



BAYREN SMB NON-DEEMED MARKET CHARACTERIZATION STUDY

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The Bay Area Regional Energy Network (BayREN)

Energy Solutions. Delivered.

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EXECUTIVE SUMMARY

Project Objectives

BayREN implements effective energy saving programs on a regional level and draws on the expertise, experience, and proven track record of Bay Area local governments to develop and administer successful climate, resource, and sustainability programs. In 2017, the CPUC authorized BayREN to conduct EM&V studies that would both, provide feedback about the organization's current programs, and would provide market insight that could be used to refine or develop new program areas.

BayREN's specific objectives in this engagement were to conduct EM&V research that would support new program development and marketing for the small-to-medium nonresidential marketplace. Specifically, the research was designed to address the following issues for the Small-to-Medium (SMB) Non-Deemed Commercial Business marketplace:

- Assess the general presence and relative size (preponderance of) certain energy consuming equipment and measure types that:
 - Currently receive little-to-no ratepayer incentives (e.g. early retirement/ replacement of package HVAC units);
 - And that are considered capital intensive.
- Determine retrofit opportunity of these measure and equipment types and associated costs.
- Inform BayREN and other program administrators of the range of possible investment levels to get at these stranded savings.
- Increase understanding of the specific market drivers that may be leveraged in programs designed to access these measures.
- Inform potential incentive and financing options, market needs, and possible outreach strategies that may also affect the implementation of these measures.

To meet these objectives and develop a characterization of the SMB Non-Deemed market, AEG conducted an online survey of SMBs located in BayREN counties.

Key Findings

There are seven key themes that emerge from the SMB Non-Deemed market characterization:

1. Businesses that qualify for the survey (and, implicitly, who qualify for BayREN programs) are smaller, but do not include large numbers of micro-businesses.
2. Most respondents say that they already lean toward the use of energy efficient (EE) equipment.
3. Respondents tend to express attitudes that are already very supportive of energy efficiency and green actions.
4. A majority of respondents say they would participate in each of the programs tested by BayREN.
5. Upfront costs are important barriers to EE adoption, but other barriers are also important.
6. This group of businesses is diverse in their reasons for participating in new EE programs, and as a result, find different program features attractive.

7. A segmentation analysis reveals a somewhat complex program marketing picture.

More information associated with each of these themes is provided in the sections below.

Qualifying Businesses

Businesses that qualify for the survey are smaller, but do not include large proportions of micro-businesses. In order to qualify for the survey, respondents were required to represent businesses that are directly billed for electricity and are responsible for maintaining and replacing existing space conditioning equipment. The result of these criteria is that many micro-businesses (very small businesses) did not qualify for the survey.

Key findings that are relevant to this outcome include that:

- 34% of the survey respondents report having fewer than 20 employees at their largest facility operating in the Bay Area:
 - 66% have 20 or more employees;
 - 29% have 100 or more employees.
- Similarly, 44% of these establishments report having 5,000 square feet or less of enclosed space:
 - 56% are larger than 5,000 square feet;
 - 12% have 25,001 – 50,000 square feet of space.
- Most respondents operate multiple facilities within the BayREN region --only 32% say they operate a single location.
- Eligible businesses also tend to own (78%) and be responsible for managing (85%) their own space.

Existing Energy Efficient Equipment

Central air conditioning (CAC) systems are common (76%) among this population, and relatively younger (54% of cooling systems and 46% of heating systems are reported to be less than 10 years old). Additionally, respondents tend to describe these existing systems as already energy efficient:

- Current HVAC systems are most often described (65%) as “higher-than-standard efficiency” systems.
- Half of heating systems are also described as high efficiency.
- 60% of respondents also say that they will select the highest possible efficiency cooling system as a replacement when this is needed.
 - Another 36% say they would install a higher-than-standard efficiency system, though not the highest efficiency.
- Respondents also tend to think that their advisors will also recommend high efficiency systems.
- More than one-in-five say their heating and/or their cooling system is on its last legs.
 - Half of respondents say they will wait to replace a cooling system until failure is either imminent or actually occurs.
- Half also say that they have a clear plan for replacing their cooling system.
 - Another 36% say they have a basic idea for what they will do in this situation.

Energy Efficiency-Related Attitudes

Respondents say that they already lean toward installing energy efficient (EE) equipment options in the future:

- More than a third of respondents (36%) say they “always” install the highest efficiency equipment they can.
- Another 47% say they “try” and install EE equipment as often as possible.

Respondents also tend to say that they believe in the value of EE equipment, and they express traditional “green” attitudes.

- 48% strongly agree (by providing Top 3 box responses on a 10-point scale) that investing in EE is almost always a good business decision.
- 74% strongly agree (providing Top 3 box responses on a 10-point scale) that global warming is real and significant.
- More than half of those respondents who express green attitudes also tend to say that they are “almost always” able to act on those beliefs on a day-to-day basis.

Program Interest

Half or more of respondents say they would participate in each of the programs tested by BayREN.

Table ES 1 Customer Interest in Tested Programs

Program	Top Box ("10" Rating)	Top 3 Box ("8" – "10" rating)	Notes
Replace HVAC system at failure with EE option, given incentives that create a 3-year payback	22%	71%	High acceptance levels for this program
Replace HVAC system with EE option at failure, given incentives that create a 5-year payback (<u>among those who accepted a 3-year payback</u>)	18%	59%	Most people who say they would use the program at 3 years also say they would use the program at 5 years
Replace HVAC system with EE option at failure, given incentives that create a 1-year payback (<u>among those who did not accept a 3-year payback</u>)	6%	24%	Reducing the payback period from 3 years to 1 year does not increase adoptions dramatically
<u>Early replace</u> HVAC system with EE option, given incentives that create a 3-year payback	12%	49%	Willingness to implement early replacement for more EE space conditioning systems is lower than for "at failure," but still substantial
Implement bundled renovation package, given no renovation since 2000, and the presence of incentives and an Energy Advisor	31%	48%	Bundling is attractive but the sample size here is very small
Implement lighting upgrade program	22%	68%	The lighting program is also very attractive

Barriers to EE Adoption

Upfront costs are reported to be important barriers to EE adoption, but other barriers are also viewed as important by many customers. To be more specific, upfront costs remain an important concern for a significant portion of customers, but only half of customers rate this concern in their top five barriers to EE, and only 12% rate it as their most important concern.

At least as important a finding is the fact that 88% of customers rate something other than upfront costs as their most important barrier. An additional noteworthy result is the large number of barriers that are rated as most important by at least some customers.

Other important barriers are identified as:

- Customer (and advisor) knowledgeability about EE (e.g., being able to estimate EE savings, or the sense that EE savings are not large enough to warrant their time),
- EE option availability,

- and having the time available to evaluate EE options.

It is also worth noting that not having time available to evaluate EE options is likely to be correlated with confusion about the possible benefits of EE installations.

Program Features

This group of businesses is diverse in their reasons for participating in EE programs. Nearly all survey respondents describe multiple program features as attractive (that is, leading them to be “much more likely” to participate in any of the tested programs).

- 62% rate at least three program features as attractive, while only 6% say that no features are very attractive, and only 12% say a single feature is attractive.
- More specifically, having access to a “Program Advisor,” or to the more generic “Program Facilitator,” are each compelling drivers to new program adoption for a substantial portion (40+% of all customers.
- Having access to low / no interest loans (and potentially linking loan payments to annual property tax payments) are each also attractive options for many customers (37% to 40%).

Customer Segmentation

A simple segmentation analysis which identified four market segments reveals a complex program marketing picture. The drivers used to define the segments were customer assessments of the relative importance of the different barriers to EE investment that were tested in the survey. While the segments were defined by differences in the perceived importance of EE barriers, the reality is that the resulting segments also differ significantly on other criteria as well.

The four segments appear to differ markedly in terms of how aggressively the customers in each segment will pursue EE investments on their own, and in terms of the sorts of “help” that will be most appealing to them.

- Unenthusiastic About EE (29%): Varied barriers; less likely to believe that EE “works,” less green, no clear “hooks” for EE.
- Need Help for EE (26%): Less interested in EE, but would value Project Advisors / Program Facilitator.
- Interested, But Constrained (24%): Interested in EE, but need help determining the best installation options and they need help with installation costs.
- Green Adopters (21%): Excellent target for EE programs; traditional “greens;” need help choosing appropriate EE options.

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INTRODUCTION

Project Background

BayREN represents a collaboration of the nine counties that make up the San Francisco Bay Area and is led by the Association of Bay Area Governments (ABAG). ABAG was formed in 1961 by a joint powers agreement among Bay Area local governments and serves as the comprehensive regional planning agency and Council of Governments for the nine counties and 101 cities and towns of the San Francisco Bay Region.

The region encompasses Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. BayREN is funded by California utility ratepayers under the auspices of the California Public Utilities Commission. One of only two Regional Energy Networks in the state, BayREN represents 20 percent of the state's population.

BayREN implements effective energy saving programs on a regional level and draws on the expertise, experience, and proven track record of Bay Area local governments to develop and administer successful climate, resource, and sustainability programs. A critical focus of BayREN is to provide energy efficiency services to communities that have been underserved by traditional utility programs.

As a Program Administrator, BayREN's business plan outlines a variety of activities through 2025 which include refinements to current programs and the potential implementation of new program areas that are intended to fill gaps in the state's energy efficiency programs specifically focusing on underserved populations. In 2017, the CPUC authorized BayREN to conduct EM&V studies that would both, provide feedback regarding the organization's current programs, and provide market insight that could be used to refine or develop new program areas.

Project Objectives

BayREN's specific objectives in this engagement were to address the following issues for the Small-to-Medium (SMB) Non-Deemed Commercial Business marketplace in order to:

- Assess the presence and relative size of packaged AC equipment among SMBs with such equipment:
 - BayREN chose to focus on this equipment because these systems currently receive little-to-no ratepayer incentives for early retirement / replacement, and because they are considered to be "capital intensive"¹.
- Determine the retrofit opportunity for these measure, as well as equipment types and associated costs
- Inform BayREN and other program administrators of the range of possible investment levels to get at these stranded savings

¹ BayREN recognizes that there is other energy using equipment in SMBs (besides packaged AC systems) that may also meet these criteria. BayREN chose to focus on packaged AC systems as a first step because this end use was likely to be most broadly distributed among SMBs. Future research and BayREN SMB programs may consider other equipment (such as refrigeration-related equipment, or other end uses), but the survey described here was intended to focus specifically on packaged AC systems in the SMB sector.

- Increase understanding of the specific market drivers that may be leveraged in programs designed to access these measures
- Inform potential incentive and financing options, market needs, and possible outreach strategies that may also affect the implementation of these measures

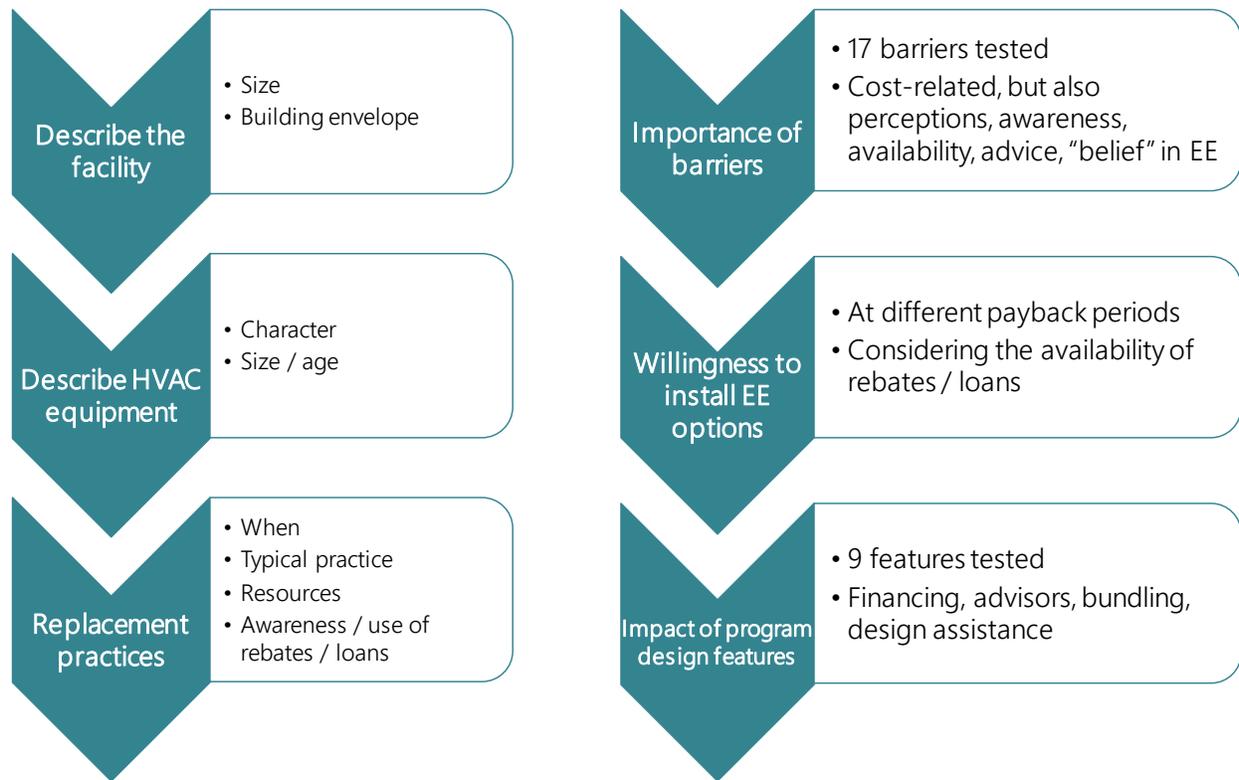
Methodology

The overall research design was to conduct a survey among qualifying respondents that was administered online. The survey sample was developed from online panel sample sources by SHC Universal Survey who also programmed and administered the online survey². The online survey and sample sourcing was necessary because utility sample sources were not an option for the survey, and because no other source of sample was viable given other project requirements. Note that this meant that the business establishments represented by individual respondents could not be linked with actual energy use data for those establishments. This was not viewed as problematic, since energy use information was not central to any objectives.³

² Note that introductory text that was provided to survey respondents before they agreed to participate in the survey did mention energy efficiency as an area of interest for the survey (see the copy of the questionnaire in Appendix A). It is possible, therefore, that potential survey respondents with an interest in energy efficiency were more likely to participate. While this was possible, however, the team felt that it was more important to ensure that respondents had an overall sense for core survey topics since it was critical that only those respondents who were knowledgeable about energy efficiency / energy operations at their facility were eligible to participate.

³ Note that the team did capture some information about the location of the business establishments represented in the survey. Respondents were asked, for example, for the county in which the facility is located, and the type area in which it is located (urban, suburban, rural). Because the total survey sample size was relatively small, the team did not believe that capturing more granular location information (such as zip code) would be useful (since there would likely be very few respondents in any given zip code, meaning that zip code-level analyses would not be viable).

Figure 1-1 Survey Questionnaire Highlights



Individual survey respondents qualified to complete the survey only if they were knowledgeable about their business's cooling / heating system replacement practices. In addition, the survey respondents were required to represent a business that⁴:

- Operates at least one establishment in the BayREN geography;
- Pays an electric bill to an electric utility (not to an owner / lessor);
- Is responsible for the replacement of cooling equipment (that includes a condenser) or heating equipment (that includes a coil) when that equipment fails.
- Qualifies as a small-to-medium sized business (SMB) using the criteria adopted by BayREN:
- Have fewer than 20 employees onsite, OR
- Have some, but less than 50,000 square feet of, enclosed space.

Data collection took place from March 14 to March 19, 2018. Total sample size for the survey included 225 valid surveys. Average questionnaire length was 18.8 minutes, with fewer than 5% breakoffs. “Breakoffs” represent surveys in which a respondent starts the survey, passes the screens to become a qualified survey

⁴ Note that the listed survey qualification criteria were ALL applied to the sample. That is, qualifying survey respondents had to qualify on all of the qualification criteria. The reason for this was that all of the criteria were specified by the BayREN team as relevant to characterizing the portion of the SMB market that was the focus of the team’s interest. Of particular note is the fact that, besides the other specified criteria, qualifying businesses were also required to be responsible for replacing space conditioning equipment. The team realized that implementing this requirement would mean that some SMBs would not qualify for the survey, but this was deemed appropriate since the team did want to focus the survey on SMBs that would be able to participate in new EE-related programs that might involve space conditioning system upgrades.

participant, but then stops the survey part way through. A breakoff rate of less than 5% is generally regarded to be satisfactory.

With a total sample size of 225, the 90% confidence interval for the full sample is +/- 5.5%. This means that we can be 90% confident that the "true" value of a given response is within + / - 5.5% of the value for that response provided in this report. Since some sub-populations of interest are smaller than the total sample, the table below provides additional 90% confidence intervals for smaller sample sizes.

Table 1-1 Confidence Intervals for Sample Sizes

Sample Size	90% Confidence Interval
225	5.5%
150	6.7%
100	8.3%
70	9.9%

2

MARKET CHARACTERIZATION

This chapter describes the building characteristics, and space conditioning systems and practices, observed from the survey within the SMB Non-Deemed market.

Building Characteristics

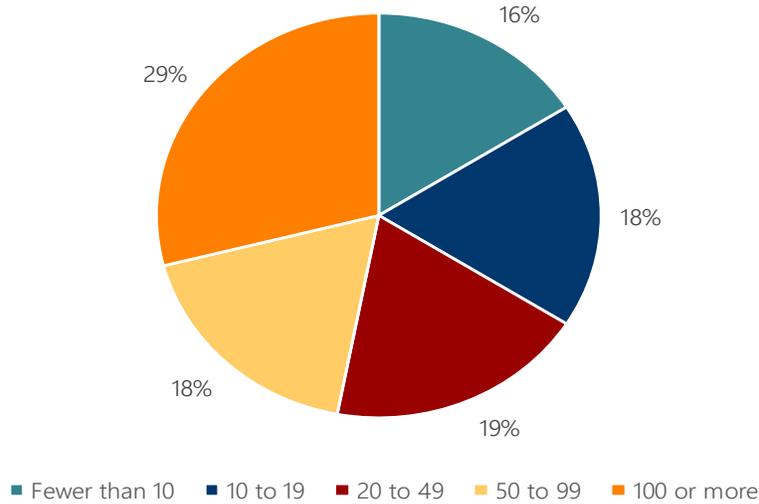
The research asked respondents to provide their answers for specific business “establishments,” rather than for a business as a whole. A business establishment was defined as a specific business location, and as a result, a single business could have multiple business establishments.

While we know that many small businesses (and business establishments) are very small (with only a few employees and very little enclosed space), the population of business establishments that qualify under BayREN’s definition of an eligible SMB tend to include only the larger portion of the total SMB population. Note that qualifying business establishments were required to pay a bill directly for electricity, and even more importantly, had to be the responsible party for onsite heating and / or air conditioning equipment. These factors “screen out,” or make ineligible many smaller business establishments. As a result, many (or even most) “micro” business establishments are excluded from the population of SMB establishments that might have been eligible to be included in this survey (and / or which might be eligible for BayREN programs).

The figure below indicates that just over a third of qualifying business establishments have fewer than 20 full time employees in total. While all of the business establishments “counted” in this assessment qualified under BayREN’s definition of an eligible business establishment, just 16% of these qualifying establishments employ fewer than 10 full-time staff, while another 18% employ 10-19 staff.⁵

⁵ As we noted earlier, the project team recognized that many small-to-medium businesses were not eligible for the survey, and so were not represented in the sample. The logic for this fact was that the project team wanted respondent businesses to be responsible for replacing space conditioning equipment, and those SMBs who did not have AC, or were not responsible for AC equipment that served their facility, were defined as ineligible for the survey. The reason for this exclusion was to ensure that the survey results spoke specifically to the portion of the SMB market that were potential participants in new EE programs focused on space conditioning systems. Surveys intended to support actions directed toward a broader portion of the SMB market would require a sample that is more broadly defined.

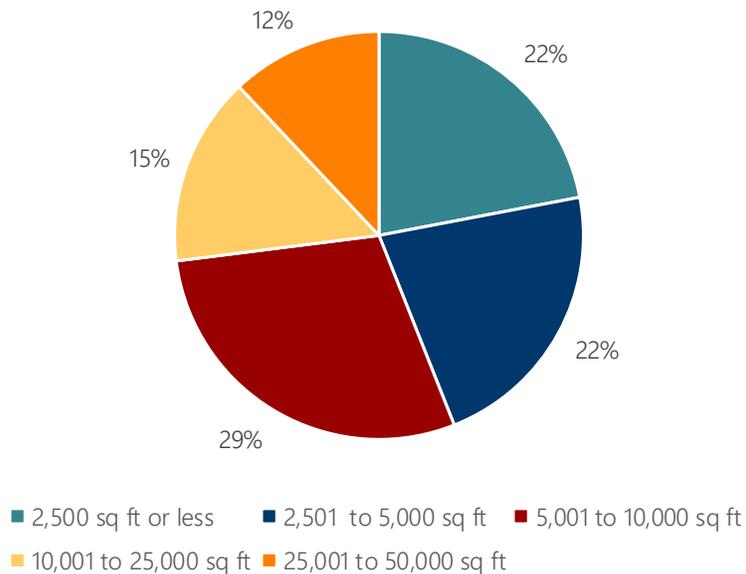
Figure 2-1 Employee Size Distribution for Qualifying Business Establishments



(N=225) S7. Approximately how many full-time employees work at this location?

A total of 44% of qualifying business establishments have 5,000 square feet of enclosed space or less. Twenty-two percent of qualifying establishments say they have no more than 2,500 square feet of enclosed space, but note that 15% have 10,001 – 25,000 square feet, and another 12% have more than 25,000 square feet of enclosed space.

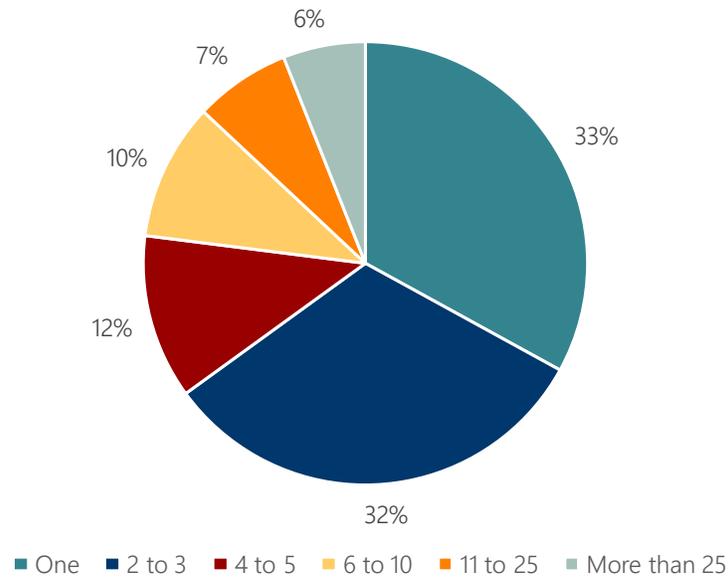
Figure 2-2 Distribution of Enclosed Space for Qualifying Business Establishments



(N=225) S6. What is the approximate total square footage of the enclosed space at this location?

Most respondents represent businesses that operate two or more qualifying establishments. Only one-third of qualified respondents say they operate a single establishment in the relevant counties. It is worth noting that respondents who indicated that their business operated more than one location in the relevant set of counties were told: "For the remainder of our questions, please think about the largest, or most complex, facility that you operate in these counties. This would also be the facility that has the highest use of electricity."

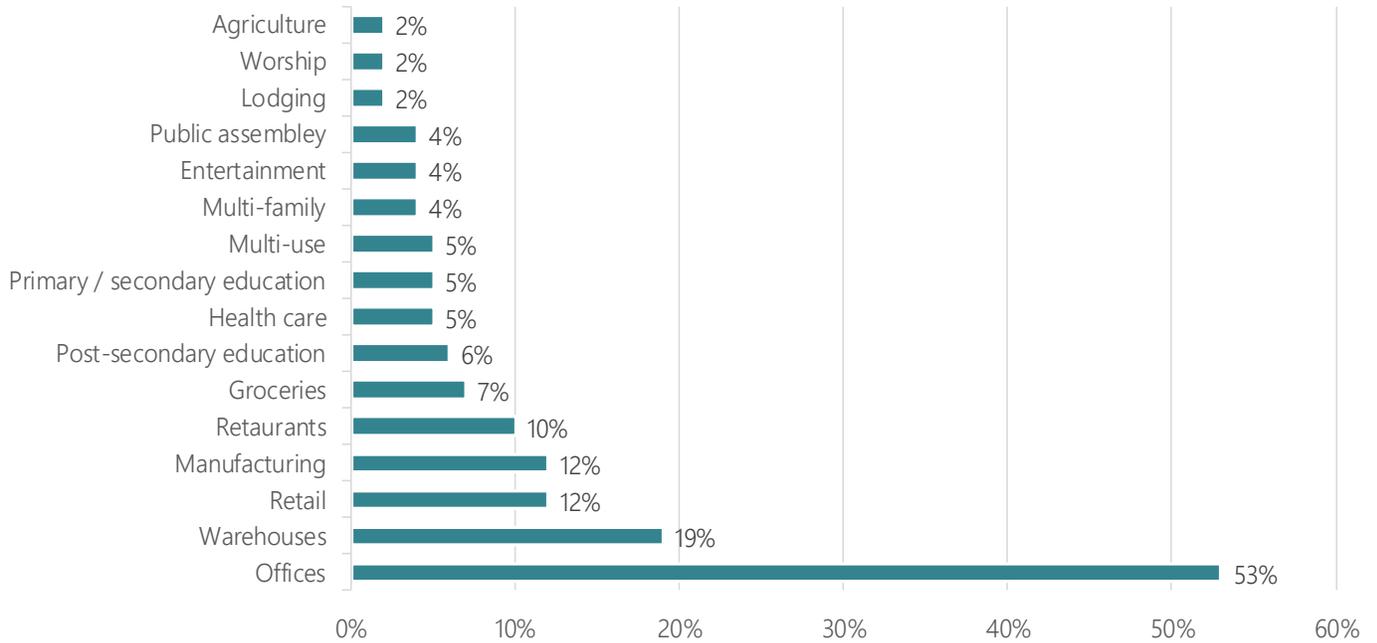
Figure 2-3 Number of Qualified Facilities Operated by Qualifying Businesses



(N=225) S2. How many different locations in total does your organization currently operate in these counties?

Qualifying businesses represent a broad range of business types. More than half are offices, and almost one in five are warehouses.

Figure 2-4 Type of Qualifying Facilities Operated by Qualifying Businesses



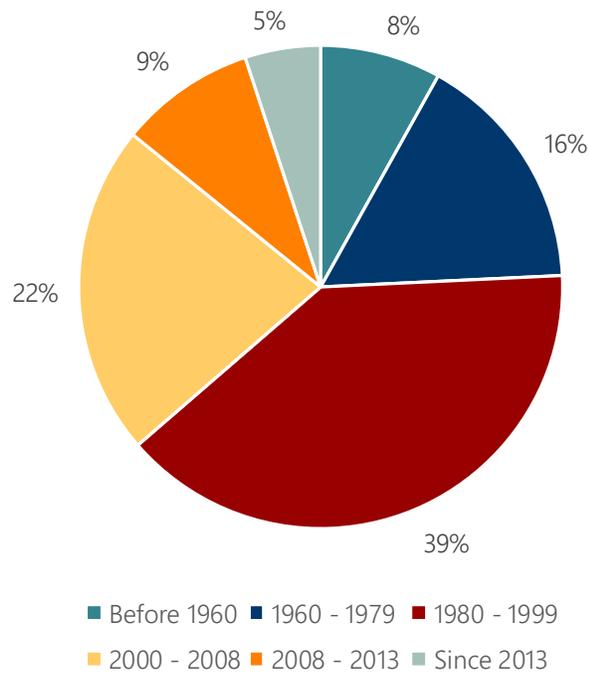
(N=225) Q1. What type of facility does your organization occupy at this location?

Eligible businesses tend to own, and be responsible for managing their own space:

- 78% say they own their own space, while 22% lease.
- 85% are responsible for managing their own space, while 13% say there is an onsite property manager.
- 75% occupy the entire building, while 14% occupy part of a high-rise building, and 10% occupy part of a low-rise building.

Figure 2-5 indicates that 45% of these facilities have been built since 2000, while Table 2-1 indicates that 71% have been renovated since that date.

Figure 2-5 Date Facility Constructed



(N=225) Q2: Approximately when was this facility constructed?

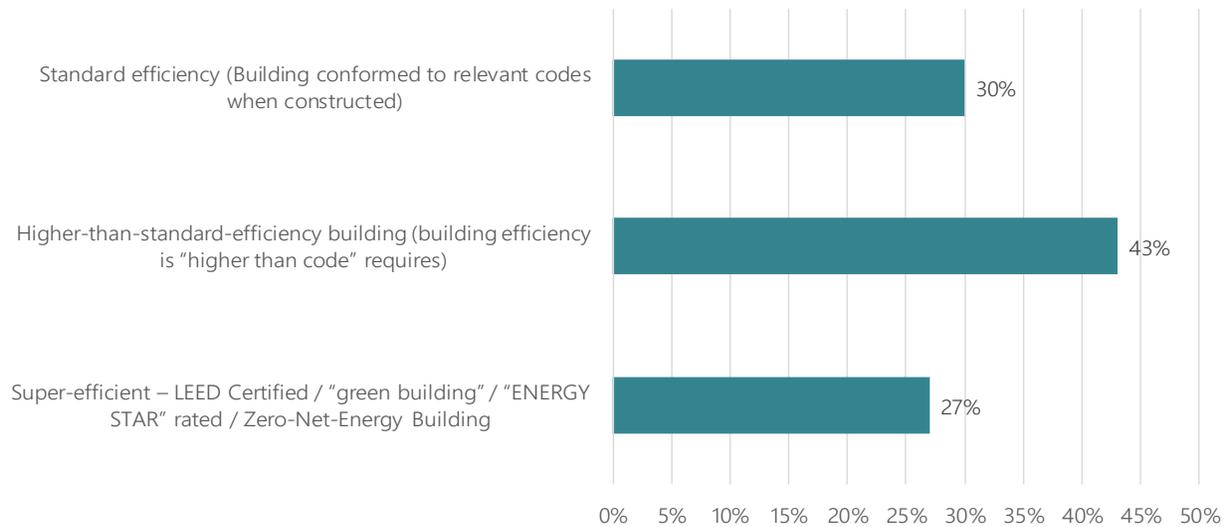
Table 2-1 Facility Renovation Status

Date Renovation Completed	
Never	20%
Before 1960	0%
1960 – 1979	2%
1980 – 1999	7%
2000 – 2008	23%
2009 - 2013	30%
2014 - Present	18%

(N=225) Q3. Since its construction, has there ever been any significant renovation done to the overall building itself (things like adding or replacing insulation, upgrading doors and / or windows, sealing ducts, or the like)? (N=181) Q4. About when was this renovation completed?

Only 30% of respondents describe their building as “standard efficiency”. More than a quarter say their building is super-efficient.

Figure 2-6 Building Efficiency Level Described by Respondent

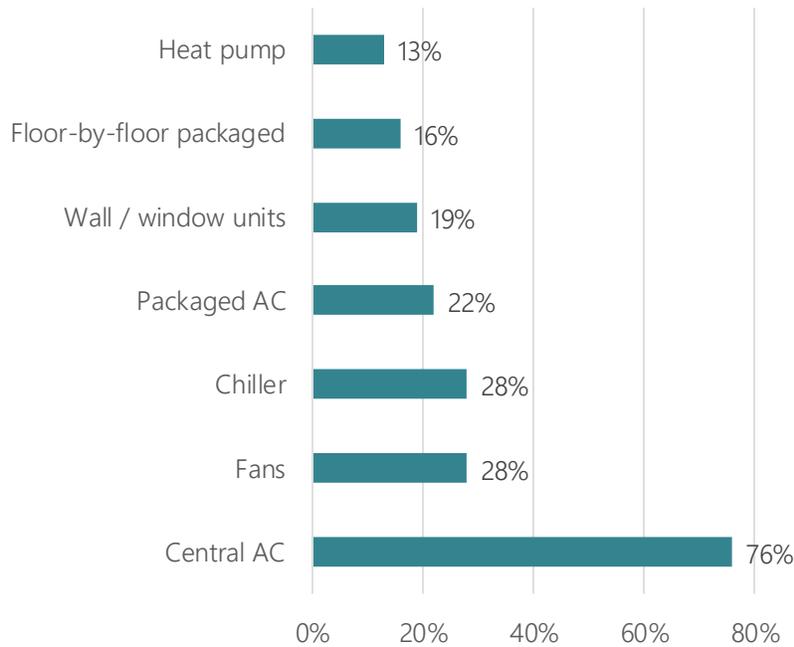


(N=225) Q5: Which of the following best describes the overall efficiency level of your building?

Space Conditioning Systems and Practices

Most of these facilities report having central AC as part of their cooling system.

Figure 2-7 System Type for All Cooling Systems Present (Total = more than 100% since some facilities have multiple systems)



(N=225) QS8: Which of the following types of cooling systems are used to cool the space at this facility?

More than a third (35%) report having more than one cooling system. Of those with more than one cooling system, 60% have CAC as their primary system. The primary system cools 69% of the building space on average, while the secondary system cools 38% of space.

Most of these facilities also use electricity for space heating (91%). These systems heat, on average, 64% of the building space. Electric boilers account for 36% of the electric heating systems, while baseboard or radiant heating accounts for 31%.

Table 2-2 Date Heating / Cooling Systems Installed

	Date Primary AC System Installed	Date Primary Heating System Installed
Before 1960	0%	0%
1960 – 1979	2%	3%
1980 – 1999	11%	15%
2000 – 2008	33%	35%
2009 – 2013	35%	31%
2014 – Present	19%	15%

(N=210) Q9: About how old is your primary cooling system? (N=204) Q19 About how old is your primary heating system?

Findings on reported system age show that most HVAC systems are less than 20 years old, while about half are less than 10 years old. Less than 20% of both, AC systems (13%), and heating systems (18%), are reported to have been installed prior to 2000. At the other end of the scale, 54% of AC systems and 46% of heating systems are reported to have been installed since 2009.

Current HVAC systems are most often described as “higher-than-standard efficiency” systems. Two-thirds of respondents (65%) say their current cooling system is higher than standard efficiency now, while 50% say their current heating system meets the same standard.

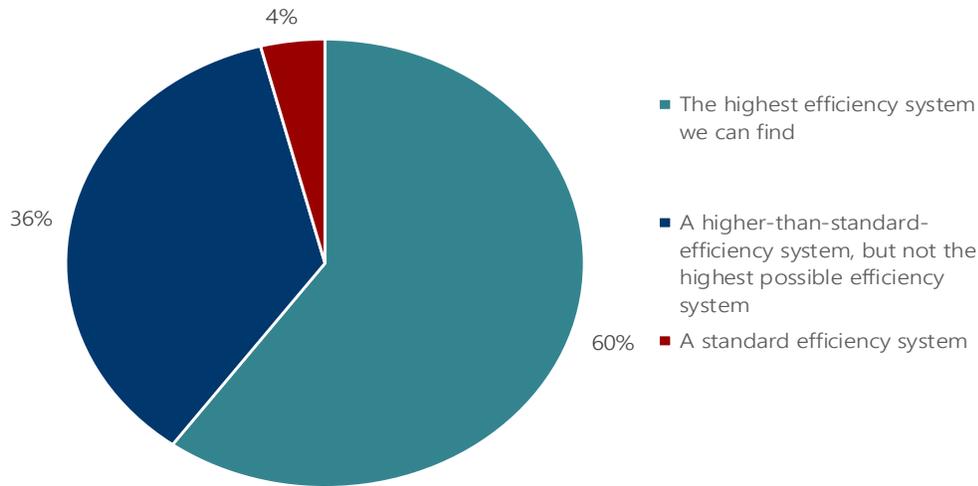
Table 2-3 Reported Proportion of High Efficiency Heating and Cooling Systems

Is your current [heating/cooling] system a higher than standard efficiency unit?	Cooling System	Heating System
Yes	65%	50%
No	23%	36%
Not Sure	11%	13%

(N=210) Q10: To the best of your recollection, is your primary cooling system a higher-than-standard-efficiency system? (N=204) Q20: To the best of your recollection, is your primary heating system a higher-than-standard efficiency system?

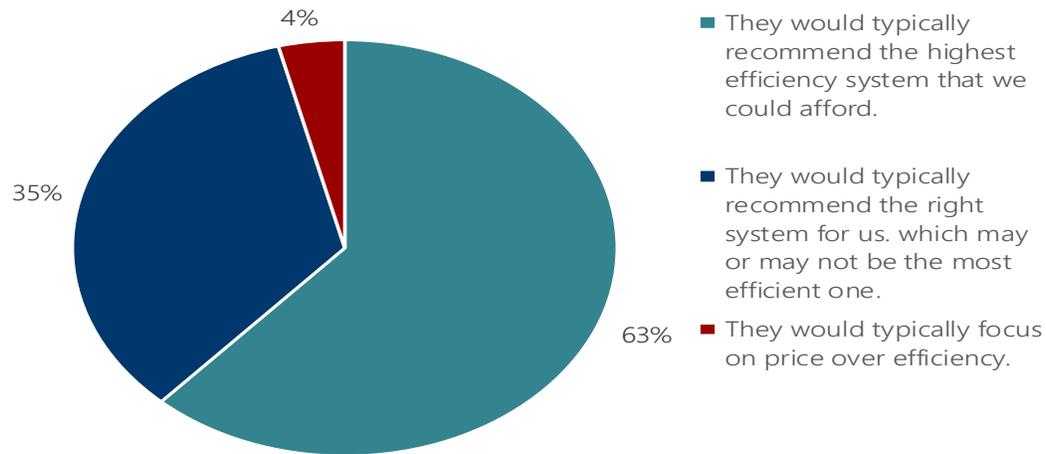
As is reported in the figures below, respondents tend to say both that they will select, and believe that their advisors will recommend, very efficient cooling system replacements.

Figure 2-8 *Planned Efficiency Level for Next Cooling System*



(N=140) Q13. Are you currently thinking that you will replace your system with . . . ?

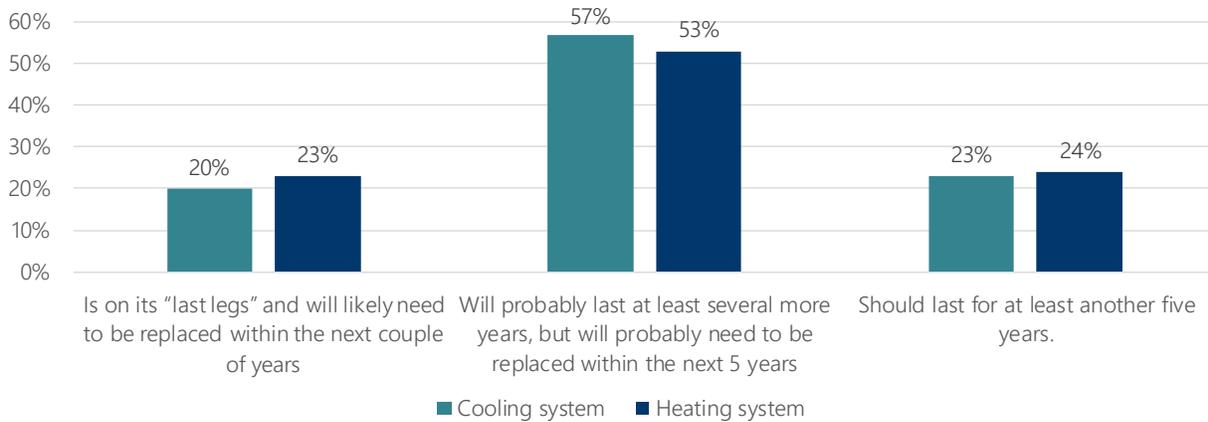
Figure 2-9 *Expected Efficiency Recommendation from HVAC Advisor*



(N=173) Q15A: Which of the following statements best describes your estimate of how this person or company thinks about energy efficiency?

More than one in five say their heating system, and/or their cooling system is on its last legs. Only about a quarter of respondents expect their heating system or their cooling system to last for more than 5 years.

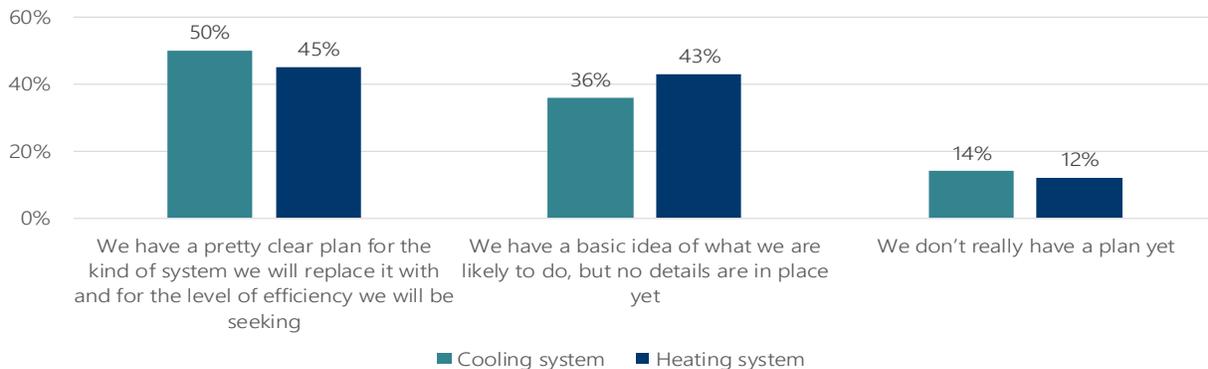
Figure 2-10 HVAC System Status



(N=210) Q11: We know that it can be difficult to tell sometimes, but as best you can tell, would you say your primary cooling system: Should last for at least another five years, Will probably last at least several more years, but will probably need to be replaced within the next 5 years, or Should last for at least another five years?; (N=204) Q21: We know that it can be difficult to tell sometimes, but as best you can tell, would you say your primary heating system: Should last for at least another five years, Will it probably last at least several more years, but will probably need to be replaced within the next 5 years, or Should last for at least another five years?

Most respondents facing near-term HVAC replacement say they have a plan in place for doing so. Only a few respondents (14% for cooling systems and 12% for heating systems) say they have no plan at all for what to do when their HVAC system fails, while at the other end of the spectrum, 50% for cooling systems and 45% for heating systems say they have a "pretty clear plan in place" for replacement.

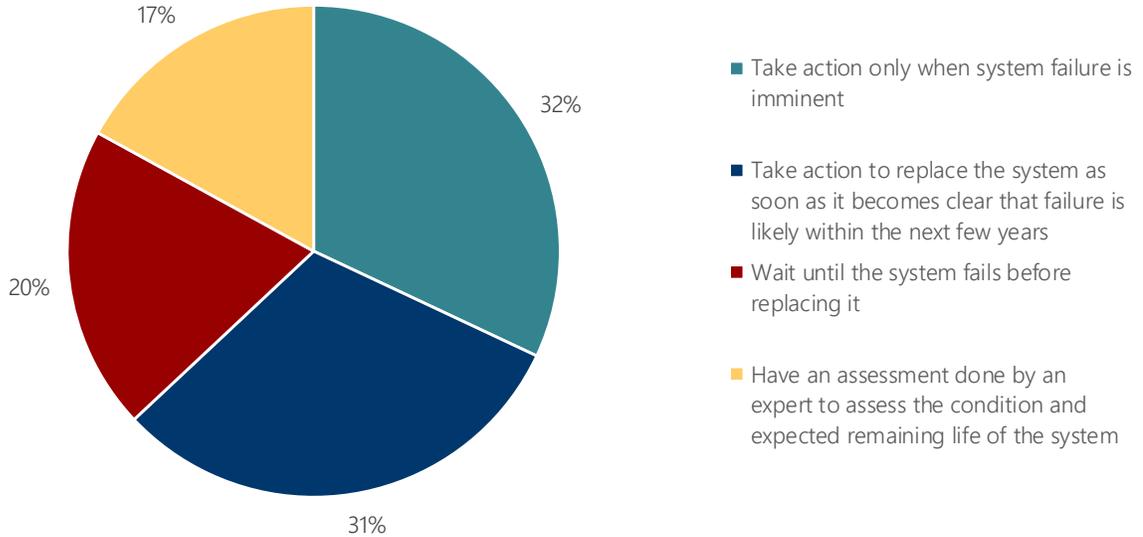
Figure 2-11 Status of Planning for HVAC System Replacement (Given that the respondent expects to replace the system with 5 years)



(N=152) Q12: Given that your primary cooling system will likely need to be replaced within the next [few years/5 years or so], does your organization have a plan in place for that replacement? (N=156) Q22: Given that your primary heating system will likely need to be replaced within the next [few years / 5 years or so], does your organization have a plan in place for that replacement?

Half of respondents say they expect that they will wait to replace a cooling system until failure is either imminent or actually occurs.

Figure 2-12 When Respondents Say They Will Take Action to Replace Cooling System



(N=210) Q14: Do you think that your organization will probably . . . ?

3

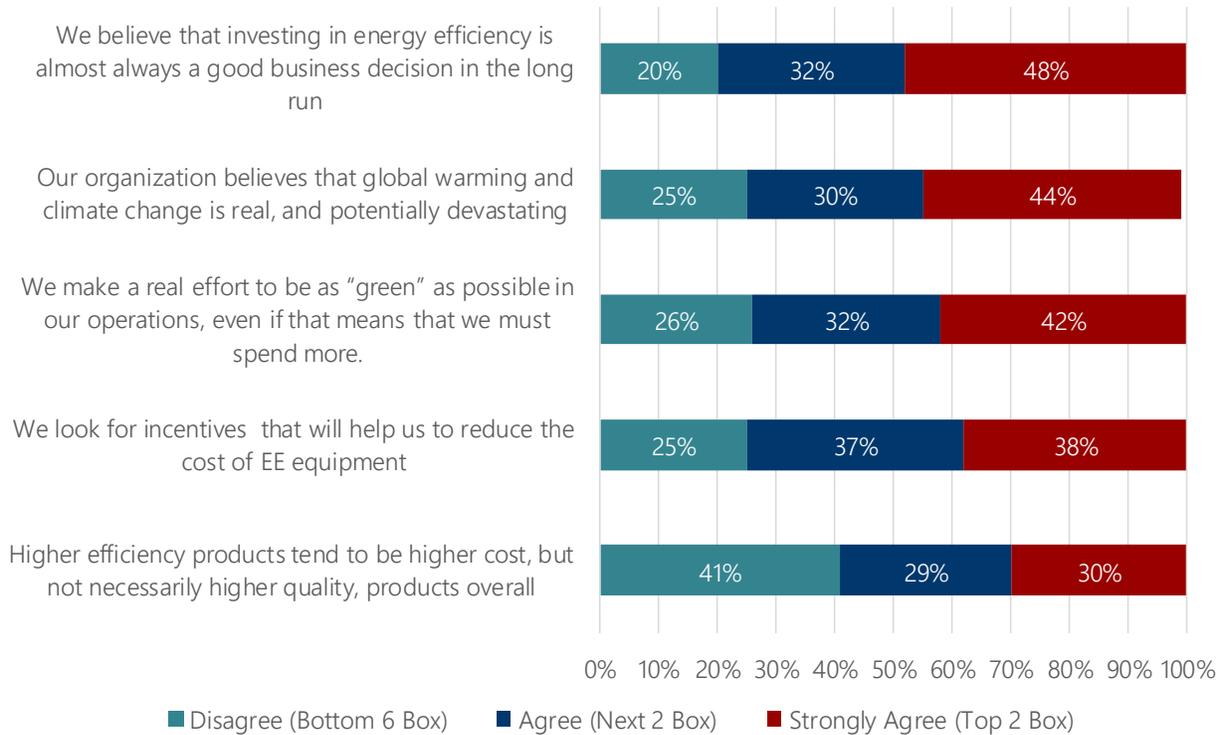
ENERGY RELATED ATTITUDES

This chapter discusses the attitudes and opinions that these business respondents hold toward energy efficiency, environmental considerations, information sources, and other related issues.

Energy Efficiency Attitudes

Businesses tend to express, both very pro-energy-efficiency opinions, and very “green” environmental opinions. With regard to energy efficiency, for example, a total of 48% agree strongly with the notion that energy efficiency “is almost always a good business decision in the long run,” while 41% disagree (and only 30% strongly agree) with the negatively worded statement that higher efficiency products can be “higher cost but not necessarily high quality, products overall.” On the environmental opinion side, 44% strongly agree that climate change is “real and potentially devastating” and almost the same number (42%) say that they do “make a real effort” to be as green as possible, even if this means they incur additional costs.

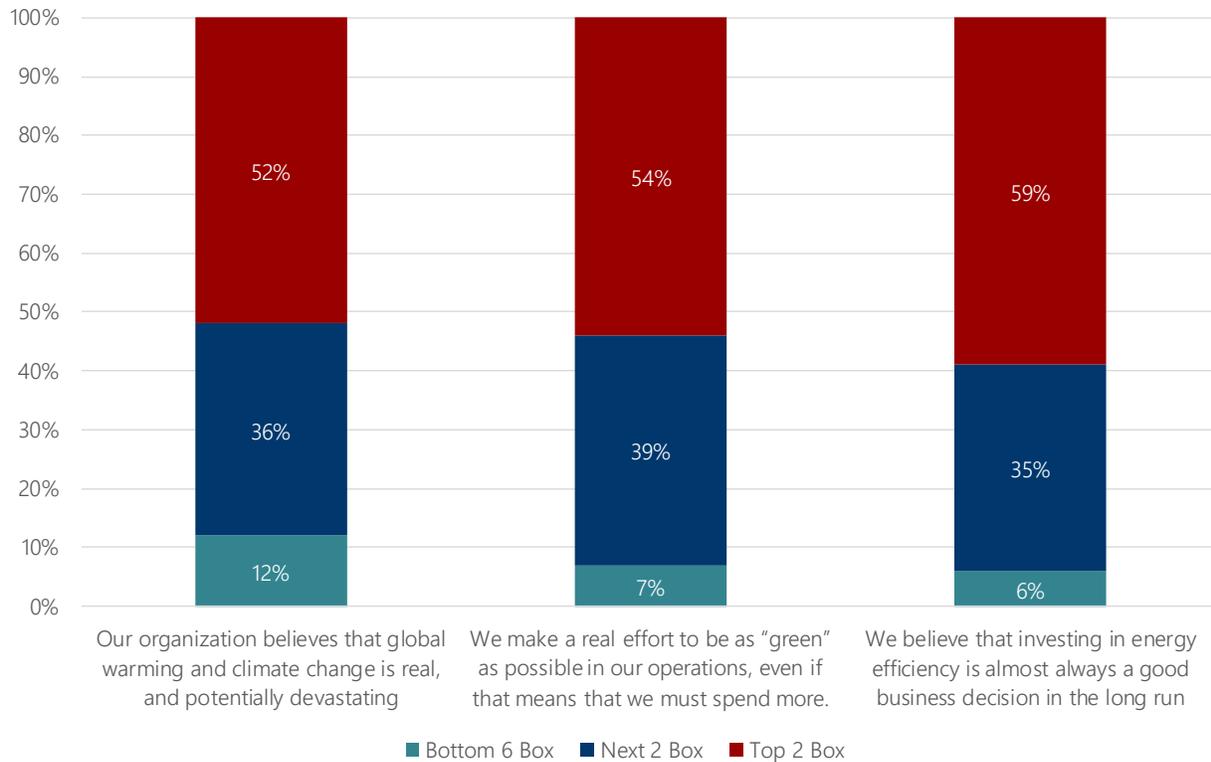
Figure 3-1 Agreement with Energy Efficiency and Environmental-Related Statements



(N=225) Q23: At an organizational level, to what extent does your organization agree or disagree with each of the following statements? Please use a scale where ‘1’ means you strongly disagree, and ‘10’ means you strongly agree.

More than half of respondents who express agreement with several of the opinions just outlined also say that they are “almost always” able to truly act on their beliefs on a day-to-day basis. Customers who strongly agreed with three specific EE-, or green-, focused attitudes were also asked the extent to which they are able to truly act on those attitudes on a day-to-day basis. At least half of those who strongly agreed with each opinion also strongly agreed that they are able to implement actions that support that belief on a day-to-day basis.

Figure 3-2 *Perceived Ability to Implement Actions that Support Given Beliefs on a Day-to-Day Basis*

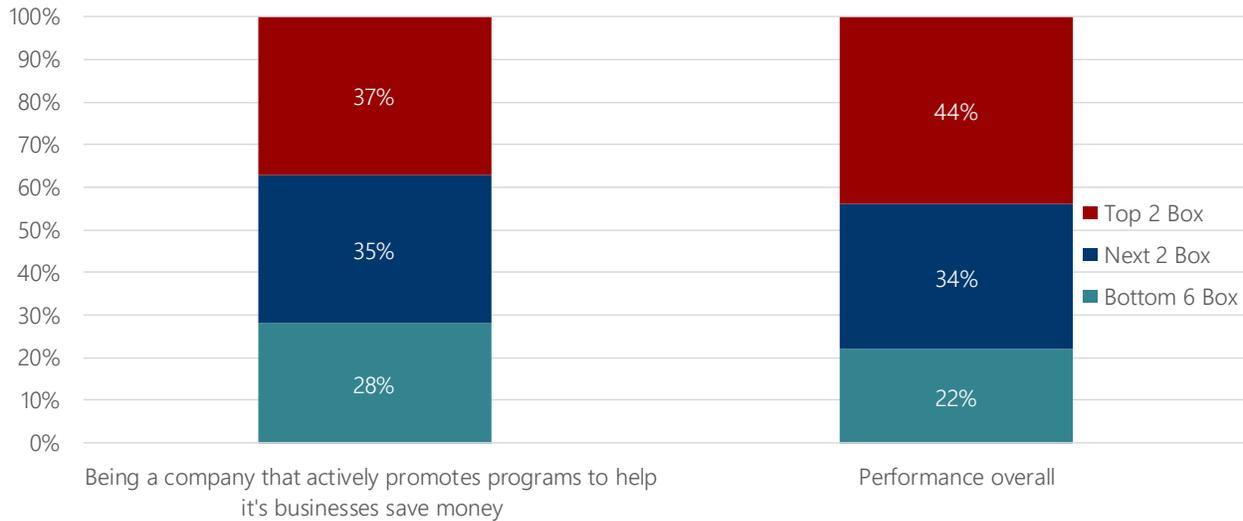


(N= 151, 143, 136). Q23: You indicated in the last question that you strongly agree with some of statements we asked having to do with energy efficiency and “green” issues. We also recognize that sometimes these beliefs can be difficult to put into practice. To what extent would you say that your organization is able to implement actions on a day-to-day basis that are supportive of these beliefs? For each of these statements, please use a scale in which: ‘1’ means that “We are rarely able to implement actions that support this belief on a day-to-day basis,” and “10’ means “We are almost always able to implement actions that support this belief on a day-to-day basis.”

Attitudes Toward Electric Providers and Other Information Sources

Nearly half of respondents say they are very satisfied with their electric utility provider’s performance overall. Almost all (99%) say that PG&E is their electricity provider.

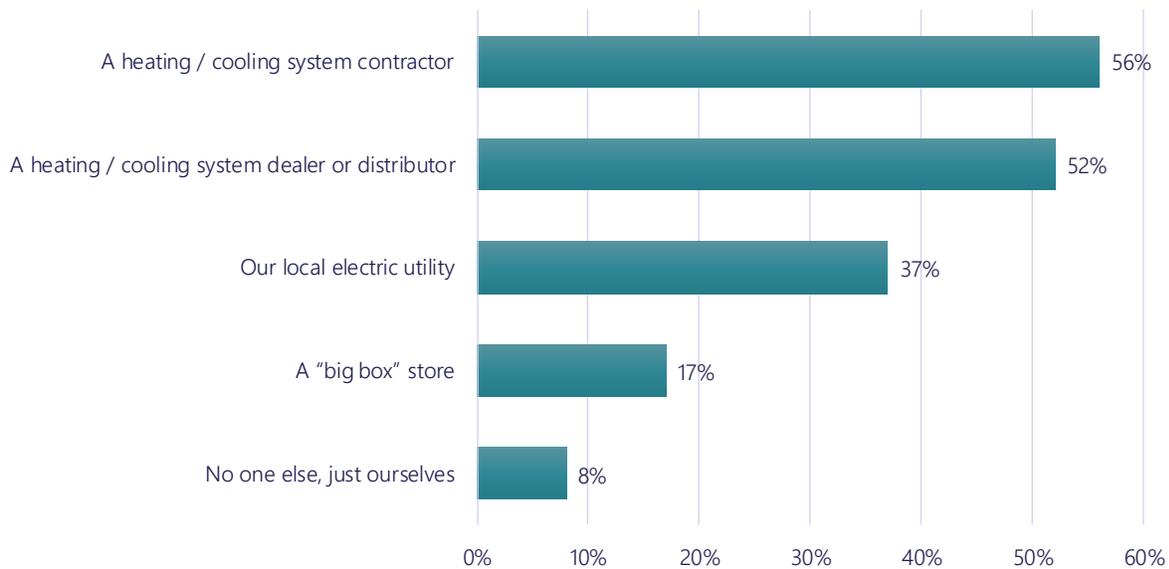
Figure 3-3 Utility Provider Performance Ratings (on a 10-point scale where “1” = “Poor” and “10” = “Excellent”)



(N=225) QC2: Please rate your electric service provider on the following.

HVAC contractors and dealers/distributors are mentioned most frequently as additional advisors for cooling systems. Utilities are only mentioned as an additional advisor by just over a third of respondents.

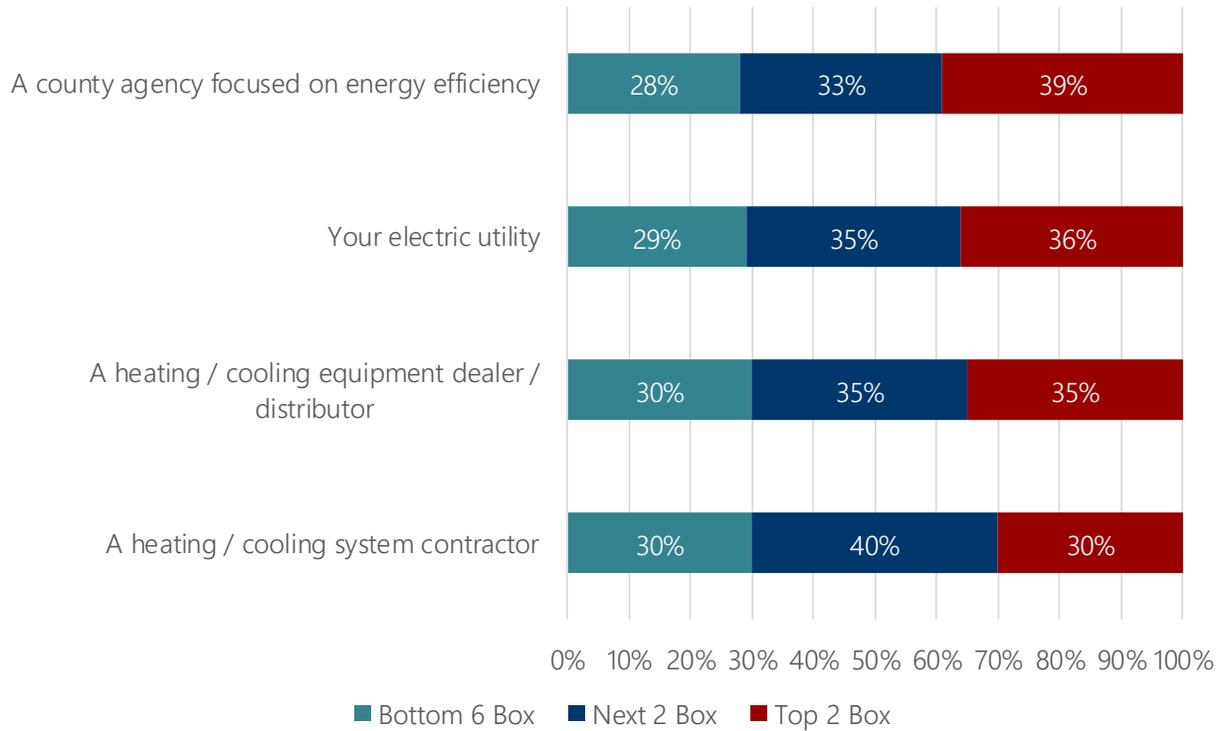
Figure 3-4 Who Customers Would Turn to for Advice on Cooling Systems



(N=210) Q16: Besides the person or company with whom you currently have a working relationship on cooling systems issues, is there anywhere else you would [PROGRAMMER: SHOW IF Q15=2: "Where your organization would"] turn for advice on selecting a new cooling system?

There is relatively little variability in the credibility assigned to different EE-related information sources. Utilities are rated as highly credible by fewer respondents than say they have a highly favorable opinion of their electric utility (44% rate their satisfaction with their utility as Top 2 Box, but only 36% rate them as equally credible). Note the inconsistency here: Contractors are mentioned most frequently as the advisor they use, but only 30% rate them as highly credible. This may well represent the difference between their view of contractors in general vs. their view of “their” contractor.

Figure 3-5 Rating Alternative Sources of EE Information on Credibility

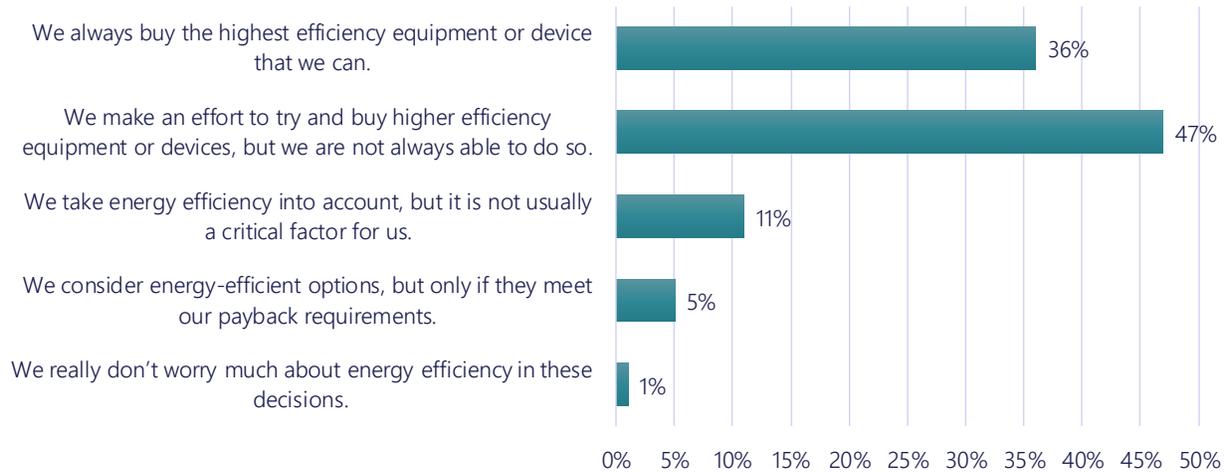


(n=225) Q35: Please rate the sources of information on energy efficiency listed below on their credibility: [Scale = "1" Not at all credible; "10" "Highly Credible".

Equipment Purchasing Decisions

Respondents say that EE is a factor in almost all purchasing decisions. More than a third (36%) say they always buy the highest efficiency equipment they can, and another 47% say they try to buy higher efficiency equipment whenever they can (while admitting that this is not always possible).

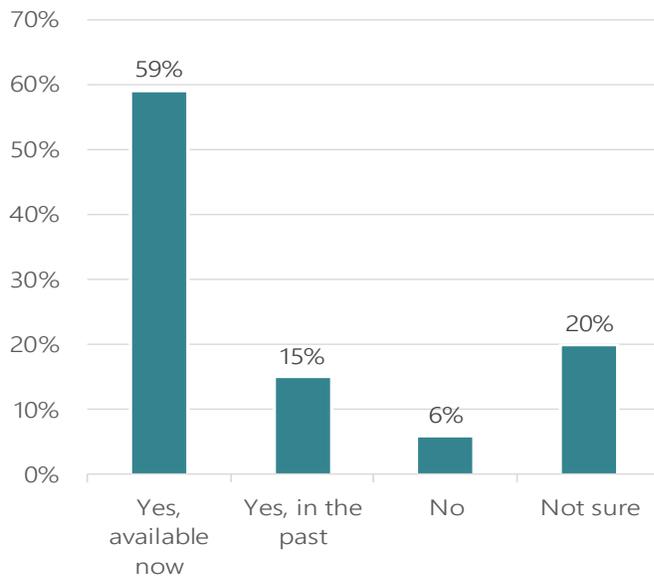
Figure 3-6 *How Important is EE When Purchasing New Equipment*



(N=225) Q27: Which of the following statements best describes the way that your organization thinks about the importance of energy efficiency when you purchase new equipment?

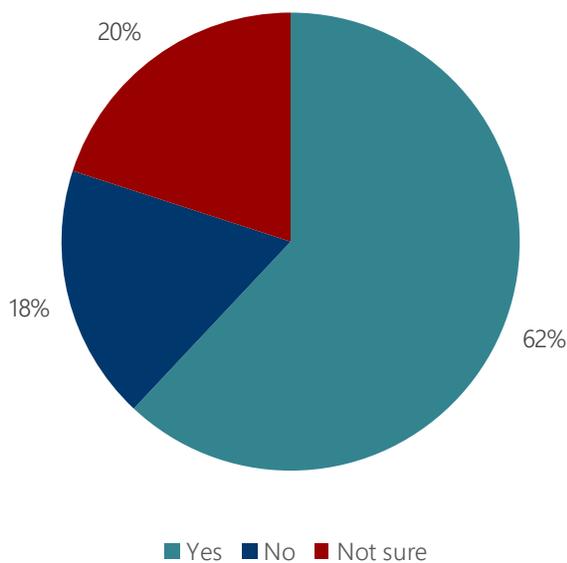
A majority of respondents also say that they are aware of EE incentives and plan to seek them out. More than half (56%) say they received a rebate or loan in the last 2 years.

Figure 3-7 *Is Financial Support Available for EE Purchases*



(N=225) Q25: Some utilities or government agencies offer financial support (such as rebates or loans) to encourage businesses to purchase highly energy-efficient products, including HVAC equipment, water heaters, lighting, and other items, or to make other energy efficiency-related changes to reduce electricity usage. To the best of your knowledge, are there any programs like this available to businesses like yours?

Figure 3-8 *Plan to Seek Out Rebates or Loans*



(N = 166). Q26 & 26A: Has your organization received any rebates or loans related to any energy efficiency-related actions you may have taken within the last 2 years? Does your organization have any specific plans to seek out any rebates or loans related to any energy efficiency-related actions you may take within the next year?

4

ENERGY EFFICIENCY PROGRAM INTEREST

Response to Core Program Concepts

The objectives underlying this research included a desire to understand likely customer response to existing and new energy efficiency program concepts at different incentive levels. In order to address these issues, the team explored customer stated willingness to replace existing end use equipment with high efficiency equipment if a rebate was offered to them for doing so.

The first set of options tested with customers involved replacing an HVAC system when it was near failure with a high efficiency option that offers a 3-year payback period when the rebate is included. Customers who indicated that they were unlikely to use the rebate to purchase a new EE HVAC system in the 3-year option (they rated their response to that option as a "6" or lower on a 10-point scale) were asked about their likelihood to make such a purchase if the rebate was higher (implying a payback period of only 1 year).

Alternatively, customers who indicated that they were likely to use the rebate to purchase a new EE HVAC system in the 3-year option (they rated their response as a "7" or higher on the 10-point scale) were asked about their likelihood to make such a purchase if the rebate was lower (meaning that the implied payback period was 5 years).

EE REBATES DESCRIPTION

The logic for how EE rebates would work was described in the questionnaire as follows:

Now, please assume that a utility or a government agency could offer your business a rebate or other financial incentive to purchase a "higher-than-standard" efficiency heating or cooling system.

Higher efficiency systems usually cost more than standard efficiency systems, but manufacturers say that customers save enough from the lower energy costs of higher efficiency units to more than make up for the higher initial cost over time.

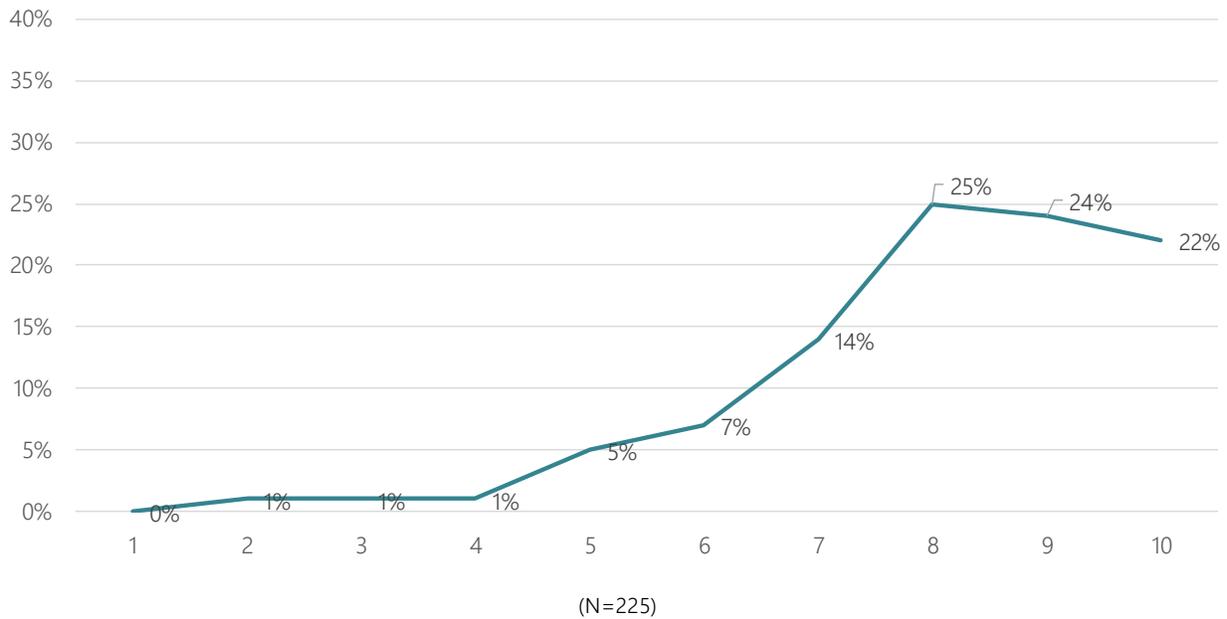
Because an up-front rebate or incentive would reduce the initial cost of a highly efficient system, this means that a rebate would reduce the amount of time it would take for the more efficient system to "pay for" that higher initial cost.

Given the logic of EE rebates just described, customers were given the opportunity to use a 10-point scale to describe how likely they would be to use a rebate and select a high efficiency unit, rather than paying for a standard efficiency unit, under different conditions.

Scale end points were labelled as "1" meaning "Not at all likely to do this" and "10" meaning "Extremely likely to do this."

A total of 71% of customers say they would be likely (rating their response at an "8" or higher) to use a rebate to replace a failing HVAC system with an EE option, given a 3-year payback.

Figure 4-1 Stated Willingness to Use a Rebate to Replace A "Near Failure" HVAC System with an EE Option Given a Rebate That Creates a 3 Year Payback Period

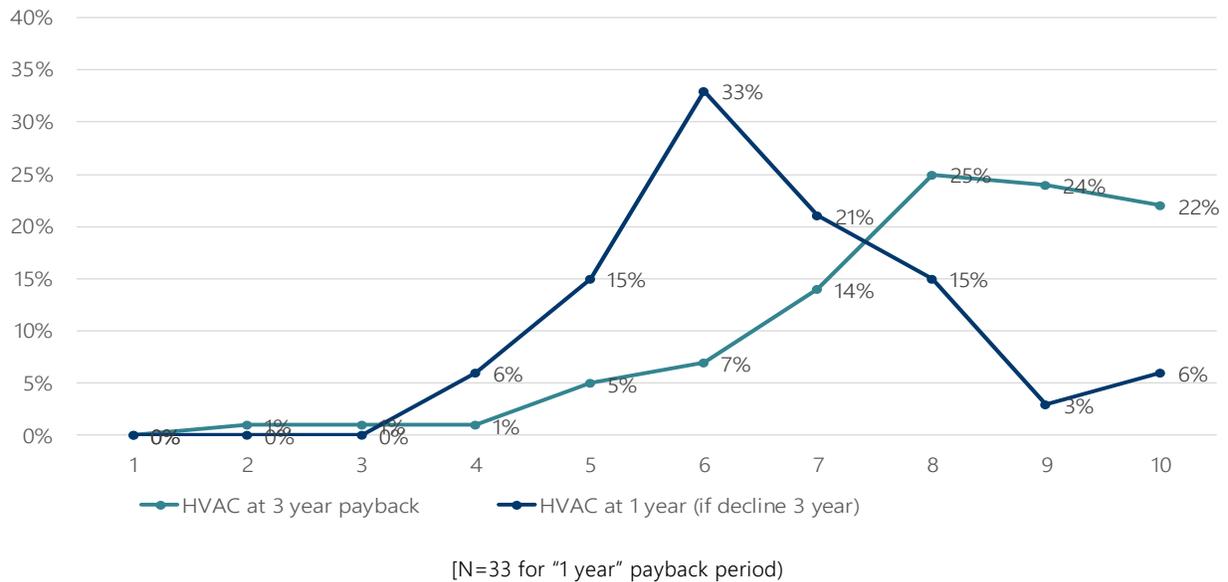


BASE EE INCENTIVE PROGRAM DESCRIPTION

Please assume for now that your organization was offered an incentive by a utility or government agency that claimed that you could expect to see energy savings from installing a high efficiency system that would pay for the higher cost of that system in three years. If your heating or cooling system were about to fail, and you needed to acquire a new one, how likely would your organization be to buy the higher efficiency system (and take the incentive), rather than buying a standard efficiency system? Please use a 10-point scale where, '1' means you think your business would be not at all likely to do this and '10' means you think your business would be extremely likely to do this.

Only 24% of those who declined the EE option with a 3-year payback, say they would adopt the option (by rating their response at 8 or higher on the 10-point scale) with a 1-year payback.

Figure 4-2 Willingness to Replace a “Near Failure” HVAC System with An EE Option Given a Rebate That Yields a 1 Year Payback (Among those who declined the 3-year option (Note small N=33))

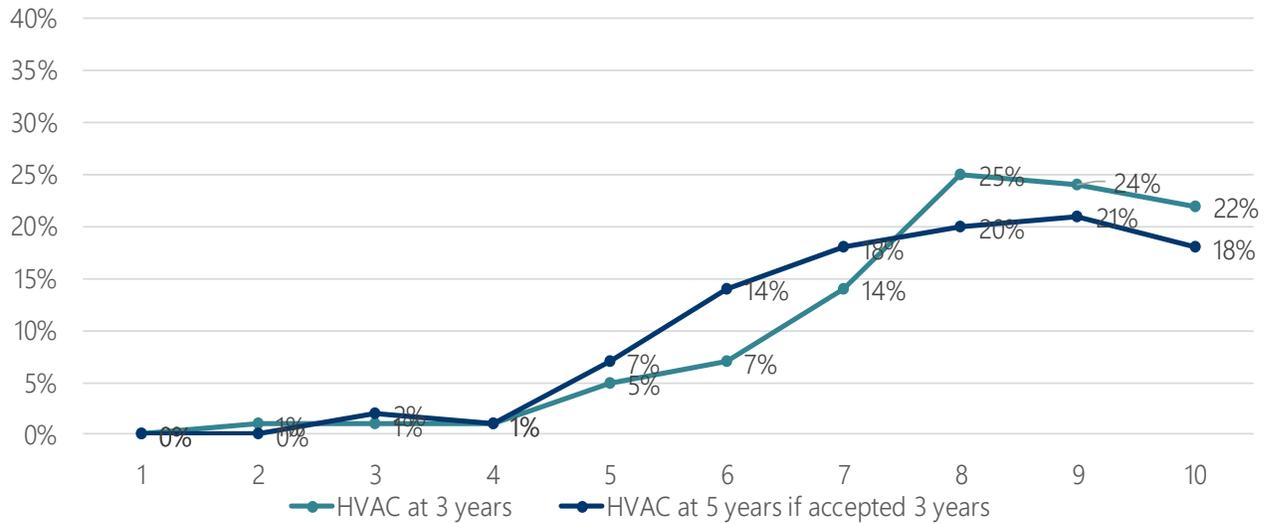


1 or 5-Year Payback Option

Now please assume that, again, your system was on the verge of failure, but that the rebate offered to you meant that it would take [PROGRAMMER: IF Q30= 6 OR LOWER: "only 1 year,". IF Q30= 7 OR HIGHER: "5 years"] to pay for the higher initial cost of the higher efficiency system. Given these assumptions, how likely would your organization be to buy the higher efficiency system (and take the incentive), rather than buying a standard efficiency system? Please use a 10-point scale where, '1' means you think your business would be not at all likely to do this and '10' means you think your business would be extremely likely to do this.

A majority (59%) of those who gave top-3 box ratings for the 3-year payback option give the same response for a 5-year payback.

Figure 4-3 Stated Willingness to Replace a "Near Failure" HVAC System with An EE Option Given a Rebate That Yields a 5 Year Payback (Among those who accepted the 3-year option)



(N=192 for "5 year" payback period)

The key takeaways here are that reducing the rebate to 1 year captures only a small proportion of those who reject the 3-year rebate. Alternatively, a majority of those who say they are highly likely to accept the rebate and purchase the high efficiency system if the rebate reduces the payback period to 3 years (71%) still tend to say that they would use the rebate if the payback period was extended to 5 years (59%).

Response to Additional Program Concepts

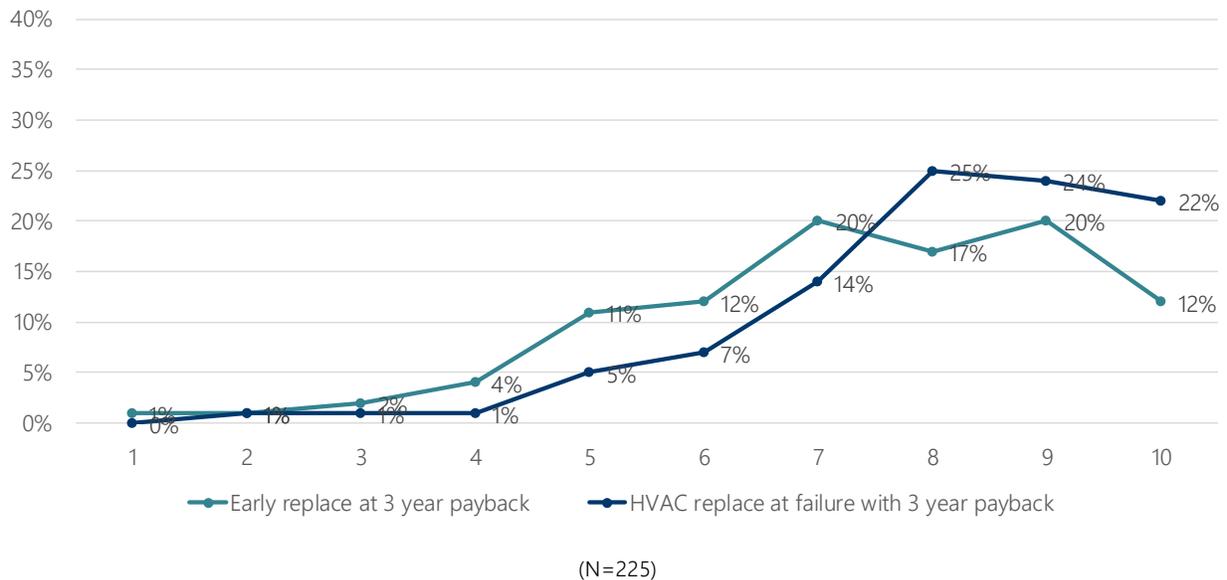
In addition to this base concept, the research also explored several additional program concepts, including:

- Early replacement of a space conditioning system, given the availability of rebates.
- A bundled renovation option which included the availability of both the help of an energy advisor and installation incentives.
- Replacement of existing lighting systems, given the availability of rebates.

Early Replacement

Respondents are slightly less likely to say they would use a rebate to replace a system early vs. at failure with a rebated EE option. Seventy-one-percent gave a top 3 box rating for the base 3-year payback for an EE option with replacement at failure compared to 49% for a 3-year payback for an EE option with early replacement.

Figure 4-4 Stated Willingness to Replace an HVAC System with An EE Option Given a Rebate That Yields a 3 Year Payback When It Is "Near Failure" vs. Not at Near Failure (e.g. Early Replacement)



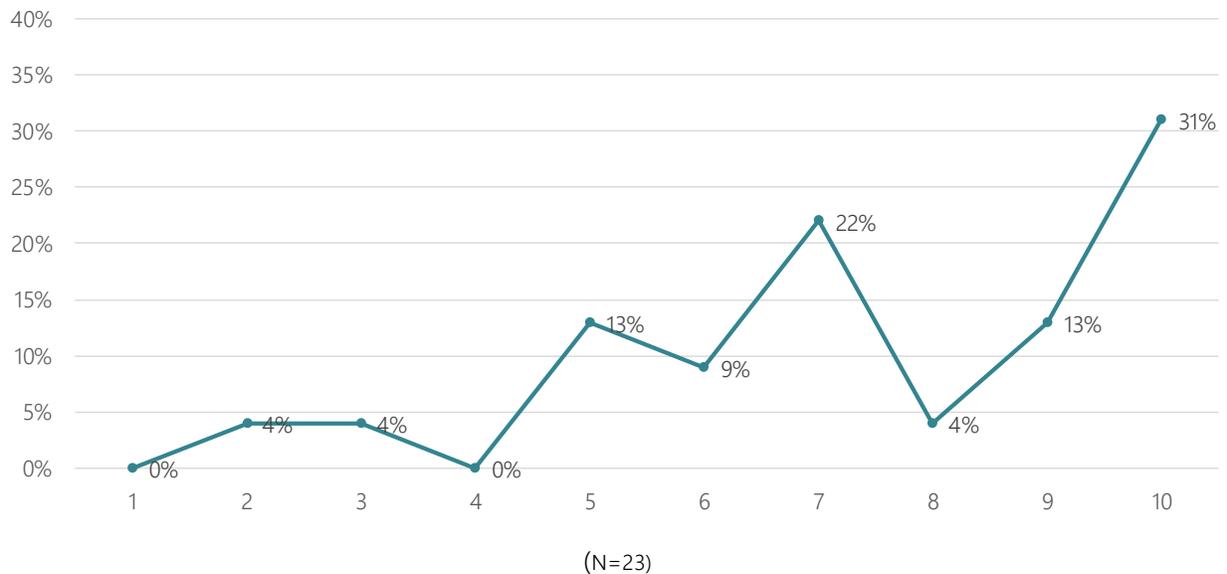
Early Replacement EE Program Option

Let's assume a slightly different situation. Again, a utility or government agency offers you an incentive to replace your current heating or cooling system with a new, higher efficiency system. Additionally, assume that, again, the incentive would reduce the cost of the higher efficiency system so that your energy savings are projected to "pay for" the higher initial cost of the high efficiency system within three years. In this case, however, your existing system is not on the verge of failure, but is lower efficiency than the new system that would replace it. The organization offering the incentive would provide you with information indicating that, even replacing your system "early" (before it fails) would save you money in the long run (since you start to get the energy savings sooner). How likely would you be to replace your system "early" (before failure) and install the high efficiency system, with the offered rebate. Please use a 10-point scale where, '1' means you think your business would not be at all likely to replace your system with a high efficiency model under these conditions, and '10' means your business would be extremely likely to replace your system with a high efficiency model.

Bundled Renovation

About a third of eligible respondents (31%) are enthusiastic about a bundled renovation option (as is indicated by their rating of 10 for this program), while a total of 48% give the option a rating of eight or higher.

Figure 4-5 Likelihood to Pursue Bundled Renovation - Given Incentives and the Presence of an Energy Advisor - for Those Without a Recent (Since 2000) Facility Renovation [Note Small N=23]



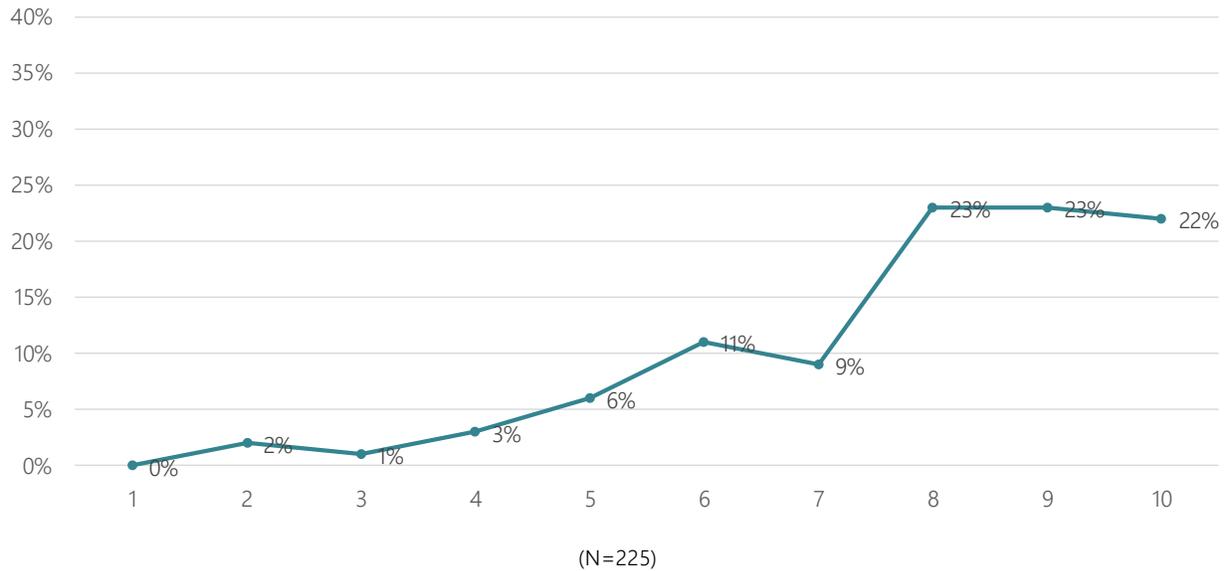
Bundled Renovation Program Option

You mentioned earlier that your building was constructed before 2000 and has not had any significant renovation work done to the overall building itself (things like adding or replacing insulation, upgrading doors and / or windows, sealing ducts, or the like). We recognize that it can be challenging to choose to upgrade these sorts of things without some other need to renovate your space. If an organization like BayREN made incentives available specifically to organizations like yours that would promote the implementation of these upgrades if you agreed to install a "bundle" of such measures all at the same time (new insulation, for example, along with duct sealing, and other similar measures), how likely would you be to pursue such a program? Please assume that as part of this package, you would have access to an impartial Energy Advisor who could identify the measures that would be the most cost-effective for you. [10-point scale where, '1' = not at all likely to pursue this option and '10' = extremely likely to pursue this option.

Lighting

Just over two-thirds of respondents (68%) say they would be likely to participate in a high efficiency lighting upgrade program (by rating the program at an eight or higher).

Figure 4-6 Likelihood to Pursue Lighting Rebate Program (given the presence of “significant incentives”)



Lighting Program Option

All our questions so far have focused on heating and cooling systems and overall building efficiency. Lighting is also a significant energy use in some buildings, however. Please indicate below how likely your organization would be to participate in a program that would provide you with significant incentives to upgrade any standard efficiency lighting in your facility with higher efficiency options (such as LEDs or super-high-efficiency fluorescents)? If you have already installed high efficiency lighting in your facility, please indicate that. [10-point scale where, '1' = not at all likely to pursue a high efficiency lighting program and '10' = extremely likely to pursue a high efficiency lighting option. "11" = Have already installed high efficiency lights.]

Table 4-1 Summary of Customer Interest in Tested Programs

Program	Top Box ("10" Rating)	Top 3 Box ("8" – "10" rating)	Notes
Replace HVAC system at failure with EE option, given incentives that create a 3-year payback	22%	71%	High acceptance levels for this program
Replace HVAC system with EE option at failure, given incentives that create a 5-year payback (<u>among those who accepted</u> a 3-year payback)	18%	59%	Most people who say they would use the program at 3 years also say they would use the program at 5 years
Replace HVAC system with EE option at failure, given incentives that create a 1-year payback (<u>among those who did not accept</u> a 3-year payback)	6%	24%	Reducing the payback period from 3 years to 1 year does not increase adoptions dramatically
<u>Early replace</u> HVAC system with EE option, given incentives that create a 3-year payback	12%	49%	Willingness to implement early replacement for more EE space conditioning systems is lower than for "at failure," but still substantial
Implement bundled renovation package, given no renovation since 2000, and the presence of incentives and an Energy Advisor	31%	48%	Bundling is attractive but the sample size here is very small
Implement lighting upgrade program	22%	68%	The lighting program is also very attractive

5

TARGETING NEW EE-RELATED PROGRAMS AND SERVICES

This chapter discusses barriers to EE-related programs and services, features that can help overcome those barriers, and the results of a segmentation analysis that was intended to support targeted program marketing.

Barriers to Participation

One of the key goals for the research involved understanding the relative importance of different barriers to EE actions that might have the effect of reducing customer willingness (or ability) to take EE actions because of the impact of one or more barriers.

The team identified a set of seventeen different barriers (listed below) that might affect customer willingness and/or ability to implement different EE barriers. The team wanted to evaluate the rated importance of each of the barriers to respondents, but recognized that simply asking customers to rate barrier importance on a single scale (a 1-5, or 1-10 scale of “higher” to “lower” importance, for example) would probably not provide much differentiation.

Prior research reveals that customers tend to say – when assigning individual importance ratings – that “everything is important.” For this reason, the team created a questionnaire that asked customers to evaluate the seventeen barriers, and then – first - select their five most important barriers, then select their four next most important barriers, then select their three least important barriers. This novel question format forced survey respondents to make decisions about the relative importance of different barriers, and this was the goal of the research.

Barriers to the implementation of EE measures tested in the research included the following:

1. The higher upfront cost of energy-efficient options can be a challenge.
2. Energy savings claims for energy-efficient options are not reliable / trustworthy.
3. Rebates for higher efficiency options do not cover the higher initial cost of those options.
4. Rebates for higher efficiency options require applications that can be complicated and / or time consuming to submit.
5. The energy savings from energy-efficient options are just not big enough to make them worthwhile.
6. We are just so busy that we just don't have the time to deal with problems until they happen.
7. It is very hard to tell if installing energy-efficient options really reduce our energy costs.
8. It is hard to estimate how much we would save from installing an energy-efficient option.
- [Barrier 9 was determined to be duplicative and so was eliminated]
10. Our advisors do not think that energy-efficient options are always a good choice.
11. We want to make sure we get the right equipment for us; efficiency must be a secondary concern.
12. Our advisors are not always very knowledgeable about energy-efficient options.

13. Sometimes energy-efficient options are just “overkill,” or more than we need.
14. Realistically, if energy efficiency costs us anything upfront, we usually can’t make that choice.
15. Improving energy efficiency is just not on our radar.
16. We don’t know enough about energy efficiency to make the right choices in this area.
17. High efficiency options may not be available exactly when we need them.

BARRIERS QUESTION TEXT

[N=225] Q28. Below is a list of reasons why an organization might not always be able to implement higher efficiency options when they need to replace a piece of equipment. Please review the list and then evaluate them in terms of their importance to your organization.

[ON THE FIRST SCREEN] First, please drag the FIVE reasons that are “The most important things that limit us” into the boxes on the right.

[ON THE SECOND SCREEN] Now, please drag the FOUR reasons that are “Things that are important, but not critical to us” into the boxes on the right.

[ON THE THIRD SCREEN] And finally, please drag the THREE reasons that are “Things that are not very important to us” into the boxes on the right.

Once the importance categories were created, customers were then asked to individually rank order the importance of their top five ranked barriers.

Q29. Previously, you specified the five things that were the most important limits on your ability to implement high efficiency options.

We would like to ask you to go a step farther now, and to rank order the importance of these five things. While all of them are obviously important to you, some are probably more important than others.

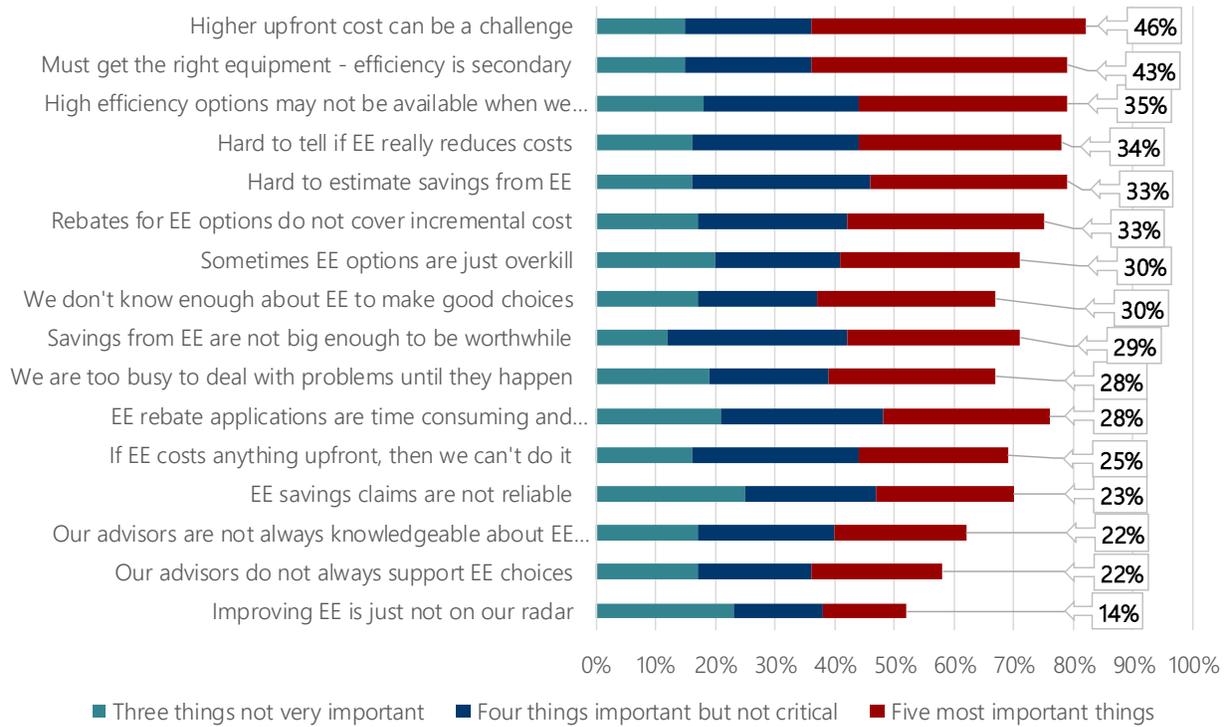
Please rank the items individually by using your cursor to drag the most important of the five items listed below into the box labelled as “most important,” then drag the next most important of these things into the box labelled “second most important,” and continue for each of the remaining items.

[PROGRAMMER: SHOW ONLY FIVE ITEMS SELECTED IN TOP BOX FROM Q28 AND REQUIRE ALL ITEMS TO BE DRAGGED INTO ONE OF FIVE BOXES LABELLED AS “MOST IMPORTANT,” “SECOND MOST IMPORTANT,” “THIRD MOST IMPORTANT,” “FOURTH MOST IMPORTANT,” AND “FIFTH MOST IMPORTANT”]

Note also that the five barriers assigned to the highest importance category were then individually ranked.

Not surprisingly, upfront costs are rated most frequently as one of the five most important barriers to EE, but several other barriers are cited as important nearly as frequently.

Figure 5-1 *Rankings of Barrier Importance by Importance Category (Five most important things, Four important but not critical things; Three things that are not very important)*



Recall that the top five most important barriers referenced by each respondent were then individually ranked in their individual importance. The results of these individual rankings are cited in Figure 4-8 below, and they indicate again that, while upfront costs are cited as most important by significant numbers of respondents, just 12% in total rate “higher upfront costs” as the most important barrier. This means, of course, that 88% of respondents do not rate it as most important.

Figure 5-2 Importance Rankings for Most Important Barriers

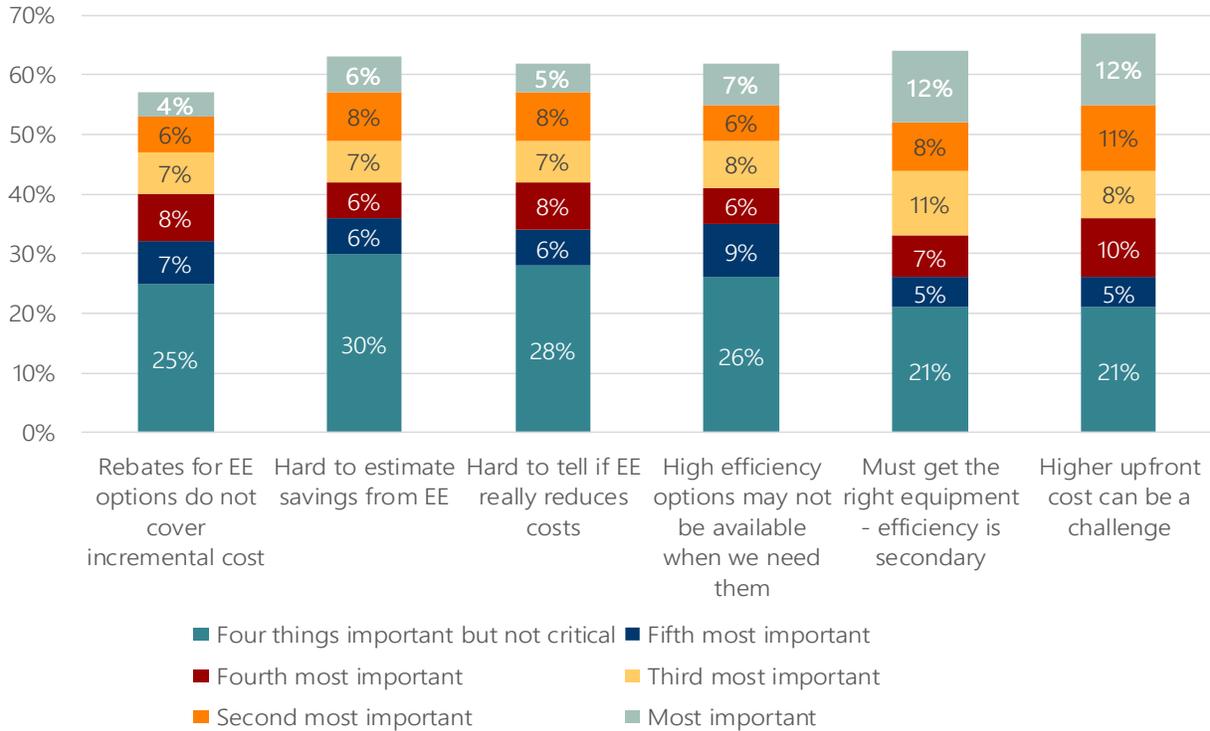
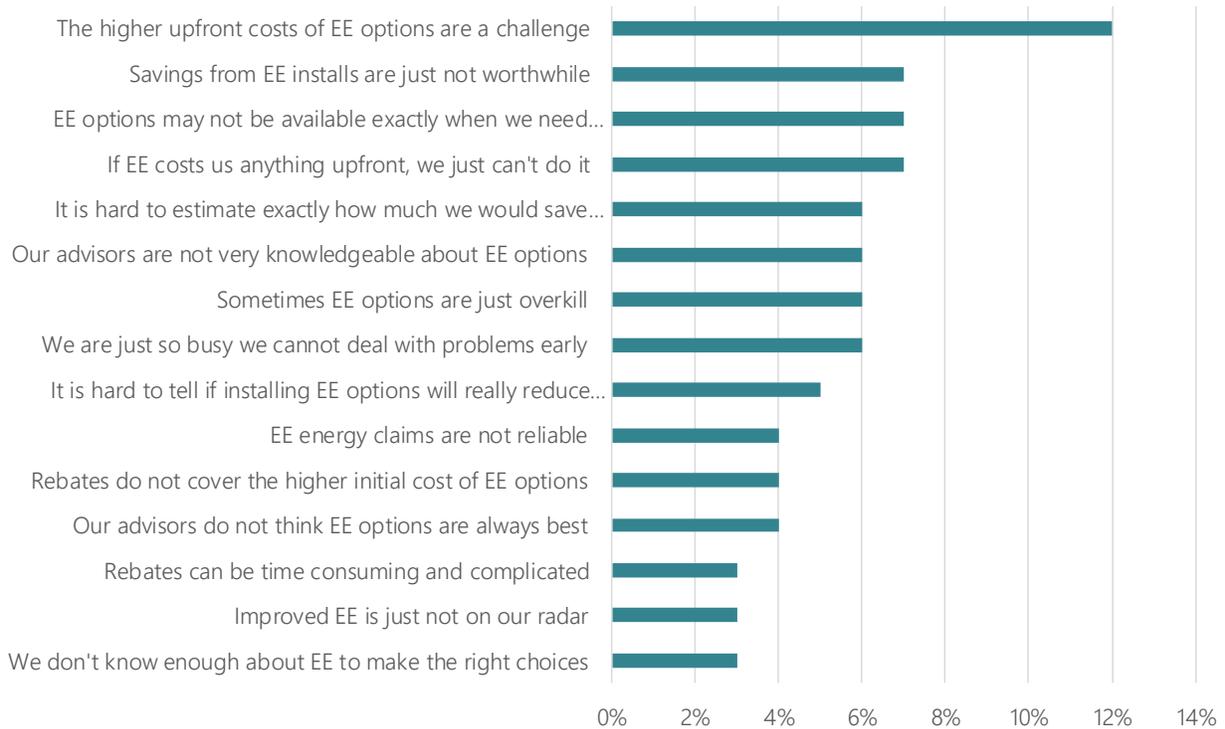


Figure 5-3 Single Most Important Barrier



The analysis team reviewed the barrier ratings and concluded that the barriers rated as most important tend to fall into five different categories of concerns. Barriers related to upfront costs show up regularly in the list, of course with statements that include the following type of language: *Upfront costs are a challenge / If EE costs anything upfront, we can't do it / Rebates do not cover the higher upfront cost of EE options*. However, other categories of barriers are also rated as important:

- The ability to estimate savings;
 - *It is hard to estimate savings / Our advisors are not knowledgeable about EE options / EE options are overkill / It is hard to tell if EE options will reduce energy use / EE savings claims are not reliable / We don't know enough about EE.*
- The view that EE savings are not large enough to make them worth pursuing;
- EE option availability;
- Being too busy to focus on EE.

Program Features that May Drive Participation

An additional important goal for the research involved understanding the relative contribution that a variety of program features might have on affecting customer likelihood to adopt EE measures. The team identified a set of nine different features (listed below) that might affect customer willingness to implement new EE programs.

The team also wanted to evaluate the rated importance of each of these features to respondents, but again recognized that simply asking customers to rate feature importance on a single scale would probably not provide much differentiation.

Given this concern, the team developed a question set around program features that focused on asking survey respondents to assign features to categories based on the perceived likelihood that the feature in question would make the respondent's business more or less likely to install a generic, rebated, space conditioning EE measure.

Potential EE Program features tested:

1. The ability to finance the cost of the new cooling system through monthly payments on your electric bill.
2. The ability to get a no or low interest loan with favorable terms for the cost of the new cooling system.
3. Having access (at no cost to you) to a professional "Energy Advisor" who would help you obtain financing, apply for rebates, and provide direct unbiased assistance to inform you about energy efficiency options, help you select an appropriate contractor, review estimates or bids, and help you navigate project installation.
4. The ability to finance the cost of the new cooling system through a program that provides 100% financing with a low or no interest loan paid back through assessments on your property tax bill for a period of up to 30 years.
5. Receiving information on likely energy savings from sources you believe to be reliable and unbiased.
6. Having a representative of the program come to your facility and handle all aspects of system selection and installation, as well as financing and related paperwork.
7. Having the opportunity to get additional incentives and cost savings if you take more than one action (say, improving your insulation levels or reducing air infiltration, as well as replacing heating or cooling systems).
8. Obtaining free design assistance from sources you trust.

PROGRAM FEATURES QUESTION

[N=225] Q32. *One at a time below, we will show you a list of features that are intended to make rebate / incentive programs like the one we just discussed more attractive to businesses like yours, regardless of whether the cooling or heating system being replaced was replaced at failure or significantly before failure.*

Please review each feature as it appears and use your cursor to "drag" each of these program features into one of the three categories you see.

You can put as many of the features into each category as you want, but you need to assign each feature to a category.

Please use your cursor to drag the features you think fit into each category:

The features that would make us much more likely to install a new high efficiency system

The features that would make us somewhat more likely to implement a new high efficiency system

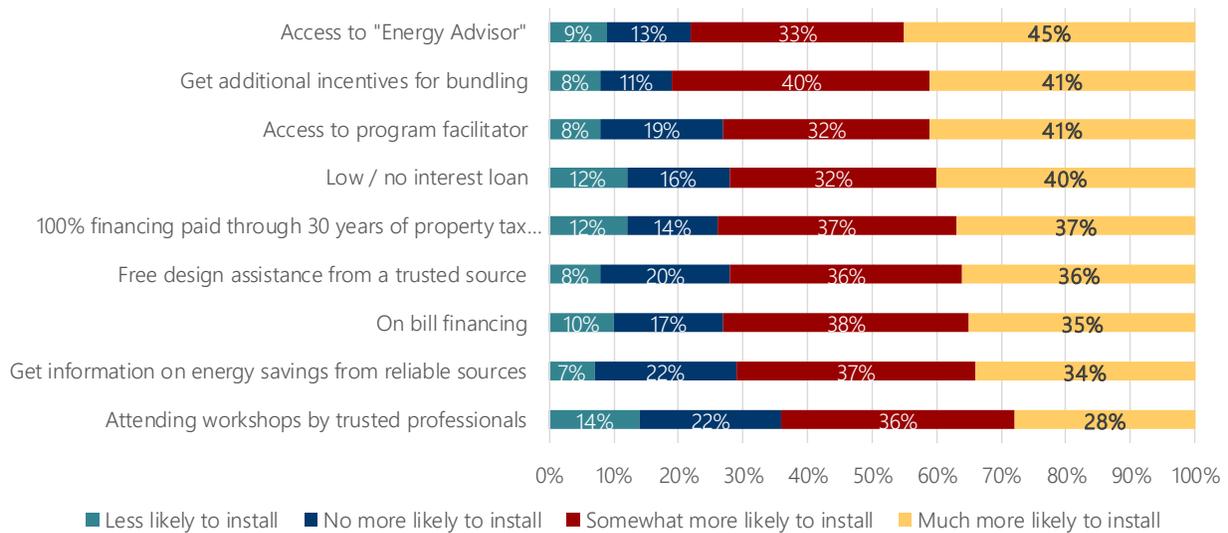
The features that would make us no more likely to implement a new high efficiency system

The features that would make us less likely to implement a new high efficiency system

9. Attending workshops on different technology types and what those technologies can mean for energy savings that are hosted by energy industry professionals you trust.

The key finding from these ratings is the lack of consensus across customers as to the relative importance of different program features. Multiple program features, it turns out, are rated as important to promoting new EE program adoption. A total of 45% of respondents rate "Access to an energy advisor" as something that would make them "much more likely" to participate in an EE program, but three more program features are rated at the same level by 40% or more of respondents, and another four program features are rated at that level by 34% or more of respondents.

Figure 5-4 Rating of Program Features in Terms of Their Likely Effect on EE Adoption

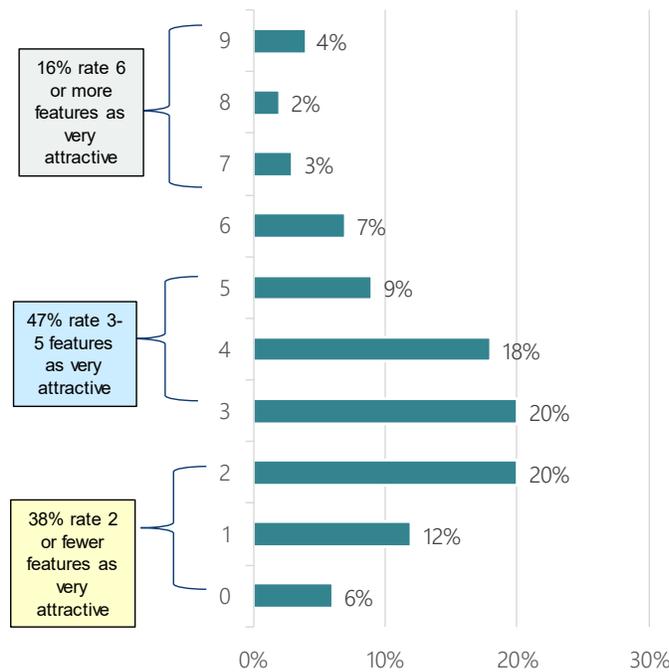


* Note that the "Energy Advisor" was described as "having access (at no cost to you) to a professional "Energy Advisor" who would help you obtain financing, apply for rebates, and provide direct unbiased assistance to inform you about energy efficiency options, help you select an appropriate contractor, review estimates or bids, and help you navigate project installation," while the "Program facilitator" was described more simply as having access to a "representative of the program [who would] come to your facility and handle all aspects of system selection and installation, as well as financing and related paperwork."

Note additionally that even the lowest rated program feature ("Attending workshops on different technology types and what those technologies can mean for energy savings that are hosted by energy industry professionals you trust") is rated as leading their business to be "much more like to install" a given EE measure by 28% of businesses.

Respondents also tend to find more than one program feature to be attractive. A total of 63% of respondents rate at least three program features as making their business “much more” likely to install EE options. Within this group, 16% rate six or more features as very attractive (e.g., making them “much more likely to install EE options”). Only 6% of all respondents do not rate any of the features as very attractive, and only 12% rate just one feature as very attractive.

Figure 5-5 Number of Features Rated as Attractive



Customer Segmentation

In order to understand how BayREN might most effectively target its EE programs, the analysis team explored several ways of segmenting respondents. The first goal of customer segmentation is to create subgroups of customers that are similar to one another within a segment, but different from one another across segments. The second goal of a segmentation analysis is to create these subgroups (segments) in such a way that the segments differ in ways that could inform EE marketing activities.

In this case, the analysis team tested several different segmentation approaches, but found that segments based on respondent ratings of the importance of the EE-related barriers tested in the survey yielded the most useful segments. After exploring multiple segmentation options, the team ultimately chose a solution which defined four “barriers” segments.

- As noted earlier, the segments were defined by using as inputs to the segmentation analysis the responses that were provided to questions that asked about the relative importance of different barriers that businesses might face as they consider a variety of different EE actions.
- As a result, the four segments differ significantly in terms of the EE-related barriers they see as most important, but they also differ in terms of other, related business firmographic and attitudinal characteristics which are correlated with differences in the perceived importance attached to different EE barriers.

Table 5-1 Defining the Customer Segments

	Unenthusiastic about EE	Green Adopters	Need Help for EE	Interested but Constrained
Most Important Problem	Rebates do not cover higher cost of EE options Savings not big enough to be worthwhile Hard to tell if EE really reduces costs EE options are overkill	EE options not available EE claims not reliable Advisors do not recommend EE Too busy to deal with EE	If EE costs more can't do it EE must be secondary concern Rebate applications can be complicated Don't know enough about EE to make right choice	Hard to estimate EE savings Higher upfront costs are a problem Hard to tell if EE reduces costs
Most Attractive Program Features	Incentives for bundling Low / no interest loans But typically, lower on rating features as attractive	Access to an Energy Advisor Additional incentives for bundling Access to program facilitator	Provide energy advisor/ program facilitator Free design assistance from trusted source	Low/no interest loans Loan interest loans paid with tax bill Additional incentives for bundling
Program Interest	Slightly less interested in EE programs	More interested in EE programs	Lower than average interest in EE programs	More interested in EE programs
Operational Practices	Have a plan for space conditioning replacement	System will need replacement in 5 years and have a plan	More likely to say system will last 5 more years	Less likely to have a plan for system replacement, but more likely to say replacement in 5 years likely
Attitudes	Most likely to disagree with green attitudes Less positive about their electric utility or county agency focused on EE	High on green attitudes Rate utility more positively	Slightly less green than others Less positive toward utility	Believe in the value of EE Average/high in green perceptions
Firmographics	Less urban/more suburban More likely to own/be responsible for space Fewer employees	More urban More likely to lease More employees	More likely to be lessors	More likely to be owners More likely to be offices/ retail
Summary	Less interested in programs/program features, less green, less positive towards utility	Green, program adopters, varied barriers, like advisors	Less interested in EE, cost-focused but mostly need EE help	Concerned about EE benefits, looking for cost assistance

The four segments differ substantially in terms of how aggressively they will pursue EE investments on their own, and in terms of the sorts of “help” that will be most appealing to them.

- Unenthusiastic About EE (29%): Varied barriers; less likely to believe that EE “works,” less green, no clear “hooks” for EE
- Green Adopters (21%): Excellent target for EE programs; traditional “greens;” need help choosing appropriate EE options
- Need Help for EE (26%): Less interested in EE, but would value Project Advisors / Program Facilitator
- Interested, But Constrained (24%): Interested in EE, but need help determining best install options and help with install costs

A

SURVEY INSTRUMENT

Welcome!

This survey is sponsored by BayREN – The Bay Area Regional Energy Network.

Thank you for taking the time to complete this survey. BayREN operates under the direction of a group of county governments and is funded by utility ratepayers. The network supports residents and businesses in the greater Bay Area who wish to become more energy-efficient. The goal of this survey is to help BayREN design and offer new programs for businesses and building owners to save money and reduce the amount of energy they consume by using more efficient alternatives.

The survey will ask for descriptive information about your business and the ways that you think about, and use, energy, but it will not ask for any personally identifying information. Survey results will be analyzed and summarized by the market research team at Applied Energy Group (AEG) located in Oakland, California.

Should you have any questions about why the survey is being conducted, or the validity of this effort, please feel free to contact a BayREN representative (richard.chien@sfgov.org). If you have any questions about the survey itself, please access the help support contact provided in the survey.

You will first be asked a few questions to make sure you and your business qualify for participation. If you do qualify, then you will be asked to complete the full survey.

Please click the "Continue" button below to start the survey.

S1. Does the organization for which you work operate a facility in any of the following counties that surround the San Francisco Bay? *(Please check all of counties in which your organization operates at least one location.)*

[PROGRAMMER: OPTION 10 SHOULD BE EXCLUSIVE]

1. San Francisco County
2. San Mateo County
3. Santa Clara County
4. Alameda County
5. Contra Costa County
6. Solano County
7. Napa County
8. Sonoma County
9. Marin County
10. We do not operate a location in any of these counties

[PROGRAMMER: IF S1=10, TERMINATE [SHOW TERMINATE LANGUAGE AT END OF THIS SECTION FOR ALL TERMINATING RESPONDENTS], OTHERWISE, CONTINUE]

S2. How many different locations in total does your organization currently operate in these counties?

_____ [PROGRAMMER: ALLOW 1-500]

[PROGRAMMER: IF S2 = "2 OR MORE," DISPLAY THE FOLLOWING MESSAGE ON THE SAME SCREEN AFTER RESPONSE:] "For the remainder of our questions, please think about the largest, or most complex, facility that you operate in these counties. This would also be the facility that has the highest use of electricity.

- S3. How knowledgeable are you about your organization's typical practices regarding the replacement of heating or cooling systems at this Bay Area facility?
(This might include knowing about how and when your organization might choose to replace one of these systems, along with how important energy efficiency would be in deciding on a replacement system.)
1. Very knowledgeable about this
 2. Somewhat knowledgeable about this
 3. Not very knowledgeable about this
 4. Not at all knowledgeable about this

[PROGRAMMER: IF S3=3 OR 4, TERMINATE, OTHERWISE, CONTINUE]

- S4. Which of the following best describes how your business is billed for electricity at this location?
1. We are billed directly by our utility company for the electricity we use
 2. Our electric bill is handled by another part of our company, or by a third-party service provider, but our company is still responsible for the cost for our electricity
 3. We are NOT billed directly by our utility company for the electricity we use; the cost for our electricity is included in our rent/lease
 4. Don't know

[PROGRAMMER: IF S4=3 OR 4, TERMINATE, OTHERWISE, CONTINUE]

- S5. Does your operation at this location occupy any enclosed space, or is it an outdoor structure or operation, such as a billboard, a parking lot, a communications tower, or the like?
Our location...
1. Is ONLY an enclosed space
 2. Is ONLY an outdoor structure or facility
 3. Includes both an enclosed space AND an outdoor structure or operation

[PROGRAMMER: IF S5=2, TERMINATE; IF S5=1 OR 3, CONTINUE]

- S6. What is the approximate total square footage of the enclosed space at this location?
(Please estimate as best you can.)
1. 1,000 square feet or less
 2. 1,001 to 2,500 square feet
 3. 2,501 to 5,000 square feet
 4. 5,001 to 10,000 square feet
 5. 10,001 to 25,000 square feet
 6. 25,001 to 50,000 square feet
 7. More than 50,000 square feet
- S7. Approximately how many full-time employees work at this location?
1. Fewer than 5 employees
 2. 5 – 9
 3. 10 – 19
 4. 20 – 49
 5. 50 – 99
 6. 100 –999
 7. 1,000 or more
- S8. Which of the following types of cooling systems are used to cool the space at this facility?
(Please select all that apply.)
[PROGRAMMER: ALLOW MULTIPLE RESPONSES; HOWEVER, OPTION 9 AND OPTION 10 ARE EXCLUSIVE]
1. Air or water-cooled chiller
 2. Central air conditioner
 3. Packaged air conditioner units (sometimes called roof-top units or RTUs)
 4. Floor-by-floor packaged water-cooled DX (Direct Expansion) units
 5. Wall or window air conditioner units
 6. Air-source or geothermal heat pump
 7. Another type of air conditioning system (Please specify _____)
 8. Fans
 9. Not sure
 10. None – We do not use a cooling system to cool our space

[IF S8=1-7, DISPLAY S9 ON SAME PAGE]

- S9. If your cooling system were to fail and need replacement, would your organization be responsible for replacing that system, or would this be the responsibility of someone else (such as a landlord or the building owner)?
1. We would be responsible
 2. This would be someone else (such as a landlord or the building owner)

- S10. Do you use electricity to power a space-heating system at this location?
1. Yes, we use electricity to power one or more space-heating systems
 2. No, we either do not have a space-heating system or do not use electricity for that purpose

[IF S10=1, DISPLAY S11 ON SAME PAGE]

- S11. If your electricity-powered heating system(s) were to fail, and need replacement, would your organization be responsible for replacing that system, or would this be the responsibility of someone else (such as a landlord or the building owner)?
1. We would be responsible
 2. This would be someone else (such as a landlord or the building owner)

[PROGRAMMER: IN ORDER TO QUALIFY, ALL THREE OF THE FOLLOWING CONDITIONS MUST BE MET:

- RESPONDENT MUST PASS SCREENS FOR S1, S3, S4, AND S5
- RESPONDENT MUST ANSWER 1-6 TO S6 (50,000 SQUARE FEET OR LESS) OR 1-3 (FEWER THAN 20 EMPLOYEES) FOR S7
- RESPONDENT MUST ANSWER "1" (YES) TO S9 OR S11]

[TERMINATE LANGUAGE: Thank you for your answers. Unfortunately, we need to have responses from businesses with different characteristics than yours. Thanks for your time.]

[INVITATION TEXT FOR QUALIFYING RESPONDENTS] Thank you for your answers so far! You qualify for the survey which should take about 15 minutes of your time to complete. Your responses are important to us, so please press "Continue" to begin answering the survey questions.

BASIC FACILITY INFORMATION

First, we'd like to ask a few questions about your facility/location.

- Q1. What type of facility does your organization occupy at this location?
1. Office (finance, insurance, real estate, law, etc.)
 2. Retail (department stores, services, boutiques, etc.)
 3. Grocery (supermarkets, convenience store, market, etc.)
 4. Restaurant (sit-down, fast food, coffee shop, etc.)
 5. Warehouse
 6. School (day care, pre-school, elementary, secondary)
 7. College, university or trade school
 8. Health Care (health practitioner office, hospital, urgent care center, etc.)
 9. Nursing home / assisted living facility / residential treatment facility
 10. Lodging (hotel, motel, bed and breakfast, etc.)
 11. Multi-family housing facility (apartment building, etc.)
 12. Not-for profit housing facility (shelter, prison, jail, etc.)
 13. Entertainment / recreation facility (movie theater, bowling alley, health club/gym, library, museum, etc.)
 14. Public assembly facility (convention / conference center, etc.)
 15. Worship (church, temple, mosque, etc.)
 16. Multi-use or shopping mall (i.e., mixed use of space for offices, restaurants, stores, service, apartments, etc.)
 17. Manufacturing, production, or processing facility (including for-profit businesses and governmental facilities)
 18. Agricultural (farms, ranches, dairies, greenhouses, nurseries, orchards, hatcheries, etc.)
 990. Other (please specify:) [RECORD RESPONSE]
- Q2. Approximately when was this facility constructed? *(If you don't know for sure, please provide your best estimate.)*
1. Before 1960
 2. 1960-1979
 3. 1980-1999
 4. 2000-2008
 5. 2009-2013
 6. 2014-Present
- Q3. Since its construction, has there ever been any significant renovation done to the overall building itself (things like adding or replacing insulation, upgrading doors and / or windows, sealing ducts, or the like)?
1. Yes
 2. No

[PROGRAMMER: IF Q3=1, SHOW FOLLOWING QUESTION ON SAME PAGE, OTHERWISE SKIP TO Q5]

Q4. About when was this renovation completed?

1. Before 1960
2. 1960-1979
3. 1980-1999
4. 2000-2008
5. 2009-2013
6. 2014-Present

Q5. Which of the following best describes the overall efficiency level of your building?

1. Super-efficient – LEED Certified / “green building” / “ENERGY STAR” rated / Zero-Net-Energy Building
2. Higher-than-standard-efficiency building (building efficiency is “higher than code” requires)
3. Standard efficiency (Building conformed to relevant codes when constructed)

[IF S9=1, CONTINUE, OTHERWISE SKIP TO HEATING SECTION]

[IF S8 HAS TWO OR MORE RESPONSES 1-7, ASK Q6, OTHERWISE SKIP TO S7]

Q6. You mentioned earlier that you use two or more cooling systems at this facility. Which of these systems do you consider your primary cooling system?

[PROGRAMMER: LIST FROM S8, ONLY SHOW RESPONSES SELECTED IN S8; ONLY ALLOW ONE RESPONSE]

Q7. Approximately what percentage of the space your business occupies at this location is cooled by your primary cooling system?

[ENTER RESPONSE: 0-100%]

[IF S8 HAS TWO OR MORE RESPONSES 1-7, DISPLAY Q8 BELOW ON SAME PAGE AS Q7; OTHERWISE SKIP TO Q9]

Q8. And approximately what percentage of the space your business occupies at this location is cooled by your secondary cooling system?

[ENTER RESPONSE: 0-100%]

Q9. About how old is your primary cooling system? (*Please provide your best estimate.*)

1. Before 1960
2. 1960-1979
3. 1980-1999
4. 2000-2008
5. 2009-2013
6. 2014 to present

Q10. To the best of your recollection, is your primary cooling system a higher-than-standard-efficiency system?

1. Yes
2. No or probably not
3. Not sure

Q11. We know that it can be difficult to tell sometimes, but as best you can tell, would you say your primary cooling system:

1. Is on its "last legs" and will likely need to be replaced within the next couple of years
2. Will probably last at least several more years, but will probably need to be replaced within the next 5 years
3. Should last for at least another five years.

[IF Q11=1 OR 2, CONTINUE, OTHERWISE SKIP TO Q14]

Q12. Given that your primary cooling system will likely need to be replaced within the next [PROGRAMMER: "few years" IF Q11=1, OR "5 years or so" IF Q11=2], does your organization have a plan in place for that replacement?

1. Yes, we have a pretty clear plan for the kind of system we will replace it with and for the level of efficiency we will be seeking
2. Yes, we have a basic idea of what we are likely to do, but no details are in place yet
3. No, we don't really have a plan yet

[IF Q12=1 OR 2, CONTINUE, OTHERWISE SKIP TO Q14]

Q13. Are you currently thinking that you will replace your system with?

1. The highest-efficiency system we can find
2. A higher-than-standard-efficiency system, but not the highest possible efficiency system
3. A standard-efficiency system

Q14. Do you think that your organization will probably?

1. Wait until the system fails before replacing it
2. Take action only when system failure is imminent
3. Take action to replace the system as soon as it becomes clear that failure is likely within the next few years
4. Have an assessment done by an expert to assess the condition and expected remaining life of the system

Q15. Do you have a working relationship with a person or a company to whom your organization would turn for advice on selecting a new cooling system?

1. Yes
2. No
3. No, but we have knowledgeable technical resources we can access inside our organization

[IF Q15=1 OR 3, CONTINUE, OTHERWISE SKIP TO Q16]

Q15a. Which of the following statements best describes your estimate of how this person or company thinks about energy efficiency?

1. They would typically recommend the highest efficiency system that we could afford.
2. They would typically recommend the "right" system for us; which may or may not be the most efficient one.
3. They would typically focus on price over efficiency.

- Q16. [PROGRAMMER: SHOW IF Q15=1 OR 3: "Besides the person or company with whom you currently have a working relationship on cooling systems issues, is there anywhere else you would"]
 [PROGRAMMER: SHOW IF Q15=2: "Where your organization would"] turn for advice on selecting a new cooling system? *(Please select all that apply.)*
 [PROGRAMMER: ROTATE RESPONSES EXCEPT FOR RESPONSE "6" SHOULD ALWAYS BE LAST AND RESPONSE "6" SHOULD BE EXCLUSIVE]
1. Our local electric utility
 2. A heating / cooling system contractor
 3. A "big box" store
 4. A heating / cooling equipment dealer or distributor
 5. Some other person or organization (Please specify _____)
 6. No one else; just ourselves

[IF S10=1, CONTINUE, OTHERWISE, SKIP TO Q23]

- Q17. You said earlier that you use electricity to power one or more space heating systems. Approximately what percentage of the space your business occupies at this location is heated by one of these systems?
 [ENTER RESPONSE: 0-100%]

- Q18. What type of space heating system is used to heat the largest portion of your space?
1. Electric boiler with hot water/steam radiators or baseboards in individual rooms
 2. Electric baseboard or electric coil radiant heating (no supply ducts or water/steam pipes)
 3. Air-source or geothermal heat pump
 4. Electric unit heater or wall furnace
 5. Something else (Please specify _____)

- Q19. About how old is your primary heating system? *(Please provide your best estimate.)*
1. Before 1960
 2. 1960-1979
 3. 1980-1999
 4. 2000-2008
 5. 2009-2013
 6. 2014 to present

- Q20. To the best of your recollection, is your primary heating system a higher-than-standard efficiency system?
1. Yes
 2. No or probably not
 3. Not sure

- Q21. We know that it can be difficult to determine sometimes, but as best you can tell, would you say that your primary heating system:
1. Is on its "last legs" and will likely need to be replaced within the next couple of years
 2. Will probably last at least several more years, but will probably need to be replaced within the next 5 years
 3. Should last for at least another five years.

[IF Q21=1 OR 2, CONTINUE, OTHERWISE SKIP TO Q23]

Q22. Given that your primary heating system will likely need to be replaced within the next [PROGRAMMER: “few years” IF Q21=1, OR “5 years or so” IF Q21=2], does your organization have a plan in place for that replacement?

1. Yes, we have a pretty clear plan for the kind of system we will replace it with and for the level of efficiency we will be seeking
2. Yes, we have a basic idea of what we are likely to do, but no details are in place yet
3. No, we don't really have a plan yet

Now we would like to understand how your organization as a whole thinks about energy efficiency.

Q23. At an organizational level, to what extent does your organization agree or disagree with each of the following statements? Please use a scale where ‘1’ means you strongly disagree, and ‘10’ means you strongly agree.

[RANDOMIZE 1-6]	Strongly disagree					Strongly agree				
	1	2	3	4	5	6	7	8	9	10
1. Higher efficiency equipment usually does <u>not</u> end up being noticeably cheaper to own and operate over the long run	<input type="radio"/>									
2. We make a real effort to be as “green” as possible in our operations, even if that means that we must spend more.	<input type="radio"/>									
3. We actively look for incentives from utilities or government organizations that will help us to reduce the cost of energy-efficient equipment	<input type="radio"/>									
4. Higher efficiency products tend to be higher cost, but not necessarily higher quality, products overall	<input type="radio"/>									
5. Our organization believes that the long-term threat from global warming and climate change is real, and potentially devastating	<input type="radio"/>									
6. We believe that investing in energy efficiency is almost always a good business decision in the long run	<input type="radio"/>									

[IF Q23 ITEMS “2,” “5,” OR “6” = “8” OR HIGHER, CONTINUE, OTHERWISE SKIP TO Q25]

Q24. You indicated in the last question that you strongly agree with some of statements we asked having to do with energy efficiency and “green” issues. We also recognize that sometimes these beliefs can be difficult to put into practice.

To what extent would you say that your organization is able to implement actions on a day-to-day basis that are supportive of these beliefs?

For each of these statements, please use a scale in which:

- ‘1’ means that “We are rarely able to implement actions that support this belief on a day-to-day basis.”
- ‘10’ means “We are almost always able to implement actions that support this belief on a day-to-day basis.”

[PROGRAMMER: SELECT AND SHOW ONLY ITEMS 2, 5, OR 6 FROM Q23 IF RESPONDENT RATED THOSE ITEMS AS “8” OR HIGHER; ROTATE LIST]	We are rarely able to implement actions that support this belief on a day-to-day basis					We are almost always able to implement actions that support this belief on a day-to-day basis				
	1	2	3	4	5	6	7	8	9	10
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25. Some utilities or government agencies offer financial support (such as rebates or loans) to encourage businesses to purchase highly energy-efficient products, including HVAC equipment, water heaters, lighting, and other items, or to make other energy efficiency-related changes to reduce electricity usage.

To the best of your knowledge, are there any programs like this available to businesses like yours?

1. Yes, programs like these are available now
 2. Yes, programs like this may have been available in the past, but are not available now
 3. No
998. Not sure

[IF Q25=1 OR 2, ASK Q26; OTHERWISE SKIP TO Q27]

Q26. Has your organization received any rebates or loans related to any energy efficiency-related actions you may have taken within the last 2 years?

1. Yes
 2. No
998. Not sure

Q26a. Does your organization have any specific plans to seek out any rebates or loans related to any energy efficiency-related actions you may take within the next year?

1. Yes
 2. No
998. Not sure

- Q27. Which of the following statements best describes the way that your organization thinks about the importance of energy efficiency when you purchase new equipment?
1. We always buy the highest efficiency equipment or device that we can.
 2. We make an effort to try and buy higher efficiency equipment or devices, but we are not always able to do so.
 3. We take energy efficiency into account, but it is not usually a critical factor for us.
 4. We consider energy-efficient options, but only if they meet our payback requirements.
 5. We really don't worry much about energy efficiency in these decisions.

- Q28. Below is a list of reasons why an organization might not always be able to implement higher efficiency options when they need to replace a piece of equipment. Please review the list and then evaluate them in terms of their importance to your organization.
Please rate the importance of the reasons by clicking on each of the statements and dragging it into the appropriately labelled box.
Please drag FIVE of the reasons into the category labelled "The most important things that limit us"
Please drag FOUR of the reasons into the category labelled "Things that are important, but not critical to us"
Please drag THREE of the reasons into the category labelled "Things that are not very important to us"

[PROGRAMMER: CREATE DRAG AND DROP FOR ATTRIBUTES INTO THE THREE LABELLED BUCKETS. LIMIT NUMBER OF ITEMS THAT CAN GO INTO EACH BUCKET; RANDOMIZE INITIAL LIST OF ATTRIBUTES]

1. The higher upfront cost of energy-efficient options can be a challenge.
2. Energy savings claims for energy-efficient options are not reliable / trustworthy.
3. Rebates for higher efficiency options do not cover the higher initial cost of those options.
4. Rebates for higher efficiency options require applications that can be complicated and / or time consuming to submit.
5. The energy savings from energy-efficient options are just not big enough to make them worthwhile.
6. We are just so busy that we just don't have the time to deal with problems until they happen.
7. It is very hard to tell if installing energy-efficient options really reduce our energy costs.
8. It is hard to estimate how much we would save from installing an energy-efficient option.
9. Energy-efficient options are not available at the exact time when we need them.
10. Our advisors do not think that energy-efficient options are always a good choice.
11. We want to make sure we get the right equipment for us; efficiency must be a secondary concern.
12. Our advisors are not always very knowledgeable about energy-efficient options.
13. Sometimes energy-efficient options are just "overkill," or more than we need.
14. Realistically, if energy efficiency costs us anything upfront, we usually can't make that choice.
15. Improving energy efficiency is just not on our radar.
16. We don't know enough about energy efficiency to make the right choices in this area.
17. High efficiency options may not be available exactly when we need them.

Q29. In the last question you specified the five things that were the most important limits on your ability to implement high efficiency options.
 We would like to ask you to go a step farther now, and to rank order the importance of these five things. While all of them are obviously important to you, some are probably more important than others.
 Please rank the items individually by using your cursor to drag the most important of the five items listed below into the box labelled as "most important," then drag the next most important of these things into the box labelled "second most important," and continue for each of the remaining items. [PROGRAMMER: SHOW ONLY FIVE ITEMS SELECTED IN TOP BOX FROM Q28 AND REQUIRE ALL ITEMS TO BE DRAGGED INTO ONE OF FIVE BOXES LABELLED AS "MOST IMPORTANT," "SECOND MOST IMPORTANT," "THIRD MOST IMPORTANT," "FOURTH MOST IMPORTANT," AND "FIFTH MOST IMPORTANT"]

- 1.
- 2.
- 3.
- 4.
- 5.

Q30. Now, please assume that a utility or a government agency could offer your business a rebate or other financial incentive to purchase a "higher-than-standard" efficiency heating or cooling system. Higher efficiency systems usually cost more than standard efficiency systems, but manufacturers say that customers save enough from the lower energy costs of higher efficiency units to more than make up for the higher initial cost over time.
 Because an up-front rebate or incentive would reduce the initial cost of a highly efficient system, this means that a rebate would reduce the amount of time it would take for the more efficient system to "pay for" that higher initial cost.

Please assume for now that your organization was offered an incentive by a utility or government agency that claimed that you could expect to see energy savings from installing a high efficiency system that would pay for the higher cost of that system in three years.

If your heating or cooling system were about to fail, and you needed to acquire a new one, how likely would your organization be to buy the higher efficiency system (and take the incentive), rather than buying a standard efficiency system?

Please use a 10-point scale where, '1' means you think your business would be not at all likely to do this and '10' means you think your business would be extremely likely to do this.

Not at all likely to do this									Extremely likely to do this
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q30b. Now please assume that, again, your system was on the verge of failure, but that the rebate offered to you meant that it would take [PROGRAMMER: IF Q30= 6 OR LOWER: "only 1 year". IF Q30= 7 OR HIGHER: "5 years"] to pay for the higher initial cost of the higher efficiency system. Given these assumptions, how likely would your organization be to buy the higher efficiency system (and take the incentive), rather than buying a standard efficiency system?

Please use a 10-point scale where, '1' means you think your business would be not at all likely to do this and '10' means you think your business would be extremely likely to do this.

Not at all likely to do this									Extremely likely to do this
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31. Let's assume a slightly different situation. Again, a utility or government agency offers you an incentive to replace your current heating or cooling system with a new, higher efficiency system. Additionally, assume that, again, the incentive would reduce the cost of the higher efficiency system so that your energy savings are projected to "pay for" the higher initial cost of the high efficiency system within three years.

In this case, however, your existing system is not on the verge of failure, but is lower efficiency than the new system that would replace it. The organization offering the incentive would provide you with information indicating that, even replacing your system "early" (before it fails) would save you money in the long run (since you start to get the energy savings sooner).

How likely would you be to replace your system "early" (before failure) and install the high efficiency system, with the offered rebate.

Please use a 10-point scale where, '1' means you think your business would not be at all likely to replace your system with a high efficiency model under these conditions, and '10' means your business would be extremely likely to replace your system with a high efficiency model.

Not at all likely to replace your system with a high efficiency model						Extremely likely to replace your system with a high efficiency model			
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q32. Below is a list of features that are intended to make rebate / incentive programs like the one we just discussed more attractive to businesses like yours, regardless of whether the cooling or heating system being replaced was replaced at failure or significantly before failure.

Please review the list of features and use your cursor to “drag” each of these program features into one of the three categories you see.

You can put as many of the features into each category as you want, but you need to assign each feature to a category.

Please use your cursor to drag the features you think fit into each category:

- The features that would make us much more likely to install a new high efficiency system
- The features that would make us somewhat more likely to implement a new high efficiency system
- The features that would make us no more likely to implement a new high efficiency system
- The features that would make us less likely to implement a new high efficiency system

[PROGRAMMER: CREATE DRAG AND DROP FOR ATTRIBUTES INTO THE FOUR LABELLED BUCKETS. NO LIMIT ON THE NUMBER OF ITEMS THAT CAN GO INTO EACH BUCKET; RANDOMIZE INITIAL LIST OF ATTRIBUTES]

1. The ability to finance the cost of the new cooling system through monthly payments on your electric bill.
2. The ability to get a no or low interest loan with favorable terms for the cost of the new cooling system.
3. Having access (at no cost to you) to a professional “Energy Advisor” who would help you obtain financing, apply for rebates, and provide direct unbiased assistance to inform you about energy efficiency options, help you select an appropriate contractor, review estimates or bids, and help you navigate project installation.
4. The ability to finance the cost of the new cooling system through a program that provides 100% financing with a low or no interest loan paid back through assessments on your property tax bill for a period of up to 30 years.
5. Receiving information on likely energy savings from sources you believe to be reliable and unbiased.
6. Having a representative of the program come to your facility and handle all aspects of system selection and installation, as well as financing and related paperwork
7. Having the opportunity to get additional incentives and cost savings if you take more than one action (say, improving your insulation levels or reducing air infiltration, as well as replacing heating or cooling systems).
8. Obtaining free design assistance from sources you trust
9. Attending workshops on different technology types and what those technologies can mean for energy savings that are hosted by energy industry professionals you trust.

[IF Q2=1-3 AND Q3=2 (“NO”), CONTINUE, OTHERWISE SKIP TO Q34]

Q33. You mentioned earlier that your building was constructed before 2000 and has not had any significant renovation work done to the overall building itself (things like adding or replacing insulation, upgrading doors and / or windows, sealing ducts, or the like). We recognize that it can be challenging to choose to upgrade these sorts of things without some other need to renovate your space. If an organization like BayREN made incentives available specifically to organizations like yours that would promote the implementation of these upgrades if you agreed to install a “bundle” of such measures all at the same time (new insulation, for example, along with duct sealing, and other similar measures), how likely would you be to pursue such a program? Please assume that as part of this package, you would have access to an impartial Energy Advisor who could identify the measures that would be the most cost-effective for you.

Not at all likely to pursue this option					Extremely likely to pursue this option				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q34. All our questions so far have focused on heating and cooling systems and overall building efficiency. Lighting is also a significant energy use in some buildings, however. Please indicate below how likely your organization would be to participate in a program that would provide you with significant incentives to upgrade any standard efficiency lighting in your facility with higher efficiency options (such as LEDs or super-high-efficiency fluorescents)? If you have already installed high efficiency lighting in your facility, please indicate that.

Not at all likely to pursue a high efficiency lighting program					Extremely likely to pursue a high efficiency lighting program					Have already installed high efficiency lights
1	2	3	4	5	6	7	8	9	10	11
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q35. Please rate the sources of information on energy efficiency listed below on their credibility:

[ROTATE 1-3]	Not at all credible					Highly credible				
	1	2	3	4	5	6	7	8	9	10
1. A heating / cooling system contractor	<input type="radio"/>									
2. Your electric utility	<input type="radio"/>									
3. A heating / cooling equipment dealer / distributor										
4. A county agency focused on energy efficiency	<input type="radio"/>									

- C1. What is the name of the utility that provides your electric service?
1. Pacific Gas & Electric (PG&E)
 2. {OTHERS?}
 3. Another company or organization (Please specify _____)

C2. Please rate your electric service provider on the following:

[ROTATE 1-2]	Poor					Excellent				
	1	2	3	4	5	6	7	8	9	10
1. Being a company that actively promotes programs to help its business customers save money	<input type="radio"/>									
2. Their performance overall	<input type="radio"/>									

- C3. Which of the following best describes the nature of the community in which your facility is located.
1. Urban
 2. Suburban
 3. Rural

- C4. Do you own or lease the space you occupy at this location?
1. Own
 2. Lease

- C5. Which of the following best describes how this facility is managed.
1. We are responsible for managing our own space
 2. There is an on-site property manager
 3. There is a property manager located somewhere else

- C6. At this location, do you . . . ?
1. Occupy the entire building
 2. Occupy part of a high-rise building (more than 2 stories)
 3. Occupy part of a low-rise building (1-2 stories)
 4. Something else (Please specify _____)

Thank you. We appreciate your time.

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