

EEAC Resolution Concerning Its Priorities for the Development, Implementation, and Evaluation of the 2019-2021 Three-Year Energy Efficiency Plan

February 28, 2018

Introduction

Under the Green Communities Act (“GCA”), the Energy Efficiency Advisory Council (“EEAC” or “Council”) is charged with reviewing the Massachusetts Program Administrators’ (“PAs”) energy efficiency investment plans and budgets, which are prepared in coordination with the EEAC. The Council looks forward to continuing its collaboration with the PAs and interested stakeholders as the PAs develop a fourth robust, innovative, and cost-effective electric and natural gas statewide Plan.

This resolution articulates the EEAC’s priorities for the upcoming 2019-2021 Plan, which were gathered and refined over the course of six collaborative planning workshops conducted by the Council between September 26, 2017 and January 30, 2018. Detailed briefing documents on priority topics were circulated before each workshop. During the workshops, Councilors engaged in discussion, with input from the PAs and Council Consultants, in order to develop the list of informed recommendations that is attached to this resolution..

In addition to the Council’s own input at the workshops, the stakeholder perspectives received during the upcoming public listening sessions will be an important consideration in developing the 2019-2021 Plan.

Priorities

The EEAC affirms the PAs’ obligation to acquire “all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply,” as stipulated in the GCA. In striving to meet this statutory requirement, the EEAC is requesting a 2019-2021 Plan that builds on prior Plans’ achievements, notwithstanding the expected decline in claimable electric savings from residential lighting initiatives. It is the Council’s strong sense that, in order to meet the requirements of the GCA, the PAs must approach the development of the 2019-2021 Plan with a willingness to implement innovative new energy efficiency and demand reduction measures and strategies, particularly in the residential, multi-family, and low-income electric sectors.

It is the Council’s sense that energy efficiency investments planned under the GCA should reflect the Commonwealth’s long-term greenhouse gas reduction requirements as established in the Global Warming Solutions Act (“GWSA”). This will require prioritizing from among cost-effective energy efficiency and demand reduction resources those measures and strategies that lead to greater lifetime emissions reductions. To this end, the Council wants in the plan strategic electrification of space heating and water heating equipment and other innovative approaches for achieving GWSA-supportive emissions reductions via the programs’ resource acquisition framework.

The Council will prioritize continuous improvement in lifetime savings, benefits, and customer experience, in order to ensure delivery of cost-effective programs that:

1. Increase participation by, and savings from, hard-to-reach and underserved populations and geographies, including moderate income, renters, small business, and non-profits.
2. Include goals specific to active demand management and integrate the delivery of active demand management offerings within the EE programs in the 2019-2021 Plan.

3. Promote & incentivize fuel switching strategies, in all sectors, that support the Commonwealth's long term greenhouse gas reduction requirements, as established under the Global Warming Solutions Act.
4. Provide a new, integrated residential program design that maintains strong savings and benefits for all residential homeowner and rental initiatives by:
 - a. Increasing customer capture,
 - b. Providing new methods for realizing savings,
 - c. Expanding HVAC, behavioral, financing, and upstream offerings, and
 - d. Increasing conversion rates for HVAC and weatherization measures.
5. Increase program savings in the C&I sector from HVAC, process, lighting, and CHP measures.
6. Actively promote zero energy ready buildings (ZEBs) & Passivehouse for new construction and major renovations in all sectors.
7. Establish a multi-family framework that better integrates residential and commercial offerings and is cost-effective.
8. Review low-income programs for potential improvements in participation and achievement of savings, and seek additional savings & cost-efficiency opportunities, to ensure continued success.
9. Modernize data management across all PAs and sectors, enhance accessibility to and usefulness of the data to the public, and leverage additional data sources to accomplish items 1-8 above.

Recommendations

The EEAC's initial recommendations regarding priority elements of the 2019-2021 Plan are listed below. These are the result of a collaborative and deliberative process during which the Council took care to focus its attention at a strategic level, allowing the PAs the flexibility to discern the most appropriate tactics for realizing the recommendations.

The Council appreciates that the cost-effectiveness and budgeting implications of each of these recommendations, individually and in total, will be carefully considered by the PAs. The Council looks forward to continued collaboration with the PAs, and to reviewing the draft 2019-2021 Plan and the PAs' written response to these recommendations.

Cross-Sector Recommendations

Active Demand Management

Include goals specific to active demand management and integrate the delivery of active demand management offerings within the EE programs in the 2019-2021 Plan.

- Move beyond the current demand demonstrations and scale up ADM activities fully in the 2019- 2021 Plan, including claiming demand savings and quantifying impacts.
- Integrate the delivery of ADM offerings with energy efficiency program delivery.
- Develop a goal for ADM that is separate and distinct from goals for traditional EE/passive demand reduction. Plan, track, and report the capabilities, performance, and costs of active demand management separately and in a manner that will enable development of and tracking towards the active demand management goal.

Commercial and Industrial Sector Recommendations

Combined Heat and Power

The electric PAs should set a clear and increasing target to grow CHP savings by:

- Utilizing EM&V and Council feedback to streamline participation, test alternative outreach models (e.g. circuit riders with an emphasis on small/medium customers), and increase collaboration with CHP vendors.
- Addressing potential for CHP in New Construction and small CHP systems
- Continuing to explore and seek to deploy resiliency (e.g. islanding) and ownership innovations (e.g. third party or other)

C&I Process Savings

The PAs should continue to increase process savings goals (electric and gas), in addition to other end use savings from industrial customers by:

- Increasing technical assistance and support to overcome barriers and increase savings
- Demonstrating that the PAs are sharing best practices and developing statewide initiatives on common end uses
- Providing additional energy consumption data to customers, including incentives for EMIS and benchmarking of different processes

Data-Driven Customer Acquisition and Engagement Strategies; and Big Data

The PAs should create a framework and incentives to increase the presence and use of market-driven data acquisition including software, granular energy usage measurement, and monitoring based commissioning services, including adjustments to the M&V framework to facilitate this activity.

Small Business

The PAs should increase savings in the Small Business Initiative (SBI) by:

- Unifying a SBI delivery model statewide (including statewide PA-led marketing)
- Promoting uptake of comprehensive measures

- Expanding outreach strategies and committed resources to target and engage a wider range of small business customers and owners of buildings occupied by small businesses
- Establishing a statewide small business and non-profit ambassador position that can act as an ombudsman for customers

New Construction

The PAs should seek opportunities and increase resources to drive continuous improvement and effective feedback loops in the new construction and major renovation market so that a higher percentage of buildings are served and low-energy use/low-GHG buildings are measured, recognized, promoted, and emulated in the market. Specifically, actively promote zero energy ready buildings (ZEBs) & Passivehouse for new construction and major renovations. Also pay particular attention to the commercial real estate sub-sector including new construction, major renovations, and tenant fit-outs.

Lighting & Controls

The PAs should maximize C&I lighting savings by emphasizing the linear lighting market and incentivizing active demand management-enabled controls. The PAs should increase the percent of lighting opportunities used as lead generation for non-lighting projects. Methods to consider include:

- Increasing participation in lighting initiatives (including upstream) by expanding marketing, outreach and technical support to customers, contractors, and trade associations
- A new offering, including education and training, to increase the penetration and successful use of advanced lighting controls
- Expanding lighting design service support for customers and designers/engineers, through a lighting design initiative.
- Converting all company owned streetlights to LEDs by the end of the next three-year plan including strategies that incentivize use of controls to capture greater energy savings.

HVAC & Controls

The PAs should increase HVAC savings and build market capacity for future HVAC savings growth. The PAs should work toward HVAC market transformation to make right-sized energy efficient HVAC systems the norm, and take a system optimization approach for existing and new systems in order to build a long-term upward savings trajectory for the next two three-year-plans. The PAs should:

- Conduct a market baseline study that includes recommendations to increase HVAC savings in the 2022-2024 three-year plan, and lays the groundwork for potential future efforts to assess market effects.
- Promote optimized building automation systems, including retro-commissioning and persistent commissioning of existing systems and rigorous design review and commissioning of new control systems.
- Address known market barriers to upfront investment in the engineering services necessary for system optimization through innovative program offerings. Incentivize performance verification and ongoing system tuning.
- Substantially increase ongoing education and training programs for building operators.

Fuel Switching

The Council recommends that the 2019-2021 Plan include fuel switching strategies that are consistent with and support the Global Warming Solutions Act. These include opportunities to strategically electrify energy use, and to switch from inefficient equipment to more efficient fuel and/or equipment, where cost-effective. A customer should be able to choose energy efficiency services regardless of current fuel, as long as the equipment or upgrade is to efficient equipment and is cost-effective.

Municipal

PAs should seek opportunities and increase dedicated resources to align relevant programs with municipal processes, timelines and financing streams, and to enhance savings and participation.

Residential Sector Recommendations

Heating and Cooling Equipment

- Emphasize an integrated, systems-based approach to HVAC equipment promotion and installation, particularly for heat pumps and condensing boilers
- Streamline the customer experience and ensure seamless and comprehensive delivery of all measures
- Ensure service providers are broadly knowledgeable and compensated appropriately, and/or prescreen customer projects to match them with service providers with appropriate expertise
- Expand HVAC efforts by providing new active demand management and fuel switching measures along with the appropriate education of the consumer
- Expand water heating and HVAC upstream offerings, leveraging best practices and lessons learned from the C&I sector
- Enhance connections between HVAC, weatherization, and other whole-house offerings, enabling customers to engage in more holistic improvements in a single transaction or over time
- Weatherization should remain a high priority and focal point

Serving Hard to Reach and Underserved Populations and Geographies

Increase participation and savings for hard to reach populations by:

- Implementing a stakeholder engagement process to reassess program design and improve participation in renter and moderate income customer initiatives
- Identifying underserved demographic groups, developing new segmented approaches to serve them, identifying best marketing and sales approaches to reach them, and adequately funding and incentivizing these approaches
- Increasing outreach and partnerships with community based organizations and social networks, municipalities, employers, and other organizations
- Applying lessons learned from low income programs
- Using data more effectively to better target customers – specifically geo-targeting and identification of areas with linguistic barriers
- Developing new delivery models to increase participation rate of households between 60 and 80 percent median income

- Implement methods to increase access to and use of financing across all customer segments

Behavior Programs

Broaden current behavioral program strategies to include cost-efficient new approaches for customers of all Massachusetts PAs – for example, using a statewide procurement and integrating customer data for better customization

New Construction

- Offer specific low energy path(s) such as net zero energy ready and Passivehouse (multi-family) to better align with the stretch code and to drive construction of low energy buildings and market transformation
- Integrate active demand management measures that promote load shifting opportunities of solar photovoltaics, electric vehicles and chargers, and storage
- Explore opportunities to capture additional savings via major renovations

Integrated Residential Program Design

Increase participation levels and maintain strong program savings and benefits achievements for all residential homeowner and rental initiatives by providing a new integrated residential program design that:

1. **Increases customer capture**
 - Segment, target, prioritize, and customize marketing and offers to customers by leveraging remotely accessible data, third-party sources, and real-time site data
 - Increase the points of entry into the Mass Save program for customers during home improvement, financing, and other transactions, linked to incentives that meet a wider range of customer needs
 - Cultivate, diversify, and expand market channel and community partnerships to inform, recruit, and enroll customers in the program
2. **Provides new methods of realizing savings**
 - Promote cost-effective new fuel switching measures that are consistent with and support the Global Warming Solutions Act
 - Integrate new active demand management measures (e.g. EV charging) and storage into EE programs, in addition to achieving passive demand reductions through efficiency
 - Co-deliver and coordinate electric vehicles/charging, distributed energy resources, and other related services with EE programs, while ensuring primacy of energy efficiency measures
3. **Increases conversion rates for existing measures** (especially weatherization, heating and cooling)
 - Develop new audit approaches, including data-driven remote options
 - Provide an easier path and reduce barriers for customers – require fewer steps, automate and expedite the approval processes, and improve access to financing
 - Improve feedback loop and increase targeted reengagement to close on recommendations
 - Cultivate and expand trusted, long-term relationships with customers
 - Offer greater customization to customers using single measure, comprehensive, incremental, and performance-based options
 - Support sales training and recognition for individuals who are in contact with the customer.

Multi-Family Program

- Establish a multi-family retrofit program framework that seamlessly integrates residential and commercial metered savings opportunities into whole building solutions, and increases uptake of whole building measures
- Enable program tracking and energy benchmarking by building/facility to support improved customer service and provide customizable levels of service appropriate to varying customer and building types including incremental paths to whole building improvements
- Identify and present options to address market and regulatory barriers to serving multifamily properties, including a blended benefit cost ratio for multifamily core initiative
- Leverage key points in the building life cycle including refinancing
- Reexamine a pay for performance program for market rate multifamily

Low-Income Sector Recommendations

- Identify and support new and enhanced electric and gas measures and innovative strategies
- Review program model strategies to achieve additional cost efficiencies
- Identify and implement continuous improvement opportunities and document in the 2019-2021 Plan
- Assess whether there are gaps in participation and take steps to deliver equivalent and proportional services across the Commonwealth, if necessary
- Develop and demonstrate alternative measure packages and service delivery models to serve a wider and diverse range of customer needs and interests
- Ensure communication between the market rate and Low-Income Programs to identify and coordinate program innovations when applicable
- Increase outreach and partnerships with community based organizations and social networks, municipalities, employers, and other organizations