved customer experience under one program. This simplified administration approach reduces administrative complexities, reduces customer confusion, and improves implementation efficiencies. This approach allows customers to develop strong SEM projects, as well as custom and deemed projects.

In addition, MCE plans to continue its Flex Market programs, which have been successful Pay-For-Performance ("P4P") programs, producing high-TSB projects. MCE's Flex Market programs include residential, commercial, Peak Flex, and its integrated demand-side management ("IDSM") program.[146] MCE believes that the opportunity for the residential Resource Acquisition program will continue to grow as other stackable incentives, such as the California Energy

[146] MCE, Flex Market Programs, available at: https://mcecleanenergy.org/flexmarket-efficiencymarkets/ (including Residential, Commercial, and Peak Flex).

Commission's Home Efficiency Rebates ("HOMES") P4P program, may become available during the Application period.[147]

b. Expand existing programs

MCE proposes expanding its existing Home Energy Savings and Multifamily Energy Savings Equity segment programs (described in **Chapter 3: Portfolio Strategies**) into complementary cost-effective program offerings in the Resource Acquisition segment. These HES-R and MFES-R programs will enable MCE to deliver greater benefits to a broader set of customers, as more funding will be available to drive cost-effective savings for moderate-income customers. By building on MCE's existing programmatic infrastructure, relationships with implementers, and contractor network, this expansion should have immediate beneficial impacts to MCE's customers and portfolio.

c. Promote complementary opportunities – Any Open Door

MCE staff and implementation partners will continue to find innovative and effective channels to promote its suite of EE programs and other complimentary programs that provide additional EE, decarbonization, affordability, or sustainability services to customers. This implementation of the "Any Open Door" policy is core to MCE's mission. MCE staff will continue to identify ways to secure and incorporate additional external funding[148] into programs and projects from non-CPUC ratepayer funding sources to reduce project cost impacts to customers, offer deeper benefits and greater value to participating customers, and to improve the cost-effectiveness of projects. MCE will continue to staff its cross-team collaboration—its Emerging Opportunities

[147] CEC, Solicitation Workshop HOMES P4P, August 8, 2025, available at: https://www.energy.ca.gov/event/workshop/2025-08/solicitation-concept-workshop-home-efficiency-rebates-homes-pay-performance.

[148] Defined as all non-CPUC-ratepayer funds. For example, external funding sources may include, but are not limited to state general funds, federal funds, foundation funds, MCE's self-funds, etc.

Team—to identify and apply for external funds to layer into EE portfolio programs. MCE's Emerging Opportunities team meets monthly and on ad hoc bases to identify, assess, and apply to relevant external funding opportunities. See additional discussion in **Chapter 8: Stakeholder Engagement**.

d. Employ varied delivery channels

MCE will deploy a variety of delivery models in its Resource Acquisition segment to meet customer needs, preferences, and specific circumstances across its service area and sector needs. This will include both the aggregator-led Flex Market model[149] (where project developers engage customers and provide EE services directly) and the direct install program model for the Home Energy Savings-Resource and Multifamily Energy Savings-Resource programs (where the implementer provides wrap-around services to customers at low or no-cost).

e. Facilitate financing solutions

MCE programs will support customers in accessing beneficial financing opportunities. This includes promoting available financing pathways, partnering with financial institutions such as National Energy Improvement Fund to provide direct financing solutions to customers, facilitating access to PG&E's OBF programs,[150] and other opportunities available during the portfolio cycle.

f. Maintain cost-effectiveness

MCE's core strategy to maintain portfolio level cost-effectiveness is to align program costs with claimable TSB wherever possible. This approach relies heavily on MCE's NMEC programs,

[149] MCE proposes a Residential Flex Market, Commercial Flex Market and IDSM Peak Flex Market programs.

[150] *See e.g.* PG&E, On-Bill Financing Program, available at: https://www.pge.com/assets/pge/docs/save-energy-and-money/energy-savings-programs/fs_obf.pdf.

which have proven effective in past years and continue to evolve based on performance and customer feedback.

Another strategy to maintain cost-effectiveness is MCE's use of P4P measures. P4P ties an implementor or contractor's compensation in a program directly to a project's actual performance.[151] This aligns incentives and encourages implementors or contractors to focus on high saving projects which result in cost-effective programs.

g. Maximize Total System Benefits

MCE will select experienced program implementers with the expertise required to deliver strong results, develop effective outreach strategies, and design appropriate measure packages. MCE will leverage advanced data analytics to identify customer participants with the greatest potential for energy savings and successful projects across CPUC EE metrics. MCE will further expand SEM programs that provide high-TSB measures and low- to no-cost EE opportunities to ensure its portfolio TSB.

h. Incorporate Demand Side Management (DSM) elements

Incorporating DSM measures into MCE's EE programs supports maximizing TSB while also strengthening grid reliability and increasing the utilization of renewable energy in alignment with California's climate targets as discussed in **Chapter 3: Portfolio Strategies**.[152] EE programs can leverage traditional load flexibility initiatives and create additional value for customers, project developers, and the grid.

To advance this integration, MCE proposes a cross-functional program that delivers load flexibility through IDSM—the Peak Flex Market program. MCE proposed its IDSM program in

[151] Guidehouse, Meeting the challenge: How pay-for-performance programs can solve the problem of diminishing savings, (2021), available at: https://guidehouse.com/insights/communities-energy-infrastructure/2021/pay-for-performance-programs.
[152] *See* CEC, SB 100, available at: https://www.energy.ca.gov/sb100.

MCE Advice Letter ("AL") 74-E. MCE proposed a comprehensive strategy that integrates demand response and load shifting for both residential and commercial customers year-round.[153] The Commission approved MCE's Peak Flex Market program and MCE AL 74-E in Resolution E-5387.[154] MCE's Peak Flex Market program will optimize the use of existing equipment or leverage new equipment installed with external funding. MCE will align program payments with verifiable load reductions valued through the Avoided Cost Calculator.[155] This incentive signal will drive impacts to the most valuable grid times—across the summer's peak hours. This approach further strengthens the value proposition for DSM, and delivers rewarding projects to MCE customers and implementors.

i. Promote low-GWP refrigerants

Shifting away from the use of high-GWP refrigerants to low-GWP refrigerants through EE programs presents a unique and valuable opportunity to advance progress on California's climate, decarbonization, and EE goals. Senate Bill 1013 (Lara, 2018) specifically requires the Commission to develop "a strategy for including low-GWP refrigerants in equipment funded by the energy efficiency programs overseen by the Public Utilities Commission."[156] Following Senate Bill 1013, Decision ("D.") 21-05-031 directs PAs to develop "[p]rograms that encourage the use of lower-GWP refrigerants than current 'standard practice' or regulation."[157] The Decision also "encourages the program administrators to seek out all cost-effective opportunities to incorporate low-GWP measures in the energy efficiency portfolios."[158] MCE plans to promote the installation of low- and ultra-low-GWP refrigerants throughout its portfolio.

[153] MCE AL 74-E: Attachment A (program proposal and program details).
[154] CPUC, Resolution E-5387 (effective date of September 18, 2025).
[155] CPUC, Avoided Cost Calculator, available at: https://www.cpuc.ca.gov/dercosteffectiveness.
[156] SB 1013 sec. 2 (Lara, 2018).
[157] D.21-05-031, p. 53.
[158] *Id.*, p. 60.

MCE will align its programs with other agencies' complementary efforts, policies, and regulations.[159] This includes collaboration with the California Air Resources Board's ("CARB") Fluorinated Gas Reduction Incentive Program ("FRIP"),[160] the BayREN Refrigeration Replacement Program ("BRRR"),[161] and the statewide Technology and Equipment for Clean Heating ("TECH") program.[162] MCE will also seek to collaborate with other utilities, CCAs, and other complementary regional agency programs.

MCE also proposes launching a new program which addresses a gap in the current programmatic landscape. This program would focus on the service of small and medium-sized businesses which operate refrigeration systems outside of the scope of related CARB regulations.[163] This program will leverage a performance-based program framework to pay incentives that align with the TSB of refrigerant conversion projects and the associated EE benefits of a whole building approach.

j. Grow behavioral and retro-commissioning programming

MCE will continue to prioritize low-cost, high-TSB programming by leveraging Behavioral and Retro-commissioning measures in its Resource Acquisition segment programs.

[159] See further discussion in **Chapter 7: Portfolio Coordination**.

[160] CARB. FRIP, available at: https://ww2.arb.ca.gov/our-work/programs/FRIP ("Established by Senate Bill 1013, the Fluorinated-gas (F-gas) Reduction Incentive Program (FRIP) has received a total of $66 million to promote the adoption of climate-friendly, low-GWP refrigerant technologies to help California meet Senate Bill 1383 F-gas reduction targets and reach carbon neutrality.").

[161] BayREN, BRRR, available at: https://www.bayren.org/chill. ("BayREN Refrigerant Replacement (BRRR) Program helps Bay Area food and floral businesses reduce greenhouse gas emissions by swapping out harmful refrigerants for more environmentally-friendly alternatives. Additionally, the program installs energy efficient equipment that will help lower utility bills. All this at low cost to the businesses.").

[162] *See e.g.* Energy Solutions, TECH Commercial Incentives, available at: https://techcleanca.com/incentives/commercial/ (describing low-GWP kicker).

[163] CARB, Refrigerant Management Program, available at: https://ww2.arb.ca.gov/our-work/programs/refrigerant-management-program ("Stationary refrigeration facilities with more than 50 pounds of high-GWP refrigerant in the largest on-site refrigeration system must register with the RMP. Those with at least 200 pounds of high-GWP refrigerant in the largest system have annual reporting and additional duties.").

MCE will strategically expand EE offerings for its industrial participants in the existing PY 2024-2027 SEM program. MCE will build on strong momentum in its industrial sector SEM programming, leverage the growing trusted relationships, existing administrative infrastructure and rising energy knowledge base of industrial customer participants for potentially large-scale projects.

MCE will also explore new behavioral subprogram delivery pathways to focus on small and medium-sized commercial businesses. While drawing on core principles of SEM, the concept is to expand services to employ a medium-touch approach, delivering educational modules and program services tailored to the needs of these small and medium-sized commercial customers. Currently MCE is conducting a study which includes a detailed market assessment, literature review, measurement and verification analysis, and draft program design developed by an EE consultant.

k. Utilize customer data analytics

The MCE Data and Analytics team recently created a customer data analytics platform, rooted in CALTRACK methods,[164] which enables MCE to identify customers who could benefit from specific EE programs and program offerings. The platform utilizes Advanced Metering Infrastructure ("AMI") data and creates a load profile for each customer. The tool includes several demographic and usage filters, along with analytic parameters to create reports. This tool will be integral in the refinement of program design, the identification of appropriate marketing education and outreach activities, maximizing TSB, and ongoing M&V of customers.

[164] CalTRACK, CalTRACK Methods, available at: https://docs.caltrack.org/en/latest/methods.html ("CalTRACK methods are developed in an open and transparent stakeholder process that uses empirical testing to define replicable methods for calculating normalized metered energy consumption using either monthly or interval data from an existing conditions baseline.")

l. Sectors Targeted by Above Strategies

These Resource Acquisition segment strategies will be implemented throughout MCE's program portfolio, but many of them have specific market sector focus. The table below illustrates the appropriate strategies that will be deployed by market sector.

Figure 6-1: Strategies by Sector[165]

Resource Acquisition Segment Strategy	Residential	Commercial	Industrial	Agricultural
Continue to deploy successful programs	X	X	X	X
Expand existing programs	X	X		
Promote additional opportunities	X	X	X	X
Employ varied delivery channels	X	X	X	X
Facilitate financing solutions	X	X	X	X
Maintain cost effectiveness	X	X	X	X
Maximize Total System Benefits	X	X	X	X
Incorporate Demand Side Management elements	X	X	X	X
Promote low-GWP refrigerants		X	X	
Grow behavioral and retro-commissioning programming		X	X	
Utilize customer data analytics	X	X	X	X

The MCE Resource Acquisition portfolio serves customers in the agricultural, commercial, industrial, and residential sectors. MCE proposes to continue running programs in these sectors throughout the eight-year Business Plan period, with no expansion or withdrawal of sectors served.

In its Resource Acquisition segment, MCE forecasts serving 1,150 single-family homes and zero manufactured homes in PYs 2028-2031. MCE additionally forecasts serving 2,300 single-family homes and zero manufactured homes in 2028-2035. In this Application, MCE proposes an EM&V study to remove EE program barriers for manufactured homes customers as discussed in **Chapter 9: Evaluation, Measurement and Verification**. MCE plans to use information learned

[165] While the subsections *supra* describing these strategies included relevant highlights of these strategies in action, this Figure reflects all sectors where MCE deploys the above-discussed strategies.

through its manufactured homes EM&V study to serve those customers through its portfolio programs.

m. Sectors Targeted for SEM, NMEC, Deemed, Custom Measurement, Direct Install - Evaluation Tools for Sectors

MCE's core Resource Acquisition programs serve the full range of residential and non-residential (commercial, industrial, agricultural) sectors. As **Figure 1** demonstrates, these programs feature performance-based incentives and leverage NMEC, SEM, as well as custom and deemed approaches to determine impacts.

Figure 6-2: Methods of Determining Impact by Sector

Sector	SEM	NMEC	Custom	Deemed	Direct Install
Residential		X	X	X	X
Commercial	X	X	X	X	
Industrial	X	X	X	X	
Agricultural			X	X	

General SEM is well suited to the commercial and industrial sectors because businesses benefit from ongoing operational improvements that drive sustained energy savings.[166] These sectors greatly align with SEM because it mirrors how businesses already approach operational efficiency. There is not yet a clear pathway for Residential SEM due to ongoing challenges in designing cost-effective, scalable approaches for this sector because there are so many diverse customers with comparatively smaller energy usages.

NMEC's "pay-for-performance" aligns with the residential, commercial, and industrial sectors where building loads are predictable and measurable. However, in the agricultural sector, loads are inherently variable and difficult to normalize due to seasonal cycles and weather

[166] "Energy Management Proves Cost Effective in Industrial and Commercial Facilities." American Council for Energy-Efficient Economy (ACEEE), 2021, available at: https://www.aceee.org/press-release/2021/05/energy-management-proves-cost-effective-industrial-and-commercial-facilities.

dependency. Also, MCE's service territory does not include a sufficient agricultural customer base and energy load to support the program at scale.

Custom measurement and verification serves specific project types that yield greater savings potential than standardized approaches. However, this method carries a higher administrative burden, making it most appropriate for larger or more complex projects where the potential savings justify the additional oversight and documentation costs. [167]

Deemed measures offer a comparatively reduced administrative burden and lower implementation costs, making them a more accessible and scalable method.[168] They also align with state-level goals and standardized reporting frameworks, supporting efficient program delivery without the verification complexity of custom pathways.

Direct install programming targets MCE's residential sector, which is large enough to achieve economies of scale.[169] However, direct install is not a strong fit for MCE's non-residential sector because customer counts are lower and the economies of scale that make residential direct install cost-effective are harder to achieve.

The Commercial and Residential Flex Market programs serve their respective sectors by leveraging population-based NMEC measurement and verification ("M&V") processes. Both deliver performance-based incentives to aggregators through a midstream program model,[170] enabling them to develop EE projects that simultaneously optimize grid value and reflect the actual

[167] California Technical Forum, White Paper: Energy Efficiency Measure Classification, 2020, available at: https://static1.squarespace.com/static/53c96e16e4b003bdba4f4fee/t/64c193e6c496ce49df80f4c1/1690407911676/Cal+TF+White+Paper+EE+Measure+Classification+Final.pdf, p. 2.
[168] *Id*.
[169] ACEEE, Keys to the House: Unlocking Residential Savings with Program Models for Home Energy Upgrades, 2016, available at: https://www.aceee.org/files/proceedings/2016/data/papers/2_693.pdf, p. 2-4.
[170] "In a midstream program design, the primary points of market engagement are the midstream market actors: distributors and contractors." ACEEE, Swimming to Midstream: New Residential HVAC Program Models and Tools (2016), available at https://www.aceee.org/files/proceedings/2016/data/papers/7_888.pdf.

impacts of observed usage. MCE's experience with these programs demonstrates consistent, strong cost-effective results with no risk to ratepayers (because payment is tied directly to programmatic performance). MCE will build on its success with existing programmatic offerings and continue to refine and improve them based on performance, Commission guidance, and customer feedback.

Building on this foundation, MCE is also launching a new program, the Low-GWP Refrigerant Accelerator program, focused on accelerating the adoption of low-GWP technologies. This initiative will incorporate population NMEC M&V and quantify TSB benefits from refrigerant gas reductions using the Refrigerant Avoided Cost Calculator and Fuel Substitution Calculator ("RACC-FSC").

In addition, MCE will continue to provide deemed and custom opportunities through its Energy Management, MFES-R, and HES-R programs. These approaches simplify and streamline program management and allow for clear incentive payments in cases where population NMEC methods are not appropriate.

4. Market Support

MCE proposes to continue its single comprehensive existing program under the Market Support segment—the Green Workforce Pathways program ("GWPP"). The GWPP is a workforce education and training program that will continue to support the electrification workforce, job quality, and California's decarbonization goals by:

1. Increasing the capacity of the workforce to install and maintain advanced EE and electrification measures; and
2. Creating opportunities for sustainable, quality employment in the emerging electrification industry.

GWPP provides individualized job seeker support towards a career in the energy industry, including interview and resume coaching, connections with local industry experts, and paid training opportunities with local contractors. The program also identifies and removes barriers

faced by contractors seeking to upskill their staff and grow their business by providing onboarding support, personalized education and training, and stipends to defray costs of training. This program serves to fulfill the following priorities and principles:

- Support development of workforce that advances building electrification while supporting progress on statewide and regional EE and GHG emissions reduction goals.
- Support expanding the decarbonization economy by building and strengthening targeted job seeker and contractor relationships.
- Support enhanced job quality.
- Build strategic partnerships between MCE and electrification industry professionals that can reduce electrification costs and shift customer behavior toward decarbonization and EE.
- Grow and strengthen regional coalitions that align municipalities, community-based organizations ("CBO"), CCAs and other Load Serving Entities ("LSE") on advancing decarbonization.

4.1 Sub-Objectives

MCE's comprehensive GWPP pursues each of the five sub-objectives in the Market Support segment. The success of these sub-objectives builds on one another and works in tandem to support the main goals of MCE's Market Support segment efforts.

Sub-Objective #1: Demand. Build, enable, and maintain demand for energy efficient products and services in all sectors and industries to ensure interest in, knowledge of benefits of, or awareness of how to obtain energy efficiency products and/or services.

MCE's GWPP advances demand for EE and electrification technologies by dismantling barriers that prevent these technologies from reaching cost parity with legacy, higher GHG-emitting alternatives and by providing related education to contractors. Workforce availability and readiness remain a key barrier to electrification projects and building decarbonization in California

more broadly.[171] The Bay Area Air District ("BAAD") found residential contractors experience numerous barriers to participating in electrification focused programs or learning more about newer electrification technologies, specifically including: lack of time; constrained administrative resources; cash flow financing for rebate programs requirements; eligibility or qualifications requirements; and the cost of lost wages when attending training.[172] The GWPP directly supports contractors by offering administrative support, assistance navigating existing rebate offerings, and stipends for employees to attend electrification trainings. MCE provides ongoing education for the workforce, including contractors and job seekers, and collaborates with CBOs, municipalities, and fellow CCAs to deliver accessible information on the benefits of EE and electrification. Program offerings include technical workshops, community outreach events, and paid training opportunities focusing on heat pumps and other emerging electrification technologies.

The GWPP also aims to build broader public understanding of and confidence in EE and electrification technologies as well. MCE's education of contractors and employees positions those contractors and employees to share relevant information with customers directly. As regulatory and market forces bolster installation demand, MCE's GWPP remains positioned to supply a well-trained workforce capable of meeting these growing needs.

[171] UCLA Luskin Center for Innovation and Inclusive Economies, CALIFORNIA BUILDING DECARBONIZATION WORKFORCE NEEDS AND RECOMMENDATIONS, November 2019, available at: https://innovation.luskin.ucla.edu/wp-content/uploads/2019/11/California_Building_Decarbonization-Executive_Summary-1.pdf.

[172] BAAD, STAFF REPORT Informational Update Regarding Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters less than 75,000 BTU/hr, December 2024, available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20241127_board-report-dec-2024-pdf.pdf?rev=f9b89cc7ceb54588b5c505d6f20635e3&sc_lang=en, pp. 43-44.

Sub-Objective #2: Supply: Build, enable, and maintain supply chains to increase the capability and motivation of market actors to supply energy efficient products and/or services, and to increase the ability, capability, and motivation of market actors to perform/ensure quality installations that optimize energy efficiency savings.

MCE's GWPP will support the success of its residential EE and electrification program portfolio with complementary workforce development and training. The access to education and training provided by the GWPP will support MCE's EE portfolio objectives.

GWPP is designed to leverage industry and stakeholder expertise by funding training opportunities for contractors and their staff to provide long-term, relevant support and education for EE and electrification contractors. Contractors can request stipends from MCE to cover the cost of attending related industry trainings. MCE's technical experts review each request, along with the training curriculum. If they determine that the training has appropriate scope and depth, the request is approved. Funding can cover both training fees and lost staff hours, helping contractors recover costs while investing in their team's continuing education. In addition, GWPP offers hands-on technical training in the field as part of contractor onboarding to the program.

GWPP promotes workplace standards as an integral component of its Market Support program through its contracting[173] and program administration. These actions will support high-road labor standards, job quality, and best practices for local and statewide employment. Specifically, MCE utilizes the Residential Building Decarbonization Job Quality & Labor Standards Toolkit ("Toolkit") published by Rising Sun Center for Opportunity and the Bay Area Residential Decarbonization High Road Training Partnership ("HRTP") in its administration of the

[173] MCE outlines workforce standards requirements in each related contract it enters with its EE program implementers. MCE's EE program implementers must all agree to MCE's Terms and Conditions contract terms, which includes minimum workforce/workplace standards in compliance with applicable state, federal, local laws, regulations, ordinances and resolutions.

GWPP.[174] The Toolkit is a resource designed to help program administrators advance high-road labor standards, in publicly funded or subsidized residential building decarbonization programs in the Bay Area.

Labor standards include, but are not limited to:

- Fair wages and benefits, including wages, healthcare, and retirement;
- Regional and targeted hire;
- Compliance and accountability; and
- Training, certification, and career advancement.[175]

MCE supports high-road employment by ensuring that participating GWPP contractors demonstrate their commitment to these standards. If contractors do not meet minimum high road standards, MCE encourages contractors to work toward achievement and to re-apply when they offer sufficient benefits to their employees. MCE's GWPP provides Electrification Training stipends to allow contractors and their staff to advance their technical electrification skills as well as soft skills. Participants in GWPP can apply to receive funds for any training that fits their unique needs as a contractor. MCE reviews and approves the training request if it is substantive and promotes safety practices, sales, home performance upgrades, electrical, plumbing, or any field that fits within the electrification industry's needs.

Within the GWPP, MCE partners with local and regional community-based organizations ("CBOs") to lead training for HVAC, plumbing, electrical and general contractors with an emphasis on recruiting Minority, Women, and Disadvantaged Business Enterprises ("MWDBE").

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[174] Rising Sun and Bay Area Building Decarbonization HRTP, HRTP Residential Building Decarbonization Summary, available at: https://risingsunopp.org/wp-content/uploads/Rising-Sun-Bay-Area-Residential-Building-Decarb-HRTP-Summary.pdf.
Job Quality & Labor Standards Toolkit, December 2024 available at: https://risingsunopp.org/wp-content/uploads/HRTP-Res-Decarb-Job-Quality-and-Labor-Standards-Toolkit-v2.pdf.

[175] Rising Sun and Bay Area Building Decarbonization HRTP,
Job Quality & Labor Standards Toolkit, December 2024, at 4, available at: https://risingsunopp.org/wp-content/uploads/HRTP-Res-Decarb-Job-Quality-and-Labor-Standards-Toolkit-v2.pdf.

MCE uses HRTP labor standards in the GWPP and they will continue to inform recruitment, hiring and vetting of new industry workforce staff into skilled trades, focusing on recruitment from hard-to-reach and underserved communities.

Sub-Objective #3: Partnerships: Build, enable, and maintain partnerships with consumers, governments, advocates, contractors, suppliers, manufacturers, community-based organizations and/or other entities to obtain delivery and/or funding efficiencies for energy efficiency products and/or services and added value for partners.

MCE's GWPP will continue to build, enable, and maintain partnerships with job seekers, EE and electrification contractors, and the communities MCE serves. These partnerships help ensure these Market Support activities are accomplishing program goals and providing value to participants, the designated market, and ratepayers.

For example, engaging EE and electrification contractors is critical to the success of GWPP. MCE's GWPP will leverage existing relationships to build and maintain robust partnerships with local EE and electrification contractors. MCE will offer these contractors regular opportunities to give feedback and strengthen communication with implementers, using email, phone, and in-person sessions in both individual and group settings. MCE will meet these partners where they are, providing contractors with skills training at their job site, using existing training materials and new resources developed to fill gaps in existing educational materials. Lastly, MCE will encourage contractors to seek out training tailored to their unique needs by offering stipends for contractors to cover the cost of attending third-party training.

Job seekers are also important partners to the success of GWPP. To engage these job seekers, the GWPP provides wrap around services that are critical for job seekers in their search for high-roads jobs. This includes resume-writing and interview preparation assistance, customer engagement training, funds for work clothing, transportation support, workplace expectations training, and support tailored to each participant's needs and life circumstances. MCE values the

information these job seeker partners bring to and share with MCE through the GWPP. The GWPP gathers regular feedback from participants and uses that feedback to improve program design and implementation. Some examples of past program improvements informed by participant feedback include adding a $300 stipend for job seekers to buy work equipment, and a bonus for completing the 160 hours of paid work.

CBOs are critical partners to the success of the GWPP—both MCE and these CBOs benefit from the information, expertise, relationships, and assistance all parties bring to the relationships. For example, the GWPP provides in-depth and specific information about the contractor and job experience to CBOs to inform those CBOs' own program design decisions. MCE, for its part, uses feedback from CBOs to inform program design decisions. For example, MCE's use of the High Road Training Partnership Toolkit[176] labor standards within our contractor vetting process was in direct response to community feedback. MCE partners with local CBOs to recruit new participation in the GWPP, strengthening MCE's existing relationships with participants of the program and across MCE's service area. MCE has found that these CBOs (and some workforce development providers)[177] have long-standing, trusted relationships with disadvantaged, hard-to-reach, and underserved communities. These relationships help MCE better target disadvantaged workers for GWPP's paid training component.

In August 2025, MCE held our first Electrification Contractor Power Breakfast for residential contractors at our centrally located Concord office. MCE presented the 25 regional contactor participants with updates and questions about our customer programs and offerings, with

[176] Rising Sun, Residential Building Decarbonization Job Quality & Labor Standards Toolkit, December 2024, available at: https://risingsunopp.org/wp-content/uploads/HRTP-Res-Decarb-Job-Quality-and-Labor-Standards-Toolkit-v2.pdf.

[177] *See, e.g.*, Marin Builders Association, Efficiency First, the Bay Area Residential Decarbonization High Road Training Partnership.

the goal of learning what is working and what is not for contractors and their customers. As a result of the program, MCE has made program improvements like refreshing the incentive amounts and increasing contractor engagement in our Flex Market programs. This has successfully grown our GWPP, and MCE will continue to engage contractors through meaningful engagement in these feedback/interactive sessions. The next commercial contractor breakfast is planned for March 2026.

Sub-Objective #4: Innovation and Accessibility: Build, enable, and maintain innovation and accessibility in technologies, approaches, and services development to increase value, decrease costs, increase energy efficiency, and/or increase scale of and/or access to emerging or existing energy efficient products and/or services.

The EE and electrification sectors face serious workforce challenges that can slow growth and challenge cost-effective program administration. Barriers include limited access to diverse training for all skill levels, contractor time constraints that reduce training participation, insufficient instruction on new technologies, low career awareness among job seekers, and difficulties new workers face in securing and keeping jobs.[178] Together, these barriers limit California's ability to scale and deliver effective EE and electrification programs.

The GWPP aims to build a continuously developing workforce ecosystem through stackable, sector-specific training that serves all skill levels. This approach will support strengthening and expanding a highly skilled workforce able to adopt and apply new technologies quickly and effectively. By raising career awareness and offering soft skills training and financial support, the GWPP will reduce known workforce gaps, improve retention, and help the sector meet rising demand and achieve state energy goals.

[178] BAAD, STAFF REPORT Informational Update Regarding Regulation 9, Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters less than 75,000 BTU/hr, December 2024, available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/20241127_board-report-dec-2024-pdf.pdf?rev=f9b89cc7ceb54588b5c505d6f20635e3&sc_lang=en, pp. 42-44.

Sub-Objective #5: Access to Capital: Build, enable, and maintain greater, broader, and/or more equitable access to capital and program coordination to increase affordability of and investment in energy efficient projects, products, or services.

The GWPP expands contractor access to the rapidly growing electrification industry, supporting business growth while building a robust local contractor network. A stronger network of qualified contractors increases customer access to funding through MCE programs and ensures more equitable pathways to invest in electrification upgrades.

Through training, education, and on-the-job support, the GWPP prepares contractors and job seekers to deliver advanced EE and electrification projects and to effectively communicate the value of these upgrades to customers. By offsetting initial hiring and training costs, MCE helps contractors grow their businesses while also supporting job seekers with stipends and career placement in long-term, high-quality roles.

Partnerships with CBOs, municipalities, distributors, manufacturers, and industry groups ensure that these opportunities are inclusive and accessible, prioritizing equity and fair employment. Together, these strategies expand the pool of skilled contractors, lower barriers for customers to access capital and incentives, and accelerate the transition to electrified homes and businesses.

4.2 Sectors Served under the Market Support Segment

MCE Market Support segment activities aim to strengthen the residential EE and electrification workforce, with a focus on professionals serving both single-family and multifamily homes.

The GWPP's program goals will expand for 2028-2031. Specifically, GWPP will:

- Support job readiness by providing wrap-around services and holistic educational opportunities to approximately 60 participants per year (240 for the full application period). These services include job coaching, resume development, interview

preparation, and soft-skills training designed to prepare candidates for careers in the energy sector.

- Facilitate job placements for 13 new job seekers per year (52 for the full application period) into long-term, industry-based careers. Through partnership development and targeted outreach, GWPP actively connects job seekers with qualified employers, ensuring pathways to stable and meaningful employment in green industries.
- Deliver specialized education and training opportunities on emerging and advanced technologies—such as heat pumps, smart thermostats, and energy management systems—as well as on sales and administrative roles within the electrification industry to approximately 13 participating businesses per year (approximately 52 for the full application period). This ensures that the supply side of the market remains skilled, informed, and capable of supporting customer demand effectively.

The program's ongoing expansion will include increased efforts to serve manufactured home sectors as a growing focus area, recognizing the unique needs and opportunities within this housing segment and its contribution to residential energy consumption. Manufactured homes have been historically underserved by California programs and face unique barriers to decarbonization including, but not limited to, low electrical capacity, space constraints, remediation needs, and regulatory complexities.[179] This strategic expansion aims to enhance market transformation by equipping a broader range of energy professionals with critical skills tailored to the diversity of residential building types served by MCE.

In its Market Support segment, MCE serves contractors and job seekers, therefore we do not forecast directly serving any single-family or manufactured homes in this segment throughout the eight-year portfolio. MCE will look for opportunities to educate our participating contractors on how to better serve manufactured homes. Additionally, in this Application, MCE proposes an EM&V study to remove EE program barriers for manufactured homes customers as discussed in

[179] CEC, *Equitable Building Decarbonization Program Guidelines* (2023), available at: https://www.energy.ca.gov/publications/2023/equitable-building-decarbonization-direct-install-program-guidelines, p. 13; Assembly Bill 806 sections 1-2.(Connolly, 2025) (removing legal restrictions to cooling systems in manufactured homes and mobilehome parks including electric heat pump cooling systems).

Chapter 9: Evaluation, Measurement and Verification. MCE plans to use information learned through its manufactured homes EM&V study to serve those customers through its portfolio programs.

5. Equity

Advancing energy equity is key to MCE's mission and vision.[180] Energy equity is central to how MCE approaches all EE program design and delivery for its increasingly diverse and growing customer base. MCE is fully committed advancing energy equity through its Equity segment programs as discussed below. In this Application, MCE committed the maximum budget allowed for Equity segment and Market Support programs.[181] Further, MCE requests additional funds for Equity segment programs more proportionate to its Equity segment customers in **Chapter 11: Policy Recommendations**.

5.1 MCE's Equity Customers

In this Application, MCE refers to all categories of customers eligible for its proposed Equity segment programs using the umbrella "Equity Customers." MCE defines "Equity Customers" as residential customers and businesses in what the Commission defines as Environmental and Social Justice ("ESJ") communities. The Commission defined ESJ communities for the purposes of its policy and programs as those that meet one or more of the following criteria:

- "Disadvantaged Communities, defined as census tracts that score in the top 25% of CalEnviroScreen 3.0, along with those that score within the highest 5% of CalEnviroScreen 3.0's Pollution Burden but do not receive an overall CalEnviroScreen score;
- All Tribal lands;
- Low-income households (Household incomes below 80 percent of the area median income); and

[180] MCE, About Us, Our Purpose, available at: https://mceCleanEnergy.org/about/ (MCE Vision, MCE Mission).
[181] *See* **Chapter 4: Forecast Methodology and Zero-Based Budgeting**.

- Low-income census tracts (Census tracts where aggregated household incomes are less than 80 percent of area or state median income)."[182]

This definition of Equity Customers satisfies the Commission's Equity segment requirements. The Commission requires Equity segment programs to serve "hard-to-reach or underserved customers and disadvantaged communities[.]"[183] The Commission emphasized that these programs "should be designed to specifically serve customers (or groups of customers) meeting the criteria specified by Pub. Util. Code Section 1601(e) and, if applicable, Government Code Section 12100.63(h)(2) – for instance, a family/household with school-age children who are federally eligible for free or reduced-price meals – but customers not meeting any of these criteria should not be barred from participation."[184]

Section 1601(e) defines "underserved community" as a community that meets one of the following criteria:

> (1) Is a "disadvantaged community" as defined by subdivision (g) of Section 75005 of the Public Resources Code (one where the "median household income" is "less than 80% of the statewide average");
> (2) Is included within the definition of "low-income communities" as defined by paragraph (2) of subdivision (d) of Section 39713 of Health and Safety Code (census tracts with median household incomes "at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low income by the department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093").
> (3) Is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen.
> (4) Is a community in which at least 75 percent of public school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program.
> (5) Is a community located on lands belonging to a federally recognized California Indian tribe.

[182] CPUC, ESJ Action Plan 2.0, April 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf, p. 2.
[183] D.21-05-031, p. 14.
[184] D.23-06-055, p. 47.

The Commission's definition of an ESJ community entirely overlaps with the definition of an underserved community targeting low-income, disadvantaged communities, and Tribal lands. MCE's Equity Customer definition (and, correspondingly, its Equity segment programs) target:

- Disadvantaged communities;
- Low-income households; and
- Low-income census tracts.

The Commission also clarifies that this is about the *aims* of these programs, and the definition of Equity Customers is not meant to set any participation limits or conditions based on membership in these communities. "Customers that may not be considered part of the equity segment will not be precluded from participating in [E]quity segment programs, but equity programs must be designed to target (*i.e.*, market and conduct outreach to) and to primarily serve [E]quity segment customers."[185]

5.2 MCE's Equity Segment Programs

To serve all MCE communities, advance energy equity, and respond to the unique needs of its service area—MCE currently implements and proposes continuing three Equity segment programs:

- Home Energy Savings Equity ("HES-E") program – MCE's HES-E program is a direct install program that provides low- and moderate-income single-family homeowners and renters a free home energy assessment and no-cost home energy upgrades, including electrification measures.[186]
- Multifamily Energy Savings Equity ("MFES-E") program – MCE's MFES-E program serves low-income customers in deed-restricted multifamily properties, offering EE and electrification measures. This program provides rebates for both tenant units and whole-building upgrades for property owners and tenants.[187]

[185] *Id*. at p. 43.
[186] MCE, *Home Energy Savings*, available at *https://mcecleanenergy.org/home-energy-savings/*.
[187] MCE, Energy Savings for Multifamily Properties, available at https://mcecleanenergy.org/multifamily-savings/.

- Small Business Energy Advantage ("SBEA") program – MCE's SBEA program serves historically underserved small businesses with free energy assessments and upgrades.[188]

Each program delivers solutions that fulfill the objectives established in D.23-06-055,[189] namely:

- Address disparities in access to EE programs;
- Deliver NEBs including resilience, health, comfort, safety, energy affordability, and energy savings; and
- Reduce energy-related greenhouse gas and criteria pollutant emissions.

Strategies employed to fulfill these objectives are described in detail below.

5.3 Strategies to Serve MCE Equity Segment

1. Partnering with Trusted Equity Implementers

MCE uses a Request for Proposals ("RFP") process to select implementation partners with demonstrated experience serving Equity customers. MCE selects implementation partners with demonstrated experience building trust with and successfully serving Equity customers and based on their capacity to engage communities where English is not the primary language.

2. Meaningful Partnerships with CBOs

MCE works with CBOs as trusted partners to expand the reach and impact of its equity programs. Through the SBEA program, for example, MCE currently collaborates with CBOs such as Vallejo Main Street and Canal Alliance, to engage hard-to-reach businesses.[190] These partnerships support direct outreach including door-to-door, phone, and email communications—to small businesses that often lack the resources or awareness to pursue energy upgrades.

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[188] MCE, Small Business Energy Advantage, available at https://mcecleanenergy.org/small-business-energy-advantage/.
[189] D.23-06-055, pp. 57-58.
[190] Vallejo Main Street, available at https://www.vallejomainstreet.org/; Canal Alliance, available at https://www.canalalliance.org/.

CBOs play a critical role in building trust with potential program participants, particularly in ESJ communities, by connecting residents and business owners to beneficial program opportunities and supporting them through their participation. CBOs bring many existing strong and longstanding relationships with community members helpful for outreach. CBOs additionally are experts at culturally appropriate and in-language education and outreach methods. Their expertise can help communicate both energy and non-energy benefits of potential participation (such as cost savings, health comfort, and safety) effectively to diverse communities, making participation more accessible.[191]

By prioritizing meaningful CBO partnerships into its program design and delivery, MCE ensures its services reach customers who might otherwise be left out of traditional EE efforts.

3. Community Engagement

One vital strategy for achieving MCE's Equity goals is ongoing, meaningful community engagement and networking with Equity customers. This strategy includes engaging directly with Equity customers and their advocates to help design, promote and evaluate the benefits of MCE's EE programs. MCE's community engagement process will ensure that the benefits of the programs align with, and meet an accurate baseline of, community-driven needs. This information will be relevant to both ensuring the success of Equity programs and for mitigating barriers for Equity customer participation in EE programs more broadly. This strategy is also based on developing multilingual outreach and program materials to ensure that communities have access to information in their primary languages. MCE discusses its ongoing stakeholder outreach activities in **Chapter 8: Stakeholder Engagement**.

[191] Building Energy Equity & Power (BEEP) Coalition, BEEP Comments on Equitable Building Decarbonization Program Draft Guidelines, June 2023, available at: https://beepcoalition.org/publications/, pp. 2, 3, 8.

4. Low- or No-Cost Options

Programs meet customers "where they are" by offering no- or low-cost assessments, installations, and technical support. A key structural barrier for Equity customers benefiting from clean energy and clean energy technologies is a lack of access to capital.[192] By stacking multiple non-ratepayer funding sources into its Equity segment programs,[193] MCE programs are able to minimize customer co-pay requirements, expanding access for those without discretionary funds for major home or commercial building upgrades. Special funds allocated from MCE's operating budget (non-ratepayer funds) are also leveraged for electrification readiness measures, such as electrical circuit repair, light construction, and mold remediation, particularly supporting residential equity programs. By offsetting these ancillary upgrade costs, MCE makes installations feasible for customers who would otherwise be unable to afford them.

5. Technical Assistance

Each program provides tailored education and technical support throughout the upgrade process. In the multifamily sector, MFES-E implementors support property owners and managers at every stage of the project, helping them prioritize the various upgrade opportunities at their site, and helping them navigate the challenges presented by diverse building types. This approach ensures a tailored plan for each customer.

[192] California Energy Commission, Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities, 2016, available at: https://efiling.energy.ca.gov/getdocument.aspx?tn=214830, p. 2.

[193] For the purposes of this application, MCE defines "non-ratepayer funds" as funds other than those authorized by the Commission to administer EE programs from its Public Purpose Programs surcharge. External funds MCE stacks or leverages when applicable include Transformative Climate Communities, Equitable Building Decarbonization, private grant funding, and various federal funds.

For single-family and small business customers, each HES-E or SBEA-supported upgrade is preceded by a detailed assessment to determine the most beneficial project scope, completed by trained EE professionals.

6. Customer Choice and Range of Upgrades

Each Equity segment MCE program provides customers with upgrade options tailored to the property, geographic location, and customers' needs. For example, multifamily properties are offered in-unit options, such as ductless mini-splits ideal for small, ductless spaces, while single family homes are provided with insulation and air sealing for homes not up to code. Small commercial customers are offered measures selected for commercial utility, like vending machine controls and advanced lighting systems.

7. Neighborhood Approach

MCE prioritizes Equity customers via a community campaign model. HES-E and SBEA programs employ neighborhood-based outreach, including email, social media, events, and in-person canvassing. These programs target DACs and predominantly moderate- and low-income areas, as determined by CalEnviroScreen and census data. Interested customers receive no-cost assessments and participation incentives. Trust is fostered through word-of-mouth referrals, with implementers relying on these to expand access and strengthen community relationships. MFES outreach leverages established organizational networks—local governments, property owner organizations, municipal contractors, and housing service providers—to disseminate program information within the community.

8. Economies of Scale

MCE uses economies of scale to expand access to EE and electrification while lowering costs. By delivering low- and no-cost installations across entire neighborhoods, buildings, and

business sectors, programs achieve holistic scopes of work that reduce administrative overhead and maximize long-term energy savings. Pre-defined measure sets enable implementers to coordinate bulk purchasing, secure better pricing, and send clear market signals that drive demand for efficient and electrified products.

9. Advancing Non-Energy Benefits (Resilience, Health, Comfort, Safety, and Emissions Reductions)

The goals of MCE's Equity programs are to provide EE and electrification opportunities to Equity customers while also generating NEBs such as increased health, safety and comfort. MCE strives to reduce energy costs and burdens for Equity customers especially considering the ongoing affordability crisis. As so many Equity customers suffer from high energy bills, EE programs should maximize bill savings potential and the NEB of "bill savings."[194] MCE selects measures and stacks external funds to ensure Equity segment programs deliver meaningful NEBs to participating customers, and ESJ communities especially.

All MCE Equity segment programs start with a qualified assessment and tailored recommendations that prioritize energy savings and reduced GHG and pollutant emissions. Program-supported upgrades use only non-combustion (electric) technologies, improving indoor environments while lowering health and safety risks.[195] Rigorous quality assurance—including inspections, customer surveys, and expert post-installation checks—ensures every upgrade meets program standards and delivers on energy, health, and safety goals.

[194] Public Policy Institute of California, Low-Income Households Struggle with the Cost of Electricity Bills, August 2025, available at: https://www.ppic.org/blog/low-income-households-struggle-with-the-cost-of-electricity-bills/.

[195] Yannai Kashtan, Chenghao Wang, Kari C Nadeau, Robert B Jackson, Integrating indoor and outdoor nitrogen dioxide exposures in US homes nationally by ZIP code, *PNAS Nexus*, Volume 4, Issue 12, December 2025, pgaf341, https://doi.org/10.1093/pnasnexus/pgaf341 (finding switching from natural gas stoves to electric stoves dramatically reduces air pollution and associated health effects).

In addition, MCE participated in the Market Rate Non-Energy Benefits ("NEBs") Equity Sector Working Group in 2023 and 2024, which enabled broad PA and stakeholder collaboration to "further define the goals, priorities, and scope of [a NEBs study]" to update and improve quantification of NEBs as an indicator for Equity segment program performance.[196] The Working Group made several recommendations to inform the NEBs Study Tier 1 advice letter, including identifying which NEBs should be considered as a high priority for the study.[197]

Based on its participation in the Working Group and its program design activities informed by stakeholder feedback, MCE anticipates its Equity segment programs will target delivering NEBs such as the "Benefit of bill savings," "More comfortable," "Better health at the participant level," "Increased job access at the participant level," and "Economic development" given the discussions and outcomes of the Working Group. MCE anticipates its Equity segment programs may deliver other NEBs deemed lower priority in the Working Group, such as "Increased property value" and "Increased productivity."

The Market Rate NEBs Equity Segment Study is mandated to be completed no later than October 1, 2026. MCE appreciated the opportunity to participate in the Market Rate Non-Energy Benefits Equity Sector Working Group and looks forward to reviewing and implementing the findings of the final report to track NEBs as an indicator for Equity segment program performance.[198] MCE will incorporate the contents of the Market Rate NEBs Equity Segment Study into its implementation of PY 2028-2031 Equity segment programs.[199]

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[196] D.23-06-055, p. 35.
[197] *Id*., OP 18.
[198] *Id*., pp. 124-125.
[199] MCE also tracks and participates in the CEC's Informational Proceeding on Non-Energy Impacts Docket Log (Docket Log 24-OIIP-03, available at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-OIIP-03). MCE will similarly incorporate relevant content from this proceeding as appropriate and applicable.

5.4 Definitions of Equity Subcategories

The current CPUC definitions for the three Equity subcategories—hard to reach ("HTR"), underserved, and disadvantaged communities ("DACs")— are foundational to guiding equity-focused program design and delivery. MCE recognizes that there is overlap between the three categories and that other populations presently excluded from the definitions may also face significant barriers to EE program participation. In this Application, MCE does not submit specific refinement to the definitions of hard-to-reach, underserved and DACs. MCE is not opposed to expanding Equity subcategory definitions. However, MCE believes updates to Equity definitions should be deeply informed by Equity customers themselves and their advocates. MCE recommends the Commission explore Equity definitional refinement with the guidance of stakeholders within ESJ communities, the California Energy Efficiency Coordinating Committee[200] and the Disadvantaged Community Advisory Group.[201]

5.5 Sectors Served under the Equity Segment

Given that residential customers account for over 46 percent of MCE's total electricity consumption—and noting that residential customers face historic barriers to cost-effective EE program delivery—MCE prioritizes serving residential sectors, including both single family and multifamily properties in its Equity segment programs.

However, as discussed in **Chapter 3: Portfolio Strategies**, MCE's commitment to serving hard-to-reach and undeserved communities extends to the commercial sector through the SBEA

[200] California Energy Efficiency Coordinating Committee, available at https://www.caeecc.org/.

[201] CEC, DACAG, available at: https://www.energy.ca.gov/about/campaigns/equity-and-diversity/disadvantaged-communities-advisory-group-dacag ("The DACAG is an 11-member advisory group created by Senate Bill 350 (de León, Chapter 547, Statues of 2015) that advises CEC and the California Public Utilities Commission (CPUC) on how to design and implement policies and programs to be more effective on behalf of disadvantaged communities and in the achievement of our clean energy and pollution reduction goals.").

program, which focuses on businesses located in disadvantaged communities and other underserved areas. Commercial Equity customers face unique barriers to accessing EE and clean energy opportunities including, but not limited to, contracting constraints, a lack of effective outreach, relevant data gaps, split incentives, financial obstacles, specific technical assistance needs, and workforce needs.[202]

In its Equity segment, MCE forecasts serving 1,900 single-family homes or units and zero manufactured homes in PYs 2028-2031. MCE additionally forecasts serving 3,800 single-family homes and zero manufactured homes in 2028-2035. In this Application, MCE proposes an EM&V study to remove EE program barriers for manufactured homes customers as discussed in **Chapter 9: Evaluation, Measurement and Verification**. MCE plans to use information learned through its manufactured homes EM&V study to serve those customers through its portfolio programs, especially Equity segment programs.

6. Codes & Standards

MCE is not required to and may not claim savings from administering Codes & Standards programs.[203] MCE is not submitting Codes & Standards programs in this Application.

[202] California Energy Commission, SB 350 Low-Income Barriers Study Part A at pp. 4; 9-10; 64; 69-70.
[203] D.12-11-015, OP 20.

Chapter 7: Portfolio Coordination

Marin Clean Energy ("MCE") takes regular and repeated actions to ensure that it coordinates its Energy Efficiency ("EE") portfolio internally and with relevant partners to remove the risk of duplications, overlap and to ensure that ratepayer funds are deployed to their maximum impact pursuant to California Public Utilities Commission ("CPUC") requirements.[204] MCE operates its EE portfolio in a complex regulatory, jurisdictional, and programmatic environment and remains committed to compliance with all controlling directives. MCE's ongoing coordination activities help it promote the adoption and dissemination of programmatic best practices, limits customer confusion, supports customer access to best fit programmatic offerings, confirms that its work and the work of its partners is complementary, and ensures the responsible use of ratepayer funds.

1. Coordination within the Same PA

MCE is a relatively small program administrator ("PA") and the program staff that manage programs work in close coordination with each other. Program staff have weekly coordination meetings to review programmatic progress, identify any implementation issues, discuss potential changes to programs, and lessons learned, and to share best practices. MCE staff work to ensure EE programmatic offerings are effective, complementary and responsive to customer needs.

Program staff meet with policy staff on a biweekly basis to discuss ever evolving policy requirements for EE programs including coordination issues. Program staff and policy staff regularly meet and communicate with Customer Operations staff, Public Affairs staff, and other agency staff. All meetings and communication channels provide accessible and recurring venues for MCE staff to ensure the appropriate coordination across its EE portfolio, other agency

[204] Decision ("D.") 23-06-055, Ordering Paragraph ("OP") 32 (requiring documentation of PA actions to "…mitigate or minimize ratepayer risk of program overlap and duplication.").

programs and across the agency's wide range of related activities serving its service area. MCE coordinates internally with the shared goals of best serving its customers and responsible stewardship of ratepayer funds.

2. Coordination with Other PAs

MCE coordinates with overlapping PAs through formalized Joint Cooperation Memorandums ("JCMs") and a set of standing and ad-hoc coordination forums designed to ensure transparency of programmatic offerings, prevent double-dipping, and present a coherent customer experience across overlapping service territories. JCMs must detail program summaries and PA cooperation commitments to ensure customers are aware of all programs and best positioned to make informed decisions.[205] These processes are structured to support both regional alignment (*e.g.*, within the Bay Area) and statewide alignment (particularly where investor-owned utility ("IOU") led statewide programs intersect with MCE's local portfolio).

3. Coordination Participants

3.1 Program Administrators Coordination

MCE coordinates with the following list of PAs where geographic overlap or shared customers exists.

- **Pacific Gas and Electric Company ("PG&E")**
  - **Geographic Overlap**: PG&E serves as the incumbent IOU gas provider and electric delivery utility in MCE's service area. Customers may be eligible for either MCE-administered or PG&E-administered EE programs, as well as PG&E-led statewide programs (discussed below).

[205] D.18-05-041, pp. 122-123.

- **Customer Segment Overlap**: Residential (single-family and multifamily), commercial, industrial, agricultural, public sector, and workforce education and training ("WE&T").

- **Bay Area Regional Energy Network ("BayREN")**
  - **Geographic Overlap**: MCE serves customers in four of BayREN's nine Bay Area counties. Both entities administer EE programs in residential (single-family and multifamily) and small/medium commercial sectors.
  - **Customer Segment Overlap**: Residential (single-family and multifamily), small and medium businesses, public sector, and WE&T.
- **Statewide Program Administrators (PG&E, BayREN, other IOUs)**
  - **Geographic Overlap**: MCE customers may access statewide programs administered by PG&E, BayREN or other IOUs (e.g., Codes & Standards, New Construction, Workforce, Emerging Technologies).
  - **Customer Segment Overlap**: Cross-cutting, depending on statewide program scope.

4. Coordination Structure and Frequency

4.1 Formal Coordination Venues

MCE relies on multiple formal and semi-formal coordination venues, each serving a distinct function:

a. Joint Cooperation Memorandum ("JCM") Process

- "The JCM development process involves a series of collaborative meetings between PAs, where sector and program-level strategies are debated and developed. The JCMs

help PAs determine—at a regional level—the best, most effective methods to avoid customer confusion and prevent negative outcomes from potential program overlap."[206]

- "Each PA already provides discussion of how programs coordinate and cooperate to avoid overlap, and what mitigation measures are in place, through JCMs[.]"[207]
- MCE's bilateral JCMs with PG&E and BayREN are updated on an annual cycle and filed with the CPUC.
- These JCMs establish agreed-upon coordination protocols, data sharing practices, and escalation pathways.

b. Standing Sector-Based Coordination Meetings

In addition to the JCM process, MCE conducts sector-specific forums quarterly with PG&E and BayREN for residential programs, non-residential programs (commercial, industrial, agricultural, public sector), and WE&T. MCE uses these forums to surface program changes, implementation issues, and potential overlap to be addressed.

c. Measure Package and Ex-Ante Coordination Meetings

MCE coordinates with PG&E monthly on deemed measure packages, timing of program updates, and alignment with statewide Technical Reference Manual ("eTRM") and California Technical Forum ("CalTF") processes.

[206] Southern California Regional Energy Network Filing on Behalf of the Energy Efficiency Portfolio Administrators for Program Overlap Analysis, SoCalREN Advice Letter 20-E/20-G, pp. 9. California Energy Efficiency Coordinating Committee ("CAEECC") JCMs are available on the CAEECC's website: https://www.caeecc.org/joint-cooperation-memos.

[207] *Id.* at 28.

d. Data Sharing and Double-Dip Prevention Coordination

In addition to the quarterly program manager check-ins described above, MCE, PG&E and BayREN have regular structured data exchanges (*e.g.*, quarterly claims data transfers) to prevent duplicate incentives and savings claims.

e. Ad-Hoc Working Groups and Bilateral Meetings

Lastly, MCE program administrators convene working group and bilateral meetings as needed to address emerging issues such as new program launches, program offerings, best practices, policy changes, and potential implementation challenges.

Table 7-1: Summary of Coordination Frequency

Coordination Venue	Typical Frequency
JCM development and updates	Annual / biennial (aligned with filing requirements)
Sector-based coordination calls	Regular (generally monthly or ongoing as needed)
Measure Packaging	Monthly
Data sharing (claims, participation data)	Quarterly (with interim check-ins as needed)
Ad-hoc or escalation meetings	As needed

4.2 Staff Roles Involved in Coordination

The following MCE staff participate in and support coordination activities:

- MCE Customer Program Managers;
- MCE Directors – Customer Programs; Policy;
- MCE Policy Analyst;
- MCE Policy Counsel;
- MCE Vice Presidents; and
- MCE Contracted Implementors.

5. Coordination Practices (Overlap Identification and Mitigation Workflow)

Through the JCM process, MCE and regional partners develop outreach strategies to help educate customers about EE and electrification program offerings, enrollment processes, and

encourage direct engagement with PAs. These strategies support customers' ability to make informed and empowered decisions on program participation. Program managers across PAs share program participation information with one another to ensure that savings are not double counted for some sectors (for example, Resource Acquisition programs). Additionally, MCE and other PAs have developed decision trees on program offerings with similarities that program implementers can follow when determining what are the best options for the customer in terms of highest energy and bill savings based on their unique characteristics and or eligibility criteria. For example, MCE uses a decision tree for its Multifamily Energy Savings-Equity program and the Bay Area Multifamily Building Enhancements ("BAMBE") administered by BayREN because they both serve multifamily customers. In the case of complementary programs with different sectors served and program delivery models, PAs and implementers inform customers of other programs they may be eligible to participate in.

PA staff also identify program changes that may result in "substantially similar" or "duplicative" programs through established communication channels—mainly the sector-based coordination calls. Following identification of potential issues, PA staff suggest and collaboratively refine potential solutions compliant with CPUC requirements and to best serve customer needs. Timelines for resolution can vary as many factors can impact outcomes including the scope and scale of potential overlap, the existing investment from each PA is in its corresponding planning processes, the constraints of the program or program delivery model, and/or the potential for the program design type. Typical timelines range from immediate to one year.

There are several levers through which MCE works to prevent overlap and resolve any overlap that does occur. Specifically, these include administrative/structural levers, customer

participation controls, data and information levers, and program differentiation levers. MCE addresses each of these levers in more detail below:

- **Administrative / Structural Levers**
  - Develop mutually agreed eligibility differentiation rules (*e.g.*, income limits, square-footage thresholds, hard-to-reach definitions).
  - Define referral pathways for customers not eligible for one PA's program.
  - Sequence offerings by participation pathway (*e.g.*, direct install versus rebate; strategic energy management ("SEM") versus retrofits).
- **Customer Participation Controls**
  - Apply mutually exclusive customer flags (*e.g.*, do not serve within 12-month baseline).
  - Implement project-level exclusion rules for:
    - Customers already served by a ratepayer-funded program.
    - Measures found to be identical to those incentivized elsewhere.
  - Require implementers to maintain pre-enrollment screening workflows.
- **Data and Information Levers**
  - Share quarterly claims and enrollment data.
  - Notify PAs of planned changes to program design before launch.
  - Conduct joint implementer messaging to align enrollment rules.
- **Program Differentiation Levers**
  - Layer programs to serve distinct population segments, such as:
    - Disadvantaged Communities ("DAC") / moderate-income / deed-restricted affordable housing.
    - Businesses under 50,000 square feet versus large commercial and industrial.

- Align by measure type or approach, such as:
  - Upstream/midstream versus direct install versus Normalized Metered Energy Consumption ("NMEC").
  - Behavioral/SEM versus capital replacement.

6. Coordination with Market Transformation

Market Transformation is a concerted, strategic effort to "remove structural barriers preventing growth in market share of a technology or practice."[208] Market Transformation strategies drive penetration of important technologies throughout a society or economy, and helps ensure that California benefits to the maximum extent possible from relevant technological advancements. MCE believes the insights of California's various Market Transformation initiatives can advance the goals of its EE portfolio, and that similarly its EE expertise from administering portfolio programs can in turn improve California's Market Transformation activities. The coordination of market transformation efforts is an important priority for MCE.

MCE purposely pursued a key state leadership position to better coordinate these efforts. MCE was selected to serve as a member of the Market Transformation Advisory Board ("MTAB").[209] As a member of MTAB, MCE provides substantive and relevant feedback and recommendations to the California Market Transformation Administrator ("CalMTA") on their market transformation initiatives ("MTIs") for residential and nonresidential applications. Since joining the MTAB in 2025, MCE staff participated in quarterly update/feedback sessions on CPUC-approved market transformation initiative design. Through each interaction, MCE staff

[208] CalMTA, FAQ: Market Transformation (MT), available at: https://calmta.org/faq-market-transformation/.
[209] The MTAB "provides expertise and unbiased, non-binding recommendations to CalMTA and to the CPUC." CalMTA, Advisory Board FAQ, available at: https://calmta.org/advisory-board-faq/.

provided thoughtful insight rooted in its on-the-ground PA experience with MTIs and emerging technologies.

MCE is actively coordinating with CalMTA on its current MTIs and plans to continue to further integrate CalMTA MTIs into its portfolio. For example, in November 2025 CalMTA received approval to proceed with MTIs for induction cooking products[210] (with particular attention to 24 inch 120V models that fit in smaller kitchens) and 120V window heat pumps tailored for California's climate and buildings.[211] MCE's Equity segment programs provide low-cost and, in most cases, no-cost incentives for decarbonization measures like electric heat pumps and induction cooktops. Specifically, MCE partners with the Association for Energy Affordability ("AEA") to provide incentives for multifamily decarbonization and EE upgrades through the Multifamily Energy Savings Equity ("MFES-E") program.[212] Through MFES-E, a deed-restricted low-income property received no-cost induction cooktops and cookware. CalMTA evaluated the impact of these MFES-E-enabled upgrades on customer satisfaction and bills in a report designed to inform further induction cooktop advocacy throughout the state and implementation.[213] CalMTA released the report and subsequent findings in February 2026,[214] "CalMTA will expand

[210] CalMTA, Induction Cooking MTI Plan, December 2024, available at: https://calmta.org/resourcereport/induction-cooking-mti-plan/; D.25-11-023, p. 7 "The two initial MTIs proposed are for Room Heat Pumps and Induction Cooking, leveraging an investment of approximately $92.6 million to deliver an estimated $1 billion in incremental TSB over their market deployment years from 2026 through 2045. Both initiatives include strategies to bring the benefits of room heat pumps and induction cooking to Environmental and Social Justice (ESJ) communities, in accordance with the definitions and goals established in the Commission's ESJ Action Plan.").
[211] D.25-11-023, OP 1.
[212] *See* MFES program details in **Chapter 6: Segmentation and Sector Strategy.**
[213] CalMTA, 120V Battery-Equipped Induction Ranges Field Study Report, February 2026, available at: https://calmta.org/wp-content/uploads/2025/09/120V-Battery-Equipped-Induction-Ranges-Field-Study.pdf, pp. 1-2 (The replacement of gas ranges with induction ranges builds off AEA's broader electrification work at the Emerson Arms site, which is funded through MCE's Multifamily Energy Savings (MFES) and Low-Income Families and Tenants (LIFT) programs, as well as the California Department of Community Services and Development Low-Income Weatherization Program (LIWP).
[214] *Id*.

this data set with research conducted at other multifamily sites in California, using the results to make recommendations to manufacturers for future induction product development. Research findings will also inform CalMTA's Induction Cooking Market Transformation Initiative (MTI) Plan, which features market-level interventions designed to increase the availability of 120V induction options in California and was conditionally approved by the California Public Utilities Commission (CPUC) on Nov. 20."[215]

As with induction cooktops and cookware, MCE will add innovative, vetted technologies as appropriate into Equity, Resource Acquisition, and Market Support segment programs to assist community choice aggregators ("CCA") in reaching market transformation (which according to logic models developed by CalMTA, will take upwards of 10 years for each technology).[216] This avenue for deployment will enable improvements from "baseline market adoption" to a level of "total market transformation."[217] For example, CalMTA is developing a program for residential heat pump water heaters ("HPWH"). MCE currently self-funds HPWH readiness and measure installations that support its Home Energy Savings ("HES-E,") Flex Market, and MFES-E programs. As CalMTA continues to develop its program logic models, MTIs and corresponding activities for HPWH and induction cooktops, MCE looks forward to continued coordination, and complementary investment in this innovative technology through its portfolio programs.

MCE also regularly partners and coordinates with Technology and Equipment for Clean Heating ("TECH") Clean California program administrators and implementers, and will continue to do so. TECH Clean California is "a statewide initiative to accelerate the adoption of clean space

[215] CalMTA, 120V Battery-Equipped Induction Ranges: New Field Study Findings Now Available, February 2026, available at: https://calmta.org/120v-battery-equipped-induction-ranges-new-field-study-findings-now-available/.
[216] *See*, *e.g.*, CalMTA, Induction Cooking MTI Plan, December 2024, available at: https://calmta.org/resourcereport/induction-cooking-mti-plan/.
[217] CalMTA, Room Heat Pumps FAQs, available at: https://calmta.org/room-heat-pumps-faqs/.

and water heating technology across California homes."[218] Among other initiatives, TECH Clean California administers a Quick Start Grant program that sponsors innovative projects. One such project was with Barnett Plumbing and Water Heaters, which successfully ran a gas heater loaner program for customers who needed emergency replacements, to allow them the time to retrofit and purchase an electric alternative before making a long-term gas purchase.[219] MCE leveraged this model to develop MCE funded projects including its Emergency Water Heater Loaner program. MCE's Emergency Water Heater Loaner program complements its EE portfolio programs like HES, MFES, and Flex Markets, by offering contractors $1,500 to help cover the cost of installing and maintaining a temporary loaner water heater (gas or electric) as part of the customer's permanent heat pump water heater installation.[220] More generally, MCE coordinates with market transformation efforts and responds to customer needs by designing its decarbonization focused incentives to complement or supplement statewide offerings like TECH.

Lastly, MCE coordinates with, and has incorporated lessons from, the market transformation resource the Switch Is On.[221] MCE uses this resource directly by referring contractors and residential customers to the Switch Is On website, where they are linked to industry professionals and decarbonization focused educational resources. In addition, in the spirit of the Switch Is On model, MCE launched its own contractor-focused outreach and education campaign, including:

- New contractor-facing collateral education materials;

[218] TECH Clean California, available at: https://techcleanca.com/.
[219] TECH Clean California, 2021 Quick Start Grant Recipients, Barnett Plumbing, available at: https://techcleanca.com/quick-start-grants/2021-quick-start-grant-recipients/barnett-plumbing/.
[220] MCE, Get Cash for Heat Pump Water Heater Upgrades, available at: https://mcecleanenergy.org/heat-pump-water-heater-incentive/.
[221] Switch Is On, available at: https://www.switchison.org/.

- Program offerings (Green Workforce Pathways Program ("GWPP") stipends for industry professionals to attend decarbonization trainings);
- A Contractor Finder page that allows customers to search for licensed and experienced decarbonization focused contractors in their area;[222]
- Contractor support projects and events throughout the year (e.g., the Electrification Contractor Power Breakfast) to receive feedback on MCE programs that inform meaningful improvements; and
- The E-Contractor Academy: A six-week training program focused on building climate-critical business capacity for diverse, small and local construction business owners. The E-Contractor Academy offers participants training, business support, and connections to project opportunities in the Bay Area.

7. Coordination with Energy Savings Assistance Programs

MCE's EE program is complementary to the Energy Savings Assistance ("ESA") program currently offered in its territory by PG&E. PG&E's ESA program provides direct install measures to low-income customers. Direct install measures, generally, are those measures that can be quickly installed with little or no preparatory work (*e.g.*, low flow water fixtures, smart thermostats, and weatherstripping).

MCE's Equity segment direct install programs for equity customers provide no- or low-cost installation measures for both low- *and* moderate-income customers. However, when working on installations for low-income customers, there are sometimes opportunities for direct install measures to be introduced as well for the same home. In those cases where the costs for those

[222] MCE, Find a Licensed Contractor, available at: https://mcecleanenergy.org/contractor-finder/.

direst install measures are not covered by MCE's EE portfolio programs, the program implementer will refer the customer to the PG&E ESA program to receive the benefits of that ESA program.

As part of the JCM coordination, MCE meets regularly (typically on a bimonthly or more frequent basis) with PG&E to provide updates to existing equity-focusing programs, and explores opportunities for collaboration and to avoid duplicative work for the same customers. During check-in meetings, PG&E and MCE discuss any potential program changes, and potential measure or program overlap. If potential program changes or overlap issues are identified through meetings and ongoing correspondence, PG&E and MCE collaborate on mutually agreed upon needed adjustments. Beyond coordination meetings, MCE staff regularly review PG&E's webpages on ESA programs and PG&E's ESA providers' webpages to identify any potential geographic or measure overlap with MCE programs—especially Equity segment programs serving low-income customers. MCE additionally submits programmatic updates via the other CPUC required channels including implementation plan updates,[223] the program launch/closure checklist,[224] and mid-cycle advice letters.[225] These processes provide added public opportunities for coordination, collaboration and transparency related to EE and ESA programs with PG&E, Energy Division staff, and interested parties.

MCE is especially experienced with ESA coordination activities because of its experience administering MCE's Low-Income Families and Tenants ("LIFT") pilot program from 2017-2023. LIFT provided low- to no-cost upgrades including electrification measures for low-income, multifamily customers throughout MCE's service area.[226] LIFT functioned as a complement to MCE's MFES program by offering additional, complementary incentives beyond MCE's MFES

[223] D.15-10-028, OP 6.
[224] D.21-05-03, OP 12.
[225] *Id*. at OP 10.
[226] LIFT projects were not to participate in PG&E's ESA program.

program offerings. MCE applied to the CPUC for ESA funds[227] to administer LIFT from the CPUC and was awarded funds and permission to administer the program through 2023.[228] Administration of LIFT required MCE to develop an expertise on ESA program rules, approved measures, and coordination with PG&E on ESA specifically. Since LIFT's pilot program closure, MCE continues to apply its lessons learned from administering LIFT and participating in the ESA ecosystem to its administration of MFES and HES programs especially. MCE finds its experience administering LIFT extremely valuable in ongoing coordination with PG&E's ESA program.

8. Coordination with Other Demand Side Programs

MCE supports customers navigating an array of demand side program offerings to serve their varied needs. Through its "Any Open Door" approach,[229] anytime a customer approaches MCE about a program offering, MCE will provide that customer with helpful information about the full suite of energy-related program opportunities and resources available. In addition to MCE's and other PAs' EE offerings, MCE informs customers about the following demand-side programs:

- Programs and initiatives focusing on electrification measures;
- Programs focusing on other DER activities such as demand management, solar and/or energy storage programs, or electric vehicles ("EV") and electric vehicle supply equipment ("EVSE");
- Programs providing financial support to Equity customers and affordability;
- Programs offering financing for energy related projects; and

[227] Historically limited to investor-owned utility PAs. Cal. Pub. Util. Code § 2790 (requiring the CPUC to order electric and gas corporations to provide ESA programs).
[228] *See* D.16-11-022 (approving LIFT); D.21-06-015 (extending LIFT through 2023).
[229] MCE's "Any Open Door" approach is described in more detail in **Chapter 3: Portfolio Strategies** and **Chapter 6: Segmentation and Sector Strategy**.

- Programs focusing on health and safety improvements.

9. Coordination on Programs for Equity Customers and Affordability

When MCE engages with customers interested in EE programs, MCE program staff ensures that the customer is taking advantage of all the financial support and bill relief programs that are available from MCE, the State, and other entities—including, but not limited to California Alternate Rates for Energy ("CARE"), Family Electric Rate Assistance ("FERA"), Arrearage Management Program ("AMP"), Low-Income Home Energy Assistance ("LIHEAP") and Low-Income Weatherization Program ("LIWP") programs.

MCE further helps eligible customers access any rate or tariff support and bill relief program it offers. For example, "MCE Cares" is a bill relief program that MCE launched in 2020 using its own generation revenue to support residents and businesses suffering adverse financial impacts from the COVID-19 pandemic. Since 2020, MCE's Board extended the MCE Cares credit to currently offer $20 to $25 off monthly electricity bills for low-income residential customers and small businesses.[230] By leveraging its own bill relief programs, ratepayer-funded programs, and State-funded programs, MCE will help ensure that Equity customers not only save energy but also receive non-energy benefits ("NEBs") including health, safety, and comfort improvements in their homes.

10. MCE Rebate and Incentive Finder Tool

Complementary to its "Any Open Door" activities and direct engagement with customers, MCE also hosts a free, publicly available Residential Rebate & Incentive Finder tool on its website to help customers access other demand side programs and rebates.[231] The personalized tool guides

[230] MCE, MCE Cares Credit, available at: https://mcecleanenergy.org/mce-cares-credit.
[231] MCE, Residential Rebate & Incentive Finder, available at**:** https://mcecleanenergy.org/find-rebates-and-incentives/.

customers through various rebates and incentives available to them based on their own eligibility characteristics. Customers enter their information and then receive a customized list of the rebates and incentives they are eligible for. Many incentives can be combined to maximize savings or additional NEBs.

11. Coordination with Decarbonization Programs

California is accelerating its move toward building decarbonization, including transitioning from natural gas appliances to electric alternatives due to several recent policies.

- Assembly Bill 3232 (Friedman, 2018) requires significant emissions reductions from building stock.[232]
- Senate Bill 1279 (Muratsuchi, 2022) requires the state to achieve net zero greenhouse gas emissions by 2045.
- Governor Newsom issued a 6 million heat pump deployment goal with 50 percent of investments to disadvantaged communities.[233]
- The Bay Area Air District adopted building appliance rules limiting the sales of specific space and water heater natural gas appliances.[234]

[232] *See e.g.* CPUC, Energy Efficiency Natural Gas Incentive Phase-Out Staff Proposal (DRAFT), December 2025, p. 3 ("California needs bold action to meet the state's goals to decarbonize the electric sector, and EE has an important role to play in that transition.").

[233] Office of the Governor, Letter to California Air Resources Board, July 2022, available at: https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf, p. 2. ("That is why I am establishing a goal of 3 million climate-ready and climate-friendly homes by 2030 and 7 million homes by 2035, which shall be supplemented through the deployment of 6 million heat pumps statewide by 2030. At least fifty percent of the funding to achieve these goals shall be directed toward disadvantaged communities.").

[234] Bay Area Air District, CONCEPTS FOR RULE 9-6 AMENDMENTS: Affordability and Availability Considerations for Zero NOx Small Water Heaters, October 2025, available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces/2021-amendments/documents/rule-09_06-concepts-paper_final-v1-pdf.pdf?rev=9eac6fc7a84e4b259fd2017c838de68c&sc_lang=en, pp. 2-3 (outlining zero emissions appliance rules, history and potential amendments).

- The California Air Resources Board ("CARB") is developing potential rules for zero-emissions space and water heater appliances statewide as part of its State Implementation Plan.[235]
- The CPUC outlined a pathway for EE portfolio programs to limit natural gas incentives and support building decarbonization.[236]

Advancing affordable, equitable, and community-led decarbonization solutions is key to MCE's mission.[237] MCE is actively supporting this shift to building electrification in several ways including, but not limited to:

- Administering WE&T programming:
- Supporting regional electrification in the Bay Area;
- Layering external funds; and
- Participating in building decarbonization proceedings.

12. Administering Workforce Education & Training

MCE supports coordination with other building decarbonization efforts and goals by administering its GWPP.[238] The GWPP provides electrification training and resources to contractors and job seekers in MCE's service area. This program supports the development and expansion of a qualified workforce that can deliver electrification projects to advance progress on a variety of state climate and building decarbonization goals.

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[235] CARB, Zero-Emission Space and Water Heater Standards: ABOUT, available at: https://ww2.arb.ca.gov/our-work/programs/zero-emission-space-and-water-heater-standards/about.
[236] D.23-04-035, OPs 3-7; CPUC, Energy Efficiency Natural Gas Incentive Phase-Out Staff Proposal (DRAFT), December 2025.
[237] MCE, About, available at: https://mcecleanenergy.org/about/ ("Our mission is to confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.").
[238] *See* Program Description in **Chapter 6: Portfolio Strategies**.

13. Supporting Regional Electrification in the Bay Area

MCE participates in an ongoing working group with a regional network of CCAs and the Bay Area Air District ("BAAD") to support successful customer outcomes and the implementation of its Building Appliance Rules (Rules 9-4 and 9-6). MCE and CCAs coordinate on customer education, program offerings, program and rebate design best practices and offer technical advice to the BAAD. MCE also works closely with regional electrification efforts led by BayREN and PG&E to expand access to electrification resources and support customers across its service area.

14. Layering External Funds

To maximize customer benefits, MCE looks for opportunities to combine or "layer" decarbonization funding streams and incentives within its EE programs. MCE staff participate in a cross-team collaboration—the Emerging Opportunities Team—whose function is to identify and apply for external funds to layer into MCE programs. The Emerging Opportunities Team includes staff from several MCE teams including Strategic Initiatives, Customer Operations, Customer Programs and Policy teams. The Emerging Opportunities presently meets on a monthly basis with additional ad-hoc meetings as needed.[239] The Emerging Opportunities Team provides a vital, recurring space for MCE staff to prioritize and secure external funds. Additionally, the Emerging Opportunities Team provides the relevant team members across the organization with the opportunity to collaborate, strategize and build the administrative processes necessary for receiving and layering external funds.

MCE has been successful in stacking or layering the following external decarbonization funding sources within its existing 2024-2027 EE portfolio. MCE plans to continue to identify, apply for and layer external funding within its proposed 2028-2031 EE portfolio.

[239] MCE's Emerging Opportunities has at different times met on a biweekly basis.

- **Transformative Climate Communities**: MCE layers Transformative Climate Communities funds to support electrification projects in Richmond.[240]
- **Equitable Building Decarbonization ("EBD")**: MCE actively supported state funding for the EBD program and participated in the program design of the California Energy Commission's ("CEC") rulemaking.[241] The CEC selected Association for Energy Affordability ("AEA") as the lead PA for the Northern California Region. MCE is an official partner with AEA on its PA team and is specifically engaged in supporting the program's deployment in the "Initial Community Focus Areas" of the Contra Costa County Refinery Corridor and Richmond within MCE's service area.[242]
- **MCE Self-Funded Ancillary Messages**: MCE regularly self-funds ancillary measures required for decarbonization (*e.g.*, light construction, drywall repair, electrical panel and capacity improvement, pest and environmental remediation) in support of its direct install programs that may not be fundable by other program sources.[243]
- **MCE Self-Funded Emergency Water Heater Loaner Program**: MCE's Emergency Water Heater Loaner program[244] is offering eligible contractors a

[240] City of Richmond, TCC Richmond Rising, available at: https://www.ci.richmond.ca.us/4609/TCC-Richmond-Rising.
[241] CEC, 22-DECARB-03, available at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=22-DECARB-03.
[242] CEC, EBD Statewide Direct Install Program, September 2025, available at: https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program/ebd-statewide-direct.
[243] MCE defines self-funded programs as programs supported through its net revenues that are allocated to programs at the discretion of the MCE Board.
[244] MCE, Emergency Water Heater Loaner program, available at: https://mceecleanenergy.org/heat-pump-water-heater-incentive/.

$1,500 per-unit cash incentive for the installation of heat pump water heaters after installation of an emergency loaner in its service area. Contractors who participate in this program can offer an emergency loaner water heater to residents to ensure they have hot water while the contractor makes any necessary upgrades and installs a new heat pump water heater, which can take longer than installing a gas water heater.

15. Participating in Building Decarbonization Proceedings

MCE will continue to actively participate in CPUC and CEC regulatory proceedings that advance building decarbonization. For example, MCE participates in the Building Decarbonization Proceeding (R.19-01-011), Self-Generation Incentive Program Proceeding (R.20-05-012), Longterm Gas Planning Proceeding (R.24-09-012), Equitable Building Decarbonization Proceeding (CEC, 22-DECARB-03), and Inflation Reduction Act Proceeding (CEC, 23-DECARB-01). MCE is committed to staying engaged and providing leadership—especially on flexible resources, electrification, integration with EE and equity—while designing programs that offer customers the optimal mix of integrated solutions to support decarbonization and meet customer needs. MCE regularly communicates about its decarbonization focused EE programs in other building decarbonization proceedings, advocates for opportunities to beneficially stack, layer or coordinate EE programs with other decarbonization programs, and offers lessons learned through administration to support the greater advancement of building decarbonization strategies statewide.[245]

[245] *See e.g.* MCE Opening Comments on Administrative Law Judges' Ruling on Designating Priority Neighborhood Decarbonization Zones, August 2025, R.24-09-012.

Chapter 8: Stakeholder Engagement

Marin Clean Energy ("MCE") conducted robust stakeholder engagement in the preparation of its energy efficiency ("EE") Business Plan Application ("Application"). MCE conducted its stakeholder engagement in advancement of the California Public Utilities Commission ("CPUC" or "Commission") *Environmental and Social Justice Action Plan* Goal 1: "Consistently integrate equity and access considerations throughout CPUC regulatory activities" and Goal 5: "Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the Commission's decision-making process and benefit from CPUC programs."[246]

MCE is committed to meaningfully engaging with stakeholders, especially local community-based organizations ("CBO") during the design, implementation and evaluation of its EE portfolio programs.[247] As a program administrator ("PA") since 2013, MCE finds that ongoing stakeholder engagement and opportunities for customers and communities are essential ingredients for the success of its EE programs.[248] MCE regularly conducts a variety of ongoing stakeholder outreach activities to continuously seek feedback from the customers and communities it serves. These activities are described as MCE's "Community-Based Design." Additionally, MCE conducted significant stakeholder outreach for the preparation and submission of this Application.

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[246] CPUC, Environmental and Social Justice Action Plan Vol. 2, April 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf, pp. 4-5.

[247] The Greenlining Institute, Equitable Building Electrification Framework, 2019, available at: https://greenlining.org/publications/equitable-building-electrification-a-framework-for-powering-resilient-communities/ ("Rich community input and engagement strengthen the overall program design quality with stronger cultural competence, ensure local buy-in and investment, and deliver tangible local benefits rooted in the lived experiences of everyday people. Partner with community-based organizations to develop a decision-making process that ensures that decisions are based on community needs and priorities.")

[248] BEEP Coalition, Building Energy, Equity & Power (BEEP) Coalition: Findings from Statewide Listening Sessions Presentation to the AB 32 Environmental Justice Advisory Committee (April 2022), available at: https://ww2.arb.ca.gov/sites/default/files/2022-04/BEEP%20Slides_4.26.22.pdf at p. 5 ("Equitable Process + Meaningful Engagement.").

These activities are described as "Application Stakeholder Engagement." In this chapter, MCE describes the stakeholder engagement activities it conducted, the feedback received, and how it addressed feedback in this Application. MCE thanks all engaged stakeholders for their time, expertise, willingness to participate, and valuable feedback. MCE views stakeholder engagement as both a verb and a value critical to achieving its mission to confront the climate crisis with community-based solutions. These stakeholders' feedback is reflected throughout this Application and has been threaded through MCE's operations, plans, and mission since its founding. MCE looks forward to ongoing stakeholder engagement throughout the implementation of its proposed portfolio and business plan.

1. MCE Community-Based Design

MCE conducted the following ongoing community-based design stakeholder outreach activities related to its EE portfolio during program years ("PY") 2024-2027:

- **Local Contractors**: MCE conducted twenty interviews with local contractors on electrification and permitting barriers.
- **Residential Customers**: MCE completed 119 surveys of residential customers on electrification barriers and equitable electrification.
- **Low-and Moderate-Income Program Participants**: MCE distributed 223 surveys to Home Energy Savings-Equity program participants following their receipt of direct install measures. MCE staff called direct install participants directly. Seventy-eight completed program feedback surveys. Of respondents, 96% of participants were 100% satisfied.
- **Small Business**: MCE surveyed 81 small businesses on EE needs and participation barriers when developing its Small Business Energy Advantage ("SBEA"). MCE surveyed small businesses via online workshops and online and telephone surveys.
- **Local Permitting Authorities**: MCE conducted nine interviews with local permitting authorities on various topics including permitting barriers to decarbonization and direct installs.
- **Contractor Power Breakfast**: MCE hosted a contractor power breakfast in August 2025 seeking feedback from local contractors and labor unions on a variety of EE program, decarbonization workforce issues, and program design/implementation strategies. Twenty-six representatives of local contractors and labor unions participated.

- **Municipal Engagement**: MCE staff regularly hold, 1:1 sessions with its 38 member communities to ensure the agency supports local priorities. This flexible approach allows MCE to provide deeper and more attuned assistance to highly active communities, while also facilitating multi-city collaborative efforts to advance shared regional goals. Through these interactions, MCE Community Engagement staff regularly share program updates, and solicit feedback from municipal staff on ways to support community members.

2. Application Stakeholder Engagement

During the development of this Application, MCE conducted 12 stakeholder engagement activities and engaged over 200 organizational stakeholders. Thirty organizational stakeholders formally participated in MCE's Application stakeholder engagement. MCE welcomed participant feedback in roundtable discussions, individual conversations, existing meetings, over email, and via a written survey. MCE hosted three external group stakeholder engagement sessions, six stakeholder conversations with organizations, one internal all-staff engagement session, and participated in a California Energy Efficiency Coordinating Committee ("CAEECC") Application Formal Consult.

2.1 Application Stakeholder Engagement Activities

- **MCE Community Power Coalition Engagement**: MCE invited 160 organizations in its Community Power Coalition[249] ("ComPow") to a virtual discussion on its draft Application. Seventeen organizational and local government entities attended the event and provided substantive feedback. MCE staff presented on the history of its EE programs, controlling CPUC regulatory authorities and history, existing portfolio programs, potential

[249] MCE's Community Power Coalition is a network of social, racial, and environmental justice organizations that do feet-on-the-street work to address inequities in our local communities. MCE partners with coalition members to: address climate change and eliminate the use of fossil fuels in our communities; create learning opportunities about climate justice for community-based organizations; expand access to renewable energy services and customer programs; encourage participation in the design and execution of MCE's energy equity programs and policies. *See* **Appendix 1** to this Chapter. MCE's Community Power Coalition includes 115 organizational members. The Community Power Coalition invitation to the Application feedback session included 185 organizations.

new programs and measure offerings, and policy recommendations. Participants asked questions and provided recommendations on MCE's draft Application. MCE submitted a written survey on its draft Application to participants following the meeting (see *infra*).

- **MCE Community Roundtable**: MCE hosted a virtual community roundtable discussion on its draft Application. MCE invited 29 organizational or local government attendees via email. Five organizational attendees participated in the discussion and provided helpful feedback.
- **Stakeholder Conversations**: MCE invited 11 organizations to participate in individual stakeholder conversations, and ultimately conducted six virtual conversations with seven of these stakeholders on its draft Application. The focus of each conversation varied according to the stated priorities of participants. Topic areas included building electrification, cost-effectiveness strategies, affordability and bill savings strategies, demand-side management strategies, small business strategies, and coordination with other programs. The following seven organizations participated in MCE's individual stakeholder conversations:
    - Bay Area Regional Energy Network ("BayREN").
    - Earthjustice and Sierra Club.
    - Natural Resources Defense Council ("NRDC").
    - Rising Sun Center for Opportunity ("Rising Sun").
    - California Energy Demand Management Council ("the Council").
    - California Public Advocates Office ("Cal Advocates").

The four invited organizations that did not participate in stakeholder conversations noted they lacked capacity, prioritized competing commitments, recommended an alternative organization for participation, or did not respond to email invitations.

- **Written Survey**: After its Community Power Coalition engagement (see *supra*), MCE shared its written survey attached as **Appendix 2** with participants its Community Power Coalition. MCE received 6 detailed responses to its written survey.
- **MCE All-Staff Presentation and Discussion**: MCE presented on its draft Application and sought feedback from all its staff in a virtual meeting. MCE staff—even those outside of the Customer Programs and Policy Team staff that regularly design and implement its portfolio programs—possess incredible expertise in energy program design methods; education and outreach strategies; potential areas for program stacking and collaboration with other MCE programs external to the portfolio; and service area community needs expressed in other venues. Forty-six MCE staff attended the event and provided relevant feedback.
- **California Energy Efficiency Coordinating Committee**: On December 9, 2025, MCE participated in the CAEECC Full Quarterly Meeting #48 on the Formal [Application] Consult. "There were 110 attendees, including representatives from 21 CAEECC Member organizations and five attendees from two CAEECC Ex-Officio agencies as well as 84 Members of the Public."[250] MCE presented on its draft Application including its proposed preliminary budget, cost-effectiveness, community-based design strategies, affordability strategies, decarbonization strategies, stakeholder outreach, and noteworthy potential

[250] CAEECC, Full Quarterly CAEECC Meeting #48 Summary, December 2025, available at: https://www.caeecc.org/_files/ugd/849f65_588853e58c344e7eb2a7380896679ae2.pdf, p. 1.

updates to its portfolio. CAEECC attendees asked questions about the Equity segment budget cap, and commercial normalized metered energy consumption ("NMEC") program.[251]

2.2 Summary of Stakeholder Engagement Feedback

MCE reviewed the detailed draft Application feedback from engaged stakeholders and organized it into 9 distinct themes. MCE submits each theme, a summary of corresponding feedback, and its corresponding responses in the following table.

Table 8-1: Stakeholder Engagement Feedback

Theme	Feedback	MCE Response
Continuous community engagement	Establish ongoing, continuous feedback mechanisms with community advocates and promoters and share presentation materials in advance.	- In implementing this Application, MCE will continue to host contractor engagement meetings to solicit feedback for our contractor led programs as well as educate contractors on our programs. - In implementing this Application, MCE will continue to host its annual ComPow Symposium and will ensure accessible opportunities for EE program feedback. - In implementing this Application, MCE will incorporate EE programmatic topics into more future ComPow meetings. - In this Application, the SBEA program includes a CBO partners network to support programmatic design and implementation. - In implementing this Application, MCE's Engagement team will conduct more outreach with CBOs for EE program outreach, enrollment and feedback.
Maintain financial accessibility through program design	Maintain and expand financial accessibility through subsidies, incentives, and on-bill financing, including expansion to higher-income households and market-rate renters.	- MCE redesigned its Residential Flex Market to remove income qualifications and allow it to serve higher-income households in addition to other customers. - In implementing this Application, MCE will monitor the federal Home Efficiency Rebate program administered by the California Energy Commission and seek methods to stack rebates.

[251] *Id.*, pp. 6-7.

		- In implementing this Application, MCE will continue collaboration with PG&E On-bill Financing ("OBF") programs for development of and stackability with its Commercial SEM program projects. - In implementing this Application, MCE will contribute its own funds for ancillary measures in electrification projects. - In implementing this Application, MCE will continue to staff its cross-team collaboration—the Emerging Opportunities Team--to identify and apply for external funds to layer into EE portfolio programs. MCE will update the scope of its Emerging Opportunities Team to look for external funding opportunities specifically complementary to its Application. *See* **Chapter 7: Portfolio Coordination** for additional discussion of MCE's Emerging Opportunities Team.
Prioritize and optimize cost-effectiveness	Focus on the most cost-effective programs while avoiding duplication, but continue leadership on job quality and labor standards.	- In this Application, MCE proposes closing its underperforming SEM subprograms including the Multi-family Strategic Energy Management ("SEM") subprogram and the Agricultural SEM subprogram. - In this Application, MCE reduced several program budgets to better align with EE market opportunity in our service area. - In this Application, MCE proposes a cost-effective portfolio. *See* **Chapter 4: Forecast Methodology and Zero-Based Budgeting**. - In this Application, MCE included two cost-effective complements to its existing Equity segment programs: Home Energy Savings-Resource and Multifamily Energy Savings-Resource. These programs will increase the number of cost-effective measures deployed in MCE's service area. - In this Application, MCE includes best practices for achieving high-total system benefit. *See* **Chapter 3: Portfolio Strategies**.

Enhance workforce development and job quality	Explicitly reference and adopt High Road Training Partnership (HRTP) labor standards in programs like Home Energy Savings, and support refinery worker transition to green jobs.	- In implementing this Application, MCE will continue its participation in the Bay Area Residential Building Decarbonization High Road Training Partnership ("HRTP").[252] - MCE updated its Green Workforce Pathways program to better incentivize program participants (employers) to meet HRTP labor standards. - MCE will continue to build partnerships with local colleges, school districts, and workforce organizations to build pipelines to the green workforce. Activities include but are not limited to: field trips to local renewable projects, participating in college and career fairs, and promoting paid internship opportunities at MCE.
Continue targeting hard-to-reach populations and renters	Improve targeting strategies for low-income and hard-to-reach (HTR) residents outside low-income communities. Expand programs to include market-rate renters and multi-family units.	- In implementing this Application, SBEA, which serves ESJ and HTR small business customers, will leverage its CBO partners network to improve its outreach strategies. - In this Application, MCE proposes a policy recommendation to raise the Equity segment and Market Support segment budget caps proportionally to equity populations in service areas. *See* **Chapter 11: Policy Recommendations**. - In this Application, MCE seeks funding to continue its Home Energy Savings-Equity program, and its Multifamily Energy Savings-Equity program serving residential Equity customers. - In implementing this Application, The Green Workforce Pathways Program (GWPP) will continue to target electrification benefits to Equity customers within service area. - Building on its efforts to expand accessibility for HTR communities, MCE: 1) conducted a language study to inform its approach to engaging with non-English speaking populations, 2) co-created its language accessibility guidelines with feedback from its Community Power Coalition, and 3) hosted a disability awareness training for its staff

[252] Rising Sun Center for Opportunity, Bay Area Residential Building Decarbonization High Road Training Partnership Summary, 2021, available at: https://risingsunopp.org/wp-content/uploads/Rising-Sun-Bay-Area-Residential-Building-Decarb-HRTP-Summary.pdf.

		members to center the needs of people with disabilities across the agency's efforts. - MCE's Community Partnership Program intentionally partners with community-based organizations to target HTR communities. This includes primarily Spanish-speaking populations, low-income populations, and small businesses that may also be low-income and/or Spanish-speaking.
Community education and health integration	Strengthen community education connecting energy efficiency to health and air quality and ensure program materials continue to be provided in multiple languages.	- The SBEA program currently offers direct install air purifiers for small businesses. The SBEA program also provides related customer education forms in Spanish and English. MCE will also conduct a NEBs survey to understand how the program is providing NEBs to customers, which will include questions regarding air quality and health. - MCE's HES-R, MFES-R, HES-E, and MFES-E direct install programs offer EE and electrification measures that improve health and air quality. In implementing this Application, MCE will continue discussing health and air quality with customers as part of its outreach and recruitment into its programs. Health and air quality improvements are a key part of energy efficiency and electrification upgrades, so they are included with the customers as a benefit of the measures. - The GWPP promotes health improving electrification and EE measures through education opportunities for contractors. In implementing this Application, MCE will explore methods for contractors to share this information directly with customers. - In implementing this Application, MCE will consider including in Strategic Energy Management education modules related to environmental health and safety for commercial customers. - MCE's electrification measures, both commercial and residential, often require health and safety remediation measures and produce many related co-benefits. In implementing this Application, MCE will continue to explore external funding

		opportunities for additional health and safety remediation measures. - MCE collaborates with its Community Power Coalition to understand the needs of HTR communities, including people who are proficient in languages other than English and people who have disabilities, and integrate learnings into its programs and services. MCE will continue to work with experts in these fields to achieve high quality standards for serving HTR communities. - MCE's Community Partnership Program focuses largely on customer education and outreach with a particular focus on Spanish-speaking and/or low-income populations. This includes increasing awareness of bill savings programs, energy efficiency resources and general knowledge, and conservation tips.
Promote program capacity and utilization to local government partners	Communicate regularly about which programs have available capacity so that community partners can help promote and maximize their reach.	- In implementing this Application, MCE will communicate with ComPow members about EE programs and opportunities. - In implementing this Application, MCE will communicate about EE programs in its ongoing municipal meetings with local government partners across its service area. In implementing this Application, MCE will monitor municipal interest in energy efficiency and, where cities express interest, will promote and support participation in this program. - MCE provides a quarterly digital communications toolkit in both English and Spanish for our municipal partners and community-based organizations to use. It includes social media and newsletter content that can be easily shared to promote programs, resources, and general energy education.
Coordination with other programs	Maximize customer engagement and recommend streamlining enrollment processes for customers to participate in multiple beneficial programs administered by MCE. Recommend stacking programs, when possible, to offer	- MCE discusses its coordination with other programs and efforts to improve customer participation in **Chapter 7: Portfolio Coordination**. - In implementing this Application, MCE will contribute its own funds for ancillary measures in electrification projects. - In implementing this Application, MCE will continue to staff its cross-team collaboration—the Emerging Opportunities Team--to identify

	deeper benefits to greater number of customers.	and apply for external funds to layer into EE portfolio programs. MCE will update the scope of its Emerging Opportunities Team to look for external funding opportunities specifically complementary to its Application. - In implementing this Application, MCE will continue to partner with other bay area community choice aggregators through an existing coordination group on the BAAD Building Appliance Rules for additional program coordination opportunities. - In implementing this Application, MCE will participate as a partner in the Initial Community Focus Areas of the Refinery Corridor in Contra Cost County and Richmond for the Equitable Building Decarbonization program – Northern California Region. MCE will coordinate with program administrator Association for Energy Affordability to streamline processes for customers and deliver greater benefits to more customers. - In implementing this Application, MCE will continue to support Senate Bill 1221 (Min, 2024) priority neighborhood decarbonization pilots in its service area through participation in the Longterm Gas Planning Proceeding (Rulemaking 24-09-012). MCE will look to coordinate its EE portfolio programs with any pilots in its service area.
Electrification and technology integration	Consider cutting-edge energy efficiency technologies. Promote and support electrification technologies, including those that can serve low-income customers. Consider establishing an MCE-owned electric vehicle ("EV") charging network in the service area.	- In this Application, MCE proposes several programs with electrification measures: HES-R, MFES-R, HES-E, MFES-E, SBEA, and the Residential Flex Market program. - In this Application, MCE proposes several programs with electrification measures specifically serving low-income or Equity customers: HES-E, MFES-E, and SBEA. - In this Application, MCE proposes a new Low-Global Warming Potential ("GWP") Refrigerant Accelerator program that will incentivize ultra-low and low-global warming potential ("GWP") products and technologies. - In implementing its Application, MCE will explore new technologies throughout PYs 2028-2031 for potential use and integration.

		- In implementing its Application, MCE will explore opportunities with its Virtual Power Plant, MCE Sync, and integrated demand side management ("IDSM") program to further unlock and share additional benefits of EV charging in its service area.

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APPENDIX 1

Appendix 1

MCE Community Power Coalition

MCE's Community Power Coalition is a network of approximately 160 social, racial, and environmental justice organizations that do feet-on-the-street work to address inequities in our local communities. MCE's Community Power Coalition meets bimonthly with a variety of MCE staff and stakeholders.

MCE partners with coalition members to:

- Address climate change and eliminate the use of fossil fuels in our communities.
- Create learning opportunities about climate justice for community-based organizations.
- Expand access to renewable energy services and customer programs.
- Encourage participation in the design and execution of MCE's energy equity programs and policies.

In 2025, MCE hosted 6 Community Power Coalitions meetings. Cumulatively, 230 people were engaged to discuss topics including MCE youth programming, Community Partnership Program, Affordability, Charged by Public Power, Climate Justice Engagement and Education for enhancing language accessibility, and MCE's CPUC Energy Efficiency Application for 2028-2031.

MCE Community Power Coalition Members

1.	10,000 Degrees
2.	23rd Street Merchants Association (Richmond)
3.	350 Contra Costa
4.	4th Second - Vallejo
5.	Act Now Bay Area
6.	Aging Action Initiative/ Public Authority of Marin
7.	Asian Pacific Environmental Network (APEN)
8.	Bay Area Air District (BAAD)
9.	Bay Area Climate Reality, Contra Costa County
10.	Bay Front Chamber of Commerce
11.	Benicia Main Street
12.	Benicia Tree Foundation
13.	Bike East Bay
14.	California Green Business Network
15.	Calistoga Chamber of Commerce
16.	Canal Alliance
17.	Center for Human Development
18.	Emerald Cities
19.	City of American Canyon
20.	City of Benicia

21.	City of Calistoga
22.	City of Concord
23.	City of El Cerrito
24.	City of Fairfield
25.	City of Lafayette
26.	City of Martinez
27.	City of Napa
28.	City of Novato
29.	City of Oakley
30.	City of Pinole
31.	Rubicon Programs
32.	City of Pittsburg
33.	City of Pittsburg Economic Development
34.	City of Pleasant Hill
35.	City of Richmond
36.	Rising Sun Center for Opportunity
37.	City of Richmond
38.	City of San Pablo
39.	Strategic Energy Innovations (SEI)
40.	City of San Ramon
41.	City of St. Helena
42.	City of Vallejo
43.	City of Walnut Creek
44.	Climate Reality Bay Area, Chapter
45.	Climate Reality Bay Area, Contra Costa County Policy Action Squad
46.	Climate Reality Bay Area, Solano/Napa Chapter
47.	Cobiz Richmond
48.	Comité de Negocios Hispanos de Concord
49.	Commonweal
50.	Communities for a Better Environment
51.	Contra Costa Clean Energy Alliance
52.	Contra Costa County
53.	Contra Costa County Climate Leaders (4CL)
54.	Contra Costa County Health Department
55.	Contra Costa County Library
56.	Contra Costa Crisis Center
57.	Contra Costa Family Justice Center
58.	Contra Costa Senior Legal Services
59.	County of Contra Costa, Department of Conservation and Development
60.	County of Marin
61.	County of Marin (Sustainability team)
62.	East Bay Leadership Council
63.	East Contra Costa Community Alliance (ECCCA)
64.	East County Networking Group
65.	El Cerrito Chamber of Commerce

66.	El Cerrito Progressives
67.	El Sobrante Chamber of Commerce
68.	El Timpano
69.	City of Richmond
70.	YES Nature to Neighborhoods
71.	Empowered Aging
72.	Energy for All Program
73.	Environmental Education Coalition of Napa County
74.	Filipino Community of Solano County
75.	First 5 Contra Costa
76.	First Chance Vallejo
77.	Foodbank of Contra Costa and Solano County
78.	Fresh Air Vallejo
79.	Green Business Program Contra Costa County
80.	Green Change
81.	Rising Sun
82.	GRID Alternatives
83.	Hijas del Campo
84.	Indivisible Marin
85.	Interfaith Climate Action Network of Contra Costa
86.	Kensington Greens
87.	Kimley-Horn
88.	La Clinica de La Raza
89.	Lafayette Chamber of Commerce
90.	Lafayette Community Foundation
91.	Land Trust of Napa County
92.	Lawrence Berkeley National Laboratory
93.	GRID Alternatives
94.	Marin Center for Independent Living
95.	Marin City Community Development Corporation
96.	Marin Climate and Energy Partnership
97.	Marin Conservation League
98.	Marin County Bicycle Coalition
99.	Marin Sonoma Electrification Squad
100.	MarinCAN
101.	MAVA (Mexican American Vintners Association)
102.	Monument Crisis Center
103.	Monument Impact
104.	Napa Climate NOW!
105.	Napa County
106.	Napa County Bicycle Coalition
107.	Napa County Hispanic Chamber of Commerce
108.	Napa County Hispanic Network
109.	Napa Resource Conservation District
110.	Napa Valley Farmworker Foundation

111.	No Coal In Richmond
112.	North Marin Community Services
113.	The Utilities Reform Network
114.	Opportunity Junction
115.	Organizing for Action, Marin
116.	Orlando Graham
117.	People Who Care
118.	Pinole Progressive Alliance
119.	Rainbow Community Center
120.	RCF Connects
121.	Récolte Energy
122.	Resilient Neighborhoods
123.	Rich City Rides
124.	Richmond LAND
125.	Richmond Main Street and Soul Food Festival
126.	Richmond Our Power Coalition
127.	RichmondBUILD
128.	Ride & Drive Clean
129.	Rising Juntos
130.	City of San Rafael
131.	LIME Foundation
132.	Center for Sustainable Energy
133.	Rising Sun
134.	City of Pittsburg
135.	Safe Return Project
136.	San Anselmo Climate Action Committee
137.	San Pablo Economic Development Corporation
138.	Sausalito Sustainability Commission
139.	SF Bay Area Hispanic Chamber of Commerce
140.	Sierra Club
141.	Social Good Fund
142.	Solano County
143.	Solano Filipino American Chamber of Commerce (Vallejo)
144.	Solano Hispanic Chamber of Commerce
145.	Solano Resource Conservation District
146.	Stephanie Moulton-Peters, Marin Supervisor
147.	Safe Return Project
148.	Studio PR
149.	Sustainable Walnut Creek
150.	Sustainable Contra Costa
151.	Sustainable Lafayette
152.	Sustainable Rossmoor
153.	The Energy Alliance Association
154.	The Latina Center
155.	The Nature Conservancy

156.	Emerald Cities
157.	Todos Santos Business Assoc.
158.	Town of Danville
159.	Town of Moraga
160.	UpValley Family Centers
161.	Vallejo Chamber of Commerce
162.	Vivalon
163.	White Pony Express
164.	Yountville Chamber of Commerce
165.	Fairfax Climate Action Committee; 350Marin
166.	Benicia Sustainability Committee
167.	Solano County
168.	San Anselmo Climate Commission
169.	Quit Carbon
170.	Napa County Hispanic Network
171.	Solano Hispanic Chamber
172.	Community Action Marin
173.	Contra Costa County Department of Conservation and Development
174.	Town of Corte Madera
175.	City of Novato, Sustainability Commission
176.	GRID Alternatives
177.	Office of Assembly Member Damon Connolly
178.	San Anselmo Climate Action
179.	Simon Construction
180.	Town of Corte Madera
181.	Town of San Anselmo, Town of Fairfax
182.	MCIL
183.	Puertas Abiertas Community Resource Center
184.	San Pablo Economic Development Corporation
185.	Napa County

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Chapter 9: Evaluation, Measurement & Verification

1. Planned Evaluation, Measurement & Verification Studies and Activities

During the 2028–2031 portfolio cycle, Marin Clean Energy ("MCE") plans to advance Evaluation, Measurement, and Verification ("EM&V") studies that build on lessons learned from earlier program years ("PY") to refine implementation practices, improve program integration, improve program cost-effectiveness, and strengthen equity outcomes.

The proposed EM&V studies reflect those that are appropriate for a portfolio that has transitioned from early pilot testing to operational maturity. Through the management and development of MCE's energy efficiency ("EE") portfolio, MCE has identified areas where additional knowledge and verification methods can enhance value, efficacy, and transparency. Each study is intentionally designed to deepen MCE's understanding of program performance, persistence, and customer experience. MCE anticipates, consistent with historic trends across the portfolios, that EM&V studies may take two years to complete. MCE correspondingly proposes three priority areas for EM&V studies and activities to be completed throughout the four- and eight-year portfolio periods.

MCE's 2028–2031 EM&V priorities focus on three complementary objectives central to MCE's 4- and 8-year plans.

1. **Integration and Optimization**: Evaluating the early implementation of MCE's Integrated Demand-Side Management ("IDSM") program to inform system interoperability and grid-interactive strategies;
2. **Equity and Access**: Assessing retrofit and electrification pathways for manufactured homes, a historically underserved housing type in MCE's service area and statewide; and
3. **Persistence and Capacity Building**: Analyzing the experience of and outcomes associated with the 2028 graduates of MCE's Strategic Energy Management ("SEM") program to measure long-term energy savings persistence and leadership development in energy management.

These priorities also advance the MCE's goals and portfolio strategies as stated in **Chapter 3: Portfolio Strategies**, ensuring that programs are advancing affordability, optimizing Total System Benefit ("TSB") achievements and cost effectiveness, and increasing progress on the California Public Utilities Commission ("CPUC") Environmental and Social Justice ("ESJ") Action Plan goals. Together, these studies—discussed below—will generate actionable insights that can guide MCE's continuous improvement in its program design, customer engagement, and long-term emissions reduction planning across its portfolio. They will also generate public information, recommendations, analyses, and conclusions that will be useful for the EE, equity, and decarbonization efforts of regional and statewide partners.

1.1 Integrated Demand-Side Management Study

MCE plans to conduct a portfolio-wide, process-oriented EM&V study to evaluate the early implementation of its IDSM program, the Peak Flex Market program,[253] which is scheduled to launch by the end of Quarter 1 of 2026. By 2028, the Peak Flex Market program will have completed at least one full year of implementation, providing sufficient operational data and participant feedback to inform a process evaluation.

The study will examine how MCE's integrated EE and demand-side management program design performs in practice and identify areas for improvement as the program scales.[254]

Key topics will include:

- Coordination of EE measures with demand-side management ("DSM") and distributed energy resource ("DER") participation;
- Customer participation pathways and engagement barriers for integrated offerings;
- Interoperability of systems, data sharing, and communications between EE tracking, DSM control platforms, and MCE's data systems;
- Savings persistence and baseline accuracy across integrated interventions; and

[253] *See* MCE AL 74-E and CPUC Resolution E-5387.
[254] MCE acknowledges and confirms its IDSM program, the Peak Flex Market program, may not use EE funds for event-based DR pursuant to Resolution E-5387 at pp. A-32 – A-35.

- Insights gained from coordination with MCE's Virtual Power Plant ("VPP") pilot,[255] which operates separately from the EE portfolio, and is currently focused on serving Richmond, California specifically, but shares complementary load-shifting and grid-interactive objectives.

The process evaluation will also explore how emerging tools (such as AI-assisted load forecasting) can improve the efficiency and responsiveness of IDSM. Findings will help MCE refine its IDSM delivery model, establish metrics for grid and customer benefits that can be pulled from both IDSM and EE data sources and systems, and inform CPUC and statewide discussions on best practices for program integration in service of greater reliability and total system benefits.

1.2 Manufactured Home Decarbonization Study

MCE plans to conduct an EM&V study focused on identifying cost-effective retrofit strategies to support the decarbonization of existing manufactured homes within its service area. Manufactured homes represent a critical equity and emissions-reduction opportunity, as these households often face higher energy burdens, limited access to capital, and unique structural challenges that complicate electrification. As the California Energy Commission noted in its Equitable Building Decarbonization Program Guidelines:

> Manufactured homes and mobile homes face unique challenges to decarbonization, including low electrical capacity, limited space availability for decarbonization measures, and higher remediation needs. In addition, retrofits of manufactured homes must comply

[255] MCE, *MCE's Virtual Power Plant Pilot in Richmond*, available at: https://mcecleanenergy.org/virtual-power-plant/ (MCE's VPP currently serves Richmond, CA exclusively, but MCE plans to expand service in the future to other parts of its service area); CEC, Solicitations, GFO-23-309 - Virtual Power Plant Approaches for Demand Flexibility (VPP-FLEX), 2023, available at: https://www.energy.ca.gov/solicitations/2024-03/gfo-23-309-virtual-power-plant-approaches-demand-flexibility-vpp-flex. CEC, Notice of Proposed Awards GFO-23-309, available at: https://www.energy.ca.gov/media/11341 (NOPA Table Group 1).

with the National Manufactured Home Construction and Safety Standards rather than state and local building codes.[256]

The residents of manufactured homes are also disproportionately vulnerable to many of the effects of climate change. Manufactured homes "tend to be energy inefficient and are difficult to heat and cool, making them expensive to own and dangerous to live in during heat waves and cold snaps."[257] The siting of manufactured homes can also make residents more impacted by high winds, extreme weather, flooding, poor water quality and erosion.[258] Further, the complex regulatory and ownership structure of manufactured homes creates potential challenges in program implementation. As the Building Energy, Equity, & Power Coalition describes, "Different aspects of manufactured homes and mobile home parks are regulated individually at the federal, state, and local level making implementation processes more challenging."[259] The unique decarbonization needs of manufactured home residents requires more studies and greater analysis.

This study will explore:

- Passive design and weatherization improvements suitable for existing manufactured housing stock;
- Sealing, insulation, and ventilation measures that can enhance comfort and reduce energy loss;
- Pathways for electrification retrofits, including efficient space conditioning, water heating, and cooling technologies;
- Financing and implementation models that make upgrades more accessible to low-income and fixed-income residents; and
- The impacts of the above on total system benefits and the total resource cost ratio for this historically underserved housing type.

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[256] CEC, *Equitable Building Decarbonization Program Guidelines* (2023), available at: https://www.energy.ca.gov/publications/2023/equitable-building-decarbonization-direct-install-program-guidelines, p. 13.

[257] Urban Institute, Mobile Homes Are Vulnerable to Climate Extremes. Here's What Policymakers Can Do Before the Next Disaster, January 2025, available at: https://www.urban.org/urban-wire/mobile-homes-are-vulnerable-climate-extremes-heres-what-policymakers-can-do-next.

[258] *Id.*

[259] Building Energy Equity & Power Coalition (BEEP), Coalition Comments on Equitable Building Decarbonization Program Draft Guidelines, June 2023, available at: https://efiling.energy.ca.gov/GetDocument.aspx?tn=250886&DocumentContentId=85796.

The recent passage of Assembly Bill 806 (Connolly, 2025), which prohibits restrictions on the installation of cooling systems in mobile home parks, demonstrates the importance of ensuring residents have equitable access to efficient electric cooling options.[260] It also reflects the importance of employing nuanced, well-informed, and targeted approaches to removing historic barriers to service for this housing type. By studying retrofit pathways and coordination mechanisms with local jurisdictions, MCE aims to develop a credible foundation for future programs that improve comfort, safety, and affordability for residents of manufactured homes.

Data gaps on manufactured homes remains a key barrier to their residents benefiting from building decarbonization, EE programs, and a clean energy transition more broadly.[261] As the Natural Resources Defense Council ("NRDC") explains, "Manufactured homes are a critical piece of California's affordable housing puzzle, yet they remain one of the most misunderstood and undercounted segments of the housing stock. Data collection of these homes is often patchy across regions, resulting in an incomplete and potentially misleading picture of regional housing dynamics."[262] Since MCE, like many other program administrators, has not previously implemented a program specific to manufactured homes, this EM&V study represents a critical opportunity to gather baseline data and assess cost-effectiveness of potential solutions that can be tailored to this historically underserved housing type. Study findings will inform future program design guidance, regional decarbonization policy coordination, and MCE's broader equity and

[260] AB 806 Sec. 1 (a) (Connolly, 2025) ("Any covenant, restriction, or condition contained in any rental agreement or other instrument affecting the tenancy of a homeowner or resident in a mobilehome park that effectively prohibits or restricts the installation, upgrade, replacement, or use of a cooling system in a mobilehome is void and unenforceable.").

[261] Natural Resources Defense Council, 4 Steps to Include California's Manufactured Homes in the Transition to Clean Energy, June 2025, available at: https://www.nrdc.org/bio/ericka-flores/4-steps-include-californias-manufactured-homes-transition-clean-energy (citing improving data collection as a key recommendation for better serving manufactured homes).

[262] *Id*.

decarbonization strategies. This data will also support advancing equitable building decarbonization statewide in alignment with state policies.[263]

1.3 Strategic Energy Management Graduate Follow-Up Study

MCE proposes an EM&V study to assess the long-term outcomes and continued energy performance of participants that completed its SEM programs. The study goal is to evaluate how "graduates" of MCE's SEM cohorts sustain or expand upon the energy management practices and savings achieved during their formal program participation.

MCE launched its first SEM program cohort in 2022. The first MCE cohort will complete a six-year progression by 2028, aligning with the start of the 2028–2031 EM&V cycle. This timing creates a unique opportunity to evaluate post-graduation outcomes and the persistence of energy and greenhouse gas ("GHG") savings.

This study will focus on:

- Persistence of savings from behavioral, operational, and equipment improvements implemented during SEM participation;
- Institutionalization of energy management practices, including the establishment of continuous improvement processes, energy teams, and internal accountability systems;
- Follow-on investments or participation in complementary programs;
- Barriers and motivators influencing whether graduates sustain energy management activities; and
- Potential for advanced engagement, such as leadership cohorts, peer mentoring, or integration with IDSM and electrification programs.

Findings will inform improvements to SEM curriculum design, post-program engagement strategies, and portfolio persistence assumptions. One major goal of SEM programs is to spur long-lasting institutional changes for companies and organizations to reduce their energy usage in perpetuity. If participants do not institutionalize adoption changes learned through participation in SEM programs, then the energy savings will not persist over a long period of time. This study will

[263] AB 806 (Connolly, 2025).

also provide valuable insights into how SEM graduates may serve as regional champions for continuous energy savings and GHG emissions reductions.

2. Budget Allocation and Justification

MCE's proposed PY 2028-2031 EM&V budget is $2,610,031. MCE submits this request in compliance with Decision 16-08-019, which requires program administrators to adopt a 4 percent EM&V budget cap[264] (as a share of total portfolio expenditures) and allows administrators to retain up to 40 percent of EM&V funding for direct studies.[265] MCE discusses its budgets further in **Chapter 4: Forecast Methodology and Zero-Based Budgeting**.

[264] D.16-08-019, Ordering Paragraph ("OP") 15.
[265] *Id*. at OP 16.

Chapter 11: Recommendations for New or Modified EE Policies

Marin Clean Energy ("MCE") appreciates the Commission soliciting feedback from program administrators ("PAs") regarding energy efficiency ("EE") policies the Commission should adopt, modify, change, or sunset. PAs deploy and safeguard ratepayers' funds, and are working with partners, stakeholders, and customers on the frontlines of this work. MCE believes its EE work has been improved immeasurably through the learnings, perspective, and access to community voices it enjoys as a PA. In response to the Commission's call for ideas on ways to improve EE, MCE draws on these experiences and resources to offer the following suggestions:

1. The Commission Should Exclude Participant Costs from Cost-Effectiveness Tests
2. The Commission Should Allow Community Choice Aggregator ("CCA") Program Administrators to Adjust Equity Segment Budget Caps in Support of Greater Energy Affordability and Energy Equity
3. The Commission Must Clarify its Application of the Equity and Market Support ("E&MS") Segment Budget Cap
4. The Commission Should Streamline and Update the Definition of an Energy Efficiency Program
5. The Commission Should Reform the Evaluation, Metrics and Verification Requirements to Strengthen Transparency, Clarity, and Administrative Efficiencies
6. MCE Supports Greater Incorporation of Non-Energy Benefits in Portfolios as More Metrics Become Available
7. MCE Strongly Supports Integrated Demand Side Management Programs within the Energy Efficiency Portfolios

1. The Commission Should Exclude Participant Costs from Cost-Effectiveness Tests

The Public Utilities Code requires the Commission to fund "cost-effective energy efficiency [("EE")] and conservation activities," while not limiting the Commission's ability to also fund worthwhile EE activities that do not meet strict cost-effectiveness test requirements.[266] The Commission uses a variety of cost-effectiveness tests and other relevant metrics to evaluate

[266] California Public Utilities Code § 381(b)(1); Decision ("D.") 21-05-031, p. 67 (section 381(b)(1) does not require the Commission to exclusively fund cost-effective EE activities).

the performance of EE portfolios.[267] PAs must report on the Total Resource Cost ("TRC") test and Program Administrator Cost ("PAC") test for all segments of the portfolios separately and in the aggregate.[268] PAs[269] must achieve or exceed a TRC of 1.0 for the Resource Acquisition segment of their portfolio.[270]

Importantly, the definition of cost-effectiveness is within the Commission's discretion and naturally must evolve over time. As the Commission explains, "the definition of cost-effectiveness has always been left to interpretation and implementation by the Commission, and though past decisions are interesting, they do not prevent the Commission from evolving its definition of cost-effectiveness, from time to time, as strategies evolve or as market conditions warrant."[271] Now is one of those times.

MCE recommends the Commission update its cost-effectiveness tests to exclude participant costs, to ensure ratepayer funds are put to their highest and best uses in response to California's electric affordability crisis.[272] In 2024, Governor Newsom recognized the recent increases in electric bills outpacing inflation and directed several state agencies including the Commission to take vital steps to improve electric affordability.[273] Among those directives, Governor Newsom specifically requested the Commission evaluate the costs and benefits of electric ratepayer funded programs with an emphasis on their impacts to electric rates.[274] Similarly,

[267] D.21-05-031, pp. 18-24.
[268] D.21-05-031, p. 22; D.23-06-055, p. 26.
[269] Excluding the Regional Energy Networks ("RENs").
[270] D.21-05-031, pp. 42, 53, 75 (Conclusion of Law ("COL") 8).
[271] *Id.*, p. 67.
[272] Sierra Club, *California's Affordability Crisis: Utilities Asking for More Money for Shareholders* (November 2025), *available at*: https://www.sierraclub.org/articles/2025/11/california-s-affordability-crisis-utilities-asking-more-money-shareholders.
[273] Executive Department State of California, EXECUTIVE ORDER N-5-24, pp. 1-2 (October 30, 2024), *available at*: https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf.
[274] *Id.*, p. 2.

in 2024, the state legislature passed Assembly Bill 3264 in response to rising energy costs and directed the Commission to analyze a variety of relevant metrics to "identify evidence-based approaches to mitigating, reducing, and managing" residential electric rates.[275] In line with these directives, the Commission should adopt policies that ensure PAs maximize the benefit from all EE-dedicated ratepayer funds, and spread the benefits from these funds as far as possible while still achieving core program goals.

Removing participant costs from the calculation of the EE program cost-effectiveness tests would be an important step toward this end. The presence of participant costs in EE cost-effectiveness tests unnecessarily dilutes the accuracy and required oversight of ratepayer funds used in portfolios. Participant costs, by definition, are not ratepayer funds and are instead the personal, out-of-pocket expenses paid by a participating customer.[276] Participant costs can be a helpful metric to understand the full costs and performance of an EE measure or program. However, for metrics that are meant to assess the impact, performance, and effectiveness of ratepayer dollars, participant costs are inappropriate, distorting, and unnecessarily constricting. In light of the ongoing energy affordability crisis and recent corresponding policy directives, the Commission should take its next step in evolving its cost-effectiveness analysis and exclude participant costs from EE portfolio cost-effectiveness tests.

[275] Assembly Bill 3264 (Petrie-Norris), sections 1(b), 3(b).
[276] CPUC, *Energy Efficiency Policy Manual Version 6*, pp. 25-26 (April 2020), *available at*: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-efficiency/eepolicymanualrevised-march-20-2020-b.pdf.

2. The Commission Should Allow Community Choice Aggregator Program Administrators to Adjust Equity Segment Budget Caps in Support of Greater Energy Affordability and Energy Equity

The Commission requires PAs[277] to limit their Market Support and Equity segment programs to 30 percent of their total portfolio budgets.[278] In creating the Market Support and Equity segments, the Commission prudently removed the cost-effectiveness requirement of total portfolio TRC value of 1.0 on these segments because it had different and complementary policy objectives.[279] The Commission recognized that these cost-effectiveness requirements were preventing the needed investments in E&MS focused activities and programs.[280] When instating the 30 percent budget cap on the segments collectively, the Commission explained that the previous cost-effectiveness requirements prior to segmentation placed a "natural limitation on the amount of budget that could be spent on market support or equity type objectives, since the overall portfolio still had to have benefits that exceeded costs."[281]

The Commission based its adoption of a 30 percent budget cap for Market Support and Equity segments on its historic funding determinations for previous EE portfolios.[282] The Commission analyzed the then-current program expenditures of 20 percent non-resource program spending at that time and stated that increasing the non-resource budget to 30 percent was reasonable.[283] MCE appreciates the logic supporting the Commission's 2021 decision to impose an *initial* 30 percent budget cap for Market Support and Equity segment programs. The

[277] Excluding RENs.
[278] D.21-05-031, p. 23; D.23-06-055, p. 13.
[279] D.21-05-031, p. 14.
[280] *Id*., pp. 13-14.
[281] *Id*., p. 22.
[282] *Id*., p. 23 ("Based on a review of the budgets approved by the Commission on similar program types in the past, beginning with this decision we will limit the funds that may be spent on market support and equity programs to 30 percent of the overall budget of each program administrator, with the exception of the RENs.").
[283] *Id*.

segmentation scheme was brand new at that time and absent any other competing proposals, basing the budgets on historic spending made sense.

However, California is presently experiencing an energy affordability crisis which disproportionately and severely impacts low-income and disadvantaged community ("DAC") customers especially.[284] The Commission recently found that 2021 was a turning point for bundled average electric system rates exceeding inflation, and forecasts this troubling trend to continue through at least 2028.[285] The Little Hoover Institute's recent analysis of high electric rates places these trends into context: "This affordability crisis has had several consequences. One in five households are behind on their energy bills."[286] The Public Policy Institute of California similarly found that "California household electricity costs have been climbing in the last decade and are the second highest in the country; today, more than half of Californians say that the rising cost of natural gas and electric utility bills is a major problem for them."[287] The EE portfolios are an important tool the Commission should utilize to better support energy affordability for those most unable to bear this increasing burden. The Commission should relax current limits on this tool by allowing PAs to adjust their Equity segment budget caps. Therefore, MCE proposes the

[284] Assembly Bill 3264 (Petrie-Norris), 2024, sections 1(a)(2); 4.
[285] CPUC, *2025 SB 695 Report: Report to the Legislature on Actions to Limit Utility Cost and Rate Increases Pursuant to Public Utilities Code Section 913.1*, p. 2 (September 2025), *available at*: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/office-of-governmental-affairs-division/reports/2025/2025-sb-695-report_093025.pdf.
[286] Little Hoover Institute, *The High Cost of Electricity in California*, p. 1 (October 2025), *available at*: https://lhc.ca.gov/wp-content/uploads/LHC-Report-290-The-High-Cost-of-Electricity-in-California-Final-Draft-Prior-to-Publication-10.31.25.pdf.
[287] Public Policy Institute of California, *Low-Income Households Struggle with the Cost of Electricity Bills* (August 2025), *available at*: https://www.ppic.org/blog/low-income-households-struggle-with-the-cost-of-electricity-bills/.

Commission allow PAs to propose an adjusted Equity segment budget cap proportional to their percentage of Equity customers.[288]

This proportional funding approach for Equity customers is common in other California climate and energy investment programs.[289] For example, Senate Bill 535 (De León 2012), Assembly Bill 1550 (Gomez 2016), and Assembly Bill 523 (Reyes 2018) all require 25 percent allocation of climate and energy funds to the 25 percent of the state's population living in DACs.[290]

MCE's customer base is approximately 41 percent Equity customers. MCE therefore believes it is reasonable to spend up to 41 percent of its portfolio budget on Equity segment programs. In this Application, MCE requests authorization to spend 35 percent of its portfolio budget on Market Support and Equity segment programs (30 percent Equity and five percent Market Support). The Commission should not artificially restrict MCE's ability, or the ability of any CCA PA, to serve the unique needs and characteristics of their service area by limiting their E&MS segment budget to 30 percent. While MCE may serve its Equity customers with programs in other segments of its portfolio and strives to do so, the Commission itself recognized that the rules of the Resource Acquisition segment, particularly the cost-effectiveness requirements, limit a PA's ability to serve Equity customers.[291]

For all these reasons, MCE requests the Commission approve a Market Support and Equity segment budget request more proportional to the Equity customers in its territory. For this Application, MCE requests authorization to allocate 35 percent of its portfolio budget to Market

[288] MCE refers to all categories of customers eligible for its proposed Equity segment programs using the umbrella term "Equity Customers." MCE defines "Equity customers" as residential customers and businesses in ESJ communities." *See* **Chapter 3: Portfolio Strategies**, Section 7.
[289] *See, e.g.*, Greenhouse Gas Reduction Fund and Electric Program Investment Charge.
[290] Senate Bill 535 (De León 2012) Section 3(a), Assembly Bill 1550 (Gomez 2016) Section 1(a), and Assembly Bill 523 (Reyes 2018) Section 1(b).
[291] D.21-05-031, pp. 13-14.

Support and Equity segment programs, with 30 percent going to Equity programs and five percent to Market Support programs.[292] Notably, with this adjusted budget cap, MCE would be able to serve up to 38 additional Green Workforce Pathway Program ("GWPP") participants, 86 additional units in MFES-E, 159 additional homes in HES-E, and 30 additional businesses in SBEA (as compared to a 30 percent Market Support and Equity segment budget allocation).

3. The Commission Must Clarify its Application of the E&MS Segment Budget Cap

The Commission must clarify its application of the Equity segment budget cap. MCE requests the Commission apply the required 30 percent cap on Market Support and Equity segment programs at the time of the applicable EE Application decision—approving 30 percent of an apply-to-administer PAs' total authorized four-year programs budget on E&MS segment programs. For example, if the Commission authorized a PA to administer $100 over the four-year application period on programs in the Application decision, then the Commission also simultaneously authorized the same PA to administer $30 for Market Support and Equity segment programs. MCE submits this request because the Commission required PAs to use an alternative formula in their 2025 submitted Mid-Cycle Advice Letter ("MCAL") that resulted in MCE's Equity programs experiencing an unexpected $2,346,187.77 budget cut, significantly reducing the scope of its programs.[293]

PAs design, execute, and reevaluate their EE program offerings based on the four-year budgets the Commission approves and any limitations the Commission places on the use of those budgets. For example, for the 2024-2027 portfolio period, the Commission limited expenditures

[292] MCE submits two budgets for the Commission's consideration in this Application: 1) Proposed four-year budget with 35 percent allocated to E&MS segments; 2) Proposed four-year budget with 30 percent allocated to E&MS segments. In both proposed budgets, the Resource Acquisition and remainder of its budget remain identical.
[293] MCE AL 91-E with an effective date of January 20, 2026.

on E&MS across EE programs with a 30 percent total portfolio budget cap. This principle is foundational to the rolling portfolio structure, format, and purpose. The rolling portfolio, by design, allows PAs to adjust, balance, and refine over the defined period of time. Like a financial portfolio mitigating risk by balancing investments across a diverse suite of options over a period of time, this design supports cost-effective, responsive, efficient, and dynamic program administration that can leverage existing administrative structures, apply meaningful economies of scale, lowering costs of programs, and implement innovative program designs safely.

As the Commission recognized, the four-year portfolio and eight-year business plan provide the ideal balance of short-term and long-term planning. In D.21-05-031 updating the EE portfolio process, the Commission explained its rationale:

> [A]ssessing cost-effectiveness and goal-setting on an annual basis is one of the key processes the Commission was trying to avoid by adopting a rolling portfolio process. Having contentious annual ABALs [Annual Budget Advice Letters] that set program budgets effectively creates year-to-year uncertainty for program administrators and implementers, caused by the regulatory process, which undermines confidence and impedes market uptake of energy efficiency measures.[294]

PAs operate a vast array of different kinds of programs, and not all programs that PAs operate draw down their budgets at the same rate. MCE, for example, conducted significant community engagement in designing and launching its Small Business Energy Advantage ("SBEA") program during its 2024-2027 portfolio period. The program spending and launch timeline were very different for MCE's existing programs like its Strategic Energy Management program. E&MS spending levels in the first years of a portfolio period often reflect normal program ramp-up or external market conditions rather than discretionary reallocation. Resource Acquisition, Market Support, and Equity programs have fundamentally different ramp-up periods,

[294] D.21-05-031, p. 28.

procurement timelines, and delivery mechanisms. Equity programs in particular may require longer outreach, contractor mobilization, or community partnership development before expenditures materialize. Requiring proportional spending across segments at all times ignores these structural differences and penalizes programs that are intentionally designed to scale over time. In MCE's case, E&MS program expenditures in 2024 reflected normal program ramp-up and implementation timing.

MCE supports tracking PA spending throughout the portfolio period with existing channels like Advice Letters (True-UP, MCAL, program launch/closure), annual reports, California Energy Data and Reporting System ("CEDARS"), and recurring check-ins with Energy Division ("ED") staff. MCE believes these channels help ensure good stewardship of ratepayer funds and that PAs remain on track to comply with Commission-adopted budget caps by the end of the four-year portfolio period. However, the Commission should not reduce authorized budgets if PAs do not precisely hit budget caps (that were meant for the full portfolio period) at numerous midpoints. If that were the case, once early-year actuals are realized, they would permanently affect the spending ratio and could not be corrected through subsequent implementation. This would operate as a rolling proportional constraint tied to realized spending, and would cease to serve as a cap evaluated against the Commission-authorized budget over the full four-year period. This undoes the function, the spirit, and the value of a rolling portfolio structure.

This hybrid framework—combining cumulative actual expenditures with forward-looking forecasts—leads to unreasonable administrative burdens and policy distortions. In practice it effectively requires PAs to maintain proportional spending across portfolio segments throughout the portfolio period at all times. For the E&MS budget cap, this means ensuring that—for every dollar spent outside these segments—a corresponding share of spending is reflected within those

segments, regardless of implementation timing, contract structures, or market conditions. Recent experience highlights the need for policy clarification regarding how these kinds of budget caps are applied mid-cycle, particularly when prior-year actuals and voluntary budget adjustments are used in ways that redefine the cap itself. The Commission adopted a four-year portfolio budget period for a reason.

The Commission applied this framework to MCE's 2025 submitted MCAL.[295] For MCE's MCAL, ED staff evaluated cumulative 2024 actual expenditures together with forecasted spending for 2025–2027 to assess compliance with the Commission-adopted combined Equity and Market Support budget cap. Based on this novel assessment, ED concluded that projected E&MS spending *could* reach approximately 32 percent of total portfolio expenditures by the end of the four-year portfolio period.

As a result, ED required MCE to reduce its E&MS segment *budgets* (not expenditures) as part of the MCAL review. This reduced MCE's E&MS segment budgets by $2,346,187.77. At the time of the MCAL filing, MCE's E&MS budgets remained within the dollar caps originally approved by the Commission in both D.23-06-055 and its True-Up Advice Letter ("TUAL").[296]

Unlike the EE application and TUAL, which established total authorized portfolio budgets for the 2024–2027 period, the MCAL reflects the remaining authorized portfolio amount after accounting for 2024 actual expenditures. As such, the MCAL portfolio amount incorporates and accounts for realized spending and does not represent a standalone budget authorization for the full four-year period.

[295] MCE AL 91-E submitted November 4, 2025.
[296] MCE AL 70-E with an effective date of November 15, 2023.

3.1 Commission's Approval of E&MS Budget Cap

MCE interprets the Commission's recent EE decisions as establishing and approving the combined E&MS budget cap as a percentage of the PA's total portfolio budget for the full portfolio period. Under the Commission's EE framework, a PA's portfolio budget is created through approval in the EE application and may be modified only through explicit Commission action, such as a TUAL. Actual expenditures reduce remaining available budget authority but do not redefine the underlying portfolio budget itself.

As D.21-05-031 states:

> Beginning in program year 2022, energy efficiency program administrators who are investor-owned utilities or community choice aggregators shall limit the expenditures in their portfolios on market support and equity programs, combined, **to a total of no more than 30 percent of their total budget**, including statewide programs, but excluding funds forwarded to other energy efficiency program administrators.[297]

Decision 23-06-055 further explains that "D.21-05-031 directed the energy efficiency PAs to segment their portfolios into programs that are primarily designed for three purposes: resource acquisition, market support, and equity[,]" and "**[t]he combined budgets of each non-REN PA for the equity and market support programs are limited to 30 percent of their total portfolio budget.**"[298]

Read in context, the terms "total budget" or "total portfolio budget" refer to the portfolio budget established through Commission approval, not to a dynamically recalculated amount derived from realized expenditures or forecast updates. Nothing in these decisions indicates that the portfolio budget denominator (for purposes of applying the combined E&MS cap) is recalculated mid-cycle based on implementation pacing, underspending in other segments, or

[297] D.21-05-031, OP 4 (emphasis added).
[298] D.23-06-044, p. 13 (emphasis added).

updated forecasts. Under the framework the Commission established, PAs report actual expenditures for monitoring and oversight purposes, but do not redefine the authorized budget base against which the combined E&MS cap is calculated.

3.2 Impact of Hybrid Framework on Programs

MCE's experience demonstrates how applying the combined E&MS cap using a hybrid actuals-plus-forecast framework effectively redefines the Commission-authorized cap mid-cycle, despite no Commission action modifying the underlying authorized portfolio budget or cap structure. This highlights the need for policy clarification regarding how budget caps are applied mid-cycle, particularly when prior-year actuals and voluntary budget adjustments are used in ways that redefine the cap itself.

Table 11-1 below summarizes the evolution of MCE's portfolio authorization and E&MS budget caps across approval stages and illustrates the distinction between Commission-approved budgets and remaining authorization net of actual expenditures.

Table 11-1: Evolution of MCE's Portfolio Authorization and E&MS Budget Caps[299]

Approval Stage	Portfolio Authorization Basis	Amount
EE Application (Original Authorization)[300]	Total authorized 2024-2027 portfolio budget	$78,217,316.00
	Authorized E&MS Budget Cap (limited to 30 percent)	$23,465,194.80
TUAL (2023)[301]	Updated authorized 2024-2027 portfolio budget	$76,679,990.46
	Authorized E&MS Budget Cap	$23,001,297.15
MCAL (2025)[302]	Remaining Authorized Portfolio Amount After 2024 actual Expenditures	$70,393,693.44
	Authorized E&MS Budget Cap	$21,119,008.03
E&MS Budget Cut (subtracting MCAL amount from EE Application amount)		$2,346,187.77

As a result of this unanticipated reduction in budget, MCE E&MS Programs in PY 2026-2027 suffered serious negative impacts. For example, the GWPP suffered administrative impacts (renegotiation of contract, potential impact of implementer staff time/hours), financial impacts (reducing the 2026 budget from $1.2 million to $500,000), and program deliverables impacts (significantly paring down job seeker matching). This has occurred at critical times, limiting contractor engagement and outreach during the Bay Area Air District's 9-6 ruling on zero NOx appliances and stopping program implementers from accessing cash stipends for small contractors when they were looking to build on growth and results of 2025. The SBEA program also suffered significant administrative impacts (requiring contract renegotiation, causing potential job loss, reduction in services, and potential temporary pause in program services) as well as financial

[299] The EE Application and TUAL reflect Commission-approved portfolio budgets for the full 2024-2027 period. The MCAL did not establish a new portfolio budget; instead, it reflects the remaining authorized portfolio amount after accounting for 2024 actual expenditures.
[300] D.23-06-055, p. 93.
[301] MCE Advice Letter 70-EE.
[302] MCE Advice Letter 91-EE.

impacts (reducing the program years 2026-2027 budget by $1 million, or 50 percent). MCE was required to renegotiate contracts and reduce planned E&MS activities in later years—despite remaining within the Commission-authorized dollar cap for the full four-year portfolio period. This outcome discourages long-term Equity program planning that uses community engagement to meaningfully inform program design and implementation.

3.3 MCE Proposal—Fixed Cap with Ongoing Annual Tracking and Triggered Oversight

MCE recognizes ED's responsibility to ensure that PAs remain on track to comply with the combined E&MS budget cap over the full four-year portfolio period. MCE also recognizes that the MCAL represents the final formal opportunity for forward-looking forecasts within the current portfolio cycle. Accordingly, MCE proposes a framework that preserves the Commission-authorized cap structure while providing ED with both mid-cycle assurance and ongoing post-MCAL oversight, without recalculating the cap denominator or imposing continuous proportional spending requirements.

a. MCAL as the Final Forward-Looking Checkpoint

At the MCAL, PAs would continue to provide:

- Actual E&MS expenditures to date;
- Forecasted E&MS expenditures for remaining portfolio years; and
- Remaining headroom under the Commission-authorized E&MS budget.

ED would assess whether the portfolio trajectory reasonably demonstrates compliance with the authorized cap by the end of the four-year portfolio period, consistent with the MCAL's role as a mid-cycle oversight and course-correction mechanism. The MCAL would not, however, establish a new cap or denominator. The E&MS cap denominator would remain fixed as a percentage of the Commission-authorized total approved portfolio budget, regardless of voluntary

mid-cycle budget reductions, justifiable underspending in other portfolio segments, or year-to-year variability in program pacing or implementation timing.

b. Annual E&MS Cap Tracking Using a Standardized Table

To provide ongoing transparency after MCAL approval, MCE recommends that PAs include a standardized E&MS Cap Tracking Table in each annual report for the remainder of the portfolio period. Under this approach, compliance would be evaluated based on cumulative E&MS expenditures relative to the authorized cap. Pipeline and commitment information would be provided solely to inform prospective risk assessment and would not, on its own, constitute a cap exceedance or trigger retroactive budget reductions.

Table 11-2*:* Recommended Table Structure for the Annual Report

Table Header	Description	Purpose / Rationale
Authorized Portfolio Budget	Commission-approved total EE portfolio budget	Anchors cap tracking to Commission-authorized amounts rather than evolving actuals.
Authorized E&MS Cap ($)	Dollar value of the Commission-authorized combined cap	Establishes a fixed, transparent compliance threshold.
Cumulative E&MS Expenditures to Date	Actual incurred costs through the reporting year	Serves as the definitive basis for compliance evaluation.
Remaining Headroom Under the Authorized Cap	Difference between authorized cap and cumulative expenditures	Translates compliance status into a clear, actionable dollar metric.
Executed Contract Commitments	Value of executed contracts supporting E&MS activities	Identifies legally binding obligations and provides a strong forward-looking indicator.
Committed Pipeline (Reasonably Expected Spend)	Near-term activities beyond exploratory stages but not yet executed	Supports early identification of potential cap risk.
Material Cap Risk Indicator	Qualitative indicator (*e.g.*, Low / Moderate / High risk)	Flags when trends suggest a reasonable risk of cap exceedance and when further action may be warranted.

c. Triggered Filing Only if Risk Emerges

If an annual report indicates that continued implementation would present a significant risk of the PA exceeding the authorized E&MS cap based on cumulative expenditures, executed commitments, and reasonably expected pipeline activity, the PA would then be required to take corrective action prior to exceeding the cap. Such action would include filing a Tier 2 Advice Letter proposing portfolio adjustments or requesting Commission guidance, as appropriate. This approach ensures ED review before a cap exceedance occurs while avoiding automatic or retroactive budget reductions driven solely by implementation timing differences or cross-segment underspending.

3.4 Distinguishing Trajectory Evaluation for Total System Benefit Goals Versus Budget and Equity Caps

MCE recognizes that ED appropriately evaluates portfolio trajectory using actual performance and forecasts when assessing progress toward TSB goals, including in the MCAL. TSB goals are performance-based targets designed to evolve over time in response to updated potential studies. As such, it is reasonable and necessary to assess whether PAs remain on track using a hybrid actuals-plus-forecast framework. Budget caps, by contrast, are authorization-based constraints. The Commission establishes these caps as fixed dollar limits tied to the authorized portfolio budget approved at application and the EE Potential and Goals Study. Unlike TSB goals, budget caps are not recalculated or re-baselined based on realized performance or implementation timing.

Applying a hybrid trajectory framework designed for performance goals to authorization-based budget caps conflates two fundamentally different regulatory constructs and effectively transforms a fixed cap into a rolling proportional spending requirement—an outcome neither articulated in Commission decisions nor aligned with the purpose of budget authorization. Treating

these constructs differently preserves the integrity of both oversight functions: performance trajectory assessment for TSB goals and authorization compliance for budget caps.

3.5 Requested Commission Action

MCE respectfully requests that the Commission:

1. Clarify that the combined E&MS budget cap is calculated as a percentage of the Commission-authorized total portfolio budget approved in the EE application, and that this denominator remains fixed for the four-year portfolio period absent explicit Commission action.
2. Confirm that cumulative actual expenditures are used to measure progress toward the authorized cap but do not redefine or re-baseline the authorized budget base.
3. Affirm that the MCAL serves as the final forward-looking checkpoint for assessing cap compliance trajectory (unless the below trigger applies) and does not establish a new cap or denominator.
4. Direct PAs to include a standardized E&MS Cap Tracking Table in annual reports following MCAL approval to support transparent, prospective oversight.
5. Establish a trigger-based enforcement mechanism requiring prospective corrective action, including a Tier 2 advice letter where appropriate, only if an annual report demonstrates a reasonable risk of exceeding the authorized cap.
6. Clarify that while hybrid actuals-plus-forecast evaluation is appropriate for TSB goals, budget caps are authorization-based constraints and should be evaluated based on cumulative expenditures relative to Commission-authorized limits.

4. The Commission Should Streamline and Update the Definition of an Energy Efficiency Program

MCE recommends the Commission update its definition of an EE program in its public reporting to improve portfolio transparency and customer access to program information. PAs regularly report on program and portfolio performance on the publicly available CEDARS.[303] CEDARS is a tremendous tool that provides significant information to the public on EE programs and their performance. However, MCE has received feedback from other stakeholders interested in EE programs that its interface and organization can be difficult for some to navigate.

[303] For example, quarterly reports and annual reports often include hundreds of metrics.

One difficulty consistently identified by stakeholders is the sheer number of EE programs and metrics. On CEDARS, reports are organized by individual PA and on a programmatic basis with specific program identifications ("IDs"). The present organization of programmatic information is very detailed, but its organization can be overwhelming and make it challenging to understand the larger trends of portfolio performance or program offerings. MCE recommends the Commission update its definition of an EE program on the CEDARS website, prioritize aggregating data, and present streamlined trends of portfolio performance.

In this Application, for example, MCE submits eleven programs with different implementation plans and delivery models.[304] In order to capture the required data specifications in a format that is clear for ED staff and evaluators, MCE created 23 individual program IDs in CEDARS.[305] This creates confusion for stakeholders trying to assess program performance and the customers interested in individual programs. This can also contribute to public evaluations of EE portfolios which overrepresent the numbers of actual EE programs. The energy affordability crisis has sparked additional scrutiny on the use of electric ratepayer funds in programs,[306] and the Commission must update this definition and improve the organization of programmatic reporting to ensure greater accuracy and transparency.

[304] In this Application, MCE submits the following programs: Commercial Flex Market, Energy Management, Green Workforce Pathways, Home Energy Savings-Equity, Home Energy Savings-Resource, Integrated Demand Side Management, Low-Global Waming Potential ("GWP") Refrigerant Accelerator, Multifamily Energy Savings-Equity, Multifamily Energy Savings-Resource, Residential Flex Market, Small Business Energy Advantage. *See* **Exhibit 2: Program Cards** for additional details.
[305] *See* **Exhibit 3: CEDARS Filing Links and Receipts.**
[306] Assembly Bill 3264 (Petrie-Norris), section 4 (requiring the CPUC to report a list of all demand-side management programs and evaluations of each program with specific metrics).

To reduce customer confusion, MCE recommends the Commission adopt an approach for CEDARS similar to the "Switch Is On" website.[307] The Switch Is On is a statewide educational campaign promoting home electrification. The Switch Is On is a collaboration between the Commission's Technology and Equipment for Clean Heating ("TECH") program and other partners. The campaign's success is in large part due to its focus on communicating directly with customers—the Switch Is On "is a people-focused campaign focused on educating, inspiring, and supporting Californians."[308] The website features a rebate locator and contractor directory organized by services, location, and other eligibility criteria. PAs could provide similar information to the Commission for this CEDARS update. MCE recognizes CEDARS serves additional important goals beyond customer education. So instead of removing existing CEDARS components, MCE recommends the Commission, in partnership with PAs, add an additional customer-focused resource that helps customers easily navigate EE program offerings. PAs are well positioned to support this process because many, including MCE, already offer program rebate and incentive navigation tools on their websites. The Commission could even centralize existing resources on CEDARS to limit any additional administrative burdens.

5. The Commission Should Reform the Evaluation, Metrics and Verification Requirements to Strengthen Transparency, Clarity, and Administrative Efficiencies

MCE recommends the Commission update the Evaluation, Metrics, and Verification ("EM&V") requirements to improve transparency, clarity, and administrative efficiencies.

[307] https://www.switchison.org/; *See also* Mass Save, Mass Save Data: The Massachusetts Energy Efficiency Database, *available at*: https://www.masssavedata.com/ (offering streamlined and aggregated EE program reporting for Massachusetts).

[308] The Switch Is On, *The Switch Is On Presentation*, p. 13 (March 2022), *available at*: https://www.bayren.org/sites/default/files/2022-03/BayREN%20March%202022%20Forum%20presentation_Rebecca%20Rothman_Switch%20Is%20On-Building%20Decarbonization%20Coalition.pdf.

Providing clearer EM&V direction to PAs will support more consistent and timelier compliance in furtherance of related goals. The Commission designed EM&V to advance the following objectives: inform the program selection process, provide early feedback to program implementers, produce impact evaluations at the end of the funding period, and feed the planning process for future program cycles.[309] EM&V allows EE programs and program offerings to continuously improve in alignment with ever evolving Commission and state policy goals. Strengthening the consistency and timeliness of EM&V reporting will allow for more comprehensive, usable, and relevant data. This data will help PAs across the portfolio further improve EE programs and program offerings in real time.

Currently, the Commission issues EM&V requirements for PAs across several distinct sources including the *2020 Energy Policy Manual*, the *2006 California Energy Efficiency Evaluation Protocols*, and various decisions. These controlling authorities establish the foundational principle that Commission ED Staff oversee EM&V activities and PAs are responsible for supporting evaluations, reviewing findings, and preparing Responses to Recommendations ("RTRs") when included. These sources offer a rich and detailed foundation for EM&V activities. However, PAs do not have a streamlined method or source from which to learn when EM&V studies are published, determine whether specific recommendations apply to their portfolios, or to identify due dates for RTR submissions.

Absent a single unified EM&V resource, PAs must monitor the following three repositories:

[309] CPUC, *Energy Efficiency Policy Manual Version 6*, pp. 43-44 (April 2020), *available at*: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-efficiency/eepolicymanualrevised-march-20-2020-b.pdf.

- **Public Documents Area**: The Public Documents Area ("PDA") is the Commission's general repository for EE-related public documents, including EM&V reports, work papers, and supporting materials. However, the PDA does not presently identify which reports contain PA-specific recommendations or indicate when RTR action is required.
- **Project Status Reporting Module**: The Project Status Reporting ("PSR") module[310] provides EM&V project descriptions, budgets, milestones, and status updates. While useful for tracking study progress, the PSR Module does not identify which PAs must respond to recommendations and does not issue notifications to impacted PAs when a study advances or additional action is necessary. Additionally, the PSR Module does not allow CCAs like MCE to identify themselves as study leads. This unnecessarily limits public transparency of PA-conducted EM&V studies.
- **CalMAC**: CalMAC[311] is a separate public-facing library of EM&V and research studies. CalMAC was created by the investor-owned utilities, Commission, and the California Energy Commission ("CEC") historically as an "unofficial forum for discussing and directing" EM&V efforts.[312] Currently, CalMAC functions primarily as a research archive and search tool, but does not provide study status information, PA-specific tagging, RTR requirements, or notification functionality. EM&V requirements are presently ambiguous on whether PAs should publish studies to both CalMAC and the PDA. Also unclear is what distinct role each platform is intended to play within the EM&V ecosystem.

[310] https://psr.energydataweb.com.
[311] California Measurement Advisory Council ("CalMAC"), https://www.calmac.org/.
[312] CalMAC, FAQ, *available at*: https://www.calmac.org/faq.asp.

In the absence of a single, centralized system and PA-specific notifications and indicators, PAs must manually and repeatedly review multiple resources to determine the receipt of a new RTR obligation. This process is time intensive, administratively inefficient, risks PAs missing valuable information, and particularly impacts smaller PAs with comparatively limited staff resources.

To support greater consistency, transparency, administrative efficiency, and usability of EM&V reports, MCE recommends:

1. The Commission-issue notifications identifying which EM&V studies require RTRs and their corresponding due dates.
2. The Commission require PA-specific tags or metadata on the PDA, PSR module, and CalMAC publications indicating which PAs are evaluated in each study.
3. The Commission issue consolidated guidance and training materials explaining the purpose and application of CalMAC, the PDA, and the PSR module within EM&V requirements.

These narrow improvements would reduce duplicative manual effort for all PAs, reduce the necessary staff resources and costs of compliance, remove existing compliance ambiguities, and support timely and accurate RTR submissions. Collectively, these enhancements will further strengthen the quality and timeliness of EM&V reporting in support of improved EE programming.

6. MCE Supports Greater Incorporation of Non-Energy Benefits in Portfolios as More Metrics Become Available

MCE strongly supports the valuation and consideration of non-energy benefits ("NEBs") within the EE portfolios. The lack of consideration of NEBs in climate and energy programs frequently prohibits meaningful investments in environmental and social justice ("ESJ") communities especially.[313] NEBs like improved health, safety, comfort, resilience, and bill savings

[313] California Energy Commission, *Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities*, pp. 3, 5, 43, 46 (2016), *available at*: https://efiling.energy.ca.gov/getdocument.aspx?tn=214830.

are also often the primary motivator for customers' participation in EE programs.[314] The consideration and valuation of NEBs is consistent with the Commission's *Environmental and Social Justice Action Plan* Goals 2, 4, and 7 to increase investment in ESJ communities that improve air quality, climate resiliency, and promote high road career paths and economic opportunities for residents.[315] Valuing and considering NEBs supports their delivery through EE programs in compliance with relevant EE and state policy objectives.

As so many Californians suffer from high energy bills, EE programs should maximize bill savings potential and the NEB of "bill savings."[316] As discussed above, the Governor and legislature directed the Commission to ensure ratepayer programs do everything possible to help energy affordability.[317] Assembly Bill 3264 (Petrie-Norris, 2024) directly requires reporting on the bill savings impacts and "public interest impacts, as applicable" of all demand-side management programs, including EE programs. The Commission should take additional steps to incorporate NEBs like bill savings across the EE portfolio, especially within the Equity segment.

MCE supported the Disadvantaged Community Advisory Group's ("DACAG") proposal for greater integration of NEBs in EE portfolios in the previous application cycle,[318] as well as the Commission's *Non-Energy Benefits Study* "to update and improve quantification of non-energy benefits as an indicator for Equity segment program performance, as well as for consideration by

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[314] *Id*., p. 43.
[315] CPUC, *ESJ Action Plan Vol 2* (April 2022), *available at*: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf (GOAL 2: Increase Investment in Clean Energy Resources to Benefit ESJ Communities, Especially to Improve Local Air Quality and Public Health; GOAL 4: Increase Climate Resiliency in ESJ Communities GOAL 7: Promote High Road Career Paths and Economic Opportunity for Residents of ESJ Communities).
[316] Public Policy Institute of California, *Low-Income Households Struggle with the Cost of Electricity Bills* (August 2025), *available at*: https://www.ppic.org/blog/low-income-households-struggle-with-the-cost-of-electricity-bills/.
[317] Executive Department State of California, EXECUTIVE ORDER N-5-24, pp. 1-2 (October 30, 2024), *available at*: https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf; Assembly Bill 3264 (Petrie-Norris), 2024, section 4.
[318] D.23-06-055, p. 32.

PAs, stakeholders, and ED staff in the equity goals development process."[319] MCE along with other PAs and stakeholders have meaningfully participated in the Non-Energy Benefits Study Working Group. This Working Group published a draft research plan identifying 11 NEBs for further study.[320] The final report will include NEBs measurement methods for the identified NEBs and PA reporting templates for Equity segment programs. According to recent timeline estimates, the final report should be published in Q3 of 2026.

Simultaneously, the CEC adopted an Order Instituting an Informational Proceeding on Non-Energy Impacts ("NEI") in March 2024 to "[c]onsider use of non-energy benefits and social cost methodologies in CEC analyses, planning, and decision-making processes."[321] The CEC has conducted two public workshops seeking "[f]eedback on the proposed set of non-energy impacts[322] planned for consideration for application in CEC planning and processes."[323] MCE recommends the CPUC coordinate with the CEC on this complementary effort to ensure utilization of any relevant research, findings, proposals, and methods.

Following the publication of the *Non-Energy Benefits Study* in 2026 and any other potentially relevant NEI publications from the CEC, the Commission will require PAs to track and report NEBs for the Equity segment starting in the Q1 2028 quarterly reports.[324] Since these reports

[319] *Id.*, p. 35.
[320] NEBs identified include: bill savings, more comfortable, better health at the participant level, increased job access at the participant level, economic development, better health at the societal level, increased jobs, reduced shut-offs, increased property value, increased productivity, enhanced community resilience and adaptation to climate change.
[321] CEC, *Order Instituting Informational Proceeding on Non-Energy Impacts (NEI)* (2025), *available at*: https://www.energy.ca.gov/proceeding/order-instituting-informational-proceeding-non-energy-impacts-nei.
[322] NEI categories under consideration include air quality, land use, affordability & economics, workforce & jobs, resilience, water supply and quality, public health and safety, cross-cutting.
[323] CEC, *Informational Proceeding on Non-Energy Benefits and Social Costs, Presentations for the Scoping Workshop for the Non-Energy Impacts Informational Proceeding*, p. 8 (March 2025), *available at*: https://efiling.energy.ca.gov/GetDocument.aspx?tn=262166.
[324] D.23-06-055, OP 19.

are not presently available, MCE recommends the Commission consider greater incorporation of NEBs with a focus on bill savings prior to 2028. Doing so would ultimately support energy affordability, Executive Order N-5-24 and AB 3264 compliance, and ESJ Action Plan Goals 2, 4, and 7.[325]

7. MCE Strongly Supports Integrated Demand Side Management Programs within the Energy Efficiency Portfolios

MCE strongly supports the Commission continuing to fund integrated demand-side management ("IDSM") programs within the EE portfolios. In D.23-06-055, the Commission authorized "each PA to set aside up to 2.5 percent, or $4 million, whichever is great[er], of its energy efficiency budget for the portfolio period, up to a maximum of $15 million, for ongoing load shifting that reduces peak consumption and is not event-based" for programs from 2024-2027.[326] In March 2024, Pacific Gas & Electric Company ("PG&E"), Southern California Edison Company ("SCE"), Southern California Gas Company ("SoCalGas"), San Francisco Bay Area Regional Energy Network ("BayREN"), Inland Regional Energy Network ("I-REN"), MCE, Southern California Regional Energy Network ("SoCalREN"), and Tri-County Regional Energy Network ("3C-REN") submitted multi-distributed energy resource IDSM frameworks and programs to the Commission. In September 2025, the Commission issued a final resolution

[325] CPUC, *ESJ Action Plan Vol 2* (April 2022), *available at*: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf (GOAL 2: Increase Investment in Clean Energy Resources to Benefit ESJ Communities, Especially to Improve Local Air Quality and Public Health; GOAL 4: Increase Climate Resiliency in ESJ Communities GOAL 7: Promote High Road Career Paths and Economic Opportunity for Residents of ESJ Communities).
[326] D.23-06-055, COL 41.

approving PG&E, SCE, SoCalGas, BayREN, I-REN, MCE, SoCalREN, and 3C-REN's IDSM frameworks and programs.[327] MCE expects to formally launch its IDSM program[328] in Q1 of 2026.

In D.23-06-055, the Commission did not explicitly authorize the funding of IDSM frameworks and programs beyond PY 2027.[329] MCE recommends the Commission continue IDSM funding for PYs 2028-2031 and beyond. The integration of IDSM measures and activities within EE portfolios supports several key policy goals including cost-effectiveness, grid reliability, bill savings, and customer satisfaction in program participation. Evaluations of IDSM programs consistently find the program designs allow the measure of flexibility necessary to produce more valuable energy savings at key times of electric grid stress that simultaneously benefit the participant customers and the non-participant customers using the electric grid.[330] As California's reliability[331] and affordability[332] needs continue to evolve, the Commission should continue investing in the essential tools of IDSM programs integrated within EE portfolios. IDSM programs within EE portfolios further reduce the administrative costs and customer confusion resulting from administering multiple siloed EE, DSM, and demand response programs.[333] MCE recommends the Commission continue to authorize IDSM funding in EE portfolios for PYs 2028-2031.

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[327] Resolution E-5387.

[328] See descriptions of MCE's Peak Flex Program in **Chapter 3: Portfolio Strategies**, **Chapter 6: Sector and Segmentation Strategy**, and **Exhibit 2, Peak Flex Market Program Card**.

[329] D.23-06-055, COL 41 ("for programs to be launched during 2024-2027").

[330] American Council for an Energy-Efficient Economy, *ENABLING INDUSTRIAL DEMAND FLEXIBILITY: ALIGNING INDUSTRIAL CONSUMER AND GRID BENEFITS*, p. 5 (February 2024), *available at*: https://www.aceee.org/sites/default/files/pdfs/enabling_industrial_demand_flexibility-aligning_industrial_consumer_and_grid_benefits.pdf.

[331] CEC, *Staff Report: California Energy Resource and Reliability Outlook, 2025*, p. 108 (July 2025), *available at*: https://www.energy.ca.gov/publications/2025/california-energy-resource-and-reliability-outlook-2025 ("Electricity Demand: California's electricity demand continues to rise, peaking in summer. The 2024 IEPR Update forecasts a coincident peak of nearly 46,000 MW for the California ISO in summer 2025.").

[332] Executive Order N-5-24.

[333] Lawrence Berkeley National Lab, *Barriers and Opportunities to Broader Adoption of Integrated Demand Side Management at Electric Utilities*, pp. 12, 34 (February 2018), *available at*: https://eta-publications.lbl.gov/sites/default/files/barriers_and_opps_idsm_final_03222108.pdf.