

# Pilots for the Changing World of Energy Efficiency

The challenges, demands, and scope of utility energy efficiency (EE) programming are all rapidly changing, bringing a need for real innovation. All parties designing and approving EE plans have been focused on the problem of how to make up for energy and demand savings no longer available from screw-in LED and other lighting, but there are other factors making innovation an imperative:

- Market uptake on new (or now not so new) technologies, such as networked lighting and other system or building controls has been limited, as has participation in many non-lighting programs in general.
- Application of the data available from advanced metering infrastructure (AMI) and ever more sophisticated modeling techniques for measurement of savings, whether using AMI or legacy metered data, has become an interest of stakeholders and even a point of criticism against utilities.
- Extension of the scope of EE to include other distributed energy resources (DER) and to address spatial and temporal impacts as part of system planning or nonwires/non-pipe alternatives is occurring in many jurisdictions.

Many factors, including those listed above, are going to reshape every aspect of EE, including program design and delivery, the integration of emerging technology, measurement and verification (M&V), incentives, education, and perhaps most important, the value proposition presented to customers. However, it is not easy to make radical change, which is why designing and implementing pilots has become all but essential in the industry. Unfortunately, even this small step forward is often met with skepticism by both internal and external stakeholders, which strongly suggests that a structured approach to design and execution is critical to get stakeholders onboard and pass regulatory muster.

MCR Performance Solutions combines its regulatory and stakeholder engagement expertise with cross-cutting EE services ranging from market research and program design to data analytics and modeling to ensure success through structure and innovation.

# Questions Addressed in MCR's Approach to Energy Efficiency Pilots

## Design

## Administration

### **Analysis & Reporting**

- What are the objectives of the pilot? What are the measurable hypotheses to be tested?
- What is the overall test design?
- How long will the pilot last?
- How will the pilot be funded?

- What internal organizations need to be engaged?
- What customers, if any, need to be involved and how will they be engaged?
- Which stakeholders need to be How will the results be kept informed; which have approval and/or veto authority? ■ What decisions will be made
- How will the pilot be managed? What resources will be used?

- What data will be collected and where will it be stored?
- What analytics will be run?
- How will the data and results be verified?
- assessed?
- from the assessment?

MCR is applying this approach to a wide range of pilots for its utility clients, addressing various types of innovation and implementing flexible yet structured scopes. These EE pilots span the full spectrum of required innovation from program design and delivery to emerging technologies and M&V and cross a wide variety of customer segments especially including hard to reach markets.

#### MCR Energy Efficiency Pilot Projects

	Program or Delivery	Emerging Technology	Advanced M&V	Incentive Structure	Education & Workforce	Hard to Reach	Value Proposition
Geotargeting	✓		✓	✓		✓	
Batteries	✓	✓	✓			✓	✓
Low Income Multifamily Passive House	✓		✓	✓	✓	✓	
NMEC (Normalized Metered Energy Consumption)	✓		✓	✓			✓
Community Energy Education	✓				✓	✓	
Market Manager / Channel Manager	✓		✓	✓			✓
Public Agency Partnership	✓		✓	✓		✓	✓
Lighting as a Service	✓	✓	✓	✓		✓	✓

In addition to executing with clients the above pilot concepts, MCR has:

- Designed and implemented or facilitated implementation of midstream and upstream lighting programs since their inception in the early 2000s for lighting and late 2000s for non-lighting technologies, such as air conditioning and water heating
- Deeply examined and/or facilitated procurement of online marketplace platforms and commercial/industrial (C&I) behavior programs
- Currently focusing on programs for networked controls and combined heat and power

For more information on MCR's approach to EE pilot design and execution, or to learn more about any of the specific pilots listed above please contact:

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