



2023 MCE Energy Efficiency Annual Report

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2023 Portfolio Highlights



In 2023, MCE's energy efficiency programs:

- Completed energy efficiency projects in 32 out of 37 MCE member communities.



- Achieved \$6.6 million in total system benefits ("TSB") and issued \$2.08 million in rebates.



- Prevented 27,076 metric tons of carbon dioxide emissions over the life of energy efficiency measures installed in 2023 -Equivalent to taking 6,444 gasoline-powered cars off the road for one year.



- Saved 5.11 net GWh and 311,629 therms.

Introduction

MCE is a not-for-profit public agency and the preferred electricity provider for more than 580,000 customer accounts and 1.5 million residents and businesses across Contra Costa, Marin, Napa, and Solano counties.¹ Setting the standard for clean energy in California since 2010, MCE leads with 100% renewable power at stable rates, delivering a 1,200 MW peak load and significantly reducing greenhouse emissions and reinvesting millions in local programs.

MCE's mission is to confront the climate crisis by significantly reducing fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits. MCE's vision is to lead 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.

MCE offers 3 renewable energy products: Light Green (60% renewable); Deep Green (100% renewable); and Local Sol (100% locally produced solar). MCE continues to exceed state renewable energy supply standards and GHG reduction targets. MCE achieved California's renewable energy goals 11 years ahead of state targets and expects to be 95% GHG free by 2023. For more information about MCE, visit mceCleanEnergy.org.

In support of its mission, MCE has administered energy efficiency funds under California Public Utilities Code ("Code") Section 381.1(a)-(d) since 2013.² The California Public Utilities Commission ("Commission") originally restricted MCE's energy efficiency programs to serving gaps in Investor Owned Utility ("IOU") programs and hard-to-reach markets.³ At the time, the Commission acknowledged that these restrictions may cause MCE's portfolio to fail the Total Resource Cost ("TRC") test and thus did not initially impose a minimum cost-effectiveness requirement on MCE.⁴ In 2014, however, the Commission lifted the restrictions and imposed the same cost-effectiveness requirements on CCAs as IOUs.⁵

Program Administrators ("PA") were invited to submit energy efficiency business plans in 2017 to the Commission. On January 17, 2017, MCE filed a Business Plan with the Commission that requested authorization to expand MCE's energy efficiency portfolio to include additional sectors and programmatic offerings.⁶ MCE proposed to offer programs in the following sectors: (1) Residential; (2) Commercial; (3) Industrial; (4) Agricultural; and (5) Workforce Education and Training. On June 5, 2018, the Commission approved MCE's Business Plan.⁷ In 2021, the Commission issued a business plan and portfolio application process for energy efficiency programs.⁸ On March 04, 2023, MCE filed its Application of Marin Clean Energy for Approval of 2024-2031 Energy Efficiency Business Plan and 2024-2027 Energy Efficiency Portfolio Plan.⁹

¹ MCE, Service Area, available at: <https://www.mcecleanenergy.org/service-area/>.

² To date, MCE is the only community choice aggregator ("CCA") to have requested energy efficiency funding under Code Section 381.1(a)-(d). D.14-01-033, OP 1 at 50; D.18-05-041, OP 1 at 182.

³ D.12-11-015 at pp. 45-6.

⁴ D.12-11-015 at p. 46.

⁵ D.14-01-033 at p. 14; see also D.14-10-046 at p. 120.

⁶ See Application of Marin Clean Energy for Approval of its Energy Efficiency Business Plan (Application ("A.") 17-01-017) filed January 17, 2017.

⁷ D. 18-05-041, OP 33 at 189.

⁸ D.21-05-031.

⁹ See MCE Application, A.22-03-12 consolidated into A.22-02-005 et. al.

On July 3, 2023 the Commission approved MCE’s EE portfolio Application for 2024-2027 with no adjustments to its proposed portfolio budget cap in the amount of \$78,217,316 and approved all of MCE’s proposed programs except for its PeakFLEXmarket program.¹⁰ On October 16, 2023 MCE filed a True-Up Advice Letter (“TUAL”) requesting approval of its proposed budget amount of \$76,670,990 for 2024-2027, submitted additional details on its portfolio and proposed to allocate a fixed amount of \$4 million from its 2024-2027 budget to an Integrated Demand-Side Management program.¹¹ The CPUC approved MCE’s proposed budget amount, IDSM allocation and portfolio details in a Disposition with the effective date of November 15, 2023. On March 15, 2024, MCE submitted additional proposed IDSM program details.¹²

Resource Acquisition

Multifamily Energy Savings Program (MCE01)

Program Description

The Multifamily Energy Savings Program (“MFES”) provides residential energy efficiency improvements to affordable multifamily properties in the MCE service territory. This program is implemented by the Association for Energy Affordability (“AEA”) and provides funding for energy efficiency and building electrification measures. It layers various funding sources and programs, including Energy Efficiency and Energy Savings Assistance (“ESA”) program, federal and MCE funding, Low Income Weatherization Program, and TECH Clean California to provide comprehensive, whole building upgrades. The program supports environmental and social justice (“ESJ”) communities¹³ that are disproportionately impacted by California’s energy system, particularly those who have been traditionally underserved by energy efficiency programs. MFES complemented MCE’s Low-Income Families and Tenants (“LIFT”) pilot program, authorized in D.16-11-022, by providing funding to affordable properties where not all units qualify for LIFT incentives.

LIFT provides comprehensive technical assistance services and supports energy efficiency and fuel switching from gas appliances to electric heat pumps for cleaner and safer energy use. Income-qualified multifamily properties were able to layer incentives from LIFT on MFES rebates for services and measures listed below. With this model, MFES supports property-wide upgrades for all tenants who live in affordable housing.

MFES services include no-cost property assessments, project scope development, and program assistance throughout the lifetime of the project. The program offers rebates for energy efficiency and building electrification measures. It also provided no-cost direct install energy efficiency measures to reduce overall project management and measure costs.

MFES addresses key market barriers by:

¹⁰ D.23-06-055 at pp. 93, 103-105.

¹¹ MCE AL 70-E at p. 8.

¹² See MCE AL 74-E (submitted in compliance with Ordering Paragraphs 28-29 of D.23-06-055).

¹³ CPUC, Environmental and Social Justice Action Plan Volume 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> at p. 2 (definition of ESJ communities).

- Providing customized technical assistance to overcome challenges associated with the diversity of building types, ownership types, and billing configurations;
- Informing property owners about the range of participation options that best meet their current property needs. This includes guiding property owners through the upgrade opportunities throughout the property; and
- Bridging the funding gap between multifamily units that qualify for LIFT or ESA incentives and those that do not by stacking funds to enable comprehensive and equitable whole-building improvements.

Strategies and Achievements in 2023

As a result of the strategies employed in 2022, the MFES project pipeline grew significantly in 2023. The strategies include the expansion of the measure list to incorporate building electrification measures such as heat pump HVAC and water heating systems, induction stoves, and heat pump dryers, as well as additional incentives for electrical panel and other electrical upgrades in-unit and in common areas. Additionally, incentive amounts were increased to better serve multifamily customers. MCE implemented a streamlined incentive layering process to effectively deliver funding to affordable properties, where some units were eligible for LIFT incentives, which provided health and safety measures to bolster the participant benefits of the energy efficiency upgrades.

The program also focused on further developing the direct install component by contracting with Bottom Line Utility Solutions Inc (“BLUS”) to provide a no-cost direct install service for both MFES and LIFT Program participants. These efforts aimed to increase the number of energy efficiency and electrification measures in multifamily properties, benefiting both residents and the environment by reducing indoor emissions. Consequently, the MFES program conducted 12 site visits, completed projects at 9 properties comprised of 653 units, and disbursed a total of \$246,274 in rebates. Moreover, the program reserved \$725,641 in rebates for 8 new projects, encompassing 439 units. The majority of these projects will be completed by the end of 2024, with the others anticipated to be completed in 2025.

Looking Forward in 2024

Following a year of boosting electrification projects, the MFES program is starting to see tangible results. This includes increased participation, stronger customer engagement, and more completed projects, all contributing to a robust project pipeline.,

In 2024, the program will continue building a strong project pipeline, with a focus on ESJ and historically underserved communities,¹⁴ including households unable to qualify for low-income programs yet still in need of financial and technical support. The program aims to serve 122 units across 4 properties within these communities.

Other changes include:

- Ceasing direct install services to prioritize building electrification incentives and technical assistance;

¹⁴ Pursuant to Cal. Pub. Util. Comm’n, Environmental and Social Justice Action Plan version 2.0, (April 7, 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>.

- Expanding program reach by seeking additional funding sources, such as federal, state, and local funds and grants to layer with MFES incentives to boost projects and their impacts;
- Strengthening tenant education strategies to empower them to beneficially utilize their new electric appliances; and
- Continuing MCE’s partnership with BayREN to provide incentives for projects that don’t qualify for BayREN’s Bay Area Multifamily Enhancements Program (“BAMBE”).

Multifamily Strategic Energy Management Program (MCE01c)

Program Description

The Multifamily Strategic Energy Management (“MF SEM”) Program serves multifamily property customers with a goal of achieving low-cost and no-cost energy savings, which are sustained by making behavioral and operational changes and adopting best practices. MF SEM is a holistic, whole property approach that uses Normalized Meter Energy Consumption (“NMEC”) methodology and dynamic baseline models to determine eligible energy savings from all program activity at the property. MF SEM expands energy management beyond traditional capital equipment upgrades to focus on improving internal processes, systems, and policies to save energy. Savings are realized year over year as participants develop more knowledge in a culture of continuous improvement and support.

The program is designed to help properties identify and implement energy savings opportunities that they would not have implemented without the program’s support. Participating properties join a cohort and progress through a series of facilitated workshops together. Workshops teach participants how to map energy usage across their respective properties, and participants develop skills to identify, measure, and replicate opportunities for energy savings. Savings estimates and customer incentives for operations and maintenance (“O&M”), retro-commissioning (“RCx”), and behavioral measures are calculated using pre- and post-project interval meter data.

The program addresses market barriers by providing:

- Customized technical assistance to overcome challenges associated with the diversity of building types, ownership types, and billing configurations, and to help with analyzing potential upgrade measures;
- Employee (property management) and tenant engagement;
- Energy tracking models;
- Assessments of low cost/no cost, behavioral, O&M, and capital opportunities throughout the property; and
- A range of participation options to best meet the current needs and abilities of properties.

Strategies and Achievements in 2023

In its first full program year, MF SEM focused on building relationships with a core set of employees within its ten participating organizations to learn the basics of an energy management system and achieve quick initial savings. First, the program identified points of contacts within each organization to be the “energy champions.” These champions were encouraged to formalize their commitment to improving energy management by developing a charter and assembling a team.

Second, the program prompted organizations to select only one or two sites to engage in the first year. Narrowing their focus increased their likelihood of demonstrating success in reducing energy use

through behavioral and operational changes. The program conducted site walkthroughs with the energy champions, their newly established energy teams, the program’s technical experts, and the organization’s MCE account manager. These walkthroughs resulted in a compiled list of energy-saving opportunities, serving as a tool for energy management, and built a collaborative environment for future education that persists throughout their participation in the program.

Third, the program awards financial incentives for achieving participation milestones within the program and for implementing energy management practices that result in reduced energy consumption.

Notable achievements include:

- Over \$20,000 in incentives distributed for engaging and implementing new energy management practices;
- All ten (10) enrolled multifamily properties in the Program have identified energy champions;
- Eight (8) multifamily properties completed site walkthroughs and have a “register” of energy-saving opportunities;
- The first two (2) multifamily properties achieved savings trends in their first year of participation and received over \$10,000 in incentives for the energy saved;
- Facilitated conversations with participants about other MCE incentive programs to identify additional opportunities to provide greater value and service and build their relationships with MCE; and
- Worked closely with MCE’s MFES program implementer, AEA, to optimize a customer’s experience participating in both multifamily programs.

Looking Forward in 2024

The two areas of focus for 2024 are enrolling another cohort of participants and building on the foundations established in the first year.

Goals for 2024 are:

- Enroll five (5) more multifamily properties in the Program and identify energy champions;
- Collectively, save customers \$180,000 on annual energy bills and distribute \$20,000 in incentives for engaging and implementing new energy management practices

To reach the enrollment goal, the program’s outreach team will continuously build on the strategies outlined below. MCE will regularly review the resources below to assess relevance, and to make sure there is adequate support to drive results.

Lead generation will come from a variety of sources including:

- Past prospects that have expressed interest;
- Direct to customer marketing;
- Earned media and collaborations with other sustainability-based organizations and offerings;
- MCE account managers;
- Manufacturers, distributors, and vendors serving the multifamily segment; and
- Trade organizations.

The program will further increase program engagement by giving enrolled multifamily properties various avenues for sharing their success stories. The program's marketing team will build case studies to share with prospective program participants, while the program team will host cohort workshops to foster conversations around best practices and lessons learned. During the second year of SEM enrollment, participants will solidify and advance the practices they identified and began implementing in the first year, often resulting in greater energy savings. Participants will engage in a mix of individual coaching sessions, cohort-style technical workshops, and peer-to-peer learning activities.

Other strategies include:

- Continued participation in statewide and North American SEM initiatives to inform developments/strategies for the multi-family (and other non-industrial) SEM programs.
 - SEM Statewide Best Practices meeting, a bi-monthly coordination call with other California SEM program administrators, implementers, subject matter experts, & CPUC to discuss recent SEM energy issues and recommendations.
 - The North American SEM Collaborative, a professional membership and outreach initiative with a goal of improving the effectiveness of existing SEM programs that span across other program administrators, implementers, and evaluators.
- Continued outreach and recruitment for a second multifamily property cohort, in coordination with MCE marketing and customer engagement teams, as well as other MCE program implementers serving multifamily properties.
- Explore additional channels to reach the multifamily sector like hosting informational workshops by region and leveraging existing relationships.
- Continue to assess MF SEM design to optimize cost effectiveness of the program.

Commercial Energy Efficiency Program (MCE02a-c)

Program Description

The MCE Commercial Program is a comprehensive, third-party delivered program which produces reliable and persistent electric and gas savings for customers within MCE's service area. The Program offers various participation pathways that deliver prescriptive measures, custom-calculated savings, and rebates to commercial customers of all sizes. Customers benefit from a comprehensive approach to energy efficiency, combining MCE's strong customer relationships and community relationships, and ongoing communication with innovative methods, data-driven outreach, and technical review of projects to move customers forward on their energy efficiency journey.

For customers, the Program offers energy assessments, procurement assistance, a diverse mix of energy efficiency services, and rebates for lighting, HVAC, refrigeration, food service measures and more. In addition, the program offers project management assistance and post-project quality assurance. SEM affords customers the opportunity to strengthen energy management within their organizations, and complete no- and low-cost behavioral changes, retro-commissioning, and operational projects. SEM can drive longer term organizational changes that result in continuous energy improvements, year after year.

The Program goals are to:

- Streamline the customer experience, reduce administrative costs, improve cost-effectiveness, and better serve all ratepayers regardless of customer size or business type;
- Increase education about energy use and its associated economic and environmental impacts in the commercial sector within MCE’s service area;
- Ensure program impacts are verifiable and that incentive payments align with realized savings; and
- Scale resource energy efficiency impacts, with a focus on cost-effective program delivery and Total System Benefits (“TSB”).

Strategies and Achievements in 2023

MCE’s Commercial program deployed several strategies in 2023, in the interest of growing program impacts, accountability, and cost effectiveness. MCE continued and improved upon its foundational strategy to ensure its program services and incentives fulfill a variety of energy efficiency needs and interests. A core component of this strategy is MCE ensuring that flexible contract mechanisms are in place, so that implementation partners are not unnecessarily limited in the scope of their services or programs. This contracting strategy enables implementation partners to better meet customers’ varying needs, leveraging different participation pathways and levels of engagement.

As in previous years, MCE has also leveraged consumption data to help identify ideal program participants and conduct customer outreach. This is a critical component of the SEM program, which focuses squarely on MCE’s largest commercial customers. Consumption and interval data are also critical components of customer targeting and evaluating customer energy savings under the Efficiency Market program, where the total project value is determined in part by the load shape of energy efficiency savings. Customer data is important to understanding the value of savings with a particular customer, and the interventions that they may benefit from.

Notable Achievements include:

- Helping (41) businesses complete (45) individual energy saving installation projects;
- Providing over \$250,000 in custom and deemed rebates for lighting, HVAC, and building envelope improvements; and
- Reducing energy usage by 780,000 kWhs/year for participating businesses and collectively achieving over \$475,000 in annual bill savings, along with lower maintenance costs.

Looking Forward in 2024

MCE will continue building the Commercial program portfolio with one program implementer, CLEAResult, to allow for streamlined program operations and customer referrals. There will be a focus on developing projects at larger commercial sites, while continuing to provide services to small and medium business.

2024 goals include:

- Help businesses collectively reduce their overall annual consumption by 1 GWh and achieve annual bill savings of over \$500,000

- Increase education about energy use and its associated economic and environmental impacts in the commercial sector within MCE’s service area
- Provide businesses with program offerings specific to their market segments

Commercial Efficiency Market Program (MCE02d)

Program Description

The MCE Commercial Efficiency Market program is a third-party delivered population-level NMEC program. MCE designed the program to scale up quickly with an open market of qualified aggregators delivering energy efficiency and demand flexibility solutions to customers within its service area. The program leverages a diverse mix of energy efficiency services and measures with a focus on saving and reducing energy consumption during summer¹⁵ peak and net peak periods in support of grid reliability. The program works with Recurve to implement the program, manage aggregator relationships, enroll projects, and measure and deliver results.

The Commercial Efficiency Market program’s unique design allows for cost-effective energy efficiency procurement by opening the door to a wide network of participating aggregators, without requiring direct solicitations or direct contracts with MCE. This results in a program that is easier to access for providers and mitigates the risk of underperformance and unspent program funding. Further, the design reduces the administrative burden and waste often present in opening and closing new programs. The program emphasizes the time-dependent value of savings, by paying participating aggregators based on an adjusted TSB¹⁶ delivered by portfolio of projects, as determined by custom savings load shapes and customer profiles. This drives aggregators to focus on high value customers and interventions that deliver savings throughout times of the year when grid value is maximized and rewards them for doing so.

The program goals are to:

- Align aggregator payments with realized grid benefits and incentivize them to pursue projects and measures that produce the most savings, particularly during summer peak hours;
- Ensure program impacts are verifiable and spending does not exceed TSB delivered; and
- Scale resource energy efficiency impacts, with a focus on cost-effective program delivery and Total System Benefits.

Strategies and Achievements in 2023

MCE’s Commercial Efficiency Market deployed several strategies in 2023, in the interest of growing program impacts, accountability, cost effectiveness and summer grid reliability. First, in December 2021, MCE received Commission approval for its 2022 & 2023 Commercial Efficiency Market to modify its current program design to align with the rules and procedures adopted for Market Access Programs.¹⁷ Accordingly in 2022 & 2023, the program adjusted the avoided cost curve for aggregator payments to further emphasize summer peak and net peak impacts and align with MCE’s Residential Market Access program, also known as MCE’s Residential Efficiency Market. This allowed the program to further incentivize and emphasize the importance of summer peak savings when the grid is most constrained.

¹⁵ “Summer” defined as June 1 to October 31.

¹⁶ TSB is an expression, in dollar terms, of the lifecycle energy, capacity, and GHG benefits, expressed on an annual basis

¹⁷ D21-12-011, OP 2 at 60

Second, the program continued to offer upfront payments based on forecasted project value and subsequent quarterly portfolio payments, net of program management fees, based on delivered grid value. This change supported aggregator cash flow concerns and allowed for the continual submittal of projects to the program instead of the previous payment structure where aggregators waited a full year to receive performance payments. This change coupled with a greater market acceptance of the program design attracted additional aggregators to participate in the program who previously expressed concerns.

In 2023, the program saw a 100% increase in participation from the previous program year with a total of 38 installed projects that entered the tracking phase to start measuring impacts at the meter. The program also nearly reserved its entire allocated budget for these projects and an additional 14 projects are anticipated to be installed in the first quarter of 2024.

The program true-up the 2022 forecasted savings claim for all 19 projects completed and installed in 2022 following their twelve-month monitoring period in 2023. The program level true-up claim reflected projects' actual savings at the meter. The program achieved a 115% realization rate between forecasted kWh savings and delivered kWh savings and a 111% realization rate between forecasted TSB and delivered TSB. To closely match the actual TSB output of 2022 impacts, the program selected two weighted DEER load shapes and weighted Effective Useful Lives ("EUL") that best represented actual, delivered TSB. This true-up claim included an actual weather normalization using weather stations closest to the project locations within the same climate zone. Combined, the true-up methods steps used on the 2022 forecasted program claim provided the most accurate representation of actual savings and benefits that this program delivered.

Looking Forward in 2024

MCE will continue to provide innovative strategies to drive customer participation, expand the program benefits, and increase cost-effectiveness. MCE will also continue to coordinate with other Market Access and similar programs offered by other CCAs and PAs throughout our service area and state to improve our program design and achieve beneficial grid impacts.

MCE eagerly anticipates the opportunity to utilize custom load shapes instead of deemed measure load shapes in order to significantly enhance the accuracy of TSB calculations. By shifting from deemed measure load shapes to custom load shapes, MCE can attain a more detailed and accurate evaluation of energy savings while capturing the distinct energy consumption patterns of the program.

Other program changes, improvements, and goals include:

- Support aggregators in marketing to target customers that best fit their business model;
- Facilitate customer "matchmaking" by identifying customer needs and matching them with a list of qualified aggregators;
- Enroll 100 commercial customers into the program;
- Leverage custom load shapes in savings claims to enable higher value projects;
- Structure payable rates within contracts and incentives that align with delivered benefits in support of improved cost-effectiveness; and

- Filed a Tier 3 advice letter to utilize IDSM funding to expand the Peak FLEXmarket program to emphasize ongoing and permanent load shifting or load reduction during peak hours throughout the year.¹⁸
- Continue researching the potential for a program offering for low global warming potential (“GWP”) refrigerant gas replacements.¹⁹

Agricultural and Industrial Resource (“AIR”) Program (MCE10a-d, MCE11a-d)

Program Description

The MCE AIR Program is a comprehensive third-party program²⁰ designed for agricultural and industrial customers within MCE’s service area. The AIR program is designed to provide individualized services to identify energy efficiency opportunities, develop and evaluate implementation options, and provide incentives in the form of technical assistance, money-back rebates, and financing. MCE partners with CLEAResult as the implementer, and the program aims to leverage multiple participation pathways, including SEM as a primary strategy for engaging agricultural and industrial customers, but also including the opportunity to pursue deemed rebates and custom projects to realize energy efficiency goals.

SEM plays a key part in the AIR Program to help address market barriers and achieve program objectives over long-term engagement with customers. SEM offers customers cohort-style training workshops and individual site activities.

The AIR Program delivers the following objectives:

- Improve education and knowledge about energy use and associated economic and environmental impacts in the agricultural and industrial sectors within MCE’s service area;
- Provide customers with a single point of contact (“SPOC”) for their energy journey, simplifying otherwise complex and potentially competing project interests, while also connecting them to other available local and regional offerings;
- Create multiple pathways to participate under a single program umbrella, to maximize participation and optimize value to customers based on their needs; and
- Ensure program impacts are verifiable and defensible and that incentive payments align with realized savings where feasible.

Strategies and Achievements in 2023

In 2023, the MCE AIR program designed and launched a broader marketing and outreach campaign to cast a wide net and elicit interest from customers who may not be aware of the program and its offerings. The program simplified its intake form to encourage more input from prospective program participants.

To account for the growing number of SEM participants, - seven large organizations in 2021-2023 – the program added an additional SEM coach. An additional team member dedicated to the newer, most energy-consuming participants enabled the program to establish strong relationships and opportunities

¹⁸ MCE AL 74-E submitted March 15, 2024.

¹⁹ D.21-05-031 at p. 60.

²⁰ MCE is not subject to the energy efficiency “Third-Party” program rules as they are defined for utility administrators in D.16-08-019. D.16-08-19 at OP 10-11.

at these organizations for both improving energy management and increased the potential for long-term organizational change.

Other strategies and achievements include:

- Continued participation in statewide and North American SEM initiatives to inform developments/strategies for the industrial and agricultural SEM programs.
 - SEM Statewide Best Practices meeting, a bi-monthly coordination call with other California SEM program administrators, implementers, subject matter experts, & CPUC to discuss recent SEM energy issues and recommendations.
 - The North American SEM Collaborative, a professional membership and outreach initiative with a goal of improving the effectiveness of existing SEM programs that span across other program administrators, implementers, and evaluators.
- Co-hosted an information workshop with the Solano County Supervisor's Office to strengthen MCE's relationships with smaller customers and share information about program offerings and their benefits.

Looking Forward in 2024

In 2024, MCE will specifically target sub-sectors of industrial customers to drive awareness of the program's mission and offerings. Along with the marketing team's complete re-design of the landing page for program offerings, the AIR program will lead outreach efforts to customers with applicable sector-specific energy-saving opportunities that the program can provide technical assistance and incentives.

Other program changes and improvements include:

- Deploy sector-specific and technology-specific targeted marketing and outreach strategies to reach smaller agricultural and industrial customers;
- Continue to expand measure offerings;
- Re-engage past participants in MCE's programs; and
- Continue to identify and participate in local forums that may help foster new customer engagement and recruitment.

Equity

Single Family Home Energy Savings (“HES”) Program (MCE08)

Program Description

HES is a direct install program that provides no-cost home assessments and home upgrades to eligible single-family homeowners and renters in MCE’s service area. The program is focused on improving the efficiency of the home, making the home electrification-ready and providing electrification equipment. HES targets customers in Disadvantaged Communities (“DACs”) whose household income exceeds the limit to receive services through programs like the ESA and LIFT programs, yet are still income constrained (moderate income, 250-400 percent of the federal poverty limit) and unable to participate in shared cost market rate programs.

The program goals are to:

- Provide comprehensive home upgrades to improve the efficiency of moderate-income single-family homes;
- Increase knowledge about energy use and associated economic and environmental impacts in the residential sector within MCE’s service area;
- Provide customer service for the customers’ energy journey, while also connecting them to other local and regional efficiency and electrification offerings; and
- Ensure program measures and delivery model meet the needs of the customers, produce health, safety and comfort benefits, and achieve forecasted savings targets.

Strategies and Achievements in 2023

In 2023, HES upgraded 351 moderate income homes with the most common upgrades being duct-sealing and attic insulation. The program installed electrification measures in 32 homes.

MCE changed its outreach and implementation strategy to a targeted approach for 2023. Rather than broad marketing efforts and first come first serve service throughout MCE’s four counties, the program was only offered to one region at a time. This localized approach, which centers on HES’s door-to-door canvassing efforts, generated enough program leads to fill the 2023 program pipeline and created numerous efficiencies in the field. T Canvassing allows for increased client referrals and provides real-time customer service for potential program participants. As a result, HES was able to be more efficient and cost effective in the field, provide more timely services and improve overall customer satisfaction for the program.

In 2023, MCE leveraged the approved Deeply Buried Ducts measure package.²¹ This statewide measure package produced measure savings that are 3 times greater than traditional insulation and duct sealing savings and assisted MCE in surpassing its annual savings goals.

Lastly, MCE continued to expand the measure offerings for this program by supplementing the HES program with non-CPUC funding. In 2023 the HES program continued to use Technology and Equipment

²¹ MCE, in partnership with Franklin Energy and PG&E, developed the Deeply Buried Ducts measure package in order to facilitate greater program savings and quality installations when combining insulation and duct sealing measures. The measure package was approved in early 2023.

for Clean Heating ("TECH")²² Quick Start Grant funding that covered home upgrade work and necessary electrification repairs which resulted in fewer customers needing to defer electrification projects due to a lack of funds for basic home upgrades and repairs. HES also layered MCE funding, which resulted in an additional four heat pump mini split systems to be installed. MCE received sub-granted funds under the Transformative Climate Communities ("TCC") program,²³ City of Richmond: Richmond Rising grant to support and expand the HES program's delivery of electrification measures that improve health and safety in the City of Richmond. MCE and HES implementers specifically used the TCC funding to cover repairs, additional electrification and solar installations for Richmond HES customers.

Looking Forward in 2024

For the program year 2024, MCE plans to maintain HES as a comprehensive home upgrade offering. The direct install program will continue to serve moderate-income single-family customers, with an emphasis on electrification-readiness and electrification as appropriate. This will be achieved by continuing to provide energy efficiency measures for all participants, including the Deeply Buried Ducts measure combination, and increasing the number of electrification measures available through the program.

Other program changes and improvements for 2024 include:

- Provide HES services to a minimum of 325 customers
- MCE will coordinate with program implementers on TECH's Heat Pump Water Heater ("HPHW") program, streamlining the enrollment and application process for up to 60 HES customers and layering the incentives. This will make HES funds stretch further and increase electrification installations.
- Expanding the income eligibility for HES participation to include low-income customers, to provide more equitable services throughout MCE's service area, as well as to enable program implementers to cost-effectively serve entire neighborhoods that may have both moderate and low-income customers that can benefit from HES participation.
- Continuing to layer non-CPUC funds, MCE operational funding and the Richmond Rising TCC grant, in coordination with HES services to provide electrification readiness measures needed to install HES electrification measures. The layered funds will enable more comprehensive projects and facilitate electrification measures for ~70 customers.
- Exploring opportunities to layer complementary decarbonization-focused program funds to unlock greater benefits to participants.²⁴

²² TECH Clean California is a statewide initiative to accelerate the adoption of clean space and water heating technology across California homes in order to help California meet its goal of being carbon-neutral by 2045. Available at: <https://techcleanca.com/quick-start-grants/>

²³ Strategic Growth Council, Strategic Growth Council Awards \$96 Million for Place-Based Climate Projects in 10 Frontline Communities in California, October 2022, available at: <https://sgc.ca.gov/news/2022/10-27.html>.

²⁴ For example, the Equitable Building Decarbonization program and Home Energy Rebate programs of the Inflation Reduction Act. Available at: <https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program>; <https://www.energy.gov/scep/home-energy-rebate-programs>.

Commercial Equity Program (MCE17)

Program Description

MCE developed the Commercial Equity Program (“CEP”) in 2023 to address disparities in traditional program participation by small businesses located in underserved communities. Beginning in 2024, the Program will serve equity commercial customers²⁵ throughout MCE’s service area. To do this effectively, the Program will maintain an outreach partner network consisting of locally based Community Based Organizations (“CBOs”) and Green Business Programs (“GBPs”) selected for their ability to serve small businesses where they are and improve access to Program resources.

To qualify for the Program, eligible commercial customers must be located in ESJ communities, consist of five or fewer business locations, and have a peak demand less than 50kW. All Program participants will receive Market Support services that include education about their facility’s energy usage, information on energy saving tips, referral services to complimentary MCE programs, and a project summary report detailing optional low- and no-cost energy upgrades available to them. For participants that choose to move forward with energy upgrades, the Program will manage the installation process along with a list of vetted installers.

As part of MCE’s suite of equity programs, the Commercial Equity Program is focused on offering measures that directly impact MCE’s equity commercial customers in ways that matter most to them. Specifically, the Program’s objectives and goals focus on delivering and measuring Non-Energy Benefits (“NEBs”) like utility bill and maintenance cost reductions, healthier indoor air quality, improved comfort, and enhanced workplace safety.

Program goals are to:

- Provide education and comprehensive building upgrades for equity commercial customers;
- Deliver Non-Energy Benefits including bill savings along with health, comfort, and safety improvements;
- Improve workforce equity through recruitment efforts in target communities and trainings; and
- Fill gaps in services that are not currently provided by other MCE programs.

Strategies and Achievements in 2023

In 2023, MCE finalized contract negotiations with the Commercial Equity Program implementer after going through a competitive Request for Proposals (“RFP”) selection process.

Additionally, the Program conducted stakeholder engagement activities in Q1 of 2023, consisting of workshops and surveys, to solicit program design input CBOs and small businesses. Engagement efforts led to 96 survey responses from CBOs and business owners and feedback gathered from 3 workshop webinars. The results of the surveys and workshops were useful for providing direction on program design to most effectively serve equity commercial customers.

Key take aways from survey responses and workshops:

²⁵ MCE defines “Equity customers” as residential customers and businesses within identified “Environmental and Social Justice Communities” (“ESJ Communities”) by the California Public Utilities Commission’s Environmental and Social Justice Action Plan, with the additional modifier of households at or below 400% of the Federal Poverty Level (“FPL”) or 80% of Area Median Income.

- **Increase MCE Program Awareness:** 77% of respondents said that they did not know MCE provided incentives to help their businesses.
- **Prioritize Energy Bill Savings:** 95% of respondents selected lowering their energy bills as the most important factor regarding business improvements.

Considering these key takeaways, MCE has applied a more community-centric engagement strategy into the Program's design, as detailed earlier in the formation of an outreach partner network. Moreover, we've intensified the Program's focus on offering measures that yield substantial reductions in participants' energy bills.

Looking Forward in 2024

The Commercial Equity Program officially launches in 2024 and will begin serving equity commercial customers throughout MCE territory. In preparation for launch, the Program will develop important processes, documents, and tools necessary to support continued implementation efforts. Additionally, the Program will build key stakeholder partnership networks essential for successful outreach efforts and project installation support.

The Program goals for 2024 are:

- Build Outreach Partner Network consisting of local CBOs and GBPs to begin community engagement in ESJ Communities;
- Develop Program Installer Network made up of qualified and vetted contractors;
- Regional door-to-door walking campaigns coordinated with local government staff, local CBOs/GBPs, implementer, and installer network;
- Enroll 300 equity commercial customers to receive education services; and
- Enroll 200 participants to install EE measures and education.

Market Support

Green Workforce Pathways Program (MCE16)

Program Description

MCE's Green Workforce Pathways ("GWP") serves residential service contractors and job seekers in MCE's service area to advance workforce, energy efficiency and decarbonization goals. GWP provides residential service contractors with the essential education and support to expand their businesses to include electric technologies like HPWHs, scale their workforce, and create sustainable, quality green jobs.

For contractors, MCE's GWP program offers free training opportunities on cutting-edge energy efficiency and carbon-reducing electrification technologies, as well as direct connections to vetted, well-matched job seekers. For job seekers, MCE's GWP program offers trainings, personalized service support and paid work experience with local contractors. The program builds the skills of the existing contractor workforce and creates pathways for job seekers into sustainable and long-term career paths.

MCE has two implementation partners supporting GWP: AEA and Strategic Energy Innovations ("SEI"). AEA provides contractor education and technical support in electrification and home performance, as well as support in growing the contractor workforce. SEI provides individualized support for job seekers including interview and resume skills, as well as sourcing and matching job seekers with local residential energy efficiency and electrification contractors.

The program is designed to remove barriers to education and training for the existing energy efficiency contractor workforce, and to create on-ramping opportunities for job seekers into sustainable and long-term energy efficiency and electrification industry career paths.

Strategies and Achievements in 2023

In 2023, SEI offered supportive services to 37 job seekers, and funded 16 participants starting new roles with contractors. AEA brought education directly to contractors' job sites, providing 4 new contractors with individualized in-the-field meetings to support them in developing their electrification work and subsequently enrolling 5 new contractors into the program. The program deepened financial support for job seekers by awarding stipends for passing program milestones such as successfully completing the first week's in-field training activities. GWP also began offering funding for new hires to purchase equipment necessary for their new green energy career, such as work boots and tool kits.

Looking Forward in 2024

For 2024, GWP will:

- Collaborate with 5 new workforce development agencies throughout the MCE service area to grow the participant pipeline and coordinate referrals among other programs;
- Establish 2 comprehensive resource lists, one for job seekers and one for contractors, to take advantage of all available support to grow careers and upskill staff; and
- Partner directly with 3 training institutions or manufacturers to offer additional stipends for contractors and staff to attend comprehensive energy efficiency/electrification trainings.

Community Engagement Efforts

Supporting equitable communities is a key pillar to advancing MCE’s mission to transition to a regenerative clean energy future that is equitable and just by implementing policies and programs aligned with our Environmental Justice values. In 2023, MCE engaged with the communities it serves in a variety of ways, including the Community Power Coalition, equity sponsorships, supplier diversity efforts, workforce development programs, and partnerships with local CBOs, non-profits, and municipal governments.²⁶

Community Power Coalition

MCE’s Community Power Coalition (“ComPow”) is a coalition of social, racial, and environmental justice organizations working toward common goals to address climate change and eliminate GHG, teach communities about climate justice priorities, expand access to renewable energy sources, and support bi-lateral discussion and decision making.

Municipal and Community Partnerships

In 2023, MCE partnered with 40+ CBOs and municipal governments throughout our service area to conduct targeted outreach for priority communities by amplifying messaging, introducing opportunities to recruit customers to MCE programs, and welcoming information exchange regarding community needs and priorities.

Equity Sponsorships

MCE also supported local organizations in our service area through equity sponsorships, which made up 60% of our 2023 sponsorship budget, a 10% increase from FY 2022. Through these sponsorships, we increased awareness of programs and services available through MCE. Equity Sponsorships go towards organizations and events that fit the criteria of either:

- Environmental Justice;
- Disadvantage Community (as defined by CPUC);
- Black, Indigenous, and People of Color (“BIPOC”) Serving Organization;
- Serving Low-Income Communities;
- Youth Education and Title One Schools;
- Older Adult Serving; and
- Workforce Education and Development.

Strategies and Achievements in 2023

In 2023, MCE held three (3) ComPow meetings with an average attendance of 35 partners. ComPow members discussed topics including air pollution and air quality in DAC communities, and energy efficiency needs for small and diverse businesses.

Notably, MCE held an in-person community advocate’s workshop with Community Power Coalition members. Workshop topics included “Community Messaging on Reliability and Energy Resilience” and “How to Engage your community to Participate in MCE’s Programs.” In addition, the workshop included a community listening session component, members weighed in on various topics, including community education around MCE’s programs and partnering with organizations on backup power, solar, and

²⁶ See e.g. MCE, Energy Equity, available at: <https://www.mcecleanenergy.org/energy-equity/>

energy efficiency projects. Key findings from these sessions will inform MCE’s internal programs and policy. Additionally, this outreach and community education helped deepen participation in its programs and meet program and policy goals.

MCE continued its intentional engagement with multifamily customers. MCE joined a national housing association, attended housing conferences along with program implementer teams, and partnered with local government to host informational sessions for multifamily property owners across their service area. These key activities helped strengthen MCE’s multifamily program options.

MCE Policy Team staff conducted stakeholder outreach meetings to understand the needs, interests, and recommendations of various community stakeholders. These stakeholder outreach meetings outlined potential opportunities for collaboration and inform MCE’s policy positions related to its energy efficiency programs.

MCE formed a Partnership Development team to deepen relationships with community partners in priority communities through pilot projects. For their first project, MCE partnered with local CBOs and municipalities to fund a pre-apprenticeship program connecting underserved youth to green careers. Participants explored green construction trades such as architecture, plumbing, building, and solar technology. Participants reported an interest in green construction and renewable energy upon completion of the program, and will participate in job placement opportunities with local contractors.

[Looking Forward in 2024](#)

In 2023, MCE developed a Spanish Tiger Team to design strategies for increasing accessibility and participation in MCE’s services and programs among Spanish speakers. The team developed language access guidelines and marketing, outreach, and engagement strategies. In 2024, MCE will implement and review the success of these strategies.

MCE will meet with Community Power Coalition members six (6) times this year and include two (2) community listening sessions. In the first community listening session, CBOs will provide feedback on MCE’s Commercial Equity Program.

MCE will continue to work on pilot projects that advance customer and community engagement goals and equity, diversity, and inclusion (“EDI”) goals.

Annual Report Data

Budget and Expenditures

Program-level

Program ID	Program Name	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
MCE01	MFES	Administrative	\$18,750	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$300,597	2.0%	\$298,423	3.4%
		Direct Implementation Incentive	\$485,315	3.2%	\$246,274	2.8%
		Marketing, Education and Outreach	\$5,000	0.0%	\$273	0.0%
		Program Total	\$809,663	5.4%	\$561,642	6.5%
MCE01c	MF SEM	Administrative	\$18,750	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$176,208	1.2%	\$176,208	2.0%
		Direct Implementation Incentive	\$49,024	0.3%	\$8,012	0.1%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$244,199	1.6%	\$201,109	2.3%
MCE02a	Com Deemed	Administrative	\$17,257	0.1%	\$17,257	0.2%
		Direct Implementation (Non-Incentive)	\$325,287	2.2%	\$325,287	3.8%
		Direct Implementation Incentive	\$141,355	0.9%	\$127,824	1.5%
		Marketing, Education and Outreach	\$728	0.0%	\$728	0.0%
		Program Total	\$484,626	3.2%	\$471,095	5.4%
MCE02b	Com Custom	Administrative	\$17,257	0.1%	\$17,257	0.2%
		Direct Implementation (Non-Incentive)	\$615,059	4.1%	\$208,363	2.4%
		Direct Implementation Incentive	\$315,868	2.1%	\$121,245	1.4%
		Marketing, Education and Outreach	\$728	0.0%	\$728	0.0%
		Program Total	\$948,911	6.3%	\$347,593	4.0%

MCE02c	Com SEM	Administrative	\$14,414	0.1%	\$14,414	0.2%
		Direct Implementation (Non-Incentive)	\$305,103	2.0%	\$305,103	3.5%
		Direct Implementation Incentive	\$87,833	0.6%	\$26,695	0.3%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$407,566	2.7%	\$346,428	4.0%
MCE08	SF HES	Administrative	\$61,897	0.4%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$732,590	4.9%	\$526,403	6.1%
		Direct Implementation Incentive	\$1,515,359	10.1%	\$1,515,359	17.5%
		Marketing, Education and Outreach	\$121,940	0.8%	\$121,940	1.4%
		Program Total	\$2,431,786	16.2%	\$2,180,374	25.2%
MCE02d	Com Efficiency Market	Administrative	\$52,545	0.4%	\$27,218	0.3%
		Direct Implementation (Non-Incentive)	\$5,958,132	39.8%	\$2,626,245	30.4%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$7,732	0.1%	\$7,732	0.1%
		Program Total	\$6,018,409	40.2%	\$2,661,194	30.8%
MCE17	Com Equity	Administrative	\$18,678	0.1%	\$18,678	0.2%
		Direct Implementation (Non-Incentive)	\$650,132	4.3%	\$122,535	1.4%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$20,000	0.1%	\$910	0.0%
		Program Total	\$688,811	4.6%	\$142,124	1.6%
MCE07	SF HER	Administrative	\$0	0.0%	\$0	0.0%
		Direct Implementation (Non-Incentive)	\$100,500	0.7%	\$0	0.0%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$100,500	0.7%	\$0	0.0%

MCE10a	Ind Deemed	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$208,318	1.4%	\$81,371	0.9%
		Direct Implementation Incentive	\$16,502	0.1%	\$0	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$241,708	1.6%	\$98,259	1.1%
MCE10b	Ind Custom	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$153,809	1.0%	\$81,371	0.9%
		Direct Implementation Incentive	\$42,801	0.3%	\$0	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$213,498	1.4%	\$98,259	1.1%
MCE10c	Ind SEM	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$540,454	3.6%	\$216,874	2.5%
		Direct Implementation Incentive	\$47,901	0.3%	\$32,781	0.4%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$605,243	4.0%	\$266,544	3.1%
MCE10d	Ind NMEC	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$81,371	0.5%	\$81,371	0.9%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$98,259	0.7%	\$98,259	1.1%
MCE11a	Ag Deemed	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$88,678	0.6%	\$88,678	1.0%
		Direct Implementation Incentive	\$10,707	0.1%	\$3,675	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$116,273	0.8%	\$109,242	1.3%
MCE11b	Ag Custom	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$131,977	0.9%	\$83,918	1.0%
		Direct Implementation Incentive	\$54,842	0.4%	\$0	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$203,708	1.4%	\$100,806	1.2%

MCE11c	Ag SEM	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$291,191	1.9%	\$42,116	0.5%
		Direct Implementation Incentive	\$11,968	0.1%	\$0	0.0%
		Marketing, Education and Outreach	\$216	0.0%	\$216	0.0%
		Program Total	\$320,047	2.1%	\$59,004	0.7%
MCE11d	Ag NMEC	Administrative	\$16,672	0.1%	\$16,672	0.2%
		Direct Implementation (Non-Incentive)	\$81,371	0.5%	\$81,371	0.9%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$17,691	0.1%	\$17,691	0.2%
		Program Total	\$115,734	0.8%	\$115,734	1.3%
MCE16	Green Workforce Pathways	Administrative	\$36,893	0.2%	\$17,257	0.2%
		Direct Implementation (Non-Incentive)	\$658,187	4.4%	\$591,986	6.8%
		Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$4,224	0.0%	\$4,224	0.0%
		Program Total	\$699,304	4.7%	\$613,466	7.1%
MCE98	EM&V	Administrative	\$0	0.0%	\$0	0.0%
		EM&V	\$233,653	1.6%	\$181,106	2.1%
		Program Total	\$233,653	1.6%	\$181,106	2.1%
Portfolio Total			\$14,981,899	100.0%	\$8,652,238	100.0%

Sector-level²⁷

Sector	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
Agricultural	Administrative	\$66,688	0.5%	\$66,688	0.8%
	Direct Implementation (Non-Incentive)	\$593,218	4.0%	\$296,083	3.4%
	Direct Implementation Incentive	\$77,517	0.5%	\$3,675	0.0%
	Marketing, Education and Outreach	\$18,340	0.1%	\$18,340	0.2%
	Sector Total	\$755,763	5.1%	\$384,787	4.4%
Commercial	Administrative	\$120,150	0.8%	\$94,823	1.1%
	Direct Implementation (Non-Incentive)	\$7,853,714	53.3%	\$3,587,533	41.5%
	Direct Implementation Incentive	\$545,055	3.7%	\$275,764	3.2%
	Marketing, Education and Outreach	\$29,403	0.2%	\$10,314	0.1%
	Sector Total	\$8,548,322	58.0%	\$3,968,433	45.9%
Cross-Cutting	Administrative	\$36,893	0.3%	\$17,257	0.2%
	Direct Implementation (Non-Incentive)	\$658,187	4.5%	\$773,092	8.9%
	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
	Marketing, Education and Outreach	\$4,224	0.0%	\$4,224	0.0%
	Sector Total	\$699,304	4.7%	\$794,572	9.2%
Industrial	Administrative	\$66,688	0.5%	\$66,688	0.8%
	Direct Implementation (Non-Incentive)	\$983,952	6.7%	\$460,987	5.3%
	Direct Implementation Incentive	\$107,204	0.7%	\$32,781	0.4%
	Marketing, Education and Outreach	\$865	0.0%	\$865	0.0%
	Sector Total	\$1,158,709	7.9%	\$561,322	6.5%

²⁷Table excludes EM&V, which is not a sector.

Residential	Administrative	\$99,398	0.7%	\$50,016	0.6%
	Direct Implementation (Non-Incentive)	\$1,309,895	8.9%	\$1,001,034	11.6%
	Direct Implementation Incentive	\$2,049,697	13.9%	\$1,769,645	20.5%
	Marketing, Education and Outreach	\$127,157	0.9%	\$122,429	1.4%
	Sector Total	\$3,586,147	24.3%	\$2,943,124	34.0%
Portfolio Total		\$14,748,246	100.0%	\$8,652,238	100.0%

Segment-level²⁸

Segment	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
Equity	Administrative	\$80,576	0.5%	\$35,350	0.4%
	Direct Implementation (Non-Incentive)	\$1,382,722	9.4%	\$648,938	7.7%
	Direct Implementation Incentive	\$1,515,359	10.3%	\$1,515,359	17.9%
	Marketing, Education and Outreach	\$141,940	1.0%	\$122,850	1.5%
	Segment Total	\$3,120,596	21.2%	\$2,322,498	27.4%
Market Support	Administrative	\$36,893	0.3%	\$17,257	0.2%
	Direct Implementation (Non-Incentive)	\$658,187	4.5%	\$591,986	7.0%
	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
	Marketing, Education and Outreach	\$4,224	0.0%	\$4,224	0.0%
	Segment Total	\$699,304	4.7%	\$613,466	7.2%

²⁸ Table excludes EM&V, which is not a segment.

Resource	Administrative	\$272,349	1.8%	\$242,865	2.9%
	Direct Implementation (Non-Incentive)	\$9,358,056	63.5%	\$4,696,699	55.4%
	Direct Implementation Incentive	\$1,264,115	8.6%	\$566,507	6.7%
	Marketing, Education and Outreach	\$33,826	0.2%	\$29,098	0.3%
	Segment Total	\$10,928,345	74.1%	\$5,535,169	65.3%
Portfolio Total		\$14,748,246	100.0%	\$8,471,132	100.0%

Portfolio-level

Portfolio	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
Portfolio	Administrative	\$389,817	2.6%	\$295,471	3.4%
	Direct Implementation (Non-Incentive)	\$11,398,965	76.1%	\$5,937,623	68.6%
	Direct Implementation Incentive	\$2,779,473	18.6%	\$2,081,865	24.1%
	Marketing, Education and Outreach	\$179,990	1.2%	\$156,172	1.8%
	EM&V	\$233,653	1.6%	\$181,106	2.1%
Portfolio Total		\$14,981,899	100.0%	\$8,652,238	100.0%

Energy Savings

Program-level

PrgID	Program Name	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
MCE01	MFES	Installed Program Savings	0.0043	0.0650	0.0027
		Adopted Goals	0.0081	0.3375	0.0027
		Goal Attainment Percentage	53.6%	19.3%	145.1%
		Fuel Sub Adjustment	0.0000	0.0000	0.0008
		Adjusted Goal Attainment	0.0000	0.0000	0.0019
MCE01c	MF SEM	Installed Program Savings	0.0340	0.2696	0.0066
		Adopted Goals	0.0000	1.3816	0.0303
		Goal Attainment Percentage	0.0%	19.5%	21.6%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000

MCE02a	Com Deemed	Installed Program Savings	0.0010	0.0071	0.1484
		Adopted Goals	0.0376	0.1941	0.0021
		Goal Attainment Percentage	2.6%	3.7%	7164.4%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE02b	Com Custom	Installed Program Savings	0.0466	0.5968	-0.0030
		Adopted Goals	0.0904	1.7638	0.0181
		Goal Attainment Percentage	51.5%	33.8%	-16.7%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE02c	Com SEM	Installed Program Savings	0.0903	0.5496	0.0128
		Adopted Goals	0.0000	0.8004	0.0320
		Goal Attainment Percentage	0.0%	68.7%	39.8%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE08	SF HES	Installed Program Savings	0.0702	0.1680	0.0110
		Adopted Goals	0.0506	0.1236	0.0210
		Goal Attainment Percentage	138.8%	135.9%	67.5%
		Fuel Sub Adjustment	0.0000	0.0000	0.0047
		Adjusted Goal Attainment	0.0000	0.0000	0.0164
MCE02d	Com Efficiency Market	Installed Program Savings	0.4189	3.4629	0.0047
		Adopted Goals	0.7730	4.6150	0.0128
		Goal Attainment Percentage	54.2%	75.0%	36.8%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE17	Com Equity	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE07	SF HER	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	2.9691	0.0000
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE10a	Ind Deemed	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0137	0.0659	0.0455
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000

MCE10b	Ind Custom	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0026	0.1038	0.0250
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE10c	Ind SEM	Installed Program Savings	0.0000	0.0000	0.1239
		Adopted Goals	0.0000	1.2870	0.0790
		Goal Attainment Percentage	0.0%	0.0%	156.8%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE10d	Ind NMEC	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE11a	Ag Deemed	Installed Program Savings	0.0000	0.0000	0.0046
		Adopted Goals	0.0006	0.0787	0.0017
		Goal Attainment Percentage	0.0%	0.0%	275.6%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE11b	Ag Custom	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0789	0.3947	0.0085
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE11c	Ag SEM	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.5084	0.0210
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE11d	Ag NMEC	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
MCE16	Green Workforce Pathways	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
		Goal Attainment Percentage	0.0%	0.0%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000

Sector-Level

Sector	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
Agricultural	Installed Program Savings	0.0000	0.0000	0.0046
	Adopted Goals	0.0796	0.9818	0.0312
	Goal Attainment Percentage	0.0%	0.0%	14.7%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
Commercial	Installed Program Savings	0.5568	4.6164	0.1628
	Adopted Goals	0.9010	7.3732	0.0650
	Goal Attainment Percentage	61.8%	62.6%	250.7%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
Cross-Cutting	Installed Program Savings	0.0000	0.0000	0.0000
	Adopted Goals	0.0000	0.0000	0.0000
	Goal Attainment Percentage	0.0%	0.0%	0.0%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
Industrial	Installed Program Savings	0.0000	0.0000	0.1239
	Adopted Goals	0.0164	1.4567	0.1495
	Goal Attainment Percentage	0.0%	0.0%	82.9%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
Residential	Installed Program Savings	0.1085	0.5026	0.0203
	Adopted Goals	0.0587	4.8117	0.0540
	Goal Attainment Percentage	184.9%	10.4%	41.9%
	Fuel Sub Adjustment	0.0000	0.0000	0.0055
	Adjusted Goal Attainment	0.0000	0.0000	0.0485

Segment-level

Segment	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
Equity	Installed Program Savings	0.0702	0.1680	0.0110
	Adopted Goals	0.0506	0.1236	0.0210
	Goal Attainment Percentage	138.8%	135.9%	67.5%
	Fuel Sub Adjustment	0.0000	0.0000	0.0047
	Adjusted Goal Attainment	0.0000	0.0000	0.0164
Market Support	Installed Program Savings	0.0000	0.0000	0.0000
	Adopted Goals	0.0000	0.0000	0.0000
	Goal Attainment Percentage	0.0%	0.0%	0.0%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
Resource	Installed Program Savings	0.5951	4.9510	0.3006
	Adopted Goals	1.0050	14.4998	0.2786
	Goal Attainment Percentage	59.2%	34.1%	108.2%
	Fuel Sub Adjustment	0.0000	0.0000	0.0008
	Adjusted Goal Attainment	0.0000	0.0000	0.2778

Portfolio-level

Portfolio	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
Portfolio	Installed Program Savings	0.6653	5.1191	0.3116
	Adopted Goals	1.0556	14.6234	0.2996
	Goal Attainment Percentage	63.0%	35.0%	105.9%
	Fuel Sub Adjustment	0.0000	0.0000	0.0055
	Adjusted Goal Attainment	0.0000	0.0000	0.2942

TSB and Cost-Effectiveness

Program-level

PrgID	Program Name	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
MCE01	MFES	\$41,874	\$45,696	\$492,269	0.09	\$559,331	0.08
MCE01c	MF SEM	\$157,031	\$157,031	\$265,011	0.59	\$200,665	0.78
MCE02a	Com Deemed	\$804,036	\$804,036	\$992,737	0.81	\$467,251	1.72
MCE02b	Com Custom	\$609,687	\$609,687	\$408,213	1.49	\$344,822	1.77
MCE02c	Com SEM	\$316,782	\$316,782	\$869,332	0.36	\$344,951	0.92
MCE08	SF HES	\$263,941	\$311,434	\$2,254,646	0.14	\$2,181,211	0.14
MCE02d	Com Efficiency Market	\$3,712,240	\$3,712,240	\$2,661,194	1.39	\$2,661,194	1.39
MCE17	Com Equity	\$0	\$0	\$142,124	0.00	\$142,124	0.00
MCE07	SF HER	\$0	\$0	\$0	0.00	\$0	0.00
MCE10a	Ind Deemed	\$0	\$0	\$98,259	0.00	\$98,259	0.00
MCE10b	Ind Custom	\$0	\$0	\$98,259	0.00	\$98,259	0.00
MCE10c	Ind SEM	\$662,748	\$662,748	\$310,909	2.13	\$264,731	2.50
MCE10d	Ind NMEC	\$0	\$0	\$98,259	0.00	\$98,259	0.00
MCE11a	Ag Deemed	\$58,014	\$58,014	\$174,422	0.33	\$109,039	0.53
MCE11b	Ag Custom	\$0	\$0	\$100,806	0.00	\$100,806	0.00
MCE11c	Ag SEM	\$0	\$0	\$59,004	0.00	\$59,004	0.00
MCE11d	Ag NMEC	\$0	\$0	\$115,734	0.00	\$115,734	0.00
MCE16	Green Workforce Pathways	\$0	\$0	\$613,466	0.00	\$613,466	0.00
MCE98	MCE EM&V	\$0	\$0	\$181,106	0.00	\$181,106	0.00

Sector-level

Sector	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Agricultural	\$58,014	\$58,014	\$449,967	0.13	\$384,584	0.15
Commercial	\$5,442,744	\$5,442,744	\$5,073,601	1.07	\$3,960,342	1.37
Cross-Cutting	\$0	\$0	\$794,572	0.00	\$794,572	0.00
Industrial	\$662,748	\$662,748	\$605,687	1.09	\$559,509	1.18
Residential	\$462,846	\$514,162	\$3,011,926	0.17	\$2,941,207	0.17

Segment-level

Segment	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Equity	\$263,941	\$311,434	\$2,396,770	0.13	\$2,323,335	0.13
Market Support	\$0	\$0	\$613,466	0.00	\$613,466	0.00
Resource	\$6,362,411	\$6,366,233	\$6,744,411	0.94	\$5,522,306	1.15

Portfolio-level

Portfolio	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Portfolio	\$6,626,352	\$6,677,668	\$9,935,753	0.67	\$8,640,213	0.77