



Commercial Real Estate Working Group

Final Presentation to EEAC

July 21, 2015

Background and Outline

- Outline

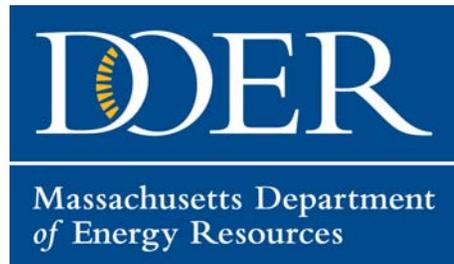
- Background
- Work to Date
- Results
- Next Steps



- Point 380 Market study from 2012 identified Office as a prime opportunity for energy savings in the near future
- 2013-2015 Plans included development of a roadmap to better serve the CRE sector

Mission

- The Commercial Real Estate Working Group (CRE WG) seeks to identify barriers and opportunities to create market based solutions that enable energy efficiency investments in the Commercial Real Estate Sector



Work of the CRE WG

- Multiple phases:
 - Secondary Research
 - Primary Research
 - Develop Strategies
 - Roundtable Discussions
 - Analyze and Present Findings



Secondary Research

- Understanding the best practices locally and elsewhere to realize savings through investments in energy efficiency.
- Reports reviewed include:
 - C&I Customer Profiles & Market Sector Profiles
 - Mid-Size Customer Needs Assessments
 - A Better City Reports
 - NEEA - Existing Building Renewal/Commercial Real Estate Research
- CRE WG concluded that research with market actors in Massachusetts was necessary to get a more thorough understanding of this sector.

Primary Research

- The CRE WG members recruiting interview participants for this Opinion Dynamics led research effort.
- The goals of the research effort were:
 - To understand lease structures
 - The EE Decision Making Process
 - The best ways for PAs to approach tenants and
 - How customers track energy use



Primary Research - Results

- Common lease structures create a split-incentive, but the majority of leases pass along energy costs to tenants.
 - Owners tend to be the primary decision makers.
- Majority formally track energy and compare to peer buildings
- Similar to non-core business activities, actors lack time, knowledge and/or resources to pursue EE measures effectively.
- EE upgrades are typically done when the use of the space starts.
 - Tenant fit-up decisions occur rapidly.
 - The window of opportunity is very narrow.
- Firms are open to more regular contact from the PAs.
- Some owners want more complex solutions and PA assistance.

Developing Strategies: Research Focus Areas

- Expand on Turnkey-delivery Models for CRE customers
 - Vendors better understand CRE opportunities
 - Target new construction, retrofit, and tenant fit out projects
- Offer “Packaged options” Targeting Specific CRE Market Segments
 - Package typical measures including lighting, lighting controls, HVAC, refrigeration to encourage ‘multi-measure’ solutions
 - Reduce paperwork and streamline application processes
- Promote “Dashboards” and Building Labeling
 - Provide Building Energy use data and peer level benchmarking
 - Work with building operators and occupant load reduction programs
- Champion the use of “Energy Efficiency Leases”
 - Explored in focus groups, but not an area for further PA exploration

Roundtable Discussions

- The Four “Go-To Market” strategies were tested with market actors in a series of Roundtable Discussions in a focus group format.
 - October to November 2014
 - Large owners – Massachusetts based
 - Tenants – Large and Small Massachusetts based tenants
 - Small Owners – One on one discussions
 - Brokers – Not sufficient interest to convene a group
- Primary goals were to determine:
 - If these strategies were viable means to promote EE
 - If so, how they could be best refined to produce results

Pre-Packaged Options for CRE Market

- Best time for EE improvements is during tenant build-out
- Bundle of measures that could address lighting, space conditioning, and specific process related energy loads, like refrigeration and commercial cooking
- Tenants and Owners showed interest in pre-packaged
- Believed it could reduce the number of missed opportunities and wanted to see bonus incentive for installing multiple measures.
- Suggested that PAs offer different “levels” of packages (“good”, “better”, and “best”) to cater to firms’ varying needs and budgets.
- Tenants suggested adding plug load monitoring and control

Dashboards and Building Labeling

- Dashboards

- Participants indicate that displaying energy usage at a tenant and building level can contribute to energy efficiency and real-time tracking can improve occupants' awareness of energy use and behaviors
- Customers becoming more conscientious about energy usage
- Behavior programs that reduce energy use discussed

- Benchmarking

- Belief that BERDO has helped better track building energy use
- Benchmarked data to compare to other buildings and tenants can be very beneficial
- EUI and kWh/sf and MBTU/sf metrics most useful
- Tenants would also like to see the energy use data linked to cost.

The Turn-key or Direct Install Model

- Smaller Owners do not have resources to identify potential improvements and keep track of available incentives. This model would reduce cost and the time and resources required for energy-efficiency actions
- Program typically focused on smaller Owners/managers
- Those interviewed saw value in the turnkey model:
 - Perceived decrease in owner/tenant cost to achieve energy efficiency upgrades.
 - Financial help, from incentives to financing, is likely to increase the likelihood of making energy efficiency upgrades

Technical Assistance and Outreach

- Feedback suggests smaller market actors want more regular contact from about energy efficiency opportunities and available incentives.
- Both groups believed PAs should be involved as early as possible and should reach out to the tenants because they often do not have the knowledge to make upgrade decisions, while keeping managers in the loop.
- Owners believe that outreach to architects and engineers would be beneficial. Tenants had concerns about draft specification language.

Constraints to Overcome

- The number and complexity of CRE accounts require diversified marketing strategies
- CRE customers require complex solutions with sufficient financial incentives.
- CRE customers require quick decision-making and limited paperwork requirements.
- There is a need for more contractors sufficiently trained in comprehensive solutions.
- New Prescriptive Packages will require complex technical work

Continued Exploration

- Alternative incentive structures
- Potential packages linked to characteristic tenant occupancies
- Dashboards linking customer and utilities
- Innovative measurement technologies
- Promotion of advanced building operator training
- Streamlined whole building energy audits
- Work to implement best practices study for retro-commissioning (RCx)
- Turn-key support services

Questions?

- Full CRE WG Report available on the EEAC Website at:
 - <http://ma-eeac.org/wordpress/wp-content/uploads/Commercial-Real-Estate-Working-Group.pdf>



Commercial Real Estate Working Group Final Report

Prepared by Charles Michal and the Members of the CRE WG

May 4, 2015
FINAL REPORT

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