



2022 MCE Energy Efficiency Annual Report

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2022 Portfolio Highlights









In 2022, MCE's energy efficiency programs:

- Completed energy efficiency projects in 35 out of 37 MCE member communities.
- Achieved \$4.58 million in total system benefits ("TSB") and issued \$2.35 million in rebates.
- Prevented 20,793 metric tons of carbon dioxide emissions over the life of energy efficiency measures installed in 2022 -Equivalent to taking 4,627 gasoline-powered cars off the road for one year.
- Saved 5.06 net GWh and 413,840 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 communitybased 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, 2022, 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/.

 $^{^{\}rm 2}$ 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.

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 as many funding opportunities as possible to provide comprehensive, whole building upgrades. The program supports vulnerable communities disproportionately impacted by California's energy system, particularly those who have been traditionally underserved by energy efficiency programs. MFES complements 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 services and supports fuel switching from gas appliances to electric heat pumps for cleaner and safer energy use. Income-qualified multifamily properties can layer incentives from LIFT on MFES rebates. 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 provides no-cost direct install energy efficiency measures to reduce overall project management and measure costs.

MFES addresses key market barriers by:

- 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 Energy Savings Assistance ("ESA") incentives and those that do not for a comprehensive and equitable wholebuilding improvements.

Strategies and Achievements in 2022

In 2022, MCE expanded the MFES measure list to include building electrification measures such as HVAC and water heating heat pumps, induction stoves, and heat pump drivers, among others. Incentive amounts were increased to better serve multifamily customers. The program implemented a streamlined incentive layering process to effectively deliver funding to affordable properties, where some units were eligible for LIFT incentives. The MFES program also layered incentives with the MCE Healthy Homes¹⁰ program (1 project).

¹⁰ The MCE Healthy Homes Program, funded by Marin Community Foundation, provides upgrades to improve the health, safety, and efficiency of Marin County homes. The program helps income-qualified residents address health hazards through energy efficiency improvements that increase comfort and decrease energy usage. Integrated pest management and mitigation of mold and moisture also help customers stay safely in their homes and reduce the risk of climate-related illnesses.

As a result, the MFES program completed 17 site visits and reserved rebates totaling \$586,635 for 8 new projects encompassing 784 units. We anticipate the completion of approximately half of these projects in 2023. 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 enhance energy efficiency and electrification measures in multifamily properties, benefiting both residents and the environment by reducing emissions.

Looking Forward in 2023

The MFES program has experienced a series of barriers that affected its overall results, like supply chain delays and equipment price increases. With the boost in its electrification projects, the program faced increasingly long project timelines due to the scale of the projects and the investment they represent for properties.

In 2023, consistent with MCE's mission¹¹ to create equitable community benefits and in alignment with the CPUC's Environmental and Social Justice Action Plan, equity will be the guiding principle for the MFES program. The program will continue building a strong project pipeline targeting disadvantaged and historically underserved communities,¹² including properties unable to qualify for low-income programs but still in need of financial and technical support.

Other changes include:

- Strengthening marketing and outreach activities with counties and municipalities in MCE's service area;
- Exploring new program delivery strategies that will allow for shorter project timelines and faster rebate processing; 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 residential 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 model(s) to determine eligible energy savings from all program activity at the property. MF SEM moves the energy management conversation beyond traditional capital equipment upgrades to focus on how improving internal processes, systems and policies can be improved to save energy. Savings are realized year over year as participants develop more knowledge in a culture of continuous improvement.

¹¹ MCE, About Us, available at: https://www.mcecleanenergy.org/about-us/.

¹² 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.

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 form 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 a list of the most promising opportunities for energy savings. Savings estimates and customer incentives for operations and maintenance ("O&M"), retro-commissioning ("RCx"), and behavioral measures will be calculated using pre- and post-project interval meter data. Savings estimates and customer incentives for common area, property, and in-unit projects will follow applicable custom program protocols.

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 model;
- 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 2022

In its inaugural year, MF SEM deployed several strategies directed towards property managers to drive energy efficiency offerings and engagement with the program. First, the program leveraged data-driven analyses of savings potential and past program participation to prioritize opportunities. This data was paired with qualitative information directly from customers, which helped to determine the best candidates for engagement. Based on these analyses, the program was able to reach qualified and interested property managers and provided targeted account management.

Second, the program conducted direct outreach to those determined to be the best candidates to drive customer participation. MCE is uniquely positioned to support targeted outreach through strong relationships with energy-savvy property managers, community organizations supporting sustainability activities, and an account management team's access to customer database and past program participation data.

Notable achievements include:

- Established California's first multifamily SEM program.
- Enrolled five (5) multifamily properties in the Program.
- 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.
- Worked closely with MCE's MFES program implementer, AEA, to optimize a customer's experience participating in both multifamily program offerings.

Looking Forward in 2023

The program's outreach team will continuously build on the strategies outlined below as the business development team continue to engage deeper in the market. 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:

- 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.

Multifamily properties enrolled in the program will complete their first year in 2023. 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.

In 2023, MCE will participate in two SEM initiatives that span across other program administrators, implementers, and evaluators. One is participation in the North American SEM Collaborative, a professional membership and outreach initiative with a goal of improving the effectiveness of existing SEM programs. The second is a sponsorship and participation in an Evaluation, Measurement and Verification ("EM&V") study, in partnership with the IOU SEM administrators, which will assess the opportunity for SEM beyond the industrial sector in California. MCE's participation in both initiatives is underway, and the hope is that these will inform ongoing developments/strategies for the multi-family (and other non-industrial) SEM programs.

Other strategies include:

- 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 works with multiple implementation partners allowing for various participation pathways, including The Energy Alliance Association ("TEAA") to deliver prescriptive measures, custom-calculated savings, and rebates; and CLEAResult Consulting to deliver SEM and large custom-calculated projects. Customers benefit from a comprehensive approach to energy efficiency, combining MCE's strong customer relationships and community presence, 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.

Strategies and Achievements in 2022

MCE's Commercial program deployed several strategies in 2022, in the interest of growing program impacts, accountability, and cost effectiveness. MCE continued and improved upon a foundational strategy in its Commercial program: ensuring that a variety of energy efficiency needs and interests can be supported through the program's services and incentives. At the core of this strategy is MCE ensuring that flexible contract mechanisms are in place, so that implementation partners are not limited in the scope of their services or programs. Instead, they are enabled to meet customers' varying needs, leveraging different participation pathways and levels of engagement.

In addition, the Commercial program expanded into new measure types. Installation of window film was performed at multiple customer locations, providing cooling load reductions; a boiler replacement was performed at a primary school as part of a comprehensive energy efficiency project; and pool covers were installed at several schools, community centers, and sports clubs to save on heating costs and reduce water evaporation.

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.

Additional strategies included a review of the program's incentive rates, as well as an expansion of its geographic reach to serve new communities added to MCE's service area.

Looking Forward in 2023

MCE will continue to provide innovative strategies to drive customer participation, expand the program benefits, and increase cost-effectiveness. Specifically, MCE will align the Commercial Efficiency Market with the new Market Access Program ("MAP") launched by PG&E. PG&E's MAP also includes the commercial sector and aligning program rules and incentive structures serves to establish a stronger overall market and individual program. Per the Commission's direction on the MAP incentive structures, both MCE and PG&E will provide "kicker" rates to peak period savings to further incentivize peak demand reduction.¹³ MCE is also exploring various financing opportunities to overcome financial barriers for both customers and aggregators.

Other program changes and improvements include:

- Incentivize short term peak savings as well as dispatchable demand response under the umbrella of MCE's Peak FLEXmarket program;
- Leverage engineering services and expertise for larger commercial projects; and
- Deploy commercial program energy efficiency funding to incentivize low global warming potential ("low GWP") refrigerants¹⁴ within the grocery sector. MCE staff identified interested customers and have begun to assess their value. In 2023, MCE intends to incentivize, analyze, and report out on the outcomes of this pilot initiative.

Commercial Efficiency Market Program (MCE02d)

Program Description

The MCE Commercial Efficiency Market program is a third-party delivered population-level NMEC program. It is designed to scale up quickly with an open market of qualified aggregators delivering energy efficiency and demand flexibility solutions to customers within MCE's service area. The program leverages a diverse mix of energy efficiency services and measures with a focus on saving and reducing energy consumption during summer 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, it reduces the administrative burden and waste in opening and closing new programs. The program emphasizes the time-dependent value of savings, by paying participating aggregators based on an adjusted TSB¹⁵ 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:

¹³ D.21-12-011, OP 1 at 59.

¹⁴ A low GWP refrigerant is a type of refrigerant that has a significantly lower global warming potential (GWP) compared to conventional high-GWP refrigerants.

¹⁵ TSB is an expression, in dollar terms, of the lifecycle energy, capacity, and GHG benefits, expressed on an annual basis

- 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 2022

MCE's Commercial Efficiency Market deployed several strategies in 2022, 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 Commercial Efficiency Market to modify its current program design to align with the rules and procedures adopted for Market Access Programs.¹⁶ In response, 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.

Second, the program updated its payment structure to allow for an upfront payment based on forecasted project value and subsequent quarterly portfolio payments, net of program management fees, based on delivered grid value. This change responded to aggregator cash flow concerns and allowed continual submittal of projects to the program instead of the previous payment structure where aggregators waited a full year to receive performance payments. It also attracted additional aggregators to participate in the program who previously had concerns about participating.

The program trued-up the 2021 forecasted savings claim for most of the completed projects in 2021 that had finished their twelve-month monitoring period. The program level true-up claim reflected actual savings at the meter. To closely match the actual TSB output of 2021 impacts, a DEER load shape and weighted EUL were selected that best represented actual TSB delivered. This true-up claim also included an actual weather normalization using weather stations closest to the project locations within the same climate zone. Combined, the steps taken to true-up the 2021 forecasted program claim provided the most accurate representation of actual savings and benefits that this portfolio delivered.

Looking Forward in 2023

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 FLEXmarket and Market Access programs offered by other CCAs and PAs throughout our service area and state to improve our program design and drive beneficial grid impacts.

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

Other program changes and improvements include:

• Support aggregators in marketing to target customers that best fit their business model;

- 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;
- Incentivize short term peak savings as well as dispatchable demand response under the umbrella of the Peak FLEXmarket program;
- Co-host quarterly webinars that support aggregator engagement and project submittals; and
- Continue to explore and expand the programs refrigerant gas replacement offering and report on lessons learned from the initial projects.

Single Family Comprehensive Program (MCE07)

Program Description

The HER program provided selected customers with Home Energy Reports ("HERs") at regular intervals to encourage energy- and money-saving behavioral changes. The program's treatment group received monthly HERs, including a Similar Homes Comparison and Monthly Usage report. Participants also had direct access to a web portal where they could learn about additional electricity savings potential.

The HER program was implemented by Bidgely Inc., that developed collateral to engage and educate participants in the program about energy consumption patterns, efficiency opportunities, and incentives to participate in energy efficiency programs and was able to deliver this information in an easy-to-understand, online format. Bidgely developed an algorithm that disaggregates energy consumption at the appliance level. This level of detail provided participants with a unique snapshot of their energy use patterns and provides recommendations that can save money and energy. Participants were also encouraged to review energy- and cost-savings opportunities online with Bidgely's web portal via a dashboard and links to educational resources.

The program goals were to:

- Establish a residential behavior program to educate participants on their energy consumption behavior and motivate them to save energy and money; and
- Validate participant savings using meter-based energy savings calculation methods and Randomized Control Trial ("RCT") to measure NMEC using a net ex post versus ex ante calculation.

Strategies and Achievements in 2022

Throughout 2022, MCE and Bidgely engaged in ongoing discussions to explore potential program improvements and ways to enhance electricity savings in both the short and long term. Bidgely conducted a thorough analysis of Recurve's savings calculation design, which had been previously approved by MCE. Their findings revealed flaws in the design, prompting them to recommend discontinuing it in favor of an alternative methodology.

However, MCE could not conclusively determine whether the lack of savings was due solely to a flawed savings calculation design or a range of external factors such as the potential rise in electricity consumption resulting from COVID-19 policies, natural disasters, climate change, and the unique characteristics of MCE's residential customers.

Despite attempting to improve program results through new outreach and communication strategies and expanding the customer base by approximately 100,000 residences, MCE was unsuccessful in

achieving demonstrated electricity savings. Correspondingly, after Commission approval, MCE terminated the program in August 2022 due to concerns about the appropriateness of the savings calculation design, other external factors, and MCE's limited access to timely time-of-use data, despite making multiple adjustments.

Program Performance Metrics and Major Achievements in 2022

The program did not meet the goals established for it in 2022; residential electricity consumption by customers in the program did not shift up or down at a level of significance. However, the program did show some engagement results of note. Namely, in between January and August of 2022 the program had:

- 17,516 unique HER program online "dashboard" views.
- 3,353 clicks from online HERs onto personalized home energy surveys.
- 2,750 unique views of tips for appliance purchases.

Looking Forward in 2023

The program did not meet electricity saving goals in 2022 and the program closed in August 2022. MCE is not pursuing a new behavioral program through the CPUC-funded portfolio for residential customers. MCE will continue self-funded efforts to provide education and outreach to residential customers through social media, web, and online-based collateral and campaigns led by MCE staff.

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

Program Description

The MCE AIR Program is a comprehensive third-party program¹⁷ designed for agricultural and industrial customers within MCE's service area. The AIR program is designed to provide individualized service 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, leaning heavily on 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;

¹⁷ 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.

- 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 2022

In 2022, the MCE AIR program designed and launched a suite of marketing and outreach strategies to foster more engagement, specifically targeting agricultural customers to drive awareness of the program's mission and offerings. First, the program revised its flyers and landing pages, which included an FAQ section to address common questions about the program. Second, the program increased its social media presence on LinkedIn, creating awareness about the program using zip codes to target MCE customers. Thirdly, the program reached wineries, farmers, food processers, and other industry professionals through banners and ads on sector-specific and region-specific publications, as well as direct mail post cards. Finally, the program initiated two additional case studies in the agricultural sector to demonstrate the experiences of existing customers.

Looking Forward in 2023

MCE will co-host its first information workshop with the Solano County Supervisor's office in Q1 2023. This workshop will be a prototype for future targeted outreach to strengthen MCE's relationships with smaller customers and inform them about program offerings and their benefits. In addition, the program will analyze the results from the marketing and outreach strategies to inform future efforts. MCE will also continue to offer virtual workshops and evaluate COVID-19 energy impacts on an individual basis for each SEM participant.

Other program changes and improvements include:

- Improve the program's efficiency in customer targeting and meter-based measurement;
- Deploy targeted marketing and outreach strategies to reach smaller agricultural and industrial customers; 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

MCE's Single Family Direct Install Program is branded to customers as the HES Program. HES is a direct install program that provides no-cost health and energy savings kits, home assessments, and home upgrades to eligible single-family homeowners and renters in MCE's service area, focused on improving the efficiency of the home and making the home building electrification-ready. This program targets customers in Disadvantaged Communities ("DACs") whose household income exceeds the limit to receive services through programs like the ESA Program and LIFT Program yet are still income constrained (moderate income) 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 via a SPOC for the customers' energy journey, while also connecting them to other available local and regional 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 2022

In 2022, HES upgraded 368 moderate income homes with the most common upgrades being ductsealing and attic insulation. The program installed electrification measures in 46 homes.

In March 2022, MCE launched a new marketing and outreach campaign that generated enough program leads to fill the program pipeline for the remainder of the year. The program also continued its neighborhood canvassing strategy to leverage client referrals and provide better customer service and increase customer participation. As a result, MCE was able to shift approximately \$33k out of the program's marketing budget and into the incentive budget, enabling more customers to receive home upgrade measures.

To expand the measure offerings for this program, MCE partnered with Franklin Energy and PG&E to develop a Residential Deeply Buried Ducts workpaper, which was submitted to the CPUC for approval in December 2022. This statewide workpaper incentivizes comprehensive envelope measures and enables program administrators to capture greater savings when combining duct sealing and repair, sealing of the attic plane, and increasing attic insulation in their program measures.

Lastly, MCE supplemented the HES program offering with Technology and Equipment for Clean Heating ("TECH")¹⁸ Quick Start Grant funding that covered home upgrade work outside of HES's offerings. This

¹⁸ 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/

allowed 20 additional homes to receive electrification measures that would have otherwise been deferred.

Looking Forward in 2023

For the program year 2023, MCE plans to maintain the Home Energy Savings Program as a comprehensive home upgrade offering. The direct install program will continue to cater to moderate-income single-family customers, with an emphasis on electrification-readiness. This will be achieved by removing the health and energy kit measures and providing more envelope and electrification retrofit measures. Once the Deeply Buried Ducts measure combination workpaper is approved by the CPUC, the program will leverage it in 2023 to achieve more significant savings.

Other program changes and improvements for 2023 include:

- Improving the SPOC model through continued program coordination with BayREN and PG&E, and developing coordinated enrollment referrals with programs serving customers above and below the moderate-income eligibility guidelines and outside of MCE's service area.
- Updating the marketing and outreach plan to incorporate lessons learned and benchmark metrics to achieve 2023 goals.
- Continuing to layer in funding such as TECH to provide complimentary services to HES participants that are not covered by energy efficiency funding, and reducing HES customer deferrals.
- Exploring laying complementary decarbonization focused program funds at the California Energy Commission and federal Department of Energy to produce greater benefits to participants.¹⁹

Commercial Equity Program (MCE17)

Program Description

The Commercial Equity Program ("CEP") is a new program which began development in 2022. The program will serve equity commercial customers²⁰ throughout our service area and deliver energy savings, bill savings and Non-Energy Benefits ("NEBs") through turnkey services.

Program goals are to:

- Serve businesses found in the Equity areas throughout our service area;
- Collect stakeholder input to inform the development of the program;
- Deliver energy savings and bill savings;
- Focus on delivering NEBs, including a methodology to quantify the value of NEBs; and
- Fill gaps in services that are not currently provided by other MCE programs.

¹⁹ 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.

²⁰ 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.

Strategies and Achievements in 2022

MCE issued a Request for Proposals ("RFP") to identify a program implementer for the program in August 2022. From this solicitation five proposals were received; three interviews were performed, and a contractor was engaged in contract negotiations.

Looking Forward in 2023

The program development phase will begin in Q1 2023 following contract execution. The program development stage includes stakeholder engagement consisting of workshops and surveys to encourage Community Business Organizations ("CBOs") and small businesses to provide input for program design. The results will inform the measure development and marketing strategies to create a program tailored to the needs of the priority population.

Following the initial phase of customer outreach, MCE will develop a comprehensive Program Implementation Plan which will be presented at a program stakeholder workshop to solicit feedback. The program will be launched in Q2.

The Program goals for 2023 are:

- (4) stakeholder workshops to collect data from CBOs and small businesses;
- Develop HVAC contractor network to deliver HVAC maintenance services;
- File program implementation plan and launch program in Q2; and
- Enroll 225 customers in the program in 2023.

Market Support

Green Workforce Pathways Program (MCE16)

Program Description

MCE's Green Workforce Pathways program supports the development of the residential energy efficiency workforce by enhancing the skills of the existing contractor workforce and creating pathways for job seekers into sustainable and long-term career paths.

The Green Workforce Pathways program has two implementers: AEA and Strategic Energy Innovations ("SEI"). AEA provides contractor education and technical support in electrification and home performance, as well as support in growing their 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 contractors.

The Program is designed to leverage industry and stakeholder expertise and experience to provide longterm, relevant education and training opportunities for the existing energy efficiency contractor workforce, and on-ramping opportunities for job seekers into sustainable and long-term career paths.

Strategies and Achievements in 2022

In 2022, the program implemented several improvements based on past years' learnings and feedback gathered at program roundtables with local workforce stakeholders. SEI created a comprehensive Career Readiness Workshop, built in response to contractor feedback on the skills they needed in new hires. This workshop fills a gap by focusing on customer service skills, crucial in the work of residential service contractors. SEI will be offering this workshop to program participants and trainees enrolled in partner agencies starting in 2023. AEA brought education directly to contractors' job sites, providing 3 new contractors with individualized in-the-field meetings to support them in developing their electrification work. AEA also launched another form of contractor support, providing funding to cover heat pump manufacturer trainings for contractors and their staff. Lastly, the program expanded support providing services to more job seekers, including assistance obtaining a driver's license and assistance with resume development.

Looking Forward in 2023

For 2023, program work will include:

- Re-establishing partnerships with local educational partners to continue supporting HVAC and electricity courses;
- Offering Career Readiness Workshop to partner workforce development agencies and their trainees, as well as program participants; and
- Implementing a new marketing campaign, supported by a marketing subcontractor.

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 2022, MCE engaged with the community in a variety of ways, including the Community Power Coalition, equity sponsorships, supplier diversity efforts, workforce development, and partnerships with local CBOs, non-profits, and municipal governments.²¹

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 2022, 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 50% of our 2022 sponsorship budget. 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
- Workforce Education and Development

Strategies and Achievements in 2022

In 2022, MCE held five (5) ComPow meetings with an average attendance of 35 partners. Notably, MCE's Community Engagement team's outreach strategy aimed to increase membership base reflective of the MCE service area, prioritize energy adjacent partners, and re-engage inactive members. This outreach resulted in 20 new members joining. Additionally, this tailored outreach helped deepen participation in its programs and meet program and policy goals.

MCE's Community Engagement team participated in a Community Listening Session ("CLS") taskforce with sixteen local CBOs to conduct focus groups in key DACs in our service area. The CLS taskforce recruited 51 residents to learn about a range of topics impacting DAC residents, including quality of life,

²¹ See e.g. MCE, Energy Equity, available at: https://www.mcecleanenergy.org/energy-equity/

safety, and environmental concerns. Key findings from these sessions will be used to inform internal programs and policy.

MCE's Community Engagement team recognized the importance of increasing engagement with multifamily customers. To address this, they delivered presentations to municipal governments, housing associations, and property management teams to highlight MCE's multifamily program options. Furthermore, MCE's Community Engagement team collaborated with a working group to orchestrate a Green Homes Tour that showcased energy-efficient and electrification upgrades at affordable housing sites. These sites received technical support and rebates as beneficiaries of MCE's multifamily programs.

Looking Forward in 2023

In 2023, MCE is working alongside CBO partners to develop a Community Engagement Framework that will follow California Environmental Justice Alliance ("Cal CEJA")²² best practices for CCA community engagement, which include ensuring meaningful and active engagement, prioritizing and protecting the most impacted populations, maximizing transparency and accountability, and driving decision-making through robust community input.

²² California Environmental Justice Alliance, "Building a Just Energy Future: A Framework for Community Choice to Power Equity and Democracy in California", 2020, https://caleja.org/wp-content/uploads/2020/11/CEJA-CCA-REPORT-EX-SUMMARY-FINAL.pdf.

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
		Administrative	\$29,442	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$848,823	5.9%	\$88,395	1.3%
MCE01	MFES	Direct Implementation Incentive	\$134,211	0.9%	\$0	0.0%
		Marketing, Education and Outreach	\$5,000	0.0%	\$746	0.0%
		Program Total	\$1,017,476	7.1%	\$103,807	1.5%
		Administrative	\$125,442	0.9%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$539,285	3.8%	\$194,895	2.9%
MCE01c	MF SEM	Direct Implementation Incentive	\$45,167	0.3%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$6,980	0.1%
		Program Total	\$709,894	5.0%	\$216,540	3.2%
		Administrative	\$28,144	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$109,012	0.8%	\$626,366	9.3%
MCE02a	Com Deemed	Direct Implementation Incentive	\$101,935	0.7%	\$273,187	4.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$239,091	1.7%	\$914,219	13.5%
		Administrative	\$28,144	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$607,245	4.2%	\$396,892	5.9%
MCE02b	Com Custom	Direct Implementation Incentive	\$288,498	2.0%	\$399,532	5.9%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$923,887	6.4%	\$811,089	12.0%
		Administrative	\$17,299	0.1%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$369,667	2.6%	\$188,777	2.8%
MCE02c	Com SEM	Direct Implementation Incentive	\$87,833	0.6%	\$24,906	0.4%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$474,799	3.3%	\$228,348	3.4%

		Administrative	\$130,237	0.9%	\$14,665	0.2%
		Direct	ψ100,207	0.570	φ14,000	0.270
		Implementation (Non-Incentive)	\$610,763	4.3%	\$494,188	7.3%
MCE08	SF HES	Direct Implementation Incentive	\$1,475,392	10.3%	\$1,633,696	24.1%
		Marketing, Education and Outreach	\$150,000	1.0%	\$116,685	1.7%
		Prorgam Total	\$2,366,392	16.5%	\$2,259,234	33.4%
		Administrative	\$31,759	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$5,050,348	35.2%	\$704,270	10.4%
MCE02d	Com Efficiency Market	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$5,082,107	35.4%	\$718,935	10.6%
		Administrative	\$31,759	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$50,348	0.4%	\$67,604	1.0%
MCE17	Com Equity	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$82,107	0.6%	\$82,269	1.2%
		Administrative	\$76,210	0.5%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$367,028	2.6%	\$179,604	2.7%
MCE07	SF HER	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$443,238	3.1%	\$194,269	2.9%
		Administrative	\$24,451	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$205,968	1.4%	\$71,781	1.1%
MCE10a	Ind Deemed	Direct Implementation Incentive	\$19,502	0.1%	\$2,717	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$249,921	1.7%	\$89,163	1.3%
		Administrative	\$24,451	0.2%	\$14,665	0.2%
MCE10b		Direct Implementation (Non-Incentive)	\$214,794	1.5%	\$67,604	1.0%
	Ind Custom	Direct Implementation Incentive	\$89,796	0.6%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
1		Program Total	\$329,041	2.3%	\$82,269	1.2%

		Administrative	\$24,451	0.2%	\$14,665	0.2%
		Direct	φ <u></u> 2 1,10 1	0.270	¢ 1 1,000	01270
		Implementation (Non-Incentive)	\$550,180	3.8%	\$148,205	2.2%
MCE10c	Ind SEM	Direct Implementation Incentive	\$81,965	0.6%	\$12,745	0.2%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$656,596	4.6%	\$175,616	2.6%
		Administrative	\$24,451	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$29,449	0.2%	\$67,604	1.0%
MCE10d	Ind NMEC	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$53,900	0.4%	\$82,269	1.2%
		Administrative	\$27,042	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$65,515	0.5%	\$67,604	1.0%
MCE11a	Ag Deemed	Direct Implementation Incentive	\$10,707	0.1%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$103,263	0.7%	\$82,269	1.2%
		Administrative	\$27,042	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$168,332	1.2%	\$98,810	1.5%
MCE11b	Ag Custom	Direct Implementation Incentive	\$94,139	0.7%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Prorgam Total	\$289,513	2.0%	\$113,476	1.7%
		Administrative	\$27,042	0.2%	\$14,665	0.2%
		Direct Implementation (Non-Incentive)	\$279,058	1.9%	\$79,690	1.2%
MCE11c	Ag SEM	Direct Implementation Incentive	\$41,198	0.3%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$347,297	2.4%	\$94,355	1.4%
		Administrative	\$27,042	0.2%	\$10,469	0.2%
		Direct Implementation (Non-Incentive)	\$37,833	0.3%	\$71,800	1.1%
MCE11d	Ag NMEC	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Program Total	\$64,875	0.5%	\$82,269	1.2%

		Administrative	\$63,828	0.4%	\$65,595	1.0%
		Direct Implementation (Non-Incentive)	\$618,743	4.3%	\$323,030	4.8%
MCE16	MCE16 Green Workforce Pathways	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
		Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
		Prorgam Total	\$682,571	4.8%	\$388,625	5.7%
		Administrative	\$0	0.0%	\$0	0.0%
MCE98	EM&V	EM&V	\$225,039	1.6%	\$47,129	0.7%
		Program Total	\$225,039	1.6%	\$47,129	0.7%
	Portfolio Total			100.0%	\$6,766,150	100.0%

Sector-level²³

Sector	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
	Administrative	\$108,167	0.8%	\$54,465	0.8%
	Direct Implementation (Non-Incentive)	\$550,739	3.9%	\$317,904	4.7%
Agricultural	Direct Implementation Incentive	\$146,043	1.0%	\$0	0.0%
	Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
	Sector Total	\$804,948	5.7%	\$372,369	5.5%
	Administrative	\$137,107	1.0%	\$73,327	1.1%
	Direct Implementation (Non-Incentive)	\$6,186,619	43.8%	\$1,983,908	29.5%
Commercial	Direct Implementation Incentive	\$478,265	3.4%	\$697,624	10.4%
	Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
	Sector Total	\$6,801,991	48.2%	\$2,754,859	41.0%
	Administrative	\$63,828	0.5%	\$65,595	1.0%
	Direct Implementation (Non-Incentive)	\$618,743	4.4%	\$323,030	4.8%
Cross-Cutting	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
	Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
	Sector Total	\$682,571	4.8%	\$388,625	5.8%

²³Table excludes EM&V, which is not a sector.

	Administrative	\$97,805	0.7%	\$58,662	0.9%
	Direct Implementation (Non-Incentive)	\$1,000,390	7.1%	\$355,193	5.3%
Industrial	Direct Implementation Incentive	\$191,263	1.4%	\$15,462	0.2%
	Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
	Sector Total	\$1,289,458	9.1%	\$429,317	6.4%
	Administrative	\$361,331	2.6%	\$58,662	0.9%
	Direct Implementation (Non-Incentive)	\$2,365,898	16.8%	\$957,081	14.2%
Residential	Direct Implementation Incentive	\$1,654,771	11.7%	\$1,633,696	24.3%
	Marketing, Education and Outreach	\$155,000	1.1%	\$124,411	1.9%
	Sector Total	\$4,537,000	32.1%	\$2,773,850	41.3%
Portf	olio Total	\$14,115,967	100.0%	\$6,719,021	100.0%

Segment-level²⁴

Segment	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget	Expenditure Amount	Percent of Total Portfolio Expenditures
	Administrative	\$161,996	1.1%	\$29,331	0.4%
	Direct Implementation (Non-Incentive)	\$661,110	4.7%	\$561,791	8.4%
Equity	Direct Implementation Incentive	\$1,475,392	10.5%	\$1,633,696	24.3%
	Marketing, Education and Outreach	\$150,000	1.1%	\$116,685	1.7%
	Segment Total	\$2,448,499	17.3%	\$2,341,503	34.8%
	Administrative	\$63,828	0.5%	\$65,595	1.0%
	Direct Implementation (Non-Incentive)	\$618,743	4.4%	\$323,030	4.8%
Market Support	Direct Implementation Incentive	\$0	0.0%	\$0	0.0%
	Marketing, Education and Outreach	\$0	0.0%	\$0	0.0%
	Segment Total	\$682,571	4.8%	\$388,625	5.8%
	Administrative	\$542,413	3.8%	\$215,785	3.2%
	Direct Implementation (Non-Incentive)	\$9,442,535	66.9%	\$3,052,294	45.4%
Resource	Direct Implementation Incentive	\$994,950	7.0%	\$713,086	10.6%
	Marketing, Education and Outreach	\$5,000	0.0%	\$7,726	0.1%
	Segment Total	\$10,984,898	77.8%	\$3,988,892	59.4%
Portfo	olio Total	\$14,115,967	100.0%	\$6,719,021	100.0%

²⁴ Table excludes EM&V, which is not a segment.

Portfolio-level

Portfolio	Budget Category	Authorized Budget Amount	Percent of Total Portfolio Budget		Percent of Total Portfolio Expenditures
	Administrative	\$768,237	5.4%	\$310,711	4.6%
	Direct Implementation (Non-Incentive)	\$10,722,388	74.8%	\$3,937,116	58.2%
Portfolio	Direct Implementation Incentive	\$2,470,342	17.2%	\$2,346,783	34.7%
	Marketing, Education and Outreach	\$155,000	1.1%	\$124,411	1.8%
	EM&V	\$225,039	1.6%	\$47,129	0.7%
Por	tfolio Total	\$14,341,006	100.0%	\$6,766,150	100.0%

Energy Savings

Program-level

PrgID	Program Name	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0052	0.4024	0.0023
MCE01	MFES	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
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	1.2460	0.0311
MCE01c	MFSEM	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
		Installed Program Savings	0.0011	0.0072	0.3321
		Adopted Goals	0.0429	0.2239	0.0019
MCE02a	Com Deemed	Goal Attainment Percentage	2.7%	3.2%	17820.6%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
		Installed Program Savings	0.1103	3.5049	-0.0080
		Adopted Goals	0.0904	1.6820	0.0192
MCE02b	Com Custom	Goal Attainment Percentage	122.0%	208.4%	-41.7%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000

		Installed Program Savings	0.0372	0.5237	0.0313
		Adopted Goals	0.0000	0.8004	0.0320
MCE02c	Com SEM	Goal Attainment Percentage	0.0%	65.4%	97.7%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
		Installed Program Savings	0.0516	0.3270	0.0104
		Adopted Goals	0.0506	0.1236	0.0210
MCE08	SF HES	Goal Attainment Percentage	102.0%	264.6%	49.5%
		Fuel Sub Adjustment	0.0000	0.0000	0.0100
		Adjusted Goal Attainment	0.0000	0.0000	0.0110
		Installed Program Savings	0.0000	0.5730	0.0000
		Adopted Goals	0.8220	4.9076	0.0136
MCE02d	Com Efficiency Market	Goal Attainment Percentage	0.0%	11.7%	0.0%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
MCE17	Com Equity	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
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	1.5675	0.0000
MCE07	SF HER	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
		Installed Program Savings	0.0019	0.0147	-0.0001
		Adopted Goals	0.0137	0.0659	0.0455
MCE10a	Ind Deemed	Goal Attainment Percentage	14.0%	22.3%	-0.3%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0044	0.1671	0.0437
MCE10b	Ind Custom	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
		Installed Program Savings	0.0151	0.1077	0.0482
		Adopted Goals	0.0000	1.3200	0.0936
MCE10c	Ind SEM	Goal Attainment Percentage	0.0%	8.2%	51.5%
		Fuel Sub Adjustment	0.0000	0.0000	0.0000
		Adjusted Goal Attainment	0.0000	0.0000	0.0000
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
MCE10d	Ind NMEC	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
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0006	0.0787	0.0017
MCE11a	Ag Deemed	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

		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0740	0.3700	0.0085
MCE11b	Ag Custom	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
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.5280	0.0211
MCE11c	Ag SEM	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
	Ag NMEC	Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	0.0000	0.0000
MCE11d		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
		Installed Program Savings	0.0000	0.0000	0.0000
		Adopted Goals	0.0000	.0000 0.0000 0.00	0.0000
MCE16	Green Workforce Pathways	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
	Installed Program Savings	0.0000	0.0000	0.0000
	Adopted Goals	0.0747	0.9767	0.0312
Agricultural	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
	Installed Program Savings	0.1487	4.6088	0.3554
	Adopted Goals	0.9553	7.6138	0.0667
Commercial	Goal Attainment Percentage	15.6%	60.5%	532.8%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000
	Installed Program Savings	0.0000	0.0000	0.0000
	Adopted Goals	0.0000	0.0000	0.0000
Cross-Cutting	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
	Installed Program Savings	0.0170	0.1224	0.0480
	Adopted Goals	0.0181	1.5530	0.1828
Industrial	Goal Attainment Percentage	94.0%	7.9%	26.3%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000

Residential	Installed Program Savings	0.0516	0.3270	0.0104
	Adopted Goals	0.0558	3.3395	0.0545
	Goal Attainment Percentage	92.4%	9.8%	19.1%
	Fuel Sub Adjustment	0.0000	0.0000	0.0100
	Adjusted Goal Attainment	0.0000	0.0000	0.0445

Segment-level

Segment	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
	Installed Program Savings	0.0516	0.3270	0.0104
	Adopted Goals	0.0506	0.1236	0.0210
Equity	Goal Attainment Percentage	102.0%	264.6%	49.5%
	Fuel Sub Adjustment	0.0000	0.0000	0.0100
	Adjusted Goal Attainment	0.0000	0.0000	0.0110
	Installed Program Savings	0.0000	0.0000	0.0000
	Adopted Goals	0.0000	0.0000	0.0000
Market Support	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
	Installed Program Savings	0.1657	4.7312	0.4034
	Adopted Goals	1.0533	13.3593	0.3142
Resource	Goal Attainment Percentage	15.7%	35.4%	128.4%
	Fuel Sub Adjustment	0.0000	0.0000	0.0000
	Adjusted Goal Attainment	0.0000	0.0000	0.0000

Portfolio-level

Portfolio	Savings Category	Net MW Savings	Net GWh Savings	Net MM Therms Savings
	Installed Program Savings	0.2173	5.0582	0.4138
	Adopted Goals	1.1039	13.4829	0.3353
Portfolio	Goal Attainment Percentage	19.7%	37.5%	123.4%
	Fuel Sub Adjustment	0.0000	0.0000	0.0100
	Adjusted Goal Attainment	0.0000	0.0000	0.3253

TSB and Cost-Effectiveness

Program-level

PrgID	Program Name	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TPC Patio	Total PAC Cost	PAC Ratio
MCE01	MFES	\$0	\$0	\$103.807	0.00	\$103,807	0.00
MCE01c	MFSEM	\$0	\$0	\$216,540	0.00	\$216,540	0.00
MCE02a	Com Deemed	\$1,685,640	\$1,685,640	\$985,627	1.71	\$902,212	1.87
MCE02b	Com Custom	\$1,354,481	\$1,354,481	\$1,011,330	1.34	\$798,418	1.70
MCE02c	Com SEM	\$377,974	\$377,974	\$762,573	0.50	\$227,143	1.66
MCE08	SF HES	\$240,639	\$340,676	\$2,395,813	0.14	\$2,316,277	0.15
MCE02d	Com Efficiency Market	\$616,045	\$616,045	\$718,935	0.86	\$718,935	0.86
MCE17	Com Equity	\$0	\$0	\$82,269	0.00	\$82,269	0.00
MCE07	SF HER	\$0	\$0	\$194,269	0.00	\$194,269	0.00
MCE10a	Ind Deemed	\$13,171	\$13,171	\$144,507	0.09	\$89,112	0.15
MCE10b	Ind Custom	\$0	\$0	\$82,269	0.00	\$82,269	0.00
MCE10c	Ind SEM	\$287,797	\$287,797	\$273,126	1.05	\$174,722	1.65
MCE10d	Ind NMEC	\$0	\$0	\$82,269	0.00	\$82,269	0.00
MCE11a	Ag Deemed	\$0	\$0	\$82,269	0.00	\$82,269	0.00
MCE11b	Ag Custom	\$0	\$0	\$113,476	0.00	\$113,476	0.00
MCE11c	Ag SEM	\$0	\$0	\$94,355	0.00	\$94,355	0.00
MCE11d	Ag NMEC	\$0	\$0	\$82,269	0.00	\$82,269	0.00
MCE16	Green Workforce Pathways	\$0	\$0	\$388,625	0.00	\$388,625	0.00
MCE98	MCE EM&V	\$0	\$0	\$47,129	0.00	\$47,129	0.00

Sector-level

Sector	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Agricultural	\$0	\$0	\$372,369	0.00	\$372,369	0.00
Commercial	\$4,034,141	\$4,034,141	\$3,560,734	1.13	\$2,728,977	1.48
Cross-Cutting	\$0	\$0	\$388,625	0.00	\$388,625	0.00
Industrial	\$300,968	\$300,968	\$582,171	0.52	\$428,372	0.70
Residential	\$240,639	\$340,676	\$2,910,429	0.12	\$2,830,892	0.12

Segment-level

Segment	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Equity	\$240,639	\$340,676	\$2,478,082	0.14	\$2,398,546	0.14
Market Support	\$0	\$0	\$388,625	0.00	\$388,625	0.00
Resource	\$4,335,108	\$4,335,108	\$4,947,621	0.88	\$3,962,065	1.09

Portfolio-level

Portfolio	Net TSB	Total Benefits (TRC/PAC)	Total TRC Cost	TRC Ratio	Total PAC Cost	PAC Ratio
Portfolio	\$4,575,747	\$4,675,784	\$7,861,457	0.59	\$6,796,364	0.69