



2019 MCE Energy Efficiency Annual Report

MCE
1125 Tamalpais Ave
San Rafael, CA 94901

energysavings@mceCleanEnergy.org

INTRODUCTION 4

PORTFOLIO OF PROGRAMS..... 5

MULTIFAMILY5

Program Description5

Strategies Employed in 2019.....6

Program Performance and Major Achievements in 20196

Program Changes and Improvements for 20207

SINGLE FAMILY7

Program Description7

Strategies Employed in 2019.....8

Program Performance and Major Achievements in 20199

Program Changes and Improvements for 20209

Program Description9

Strategies Employed in 2019.....9

Program Performance and Major Achievements in 201910

Program Changes and Improvements for 202010

RESIDENTIAL DIRECT INSTALL10

Program Description10

Strategies Employed in 2019.....11

Program Performance and Major Achievements in 201911

Program Changes and Improvements for 202011

COMMERCIAL12

Program Description12

Strategies Employed in 2019.....12

Program Performance and Major Achievements in 201913

Program Changes and Improvements for 202013

AGRICULTURAL AND INDUSTRIAL.....13

Program Description13

Strategies Employed in 2019.....14

Program Performance and Major Achievements in 201914

<i>Program Changes and Improvements for 2020</i>	15
EXPENDITURES	16
TOTAL PORTFOLIO BUDGET AND EXPENDITURES.....	16
INTEREST EARNED ON FUNDING	16
ENERGY SAVINGS	16
TOTAL PORTFOLIO NET SAVINGS	16
NET SAVINGS BY SECTOR	17
NET SAVINGS BY END USE CATEGORY	17
COST-EFFECTIVENESS	18
TRC AND PAC RESULTS	18
ENVIRONMENTAL IMPACTS	18
APPENDIX A: PROGRAM IMPACT MAPS	18

INTRODUCTION

MCE is California's first Community Choice Aggregation (CCA) program, a not-for-profit, public agency that began service in 2010 with the goals of providing cleaner power at stable rates to its customers, reducing greenhouse gas (GHG) emissions, and investing in targeted energy programs that support communities' energy needs. MCE is a load-serving entity providing electricity service to approximately 475,000 customer accounts and over 1 million residents and businesses in 34 member communities across 4 Bay Area counties: Napa, Marin, Contra Costa, and Solano.

MCE's mission is to address climate change by reducing energy related GHG emissions through renewable energy supply and energy efficiency at stable and competitive rates for customers while providing local and economic workforce benefits. MCE offers 3 renewable energy products: Light Green (60% renewable); Deep Green (100% solar and wind power produced in state); 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 will meet GHG-free goals 23 years early. 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 2013.¹ 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.² 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.³ In 2014, however, the Commission lifted the restrictions and imposed the same cost-effectiveness requirements on CCAs as IOUs.⁴

Program Administrators ("PA") were invited to submit business plans in 2017. 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.⁵ 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.⁶

In 2019, MCE expanded its portfolio to administer the following programs:

¹ To date, MCE is the only community choice aggregator ("CCA") to have requested energy efficiency funding under Code Section 381.1(a)-(d).

² D.12-11-015 at pp. 45-6.

³ D.12-11-015 at p. 46.

⁴ D.14-01-033 at p. 14; see also D.14-10-046 at p. 120.

⁵ See Application of Marin Clean Energy for Approval of its Energy Efficiency Business Plan (Application ("A.") 17-01-017) filed January 17, 2017.

⁶ D.18-05-041, OP 33 at p. 189.

- Multifamily
- Commercial
- Single Family Seasonal Savings
- Single Family Comprehensive
- Residential (MF and SF) Direct Install
- Agricultural and Industrial

PORTFOLIO OF PROGRAMS

MULTIFAMILY

Program Description

MCE's Multifamily Energy Savings Program provides technical assistance, rebates, free direct install service for light touch⁷ efficiency measures,⁸ and access to other resource conservation programs. MCE works with properties to assess their unique needs and present them with the best energy savings opportunities. The program is available to both affordable and market-rate properties with four or more units⁹ located within MCE's service area.

MCE's Multifamily Program operates alongside the Low-Income Families and Tenants (LIFT) Pilot Program (authorized in D. 16-11-022), with the objective to layer incentives and maximize benefits to better serve income-qualified multifamily properties that are not currently benefiting from other low-income energy efficiency programs. The LIFT Pilot Program provides comprehensive services and supports fuel switching from gas to electric heat pumps for cleaner and safer energy use.

MCE works with the Association for Energy Affordability (AEA) to implement both the Multifamily and LIFT Programs. AEA serves as the implementation lead and technical assistance provider. Direct install services are provided by the Conservation Corps North Bay (CCNB) and Franklin Energy.

MCE's Multifamily Energy Savings Program operates under the Single Point of Contact (SPOC) model. AEA, as the program implementer, serves as a SPOC and provided program participants with a uniform and integrated presentation of opportunities across demand-side management strategies and other non-energy-related opportunities. AEA provides participants with personalized attention, follow-through, and assistance, identifying solutions that met their needs, budget, and levels of readiness for change (thereby minimizing the barriers that often plague projects during the initial phases).

The Multifamily Program uses a point-based incentive structure. The point-based system allows for the measures that achieve greater savings or directly impact residents to have the highest point value. Points translate to a per-unit rebate amount and the total rebate is calculated by multiplying that dollar

⁷ Direct install measures include: Showerheads, aerators, smart thermostats and LED bulbs (non-A19)

⁸ The direct install service is not a standalone service but is offered to participants in the program.

⁹ The program will consider 2+ units on a case-by-case basis.

amount by the total number of treated units. For income-qualified residents, MCE layers LIFT in-unit incentives (ESA funding) on top of Multifamily Program rebates.

Strategies Employed in 2019

During 2019, MCE deployed the following strategies:

- Adjusted contracts to performance and milestone-based formats to expedite project conversion time and improve overall cost-effectiveness.
- Established a strategic partnership with the Bay Area Regional Network (BayREN) to consolidate MCE and the Bay Area Multifamily Building Enhancements (BAMBE) program delivery and offerings.
- Developed a plan to restructure the Program's incentive structure to improve cost-effectiveness.
- Increased frequency of communications to participants to reduce project conversion time (move properties through the pipeline and get them into rebate reservation faster).
- Conducted ongoing evaluation of the LIFT Pilot Program and gathered bilingual feedback from participants to improve the delivery of both programs.
- Participated in forums and conferences concerning multifamily low-income programs and non-energy benefits.
- Held meetings with City and County staff, affordable housing developers, local organizations, and other strategic partners.
- As in previous years, MCE continued coordinating closely with the Bay Area Regional Energy Network (BayREN) and Pacific Gas & Electric Company (PG&E) through regular meetings, check-in calls, and emails. These practices aimed to avoid customer confusion, ensure that there is no double counting of savings, and share best practices.
- Employed the Single Point of Contact (SPOC) model by:
 - Expanding the range of referral services to include solar and EV technical assistance and rebates.
 - Partnering with the City of Richmond's "Energize Richmond" Campaign to provide additional incentives to Richmond property owners to cover out-of-pocket costs for completing energy efficiency upgrades.
 - Continuing the partnership with Green and Healthy Homes Initiative (GHHI) in Marin to coordinate rebates and services to address health, safety, and aging-in-place issues at properties in Marin.
 - Offering the LIFT Pilot Program to leverage Energy Savings Assistance (ESA) funding with incentives provided by the Multifamily Program and further assist income-qualified residents in MCE's service area.

Program Performance and Major Achievements in 2019

In 2019, MCE accomplished the following program achievements:

- Provided technical assistance to 1,336 units.
- Disbursed \$285,576 in rebates.
- Completed seven projects reserved in previous years.

- Enrolled 6 multifamily projects in rebate reservation in 2019. Four (4) of those projects completed in 2019 and 2 will complete in 2020.
- Comprehensively served four multifamily projects (26 units) through GHHI in Marin and disbursed \$58,500 for health and safety upgrades through this program.
- Of the total 1,336 units touched by the program, 1,223 were low-income units
- Through its direct install component, the program installed free light-emitting diodes (LEDs), low-flow showerheads, and faucet aerators in 50 units.
- Fostered a successful relationship with local water agencies, helping direct install recipients save 213,808 gallons of water per year.
- Supported local workforce development initiatives by working with CCNB's clients to staff MCE's direct install team and provided 452 local work hours.
- Supported local green jobs by funding 1,374 local work hours through implementation contracts.
- Disbursed an additional \$558,325 in rebates through the partnership with Energize Richmond and reserved another \$766,980 for projects completing in 2020.
- Reserved rebates for nine new properties totaling 302 units.

Program Changes and Improvements for 2020

In 2020, MCE is planning to implement the following program improvements:

- MCE will make complete adjustments to the Multifamily Program to improve cost-effectiveness such as:
 - Finalize and implement new incentive structure and measure mix to achieve competitive savings targets and cost-effectiveness requirements.
- Strengthen partnerships with City and County staff through MCE-BayREN Partnership.
- Continue to collect data and best practices throughout the implementation of the LIFT Pilot Program to better serve income-qualified customers.
Continue to leverage incentives for affordable properties in partnership with the LIFT Pilot Program.

SINGLE FAMILY

Program Description

Seasonal Savings Pilot

In January 2019, MCE launched the third year of the Seasonal Savings Pilot Program. The objective of the Seasonal Savings Pilot is to measure the cost-effective savings in utilizing smart thermostat technology to remotely modify set points on HVAC equipment.

The Seasonal Savings Pilot Program employs a software algorithm that offers customers an opportunity to make their heating or cooling schedules more efficient through a series of very small adjustments to the scheduled temperatures over a three-week period. The algorithm results in more energy efficient heating or cooling schedules for the length of the heating or cooling season. Customers are invited to join the program through their thermostat and its mobile app and must opt-in to participate.

In order to best measure the savings impacts of the pilot program, the program was divided into a winter heating season, which ran from January 15 through April 30; and a summer cooling season, which ran from July 21 through September 30.

Seasonal Savings Winter 2019

The program makes changes to customers heating schedules, which leads to more efficient heating set points, and a reduction in heating system runtime hours. A total of 34,601 thermostats were identified in MCE's service area, which is larger from prior years given the growth of MCE's service area. The target population was randomly split into treatment and control groups with 31,141 thermostats in the target treatment group and 3,460 in the control group. 79% of the target treatment group qualified¹⁰ to participate and 79% of the qualified thermostats opted to participate. In total, 16,917 thermostats participated in the Seasonal Savings Winter event, equal to 54% of the target group.

The 31,141 target group thermostats were in 24,702 homes, which means 22% of customers had more than one thermostat with an average of 1.29 thermostats per home.

Based on an analysis of set points and run times, gas heated homes that opted to participate are estimated to have saved 15 hours of furnace runtime, which equals 7.2 therms of natural gas and 8.2 kWh of electricity¹¹. In aggregate, the program saved 118,903 therms and 149,338 kWh.

Seasonal Savings Summer 2019

A total of 31,063 thermostats with controlled central air conditioners were identified in MCE's service area. This number is higher from previous years given the growth of MCE's service area. The target population was randomly split with 3,106 thermostats in the control group and 27,957 in the treatment group. 64% of the target treatment group qualified¹² to participate and 61% of the qualified thermostats opted to participate. In total, 10,884 thermostats participated in the Seasonal Savings Summer event.

The 27,957 target group thermostats were in 24,104 homes, which means 14% of customers had more than one thermostat with an average of 1.16 thermostats per home.

Based on an analysis of the cooling set points and run times, the program achieved an estimated 2.8% savings or 20 kWh per opt-in customer. The aggregated savings totaled 214,907 kWh.

Strategies Employed in 2019

In 2019, MCE's Single-Family Energy Efficiency Program used the following strategies:

- Expanded the pilot program to the new MCE service area, increasing participation and savings.

¹⁰ Customers qualified for the program if the thermostat was online and running a heating schedule.

¹¹ Primarily from reduced air handler power use.

¹² Customers qualified for the program if the thermostat was online and running a cooling schedule.

Program Performance and Major Achievements in 2019

In 2019, MCE accomplished the following program achievements:

- 16,840 customers enrolled in the Seasonal Savings Winter 2019, resulting in 118,903 therms and 149,338 kWh.
- 10,865 customers enrolled in the Seasonal Savings Summer 2019, resulting in 214,907 kWh savings.

Program Changes and Improvements for 2020

2019 was the final year of the pilot program. Despite the successful pilot outcomes, the technology provider was not interested in continuing implementation of this program. In 2020, MCE will explore the feasibility of a similar program with a new implementation partner.

Program Description

Single Family Comprehensive

MCE will launch a Single-Family Comprehensive Program (SF Program) in mid-2020, which offers behavior intervention strategies to residential participants with the goal of achieving short-term energy and cost savings that can persist and produce long-term behaviors. This will be achieved by fostering participant engagement, ensuring participant satisfaction and providing energy education and upgrades through regular and participant-specific touch points in the form of paper or digital home energy reports and a web-based education portal.

MCE will select eligible customers and assign them to a treatment group to receive home energy reports at regular intervals to encourage energy- and money-saving behavioral changes or to act as a control group for the study. The program's treatment group will receive a series of HERs and, if enrolled in the digital platform, energy budget reports and alerts, as well as access to a web portal where they can learn about additional savings potential.

Customers will be enrolled into the program in compliance with the Measurement and Verification (M&V) plan filed with the Commission and all current Commission program rules and requirements for behavioral programs.

The MCE SF Program goals are to:

- Establish a cost-effective residential behavioral program to educate participants on their energy consumption behavior and motivate them to save energy and money over the short- and long-term.
- Validate participant savings using meter-based energy savings calculation methods and Randomized Control Trial (RCT) to measure savings.

Strategies Employed in 2019

Program activities in 2019 centered around soliciting and contracting with entities for implementation and M&V, regulatory and stakeholder engagement, and validating customer experience and data flows.

Program Performance and Major Achievements in 2019

Major design and implementation components addressed in 2019 were:

- Data:
 - Selection of participant and control groups for the program, including coordination with PG&E to ensure no overlap with other behavior program treatment or control groups.
 - Developed a process for providing a consistent and accurate data set to support program implementation.
- Regulatory/Stakeholder discourse:
 - Held ongoing dialogue with the Commission, the Public Advocates Office and other stakeholders on the NMEC/RCT program design and its fit within Commission rulebooks and regulations.
 - Filed official program Implementation Plan and Program Manual in CEDARS; webinar to introduce program to stakeholders.
- Customer Experience
 - Designed and approved digital and print outreach collateral.

Program Changes and Improvements for 2020

The MCE SF Program is set to launch in May 2020.

RESIDENTIAL DIRECT INSTALL

Program Description

The Residential Direct Install program provides no-cost energy efficiency measures to eligible homeowners and renters in both single-family and multifamily dwellings in MCE's service area. This Program targets customers in Disadvantaged Communities (DACs) whose household income exceeds the limit to receive services through programs like the Energy Savings Assistance Program (ESA) and Low-Income Families and Tenants (LIFT) Program yet are still income constrained (lower-middle income). The goal is to introduce this market sector to the concepts of energy efficiency, provide upgrades that reduce household energy consumption and encourage a pathway toward deeper energy retrofits offered through existing and emerging market-rate programs and technology. Measures include EnergyStar certified Smart Thermostats, Refrigerant Charge and Coil Clean, Tier II Smart Power Strips, LED lighting, low flow showerheads and faucet aerators.

The Program has the following key objectives:

- Increase awareness about energy use and associated economic and environmental impacts in the Residential sector within MCE's service area.
- Serve customers via a single point of contact for their energy journey, while also connecting them to other available local and regional offerings.
- Ensure program measures and delivery model are cost-effective and achieve forecasted savings targets.

Strategies Employed in 2019

Most of the program's efforts in 2019 focused on the program launch, marketing and outreach, and customer engagement. Strategies employed in 2019 include:

- MCE contracted with a third party, Franklin Energy, to implement the Residential Direct Install program. MCE and Franklin Energy will coordinate directly with Participating Contractors to market the program to end-users. Franklin Energy and the Participating Contractors will gather customer eligibility information, complete a household energy assessment, complete combustion appliance safety testing, install eligible measures, and provide customer education materials on residential single-family homes and multifamily units across MCE's service area.
- Conducted meetings with other program implementers and administrators to serve MCE's service area synergistically.
- Established the software tool used to manage the Residential Direct Install program, including internal user acceptance testing and portal launch, and setting reporting dashboards, reports, and automation.
- Launched a thorough marketing and outreach campaign to engage participants, which included:
 - Design and distribution of multilingual program collateral (door hangers and cut sheets);
 - Publishing a program web page and enrollment web form.
 - Launching email, call, and door hanger outreach campaigns.
 - Launching program social media ads and e-newsletter.

Program Performance and Major Achievements in 2019

The Program launched in October 2019 and began offering EnergyStar certified Smart Thermostats to achieve immediate savings results at no cost to participating customers, providing customers with more healthy, efficient, and comfortable homes.

Between the end of October and December 31, 2019, MCE accomplished the following program achievements:

- Made 1,216 outreach calls and sent 2,137 outreach emails to single-family households.
- Made 341 outreach calls and sent 31 outreach emails to multifamily property owners.
- Distributed 1,176 program door hangers.
- Scheduled 93 appointments.
- Installed 80 smart thermostats at single-family households and one multifamily unit.
- Completed 77 Quality Assurance reviews, and 5 Quality Control field inspections, all yielded passing scores.

Program Changes and Improvements for 2020

In 2020, MCE is planning to implement the following program improvements:

- Update incentives list to include the full package of cost-effective measures.
- Update the marketing and outreach plan to reflect lessons learned and benchmark metrics to achieve 2020 goals.
- Update marketing materials and campaigns.

- Develop additional multifamily strategies and deepen outreach to multifamily residents.
- Migrate to a new marketing automation platform to send email marketing in larger volumes, have better customer segmentation and improve email campaigns.
- Distribute health and safety information to participating households.

COMMERCIAL

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 prescriptive and, custom-calculated savings and rebates, meter-based quantification, and Strategic Energy Management (SEM). 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 rigorous technical review of projects to move customers forward on their energy efficiency journey.

The program offers energy assessments, procurement assistance, and rebates for lighting, heating, ventilation, and air conditioning (HVAC), refrigeration, food service measures, and steam systems. In addition, the program offers project management assistance and post-project quality assurance.

MCE administers this program through partnerships with multiple implementation partners and coordinates closely with PG&E energy efficiency programs to eliminate program funding overlap and reduce confusion among contractors and customers as well as eliminate program funding overlap.

The Program leverages various customer outreach strategies to drive awareness of energy efficiency offerings and engagement within the Program. This includes street canvassing, customer representatives' outreach, MCE e-newsletters, data-driven analyses, and networking among MCE stakeholders and community groups.

In 2019, several changes to the program were made to reduce customer and contractor confusion, and to streamline the Program offerings. The changes include:

- Expanded deemed measure offerings
- Re-evaluated incentive rates by measure code, customer classification, and technology.
- Diversified customer participation pathways to include NMEC and SEM.
- Launched an SEM cohort to provide a multi-year, whole-facility approach focused on no and low-cost savings opportunities.
- Updated the Joint Cooperation Memo with PG&E on how to coordinate across programs.
- Lifted business size restrictions to serve all commercial properties, regardless of their maximum peak demand and annual energy usage.

Strategies Employed in 2019

In 2019, MCE's Commercial program employed the following strategies:

- Coordinated closely with local Energy Watch Programs (Marin Energy Watch Partnership, East Bay Energy Watch, Napa County Energy Watch).
- Shifted funding between two different implementation contracts to focus on a results-oriented program.
- Leveraged usage data, identified and conducted outreach with dozens of large customers who were evaluated for their fit within the SEM offer.
- Expanded geographic reach of implementer to cover all of MCE service area.
- Required bids from a minimum of two participating contractors when the project lead is not generated by a contractor (e.g. referral from MCE or implementer).
- Mandated pre-approval of project scope when expected incentive payments are higher than \$10,000.

Program Performance and Major Achievements in 2019

In 2019, MCE accomplished the following program achievements:

- Completed energy assessments at 128 businesses
- Completed energy efficiency retrofits at 67 customer facilities
- Disbursed \$233,798.12 in rebates.

Program Changes and Improvements for 2020

In 2020, MCE is planning the following program changes and improvements:

- Continue to build our partnerships with Cities and Counties, especially in new communities, through targeted marketing campaigns, customer outreach, and close coordination with local government staff, BayREN, and other utility programs.
- Target specific customers using data-driven analyses.
- Explore introducing an additional implementer within the Program to increase program participation rates and offer another pathway for customers to benefit.
- Work to reduce program implementation costs and improve overall cost-effectiveness through performance-based contracts.
- Retire non-cost-effective deemed measures.
- Structure payable rates within contracts and incentives that align with delivered benefits in support of improved cost-effectiveness.
- Leverage engineering services and expertise for larger commercial projects.
- Focus additional resources on gas savings targets.

AGRICULTURAL AND INDUSTRIAL

Program Description

The MCE Agricultural and Industrial Resource (AIR) Program is a comprehensive third-party program 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. The Program aims to leverage multiple participation pathways, including

deemed rebates, custom projects, Normalized Metered Energy Consumption (NMEC) projects, and Strategic Energy Management (SEM) to realize energy efficiency goals. The AIR Program launched in May 2019.

This comprehensive program is implemented with the following objectives:

- Provide customers with a single point of contact for their energy journey.
- Raise awareness about energy use and its associated economic and environmental impacts in the agricultural and industrial sectors.
- Ensure program impact are verifiable, transparent and accurate.
- Achieve energy reduction goals and program cost-effectiveness targets.

SEM plays a key part in the AIR Program to help address market barriers and achieve program objectives over a long-term engagement. As a subprogram, SEM is offered in a cohort style format for training workshops and a mix of individual and cohort-style site activities. SEM delivers a subset of program objectives that include:

- Implementing energy efficiency projects with a focus on low-to-no cost behavioral, retro-commissioning, and operational measures.
- Establishing a continuous Energy Management System (EMS) at each facility to impact company culture in a positive way.
- Quantifying and reporting facility wide energy performance.
- Encouraging peer to peer learning and sharing.
- Achieving a balance between saving energy and building EMS practices.

Strategies Employed in 2019

In 2019, the MCE AIR program employed the following strategies:

- Completed a competitive solicitation and contracting for third party program design and implementation.
- Combined the Agricultural and Industrial programs into a single customer-facing offer, the AIR program, which recognizes similarities and overlap between the customer groups, and an opportunity to reduce administrative demands and lower program costs.
- Development of program collateral, website updates, and an online platform for participating customers and contractors.
- Data-driven customer targeting.
- Coordinated customer outreach engaging MCE account representatives and third-party implementation partner.
- Customer offer – including incentive rates, rebates and measures – designed with cost-effective program delivery as a primary driver.
- Coordination with Sustainable Napa County, the Napa Green certification program, and a number of municipal stakeholders.

Program Performance and Major Achievements in 2019

In 2019, MCE accomplished the following program achievements:

- Designed and launched the MCE AIR Program.
- Completed energy assessments at 5 facilities.
- Launched first SEM cohort with 8 participants in November 2019.
 - Hosted first SEM Kick-Off workshop
 - Completed 3 Treasure Hunts per the California Industrial SEM Design Guide¹³
 - Completed 7 data collection calls

Program Changes and Improvements for 2020

In 2020, MCE is planning the following program changes and improvements:

- Continue to build our partnerships with cities and counties, especially in new communities, through targeted marketing campaigns, customer outreach, and close coordination with local government staff, BayREN, and other utility programs.
- Launch a second SEM cohort with 10-12 new participating customers.
- Improve the program's efficiency in customer targeting and meter-based measurement, by creating a reliable flow of data from PG&E to MCE, for use within MCE programs and by MCE programs partners. MCE will also be receiving gas data on a regular basis from PG&E for the first time.
- Deploy marketing and outreach strategies to reach smaller agricultural and industrial customers.
- Attend relevant industry events, such as those facilitated by the County Farm Bureaus, Napa Green and Sustainable Napa County.

¹³ The primary goal of the Treasure Hunt is to identify energy waste and energy savings opportunities so that participants can make changes that save energy. The Treasure Hunt can have the highest impact on the success of a participant's engagement in SEM. It should ignite enthusiasm among employees and set the stage for success in improving the facility's energy performance.

EXPENDITURES

Total Portfolio Budget and Expenditures

Table 1: 2019 Budget and Expenditures (Including Committed Expenditures)

Budget Category	Operational Budget	Percent of Portfolio Budget	Expenditures	Percent of Total Expenditures
Administrative	\$424,265	6.25%	\$171,821	7.59%
Direct Implementation	\$3,372,099	49.74%	\$1,455,057	64.31%
Incentives	\$2,710,326	39.98%	\$538,814	23.82%
Marketing, Education & Outreach	\$161,872	2.39%	\$1,660	0.07%
EM&V	\$111,143	1.64%	\$95,351	4.21%
Portfolio Budget	\$6,779,704	100.00%	\$2,262,703	100.00%

Interest Earned on Funding

MCE accrued \$187,931 in interest since placing ratepayer funds in an interest-bearing account in 2018. MCE will return the interest accrued to ratepayers in its 2021 Annual Budget Advice Letter.

ENERGY SAVINGS

Total Portfolio Net Savings

Table 2: 2019 Annual and Lifecycle Net Savings and Demand Reduction

Annual and Lifecycle Savings Categories	Total Net Savings
Annual GWh Savings	1.51
Lifecycle GWh Savings	7.22
Annual Natural Gas Savings (MMth) – Annual	0.12
Lifecycle Natural Gas Savings (MMth) – Lifecycle	0.24
Annual Peak Demand Savings (MW)	0.23
Lifecycle Peak Demand Savings (MW)	1.21

Net Savings by Sector

Table 3: 2019 Annual Net Savings by Sector

Portfolio Sector	Annual Net Savings		
	Electric (MWh)	Demand (MW)	Gas (therm)
Multifamily	156.43	0.02	10,594.94
Commercial	1,005.90	0.21	(6,192.83)
Single Family	350.32	0.00	113,528.84
Total	1,512.66	0.23	117,930.93

Net Savings by End Use Category

Table 4: 2019 Annual Net Savings by End Use

End Use Category	GWH	% of Total	MW	% of Total	MMTh	% of Total
Residential	0.5068	33.50%	0.0194	8.42%	0.1241	105.25%
Appliances	0.0032	0.63%	0.0005	2.35%	0.0038	3.09%
HVAC	0.3709	73.19%	0.0102	52.87%	0.1214	97.84%
Lighting	0.1210	23.87%	0.0069	35.68%	(0.0010)	(0.84)%
Refrigeration	0.0101	2.00%	0.0016	8.05%	(0.0003)	(0.28)%
Water Heating	0.0016	0.31%	0.0002	1.06%	0.0002	0.19%
Other	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
Nonresidential	1.0059	66.50%	0.2106	91.58%	(0.0062)	(5.25%)
HVAC	0.0000	0.00%	0.0000	0.00%	0.0010	0.00%
Lighting	0.9893	98.35%	0.2091	99.29%	(0.0060)	96.46%
Refrigeration	0.0166	1.65%	0.0015	0.71%	(0.0002)	3.54%
Other	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
MCE Annual Portfolio Savings	1.5127	100%	0.2300	100%	0.1179	100%

COST-EFFECTIVENESS¹⁴

TRC and PAC Results

The cost-effectiveness of MCE's programs is outlined below. The Total Resource Cost (TRC) Test weighs the program's net benefits against the cost to the program administrator and its customers. The Program Administrator Cost (PAC) Test measures the benefits and costs to the Program Administrator.

Table 5: 2019 Cost-Effectiveness Results

Annual Results	TRC Ratio	PAC Ratio
Multifamily	0.18	0.31
Commercial	0.48	0.49
Single Family	0.73	0.73
Portfolio TRC	0.27	0.33

Environmental Impacts

The avoided emissions data calculated using the Cost-Effectiveness Tool, developed by the Energy Division of the CPUC.

Table 6: 2019 Net Environmental Impacts

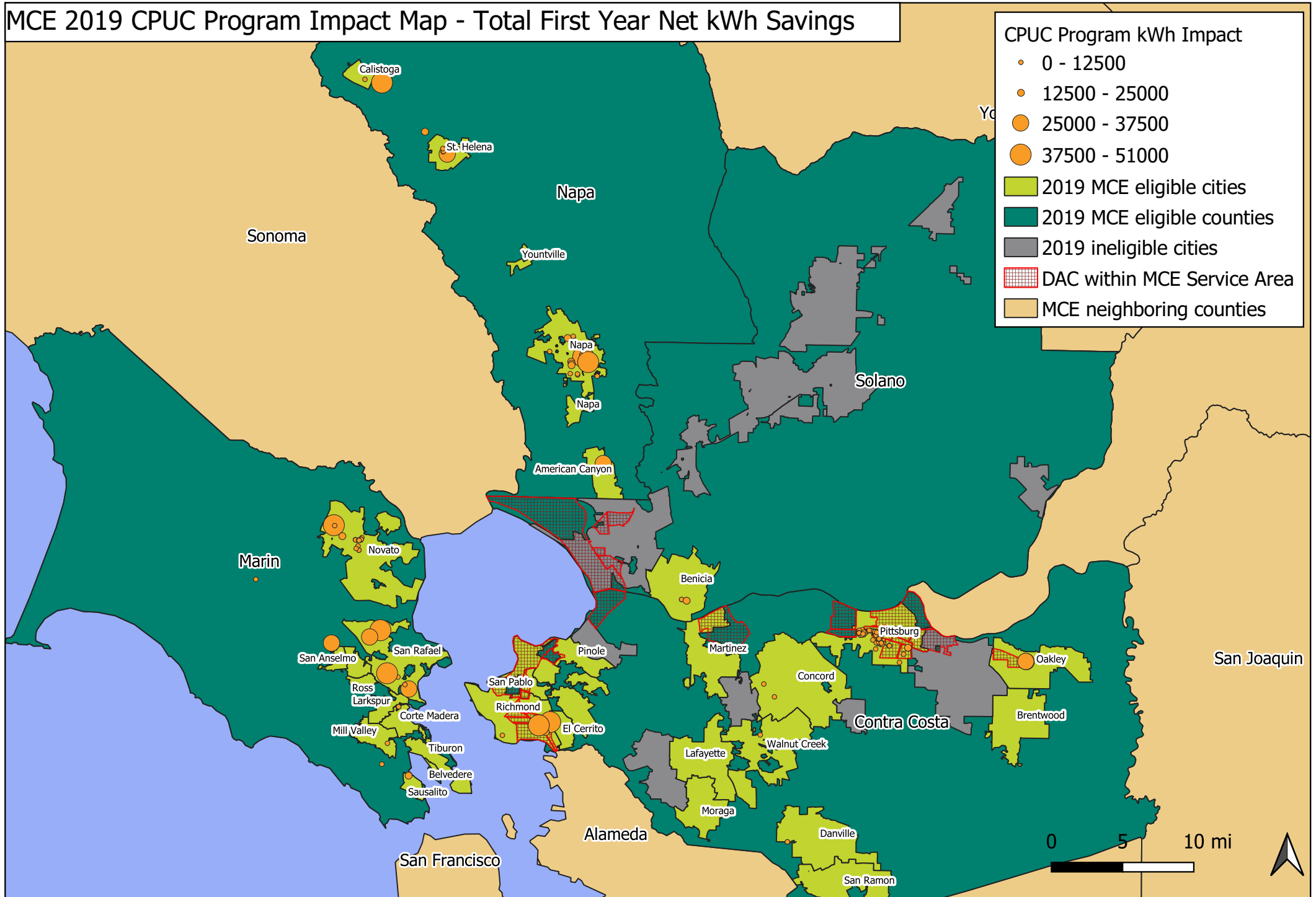
Annual Results	Annual MT of CO2 avoided	Lifecycle MT of CO2 avoided	Annual MT of NOx avoided	Lifecycle MT of NOx avoided
Portfolio Total	773	2,063	114	805

Appendix A: Program Impact Maps

The following maps demonstrate the distribution of projects reported and the impact made in terms of kWh and therms.

¹⁴ Cost-effectiveness results were generated by the CPUC approved Cost-Effectiveness Tool.

MCE 2019 CPUC Program Impact Map - Total First Year Net kWh Savings



MCE 2019 CPUC Program Impact Map - Total First Year Net Them Savings

