

Residential Programs: From Planning to Implementation

Key Implementation Activities to Ensure Effective Programs

Council Residential Consultants

MA EE Advisory Council Meeting
November 24, 2009

Residential Consultant Team: Range of responsibilities

- Serve as the arm of the EEAC in all EE program development and implementation activity
- Work with PAs to develop, implement and refine successful programs
- Engage PAs on Council priorities
- Develop aggressive performance metrics
- Coordinate with Evaluation team/activities
- Bring multi-state experience to MA programs
- Support EEAC activities

Focus in 2009: Developing the 3-Year Plans

- Established aggressive savings goals
- Established a cross-program cross-fuels focus
- Developed a strong set of new and improved statewide residential program designs to go after 'deeper' (and broader) savings
- Developed challenging Performance Metrics for 2010
- Monitored implementation of 2009 programs

Focus in 2010:

Implementing the 3-Year Plans

- Complete tasks to prepare for program start-up
- Roll out and monitor new program designs
- Focus on going 'deeper' to achieve Council-established savings targets
- Coordination among numerous PAs (gas/electric)
- Monitor progress toward performance metrics
- Do, Learn, Adjust/Mid-course adjustment process
- Public education and marketing

Lighting Program

- Develop and implement revised lighting program design (in response to recent evaluation results showing low Net-to-gross ratios)
- Large increase in specialty CFLs (identifying and targeting hard to reach customers and market channels)
- Planning for 2012 Federal lighting standards
- Availability of ENERGY STAR SSL/LED lamps in 2nd half of 2010 (new opportunity/rapidly evolving technology)

Appliances/Consumer Electronics

- Integration with ARRA-funded state appliance rebate program
- Developing and implementing models to target efficient consumer electronics (e.g. TVs)
- Exploring regulatory/legislative solutions for other consumer electronics (e.g. set top boxes)
- Rolling out statewide refrigerator early retirement & recycling program

HVAC Program

- Gas and Electric integration (CoolSmart and GasNetworks)
- Applying results of Gas heating/hot water evaluation to gas program (i.e. potential program design modifications)
- Increasing market share of efficient cooling equipment with proper installation
- Heat pump water heater pilot (promising new technology, 50%+ savings possible)
- Coordination of duct sealing across programs

RCS/MassSAVE Program

- Complete working group activities to prepare for program launch
- Monitor implementation of new program (Do, Learn, Adjust)
- Maintain focus on 'deeper' savings
- Integrate 2009 metric activities/results with 2010 program implementation (e.g. single statewide audit, Existing Homes rating, Comprehensive Education Package)

New Construction Program

- Planning for 'stretch code' towns
- IECC 2009 implementation and coordination with HERS raters and code officials (duct testing & air leakage testing)
- Program savings adjustment with new code
- Code savings attribution metric implementation
- ENERGY STAR Homes version3 – 2011 planning and implementation
- Evaluation planning: Baseline study
- Integrate EPA's Remodeling w/ENERGY STAR pilot into MA program
- Coordination with MF new construction program

Multifamily New Construction Program (4-8 stories)

- Monitor implementation of new program (Do, Learn, Adjust)
- Maintain focus on 'deeper' savings
- Coordinate with Residential New Construction and C&I programs
- Provide objective feedback to the Council

Multifamily Retrofit Program

- Monitor implementation of new program (Do, Learn, Adjust)
- Maintain focus on 'deeper' savings
- Coordinate with C&I and Low Income MF programs as appropriate
- Provide objective feedback to the Council

O-Power Program

- Monitor roll out of new program with NGRID and NSTAR, and investigate statewide expansion
- Do, Learn, Adjust
- Provide objective feedback to the Council

Pilot Programs (partial list)

- Deep Energy Retrofit pilot
- Major renovation pilot
- Hot roofs pilot
- Heat Pump water heater pilot
- New construction lighting design pilot
- New construction Ver3 ENERGY STAR Homes pilot

Residential Managers Working Group

- Forum for addressing and resolving higher level residential issues (cross-PA coordination)
- Coordinate all activities of the working group
- Discussions above level of program working groups (program design/implementation)
- Metric discussions
- Integrating new financing into programs
- Establishing working groups, as needed (e.g. Technical Review Committee)

Low Income 1-4 and MF Programs

- Monitor implementation of Low Income 1-4 and Multifamily programs (Do, Learn, Adjust)
- Provide cross-sector (Residential-Low Income) perspective
- Engage with Best Practices working group on new EE measures and strategies
- Provide technical assistance to LEAN

Residential Metrics for 2010

Deeper Savings Metrics

- MassSAVE/Weatherization: Deeper Savings
- MassSAVE: Increase Direct Install bulb penetration
- CoolSmart: Increase % of correct installations
- Products: Set Top Boxes

Infrastructure Metrics

- Community Initiatives
- MassSAVE: Explore inclusion of Energy Professionals

Low Income Metrics for 2010

1. Low-income Best Practices working group/measure pilots
2. Low-income Auditor Training & Contractor Recruitment/Support
3. Low-income 1-4 Retrofit: Deep Energy Retrofit

Residential/Low Income Evaluation Activities in 2010 (partial list)

- MassSAVE process and impact evaluations
- Low-income program process and impact evaluations
- Res New construction baseline study
- Process evaluation of gas/electric integration efforts
- Evaluation of Deep Energy Retrofit pilot
- New lighting net-to-gross impact study
- Study to determine savings potential in MF sector
- Evaluation of community-based pilots
- Behavioral programs evaluation (e.g. O-Power)
- Residential & Low-income Non-energy benefits studies

Conclusions

- There's quite a lot going on
- This unprecedented effort to achieve the Council's aggressive savings goals and to set the stage for ramping up in years 2 and 3 will require all hands on deck
- The RES Consultants bring a broad range of experience and expertise to the table
- We can't afford not to get this right