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Consumers Energy
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2020 PROGRAM YEAR EM&V RESEARCH

Residential EWR EM&V Highlights for Michigan Collaborative

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Agenda

Cross-Cutting
Activities

Certification

Cross-cutting research

Annual Program
Evaluation Activities

Ongoing customer satisfaction
research

Annual reports

2021 Cross-Cutting Studies



Load Shape Research

Completed spring 2021 (res) and late 2021 (C&I)



Lighting Net-to-Gross and Estimated Useful Life

Prospective NTG analysis for 2022 planning

EUL adjustment to be included in 2022 MEMD



Baseline Housing Study/Furnace Metering Study

Housing Study completed May 2021

Furnace metering analysis and 2023 MEMD updates by May 1, 2022

IN FOCUS

The Statewide Baseline Housing Study found that the year a home was constructed had the strongest correlation with the home's efficiency and levels of insulations. The vintage bins defined in the MEMD can be better aligned with efficiency levels of Michigan Lower Peninsula homes.

Regular Annual Evaluation Activities



Ongoing Customer Satisfaction Surveys

Field quarterly satisfaction surveys with customers who participated in prior three months. Results posted daily to OCSS dashboard and presented in bimonthly check-ins.

14,000 completed surveys across 11 programs in 2020



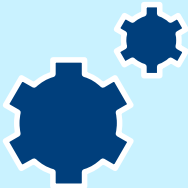
Annual Evaluation Reports

Findings, conclusions and recommendations from the year's evaluation activities and assessment of program performance. **20 EWR reports submitted to MPSC for 2020 evaluation year**

Program Research Highlights

Home Energy Reports, Insulation and Windows

INWIN TIERED REBATE ANALYSIS



Analyzed tracking data to assess effect of tiered attic insulation rebates. Determined that tiered rebate effectively encouraged higher R-value installations.

HER CUSTOM SAVINGS



Billing analysis of treatment and control groups for energy savings and demand reduction.

ES Appliances and Marketplace Program

RECENT RESEARCH



Peer Program Review (2020)

In-depth review of ten peer utility programs and follow-up interviews with five peer utility program managers. Objectives included:

- Document how other ENERGY STAR Appliance and Marketplace programs have approached improving satisfaction and participation
- How peers have achieved higher savings with the decline in lighting measures
- Ways to capture savings from specialty bulbs

Home Energy Analysis and HEA-Electric

RECENT RESEARCH



Cancellation Mitigation Research (2019)

Investigated how similar programs managed/mitigated customer cancellations and no-shows through secondary research and interviews.



New Savings Opportunities (2019)

Identified opportunities including when customers are not utilizing programmable thermostat capabilities.



Program Design Benchmarking Research (2020)

Review of electric-only audit programs to compare key metrics and program design elements and identify program improvements.

IQ and IQ-Electric

RECENT RESEARCH



eTracker Data Mining (2020)

Examined customer tracking data for IQ program years 2016 through 2019 to identify the highest level of engagement to which an individual participant advanced each year. This research exemplified the ways customers participated in the various program initiatives, particularly the premium measures, and how long their customer journey took.



Program Design Benchmarking Research (2020)

Review of electric-only audit programs for program design concepts and key findings from other electric-only audit programs.

Multifamily and Multifamily IQ Program

RECENT RESEARCH



Small Property Identification (2020)

Program participation is dominated by larger multifamily complexes and the program is reaching saturation in this segment. To effectively expand the program, Cadmus created a way to identify smaller (< 20 unit) properties in eTracker. By replicating this model, Consumers Energy can systematically review customer data for targeted outreach opportunities.



Laundry Leasing Opportunity Analysis (2020)

Researched the potential to improve the efficiency of leased laundry equipment in multifamily settings. We examined program design options and learned that common area laundry equipment barriers are significant, and savings potential is low; therefore, it was not worth pursuing an initiative.

HVAC and Water Heating Program

RECENT RESEARCH



Midstream Channel Benchmarking (2020)

Reviewed materials from peer programs offering midstream HVAC or water heating for: incentive levels, ramp-up timeline, program requirements, measures, regulatory environment, savings.



Contractor and Distributor Interviews (2019)

Discussed midstream program model with contractors, distributors and other utility program staff for feedback on how to make such an offering successful.



Midstream Interviews (2020)

In-depth interviews with five peer utility program managers to document how other midstream residential HVAC programs are designed and implemented and identify benefits and challenges of these other programs.

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Thank You

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