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Massachusetts C&I Evaluation Contract Project Summary:

Massachusetts Commercial & Industrial Impact Evaluation Framework

Project timeframe: Mar 2016 – May 2017

Research Area: Impact Evaluation

High-level study objectives: This framework represents a fundamental re-examination of traditional impact evaluation methodologies, the changing needs of programs and program administrators, and the role of evaluation in responding to those needs.

Recommendations

Continued Maintenance of this Living Framework

- This Impact Framework is intended to be a living document that can be updated on an as-needed basis and used as part of the impact evaluation planning process. The authors recommend that this framework and associated tools are reviewed by stakeholders each calendar year to incorporate new material and revisions. The depth of review can depend upon needs and priorities.

Proposed Refinements to Massachusetts Impact Evaluation Structure

- Initiate a Traditional evaluation of Custom measures. A combined Custom segment may be adapted into a longer duration structure (Multiyear staged or continuous Rolling) that still facilitates annual result generation for regulatory and other needs.
- Alternatively, perform Reconnaissance on Custom HVAC and Custom Lighting to investigate whether the previous evaluation results appear to be stable.
- Lay groundwork for Multiyear staging with a year one effort for Small Business Lighting and Custom Gas. A Multiyear evaluation strategy could involve year one lighting-only work followed up with non-lighting in year two plus a small supplemental sample of lighting. In concert, these evaluations would lay the groundwork for a three to five-year "sliding window" multiyear evaluation.
- Test quarterly data delivery in a Staged evaluation. Two prescriptive measures – lighting and compressed air – are good candidates for quarterly staged evaluation due to minimal savings seasonality. We recommend testing the feasibility of quarterly tracking system delivery and midyear sampling with one or both of these measures. This would serve as a proof of concept of the Staged evaluation structure and is likely to generate lessons for future updates to this impact framework.
- Explore feasibility of continuous data delivery for Rolling evaluation. Concurrent with the quarterly data delivery test immediately above, explore the manner in which continuous data delivery may be feasible for the same population segments of prescriptive lighting and compressed air.
- Identify candidates for Reconnaissance work. Suggested candidates include variable speed drives, motors, and prescriptive gas.
- Revisit desk reviews and develop a protocol. Once a cornerstone of impact evaluation in the Northeast, and still a dominant tool in other parts of the country, file reviews are a cost-effective way to examine measure performance. A large sample of file reviews with a nested, smaller sample of field M&V is a reliable, tried-and-true method.
- Remain open to the full spectrum of available M&V methods. Massachusetts gross impact evaluation most often employs IPMVP Option A and B (retrofit-isolation) approaches. Building simulation (Option D) is used in select instances, and billing analysis (Option C) is less frequently employed. All methods have their merits and places, so choosing an M&V approach might go hand in hand with the structuring and timing issues laid out above.

Baselines and Measure Life

- The framework recommends integrating some participant free ridership and spillover analysis with gross impact evaluation. We recommend this be done for all custom impact evaluations.
- ISP research should be completed as part of an ad hoc or "focused study" under this impact evaluation framework.
- The DNV GL team recommends that a prioritization of equipment needing measure life research be completed.

Ex-ante M&V and Early Involvement

- The DNV GL team recommends coordinating with implementation to determine if they see value to ex-ante EM&V baseline review. The review would focus on the selection and the efficiency of the baseline. Since the purpose of ex-ante EM&V baseline review would be to benefit implementation, they should drive the decision to engage in this strategy, which is voluntary in nature.

Next Steps

There will be a follow-on study (Impact Evaluation Transition Planning) to explore and advance some of the recommendations set forth in the Massachusetts Commercial & Industrial Impact Evaluation Framework document. The timeline of the Impact Evaluation Transition Planning study is May 2017 – April 2018; Stage 3 work plan development commenced in May 2017.

For full report see: MA CIEC stage 5 report – P63 Impact Evaluation Framework_FINAL on the EEAC website, http://ma-eeac.org/studies/