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Commercial Real Estate (CRE) Market Test Assessment: Understanding Delivery, Partnership Strategies and Program Channels

Prepared by:
New Buildings Institute
1601 Broadway Street
Vancouver, WA 98663

Northwest Energy Efficiency Alliance
PHONE
503-688-5400
FAX
503-688-5447
EMAIL
info@neea.org

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1 EXECUTIVE SUMMARY

NEEA, through its Commercial Real Estate (CRE) Initiative, is seeking to drive the adoption of energy efficiency best practices. These best practices include behaviors and tools that continuously support effective implementation of energy management. The Initiative's target market is CRE executives in firms holding portfolios of income-producing office, warehouse and big box retail in a range of Northwest markets.

The objective of this study was to better understand the delivery, partnership strategies and program channels for promoting the adoption of energy efficiency best practices in CRE and identify findings that will enhance the CRE Initiative approach and outcomes.

The study focused on three primary study areas to provide the market feedback and data to accomplish the objectives:

1. **CRE Executives** - Understand the knowledge, perspective and interest level of executive-level CRE professionals and identify the most successful learning formats and influence channels for content delivery.
2. **Bright Spot Analysis** - Gather details from CRE firms whose approach to energy efficiency is substantially better than market norms and identify some of their key energy efficiency activities, better understand why and how these activities were developed and supported, and clarify the benefits to the CRE firm.
3. **Licensing, Credentialing and Accreditation (LAC)** - Understand LAC trends to provide insights on how future LAC trends might reduce market barriers. Explore and understand the current and near-term energy efficiency LAC programs with focus on CRE-related trade associations.

1.1 Key Themes and Strategies

The findings identified six key themes and potential strategies for NEEA's consideration:

Theme #1: Information Overload

- The market is awash with information, education, ideas, promises, proposals and businesses related to energy efficiency, causing confusion for CRE teams and delaying or eliminating energy efficiency decisions.
- Firms lack both time and staff expertise to resolve information gaps and conflicts.
- Information presented on energy efficiency is not properly targeted to CRE and their business case.
- A lack of understanding of NEEA's role and offerings only serves to contribute to the amount of "noise" in the marketplace.

Theme #2: CRE Firms Manage Properties as a Team

- Decisions about efficiency investment are typically a team effort that involves a messy matrix of inputs and decisions from several organizational levels.

- Informal energy “Champions” are an important influencer at many CRE firms. Sometimes the champions are executive level (lacking critical details), sometimes lower level (lacking authority).
- Bright Spot firms typically have a dedicated sustainability or energy staff at a senior level that works across teams to add perspective and analysis.

Theme #3: A Lack of Energy Efficiency Platforms and or Plans

- Benchmarking is increasingly being utilized by the CRE industry, however not as part of a corporate or portfolio-wide approach to energy efficiency.
- CRE firms rarely have a fully developed, integrated and documented energy efficiency platform and or plan.
- Properties and energy efficiency investments are generally considered on a case-by-case basis, with utility incentives being a major motivator.
- Bright Spot firms elected sustainability and energy policies, rather than a detailed energy management plan.
- LEED is the most desired building certification or label.

Theme # 4: The Need for Actionable Insight via Certification and Training

- Professional CRE industry courses and vendor trainings should focus on energy efficiency actions that can be applied in the short term.
- Credential and certification options are growing while the number of individuals seeking professional development remains relatively constant. .
- Emerging professionals are most interested in immediate action activities that provide for career advancement in the near term.

Theme #5: Differences in CRE Business Structure Matter

- Information and trainings often do not reflect a good understanding of the CRE market. A “one size fits all” approach was commonly cited in the interviews as a barrier for adoption of current industry programs focused on energy efficiency.
- The primary market motivations to invest in energy efficiency vary greatly based on the business structure of the firm. When it comes to the promotion of energy efficiency we believe it to be beneficial to tailor strategies and approaches to the following three types of firms:
 1. Larger Investor/Owners and Real Estate Investment Trusts (REITs)
 2. Third-Party Property Managers
 3. Smaller Independents

Theme #6: The 2030 District and Impactful Partnerships

- When surveyed about existing policies and programs in the Northwest, the Seattle 2030 District was most recognized by the executives interviewed (whose firms managed portfolios in the Seattle market).

- The Seattle effort appears to have demonstrated that local efforts with shared goals, peer-based learning, and socialization of global concerns can promote engagement and action.
- There was a strong consensus among those with buildings in the District that their efforts were improved and influenced greatly because of the 2030 District.

1.2 Recommendations

The research team summarized the findings into 12 priority recommendations for the initiative:

1. Provide clear and consistent messages around a limited set of best practices to increase credibility for energy efficiency.
2. Set a progressive path of action that defines best practice or, in some cases, even standard practice to ensure the most robust approaches are consistently adopted across a range of buildings.
3. Promote the adoption of corporate sustainability policies rather than only the energy efficiency targets and plans.
4. Leverage Energy Star brand recognition and work products showing the value.
5. Create peer networks focused on energy efficiency within trade group committees and pursue replication of peer-based efficiency modeled on the Seattle 2030 District.
6. Provide experiential opportunities – show-and-tell within actual buildings with peer-to-peer communication to discuss cost, complexities of install, non-energy benefits and savings. Incorporate “lunch and learns” as a standard format for sharing such information.
7. Assist internal champions in promoting the energy efficiency best practices through case studies and specific tools and resources.
8. Understand and approach the market based on the distinctions between large REITs and investor-owners, third-party property managers, and smaller independents.
9. Create financial decision-making guides and simple tools targeted to the CRE business models.
10. Provide financial, logistical and messaging support for educational leaders and influencers (Building Owners and Managers Association (BOMA), International Facility Management Association (IFMA), Institute of Real Estate Management (IREM) and Building Owners and Managers Institute (BOMI)) and vendors focused on educating property, asset and operations managers.
11. Create market clarity in terms of what education and training are available.
12. Leverage existing CRE partnerships as an outlet for sharing success stories and case studies and the vendors responsible for implementing building-specific energy efficiency best practices.

2 INTRODUCTION

NEEA, through its Commercial Real Estate (CRE) Initiative, is seeking to drive the adoption of energy efficiency best practices by addressing key market barriers. To this end, NEEA engaged New Buildings Institute (NBI) to conduct research to better understand the delivery, partnership strategies and program channels for promoting the adoption of energy efficiency best practices in CRE.

2.1 Background

NEEA's Commercial Real Estate Initiative started in 2007. Its primary focus is to leverage strategic partnerships with the Northwest's CRE market to deliver a broad range of energy efficiency best practices, demonstrating energy efficiency as a powerful competitive advantage. The Initiative's target market is CRE firms holding portfolios of income-producing office, warehouse and big box retail in a range of Northwest markets such as the 'large' markets of Greater Puget Sound and Greater Portland, 'medium' markets like Tacoma and Spokane, and 'smaller' markets like the Tri-Cities and Missoula.

NEEA accomplishes adoption of energy efficient measures within this target market by working with real estate firms and professionals engaged in the development, management and operations of commercial office buildings. The aim of the initiative is to offer a wide range of energy efficiency best practices and tools to enable key participants in this market to reduce energy usage and remain competitive.

2.1.1 CRE Initiative Cohorts

The CRE Initiative consists of two cohorts; the Market Partners Program (MPP) and the Commercial Office Efficiency Competitions (Office Competitions). The MPP engages CRE firms for two years and employs a coaching process that focuses on integrating Strategic Energy Management (SEM) into the firm's business practices. The Office Competitions engaged CRE firms over the course of a year at the building level to adopt principles of SEM and energy management best practices. In 2013 this effort was launched as the Kilowatt Crackdown in Portland, Oregon, and Boise, Idaho (The Cadmus Group, 2014).

While this research project is not directly associated with either of these two cohorts, given their presence in the CRE market in the Northwest, they are mentioned here as part of the context of NEEA's existing market engagement strategy for the promotion and adoption of energy efficiency practices.

2.1.2 Energy Efficiency Best Practices

While SEM was a central focus of both the MPP and Office Competitions cohorts, NEEA has strategically repositioned the focus of the CRE Initiative to be on *energy efficiency best practices*, with SEM being positioned as a tool promoted for the CRE market. NEEA has provided NBI with the following definition of *energy efficiency best practices*:

"Energy efficiency best practices broadly include behaviors and tools that support effective implementation of energy management. In contrast to a single project, best practices tend to increase energy performance over time in buildings, portfolios or organizations.

Examples range from adoption of specific technical practices by individuals or teams, to organizational goal-setting and reporting, to whole-building retrofits.”

2.2 Research Objectives

Assisting NBI on this project were davidwhewett, inc., and BZ Business Systems. This team conducted market research to meet the following information needs:

1. To gain a full understanding of the knowledge, perspective and interest level of executive-level CRE professionals on the topic of energy efficiency best practices, specifically to better understand:
 - a. Knowledge of energy efficiency best practices for CRE
 - b. Influence channels and partners in program adoption and implementation of energy efficiency best practices
 - c. Key methods for information updates and education on the latest energy efficiency best practices
 - d. Effectiveness and market perception of credentials for adopting and implementing sustainability and other energy efficiency measures
2. Gather details from CRE firms whose approach to energy efficiency is substantially better than market norms and identify some of their key energy efficiency activities, better understand why and how these activities were developed and supported, and clarify the benefits to the CRE firm.
3. To explore and understand the current and near-term licensing, accreditation and certification (LAC) programs leveraged for distribution of energy efficiency best practices to the CRE market, with a focus on CRE-related trade associations.
 - a. Determine and list existing CRE LAC tracks and competing alternatives that currently exist at the portfolio, building and individual levels
 - b. With the list of available tracks:
 - i. Determine what gaps NEEA can fill based on an existing track
 - ii. Identify competing alternatives
 - iii. Determine the number of certificants when possible
4. Understand LAC trends to provide insights for further initiative strategy development.

2.3 Methodology

Table 1 provides a summary of the research methodologies used to meet the major research objectives indicated above, and the three primary research tasks conducted as part of this project.

Table 1: Research Objectives and Approaches

Research Objective	Research Approach	Research Task
To gain a full understanding of the knowledge, perspective and interest level of executive-level Commercial Real Estate (CRE) professionals on the topic of energy efficiency best practices.	Interviewed 21 CRE executives representing 18 firms	1. Executive Interviews
Identify the most successful learning formats and influence channels for content delivery to advance energy efficiency product awareness and skill development as well as other energy efficiency best practices by CRE executives.		
Gather details from CRE firms whose approach to energy efficiency is substantially better than market norms and identify some of their key energy efficiency activities, better understand why and how these activities were developed and supported, and clarify the benefits to the CRE firm.	Interviewed 6 CRE professionals at multiple organizational levels representing 3 firms	2. Bright Spot Analysis
To explore and understand the current and near-term licensing, accreditation and certification (LAC) programs leveraged for distribution of energy efficiency best practices to the CRE market, with focus on CRE-related trade associations.	Interviewed 17 representatives from 5 CRE-related trade associations Conducted market research	3. Licensing, Accreditation and Certification
Understand LAC trends to provide insights for future initiative strategy development.		

2.3.1 Interviews

For all three sets of interviews, the research team put together an interview guide for each of the interviews.

The project team conducted 18 executive interviews between August 2014 and November 2014. Each interview was conducted over the phone and lasted approximately 60 minutes.

The three Bright Spot interviews were conducted in September 2014. Each interview was conducted over the phone and lasted approximately 60 minutes. The interview guide was structured around the five topic areas that sought to understand how energy efficiency is promoted and tracked at a corporate level, what defined a successful team, and what could

assist the team in further adoption of energy efficiency strategies and practices. The entire Bright Spot interview guide appears in Appendix B.

The research team developed two slightly different interview guides that served to guide the national- and local-level interviews respectively. These interviews were conducted over the phone in August and September of 2014 and lasted approximately 60 minutes. The interview guide for the national-level organizations focused on current offerings that addressed energy efficiency as well as the primary barriers to the increased adoption of energy efficiency best practices through LAC programs. The interview guide for the BOMA locals focused on current energy efficiency educational/training offerings and programs, perceived value of the current offerings, and ways in which NEEA could support these efforts going forward. Both of these interview guides appear in Appendix C.

3 RESEARCH TASKS

As noted in

Table 1, the project team structured this project around three primary research tasks. While the project team considered all three tasks when identifying the key market themes and findings that are documented in Section 4, each research task had its own objectives and therefore involved different approaches and target audiences, and ultimately resulted in varied findings.

3.1 Executive Interviews

In identifying which individuals to target, we took full advantage of the expertise and connections of David Hewett. Mr. Hewett is well known both nationally and in the Northwest, where he has spent much of his career. The project team leveraged his professional connections in compiling a list of 53 CRE Executives from around the country and throughout the Northwest.

3.1.1 Markets Represented

The CRE firms interviewed represent a range of markets globally and throughout the Pacific Northwest, as illustrated in Table 2 below.

Table 2: Primary Markets Represented by CRE Firms Interviewed

Primary Market	Number of Firms Interviewed
Global	3
National	3
Pacific Northwest	12
Total	18

Specific to the Northwest, there was a deliberate attempt to represent not only the larger metro markets of Seattle and Portland but also to ensure representation from the mid-size to smaller markets. Table 3 indicates the number of CRE firms interviewed from the larger metro areas of Portland and Seattle and the mid-size to small markets that are distributed throughout the states of Idaho, Montana, Oregon, and Washington.

Table 3: Pacific Northwest Submarkets

Pacific Northwest Submarket	Number of Firms Interviewed
Portland and Seattle Metro	10
Spokane, Coer d'Alene and Bend	2*
Total	12

*These two firms conduct work in all of the four Northwest states.

3.1.2 Building Types Represented

All 18 firms included office buildings in their portfolios. Additionally, retail, warehouse and mixed-used buildings were represented in the portfolios of the CRE firms interviewed. Table 4 indicates the number of firms associated with each building type.

Table 4: Building Types

Building Type	Number of Firms Interviewed
Office	18
Retail	8
Warehouse	7
Mixed Use	3

3.1.3 CRE Firms and Titles

Table 5 lists the firms represented in the executive interviews, the titles of the individuals interviewed and the number of individuals present for the interview.

Table 5: CRE Firm and Title of Executives Interviewed

CRE Firm No.	Title(s)	Number of People Interviewed
1	Senior Vice President; Project Director	2
2	CEO; Vice President, Construction; Vice President, Property Management	3
3	CEO	1
4	Executive Vice President	1
5	Senior Vice President of Commercial Properties	1
6	Development Manager	1
7	Vice President, National Operations Manager	1
8	Director, Property Management	1
9	Director of Operations	1
10	General Manager	1
11	Director of Corporate Services	1
12	Vice President, Sustainability	1
13	Senior Vice President, Property Management	1
14	Senior Property Manager	1
15	President, Construction	1
16	Director, Global Energy & Sustainability	1
17	Vice President of Commercial Property	1
18	Senior Managing Director	1

CRE Firm No.	Title(s)	Number of People Interviewed
Total		21

3.1.4 Research Findings of the Executive Interviews

Below are the key findings from each of the four primary topic areas covered in the interview guide.

1. Knowledge of energy efficiency best practices for CRE.
 - The attention CRE staff can pay to energy efficiency is extremely limited. Within energy efficiency topics there is too much noise - conflicting or unreliable information and significant skepticism about performance, some based on previous experience. This can be applied to both the number of energy efficiency products and services available as well as to the various programs, certifications and educational opportunities.
 - CRE firms indicated that for the most part they are only installing the most robust energy efficiency measures, those that are well proven and have short paybacks periods (less than three years, and in many instances only one or two). Despite this focus, we determined from the limited scope of the energy efficiency projects described that there is "low-hanging fruit" still available within CRE.
 - Almost all firms have done some form of benchmarking. Successful firms have internalized this process by using resources such as Energy Star Portfolio Manager.
 - When a building certification or label is important to an owner, LEED is the brand most desired. Although the group generally agreed on this, there is still a healthy dose of skepticism around the legitimacy of the LEED program, especially when it comes to the validity of the energy requirements.
2. Influence channels and partners in the adoption and implementation of energy efficiency best practices.
 - Market channels of information for CRE Executives are diverse, and with the notable exception of utility incentive dollars there are no clear standouts. Trade publications were generally considered to have the lowest influence on participants. It was not clear if these influence channels also applied to specific energy efficiency products or services.
 - Most decisions about property management are made by a team that includes the property manager, engineering staff and one or more senior executives. Decision-making about energy efficiency was often spearheaded by an internal champion. The ability of this champion to get buy-in from the rest of the team is essential.

- Challenges associated with projects pitched by trade allies and consultants were typically tied to a lack of understanding of the CRE business model. Claims are often either unsubstantiated or do not include quantifiable savings estimates.
 - The financial decision-making process for energy efficiency tasks or upgrades outside the normal budget cycle is complicated and requires higher level approval beyond simple operation and maintenance (O&M) measures. Budgeting for more significant improvements can be a 12- to 18-month process.
3. Key methods for obtaining information updates and preferred learning formats, learning channels and content delivery on energy efficiency.
 - CRE executives strongly rely on their professional networks and word of mouth for obtaining information on energy efficiency strategies and best practices. Industry publications are generally disregarded.
 - *Lunch and learns* are the most preferred format for learning.
 - There was an expressed desire for “actionable insight” from formal professional courses (BOMA, IFMA and BOMI) and vendor trainings.
 4. Market perception of credentials.
 - Hiring managers and organizations hiring subcontractors continue to use credentials as a base-level guide in the process, even if they are not fully aware of a credential’s full value.
 - Credentials can be a good indication of professional commitment and desire to gain greater knowledge on a subject, but tenure, experience and good recommendations hold greater weight at the executive level.

3.2 Bright Spot Analysis

When identifying which CRE firms met the criteria of *having well-established energy efficiency practices that make them excellent examples for others*, NBI relied primarily on its subject matter experts to make recommendations. These recommendations were based on their knowledge of how those firms manage their properties, as well other indicators such as being recognized as an Energy Star Partner of the Year, participating in the Global Real Estate Sustainability Benchmark (GRESB) and featuring a significant number of LEED-certified projects across their portfolios. Based on this research, the team identified and submitted for NEEA’s approval nine CRE firms whose approach to energy efficiency was considered substantially better than market norms. From this list, NBI secured interviews with representatives from three of these firms, including one located in the Northwest, per NEEA’s request.

3.2.1 Bright Spot Firms

Table 6 lists the firms that participated in this portion of the project and some qualifications that demonstrate their leadership position with regard to energy efficiency:

Table 6: Bright Spot Firms Interviewed

Bright Spot Firm	Leadership Qualifications
A	Recognized by the Environmental Protection Agency (EPA) with a 2014 Energy Star Partner of the Year Sustained Excellence Award for its continued environmental leadership. This award recognizes the firm's long contribution to reducing greenhouse gas emissions through the use of innovative energy efficiency approaches. This is the 12th consecutive Energy Star Partner Award for this firm.
B	Portfolio includes multiple buildings that have been recognized by Energy Star for demonstrating excellence in energy management and that have received LEED Platinum Certification.
C	Recipient of a 2014 Energy Star Partner of the Year award. Named the North American leader in sustainability by Global Real Estate Sustainable Benchmark. GRESB ranked this firm first among 151 North American participants across all asset types, and fifth worldwide out of 637 participants.

3.2.2 Bright Spot Professionals Interviewed

A key element of this task was to interview multiple individuals involved in the energy efficiency decision-making chain in order to understand how these industry leaders identify some of their key energy efficiency activities, why and how these activities were developed and supported, and to clarify the benefits to each firm. Table 7 below indicates the primary roles and quantity of the professionals interviewed for this task.

Table 7: Roles and Quantities of Bright Spot Interviews

Roles	Number of People Interviewed
President or VP of Sustainability	2
Asset Manager (at a Senior VP or VP level)	2
Direct or VP of Facilities and Engineering	2
Total	6

3.2.3 Research Findings

Below are the key findings for each firm associated with each of the five primary topic areas covered in the Bright Spot interview guide.

Table 8: Summary of Bright Spot Findings by Firm

Topic Area	Firm A	Firm B	Firm C
Corporate Commitment	Publicly available Energy Management and Sustainability policy designed to improve financial performance Ongoing tracking and measurement	No formally adopted energy efficiency commitment or policy Use a longer-than-typical time frame for energy efficiency investments as they hold properties over time	Publicly available Sustainability Objectives Action Plan and Energy Policy Annual reporting
Staffing Structure	Dedicated sustainability staff between Executives and Property Managers Recognition and bonuses based on performance	General managers meet biweekly to discuss and share information on properties including energy Annual two-day asset review	Dedicated three-person sustainability team that includes an MBA and an Engineer Would benefit from an energy supply expert for distributed generation and demand management

Topic Area	Firm A	Firm B	Firm C
Operations & Maintenance (O&M) Plan	All buildings benchmarked and actively monitored Energy management plan in place for each building with annual report of actions	All buildings benchmarked and actively monitored Annual energy upgrade budgeting process based on audits and ROI	Annual walk-through of each building with team Third-party detailed energy use tracking of load profiles
Program Enhancement ¹	Recognition program based on performance Effective messaging on the benefits of utilizing low- and no-cost resources such as Portfolio Manager	Many opportunities exist between the typical “low-hanging fruit” done in CRE and best practice demonstration projects Tenant education	Need to enhance business case, clearly show ROI More training for vendors on how to effectively sell to CRE professionals
Credentials	Places more emphasis on capabilities and track record	Tenure, experience more important LEED credential not strong enough on energy	Important for engineers BOMA linkages useful

3.3 Licensing, Accreditation and Credentialing

In order to meet the objectives of this task, the research team conducted interviews with staff or board members representing the CRE profession broadly regarding professional education and credentials and conducted a market scan of the primary CRE licensing, accreditation and certification (LAC) track offerings. Additionally, the CRE executives interviewed were asked which credentials, designations or certifications were important to them, which served to inform this task.

3.3.1 LAC Interviews

The research team targeted both national-level leaders as well as representatives of organizations working in the Northwest on the topic of education and credentials and interviewed 17 individuals representing nine organizations. Table 9 indicates the national-level organizations that were interviewed as well as the number of representatives that were present for the interview.

¹ This relates to Northwest-specific programs, but in the case where the interviewee was not familiar with these programs, this information was inferred from other answers.

Table 9: National Organizations Interviewed

Organization	Number of Staff Interviewed
BOMA International	4
BOMI International	4
International Facility Management Association (IFMA)	2
Silver Loc Associates LLC ²	1
Institute of Real Estate Management (IREM) ³	1
Total	12

Table 10 indicates the Northwest organizations interviewed as well as the number of representatives that were present for the interview.

Table 10: Northwest Organizations Interviewed

Organization	Number of Staff Interviewed
BOMA Boise	1
BOMA Seattle & King County	1
BOMA Tri-Cities	1
BOMA Spokane	1
BOMA Oregon	1
Total	5

3.3.2 LAC Track Market Scan

The research team conducted a market scan of various LAC tracks and based on input from market experts as well as input from the 17 LAC interviews and the 21 executive interviews, compiled a list of CRE LAC offerings that were either standard in the industry or particular to the Pacific Northwest.

² Former President of IFMA

³ Did not participate in full interview due to time constraints

Table 11: Number of LAC Tracks Documented

LAC Track End User/Group	Number of LAC Tracks Documented
Individual-level LAC tracks: professional and educational opportunities for professionals in the CRE industry	23
Building-level LAC tracks: certification and recognition programs and opportunities for individual buildings	7
Portfolio-level LAC tracks: disclosure and recognition programs and opportunities for companies	5

3.3.3 Research Findings

The primary findings from the task appear below, associated with each LAC track end-user or group.

1. Individual-level LAC tracks:

- An over-saturation of competing announcements and market actors for energy efficiency education, opportunities, products and services.
- A lack of perceived value in paying for professional education and development which means that employees, especially those early in their careers, are not being trained to industry standards.
- Hiring managers and organizations hiring subcontractors continue to use credentials as a base-level guide in the process, even if they are not fully aware of the full value of a credential.
- A high demand for education delivered in a lunch-and-learn format that targets personnel representing a range of seniority at a particular CRE firm.

2. Building-level LAC Tracks:

- The partnership between NEEA and the BOMA Seattle chapter in implementing the BOMA Energy Efficiency Program (BEEP) in that market then replicating it in other markets in the region was considered to be hugely successful.
- LEED is the most desired and valued designation.
- The cost associated with the LEED program is driving the CRE industry to explore alternatives such as Green Globes.

3. Portfolio-level LAC Tracks:

- A greater focus on Corporate Responsibility is driving leading CRE companies to develop Sustainability and Energy Policies.
- CRE investors are starting to demand greater disclosure and transparency when it comes to the environmental impacts of CRE portfolios.

4 KEY MARKET THEMES AND FINDINGS

The research conducted by the NBI team developed a number of consistent findings about how the CRE market operates and what critical barriers restrict a stronger uptake of energy efficiency options. In this section, major findings are organized around key themes from the interviews and the impact that these findings have on efficiency investments. A number of focus areas that can help inform program development are discussed.

4.1 Key Theme #1: Information Overload

The market is awash with information, education, ideas, promises, proposals and businesses related to energy efficiency.

“There is too much information (on energy efficiency offerings) and it’s not all quality.”
- CEO of Firm #3

Impacts

The amount and variety of information frequently results in confusion for CRE teams, and many decisions about energy efficiency are not made or are postponed because of conflicting information and/or insufficient performance and financial details. This impacts firms across the board regardless of their current level of sophistication and/or education around energy efficiency.

Most CRE firms are constrained by both time and staff expertise from resolving information gaps and conflicts. They are asking for good information on the best way to move forward at several levels, including:

1. Staff training and professional development
2. Measures that provide short term paybacks
3. Long-term program opportunities and equipment change outs

Significant Details

This issue was observed in CRE firms that had ranked themselves highly in their commitment to energy efficiency as well as firms that considered themselves to be more middle-of-the-road in their approach. For the leading firms, the barrier was expressed as not knowing what emerging energy efficiency measure would potentially constitute best practice. For the middle-of-the-road firms, it was often expressed as simply not knowing where to start. This issue was attributed to the amount of “noise” in the marketplace when it came to the sheer volume of information around energy efficiency best practices as well as mismatched guidance and training.

Many executives noted that they often did not have the time to vet a particular energy efficiency technology or approach and that in general they did not trust vendor claims related to energy savings. They also expressed that they did not feel that the information presented on energy efficiency was properly targeted to them and their business case.

Additionally, the role of NEEA is not understood. None of the firms understood the organization’s goals or relationship with utilities, and they had limited knowledge of NEEA’s range of offerings.

Areas for Focus

The market is looking for someone that can sort through the issues, provide useful information on the offerings, and help demonstrate what will create the greatest benefit to their firm. Multiple individuals expressed that they were looking for a “trusted source.”

- Focus on providing consistent and reliable information about a limited number of best options for efficiency investments. Technical information should be consistent across educational, communications and marketing efforts.
- Information and education should be constructed to specific roles/ownership types. Access to the tools and scheduled training or education events should allow for CRE professionals to easily find relevant information based on their role.
- Provide concrete examples or case studies that include financial and implementation information.
- Make information resources available to utilities and trade allies to improve consistency of information that reaches the CRE market from these channels.
- Focus on clarifying NEEA’s role to the CRE marketplace in the Pacific Northwest. Use the major trade associations as a critical partner in delivering information to CRE. Potential opportunities include supporting energy efficiency training by the trade associations and working with them on joint opportunities to provide consistent and reliable information, such as conferences.

4.2 Key Theme #2: CRE Firms Manage Properties as a Team

CRE firms manage properties as a team. There is no single energy efficiency decision maker to target at most CRE firms. Decisions about efficiency investment are typically a team effort that can involve a muddled matrix of inputs and decisions from several organizational levels. Overall, financial goals and financial performance set key parameters and drive decisions. In the case of third-party property managers (TPPM) this becomes even more complex, with the TPPM in many cases acting as the ‘efficiency cheerleader’ with each of their clients acting as the final decision makers with varying levels of sophistication and commitment to energy efficiency.

“(Energy efficiency) is left up to the individual portfolio management teams and each team does it a little differently.” - Senior Property Manager at Firm #14

Impacts

Energy decisions can be a detail within the management strategy for a building. While the value of energy saving is generally recognized, only the most robust measures are typically installed, frequently driven by incentives with utility rebates leading as the strongest driver.

Significant Details

- Bright Spot firms typically have a dedicated sustainability or energy staff at a senior level that work across teams to add perspective and analysis.

- Informal energy “Champions” are an important influencer at many CRE firms. Sometimes the champions are executive level (lacking critical details), sometimes lower level (lacking authority).

Areas for Focus

- Support internal champions by supplying them with the right level of information and tools. Create information channels that can reach multiple levels of CRE staff within a firm as the champion may be technical, financial or management staff.
- Find ways to support champions across multiple CRE firms by creating peer-to-peer learning, mentoring and support. Opportunities could include informal gatherings within CRE trade associations and potentially geographically focused efforts, such as the 2030 District in Seattle.
- Provide tools and resources to the CRE market in order to increase benchmarking as a foundation to energy efficiency. It is imperative that training, education and tools are uniquely focused on the specific business benefits to the end user. This should apply not only to the ownership structures detailed below, but as well to the end user’s role.
- Build off the fact that energy decisions are frequently the most cost-effective investments within the broader sustainability framework. Linkages to sustainability and the direct financial benefits of energy decisions should be supported by program efforts.
- Provide lunch and learns that have something for all levels--building engineers, property managers and senior staff--so that all members of internal teams receive information relevant to their perspective on energy efficiency decisions. Emphasize benefits more than technical details.
- Showcase “Best Practice” decision-making processes to create examples of how teams can organize to advance energy efficiency.

4.3 Key Theme #3: A Lack of Energy Efficiency Platforms and or Plans

CRE firms rarely have a fully developed, integrated and documented energy efficiency platform and or plan.

“We haven’t established a (energy efficiency) plan formally, but in practice we talk about it (energy efficiency) a lot in terms of successes and failures.” –Executive Vice President at Firm #4

Impact

Developing a detailed energy plan may not be practical; energy efficiency must fit within financial performance goals and/or concerns about brand image.

Significant Details

While a number of firms claimed to have benchmarked their properties, rarely was this information used as part of a corporate or portfolio-wide approach to energy efficiency.

When a building certification or label is important to an owner, LEED is the brand most desired. Although the executives interviewed for this report generally agreed on this, there is still a healthy dose of skepticism around the legitimacy of the LEED program, especially when it comes to the validity of the energy requirements.

Two of the Bright Spot firms have sustainability and energy policies, rather than a detailed plan.

Areas for Focus

- Focus on showcasing policies that can be flexible decision support tools rather than a detailed plan. Policies can be used as part of a public statement of how CRE firms operate and can provide guidance to support energy efficiency investments, such as ROI criteria.
- Ensure that market-facing solutions address the financial decision-making timing, and clearly identify the financial benefits associated with energy efficiency best practices.

4.4 Key Theme #4: The Need for Actionable Insight

With regard to education, training, professional development and accreditation there was an expressed desire for “actionable insight” from time spent on these activities. This concept implies a need for those who are providing the education to better understand the CRE market, or that delivery methods need further evaluation. These activities can be produced by either vendors that perform services in the industry, training in their area, or by professional organizations (e.g. BOMA, IFMA, IREM, etc.) formed by industry professionals and educational institutions.

“I would say 75% of (vendor) pitches are dead on arrival.” –Vice President of Sustainability at Firm #12

Impact

Information on technologies and strategies that does not include cost information and return on investment is quickly dismissed. Professional development and training are not considered a high priority at many firms, leaving it to the individual to invest their time and money in professional development.

Significant Details

The market continues to provide new educational offerings (at all levels and types of education, training, credentials and certifications), but while it has increased the quality and quantity of knowledge, it has muddied the waters as to what is the best path of action

for professionals to take, causing many firms to limit supporting them financially or with time off.

The younger workforce is most interested in immediate action activities, such as education or training that can give them knowledge and provide for career advancement in the immediate term. Long-term credentials and education are secondary to their goal. This has impacted the number of professionals enrolling in multi-year accreditation programs which are either not well understood or known and therefore not valued.

The role of service providers (HVAC and lighting contractors) and consultants is important because the executives interviewed indicated them as having the highest level of influence (behind utility rebates) when it came to the adoption of energy efficiency measures. They were also ranked high as being sources of education and knowledge, although, as noted above, there was a feeling by CRE professionals that the education provided did not always add value as the “vendors” did not understand CRE and related business operations.

Areas for Focus

The focus here needs to be segregated into two areas: first, the vendor community servicing the owners and managers; and second, the professional and educational organizations that make up the industry.

1. Vendor organizations
 - Support these vendor groups (service providers, consultants, et al.) through strong and focused materials that can present a unified and strategic approach to the issues of energy efficiency best practices.
2. Education, Training and Professional Development Providers (including accreditation, certification and credentialing)
 - Support the educational organizations that currently provide the highest level of energy efficiency services with the following elements:
 - Financial incentives for student attendance
 - Logistics and marketing support for holding classes
 - Financial assistance and material for updating programs and classes
 - This type of support could also be applied to the top programs that highlight best practices in building operations. This would include a focus on programs that target buildings, as well as education of professionals.

4.5 Key Theme #5: Differences in Business Structure and Market Position Matter

The primary market motivations to invest in energy efficiency change with the CRE business structure and market position.

Impact

Understanding the structure of CRE firms provides a good indicator of how to approach energy investments. There are differing fundamental market drivers. The majority of the

executives interviewed attempted to make energy efficiency a priority, but in their position as a fee manager they are somewhat handcuffed by their client's needs, goals and focus for the building. Unless the client (typically the building owner) is energy savvy, energy efficiency ends up being a very tough sell at the building level.

Significant details

At the most general level, it is imperative to break the CRE market into three CRE ownership structures based on size and fundamental business interest. Having a clear understanding of these basic characteristics has significant implications as the primary drivers vary from group to group and can greatly influence how they approach and adopt energy efficiency best practices.

1. Larger Real Estate Investment Trusts (REITs) and Investor/Owners: These firms are driven by investment and global perspectives. They tend to be more attuned to transparency in reporting (including energy benchmarking) and sustainability issues; they commonly have a Sustainability Director or similar staff covering energy, recycling, waste and other issues.
 - Their goals are driven by economics first, but they are also heavily influenced by outside factors like shareholder issues, governmental regulations, and investor preferences or desires.
 - They have a greater ability to finance and pay for large-ticket items both in and out of budget cycles.
 - Their ability to create programmatic opportunities is higher relative to other firms.
 - They typically have the highest level of experience and education around their own professional staff.
 - They have a propensity to trust (after thorough review) outside experts and advisors.
 - Within this group it is also important to understand how REITs view their portfolios, as they typically have a much longer hold on their properties. This impacts the way in which they operate their buildings and make decisions around investments within their properties.

2. Third-Party Property Managers: These firms compete to meet owner/investor needs and typically are concerned with meeting near-term financial goals to maintain clients.
 - These firms serve players from both groups 1 and 3.
 - This group can also be categorized into small local and regional firms and large global firms, each with its own set of challenges and opportunities.
 - They are responsible for both interpreting their client needs and desires as well as needing to present the latest methods of building operations (including energy efficiency) as this market tends to be very competitive.

- They are very dependent on the education, training and credentials while at the same time can be reluctant to fund those activities because of the thin margins under which they operate.
 - Balancing the goals and objectives of the owners and their own operating company can put a strain on how they operate and serve their customer, leaving them with a greater need for support in best practices and operations, including energy efficiency.
 - It is important to understand that in many cases they are the decision maker for the building.
3. Smaller Independents: These firms may be family owned and usually focus their properties in a limited geographic area. They tend to be very stable, both in terms of holding properties and in terms of staff longevity. They can take a longer perspective on financial returns, which helps with energy efficiency investments.
- These smaller independents can either be direct owner or third-party managers as noted in group 2.
 - While usually managing or owning the smaller buildings (though not exclusively), it is important to remember that small commercial buildings comprise the greatest overall volume of buildings in the marketplace.
 - This group is typically in the greatest need of outside expertise and information as they customarily will have minimal inside expertise or individuals exclusively working on energy issues.

Areas for Focus

Having a clear understanding of these basic categories and their primary drivers should impact both the overall market approach and how to promote energy efficiency best practices at individual firms.

4.6 Key Theme #6: The 2030 District and Impactful Partnerships

The 2030 District in Seattle represents an intriguing opportunity for engaging the CRE market around managing and reducing energy in a group of buildings.

“The 2030 District is a big deal in Seattle because it is an attempt to be a quasi-private sector/government partnership looking at energy from a district standpoint and trying to set goals based upon a geographic area instead of a specific building.” – President of BOMA Seattle & King County

Impact

In the case of the Seattle 2030 district, the CRE community is working toward a common goal with representatives from the City and the local utility. The Seattle effort appears to

have demonstrated that local efforts with shared goals, peer-based learning, and socialization of global concerns into local action can reach the CRE market.

Significant Details

When asked about their awareness of existing programs and resources in the executive interview portion of the research, the Seattle 2030 District had the highest marks (for CRE professional that have properties in that area). There was a strong consensus of those with buildings in the District that their efforts were improved and influenced greatly because of the 2030 District.

Areas for Focus

This is an area for NEEA to further investigate and better understand how this organization works, seeing what can be replicated in other organizations and regions of their territory. The focus would be to determine:

- Who is involved and Why (owners, vendors, governmental organizations, etc.)
- How it is structured and supported (process and dollars)
- How its leadership is formed, organized and runs

5 CONCLUSIONS AND RECOMMENDATIONS

Despite the range in firm size, markets represented and the types of properties managed, we consistently heard the following messages from the CRE executives interviewed. Any effort on the part of NEEA's CRE Initiative going forward needs to address these key areas in order to reduce the market barriers to the adoption and implementation of energy efficiency best practices:

- Limited time from owners and managers is available for attention to energy efficiency, and the market place is seen as having conflicting or unreliable information.
- Significant skepticism remains about performance and services as well as various programs, certifications and educational opportunities.
- Decisions are made by a team but are usually spearheaded by an internal champion. The role and ability of this champion is essential.
- Trade allies and consultants often show a lack of understanding of the CRE business model and make unsubstantiated claims or do not quantify savings estimates.

With regard to Licensing, Accreditation and Certifications (LACs), the interviews conducted suggested several challenges that have notable implications for NEEA. The challenges are:

- The lack of perceived value in paying for professional education and development means that employees, especially those early in their careers, are not being trained to industry standards or best practices.

- The amount of ‘noise’ around energy efficiency topics perceived by the industry presents a considerable challenge to those trying to promote the adoption of energy efficiency best practices.

5.1 Recommendations

While each individual research task conducted for this project resulted in its own set of recommended focus, the research team has identified the following 12 recommendations as being priorities in the promotion and adoption of energy efficiency best practices:

1. Provide clear and consistent messages around a limited set of best practices to increase credibility for energy efficiency.
2. Set a progressive path of action that defines best practice or, in some cases, even standard practice to ensure the most robust approaches are consistently adopted across a range of buildings. An example of this is a focus on understanding benchmarking as a foundational step that is a tool used to support a process and the end goal, not a standalone end product.
3. Promote the adoption of corporate sustainability policies, which can gather broader appeal and approval, rather than only the energy efficiency targets and plans, while showing that the energy efficiency component may be the fastest way to create a financial return on the whole package.
4. Leverage Environmental Protection Agency brand recognition and work products demonstrating the value.
5. Create peer networks focused on energy efficiency within trade group committees and pursue replication of peer-based efficiency modeled on the Seattle 2030 District.
6. Provide experiential opportunities – show-and-tell within actual buildings with peer-to-peer communication to discuss cost, complexities of install, non-energy benefits and savings. Incorporate “lunch and learns” as a standard format for sharing such information.
7. Assist internal champions in promoting the energy efficiency best practices through case studies and specific tools and resources.
8. Understand and approach the market based on the distinctions between large REITs and investor-owners, third-party property managers, and smaller independents.
9. Create financial decision-making guides and simple tools targeted to the CRE business models.
10. Provide financial, logistical and messaging support for educational leaders and influencers (BOMA, IFMA, IREM and BOMI) and vendors focused on educating property, asset and operations managers.
11. Create market clarity in terms of what education and training are available.
12. Leverage existing CRE partnerships as an outlet for sharing success stories and case studies and the vendors responsible for implementing building-specific energy efficiency best practices.

6 REFERENCES

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APENDIX A: EXECUTIVE INTERVIEW GUIDE

General Questions

1. What is your job title?
2. How long have you been in this position?
3. What are your basic responsibilities?
4. What kinds of concerns dominate your work?
5. How long have you been with _____ (company)?
6. How long have you worked in the Commercial Real Estate Industry?

Knowledge of energy efficiency best practices for CRE

7. We would like to get some background on the current level of adoption of energy efficiency best practices in your organization.
 - a. How would you describe your commitment to energy efficiency (and by “commitment” we refer to your practice of energy efficiency) in your portfolio as compared to your peers in the industry?
 - b. Does your firm have a sustainability program? – if no skip to question “c”
 - i. please describe its scope
 - ii. how frequently is the performance of the program reported internally
 - iii. how frequently is the performance of the program reported to stakeholders?
 - c. Do you have any dedicated individuals for the area of energy efficiency (and by “dedicated”, we mean that a portion of their job description covers energy efficiency)? If so, please describe their job duties and title.
 - d. What percentage of the work in this area would you estimate is done by direct employees and how much by outside contractors?
 - e. Do you have a corporate platform for energy efficiency and if so, please describe. May you provide us with a copy of the plan?
 - f. Do you have a policy and procedures guide for energy efficiency? If so please describe. May you provide us with a copy of the guide?
8. Please describe your level of awareness of the following programs or resources focused on energy efficiency for CRE and provide a brief description of each that you are aware of:
 - a. BOMA 360
 - b. Global Real Estate Sustainability Benchmark (GRESB)
 - c. Urban Land Institute seminars
 - d. BetterBricks Kilowatt Crackdown
 - e. Energy Star
 - f. Better Buildings Alliance
 - g. BOMA BEEP
 - h. 2030 District Challenge
 - i. LEED for Existing Buildings

- j. Green Globes Continual Improvement of Existing Buildings (CIEB)
 - k. Others that we have not mentioned?
9. If you have participated in any of the programs or used any of the resources listed above please describe how they have impacted your portfolio:
- a. Finances – has there dollar savings (%) amount as a result of participating in the program?
 - b. Has the program initiated a capital improvement project and if so, what rate of return have you observed?
 - c. What Energy Usage reduction (kWh) have you observed at building level and the portfolio level that can be associated with program participation?
 - d. Has participation impacted your tenants comfort levels in a positive or negative manner?
 - e. Have you observed any impact on occupancy levels in your buildings as a result of program recognition?
 - f. Please describe how program participation has had an impact on the future adoption of energy efficiency best practices at your firm
10. Briefly describe any other programs you are implementing in:
- a. your full portfolio
 - b. Individual buildings, that are focused on energy efficiency best practices.

Influence channels and partners in energy efficiency best practices adoption and implementation

11. What are the key areas that **influence your decisions** to implement or adopt energy efficiency best practices in your buildings? (Can choose multiple answers)
- a. Internal champions
 - b. Corporate mandate
 - c. Leading industry publications
 - d. Industry peers
 - e. Trade organizations
 - f. Tenants
 - g. Building service providers
 - h. Outside energy consultants
 - i. Utility rebates
 - j. Local or regional utility training programs
 - k. Other
12. Of the areas of influence that you mentioned; can you give any specific examples of how they influenced your decisions in the past to adopt energy efficiency best practices.
- a. Name and/or type of influencer
 - b. Example of how they have influenced actions in the past
 - c. Example of why (Executive) would rely on them for influence in the future

13. From the key areas of influence you listed can you rank them by order of influence?
14. Of the areas we listed is there any that you would consider to have little influence over your decisions to implement or adopt energy efficiency best practices in your building?
15. Are you seeing any new issues, organizations, activities or individuals emerging that might influence you in making decisions around energy efficiency?
16. Do you now, or would you work with outside partners in implementing energy efficiency best practices in your buildings.
If No- Do you feel that you have the capacity in house to implement energy efficiency best practices or are you currently doing that in house?
If Yes- What type of partners do you or would you work with in that capacity? i.e. (Outside Energy Consultant, Building Service Provider, Utility Partner, other)
17. Of the partners you listed, which would you consider to be key outside partners in implementing energy efficiency best practices in your buildings?

Key methods for information updates/ learning formats/ learning channels/ content delivery

18. How often do you participate in training on an annual basis?
19. How do you best like to receive information around energy efficiency opportunities and best practices?
 - a. Email
 - b. Web
 - c. Colleagues
 - d. Industry sponsored trainings and seminars
 - e. Other (please specify)?
20. What is the focus of the training you are most regularly involved in?
21. How often is your organization's staff engaged in training on an annual basis?
22. What type of training are they most regularly involved in?
23. Have you in the past or do you plan on taking part in training regarding energy efficiency best practices for your portfolio?
24. Has your team in the past or do you plan having them take part in training regarding energy efficiency best practices for your portfolio?

If yes to 16

25. Where do you typically obtain professional development regarding energy efficiency best practices for your portfolio?
 - a. Internal champions
 - b. Corporate/ Sustainability Department
 - c. Leading industry publications
 - d. Industry peers
 - e. Trade organizations
 - f. Building service providers

- g. Outside energy consultants
- h. Utilities and Utility Program Providers
- i. Other

If no to 16

26. If you were going to obtain professional development regarding energy efficiency best practices which sources would you most likely pursue?
- a. Internal champions
 - b. Corporate/ Sustainability Department
 - c. Leading industry publications
 - d. Industry peers
 - e. Trade organizations
 - f. Building service providers
 - g. Outside energy consultants
 - h. Utilities and Utility Program Providers
 - i. Other
27. Of the groups that you selected which would you rely on the most for professional development for energy efficiency best practices? Top 2-3 in order of most likely.
- a. Why did you list those groups as most likely?
28. Of the groups listed which are you most unlikely to rely on for professional development for energy efficiency best practices? Top 2-3 in order of least likely.
- a. Why did you list those groups as most unlikely?
29. What is your preferred format to receive Professional development
- a. Lunch and learn and/or short in person session
 - b. Quick sessions with team (internal education)
 - c. As part of a single or multi day conference
 - d. Live webinar, or live webinar series
 - e. Pre-Recorded webinar or webinar series
 - f. Distance learning course/ online web based training
 - g. Group training (with team)
 - h. Group training (with peers)
 - i. Manual, book, or workbook (self-study)
 - j. Other
30. What defines a successful training for you?

Market perception of credentials

31. Are credentials, designations or certifications important to you in who you use (internal or external) for providing services to your portfolio or individual buildings?
- a. If so which ones are important to you

- i. In Building Operations and management
 - ii. In energy management and efficiency
- 32. Are there specific organizations that you look to provide education and professional development opportunities for Building Operations?
 - a. For Energy Management
 - b. For Energy Efficiency
- 33. Are designations or certifications important to you in who you use (internal or external) for providing services to your portfolio or individual buildings?
 - a. If so which ones are important to you
 - i. In Building Operations and management
 - ii. In energy management and efficiency

Suggestions for enhancements to program credibility, functions and services

- 34. Are there programs you would like to see offered to you or your team
- 35. What suggestions do you have to improve the professional development programs currently available in the industry

APENDIX B: BRIGHT SPOT INTERVIEW GUIDE

General Information

1. General information on the individuals and their position in the organization and time in service.
 - a. Name of the organization you are currently working for?
 - b. What is your current title/position with your current organization?
 - c. What are your basic responsibilities?
 - d. What kinds of concerns dominate your work?
 - e. How long have you been with this organization?
 - f. How long have you been involved in the Commercial Real Estate industry?
 - g. Describe how energy efficiency is currently applied to your portfolio

Staffing Structure

2. Does your organization have a dedicated person or department focused on Energy Management and Energy Efficiency?
 - a. Please describe the make-up of the team
 - i. Credentials held
 - ii. Titles
 - iii. Vision or Goals
 - iv. Number of individuals
 - b. Who does this department report to?
3. If no to number 2... Do you use any external resources, if yes to this, ask 3q and 3b
 - a. Please describe the make-up of the external team
 - i. Credentials that you are aware of
 - ii. Titles that you are aware of
 - iii. Goals that have been communicated to this team
 - iv. Why did you hire this particular team?
 - b. Who (as in title), in your company, does this external team report to?

Corporate Commitment

4. Does the Company have a written commitment to:
 - a. Energy Management (ability to track and manage the energy consumption of its buildings)
 - b. Energy Efficiency (use energy in its building more efficiently)
 - c. Sustainability(broader goals of resource conservation and occupant health)
5. Please articulate the nature of these written commitments or can you provide a written copy?
6. What was the primary driver for your firm to adopt these commitments?
7. Are there general corporate goals related to

- a. Energy Management (ability to track and manage the energy consumption of its buildings)
 - b. Energy efficiency (use energy in its building more efficiently)
 - c. Sustainability (broader goals of resource conservation and occupant health)
 - d. Can you share any of them with us?
8. Are these published to all employees? To the public?
9. Does each building in the portfolio have specific goals other than the general goals?
- a. If yes, what are those specific goals?
 - b. Why are they different from one building to another?
10. What are the top three motivations that drive your company's corporate commitment to energy management in your commercial real estate portfolio?
11. On a scale of 1 to 5, with 1 being not important at all and 5 being very important, how important is the role of energy management to the broader agenda of Sustainability?

Market perception of credentials

36. Are credentials or certifications important to you in who you use (internal or external) for providing services to your portfolio or individual buildings?
- b. If so which ones are important to you
 - i. In Building Operations and management
 - ii. Energy efficiency
 - iii. In energy management
37. Are there specific organizations that you look to, to provide education for Building Operations?
- a. For Energy Management
 - b. For Energy Efficiency

Operations and Maintenance Plan

12. Do you have a written O&M plan for the company or just the commitment statement?
13. Does each building have a plan for meeting its commitment statement?
14. (If yes to Q9), is it a written plan?
15. How is each building monitored as to its plan?
16. Who is tasked with ensuring that the building is updated as to its plan?
17. What methodology do you use in monitoring your buildings operations and maintenance activities? Software?
18. Is the plan monitored by management?
19. How is progress tracked?
- a. At the portfolio level?
 - b. At the building level?
 - c. At what intervals is progress tracked – weekly, monthly, quarterly, annually, less than annually or never?
20. Will you please describe the outline of this plan?

21. Does the plan vary from building to building?
22. How is this plan kept current?
23. Are you willing to share this plan in whole or in part with NEEA?
24. Will you describe some of the successes you have had with this plan?
25. Please describe some of the challenges associated with the plan.
26. Are there areas you would like to see added to the plan? If so, what are these?

APENDIX C: LICENSING, ACCREDITATION AND CERTIFICATION (LAC) INTERVIEW GUIDE

National Industry/ Accreditation Organizations:

1. General information on the individuals and their position in the organization and time in service.
 - a. Name of the organization you are currently working for?
 - b. What is your current title/position with your current organization?
 - c. How long have you been with this organization?
2. How long have you been involved in the Commercial Real Estate industry? Please list (or provide us with a list) all the Licensing, Accreditations and Certification programs for the CRE industry that you are familiar with.
3. Please describe your role with Licensing, Accreditations and Certification programs in the Commercial Real Estate market
4. Please share with us specific program, class, certificate or designations offered by your organization. Please describe the typical position or focus of the individuals for each of those programs and the number of student taking each one or working towards each one.
5. Which of your programs/certification programs have the strongest focus on Energy Efficiency and Management?
6. Would you describe Energy Efficiency as being essential, on par with other issues or not essential in your future classes, designations and programs.
7. What are the major competing classes' programs/certifications (if any) to those your organization provides?
8. How deep does your programs go into energy efficiency?
9. What are you hearing from your customers as the most needed education?

"I noticed that you did not mention energy management or energy efficiency education as most needed by your customers. Would you share with us the reasons for your customers not mentioning energy management? And the reasons for your customers not mentioning energy efficiency?"
10. Which Licensing, Accreditation and Certification tracks are best for driving energy efficiency knowledge and skills?
11. What is the primary barrier to increased adoption of this knowledge and skills set through Licensing, Accreditation and Certification programs.
12. What can NEEA help you with, in order to support your programs related to energy efficiency? What about for your programs related to energy management?

Local BOMA Senior staff person:

13. Please describe your knowledge of energy management and efficiency programs in your market
14. Please describe your involvement in energy management and efficiency programs in your market.
15. Please share with us all programs, classes, certificates or designations and the type (and number) of student taking each one or working towards each one in your market

16. Please describe the current status of energy management and efficiency programs and training in this market among your members.
17. In what format do your members obtain training for professional development?
 - a. How about training specifically for energy efficiency and energy management
18. Would you say that certifications or credentials are very important, important or not important to your members?
 - b. What about certifications or credentials specific to Energy Efficiency?
 - c. Do you feel your members have sufficient access to the training they need in energy management and efficiency?
 - d. If no “what do you believe are the key causes of your members not having sufficient access to training that they need in energy management?”
19. What can NEEA help you with, in order to support your programs related to energy management? What about for your programs related to energy efficiency?