EMI CONSULTING

Focus on Energy Mid-sized Business Market Segmentation Project

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FINAL REPORT

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EXECUTIVE SUMMARY

This report summarizes the results of the 2017 Mid-Sized Market Segmentation Project conducted by EMI Consulting as part of the Environmental and Economic Research and Development Program for Focus on Energy in Wisconsin. The objective of this research was to further develop the effectiveness of Focus on Energy marketing efforts toward mid-sized businesses. Like other areas of the country, mid-sized businesses in Wisconsin comprise customers with distinct business types, building sizes, and energy profiles. These differences create a unique class of customers with diverse business needs, equipment, and priorities in energy decision-making processes.

The aim of this study was to leverage the distinct aspects of the businesses that occupy the mid-sized space through segmentation and in-depth interviewing: segmentation analysis provided natural groupings of businesses through similarities in business types, and in-depth interviews provided actionable insights into *how* similarities and differences within the mid-sized market might be used to strategically promote measures, offerings, and incentives that will resonate with the various types of mid-sized customers.

Research Objectives

The overall objective of this study was to provide Focus on Energy program staff with recommendations for how to increase engagement with non-residential mid-sized customers. To support this overall objective, EMI Consulting first explored the patterns within the Focus on Energy eligible mid-sized business base that could be used to define actionable segments. Second, EMI Consulting utilized in-depth interviews to discover segment-specific insights and leverage those to inform potential value propositions and marketing messages that would resonate with different market segments.

To address these objectives, EMI Consulting developed a number of research questions that could provide insight into the factors that influence mid-sized businesses' likelihood to participate in Focus on Energy programs. These research questions included:

1. What are program participants' experiences and successes with Focus on Energy programs?
2. What motivates customers to participate in Focus on Energy programs? Conversely, what are the barriers (including program awareness) to non-participants' program participation, and what are potential solutions to these barriers?
3. What are both non-participants' and participants' attitudes, behaviors, and decision-making processes related to energy efficiency and energy efficiency upgrades?
4. How can trade allies best serve program promotional efforts?

To investigate the above, conducted a segmentation analysis to develop five actionable segments in the mid-sized customer base. EMI Consulting then conducted 26 interviews with eligible mid-sized customers across the segments and 10 interviews with trade allies who had previously worked with mid-sized customers. Detailed research findings are displayed in Chapter 3 of this report and are organized as follows:

- Segmentation Results
- Customer Firmographics
- Customer Overview: Awareness, Upgrades, and Decision-Making Processes
- Segment-Specific Decision-Making Processes, Barriers, and Motivators
- Participant Experiences
- Trade Ally Engagement

Key Findings

1. Segmentation Analysis

EMI Consulting used a classification and regression tree (CART) model to produce segments in the eligible mid-sized customer base - predictor variables were business type and Focus on Energy's rural vs. urban designation, the criterion variable was premise-level average annual kWh. The rural vs. urban distinction did not have a statistically significant influence over groupings in average annual kWh, thus groups were based on business type predicting average annual kWh. Segments produced by the CART analysis were pruned to produce five distinct mid-sized business segments. The final mid-sized business segments were: (1) non-hospital healthcare, (2) retail and auto sales, (3) office buildings, (4) restaurants, and (5) hospitals.

2. Customer Firmographics

Across mid-sized business customers, most respondents indicated occupying the role of either facilities manager, services manager or coordinator, or business owner. Overall, most customers reported HVAC and lighting as the largest end-uses of electricity. Across segments, heating was reported as the largest end use of gas at businesses, followed by boilers and kitchen equipment. Building ownership showed little variability between or within segments. The majority of customers who provided information indicated that their business owned their building. There was very little variation in energy bill payment between or within segments: nearly all customers reported paying their own energy bills.

3. Customer Overview

Overall, there is high awareness of Focus on Energy as an organization; however, there is opportunity to increase awareness of the specific services Focus on Energy offers to mid-sized business customers. Word of mouth, contractors, and professional events were the most commonly cited ways customers gained knowledge of Focus on Energy. Many respondents indicated that they were unsure of how they had become aware or were "always aware" of Focus on Energy. In addition, respondents indicated that information related to Focus on Energy programs, cost, and equipment would be the types of information that would most motivate them to search for energy efficiency upgrades for their business. Respondents suggested email and mail as the most effective ways to send them program and energy efficiency information.

4. Segment-Specific Findings

Non-hospital healthcare respondents reported considering factors related to total cost as the most important when making decisions regarding the installation of energy efficient equipment.

In addition, customers in the non-hospital healthcare segment face unique barriers to energy efficiency upgrades, including issues related to: operations, occupant type, and sources of income. These customers operate under relatively tight constraints and are limited in the types of equipment they can upgrade and when. The majority of interviewees also reported equipment-related information would motivate them to pursue energy efficiency opportunities. Finally, respondents asked for information related to emerging technology, equipment reliability, and solar.

Retail and auto sales respondents lacked awareness of Focus on Energy as an organization and program offerings. Retail and auto sales customers cited factors related to upfront cost and reduced operating costs, when asked what might make upgrading to energy efficient equipment more appealing. In addition, customers in the retail and auto sales segment are motivated by "better deals" that work for their business. Finally, all of the customers in this segment asked for information regarding ongoing programs and rebates; customers were also interested in information related to rebate payment and installation timelines.

Office respondents indicated attaining bill or energy savings was the primary reason they pursued energy efficiency upgrades. In addition, interviews indicated that contractors are a more important factor in this segment's consideration of energy efficiency upgrades—three respondents reported that contractors were a significant influence on their consideration of upgrades. Office segment interviewees cited elements related to cost (e.g., reduced equipment or upfront cost and payment plans) and reduced operating costs when asked what would make energy efficiency upgrades more appealing to them.

Restaurant respondents were somewhat distinct in their reasons for upgrading equipment, in that their reasons for upgrading were largely related to the performance of the equipment: respondents reported upgrade considerations when equipment reached end-of-life or they felt a need for better-performing equipment. In addition, customers in the restaurant segment tend to wait until equipment is at the end of its life to upgrade equipment. As a result, the factors they report as being most influential in considering energy efficiency upgrades revolve around those that are key to keeping business running. The barriers restaurant respondents listed as specific to their business type also revolve around these factors. Waiting until end-of-life to replace, coupled with volume-based revenue creates a sense of urgency for restaurant customers in upgrade situations

Hospital respondents indicated that they are distinct from other segments in that respondents reported considering or completing energy efficiency upgrades due to environmental benefits. In addition, the hospital segment's responses about making upgrades more appealing were varied. The most commonly reported factors that would make energy upgrades more appealing were lower upfront costs for upgrades and bill or energy savings. Hospital customers reported safety regulations, total cost, and tenant-related issues as the most important factors when considering equipment upgrades. Specific safety regulations mentioned included protocols for operating rooms and ASHRAE guidelines.

5. The Participant Experience

The majority of previous participants listed bill or energy savings as their primary reason for participating in Focus on Energy programs, with most upgrading lighting through Focus on Energy programs. In addition, the majority of previous participants reported positive experiences

regarding their program participation - only two of thirteen interviewees reported negative experiences. Half of the participants interviewed provided EMI Consulting with suggestions for information that would be useful while participating in Focus on Energy programs. These suggestions fell into two broad categories, program details or information and incentive-related information.

6. Trade Ally Engagement

The majority of the contractors interviewed indicated that return on investment was a significant consideration when deciding to purchase energy efficient equipment. Similarly, lighting and HVAC contractors tended to report that customers have limited capital budgets or are dissuaded by high upfront costs. Kitchen contractors indicated onerous paperwork requirements and a lack of education on more energy-efficient equipment as barriers. Contractors reported segment-specific barriers for four of five segments; these barriers are detailed in Section 3.6.

Recommendations

Recommendations are divided into three categories - segmentation analysis, customer-wide, and segment-specific - and are displayed in Chapter 4 of the full report.

Segmentation Analysis Recommendations

1. **Increase data collection efforts from Focus on Energy program participants to supplement self-report data.** The trade-off between administrative efforts and improved data quality is noted. However, the cost associated with collecting higher-quality data from program participants could be a long-term investment that would provide actionable information for targeted communications and increasing customer satisfaction in the future.

2. **Conduct a market-characterization study with a larger set of respondents across segments.** While this research provides an informative initial examination of the unique factors of the segments identified via the segmentation analysis, additional research should be conducted to provide supporting quantitative evidence and further elucidate the similarities and differences between the varying types of customers that are eligble for the Business Incentive Program.

Customer-Wide Recommendations

1. **Target communications and programs to facilities managers, service coordinators, and owners.** Leveraging existing data sources (e.g., utility data, purchasing data from market research firms), industry events, or trade organizations may prove to be an effective avenue to identifying these gatekeepers in the mid-sized sector. Midstream program designs (such as an online marketplace) may also serve to reach these decision-makers.

2. **Increase marketing for lighting-related projects under the Business Incentive Program.** Interviews show that mid-sized businesses perceive lighting as substantially contributing to energy costs, respondents are willing to upgrade their lighting, and are currently considering these types of upgrades at their businesses.

3. **Ensure that program information is reaching decision-makers and includes cost/cost-effectiveness information.** Customers' lack of information seems to be impeding Focus on Energy program uptake in the mid-sized market. There appears to be opportunity for improving uptake; however, data suggest that customers do not have the required information at-hand to make upgrade decisions. Accordingly, EMI Consulting recommends increasing outreach and ensuring that customers are aware of existing resources that may have such information (e.g., the website, existing marketing materials).

4. **Increase one-to-one contact with mid-sized customers.** Responses show that mid-sized customers want more one-to-one, or personalized, contact with Focus on Energy. Given that the only negative experiences reported by participants were related to a lack of contact, it may be prudent to increase personal outreach to this customer group.

5. **Emphasize potential bill and energy savings in marketing messages.** Respondents were primarily concerned with savings, regardless of segment. A number of respondents indicated a desire for specific savings estimates and cost comparison. Including specific information related to these potentials may serve to give mid-sized customers the information they need to pursue energy efficiency opportunities. To this end, EMI Consulting recommends creating case studies (and increasing access to those case studies that already exist) that will provide Focus on Energy customers with information regarding actual savings for specific business types. Coupled with testimonials, these types of communications could prove to be very motivating to eligible mid-sized businesses.

Segment-Specific Recommendations

1. **Provide non-hospital healthcare facilities with alternative approaches to upgrading lighting or HVAC, information regarding energy efficient models based on their requirements, or demonstrate savings potential for other measures.** One approach may be to develop and deliver approaches to circumvent the issue of constant occupancy. While additional research may be needed to determine effective strategies, one potential approach may be to supply these types of customers with an up-front incentive that covers the installation of measures over time.

2. **Target auto dealerships with lot lighting upgrades, including savings information.** Auto dealerships present an opportunity for large savings via lot lighting as these lights must be on throughout the night. However, interviews suggest that this segment is pursuing the 'best deal' for their facility and may require savings information to be convinced that an upgrade is in their best interest.

3. **Ensure contractors have value statements when approaching customers in the office segment.** Most of the respondents in the office segment reported cost or cost-effectiveness factors to be the most important issues when considering energy efficiency upgrades. Some reported that being able to easily access savings and cost-effectiveness information would improve their ability to convince other decision-makers on the benefits of upgrades.

4. **Emphasize strategies for installing energy efficiency measures during occupation and upgrades' impact on building marketability in the office segment.** Respondents emphasized the potential for increasing building-desirability for future tenants, but also cited the "hassle factor" for current tenants. Marketing communications that not only emphasize the benefits for building demand and future occupancy, but simultaneously provide strategies for upgrading, may be an effective avenue for increasing uptake in this segment.

5. **In the restaurant segment, emphasize strategies for installing energy efficient equipment during non-occupied hours and the benefits of replacing before end-of-life.** Restaurant respondents are focused on equipment performance and indicated they do not look for equipment until failure or problems. Delivering targeted information regarding savings on operating costs may influence them to explore opportunities before equipment 'becomes a problem'. Some respondents indicated that downtime equated to revenue loss. As such, providing these customers with strategies for replacing equipment with limited downtime may quell fears of losing revenue. Note that EMI Consulting's research does not suggest creating a formal "early replacement" program; instead our recommendation is in regard to specific marketing and outreach messages for customers.

6. **Consider targeted messaging emphasizing 'green image' or industry recognition for Hospitals.** This segment reported a preponderance of regulatory barriers to energy efficiency upgrades, but were also the only respondents to indicate that environmental benefits and industry recognition impacted equipment upgrades. The marketing benefits and positive press associated with 'within class' type recognition may motivate these types of mid-sized customers to look for upgrades that are not hamstringed by regulatory mandates, or consider novel means to realizing energy efficiency upgrades.

1. INTRODUCTION

This report summarizes the results of the 2017 Mid-Sized Market Segmentation Project conducted by EMI Consulting as part of the Environmental and Economic Research and Development Program for Focus on Energy in Wisconsin. The objective of this research was to further develop the effectiveness of Focus on Energy marketing efforts toward mid-sized businesses. Like other areas of the country, mid-sized businesses in Wisconsin comprise customers with distinct business types, building sizes, and energy profiles. These differences create a unique class of customers with diverse business needs, equipment, and priorities in energy decision-making processes.

The aim of this study was to leverage the distinct aspects of the businesses that occupy the mid-sized space through segmentation and in-depth interviewing: segmentation analysis provided natural groupings of businesses through similarities in business types, and in-depth interviews provided actionable insights into *how* similarities and differences within the mid-sized market might be used to strategically promote measures, offerings, and incentives that will resonate with the various types of mid-sized customers.

1.1 Research Objectives

The overall objective of this study was to provide Focus on Energy program staff with recommendations for how to increase engagement with non-residential mid-sized customers. To support this overall objective, EMI Consulting first explored the patterns within the Focus on Energy eligible mid-sized business base that could be used to define actionable segments. Second, EMI Consulting utilized in-depth interviews to discover segment-specific insights and leverage those to inform potential value propositions and marketing messages that would resonate with different market segments.

To address these objectives, EMI Consulting developed a number of research questions that could provide insight into the factors that influence mid-sized businesses' likelihood to participate in Focus on Energy programs. These research questions included:

1. What are program participants' experiences and successes with Focus on Energy programs?
2. What motivates customers to participate in Focus on Energy programs? Conversely, what are the barriers (including program awareness) to non-participants' program participation, and what are potential solutions to these barriers?
3. What are both non-participants' and participants' attitudes, behaviors, and decision-making processes related to energy efficiency and energy efficiency upgrades?
4. How can trade allies best serve program promotional efforts?

The remainder of this report is structured as follows:

- **Chapter 2 –** Research Methods
    - Segmentation Approach
    - Interview Approach and Methods
- **Chapter 3 –** Detailed Results
    - Segmentation Results

    - Customer Firmographics
    - Customer Overview: Awareness, Upgrades, and Decision-Making Processes
    - Segment-Specific Decision-Making Processes, Barriers, and Motivators
    - Participant Experiences
    - Trade Ally Engagement
- **Chapter 4 –** Conclusions and Recommendations

The report also includes the following appendices:

- **Appendix A –** Segment Graphical Personas
- **Appendix B –** Final Interview Guides

2. RESEARCH METHODS

As part of this study, EMI Consulting used a combination of secondary analysis and primary data collection. Secondary analysis was used to determine natural groupings in the Focus on Energy business customer population. Primary research—in the form of in-depth interviews with mid-sized business customers and trade allies—served to develop insights into the varied types of business customers and marketing messages and approaches for each.

For the purpose of this study, "mid-sized" customers were defined as those who had an average annual kWh usage of 360,000 kWh to 4,000,000 kWh. The "mid-sized" range was provided by Focus on Energy and represents a range that includes customers at the higher end of eligibility for the Focus on Energy Small Business Program and those at the upper-limit for Business Incentive Program (BIP) eligibility. The customers included thus comprise a wide-array of mid-sized customers who may be eligible for participation in two Focus on Energy business programs.

2.1 Research Methods – Business Customer Segmentation Analyses

The Focus on Energy (2016) Energy Efficiency Potential Study[1], served as the primary data source for creating segments in the Focus on Energy business customer population (*n* = 229,256). EMI Consulting was provided access to customer data collected by the Focus on Energy research team as part of the potential study. EMI Consulting prepared the data for segmentation by removing duplicate cases and collapsing cases that matched on customer name, address, and zip code into single "customer" cases (*n* = 4,812). The resulting dataset contained 224,444 unique customers. As part of additional cleaning, EMI Consulting removed records for customers:

1. For which there was no average kWh data;
2. With less than 360,000 average annual kWh usage;
3. With greater than 4,000,000 average annual kWh usage;
4. That were on the Focus on Energy July Large Energy Users (LEU) list;
5. That were eligible for other specific programs in the Focus on Energy business portfolio (i.e., agriculture, schools, government, small businesses, and franchises[2]).[3]

Table 2-1 below lists these steps and their impact on the analysis dataset.

[1] Focus on Energy. (2016). *Focus on Energy 2016 Energy Efficiency Potential Study.* Madison, WI: The Cadmus Group Incorporated.
[2] Franchises were defined as businesses with greater than five locations; EMI Consulting removed customers based on this definition by removing customers with greater than five cases and via visual inspection of customer names.
[3] Industrial customers were also removed from the potential study data to provide a more concentrated investigation of commercial customers.

Table 2-1. Data Cleaning Steps – Unique Business Customers (*n* = 224,444)

Data Cleaning Step: Removal of…	Customers Removed	% of Unique Customers Removed	Remaining Customers
Customers with no kWh data	-41,274	18.4%	183,170
"Small" business customers (< 360,000 avg. annual kWh)	-171,844	76.6%	11,326
"Large" customers (> 4,000,000 avg. annual kWh)	-928	0.4%	10,398
Customers on the July LEU list	-228	0.1%	10,170
Industrial, warehouse, agriculture, and school customers	-3,921	1.7%	6,249
Government customers	-213	0.1%	6,036
Franchises	-2,264	1.0%	3,772
Total	**-220,672**	**98.3%**	**3,772**

Note: Data cleaning was step-wise, numbers within each removal step may change if undertaken in a different order.

Segmentation Approach

This section describes the segmentation approach EMI Consulting used to categorize mid-sized business customers in Focus on Energy territory, including the statistical approach and segmentation variables. EMI Consulting employed a classification and regression tree (CART) model to investigate naturally-occurring segments in the Focus on Energy population of mid-sized business customers. CART models aim to divide data into groups that minimize the variance in a given variable (the criterion variable). Data is exposed to a series of yes/no checks to a host of predictor variables used to predict membership in different levels or groups of the criterion variable. The model continues to divide data until the groups are too small to divide further, or there is no possibility of improving the cohesiveness of (i.e., reducing the variance within) the groups in the criterion variable.

The EMI Consulting CART model contained two predictor variables: businesses' rural or urban location designation and their business type (as defined in the 2016 Potential Study).[4] The criterion variable was business customers' average annual kWh usage for 2015 - 2016, which was computed by multiplying each business's reported average monthly kWh usage by twelve.

2.2 Research Methods – Customer and Trade Ally Interviews

The following sections describe the methods for the Focus on Energy program eligible mid-sized business customers and trade ally interviews. This includes sampling strategy and detailed information related to recruitment and recruiting challenges.

[4] EMI Consulting ran additional CART models including additional variables (e.g., International Energy Conservation Code weather zone, geographic location). However, the model described was chosen as it aligned with the Focus on Energy targeting emphases.

Sampling Approach

This section describes the sampling approach and EMI Consulting used to attain interviewees, including recruiting emphases and the definition of previous program participation.

Mid-sized Business Customers

To develop the sample for interviews with mid-sized customers, EMI Consulting randomly selected customers within the target segments, integrating mid-sized business customers' participation in recruitment as a sampling stratum. EMI Consulting attempted to oversample *non-participant* mid-sized business customers as program non-participants can offer unique perspectives and circumstances that are directly related to increasing enrollment and that are highly actionable. Non-participants were defined as businesses who had not received a rebate from Focus on Energy since January 1, 2015.[5]

EMI Consulting discerned program participation by taking the names, addresses, and zip codes in records from the Focus on Energy (2016) Potential Study and matching them with Focus on Energy program participation (i.e., SPECTRUM) data. Customers who were matched and had received rebates from January 1, 2015 forward were defined as previous program participants. EMI Consulting also asked a screening question before conducting interviews to confirm interview respondents' participation status.

In addition to emphasizing non-participants, EMI Consulting incorporated geographic location for non-participant customers. While the Focus on Energy rural or urban location designation did not significantly influence segmentation in the CART analysis (i.e., did not reduce variance in 2015 - 2016 average annual kWh use groupings beyond what was related to business type), increasing *rural* mid-sized business representation in BIP is a priority for program staff. As such, the rural or urban location indicator was incorporated into the EMI Consulting recruiting approach for mid-sized business customers.

Trade Allies

Trade Allies who had completed Focus on Energy projects were identified through Focus on Energy program participation data. To ensure trade ally insights corresponded to the diverse set of equipment needs in the mid-sized business customer base, EMI Consulting emphasized recruiting participating trade allies who had installed at least one of three general categories of measures: HVAC, kitchen equipment, and lighting measures. Using Focus on Energy program participation data, EMI Consulting coded measures that participating trade allies installed through BIP into the aforementioned categories and assigned participating trade allies indicators of whether they had installed that type of measure through BIP.

Recruitment and Challenges

The following sections describe recruiting procedures, final participants, and challenges for the mid-sized business customer and trade ally interviews conducted by EMI Consulting.

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[5] This definition of program participation aligns with other evaluation and research efforts Focus on Energy is conducting.

Mid-sized Business Customers

EMI Consulting attained a total of 26 mid-sized customer interviews (13 non-participants and 13 participants) – Table 2-2 displays the final number of interviews completed by mid-sized segment and rural/urban designation.

Table 2-2. Mid-sized Business Customer Interviews: Completes

Segment	Non-participants		Participants
	Rural	Urban	N/A
Segment 1a: Non-hospital healthcare	2	1	2
Segment 1b: Retail and auto sales	2	0	1
Segment 2: Office buildings	0	2	6
Segment 3: Restaurants	3	3	0
Segment 4: Hospitals	0	0	4
Total	7	6	13
Grand Total	**13**		**13**

Recruiting customers to participate in the study proved to be challenging. EMI Consulting sent 800 advance letters and called nearly 300 eligible mid-sized customers to attain the 26 mid-sized customers' responses.[6] Primary challenges were related to gaining access to energy decision-makers, potential respondents' schedules, and interview cancellations.

The research team over-recruited for some customer segments to account for cancellations and interview "no-shows." When evidence suggested that the research team would not be able attain the initial quotas, the recruiting strategy shifted to attaining interviews from any eligible mid-sized customers who showed interest in participating in the study.

Trade Allies

EMI Consulting sent recruiting emails to 136 participating trade allies. Table 2-3 shows the number of completed interviews by measures previously installed through BIP. Some trade allies interviewed had installed measures from more than one of the targeted measure categories through BIP; these trade allies were randomly assigned to one of the measure categories of emphasis, and *all* trade allies were asked to answer interview questions with respect to only *one* of the measure categories with which they had experience installing through BIP (e.g., HVAC, kitchen, lighting).

[6] In an attempt to recruit past participants, EMI Consulting also sent 136 emails to addresses contained in the SPECTRUM data. However, responses showed that the email addresses contained in the data were for trade allies, as opposed to customers. Thus, the email addresses were used to recruit trade allies for the trade ally interviews.

Table 2-3. Trade Ally Interviews Completed by Measure Type Installed

Measure Type Installed	Trade Allies Interviewed
HVAC	3
Kitchen Equipment	3
Lighting	4
Total	**10**

3. DETAILED RESULTS

This section provides in-depth findings from the mid-sized business market segmentation research including the segmentation analysis and qualitative information from customer and trade ally interviews.

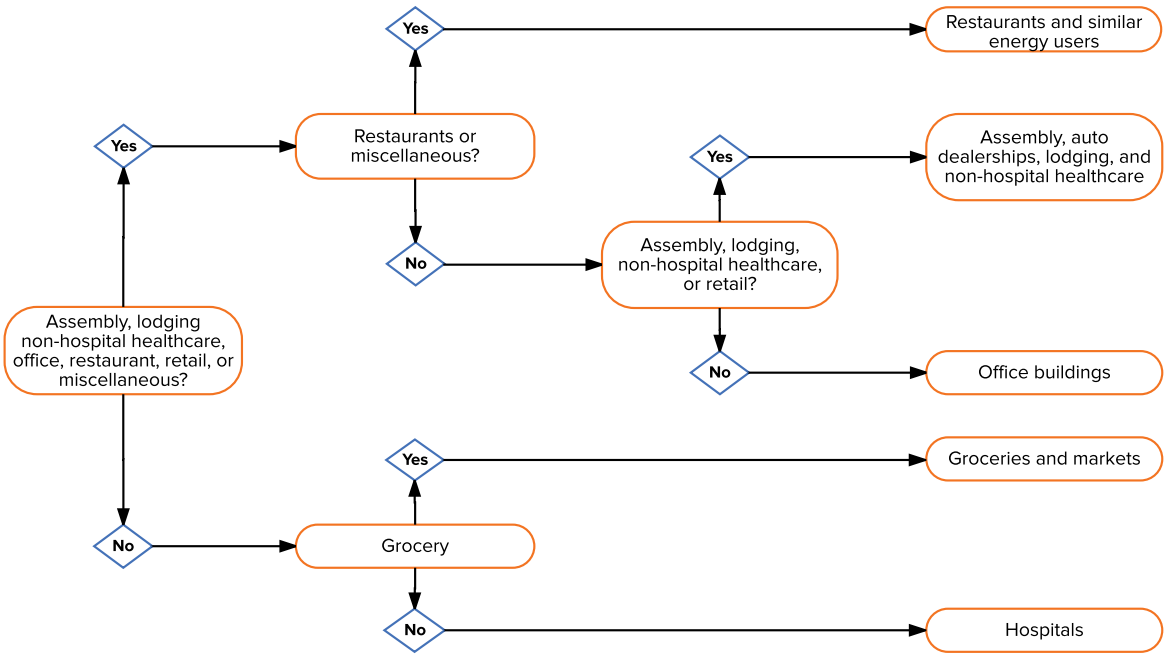
Results are presented as follows:

- Segmentation Results
- Customer Firmographics
- Customer Overview: Awareness, Upgrades, and Decision-Making Processes
- Segment-Specific Decision-Making Processes, Barriers, and Motivators
- Previous Participants' Experiences
- Trade Ally Engagement

3.1 Segmentation Results

While the rural or urban location designation supplied by Focus on Energy was included as a predictor variable in the CART model, this variable did not significantly influence groupings in businesses' 2015 - 2016 average annual kWh usage. As such, the model produced groupings in average annual kWh usage as a function of business type. Figure 3-1 shows the modeling procedure and preliminary segments produced by the CART analysis.

Figure 3-1. Classification and Regression Tree Model and Resulting Mid-Sized Business Segments



As the CART model was based on reducing variance in 2015 - 2016 average annual kWh by grouping business type, there was substantial variation in the business types constituting each

segment (e.g., assembly, auto dealerships, lodging, and non-hospital healthcare constituting a single segment). Table 3-1 displays the preliminary segments ordered by segment size, examples of business types included in the segment, percentage of unique midsized customers, and 2015 - 2016 average annual kWh for each segment. Note that a larger dataset, more complete information within fields, and more predictor variables may produce segments of greater specificity.

Table 3-1. Preliminary Midsized Business Segments - Detail (*n* = 3,772)

Segment	Example Customers in Segment	% of Unique Customers	Average Annual kWh (2015 - 2016)
Segment 1: Non-hospital healthcare, auto dealerships, lodging, and assembly	Assisted living, care centers, auto dealers, car dealerships, inns and lodging, churches, banquet halls and sports clubs	35.7%	847,599 kWh
Segment 2: Office buildings	Offices: finance, real estate, management	27.4%	982,042 kWh
Segment 3: Restaurants and similar energy users	Restaurants, laundromats, equipment repair	27.2%	678,751 kWh
Segment 4: Grocery and markets	Independent markets and grocery, specialty markets	7.2%	1,260,469 kWh
Segment 5: Hospitals	Hospitals and medical centers	2.5%	1,525,486 kWh
Total	**N/A**	**100%**	**885,145 kWh**

EMI Consulting amended the final mid-sized business segments to fit the needs of the research at-hand. While the CART analysis generated a valuable starting point for characterizing the Focus on Energy eligible mid-sized business base, in some cases, the businesses comprising individual segments were quite disparate (e.g., Segment 1 containing non-hospital healthcare, auto dealerships, lodging, and assembly). While the CART analysis shows that the businesses comprising the non-hospital healthcare, auto dealerships, lodging and assembly segment have similar energy profiles, these businesses have varied energy and equipment needs, and thus likely need to be approached differently to spur program participation. As such, EMI Consulting worked with Focus on Energy to determine the most useful and actionable segments, sub-segments, and business types to target for the research at hand. Table 3-2 shows the final mid-sized business segments that were deemed to be the most actionable and provided the most opportunity for Focus on Energy.

Table 3-2. Final Mid-Sized Business Segments (*n* = 2,755)

Segment	Example customers	*n* Unique Customers	% of Final Segments
Segment 1a: Non-hospital healthcare	Assisted living and clinics	431	15.6%
Segment 1b: Retail and auto sales	Auto dealers, retail stores	364	13.2%
Segment 2: Office buildings	Offices: real estate, finance, insurance, corporate offices	1,032	37.5%
Segment 3: Restaurants	Restaurants and other eateries	833	30.3%
Segment 4: Hospitals	Hospitals and medical centers	95	3.4%
Total	**N/A**	**2,755**	**100%**

3.2 Customer Firmographics

This section presents findings related to the demographic, firmographic, and organizational patterns that emerged from customer interviews. All customers were asked to provide general demographic and firmographic information related to: occupational title or role at the company, energy-using equipment at facilities, average energy costs, building ownership, building square footage, and payment of energy bills at their facility.

These data are provided to give the reader context for the interviews EMI Consulting conducted. Note that these firmographic data are based on a small set of interviews and should not be considered to be representative of the entire mid-sized customer population.

Decision-Makers

Across mid-sized business customers (*n* = 26), most respondents indicated occupying the role of either facilities manager (*n* = 8), services manager or coordinator (*n* = 7), or business owner (see Table 3-3). Restaurants were more likely than other business types to have business owners who were also the energy decision-makers.

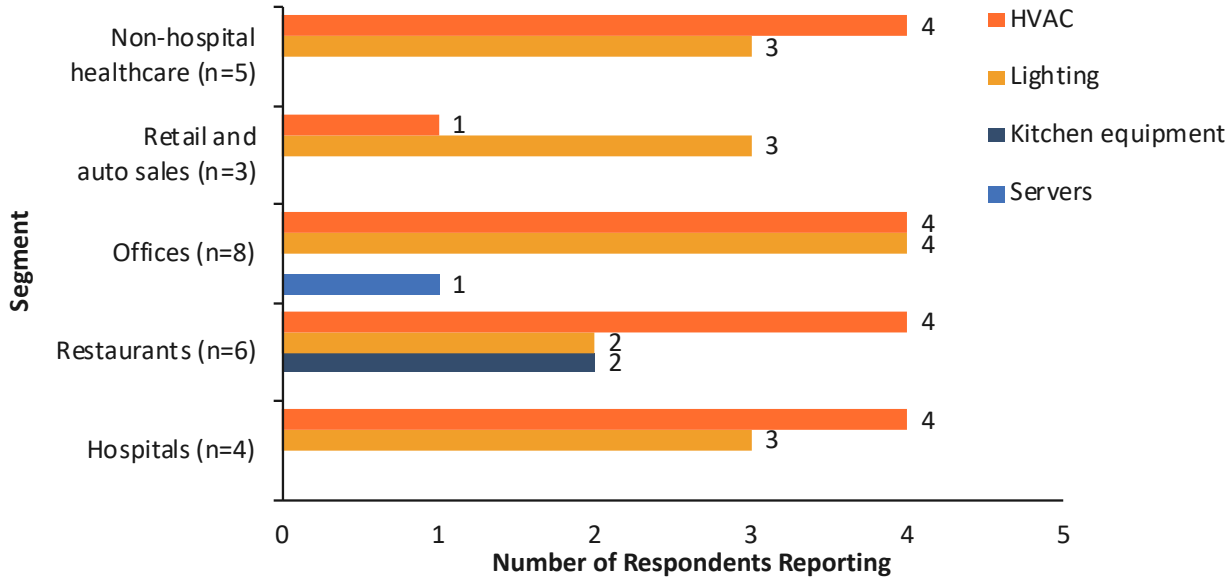
Table 3-3. Decision-Makers/Interviewees by Segment

Segment	Facilities Manager	Services Coordinator	Owner	Property Manager	General Manager	Vice President
Non-hospital healthcare (*n* = 5)	3	1	0	1	0	0
Retail and Auto Sales (*n* = 3)	1	3	0	1	1	0
Offices (*n* = 8)	4	2	0	1	0	1
Restaurants (*n* = 6)	0	1	4	0	1	0
Hospitals (*n* = 4)	0	0	1	1	0	0
Total (*n* = 26)	**8**	**7**	**5**	**3**	**2**	**1**

Energy Use

Figure 3-2 shows the largest end uses of electricity by segment as reported by respondents. Overall, most customers reported HVAC (*n* = 17) and lighting (*n* = 15) as the largest end-uses of electricity; offices were the only business type to mention servers as large end uses of electricity. Unsurprisingly, square footage varied widely across customers (responses ranged from 4,000 square foot to upwards of 2 million square foot buildings) and were associated with energy costs, with higher electricity costs associated with larger facilities.

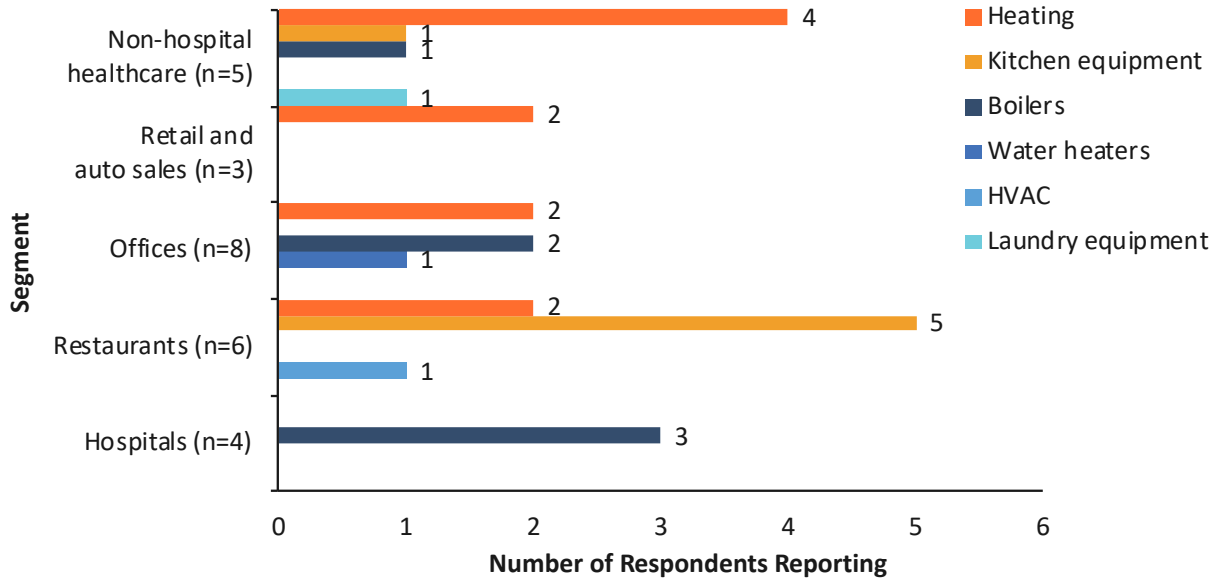
Figure 3-2. Largest End Uses of Electricity by Segment



Across segments, heating (*n* = 10) was reported as the largest end use of gas at businesses, followed by boilers (*n* = 6) and kitchen equipment (*n* = 6) (see Figure 3-3). Kitchen equipment was unsurprisingly the largest end user of gas in restaurants. However, one non-hospital healthcare respondent (an elderly care facility) also indicated that this was one of the largest end uses of gas

at their facility, indicating that kitchen equipment may be a consideration for other segments as well.[7]

Figure 3-3. Largest End Uses of Gas by Segment



Slightly more than half of respondents (*n* = 16) provided information regarding their average monthly electric bills: as shown in Table 3-4, responses indicate that hospitals and offices have the largest energy costs among segments.

Table 3-4. Monthly Electric Bill Range by Segment

Segment	Monthly Electric Bill Range
Hospitals (*n* = 3)	$18,750 - $30,000
Offices (*n* = 5)	$15,000 - $80,000
Non-hospital healthcare (*n* = 3)	$5,000 - $8,000
Retail and auto sales (*n* = 1)	$1,500 - $5,000
Restaurants (*n* = 4)	$1,500 - $5,000
Total (*n* = 16)	**$1,000 - $80,000**

Building Ownership, Size, and Bill Payment

Building ownership showed little variability between or within segments. The majority of customers who provided information (*n* = 21) indicated that their business owned their building. Offices showed some variability in terms of building ownership with four respondents indicating that they leased their building and one indicating that ownership varied across properties. One restaurant indicated they leased their building.

[7] This respondent also cited laundry services as a large end use of gas, indicating that care facilities have a disparate set of equipment in terms of energy use.

Given the nature of the segmentation analysis, building size was unsurprisingly varied both within and between segments. Interviews suggest that offices are among the largest buildings of the targeted segments, while restaurants contain the smallest buildings. Table 3-5 shows the building size ranges reported by segment. Due to the qualitative nature of the data, these values should be viewed as potential building sizes for each segment, rather than trends.

Table 3-5. Building Square Footage by Segment

Segment	Building Square Footage Range
Offices (*n* = 6)	40,000 - 2.6 MM sq. feet
Hospitals (*n* = 4)	10,000 - 175,000 sq. feet
Non-hospital healthcare (*n* = 4)	13,000 - 105,000 sq. feet
Retail and auto sales (*n* = 3)	10,000 - 38,000 sq. feet
Restaurants (*n* = 5)	4,000 - 10,000 sq. feet
Total (*n* = 22)	**4,000 - 2.6 MM sq. feet**

There was very little variation in energy bill payment between or within segments: nearly all customers (*n* = 24) reported paying their own energy bills. Two office segment respondents indicated a different form of energy bill payment: property manager and tenant payment of bills.

3.3 Customer Upgrades and Decision-Making Processes

The research team asked customers a series of questions about their attitudes, behaviors, and decision-making processes around upgrading equipment to build an understanding of how customers understand how energy efficiency impacts those decisions. Respondents were asked to provide information regarding: awareness of Focus on Energy programs (non-participants only), previous considerations of energy efficiency upgrades, current upgrade plans, considerations in pursuing upgrades, and the factors that would make completing upgrades in their facility more appealing. Results are presented as a high-level overview of customers and segment differences, followed by more detailed information for each segment.

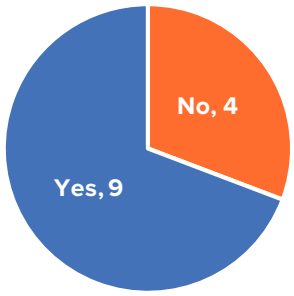
Focus on Energy Awareness

Overall, the research team found there is a high awareness of Focus on Energy with the majority of non-participants (9 of 13 respondents) reporting their awareness of Focus on Energy prior to the interview (Figure 3-4). Almost half (*n* = 4) of these interviewees have heard or seen that Focus on Energy provides incentives for energy efficiency equipment. However, three-quarters (*n* = 3) of those respondents were not aware of or had forgotten about the full extent of rebate offers. These insights demonstrate that there is high awareness of Focus on Energy, however, there is opportunity to increase awareness of the specific services Focus on Energy offers to mid-sized business customers.

All of the non-participants interviewed were aware of Focus on Energy in the offices (*n* = 2) and non-hospital healthcare segments (*n* = 3), and the majority of non-participants were aware in the restaurants segment (4 of 6 respondents). Of note, neither of the two retail and auto sales

segment respondents were aware of Focus on Energy. In addition, this finding may be impacted by self-selection bias. During recruiting, many potential respondents did not agree to continue with the interview as they were unaware of Focus on Energy. The research team recommends that program staff explore general awareness of Focus on Energy through a larger quantitative study.

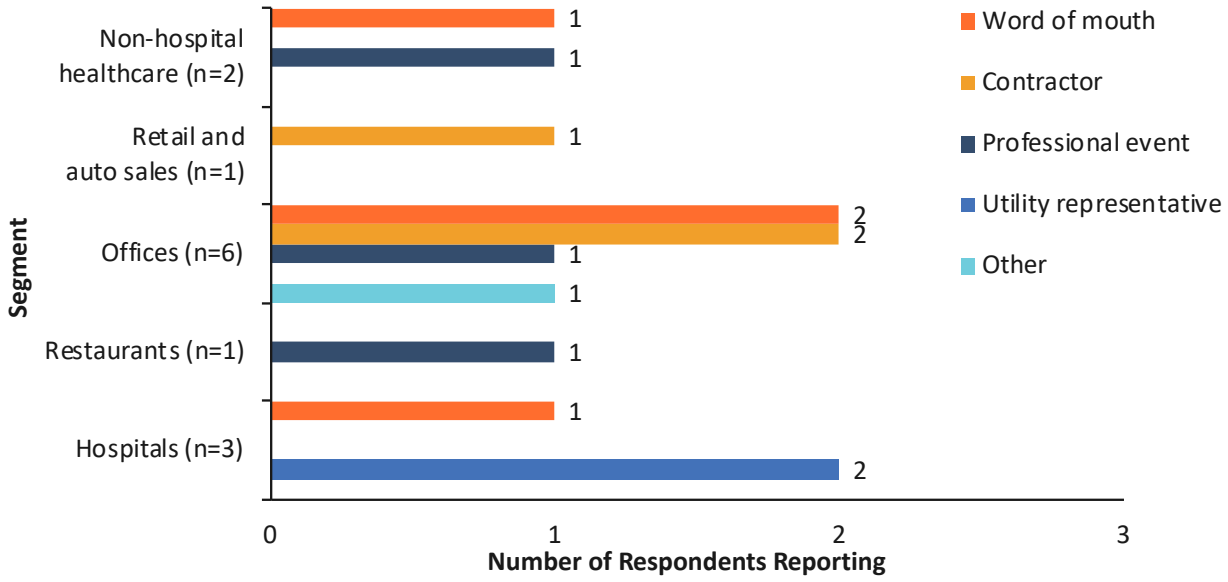
Figure 3-4. Awareness of Focus on Energy – Non-Participants



Note: EMI Consulting did not attain non-participant interviews from the hospital segment

Across all customers interviewed, 13 respondents gave definitive answers regarding their source of awareness (see Figure 3-5). Word of mouth (*n* = 4), contractors (*n* = 3), and professional events (*n* = 3) were the most commonly cited ways customers gained knowledge of Focus on Energy. Professional events included: a regional restaurant show hosted by the Wisconsin Restaurant Association, a conceptual design seminar, and an unspecified professional event. Note that few respondents were able to elaborate on how they became aware of Focus on Energy. Many respondents indicated that they were unsure of how they had become aware or were "always aware" of Focus on Energy. This finding reflects the maturity of the Focus on Energy brand.

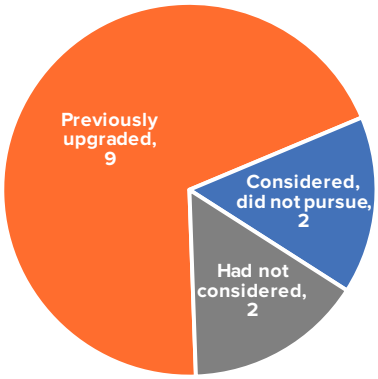
Figure 3-5. Sources of Focus on Energy Awareness



Considerations of Upgrades – Past and Current

Non-participant (*n* = 13) respondents were asked whether they had ever upgraded or considered upgrading to more energy efficient equipment at their business. As shown in Figure 3-6, nine respondents indicated that they had upgraded equipment in their facility to be more energy efficient, two reported they had considered upgrading but did not pursue these upgrades, two respondents suggested that they had not considered upgrading to more energy efficient equipment.[8] The reasons non-participants cited for not considering energy efficiency upgrades included cost (*n* = 2) and budget concerns (*n* = 1), one respondent reported building "the most energy efficient building we could when building."

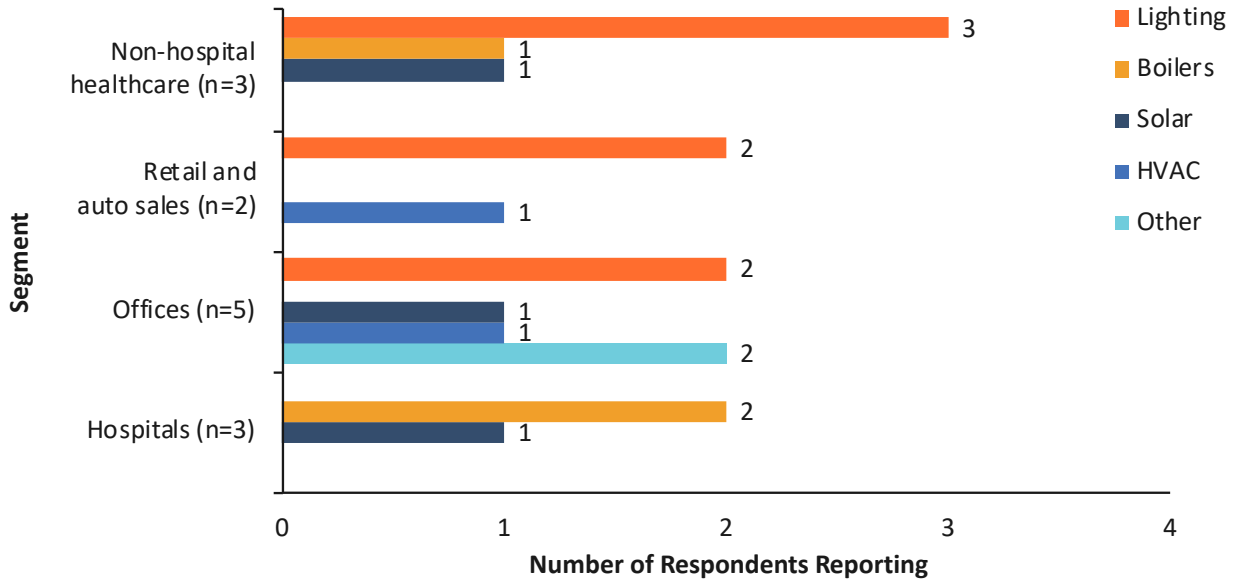
Figure 3-6. Past Pursuit and Consideration of EE Upgrades – Non-Participants (*n* = 13)



All mid-sized customers were asked whether they were currently considering energy efficiency upgrades at their business. Fourteen respondents indicated they were currently considering upgrades; as shown in Figure 3-7, the most commonly considered upgrades were lighting (*n* = 7) and boilers (*n* = 4). Three of four hospitals asserted they were currently considering boiler upgrades. Three respondents across segments indicated they were actively considering solar: these customers reported previously upgraded their lighting (*n* = 3), HVAC (*n* = 1), and boilers (*n* = 1).

[8] Of non-participants who reported pursuing energy efficiency upgrades for their buildings, three reported receiving incentives from Focus on Energy for their upgrades. These individuals were defined as non-participants per the Focus on Energy definition of participant (i.e., receipt of Focus on Energy incentives was prior to 1/1/2015).

Figure 3-7. Currently-Considered Upgrades by Segment

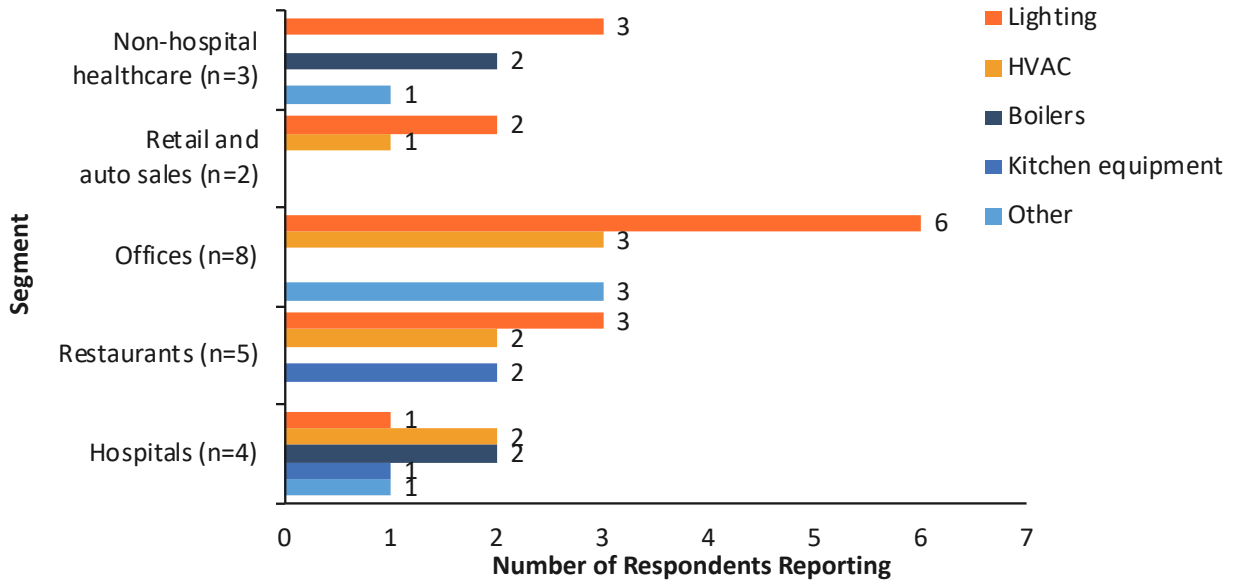


Note: "Other" responses were: "considering doing some capital operations" (office segment) and "we are in the process of considering upgrades with a consultant" (office segment)

Completed Upgrades

All mid-sized customers were asked to provide information regarding energy efficiency upgrades they had made at their business. Figure 3-8 shows that lighting upgrades (*n* = 15) were by far the most prevalent type energy efficiency measures installed by mid-sized businesses; HVAC upgrades (*n* = 8) were also common across segments.

Figure 3-8. Completed Upgrades by Segment



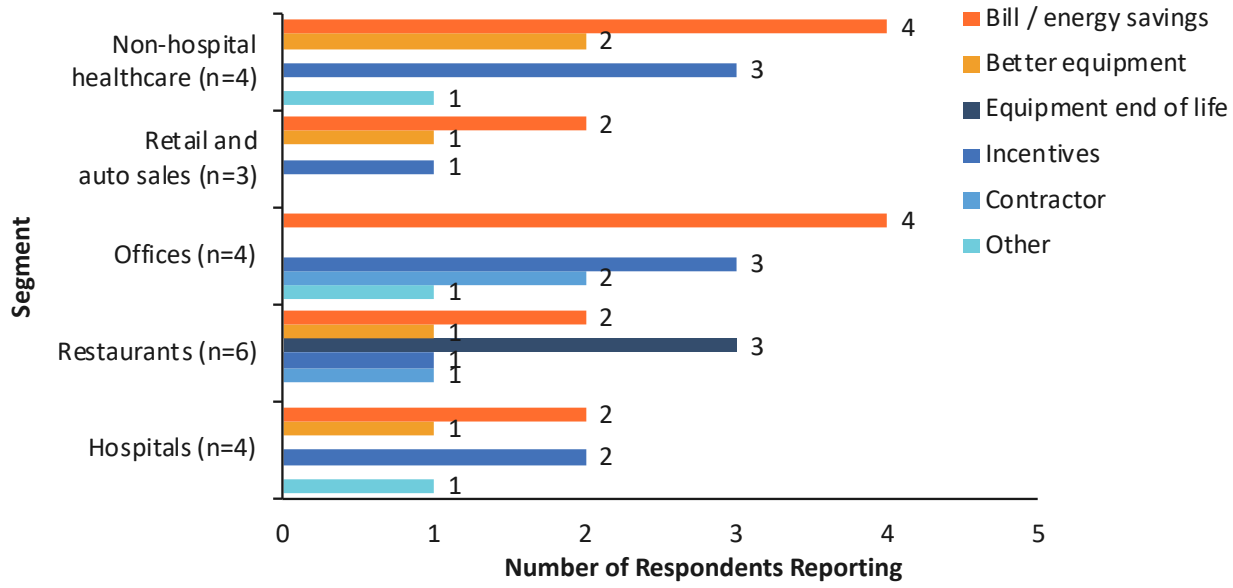
Note: "Other" responses included: solar (non-hospital healthcare), heating (office), data centers (office), whole building upgrade (office), water heaters (hospital)

Making Decisions to Pursue Upgrades

To ascertain greater insight into mid-sized customers' energy efficiency upgrade decision-making process, EMI Consulting asked interviewees to provide information regarding reasons they have considered or installed energy efficiency upgrades at their business, concerns they have surrounding upgrading, and what might make installing more energy efficient equipment more appealing to them.

As shown in Figure 3-9, across segments, the primary reason customers reported considering or completing upgrades was bill or energy savings (n = 14). Restaurants showed the most varied reasons for considering or pursuing energy efficiency upgrades and were also the only segment to report basing energy efficiency upgrades on equipment nearing or being at end-of-life.

Figure 3-9. Reasons for Considering or Completing Upgrades



In addition to asking respondents to elaborate on why they consider or complete energy efficiency upgrades, EMI Consulting asked for information regarding concerns respondents may have about upgrading their equipment. Few interviewees expressed concerns regarding upgrading their equipment. Across segments, five customers offered concerns they had regarding upgrading equipment:

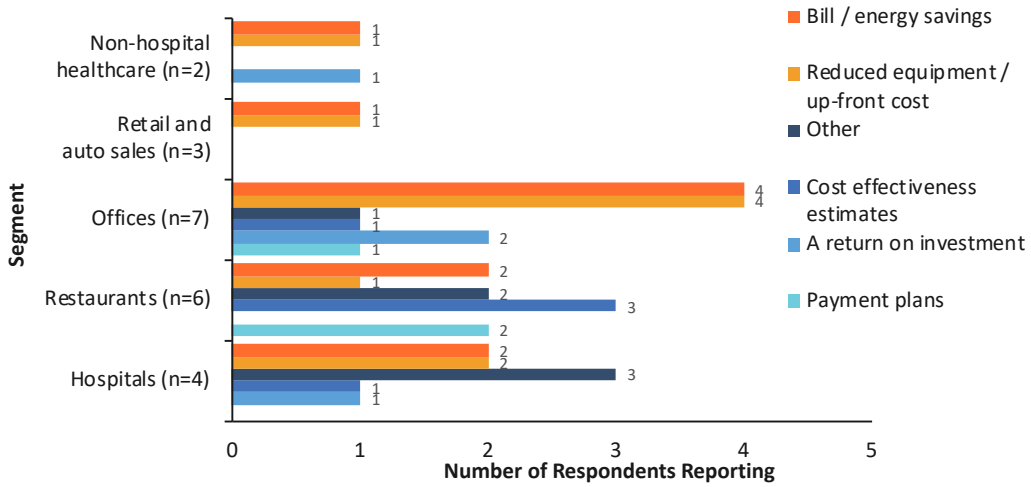
- Two expressed concerns regarding upfront costs (both restaurants).
- Two reported concerns about cost-effectiveness of upgrades and equipment (both non-hospital healthcare facilities).
- One respondent expressed apprehension regarding how lighting would look (retail and auto sales).

Increasing Appeal of Upgrades

In addition to asking respondents about their reasons for considering or completing upgrades, EMI Consulting asked mid-sized business customers to provide information regarding factors that would make pursuing energy efficiency upgrades more appealing. As shown in Figure 3-10, the most commonly cited factors that would increase the appeal of energy efficiency were bill or

energy savings (*n* = 10) and a reduction in equipment or upfront costs (*n* = 10). Cost-effectiveness estimates (*n* = 5) and a return on investment (*n* = 4) were also a seen as ways to increase the appeal of energy efficiency upgrades across most segments.

Figure 3-10. Factors That Would Increase Appeal of Energy Efficiency Upgrades

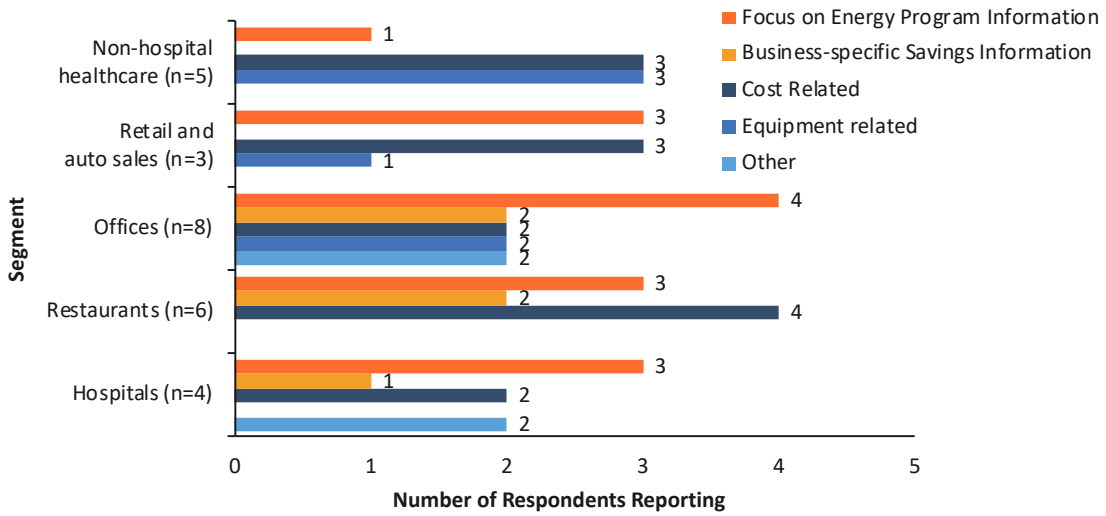


Note: "Other" responses were: increased equipment performance (restaurant, hospital), tenant satisfaction (office, hospital), and value statements (hospital).

Motivating Information to Pursue Energy Efficiency Upgrades

Both non-participants and participants were asked what type of information would motivate them to search for energy efficiency upgrades at their business. As shown in Figure 3-11, respondents primarily reported information related to Focus on Energy programs (*n* = 14), cost (*n* = 14), and equipment (*n* = 6) as the most motivating information. There were several slight differences between segments regarding the factors they considered were most important. The majority of respondents in the hospital segment (*n* = 3) and all of the respondents in the retail and auto sales segment (*n* = 3) highlighted Focus on Energy program information as information that would motivate them.

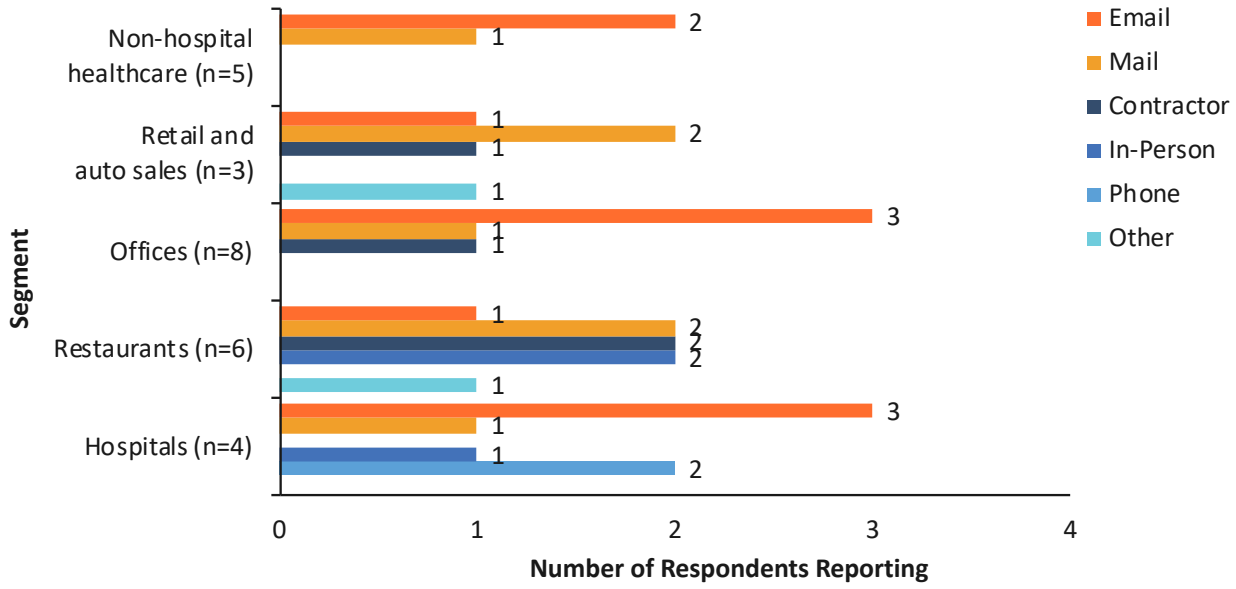
Figure 3-11. Information That Would Motivate Searches for Energy Efficiency Upgrades



Note: "Other" responses were: seminar/webinars (office) and energy audits (office, hospital), and increased Focus on Energy support (hospital).

Both participants and non-participants were also asked to indicate the best way to receive information that would motivate them to upgrade their equipment. Most respondents indicated email (*n* = 10) or mail (*n* = 7) would be the best way to send them information.

Figure 3-12. Preferred Methods for Receiving Information



Note: "Other" responses were: Focus on Energy representatives (restaurant, retail and auto sales).

3.4 Segment-Specific Findings

The following sections provide detailed findings regarding segment upgrades, decision-making, motivators, important factors in making energy efficiency upgrades, and barriers to upgrading for each of the targeted segments.

Non-hospital Healthcare (*n* = 5)

All non-participants (*n* = 3) reported being aware of Focus on Energy. Three of five non-hospital healthcare customers had installed at least one energy efficiency upgrade; all three reported lighting upgrades, indicating this is a common measure within this segment.

Two respondents reported considering lighting upgrades they ultimately did not pursue. One cited a lack of savings information as the reason for not pursuing the upgrades. The most common reason for considering or installing upgrades in this segment was bill or energy savings (*n* = 5).

> *"I wanted to see the (savings potential) in calculations, and not someone just coming and telling me… I needed some calculations to guarantee savings."*

Four of five respondents in this segment indicated they were currently considering energy efficiency upgrades: lighting upgrades were the most common. Only one respondent supplied information regarding factors that would make upgrading equipment more appealing and said "efficiency and payoff in the capital investment."

Two respondents reported concerns regarding upgrading. Both had concerns about the reliability of the lighting and cost-effectiveness of upgrading due to past experience. One respondent reported: *"A lot of the LEDs and spiral fluorescents weren't lasting as they claimed… when you look at it, the replacement costs nullify the energy/money saved on the other side."* The other told EMI Consulting: *"LEDs have more problems than they let on… We've had some failures—the manufacturer has been replacing them, but surprised that it happens".*

The non-hospital healthcare segment did not provide much information regarding what would make installing energy efficiency upgrades more appealing to their businesses. Two respondents provided responses related to return on investment (*"efficiency and the payoff in capital investment"*) and budgetary constraints (*"We would like to upgrade, but it is dependent on our current cash flow."*).

> *"Costs are number one… Operational costs and energy savings (#2), then payback for the equipment (#3) – typically 3 years or less is best. Possibly 5 years, if it is a larger project… Spending a lot of money for an item that lasts 20 years is okay."*

Interviewees in the non-hospital healthcare segment consider factors related to total cost as the most important when making decisions regarding the installation of energy efficient equipment. All of the respondents in this segment mentioned factors related to total cost when asked about what they consider when upgrading equipment. Responses included: bill or energy savings (*n* = 3), return on investment (*n* = 2), and upfront costs (*n* = 1).

Customers in the non-hospital healthcare segment face some unique barriers to energy efficiency upgrades. Barriers listed by non-hospital healthcare respondents included issues related to: operations (*n* =2), occupant type (*n* = 2), and sources of income (*n* =1). The two respondents who mentioned operations-related issues indicated that their buildings are always occupied, and therefore equipment cannot be turned off for long periods of time. One

respondent indicated a potential solution to this problem, installing equipment during the off-season: "We install equipment during the opposite season, for example, we fix their heating in the summer (if it is possible to wait that long)." Respondents who indicated that occupant type was a barrier to upgrading told EMI Consulting that they are required to have a specific number of air exchanges and brighter lighting installed due to the occupants of their facilities (e.g., elderly long-term care patients). The respondent who indicated income source as a barrier for non-hospital healthcare facilities indicated that: *"(Our) Cash-flow is lower than others... We are long-term healthcare, not a hospital, our income is mandated by the government... There is some private pay, but mostly driven by Medicare and Medicaid."* The barriers detailed by the respondents in the non-hospital healthcare segment show that these types of customers operate under relatively tight constraints and are limited in the types of equipment they can upgrade and when (due to constant occupancy). One respondent reported that they are a tax-exempt organization (501c3) and are able to receive grant money, which makes upgrading to energy efficient equipment easier.

The majority (n = 3) of interviewees also reported equipment-related information would motivate them to pursue energy efficiency opportunities. Respondents asked for information related to emerging technology (n = 2), equipment reliability (n = 1), and solar (n = 1). Respondents reported email (n = 2) and mail (n = 1) as their preferred methods for receiving this information.

Retail and Auto Sales (n = 3)

None of the non-participants interviewed in the retail and auto sales segment were aware of Focus on Energy. Two of three customers in this segment had completed upgrades (including one participant)—both parking lot lighting. Both respondents indicated that the more energy efficient lighting was aimed at bill or energy savings. Both respondents were considering additional outdoor lighting upgrades. The remaining customer in the retail and auto sales segment reported that he had never considered energy efficiency upgrades because upgrades were not accounted for in his operating budget.

Both retail and auto sales respondents who had completed upgrades indicated they were currently considering additional upgrades; both reported considering outdoor lighting, one reported considering HVAC upgrades ("*In the spring, I will do two more HVAC units.*"). The respondent who was planning on upgrading his HVAC unit (a non-participant) was not aware that Focus on Energy offered rebates for these types of upgrades, but indicated he planned on looking for rebates now that he knew this was an option.

Only one retail and auto sales respondent detailed concerns about energy efficiency upgrades: this respondent reported that he was concerned about the color of the outdoor lighting, as his business relies on this lighting to help advertise automobiles. Retail and auto sales customers cited factors related to upfront cost (n = 2) and reduced operating costs (n = 1) when asked what might make upgrading to energy efficient equipment more appealing. A previous participant said that guaranteed rebate amounts would be the largest factor in making upgrades more appealing. The respondent reported that he had upgraded indoor and outdoor lighting through a lighting contractor and received rebates through Focus on Energy. He reportedly did not receive the rebate amount he was initially quoted and indicated that he received substantially less than promised. This respondent requested more direct contact with Focus on Energy, rather than pursuing the rebate process through a third-party.

Customers in the retail and auto sales segment are motivated by "better deals" that work for their business. All of the interviewees (*n* = 3) reported total cost-related factors were the most important when considering upgrading equipment at their business. Types of total cost factors mentioned by interviewees included: upfront cost (*n* = 2), bill or energy savings (*n* = 1), and the rebate amount (*n* = 1). Throughout the interviews, the majority of interviewees emphasized the importance of cost comparison (*n* = 2) and reliability (*n* = 2).

> *"Quality and cost comparison are the biggest factors... You can pay a lot, if you don't pay attention."*

Retail and auto sales customers did not report segment-specific barriers or opportunities in terms of upgrading their equipment. However, a potential marketing opportunity for Focus on Energy emerged from the interviews: one respondent estimated that upgrading to energy-efficient lot lighting would save their business (an auto dealership) $60,000 to $80,000 a year. Highlighting such savings could provide a compelling case to businesses of this type and increase the appeal of replacing lot lighting at auto dealerships.

> *"It would come down to who could give us the better deal and what fits our facility the best... Information on the program would help us with the decision."*
>
> *"When we have the budget, we can put out feelers with companies and organizations to see what would be best for the company."*

Retail and auto customers reported that cost-related information would be the most motivating information in terms of pursuing energy efficiency upgrades at their business. All of the customers in this segment asked for information on ongoing programs and rebates (*n* = 3) (two respondents specifically asked for brochures with this information); customers were also interested in information related to rebate and installation timelines (*n* = 2). Respondents reported mail (*n* = 2), email (*n* = 1), contractor (*n* = 1) and Focus on Energy Representative (*n* = 1) as their preferred methods for receiving this information.

Offices (*n* = 8)

Both non-participant mid-sized office customers were aware of Focus on Energy. All eight customers in this segment had completed upgrades: lighting was the most commonly reported upgrade completed (*n* = 6), followed by HVAC equipment (*n* = 3). One respondent reported a whole building upgrade, another reported data center upgrades. The primary reason office respondents considered energy efficiency upgrades was to attain bill or energy savings (*n* = 4). Interviews indicate that contractors are a more important factor in this segment's consideration of energy efficiency upgrades—three (previous participant) respondents reported that contractors were a significant influence on their consideration of upgrades (in contrast, contractors were only mentioned in one other segment, restaurants).

Five customers reported they were currently considering upgrades, and lighting was the most commonly cited upgrade (*n* = 2). One respondent indicated they were in the process of considering multiple upgrades with a consultant, another indicated considering capital operations, and one respondent was considering an HVAC upgrade. No respondents expressed concerns surrounding upgrading to more energy efficient equipment.

Office segment interviewees cited elements related to cost (e.g., reduced equipment or upfront cost and payment plans) (*n* = 5) and reduced operating costs (e.g., a return on investment, bill or energy savings) (*n* = 6) when asked what would make energy efficiency upgrades more appealing to them. A number of mid-sized office respondents asked for materials to support value statements for upgrading.

"Investors don't want to see money going out the door that is not going to readily bring money back"

"I need good selling points to inform everyone that we are on track towards being energy efficient."

"Known energy savings would make it a lot easier to get a project approved."

"Bottom line is the most important [factor], second would be the tenants' happiness, making sure everything is efficient for them."

"Ease of use for tenants is important... There are several employees who would need to know how to use or be trained to use the equipment."

Customers in the offices segment reported varied considerations when asked about the most important factors they consider in energy efficiency upgrade decisions. Most (*n* = 4) reported factors related to the total cost of the upgrades or cost-effectiveness (*n* = 2) as the most important matters in equipment upgrade decisions. Tenant considerations (ease of equipment use and tenant satisfaction) were reported by two respondents.

Issues related to tenants were somewhat of a unique factor in the office segment, in that these issues could serve as both a barrier to upgrading and an opportunity for Focus on Energy. Three respondents indicated that office disruptions are usually necessary to make upgrades and installation needed to be scheduled around tenants' operating hours. However, while energy efficiency upgrades were seen as a "hassle factor" for current tenants, respondents also indicated that these upgrades could be completed during low-occupancy periods or off hours, and that energy efficiency upgrades were seen as an avenue for increasing building desirability. The quotes below emphasize the tenant-related barriers and opportunities EMI Consulting extracted from the office segment interviews.

"Lower energy bills can be a selling point to potential tenants. The market is competitive and if there are reduced utility costs at the buildings, it can be more attractive to tenants."

"If a section of a building has less occupancy, we would have a bigger opportunity to upgrade spaces before someone moves in."

"If a space goes vacant, we can tell the new perspective tenant, if we switch everything to LEDs they could drop their electricity costs by x percent."

While respondents perceived a hassle factor to current tenants in pursuing upgrades, they also indicated that there are opportunities to pursue upgrades during tenant transfers or low occupancy periods. Moreover, these upgrades were seen as an avenue to making spaces more attractive to tenants and a way to increase tenant satisfaction (e.g., reducing tenant energy bills where that payment structure exists). Ultimately, these insights may serve as a selling point for Focus on Energy, as not all office energy efficiency decision-makers (in the office segment) may be aware of approaches to increasing the feasibility of upgrades, nor the potential for increasing building attractiveness through upgrades.

"Something that would be very helpful would be energy audits on currently-installed equipment, comparisons to what is in the market, and how (energy use/bill amount) would change."

"There could be new programs/rebates out there that others are not aware of... If we can bring them to their attention, there's a good chance they'll go for it. If they have to go look for the information, it is less likely."

Office segment respondents primarily indicated that information related to program offerings and rebates (*n* = 4) and similar facilities (*n* = 2) would be the most motivating for them to explore energy efficiency upgrades at their businesses. A trend emerged from this segment in that office customers reported that the ability to easily access information (e.g., equipment-related and savings information) and the ability to provide value statements to others involved in the decision would make pursuit of energy efficiency upgrades easier. Offices reported email (*n* = 3), mail (*n* = 1), and contractor (*n* = 1) as their preferred methods for receiving this information.

Restaurants (*n* = 6)

All mid-sized restaurant respondents interviewed by EMI Consulting were non-participants; four of six were aware of Focus on Energy before being contacted. All respondents indicated that they had considered energy efficiency upgrades at some point, all but one had pursued upgrades, including: lighting (*n* = 3), kitchen equipment (freezers, fryers) (*n* = 2), and HVAC units (*n* = 2). Only two respondents reported receiving rebates through Focus on Energy for their upgrades and *no* mid-sized restaurant respondents indicated they were currently considering upgrades.

Restaurants were somewhat distinct in their reasons for upgrading equipment, in that their reasons for upgrading were largely related to the performance of the equipment: respondents reported upgrade considerations when equipment reached end-of-life (*n* = 3) or they felt a need for better-performing equipment (*n* = 2) (e.g., wanting a "quicker oven").

Only one restaurant reported concerns about upgrading to more energy efficient equipment: their concern was about upfront costs of equipment and indicated that higher incentives would alleviate this concern. Factors listed by the restaurant segment as potentially increasing the appeal of energy efficiency upgrades revolved around cost-effectiveness estimates (*n* = 3) and the cost of upgrading (e.g., payment plans and reduced upfront cost) (*n* = 3). In terms of cost-

effectiveness, one respondent indicated that upgrades would be more appealing if he *"knew exactly how much it costs per unit to run it, and what the difference would be if you get another unit."* Another reported: *"If cost and savings estimates can be provided ahead of time, that would be helpful."*

Customers in the restaurant segment tend to wait until equipment is at the end of its life to upgrade equipment. As a result, the factors they report as being most influential in considering energy efficiency upgrades revolve around those that are key to keeping business running. Interviewees reported total cost-related factors (*n* = 4), equipment-related factors (*n* = 3), timing factors (e.g., length of equipment downtime) (*n* = 3), and stage of current equipment (*n* = 3) as the most important factors when upgrading equipment at their business. The barriers restaurant respondents listed as specific to their business type also revolve around these factors. Waiting until end-of-life to replace, coupled with volume-based revenue creates a sense of urgency for restaurant customers in upgrade situations. The following quotes summarize the conundrum restaurants face when presented with an opportunity to upgrade to energy efficient equipment.

> *"There is no good time to change it out… Down time for the restaurant could cost business…. The question is how can you get it up and running right away?"*
>
> *"We wait till the equipment goes down, then look at options… What is the cost to repair or replace?*
>
> *"If we're purchasing something, we usually need to do it immediately… 24-hour turnaround, emergency-type thing… Not enough time to fill out forms, maybe if we didn't have to send it back right away."*
>
> "When it goes down, you have to replace it… It's not like you can plan on it. Might take a week to fill out the Focus on Energy paperwork. Sometimes it is difficult to get a rebate with the timing, because you need the equipment immediately."

Interviewees reported bill or energy savings information (*n* = 4), Focus on Energy program information (*n* = 3), and equipment-related information (*n* = 2) would motivate them to pursue or learn more about energy efficiency opportunities. One customer asked for specific information regarding where they might be losing money due to inefficient equipment.

Restaurants indicated that the best way for businesses like theirs to receive information was in-person (either via contractors [*n* = 3) or a Focus on Energy representative [*n* = 1]) or via mailed brochures (*n* = 2). One customer indicated that a good way to receive information was through restaurant associations; this customer also asked for reminders (e.g., magnets or stationary) and said: "I probably should do it every year, but I don't remember… I need a reminder about Focus on Energy—a magnet, pen, or calendar—something in front of me to remind me."

Hospitals (*n* = 4)

All four respondents in the hospital segment were previous Focus on Energy program participants. Hospital respondents reported completing a number of upgrades, including lighting

(*n* = 2), boilers (2), HVAC (*n* = 2), and water heaters (*n* = 1). Reasons for upgrading were varied and included: bill or energy savings (*n* = 2), return on investment (*n* = 1), and incentives (*n* = 1).

Hospitals were distinct from other segments in that respondents reported considering or completing energy efficiency upgrades due to environmental benefits (*n* = 3). One of these respondents reported that their hospital had won awards (e.g., "The Green Masters Award") for sustainability actions completed in the past. Three of four hospitals reported currently considering energy efficiency upgrades: boilers (*n* = 2) and solar (*n* = 1) and no respondents reported concerns regarding upgrading.

> *"We would have done the work regardless, the right thing to do... We're a pretty sustainable conscious organization, so we would do the right thing anyways."*

The hospital segment's responses about making upgrades more appealing were varied. The most commonly reported factors that would make energy upgrades more appealing were lower upfront costs for upgrades (*n* = 2) and bill or energy savings (*n* = 2). One respondent indicated that value statements and greater support from Focus on Energy, in the way of on-sites, would make upgrading more appealing: *"If I had some more ammunition/information... I would love for Focus to come in and find opportunities."* Equipment ease-of-use was also mentioned as a way to increase the appeal of upgrades in hospitals, as indicated by this response: *"We need to be able to control environments... there are a lot of people flying around the hospital, night nurses adjusting the thermostat... control needs to be easy."*

> *"We can't change equipment settings in some rooms... Even if a surgery area isn't occupied, we have to maintain 20 air changes per hour and keep humidity at certain points. It impedes us from having an impact on that area."*
>
> *"We have piles of regulations we have to follow... The most stringent in any industry... From an HVAC standpoint, we have to maintain humidity, we can't just swap things 1-for-1. A lot of it is related to prevention infection."*

Hospital customers reported safety regulations (*n* = 3), total cost (*n* = 3), and tenant-related issues (*n* = 2) as the most important factors when considering equipment upgrades. Specific safety regulations mentioned included protocols for operating rooms and ASHRAE guidelines. Segment-specific barriers largely revolved around these safety and regulations issues. Hospitals are limited in their flexibility with upgrades as specific rooms must be kept to certain codes, regardless of occupancy. Infection prevention regulations were cited as a major barrier to potential for energy efficiency upgrades.

Hospital respondents reported that Focus on Energy program information (*n* = 3), cost-related information (*n* = 2), increased Focus on Energy support (*n* = 2), and business-specific savings information (*n* = 1) would motivate them to pursue or learn more about energy efficiency opportunities. Specific Focus on Energy program information reported included current rebates and programs (*n* = 3). Two respondents indicated they would like Focus on Energy to play more of an advisory role in the upgrade process.

"I'd like to have Focus on Energy help us figure out things more, tell us about similar projects they have worked on and what they've seen done to get the biggest bang for your buck"

"It would be helpful to have someone at Focus who knew more about the facility advise us… I would be more than willing to share site assessments if I knew that Focus was going to do something with them (the site assessments)."

Respondents reported email (*n* = 3), phone (*n* = 2), mail (*n* = 1), and in-person (*n* = 1) as their preferred methods for receiving information.

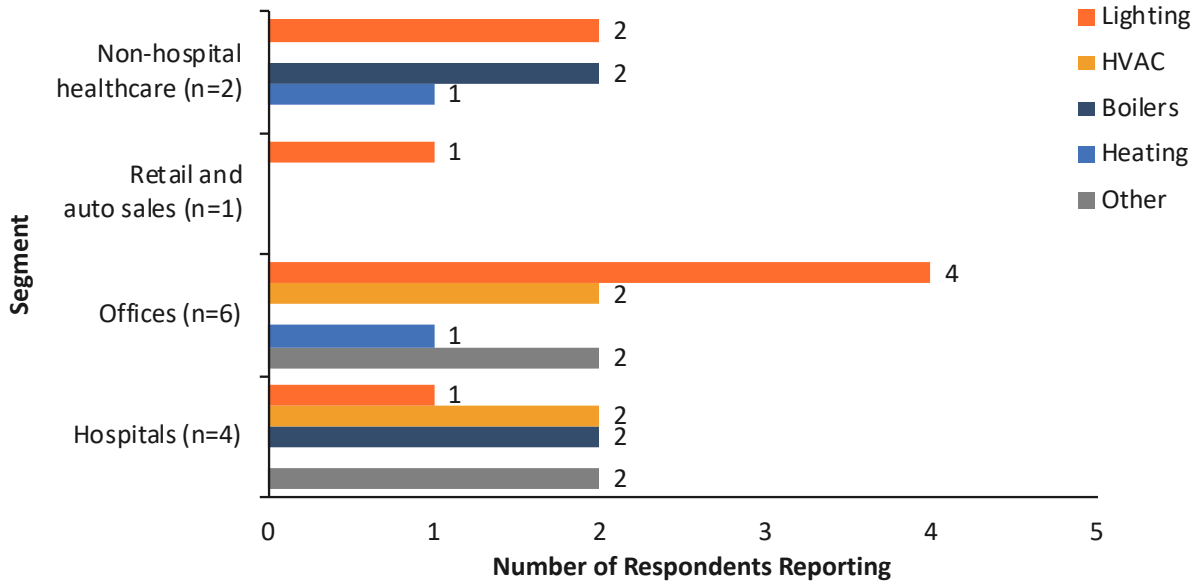
3.5 Participant Experiences

This section details information gleaned from interviews that is directly and uniquely related to previous Focus on Energy program participants. Due to sample size, participant data was combined with non-participant data in previous sections (e.g., customer decision-making, motivations and barriers to participation) to provide insights. However, the present section offers results related only to previous program participants and includes: energy efficiency upgrades completed through Focus on Energy programs, reasons for participation, participant experiences, and participants' thoughts regarding information that would have been useful when they were being introduced to the program. Findings are displayed below, in turn. As programs are evaluated on an annual basis, other research efforts may contain greater detail with regard to participants' experiences, however the information detailed below is intended to supplement these annual evaluations. Please note that no participant interviews were attained in the restaurant segment.

Participant Upgrades and Motivations for Participation

All previous Focus on Energy program participants were asked to indicate the types of equipment they upgraded through Focus on Energy programs, as well as their motivations for participating in those programs. As shown in Figure 3-13, the majority of participants (*n* = 8) reported lighting upgrades through Focus on Energy programs.

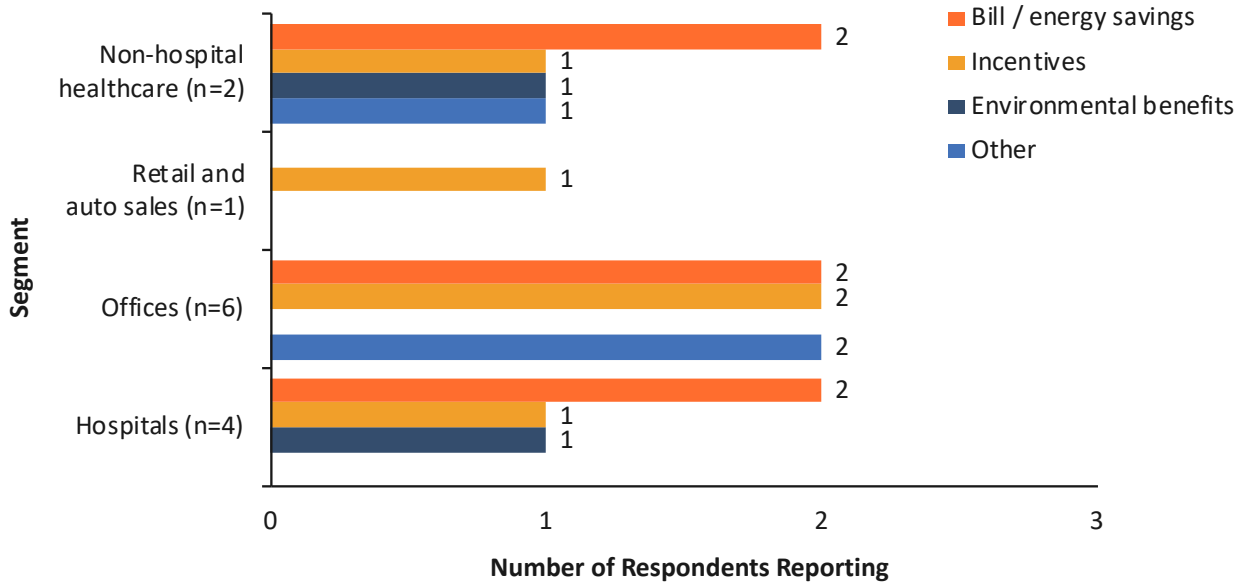
Figure 3-13. Participant Upgrades Through Focus on Energy Programs



Note: "Other" responses include: data center (offices), whole building upgrade (offices), water heaters (hospitals), kitchen equipment (hospitals)

In addition to reporting upgrades completed through Focus on Energy programs, previous participant interviewees were asked to provide information regarding the reasons they decided to participate in a Focus on Energy program. As shown in Figure 3-14, bill or energy savings (*n* = 6) was reported as the primary reason for participation across segments, followed by incentives (*n* = 5). Of note, both healthcare-related segments (non-hospital healthcare and hospitals) reported environmental benefits as a reason for participation.

Figure 3-14. Participant Reasons for Program Participation

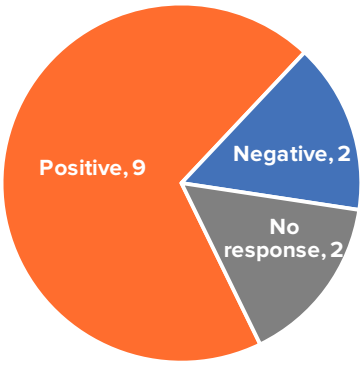


Note: "Other" responses included: tax credits (offices), contractor recommendation (offices), equipment reliability (non-hospital healthcare).

Participant Experiences and Desired Information

Previous program participants were asked to provide information regarding their experience with Focus on Energy programs. As shown in Figure 3-15, nearly all of the participants who provided information had positive experiences.

Figure 3-15. Participants' Experiences with Focus on Energy Programs



Positive comments included:

- "Positive experience… Easy to get ahold of, no push back."
- "5-star."
- "Very good. Simple to submit forms, then they send the rebates or checks."
- "There was some paperwork involved with back-and-forths, but was fairly easy."

There were no segment-related trends with those who had negative experiences. However, there was an experience-related trend: both respondents who reported negative experiences asked for more direct contact and responsiveness from Focus on Energy. One respondent (hospital segment) reported: "I haven't had good success working with Focus on Energy directly… I reached out to them 3-4 times… They are unresponsive." Similarly, the other dissatisfied respondent (retail and auto segment) reported that: "My lighting supplier made the presentation on the LED upgrades and the rebate I would receive… I received significantly less of a rebate than I was promised. I went back two or three times and they would increase the rebate incrementally each time, but I never got what I was promised…. I would like Focus on Energy (directly) to give me a confirmation on the amount of the rebate… I need direct contact with Focus on Energy if they're going to be the one giving the rebates."

Half of the participants interviewed (*n* = 6) provided EMI Consulting with suggestions for information that would be useful while participating in Focus on Energy programs. These suggestions fell into two broad categories, program details or information (*n* = 3) and incentive-related information (*n* = 3) and are displayed in Table 3-6.

Table 3-6. Additional Information Suggested by Previous Participants

Category of Information Suggested	*n*-reporting	Responses from Participants
Program details or information	3	• "More details about the program we were enrolled in—our vendor was a liaison between us and Focus on Energy." • "A bit tough to navigate it… If I don't have the answers for documents, how do I get them?" • "Our questions weren't getting answered, simple ones… How do we start this? Can we get a catalogue? We tried to re-engage multiple times and weren't able to get anything resolved."
Incentive-related information	3	• "I need accurate estimates of the rebate amount." • "More information on custom incentives and how those are calculated." • "Rebates and turn-around cost…"

3.6 Trade Ally Engagement

EMI Consulting interviewed ten contractors to obtain a market-based perspective of energy efficiency upgrades at mid-sized businesses. The research team found that contractors consider the major motivators in energy efficiency upgrades to be return on investment, ease of completing the required paperwork, and understanding of equipment availability.

Motivations

Six of the contractors EMI Consulting interviewed indicated that return on investment or payback are significant considerations when deciding to purchase energy efficient equipment; this aligns with direct feedback from customers. Contractors estimated that customers' ideal return on investment was between 2 and 5 years with the higher time periods being associated with HVAC equipment. However, one HVAC contractor noted that payback requirements are changing and often customers will not pursue an energy-efficient project unless it has a payback of under one and a half years.

Trade allies listed the following as what they saw as the most important factors for customers in upgrading to energy-efficient equipment:

- Saving energy and money
- Better quality equipment
- Lower maintenance costs of equipment
- Better appearance in building (lighting)
- Better worker health and higher productivity
- Recommendation of salesperson/contractor
- Rebate dollars to lower upfront cost

Barriers

Responses differed among the type of contractors as to why customers do not pursue more energy-efficient equipment. Lighting and HVAC contractors tended to report that customers have limited capital budgets or are dissuaded by upfront costs that are too high. However, kitchen contractors indicated onerous paperwork requirements and a lack of education on more energy-efficient equipment.

Contractors were able to provide some information specific to our target market segments. These insights are summarized below:

- Non-hospital Healthcare:
  - Opportunities could exist at assisted living facilities as trade allies are not currently pursuing this segment and there could be significant energy savings.
  - Customers may be more responsive if their facility managers learn about the opportunities.
  - Customers may be interested in information on lighting and heater upgrade opportunities.
  - Customers may respond best to information on total cost of ownership, including upfront cost (and rebates), energy savings, return on investment, and longevity of equipment.
  - Customers may be more interested in savings that can have a positive financial impact on energy bills of $5,000 to $8,000 per month.
- Auto Sales and Retail:
  - One contractor indicated that auto dealerships are a good opportunity, as the state building codes requires a certain level of energy efficiency in their facilities.
- Restaurants:
  - Kitchen contractors indicated a recent change in how rebates are paid and reported the challenge to determine eligible equipment as a factor discouraging them from engaging with the Focus on Energy program. The contractors interviewed were not in favor of a policy to require them to pay the rebate upfront and then be reimbursed later, as they preferred the rebate be directly paid to the customer once approved.
  - General consensus is lighting upgrades are difficult at restaurants. Typically, restaurants have lower lighting levels and thus less energy usage and potential for savings. However, exterior lighting is possible and is relatively easy to pursue and control.
- Hospitals:
  - One contractor indicated there is opportunity in mid-sized hospitals as their tighter budgets mean they need to save money.

Effective Approaches to Trade Ally Promotion

The research team found there are opportunities within the sales process where Focus on Energy can help trade allies influence the decision to purchase high efficiency equipment. First, trade allies describe their sales process at a high level and this can be broken down into five main steps:

1. Assess the customer's needs in relation to issue/problem they are describing.

2. Establish and review options with the customer.
3. Provide a quote with the price estimate (typically the rebate is included)
4. The Customer chooses options (or selects them, if this is a bid process).
5. Schedule the job and begin installation.

This process indicates that supporting trade allies, from the initial assessment of customer needs to the quote stage, can drive higher program participation. Most trade allies mention the availability of the rebate upfront in the initial meeting and include it in steps #2 and #3 (option review and final price quotes). The caution given by interviewees is that they might only discuss the fact that there is a rebate available early on, not the amount of the rebate, as they do not know if the customer / equipment qualifies for the rebate until they complete a more detailed review. One contractor noted: *"I discuss the rebate onsite at the walk-through if I know it is prescriptive… If custom, then I don't bring up a dollar amount."*

Trade allies provided additional feedback that could help them market the program better to their mid-sized customers including:

- Provide a handout that describes the program. One contractor noted: *"Give me a handout that I can give when I go to do the initial lighting audit… something I can leave with them as most people in commercial business don't know anything about Focus on Energy."*
- Create an incentive-based program for contractors in which they receive a financial reward for bringing more customers into the program.
- Increase rebates for the program.

Three trade allies indicated using trade association resources for generating sales leads, with two of these being kitchen-related and one HVAC-related. Resources mentioned are the Sheet Metal Contractors Association, Builders Exchange and general construction websites. These associations may provide Focus on Energy with additional resources for engaging contractors with the Focus on Energy program.

4. CONCLUSIONS AND RECOMMENDATIONS

This section provides an overview of conclusions and recommendations from the mid-sized customer segmentation research.

Conclusions and recommendations are presented below and organized under the following areas:

1. Segmentation analysis findings and implications.
2. Customer-wide findings: findings that emerged across segments.
3. Segment-specific findings: findings related to segment-level value propositions and marketing messages.

Segmentation Analysis Conclusions and Recommendations

- **Conclusion #1: Program participation (SPECTRUM) data could be more robust.** In conducting the segmentation analysis, EMI Consulting found that program participation data is limited. For example, customer primary contact name was present for only 28% of records, business type (i.e., "property usage") was present for 36% of records, and building square footage was present for less than one percent of records (0.5%).
    - **Recommendation #1: Increase data collection efforts for Focus on Energy program participants and do not rely solely on self-report data.** An increase in data points may serve to more accurately determine the types of businesses that are participating in the Business Incentive Program (BIP) and more accurately characterize these businesses in meaningful and actionable manners. One way to reduce the amount of missing information is to institute an alternative data collection approach with regard to participants. While optional self-report is less intrusive, other approaches may be more effective for characterizing the disparate set of customers who are participating in BIP. Self-selection bias (in terms of supplying firmographic information) may also confound results, as the individuals who provide information may be different from those who do not in meaningful ways. It may be prudent to add additional fields to program applications or *require* applicants to provide information. The trade-off between administrative efforts and improved data quality is noted. However, the cost associated with collecting higher-quality data from program participants would be a long-term investment that would provide actionable information for targeted communications and increasing customer satisfaction in the future.
    - **Recommendation #2: Conduct a market-characterization study with a larger set of respondents across segments.** While this research provides an informative initial examination of the unique factors of the segments identified via the segmentation analysis, additional research should be conducted to provide supporting quantitative evidence and further elucidate the similarities and differences between the varying types of customers that are participating in BIP.

Customer-Wide Conclusions and Recommendations

- **Conclusion #1: Mid-sized business decision-makers were primarily facilities managers, service coordinators, and owners.** Across segments, the majority of interviewees/decision-makers reported occupying the roles of either facilities manager (*n* = 8), service coordinator (*n* = 7), or business owner (*n* = 5).
    - **Recommendation #1: Target communications and programs to facilities managers, service coordinators, and owners.** Targeting communications to these types of individuals will ensure awareness of participation opportunities within mid-sized businesses. It may be necessary to implement recommendations from the segmentation analysis findings (i.e., improve existing data quality) to effectively target communications to the individuals who are making energy efficiency upgrade decisions. Alternatively, leveraging existing data sources (e.g., utility data, purchasing data from market research firms), industry events, or trade organizations may prove to be an effective avenue to identifying these gatekeepers in the mid-sized sector. Midstream program designs (such as an online marketplace) may also serve to reach these decision-makers.
- **Conclusion #2: There is substantial opportunity within Focus on Energy's mid-sized business customers for increasing uptake of lighting measures.** Across mid-sized segments, lighting was consistently reported as: (1) among the largest end uses of electricity (*n* = 15), (2) the most prevalent of previous upgrades (*n* = 15), and (3) the most prevalent upgrade being considered (*n* = 7). Of note, one-third of respondents who indicated they had upgraded their lighting indicated they were currently considering lighting upgrades.
    - **Recommendation #2: Increase marketing for lighting-related upgrades/projects under the Business Incentive Program.** Interviews show that mid-sized businesses perceive lighting as substantially contributing to energy costs, and respondents are willing to upgrade their lighting and are currently considering these types of upgrades at their businesses.
- **Conclusion #3: Mid-sized customers need greater access to program information, eligible equipment, and cost/cost-effectiveness details.** While the majority of non-participants interviewed (*n* = 9) reported being aware of Focus on Energy before being contacted by EMI Consulting, Focus on Energy program information, including rebates and current programs, (*n* = 14) was the most commonly cited type of information that would motivate mid-sized customers to search for energy efficiency upgrades. Moreover, a number of customers reported desires for information such as brochures with eligible equipment and cost-comparisons. Finally, all of the requests for additional information from participants were related to additional information related to program details (either procedural questions, or rebates).
    - **Recommendation #3: Ensure that program information is reaching decision-makers and includes cost/cost-effectiveness information.** A lack of information seems to be impeding Focus on Energy program uptake in the mid-sized market. Given the number of previous upgrades and the number of respondents who indicated that they were currently considering upgrades, there seems to be opportunity for increasing uptake. However, responses suggest that they do not have the required information at hand to make decisions regarding installing more energy efficient equipment. Accordingly, EMI Consulting recommends increasing outreach and ensuring that customers are aware of existing resources (e.g., the website, existing materials).

- **Conclusion #4: Mid-sized customers desire greater interaction with Focus on Energy, as opposed to third-party entities.** A number of respondents across segments indicated a desire for greater Focus on Energy involvement in projects and both participant interviewees who reported negative experiences mentioned that their negative experience was due to a lack of direct contact with Focus on Energy (i.e., an inability to reach a Focus on Energy representative or unfulfilled promises on the part of a lighting contractor).
    - **Recommendation #4: Increase one-to-one contact with mid-sized customers.** Responses show that mid-sized customers want more one-to-one, or personalized, contact with Focus on Energy. Given that both negative participant experiences were related, it may be prudent to increase personal outreach to this customer group.
- **Conclusion #5: Mid-sized customers consider bill or energy savings as the number one motivator for pursuing energy efficiency opportunities.** Interview responses show that across segments, bill or energy savings is the primary motivator for pursuing energy efficiency upgrades.
    - **Recommendation #5: Emphasize potential bill and energy savings in marketing messages.** Respondents were primarily concerned with savings, regardless of segment. A number of respondents indicated a desire for specific savings estimates and cost comparison. Including specific information related to these potentials may serve to give mid-sized customers the information they need to pursue energy efficiency opportunities. To this end, EMI Consulting recommends conducting case studies that will provide Focus on Energy with information regarding actual savings for specific business types; coupled with customer testimonials, these types of communications could prove to be very motivating to eligible mid-sized businesses.

Segment-Specific Conclusions and Recommendations

- **Conclusion #1 (Non-Hospital Healthcare): Non-hospital healthcare facilities' unique barriers are related to constant occupancy and specific tenant needs.** Non-hospital healthcare facilities indicated that constant occupancy and the nature of the occupants (i.e., elderly, long-term care patients) of their facilities necessitated that lighting always be on and/or HVAC be constantly running. Respondents indicated that they needed a specific number of air exchanges per hour and specific lighting to keep areas bright enough for their occupants.
    - **Recommendation #1: Provide non-hospital healthcare facilities with alternative approaches to upgrading lighting or HVAC, information regarding energy efficient models based on their requirements, or demonstrate savings potential for other measures.** One approach may be to develop and deliver ways to circumvent the issue of constant occupancy. While additional research (e.g., interviews with decision-makers who have experience completing projects under these constraints) may be needed to determine effective strategies, one potential approach may be to supply these types of customers an up-front incentive that covers the installation of measures over time. This option could effectively diffuse the disturbance of installs, but would require close coordination with contractors to pilot. The approach would need to be piloted to determine cost-effectiveness for Focus on Energy. It may also be prudent to determine the requirements regarding air exchanges and lumens, and directly market energy efficient

equipment that meets these specifications to non-hospital healthcare facilities. Finally, if upgrading lighting or HVAC is simply not feasible, it may be possible to market the feasibility and potential savings of *other* measures to these customers.

- **Conclusion #2 (Retail and Auto Sales): Customers in the retail and auto sales segment lack awareness and are motivated by information to aid in pursuing 'better deals.'** Neither of the non-participants in the retail and auto sales segment were aware of Focus on Energy before being contacted by EMI Consulting. All customers in this segment requested information regarding ongoing programs and rebates (two specifically in the form of brochures with cost comparison information).
    - **Recommendation #2: Specifically target auto dealerships with lot lighting upgrades, including savings information.** Auto dealerships present an opportunity for large savings via lot lighting as these lights must be on throughout the night. However, interviews suggest that this segment is pursuing the 'best deal' for their facility and may require savings information to be convinced that an upgrade is in their best interest.
- **Conclusion #3 (Office): Contractors were reported as a significant influence on decision-making in the office segment.** While mentioned as a source of awareness or a channel through which to provide information in other segments, no other segment mentioned contractors as a significant influence on their decision to pursue energy efficiency upgrades.
    - **Recommendation #3: Ensure contractors have value statements when approaching customers in the office segment.** Most (n = 6) of the respondents in the office segment reported cost or cost-effectiveness factors to be the most important issues when considering energy efficiency upgrades. Some (n = 2) reported that being able to easily access savings and cost-effectiveness information would increase their ability to convince other decision-makers on the benefits of upgrades.
- **Conclusion #4 (Office): Offices perceive upgrades to have a hassle factor but are also seen as selling points to future tenants.** Offices perceived current occupancy and the work needed to upgrade equipment as a barrier to pursuing energy efficiency upgrades. However, a number of respondents also reported work-arounds (e.g., pursuing upgrades during low occupancy or tenant transfer) to install energy efficiency upgrades. Moreover, a number of respondents indicated that energy upgrades could increase the desirability of their building for future tenants.
    - **Recommendation #4: Emphasize strategies for installing energy efficiency measures during occupation and benefits to building marketability in the office segment.** Respondents emphasized the potential for increasing building-desirability for future tenants, but equally cited the "hassle factor" for current tenants. Marketing communications that not only emphasize the benefits for building demand and future occupancy, but simultaneously provide strategies for upgrading, may be an effective avenue for increasing uptake in this segment.
- **Conclusion #5 (Restaurant): Restaurants reported not upgrading equipment until end-of-life and constraints based on occupancy and working hours.** Interviewees in the restaurant segment indicated that they wait for equipment to fail (n =3) before replacing.
    - **Recommendation #5: Emphasize strategies for installing energy efficient equipment during non-occupied hours and the benefits of replacing before end-of-life.** Restaurant respondents are focused on equipment performance and indicated they do not look for equipment until failure or problems. Delivering targeted information regarding savings on operating costs may influence them to

explore opportunities before equipment 'becomes a problem'. Some respondents indicated that downtime equated to revenue loss. As such, providing these customers with strategies for replacing equipment with limited downtime may quell fears of losing revenue. Note that EMI Consulting, based on our research, does not suggest creating a formal "early replacement" program; instead, our recommendation is in regard to specific marketing and messages for these customers.

- **Conclusion #6 (Hospital): Hospital customers reported environmental benefits and industry recognition as factors in upgrade decisions.** Respondents in the hospital segment were unique in reporting environmental benefits and industry recognition as factors in upgrading to energy efficient equipment.
    - **Recommendation #6: Consider targeted messaging emphasizing 'green image' or industry recognition.** Hospitals reported a preponderance of regulatory barriers to energy efficiency upgrades, but were also the only respondents to indicate that environmental benefits and industry recognition impacted equipment upgrades. The marketing benefits and positive press associated with 'within class' type recognition may motivate these types of mid-sized customers to look to upgrades that are not hamstringed by regulatory mandates, or consider novel means to realizing energy efficiency upgrades.

APPENDIX A: SEGMENT GRAPHICAL PERSONAS

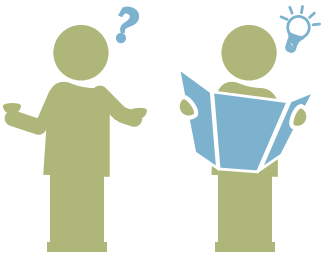
The following pages contain the graphical personas developed as part of this research. These include personas for the following segments:

- Non-Hospital Healthcare
- Retail and Auto Sales
- Offices
- Restaurants
- Hospitals

NON-HOSPITAL HEALTHCARE

Opportunities for Upgrades

Bill or energy savings are important when considering upgrading equipment.

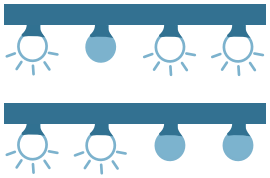


Cost and equipment-related information would motivate respondents to pursue EE opportuntiies.

Respondents are considering upgrading their lighting.

Barriers to Upgrades

Total cost was reported as the most important factor.

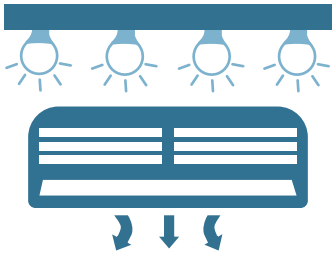


Customers reported problems with their LEDs malfunctioning.

Since buildings are always occupied, equipment cannot be shut down for long periods of time.

Energy Usage

HVAC systems and lighting were the largest end uses of electricity at their facilities.



Heaters were the largest end use of natural gas at their facilities.

Typical Building Types:
- Assisted Living
- Clinic

Building Square Footage Range:
13,000 – 105,000

Measures Installed:
- Lighting
- Boilers

All non-participants were aware of **Focus on Energy**.

EMI CONSULTING

Non-hospital Healthcare

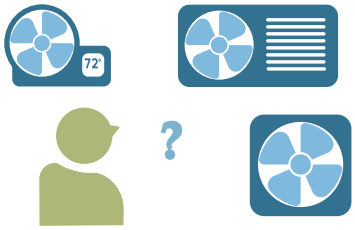
(*n*-Respondents = 5)

Graphical Persona Floor	Supporting Statistics
4th Floor: Opportunities for upgrades	• Bill or energy savings (4/5) are important when considering upgrading equipment. • Cost and equipment-related information would motivate respondents to pursue EE opportunities (3/5). • Respondents are considering upgrading their lighting (3/5).
3rd Floor: Barriers to upgrades	• Total cost was reported as the most important factor (5/5). • Customers reported problems with their LEDs malfunctioning (2/5). • Since buildings are always occupied, equipment cannot be shut down for long periods of time (2/5).
2nd Floor: Energy usage	• HVAC systems (4/5) and lighting (3/5) were the largest end uses of electricity at their facilities. • Heaters were the largest end use of natural gas at their facilities (4/5).
1st Floor: Demographics / Firmographics	• Typical building types: ○ Assisted living (4/5) ○ Clinic (1/5) • Building square footage range: ○ 13,000 - 105,000 sq. feet (4/5 provided data) • Measures installed: ○ Lighting (3/5) ○ Boilers (2/5) • Respondent breakdown: ○ *n*-Non-participants = 3 ○ *n*-Participants = 2 • Non-participant awareness of Focus on Energy: ○ All non-participants (3/3) were aware of Focus on Energy.

RETAIL & AUTO SALES

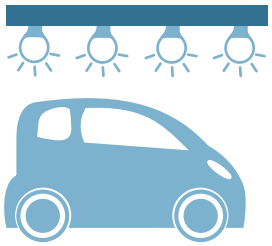
Opportunities for Upgrades

Brochures with program information would motivate businesses to look for more opportunities.



Cost comparison and reliability are the most important factors when making energy-related decisions.

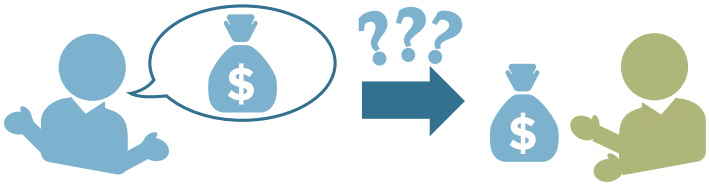
Respondents are considering upgrading their parking lot lights.



Barriers to Upgrades

Total cost was reported as the most important factor.

Lack of available budget was cited as a barrier to upgrades.



Energy Usage

Lighting was the largest end use of electricity at their facilities.

Heaters were the largest end use of natural gas at their facilities.

Typical Building Types:
- Auto Dealer
- Retail Store

Building Square Footage Range:
10,000 – 38,000

Measures Installed:
- Lighting
- HVAC Systems

No non-participants were aware of **Focus on Energy**.

EMI CONSULTING

Retail and Auto Sales

(*n*-Respondents = 3)

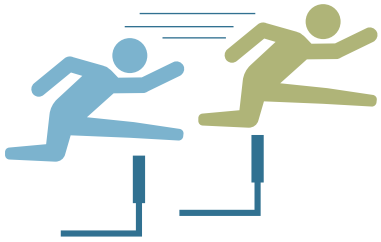
Graphical Persona Floor	Supporting Statistics
4th Floor: Opportunities for upgrades	• Brochures with program information would motivate businesses to look for more opportunities (2/3). • Cost comparison and reliability are the most important factors when making energy-related decisions (2/3). • Respondents are considering upgrading their parking lot lights (2/3).
3rd Floor: Barriers to upgrades	• Total cost was reported as the most important factor (3/3). • Lack of available budget was cited as a barrier to upgrades (1/3).
2nd Floor: Energy usage	• Lighting was the largest end use of electricity at their facilities (3/3). • Heaters were the largest end use of natural gas at their facilities (2/3).

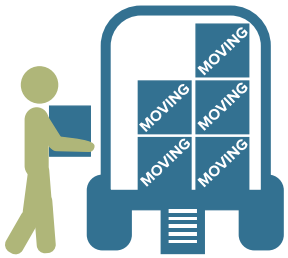
1st Floor: Demographics / Firmographics	• Typical building types:
	  ○ Auto Dealer (2/3)
	  ○ Retail Store (1/3)
	• Building square footage range:
	  ○ 10,000 – 38,000 sq. feet (3/3 provided data)
	• Measures installed:
	  ○ Lighting (2/3)
	  ○ HVAC (1/3)
	• Respondent breakdown:
	  ○ *n*-Non-participants = 2
	  ○ *n*-Participants = 1
	• Non-participant awareness of Focus on Energy:
	  ○ No non-participants were aware of Focus on Energy (2/2).

OFFICES

Opportunities for Upgrades

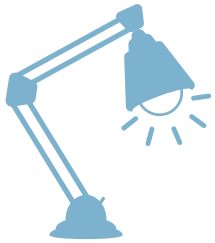
Lower energy bills for tenants make offices more competitive in the rental market.





Upgrades are easier during tenant transfers.

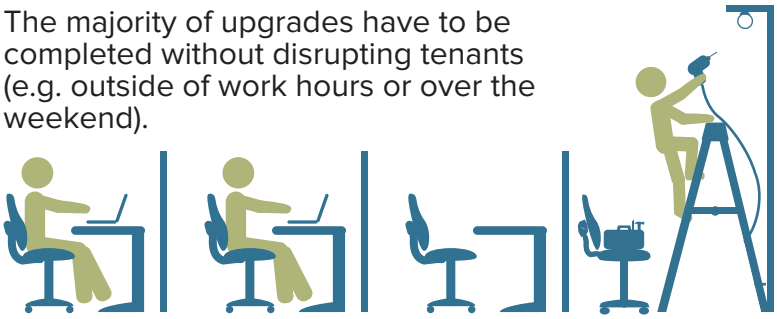
Respondents are considering upgrading the lighting in their facilities.



Barriers to Upgrades

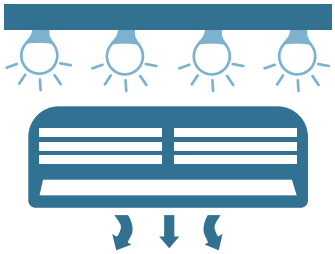
Total cost was reported as the most important factor.

The majority of upgrades have to be completed without disrupting tenants (e.g. outside of work hours or over the weekend).



Energy Usage

HVAC systems and lighting were the largest end uses of electricity at their facilities.



Heaters were the largest end use of natural gas at their facilities.

Typical Office Types:
- Real Estate
- Other

Building Square Footage Range:
40,000 – 2.6 MM

Measures Installed:
- Lighting
- HVAC

All non-participants were aware of **Focus on Energy**.

EMI CONSULTING

Offices

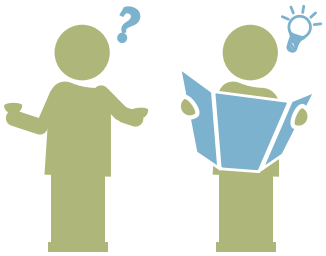
(*n*-Respondents = 8)

Graphical Persona Floor	Supporting Statistics
4th Floor: Opportunities for upgrades	• Lower energy bills for tenants make offices more competitive in the rental market (3/8). • Upgrades are easier during tenant transfers (2/8). • Respondents are considering upgrading the lighting in their facilities (2/8).
3rd Floor: Barriers to upgrades	• Total cost was reported as the most important factor (4/8). • The majority of upgrades have to be completed without disrupting tenants (e.g. outside of work hours or over the weekend) (3/8).
2nd Floor: Energy usage	• HVAC systems and lighting were the largest end uses of electricity at their facilities (4/8). • Heaters were the largest end use of natural gas at their facilities (4/8).
1st Floor: Demographics / Firmographics	• Typical building types: ○ Real Estate (3/8) ○ Property Management (1/8) ○ Call Center (1/8) ○ Credit Union (1/8) ○ Insurance Provider (1/8) ○ Medical Equipment and Service Provider (1/8) • Building square footage range: ○ 40,000 to 2.6 million sq. feet (7/8 provided data) • Measures installed: ○ Lighting (6/8) ○ HVAC (3/8) • Respondent breakdown: ○ *n*-Non-participants = 2 ○ *n*-Participants = 6 • Non-participant awareness of Focus on Energy: ○ All non-participants were aware of Focus on Energy (2/2).

RESTAURANTS

Opportunities for Upgrades

Length of downtime and turnaround were reported as imporant factors when considering upgrades.

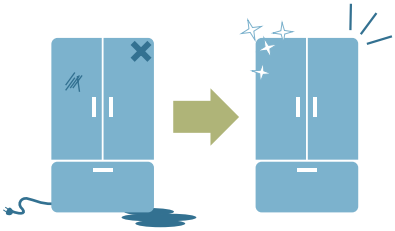


Bill or energy savings information would motivate interviewees to learn more about EE opportunities.

Respondents are not considering any upgrades right now.

Barriers to Upgrades

Total cost was the most important factor.

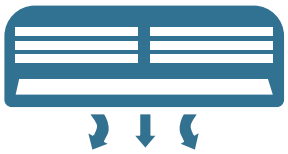


Non-participants indicated that they replace equipment at end of life.

Time related factors (e.g. need a quick turnaround on equipment) were listed as restaurant-specific barriers.

Energy Usage

HVAC systems were the largest end uses of electricity at their facilities.



Kitchen equipment was the largest end use of natural gas at their facilities.

Typical Building Types:
- Restaurant
- Bakery

Building Square Footage Range:
4,000 – 10,000

Measures Installed:
- Lighting
- HVAC Systems

2/3 of non-participants were aware of **Focus on Energy**.

EMI CONSULTING

Restaurants

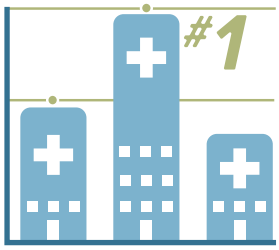
(*n*-Respondents = 6)

Graphical Persona Floor	Supporting Statistics
4th Floor: Opportunities for upgrades	• Length of downtime and turnaround were reported as important factors when considering upgrades (3/6). • Bill or energy savings information would motivate interviewees to learn more about EE opportunities (4/6). • Respondents are not considering any upgrades right now (6/6).
3rd Floor: Barriers to upgrades	• Total cost was the most important factor (4/6). • Non-participants indicated that they replace equipment at end of life (3/6). • Timing related factors (e.g. need a quick turnaround on equipment) were listed as restaurant-specific barriers (4/6).
2nd Floor: Energy usage	• HVAC systems (4/6) were the largest end use of electricity at their facilities. • Kitchen equipment was the largest end use of natural gas at their facilities (5/6).
1st Floor: Demographics / Firmographics	• Typical building types: ○ Restaurants (5/6) ○ Restaurant/Bakery (1/6) • Building square footage range: ○ 4,000 – 10,000 sq. feet (5/6 provided data) • Measures installed: ○ Lighting (3/6) ○ HVAC (2/6) • Respondent breakdown: ○ *n*-Non-participants = 6 ○ *n*-Participants = 0 • Non-participant awareness of Focus on Energy: ○ 2/3 of non-participants were aware of Focus on Energy (4/6).

HOSPITALS

Opportunities for Upgrades

Customers indicated they would like Focus on Energy to play more of an advisory role in the upgrade process.



Environmental benefits and energy efficiency rankings were mentioned as priorities.

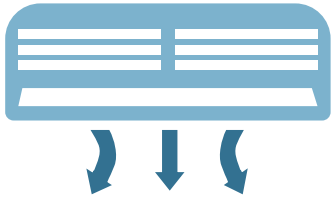
Respondents are considering upgrading their boilers.

Barriers to Upgrades

Safety regulations were the most important factors when considering upgrades. Regulations requiring air pressure and humidity to be kept at specific set points for operating rooms limit hospitals' ability to complete upgrades.

Total cost was reported as an important factor.

Energy Usage



HVAC systems were the largest end use of electricity at their facilities.

Boilers were the largest end use of natural gas at their facilities.

Typical Building Types:
- Hospital
- Medical Center

Building Square Footage Range:
10,000 - 175,000

Measures Installed:
- HVAC
- Boilers

No non-participants **interviewed**.

EMI CONSULTING

Hospitals

(*n*-Respondents = 4)

Graphical Persona Floor	Supporting Statistics
4th Floor: Opportunities for upgrades	• Customers indicated they would like Focus on Energy to play more of an advisory role in the upgrade process (2/4). • Environmental benefits and energy efficiency rankings were mentioned as priorities (3/4). • Respondents are considering upgrading their boilers (2/4).
3rd Floor: Barriers to upgrades	• Safety regulations were the most important factors when considering upgrades. (3/4) Regulations requiring air pressure and humidity to be kept at specific set points for operating rooms limit hospitals' ability to complete upgrades. • Total cost was reported as an important factor (3/4).
2nd Floor: Energy usage	• HVAC systems were the largest end use of electricity at their facilities (4/4). • Boilers were the largest end use of natural gas at their facilities (3/4).
1st Floor: Demographics / Firmographics	• Typical building types: ○ Hospital (3/4) ○ Medical Center (1/4) • Building square footage range: ○ 10,000 – 175,000 sq. feet (4/4 provided data) • Measures installed: ○ HVAC (2/4) ○ Boilers (2/4) • Respondent breakdown: ○ *n*-Non-participants = 0 ○ *n*-Participants = 4 • Non-participant awareness of Focus on Energy: ○ No non-participants interviewed.

APPENDIX B: FINAL INTERVIEW GUIDES

Non-Participant Interview Guide

[Interview Screener] Hi, this is **NAME** from EMI Consulting, calling on behalf of Focus on Energy who works with **[Insert Utility of customer]** to implement energy savings projects.

We're contacting mid-sized businesses to better understand how Focus on Energy can improve their energy efficiency programs to engage more businesses like yours. We're offering a $25 gift card for a half-hour interview. The interview will cover a variety of topics related to energy efficiency and energy efficiency incentives for your business.

[IF respondent needs clarification on Focus on Energy]

Focus on Energy is a Wisconsin utilities' statewide energy efficiency and renewable resource program. The information, resources and financial incentives Focus on Energy provides help to implement energy saving projects that otherwise would not be completed, or to complete projects sooner than scheduled.

[IF NEEDED]

If you have any questions regarding this research you may contact our project lead, Ian Johnson at EMI Consulting, or Joe Fontaine, the Performance Manager at Focus on Energy.

Ian Johnson
ijohnson@emiconsulting.com
(206) 388-0989

Joe Fontaine
Focus on Energy Performance Manager
(608) 266-0910
Joe.Fontaine@wisconsin.gov

1. Are you the key decision maker at your business in terms of energy decisions and energy efficiency upgrades?
   [IF NO: Ask for contact information for that person] [Thank and Terminate]

2. Have you received incentives from Focus on Energy for an energy savings project in since January 1st, 2015?
   [IF YES]
   [CHECK SEGMENT TO SEE IF PARTICIPANT IS NEEDED]
   [DISCERN INTEREST IN INTERVIEW]
   [MOVE RESPONDENT TO PARTICIPANT SEGMENT / TRACKING TAB]

Great! Are you available to talk now?
[IF NO: Schedule call back]

Introduction & Confidentiality

[IF AVAILABLE] Thank you for agreeing to talk with me today. Everything we discuss will be confidential, which means that your name will not be associated with your comments. To help me capture your responses accurately, is it okay if I record this call? The recording will be used for my note-taking purposes only. As a small thank you for your time, we will be offering $25. **[Get verbal confirmation]**

Section A: Background Information

In order to better understand your experiences, it would be helpful to start with some background information.

A1. Can you describe at a high level what your company does?

A2. What is your title and how would you describe your role at **[COMPANY]**?

A3. What is the approximate square footage of the (primary) building that your business operates out of?

Section B: Business Costs / Energy Profile

Now, I would like to discuss your involvement with your business's energy costs and decisions.

B1. Does your business own, lease, or manage the building(s) at this address?

B2. Does your business pay its own electricity bill, or does someone else (i.e., landlord, property manager, etc.)?

B3. About how much does your business spend monthly on electricity at this address?

> **B3a.** Do you know about what percentage of your business's operating costs is related to electricity costs?
> **[IF YES]** _____

B4. Of the equipment at your business, what do you believe uses the most energy (e.g. lighting, equipment, HVAC)?

> **B4a.** What do you believe uses the most electricity?
>
> **B4b.** What do you believe uses the most natural gas?

Section C: Energy Efficiency Upgrades and Motivations

Next, I want to understand what actions you have considered, explored, or are currently using to reduce energy expenses.

C1. Have you ever considered upgrading (or have recently upgraded) equipment at your business to be more energy efficient?

> **[IF HAVE NOT CONSIDERED/INSTALLED UPGRADES]**
> **C1a.** Are there reasons you have not considered upgrading to more energy efficient equipment?
> **[PROBE IF NEEDED]**
> - Budget priorities
> - Time required to install
> - Paperwork requirements
> - (Perceived) Limited "Return on Investment"
> - Budget cycles
> - Lease structure
> - Cost of upgrades (probe for awareness of energy efficiency incentives)
> - Unaware of available options

- Waiting to replace on failure

C1ab. Before this call, had you heard of Focus on Energy?

[IF NO] [**DESCRIPTION OF OFFERINGS**]
Focus on Energy provides incentives for equipment upgrades including heating and cooling systems, ventilation and controls, plumbing systems, building envelope, refrigeration and cooking equipment, along with a number of lighting options.

[IF YES]
C1ac. How did you hear about Focus on Energy?

C1ad. What have you seen / heard about Focus on Energy?

C1ae. Were you aware that Focus on Energy offers incentives for [**DESCRIPTION OF OFFERINGS**]?

[IF HAVE INSTALLED UPGRADES]
C1b. What upgrades have you installed?

C1ba. Why did you decide to upgrade / install [**MEASURES INSTALLED**]?

C1bb. Did you receive Focus on Energy incentives for the [**MEASURES INSTALLED**]?

C1bc. Did you have any concerns about upgrading / installing [**MEASURES INSTALLED**]? How were these addressed?

[IF C1bb = NO]

C1bd. Were you aware that Focus on Energy offers incentives for installing energy efficient equipment?

C1be. Are you currently considering any other energy efficiency upgrades?
- What?
- Do you plan on looking into incentives for [**MEASURES CONSIDERING**]?

[IF HAVE CONSIDERED UPGRADES]
C1c. What upgrades have you considered?
[Note differences between considered vs. installed, where relevant]

C1ca. Why have you considered installing [**MEASURES CONSIDERED**]?

C1cb. Did you plan on looking for incentives for the [**MEASURES CONSIDERED**]?

C1cc. Do you have any concerns about upgrading / installing [**MEASURES CONSIDERED**]?
- How could these be addressed?

C1cd. Were you aware that Focus on Energy offers incentives for [**DESCRIPTION OF OFFERINGS**]?

C1ce. Are you currently considering any other energy efficiency upgrades?
- What?
- Do you plan on looking into incentives for [**MEASURES CONSIDERED**]?

C2. What would make updating equipment at your business more appealing to you?

C2a. What would make it easier for you to update equipment at your business?

C3. Are there factors that are specific to the nature of your business (i.e., **[REFERENCE BUSINESS TYPE FROM A1]**) that make reducing your energy costs more/less feasible?

Section D: Value Proposition for Energy Efficiency Investments

Next, I would like to better understand how you make decisions that may impact the energy consumption of your business.

D1. What would you consider to be the most important factors when deciding to install equipment at your business?

[PROBE IF NEEDED]

- Return on investment
  - How do you assess the return-on-investment?
  - Is there a target return on investment? (i.e. timeline or dollar amount / range)
  - **[IF YES]** Why would you not consider a project beyond that point?
- Timeline - Installation
- Timeline - Time to receive rebate (time between work and receipt of rebate)
- Time of year (e.g., fixed budget / budget cycle)
- Rebate amounts
- Equipment eligibility
- State of equipment (e.g. end of life, broken)
- Environmental impacts
- Workplace appearance
- Employee health benefits
- Increased worker productivity
- Energy / electric bill savings
- Other specific criteria or “rules of thumb” that you follow?

[IF MENTION MULTIPLE]
D1a. Which of the factors you mentioned is the most important in terms of your decision to make upgrades?

D1b. Why?

D2. What type of information, would motivate you to explore / search for energy efficiency upgrades / incentives at your business?

[PROBE IF NEEDED]

- Equipment eligibility
- Amount of rebate
- Return on Investment
- Timeline - Installation
- Timeline - Rebate
- Flexibility in equipment or upgrade packages (Custom vs. Prescriptive)
- Environmental impacts
- Workplace appearance
- Employee health benefits

D2a. Why would this information motivate you to explore / search for incentives?

D2b. How would this information help you make decisions?

D2c. What would be the best way to give / send you this type of information? (contractor / rep? Email? Mail?)

Closing

Those are all of the questions that I have for you today, thank you very much for your time and feedback.

Is there anything that I have not asked that you think would be important for me to consider or take into account?

Do you have any questions?

Incentive

Before we end I would like to confirm (if known) / record the name and address we will use to send your $25 check.

Name: _____
Street: _____
City: _____
State: _____
Zip: _____

Again, thank you for your time. We plan on sending checks **in mid- to late-November**
[Stop the recording]

Participant Interview Guide

[Interview Screener] Hi, this is **NAME** from EMI Consulting, calling on behalf of Focus on Energy who works with **[Insert Utility of customer]** to implement energy savings projects. We're contacting mid-sized businesses who have participated in the Business Incentive Program to better understand how Focus on Energy can improve the program to engage more businesses like yours. We're offering a $25 gift card for a half-hour interview. The interview will cover a variety of topics related to energy efficiency and energy efficiency incentives for your business.

[IF respondent needs clarification on Focus on Energy]

Focus on Energy is a Wisconsin utilities' statewide energy efficiency and renewable resource program. The information, resources and financial incentives Focus on Energy provides help to implement energy saving projects that otherwise would not be completed, or to complete projects sooner than scheduled.

[IF NEEDED]

If you have any questions regarding this research you may contact our project lead, Ian Johnson at EMI Consulting, or Joe Fontaine, the Performance Manager at Focus on Energy.

Ian Johnson
ijohnson@emiconsulting.com
(206) 388-0989

Joe Fontaine
Focus on Energy Performance Manager
(608) 266-0910
Joe.Fontaine@wisconsin.gov

1. Are you the key decision maker at your business in terms of energy decisions and energy efficiency upgrades?
   [IF NO: Ask for contact information for that person] [Thank and Terminate]

2. I see you have received Focus on Energy incentives for energy efficiency upgrades for your business in the past three years, is this correct?
   [IF NO or DK: Thank and Terminate]

Great! Are you available to talk now?

Introduction & Confidentiality

[IF AVAILABLE] Thank you for agreeing to talk with me today. Everything we discuss will be confidential, which means that your name will not be associated with your comments. To help me capture your responses accurately, is it okay if I record this call? The recording will be used for my note-taking purposes only. [Get verbal confirmation]

Section A: Background Information

In order to better understand your experiences, it would be helpful to start with some background information.

A1. Can you describe at a high level what your company does?

A2. What is your title and how would you describe your role at **[COMPANY]**?

A3. What is the approximate square footage of the (primary) building that your business operates out of?

Section B: Business Costs / Energy Profile

Now, I would like to discuss your involvement with your business's energy costs and decisions.

B1. Does your business own, lease, or manage the building(s) at this address?

B2. Does your business pay its own electricity bill, or does someone else (i.e., landlord, property manager, etc.)?

B3. About how much does your business spend monthly on electricity at this address?

> **B3a.** Do you know about what percentage of your business's operating costs is related to electricity costs?
> **[IF YES]** _____

B4. Of the equipment at your business, what do you believe uses the most energy (e.g. lighting, equipment, HVAC)?

> **B4a.** What do you believe uses the most electricity?
>
> **B4b.** What do you believe uses the most natural gas?

Section C: Participants Energy Efficiency Upgrades and Motivations

Next, I want to understand what actions you have considered, explored, or are currently using to reduce energy expenses.

C1. First, how did you hear about Focus on Energy?

C2. Next, I would like to ask for a little bit of information about your experience(s) with the Focus on Energy incentives you have received for energy efficiency upgrades for your building.

C2a. What type of upgrades have you completed?

C2b. What factors contributed most to your decision to participate in a Focus on Energy program?

C2c. What was your experience working with Focus on Energy to complete the upgrades?

C2d. What information would have been useful for you to know when you were originally introduced to the program?

C3. Aside from receiving incentives from Focus on Energy for that project (or projects), have you considered upgrading (or have recently upgraded) equipment at your business to be more energy efficient?

[IF HAVE NOT CONSIDERED/INSTALLED UPGRADES]

C3a. Are there any reasons you have not considered additional energy efficiency upgrades?

[PROBE IF NEEDED]

- Budget priorities
- Time required to install
- Paperwork requirements
- (Perceived) Limited "Return on Investment"
- Budget cycles
- Lease structure
- Cost of upgrades (probe for awareness of energy efficiency incentives)
- Unaware of available options
- Waiting to replace on failure

[IF HAVE INSTALLED UPGRADES]

C3b. What upgrades have you installed?

C3ba. Why did you decide to upgrade / install **[MEASURES INSTALLED]**?

C3bb. Did you receive incentives for the **[MEASURES INSTALLED]**? (Clarify from Focus on Energy)

C3bc. Did you have any concerns about upgrading / installing **[MEASURES INSTALLED]**?

- How were these addressed?

[IF HAVE CONSIDERED UPGRADES]

C3c. What upgrades have you considered?

C3ca. Why have you considered installing **[MEASURES CONSIDERED]**?

C3cb. Were you aware that Focus on Energy offers incentives for [**DESCRIPTION OF OFFERINGS**]?

C3cc. Do you plan on looking for incentives for the **[MEASURES CONSIDERED]**? (Clarify from Focus on Energy)

C3cd. Do you have any concerns about upgrading / installing **[MEASURES CONSIDERED]**?

- How could these be addressed?

C3d. Are you currently considering any other energy efficiency upgrades?

- What?
- Do you plan on looking into incentives for **[MEASURES CONSIDERING]**?

C4. What would make updating equipment at your business more appealing to you?

C4a. What would make it easier for you to update equipment at your business?

C5. Are there factors that are specific to the nature of your business (i.e., **[REFERENCE BUSINESS TYPE FROM A1]**) that make pursuing energy efficiency upgrade more/less feasible?

Section D: Value Proposition for Energy Efficiency Investments

Next, I would like to better understand how you make decisions that may impact the energy consumption of your business.

D1. What would you consider to be the most important factors when deciding to install equipment at your business?

[PROBE]

- Return on investment
  - How do you assess the return-on-investment?
  - Is there a target return on investment? (i.e. timeline or dollar amount / range)
  - **[IF YES]** Why would you not consider a project beyond that point?
- Timeline - Installation
- Timeline - Time to receive rebate (time between work and receipt of rebate)
- Time of year (e.g., fixed budget / budget cycle)
- Rebate amounts
- Equipment eligibility
- State of equipment (e.g. end of life, broken)
- Environmental impacts
- Workplace appearance
- Employee health benefits
- Increased worker productivity
- Energy / electric bill savings
- Other specific criteria or “rules of thumb” that you follow?

[IF MENTION MULTIPLE]
D1a. Which of the factors you mentioned is the most important in terms of your decision to make upgrades?

D1b. Why?

D2. What type of information, would motivate you to explore / search for energy efficiency upgrades / incentives at your business?

[PROBE]

- Equipment eligibility
- Amount of rebate
- Return on Investment

- Timeline - Installation
- Timeline - Rebate
- Flexibility in equipment or upgrade packages (Custom vs. Prescriptive)
- Environmental impacts
- Workplace appearance
- Employee health benefits

D2a. Why would this information motivate you to explore / search for incentives?

D2b. How would this information help you make decisions?

D2c. What would be the best way to give / send you this type of information? (contractor / rep? Email? Mail?)

Closing

Those are all of the questions that I have for you today, thank you very much for your time and feedback.

Is there anything that I have not asked that you think would be important for me to consider or take into account?

Do you have any questions?

Incentive

Before we end I would like to confirm (if known) / record the name and address we will use to send your $25 check.

Name: _____
Street: _____
City: _____
State: _____
Zip: _____

Again, thank you for your time. We plan on sending checks **in mid- to late-November**
[Stop the recording]

Trade Ally Interview Guide

[Interview Screener] Hi, this is **NAME** from EMI Consulting, calling on behalf of Focus on Energy. We're contacting trade allies who have participated in Focus on Energy's Business Incentive Program to better understand how Focus on Energy can improve their program to engage more mid-sized **[SEGMENT / BUSINESS TYPE WORKED WITH]** customers. We're offering a $50 gift card for a half-hour interview. The interview will cover a variety of topics related to your energy efficiency projects with mid-sized **[SEGMENT / BUSINESS TYPE WORKED WITH]** and how you engage these customers.

[IF NEEDED]

If you have any questions regarding this research you may contact our project lead, Ian Johnson at EMI Consulting, or Joe Fontaine, the Performance Manager at Focus on Energy.

Ian Johnson

ijohnson@emiconsulting.com
(206) 388-0989

Joe Fontaine
Focus on Energy Performance Manager
(608) 266-0910
Joe.Fontaine@wisconsin.gov

1. To confirm, our records show that your firm has participated in Focus on Energy's Business Incentive Program, is this correct?
   [IF NO: Thank and Terminate]

2. Our records also show that your firm has installed **[MEASURES INSTALLED]** measures for mid-sized customers as a part of the Focus on Energy Business Incentive Program, is this correct?
   [IF NO: Ask about other measures we are targeting]

   [IF NO TO ALL MEASURES: Thank and Terminate]

3. Were you the staff member most involved in the Focus on Energy Program?
   [IF NO: Ask for contact information for that person] [Thank and Terminate]

Great! Are you available to talk now?
[IF NO: Schedule call back]

Introduction & Confidentiality

[IF AVAILABLE] Thank you for agreeing to talk with me today. Everything we discuss will be confidential, which means that your name will not be associated with your comments. To help me capture your responses accurately, is it okay if I record this call? The recording will be used for my note-taking purposes only. **[Get verbal confirmation]**

As a reminder, the interview will cover a variety of topics related to energy efficiency and energy efficiency incentives for your mid-sized Business Incentive customers.
[IF CLARIFICATION NEEDED]: For the purpose of this interview, we are defining mid-sized customers as those who do not qualify for either the Small Business, or the Large Energy Users energy efficiency programs from Focus on Energy.

Section A: Background Information

In order to better understand your experiences and place them in context, it would be helpful to start with some background information.

A1. What is your title or role at **[COMPANY]**?
A2. Can you describe at a high-level what your services you provide through your company?
A3. Approximately how many projects per month/year does your business complete?
   A3a. What percentage of those projects have received Focus on Energy incentives?

Section B: Program Awareness

First, I'd like to talk about the Focus on Energy Business Incentive Program.

B1. When did you first start participating in Focus on Energy's Business Incentive Program?

   B1a. How did you first learn about Focus on Energy? (e.g. Focus on Energy website, colleague, email, utility newsletter, presentation)

B1b. Is this how you prefer to get information about Focus on Energy programs?

B1c. Are there other ways you would like to hear about Focus on Energy program opportunities?

Section C: Feedback on Typical Project Process

Next, I would like to discuss your perspective on how mid-sized [**MEASURE INSTALLED**] energy efficiency projects work under the Business Incentive Program, and then I'd like to talk more about the Focus on Energy program specifically.

C1. How does your company get most of your leads for mid-sized [**MEASURE INSTALLED**] energy efficiency projects? (e.g. marketing, word of mouth, referrals.)

C1a. Do you rely on any trade resources?

- If yes, which ones?

C1b. What type of person (e.g., title) tends to be your main contact at a business for mid-sized business projects?

C2. Please describe, at a high level, the typical mid-sized [**MEASURES INSTALLED**] **sales and installation** process (e.g., how the project starts, progresses, finishes, etc.).

C3. At what point in the sales process do you discuss energy efficiency program incentives or technical assistance trainings with your Business Incentive Program [**MEASURE INSTALLED**] customers?

C3a. Are mid-sized customers who install [**MEASURES INSTALLED**] measures through the Business Incentive Program typically already aware of program incentives or technical assistance trainings when you talk to them?

C3b. Typically, who in mid-sized business [**MEASURE INSTALLED**] projects ultimately decides to pursue participating in energy efficiency programs? (e.g. owner, manager)

- What type of information about a program seems to be the most useful for them when they are deciding to pursue incentives?
- What do you think is the best way for Focus on Energy to get information to them?

Section D: Program Participation

D1. Generally speaking, what are some reasons that customers who install [**MEASURE INSTALLED**] customers through the Business Incentive Program decide to purchase energy efficient equipment?

[**PROBE IF NEEDED**]

- Return on investment
  - How do you assess the return-on-investment?
  - Do you have a threshold for the return on investment for a product?
- Timeline - Installation
- Timeline - Time to receive rebate (time between work and receipt of rebate)
- Time of year (e.g., fixed budget / budget cycle)
- Rebate amounts
- Equipment eligibility
- State of equipment (e.g. end of life, broken)
- Environmental impacts

- Workplace appearance
- Employee health benefits
- Increased worker productivity
- Energy / electric bill savings
- Closing a sale (applicable to trade allies)
- Case studies or reference guides
- Word of mouth or colleagues
- Other specific criteria or "rules of thumb" that they follow?

D1a. What benefits do customers receive by participating in Focus on Energy's Business Incentive Program (i.e., purchasing / upgrading energy efficient equipment through the program), specifically?

D2. What are some reasons that mid-sized customers have not pursued or do not pursue [**MEASURE INSTALLED**] energy efficient equipment more? (Probe the following)
[**PROBE IF NEEDED**]

- Budget priorities
- Time required to install
- Paperwork requirements
- (Perceived) Limited "Return on Investment"
- Budget cycles
- Lease structure
- Cost of upgrades (probe for awareness of energy efficiency incentives)
- Unaware of available options
- Waiting to replace on failure

D3. Is there any additional program information Focus on Energy could provide you to make it easier for you to market the Focus on Energy Business Incentive Program to your mid-sized customers?

D4. Do you have any suggestions for how to make [**MEASURE INSTALLED**] energy efficiency upgrade opportunities more appealing to mid-sized customers?

D5. Is there anything that would make it easier for your mid-sized customers to pursue [**MEASURE INSTALLED**] energy efficiency upgrades?

D6. What types of customers do you typically get to enroll / pursue [**MEASURE INSTALLED**] energy efficiency upgrades?
[**PROBES**]

- What are their characteristics (e.g., square footage / buildings size, urban / rural, smaller / larger, equipment types, building age, more energy / technologically aware)?
- Are there similarities in their energy use / energy use profiles?
- What types of measures do they typically install?

D7. Which types of customers are least likely to pursue [**MEASURE INSTALLED**] energy efficiency upgrades?

D7a. Why do you think they're less likely to pursue energy efficiency upgrades?

D7b. Do you pursue these types of customers differently?

D8. I'm going to read a list of business types, I would like to know whether you have had any insight into why these types of customers might be more or less likely to pursue [**MEASURE INSTALLED**] upgrades through the Business Incentive Program
[**READ 3 FROM LIST - PAUSE FOR RESPONSE**]

Healthcare Facilities (Retirement homes, Assisted living, Care centers, Doctor's offices or clinics)
- **Offices**
- **Restaurants**
- **Hospitals**
- **Retail stores**
- **Auto dealerships or sales**

[PROBES]
- How are they different from customers who do / do not install **[MEASURE INSTALLED]** through the Business Incentive Program?
- Can you think of anything that would make it easier for them to participate in the program?
- Is there anything that Focus on Energy could give you to make it easier to sell these types of customers on the program?

D9. Do you notice any differences between rural or urban customers in terms of their likelihood to install **[MEASURES INSTALLED]** equipment through the Business Incentive Program?

[IF YES PROBES]:
- How are they different?
- Why do you think this is?

Closing

Those are all of the questions that I have for you today, thank you very much for your time and feedback.

Is there anything that I have not asked that you think would be important for me to consider or take into account?

Do you have any questions?

Incentive

Before we end I would like to confirm (if known) / record the name and address we will use to send your $50 check.

Name: _____
Street: _____
City: _____
State: _____
Zip: _____

Again, thank you for your time. We plan on sending checks **in mid- to late-November**
[Stop the recording]