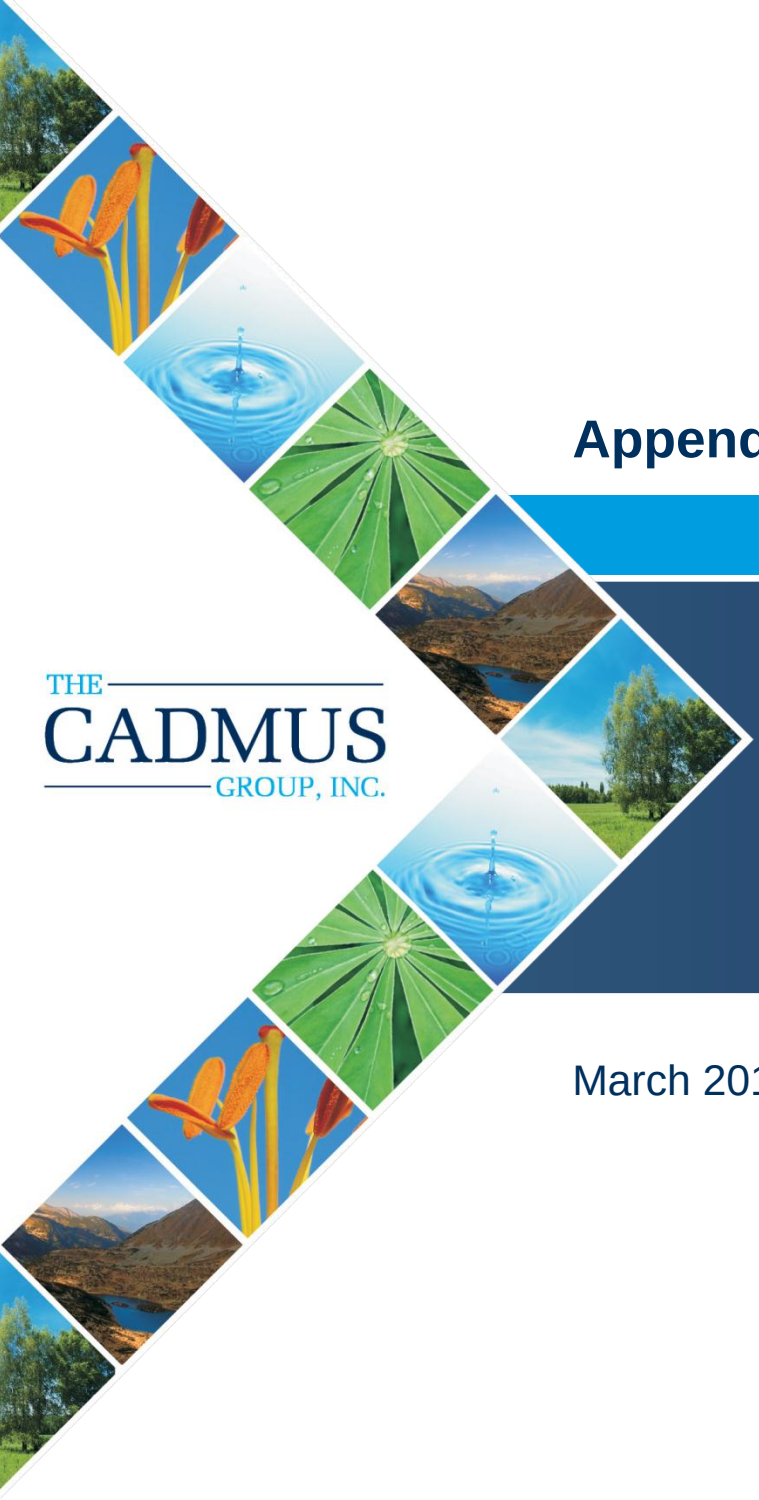

Appendices

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California 2010-2012 On-Bill Financing Process Evaluation and Market Assessment

March 2012

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LEGAL NOTICE

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APPENDIX A. ACRONYMS AND ABBREVIATIONS

APR	Annual Percentage Rate
CEC	California Energy Commission
CPUC	California Public Utilities Commission
DI	Direct Install
DoC	Department of Corporations
EUL	Effective Useful Life
EE	Energy Efficiency
EEBI	Energy Efficiency Business Incentives
HMG	Heschong Mahone Group
IOU	Investor-Owned Utility
LLRF	Loan Loss Reserve Fund
OBF	On-Bill Financing
OBR	On-Bill Repayment
PACE	Property Assessed Clean Energy
PG&E	Pacific Gas & Electric
PPP/PGC	Public Purpose Program/Public Goods Charge
RIA	Research Into Action
ROI	Return on Investment
SB-CAL	Small Business California
SCE	Southern California Edison
SoCalGas	Southern California Gas
SDG&E	San Diego Gas & Electric
SEu	Sempra Energy Utilities
WTF	Willingness to Pay

APPENDIX B. INTERVIEW AND SURVEY GUIDES

Program Manager Interview Guide

Introduction

We appreciate the time you are setting aside to contribute to this project. Cadmus was hired by the CPUC to conduct a process evaluation and preliminary market assessment regarding the On-Bill Finance programs operated by the four California IOUs. The results from our research will be used to inform planning for the next OBF program cycle.

We will first ask a series of questions related to program processes and then transition to a set of questions focused on potential future program design considerations. This interview is expected to take up to an hour and half.

Warm Up Questions

1. As I understand it, you are the program manager for [IOU NAME] On-Bill Finance program. What is your history with the program?

2. What are your responsibilities (day to day, design, policy, customer support)?

Process Evaluation

General Questions

3. What are the goals for OBF? [PROBE: INCREASE PARTICIPANTS? PROMOTE BIGGER PROJECTS?]

4. How are program funds currently distributed among applicants? (i.e., first-come, first-served)

    - Do you target specific types of customers?
    - Who decides this?
    - Does this make sense?

5. How is the program delivered? [PROBE: VENDORS, ACCOUNT EXECUTIVES, ETC.]

6. What are the OBF application approval and loan monitoring processes at [IOU NAME]? (open-ended response)

    - Who is responsible for the processes?
    - What forms and monitoring activities are involved?
    - What are the credit qualifying criteria?

7. How often do you return OBF applications to vendors or customers for clarifications or rework? What is the main reason applications need to be reworked? (open-ended response)

8. What are the most common reasons a project is disqualified? [PROBE: DOES NOT PASS POSITIVE CASH FLOW REQUIREMENT, PAYBACK PERIOD TOO LONG, LOAN LIMITS NOT MET, ETC.] Are efforts being made to reduce the application rejection rate?

Marketing

9. How is On-Bill Finance marketed? [PROBE: UTILITY ACCOUNT EXECUTIVES, TRADE SHOWS, CONTRACTORS, INDUSTRY ASSOCIATIONS, WORD-OF-MOUTH, MAILERS, TRADE PUBLICATIONS, OTHER]

    - Do you communicate with other program managers and account executives about marketing? What do you hear from them regarding customer interest in OBF?
    - Which marketing activities are working best? Why do you feel these activities are working well? [PROBE: CUSTOMER INTEREST, MARKETING DOLLARS SPENT PER COMPLETED PROJECT, PERCENTAGE OF LEADS CLOSED]
    - Which marketing activities did not work well? Why did these not work well?

10. What training, if any, have contractors received regarding the OBF program? If they have received training, did that training include tips on marketing the program?

11. What is the OBF vendor certification process? (open-ended response)

    - Are the requirements adequate?
    - Have there been any performance issues with contractors?
    - If so, what were those issues and how were they resolved?

Customers

12. Since the introduction of OBF, have you noticed any changes in efficiency program participation/interest?

    - Among which customer segments? (i.e., small, large, taxpayer funded)

13. On what percentage of eligible projects is OBF being used? How does this compare with your expected OBF uptake rate?

    - What types of measures do customers install?
    - Do you have any ideas for encouraging more comprehensive projects through OBF?

14. Outside of the OBF program, how do customers usually pay for energy-efficiency projects?

15. Are customers able to secure financing outside of OBF for energy-efficiency projects?

16. How many approved loans does the program currently have?

    - How many participating vendors are there?

17. How would you define program nonparticipants? Are those being tracked? [PROBE: CUSTOMERS WHO WERE DISQUALIFIED, THOSE WHO DIDN'T DO ANY PROJECTS AT ALL]

18. What barriers do you think OBF helps customers to overcome?

19. Do you think OBF allows customers to complete projects with greater energy savings?

    - If so, how?
    - Among which customer segments? (i.e., small, large, taxpayer funded)

20. What do customers like most about OBF? [PROBE: 0% INTEREST RATE, UP-FRONT FINANCING, ON-BILL REPAYMENT FEATURE]

21. What objections or concerns about OBF are you hearing from customers? [ASK OPEN-ENDED, AND THEN ASK SPECIFICALLY ABOUT LIST BELOW]

    - Reluctance to take on debt
    - Lack of technical assistance and procurement service support
    - Loan requirements (term limits, loan amount, payment schedule)
    - Disconnect provision
    - Performance risk (not realizing estimated savings)
    - Bill clarity
    - Program application process

22. Have customers ever turned down the OBF? [PROBE WHY]

23. How sensitive do you think customers would be to changes in incentives, interest rate, and other loan terms and conditions?

24. Do you think customers value the on-bill repayment feature?

25. Do customers have any difficulties with loan repayment through the utility bill?

    - If so, what difficulties?
    - How does the utility help solve customers' issues?

26. Is there anything you want to know about your program that we can help answer through our customer research? (i.e., participant surveys, contractor surveys, focus groups)

27. What could be done to make OBF more attractive to customers?

IOU Experiences/Concerns

28. Are any customers defaulting on OBF loans so far?

    - What conditions need to be met for an account to be in default? [PROBE: MISSED HOW MANY PAYMENTS? LATE PAYMENT?]

- If so, what is the default rate?
- What are the causes for default?
- Has any customer been disconnected due to default?
- Does the utility have a policy on recovering funds from defaults?

29. What are your fixed and variable costs for supporting OBF? [PROBE FOR PER TRANSACTION COSTS VERSUS THE COST TO SET UP THE PROGRAM OVERALL]

30. What are the biggest challenges utilities face with OBF? [ASK OPEN-ENDED, AND THEN ASK SPECIFICALLY ABOUT THE ITEMS BELOW]

    - The risk of default
    - Regulations: lending license and consumer lending laws
    - Long-term obligations
    - IT system changes
    - The lending process of approving and originating the loans
    - The billing process
    - The collection process for overdue payments

31. How is the utility overcoming those challenges?

32. What challenges do you see in scaling up the current program?

33. Do you think OBF, as it's currently implemented, is a good idea?

    - Why or why not?
    - For which customers?

34. What could be done to make OBF more attractive to IOUs?

Market Assessment (if time permits)

35. What are the pertinent legal issues surrounding OBF? [PROBE: CONSUMER LENDING LAWS, DISCLOSURE REQUIREMENTS, ETC.]

    - How do those issues affect the program?
    - The $5,000 minimum loan amount is based on requirements for a commercial loan; what would need to happen in order to originate loans less than $5,000?

36. What are your thoughts about accessing additional capital for the program? [PROBE: THIRD-PARTY LENDERS]

37. What do you think about a third-party capital provider model where a lender originates and services the obligation, so that the IOU's only role would be to put the monthly loan payment on the utility bill and pass the payments along to the bank?

- What would be the advantages to having a third-party lender distribute and fund loans?

38. What are your thoughts about the use of credit enhancements, such as loan loss reserves, loan guarantees, or interest rate buydowns? Who should provide these enhancements?

39. What issues would be involved in switching to a tariff-based model where the payment obligation is associated with the power meter (and the obligation could pass to the new owner upon resale of the property)?

40. What about a combination of third-party lending and tariff based obligation?

- How would partial payments be handled?
- Would changes need to be made to the loan security? (currently it's the shut-off provisions)

Thank you for your time today.

Program Manager Follow-Up Interview Guide

Reservation of Loan Funds for Customer Segments

1. Are loan funds reserved for certain segments? How much for each segment and why? (Verify: PG&E $18.5 million, 25% minimum commercial; SCE $16 million, 25% commercial; Sempra Energy Utilities N/A)

2. Does that reflect the IOU's perception of the risks or needs associated with certain customer segments? What about segments that might yield the largest savings?

3. Are all segments fully subscribed? Can funds be reallocated? Are there statutes of limitations on funding reservation for projects that get delayed?

Loan Makeup

4. What do you think has the greatest influence on the types of customers who succeed in obtaining OBF loans?

5. Who is the ideal customer for OBF and why?

SoCalGas/SCE Coordination (SCE and SoCalGas only)

6. What is the status of OBF program coordination? What ideas are currently being considered? (Probe: which bill would it go on?)

Application Processing Time

7. How long does it take to process the average application and issue loan agreement? Does it vary by customer (small CIA, large CIA, and G&I)?

- How does it compare to non-OBF projects?
- What is the main bottleneck?

8. Customers often make equipment purchases when something breaks; therefore, financing must be timely in order to capitalize on this transaction point. Do you think OBF is currently set up to work in these situations?

9. Who conducts inspections? What happens during inspection? How much time does it take for inspections?

10. Are 100% of projects inspected? What would happen if fewer projects were inspected? How many projects fail pre- and post-inspection?

Vendors

11. Are you happy with the way that vendors introduce customers to OBF?

12. Have you had any problems with vendors misrepresenting the program?

13. How often do you have to rework or reject applications submitted by vendors? How are vendors notified about issues with their applications?

14. Do you think contractors' pricing is fair? Have price controls been considered?

15. What percent of projects are paid to the vendor (third-party payment) vs. to the customer?

16. (do not ask SoCalGas) – Some of the vendors we interviewed were frustrated with the length of time it takes to hear back from account executives/utility staff, as well as the length of time it takes to receive payment/funding from the utility. Are you aware of these issues and what might be causing them? If so, do you have any ideas for improving these issues? How long does it usually take for vendors to receive payment after project completion? Do you track this information?

17. (ask PG&E only) – Have you started vendor training? If not, is a timeframe in place for implementing this process?

Scalability and Transition to OBR

18. Are your systems set up to support ten times greater loan volume? What would need to happen to enable this? How long would it take to ramp up? How much more staff would be needed?

19. Are your systems set up to support OBR (third-party repayment)? Are systems ready to handle interest?

Management Buy-In

20. What does upper management think of OBF, and do they have reservations about it? What benefits does the utility get from offering OBF?

Account Executive Interview Guide

Thank you for taking the time to talk with us today about your experience with **[Utility Name]'s** On-Bill Financing. My name is **[Insert Name]** from The Cadmus Group. We are conducting a process evaluation of OBF offered by the four California investor-owned utilities. The evaluation involves talking to stakeholders involved with the program, reviewing program information, and surveying customers and vendors. With this information we piece together how the program is intended to work, key players, and how things are working. We highlight what is working well and, if needed, provide suggestions for improvement.

This survey is not a review of your work. Your answers will be kept confidential; analysis will be at the aggregate level. Your experience and perspective are important to us, and we would very much appreciate your candid thoughts and suggestions as we go through these questions.

1. How many customers do you work with?

2. Are you assigned to a particular type of customer (e.g., universities or hospitals)?

3. Approximately how many of your customers are using or considering OBF to help them participate in energy-efficiency programs?

Understanding of OBF

4. Did you get any training or training materials in regards to On-Bill Finance? [PROBE TO DETERMINE WHAT THEY RECEIVED]

5. Did the training or training material prepare you to help customers participate in OBF? [PROBE FOR DETAIL.]

   5a. (IF 5 = NO) How did you prepare to bring OBF to customers? What else do you need to be better prepared?

6. Were you given any guidelines about the types of customers that might benefit most from OBF? Any direction to target OBF to specific customers? [IF YES – PROBE FOR DETAIL; IF NO – ASK HOW CUSTOMERS WERE TARGETED.]

7. Were you given any guidelines about the types of projects that might benefit most from OBF? Any direction to target OBF for specific projects? [IF YES- PROBE FOR DETAIL; IF NO – ASK HOW PROJECTS WERE SELECTED, FOCUSING ON COMPREHENSIVENESS OF PROJECTS.]

8. Do you help your customers fill out EE program and OBF applications? If yes, does this occur when they implement a project themselves or when vendors are used? Or both? [PROBE: HAVE THEM EXPLAIN ANY DIFFERENCES FOUND]

9. Would you say that the OBF application process is smooth or difficult? Why?

   9a. (IF 8 = DIFFICULT) What do you think can be done to fix this?

10. Are any of your customers excluded or discouraged from using OBF?

10a. (IF 10 =YES) Which ones, and why?

11. Why do you think your customers choose to participate in OBF? [PROBE: 0% INTEREST RATE, CONVENIENCE OF EVERYTHING ON ONE BILL, ABILITY TO FIND UP-FRONT FINANCING, ETC.]

12. Are there particular segments of customers you think it makes the most sense to target for OBF, and why? [PROBE: WHAT IS IT ABOUT THAT CUSTOMER TYPE OR CERTAIN CUSTOMERS THAN MAKES THEM A GOOD FIT FOR OBF?]

13. Similarly, in your view does OBF change the nature of the projects in any way from what might have happened without financing support?

14. Can you characterize the differences between promoting an OBF project and a non-OBF retrofit project, especially in terms of decision makers who have to be involved and convinced, and the time it takes through installation of equipment?

15. How long does it generally take to process applications and inspect OBF projects? Do you think this amount of time is reasonable? Do you think your customers do? How does this differ from retrofit projects that do not use OBF?

16. Do customers ever complain to you about OBF? If yes, what are some of their concerns? How do you generally handle customer complaints?

Inspection Process

17. Does every OBF project get a pre- and post-inspection? If no, why? Does this differ from the requirements for participation in other nonresidential efficiency programs?

18. Do you think the inspection process can be shortened/improved without severely increasing OBF default risk? How?

OBF Value

19. In your opinion, what is the effectiveness of rebates vs. loans in motivating your customers? Is one more useful or more successful than the other?

20. What value do you place on OBF to help the utility meet EE goals? What about the value that customers place on the program? [PROBE: WHAT WOULD HAVE BEEN DONE WITHOUT OBF]

21. In general, what do you think is working well with OBF?

22. What are the challenges with OBF?

23. (SCE specific)Would more customers apply for OBF if the funds were available?

24. (SCE/SoCalGas specific) It is our understanding that SCE and SoCalGas were in the process of coordinating OBF loans for joint customers, how do you think this would work?

25. There has been discussion about changing the current OBF model to one in which the financing is provided by a private lender rather than the utility. Note that on-bill repayment would probably continue. Such a model would make financing available to more customers, but it could also mean having to deal with additional administrative processes related to lenders, such as loan origination. How much of an issue, if any, would such a change present to customers?

26. This model would likely mean the end of zero interest (would be low interest rate financing). Do you think your customers would still be interested in OBF with these changes?

27. (Do not ask to SoCalGas account executives) While we understand that your job is to specifically interface with customers, we also realize that sometimes you may be contacted by vendors. Have you been contacted by vendors working with customers who are using OBF?

    27a. (If yes) What do they ask you about?

    27b. How often would you say you interface with vendors working with your customers instead of customers themselves?

28. Is there anything else that you'd like to say in regards to the OBF initiative or your specific experience with it?

Thank you for your time today!

Participant Survey

Interviewer instructions are in green. CATI programming instructions are in red.

"Hello, my name is [NAME]. I am calling on behalf of the California Public Utilities Commission. You recently participated in [IOU NAME]'s On-Bill Financing loan program, and we want to get your feedback on this experience. May I please speak to [CONTACT NAME FROM DATABASE]?

Screening Questions

These questions screen or qualify the respondents to ensure that results are comparable across respondents and that potential biases are avoided. The specific checks include the following:

Respondent organization is a customer of [IOU NAME].

Respondent is a decision maker or aware of the decision to participate in OBF at the organization that received financing through [IOU NAME]'s OBF program.

TERMINATION TEXT: Thank you for your willingness to participate; however, based on your responses to our screening questions, at this time we are unable to move forward with this questionnaire.

A1. Our records show your organization received a loan from [IOU NAME] to pay for an energy-efficiency project. We are gathering feedback from participating organizations so that we can improve the loan program, also called the OBF program. Your answers will be kept confidential. Our records show you are the best person to talk with about this program, is that correct?

1. Yes [GO TO A1A]
2. No [ASK TO SPEAK TO THE PERSON IN THE ORGANIZATION WHO WAS INVOLVED IN THE DECISION TO PARTICIPATE IN OBF. IF THAT PERSON IS NOT AVAILABLE, GET THEIR CONTACT INFORMATION AND BEST TIME TO CALL BACK. THEN THANK AND TERMINATE]
3. Don't know [ASK TO SPEAK TO SOMEBODY ELSE WHO MAY KNOW AND REPEAT A1]
4. Refused [THANK AND TERMINATE]

A1a. Can we talk now or is there a more convenient time I could call back? [EMPHASIZE THAT "IT IS IMPORTANT FOR [IOU NAME] TO INCLUDE YOUR OPINIONS IN THIS STUDY TO BETTER SERVE YOUR NEEDS."]

1. Yes [IF RESPONDENT ASKS HOW LONG, SAY "10 TO 15 MINUTES."]
2. Not a good time [THANK AND ASK FOR A BETTER TIME]
3. Not interested [THANK AND TERMINATE]

A2. Just to confirm, is your organization a customer of [IOU NAME]?

1. Yes
2. No [THANK AND TERMINATE]
3. Don't know [THANK AND TERMINATE]

A3. And did your organization finance an energy-efficiency project using a loan from [IOU NAME]?

1. Yes
2. No [THANK AND TERMINATE]
3. Don't know [THANKS AND TERMINATE]
4. Refused [THANK AND TERMINATE]

A4. How many people are employed full time at your location? [RECORD NUMBER]

Source of Program Information

First, I'd like to ask you some questions about your decision to participate in the OBF program and about the equipment you installed.

[IF ASKED: THE PROGRAM OFFERS 0% FINANCING TO NONRESIDENTIAL CUSTOMERS WHO MAKE QUALIFYING ENERGY-EFFICIENCY INVESTMENTS AT

THEIR PLACE OF BUSINESS. THE LOAN IS THEN REPAID THROUGH A LINE ITEM ON THE UTILITY BILL.]

B1. How did you first find out about [IOU NAME]'s on-bill finance program? [DO NOT READ, PROMPT IF NECESSARY.]

1. Contractor/installer
2. Newspaper/magazine/print media
3. [IOU NAME] account manager or program staff
4. [IOU NAME] physical mail or e-mail
5. [IOU NAME] Website
6. Word-of-mouth
7. Other [SPECIFY]
8. Don't know
9. Refused

Decision Making Process

C1. Who is involved in making decisions about energy-efficiency projects at your company, and what are their positions or roles? [MULTIPLE RESPONSES POSSIBLE, PROMT IF NEEDED]

1. Owner
2. Upper Management/Executive Management
3. Finance and Accounting Staff
4. Operations Manager
5. Facility Manager
6. Engineer
7. Other [SPECIFY]
8. Don't know
9. Refused

C2. What types of equipment did your company finance through the on-bill finance program? [READ CHOICES]

1. Lighting equipment only
2. Lighting and another type of equipment, such as heating or refrigeration [SKIP TO C3]
3. Equipment not related to lighting [SKIP TO C3]
4. Don't know
5. Refused

C2a. At the time that you participated in OBF, did you consider or were you offered other types of equipment besides lighting?

1. Yes [PROBE WHAT TYPE]
2. No [SKIP TO C3]
3. Don't know [SKIP TO C3]
4. Refused [SKIP TO C3]

C2b. Why didn't you install the other equipment? [OPEN ENDED]

C3. What was the main reason for using OBF? [OPEN ENDED]

C4. Did your organization look into obtaining financing from other sources outside the OBF program?

1. Yes [PROBE: WHICH SOURCES]
2. No [SKIP TO C5]
3. Don't know [SKIP TO C5]
4. Refused [SKIP TO C5]

C4a. What was the main reason for using utility OBF instead of other financing sources? [OPEN ENDED]

C5. Did your organization have any concerns about using OBF to pay for the energy-efficiency project?

1. Yes
2. No [SKIP TO C6]
3. Don't know [SKIP TO C6]
4. Refused [SKIP TO C6]

C5a. What were your concerns? [DO NOT READ, PROMPT IF NECESSARY.]

1. Taking on debt/balance sheet concerns
2. Didn't want to deal with another loan
3. Time and effort required for application process/paperwork
4. Not realizing energy savings/performance of equipment/return on investment
5. May need to move in future
6. Didn't want to rely on utility
7. Didn't understand that it was a loan; vendor said it would be free
8. Other [PROBE]

C6. Which of the following best describes how the loan repayment period figured into the decision to use OBF? [READ OPTIONS]

1. You were not concerned with the repayment period

2. Repayment period was adequate
3. You would have liked a longer repayment period [PROBE: HOW LONG]
4. You would have liked a shorter repayment period [PROBE: HOW LONG]
5. Don't know
6. Refused

C7. Would you have preferred a larger or smaller loan than what was available through the program? [DO NOT READ, PROMT IF NECCESSARY]

1. No, loan size was fine
2. Yes I would have liked a larger loan amount [PROBE: HOW MUCH AND WHY]
3. Yes, I would have liked a smaller loan amount [PROBE: HOW MUCH AND WHY]
4. Don't know
5. Refused

C8. I'm going to ask a series of questions about what actions your organization might have taken if utility OBF had not been available. If OBF had not been available, would your organization still have considered or completed an energy-efficiency project or would it have not done a project at all?

1. Still would have completed a project
2. Would not have gone through with a project [SKIP TO D1]
3. Don't know [SKIP TO D1]
4. Refused [SKIP TO D1]

C8a. Would you have completed the project at the time that you did or would you have done it later?

1. Same time
2. Would have delayed the project
3. Don't know
4. Refused

C8b. Would the efficiency of the equipment you installed been at the same level or would it have been less efficient? [DO NOT READ, PROMT IF NECCESSARY]

1. Same efficiency level
2. Less efficient [PROBE: WHAT EQUIPMENT WOULD YOU HAVE INSTALLED AND AT WHAT EFFICIENCY LEVEL]
3. More efficient
4. Don't know
5. Refused

C8c. Would you have installed the same quantity of equipment or would you have installed a different quantity?

1. Same quantity
2. More
3. Less
4. Don't know
5. Refused

C9. If OBF had not been available, how would you have paid for the energy-efficiency project you installed? [DO NOT READ, PROMPT IF NECESSARY.]

1. With available cash or company funds
2. Unsecured loan from lender
3. Secured loan from a lender
4. Unknown type of loan from a lender
5. Would have leased the equipment
6. Used an Energy Services Agreement/ Energy Services Company
7. Other [PROBE]
8. Don't know
9. Refused

Participation Under Alternate Loan Terms and Incentive Structures

D1. Let's talk about the package of rebates and financing you received from the utility for your efficiency project, and what you liked most about it. If you had to select either the rebates or 0% financing, but not both, what would you have selected? [DO NOT READ, PROMPT IF NECESSARY]

1. Rebates
2. 0% financing
3. Don't know
4. Refused

D1a. Why do you say that? [OPEN ENDED]

D2. In the future, OBF at 0% may not be available. I am going to ask you about your organization's willingness to implement the same energy-efficiency project financed at different interest rates. Assume in all cases that the energy cost savings are equal to the loan installment, and that the payments would be spread over a longer period of time than a loan at 0% interest.

Would you have implemented the same project using OBF if your monthly payments were calculated using a [RANDOMLY CHOOSE AND NOTE STARTING RATE FROM: 5%, 6%, 7%] interest rate?

1. Yes [ASK D2A]
2. No [ASK D2B]
3. Don't know [ASK D2B]
4. Refused [ASK D2B]

D2a. Would you have implemented the same project using OBF if your monthly payments were calculated using a [STARTING RATE +2%] interest rate?

1. Yes
2. No
3. Don't know
4. Refused

D2b. Would you have implemented the same project using OBF if your monthly payments were calculated using a [STARTING RATE -2%] interest rate?

1. Yes
2. No
3. Don't know
4. Refused

D3. If rebates were cut in half for OBF projects, but the interest rate stayed at 0%, would you still be interested in using OBF for energy-efficiency projects?

1. Yes, would be interested even with halved rebates
2. No, would not be interested if rebates were halved
3. Don't know
4. Refused

Loan Repayment

I am now going to ask a few questions regarding your experience with loan repayment.

E1. Have you received and seen a utility bill that included your loan installment?

1. Yes
2. No, haven't received a bill with loan installment yet [SKIP TO E3]

3. No, I do not handle utility bill payment [SKIP TO E3]
4. Don't know [SKIP TO E3]
5. Refused [SKIP TO E3]

E2. Have you experienced any difficulties with loan repayment through your utility bill?

1. Yes
2. No [SKIP TO E3]
3. Don't know [SKIP TO E3]
4. Refused [SKIP TO E3]

E2a. What kind of difficulty?

1. Loan installment amount was incorrect
2. Bill was difficult to understand
3. Could not pay off early
4. Other [PROBE]

E3. With OBF, you have the ability to repay the loan through your utility bill instead of dealing with a separate bill. Do you find this to be a valuable feature of the program?

1. Yes
2. No
3. Don't know
4. Refused

E4. Currently, the money for OBF loans comes from your utility and not from a traditional lender, such as a bank. Assuming the loan installments remained on the utility bill, would you prefer that the loan money come from your utility or from a bank? [DO NOT READ OPTIONS, PROMPT IF NEEDED]

1. Utility
2. Bank
3. Don't have preference
4. Don't know
5. Refused

E4a. Why do you say that? [OPEN ENDED]

Customer Experience

This last series of questions will ask about your experience with various aspects of the on-bill finance program.

F1. Was there anything about the loan application process which caused you difficulty? [OPEN ENDED]

F1a. Is there anything that could have been done to make the application process easier? [OPEN ENDED]

F2. Did you use a vendor for the energy-efficiency project?

1. Yes
2. No [SKIP TO F2C]
3. Don't know [SKIP TO F2C]
4. Refused [SKIP TO F2C]

F2a. How many bids or quotes did you obtain for the project? [RECORD NUMBER]

F2b. Did you have any difficulty working with your vendor on the project? [IF YES, PROBE: WHAT DIFFICULTY, OPEN ENDED]

F2c. Would a utility approved list of vendors have made it easier for you to select a vendor?

1. Yes
2. No
3. Don't know
4. Refused

F3. How clearly did the OBF program guidelines explain what your organization needed to do to participate?

1. Very clearly
2. Somewhat clearly [PROBE: WHAT WAS NOT CLEAR?]
3. Not clearly/had issues [PROBE: WHAT WAS NOT CLEAR?]

F4. Did your organization request assistance to help you decide whether or not to use OBF?

1. Yes
2. No [SKIP TO F5]
3. Don't know [SKIP TO F5]
4. Refused [SKIP TO F5]

F4a. Who did you ask?

1. [IOU NAME] efficiency program staff
2. [IOU NAME] account executive
3. [IOU NAME] customer service
4. Contractor/vendor

5. Other [PROBE]
6. Don't know
7. Refused

F4b. Did you get the assistance you needed?

1. Yes [SKIP TO F5]
2. No [PROBE: WHAT ADDITIONAL ASSISTANCE WAS NEEDED?]
3. Don't know [SKIP TO F5]
4. Refused [SKIP TO F5]

F5. Did OBF cover all design, equipment, and installation costs?

1. Yes
2. No [PROBE: WHAT WASN'T COVERED?]
3. Don't know
4. Refused

F6. As a result of your experience with OBF, would you say you are more likely, just as likely, or less likely to pursue energy-efficiency projects for your organization?

1. More likely
2. Equally likely
3. Less likely
4. Don't know
5. Refused

Closing Question

G1. What is the best way to promote this program to businesses like yours? [DO NOT READ, PROMPT IF NECESSARY. CHECK ALL THAT APPLY OR RECORD VERBATIM.]

1. Trade shows
2. Word-of-mouth
3. Vendors
4. Trade associations
5. Other [SPECIFY]
6. Don't know
7. Refused

[THANK FOR THEIR TIME AND TERMINATE]

Participating Vendor Survey

Created by Cadmus and Research Into Action

Introduction Section

Hello, my name is [NAME], and I'm calling from [COMPANY NAME]. We are conducting research on behalf of [IOU NAME] and the California Public Utilities Commission to provide recommendations on improving their energy-efficiency programs to better serve their customers. I'm calling specifically to find out about your experience with the On-Bill Financing program. I would like to speak for approximately 30 minutes with you or someone else familiar with your company's projects that were part of the program. All responses will be treated confidentially.

Respondent Background

1. What is your title and what are your responsibilities?

2. How did you first learn about [IOU NAME]'s OBF program?

3. How long has your business been participating as a vendor in this program?

   - Is your business participating, or planning to participate as a vendor in other utility-run OBF programs in California? [PROBE FOR LEVEL OF PARTICIPATION OR FUTURE PARTICIPATION]

4. How many employees work at your location?

5. Would you consider yourself/your company to be a project aggregator—a company that aggregates applications for other vendors and submits them to the utility?

Respondent Participation Decisions

6. What aspect of the program made you want to participate as a vendor?

7. Has your experience with the program differed from what you expected? If so, how?

8. Did you have any difficulties becoming a participating vendor? [PROBE: TRAINING REQUIREMENTS, FLOATING PROJECT COSTS UNTIL IOU PAYMENT DISBURSED, TIME COMMITMENT, ETC.]

9. How many projects do you complete a year as part of the IOUs' energy-efficiency programs, on average?

   - What percentage of these would you say use OBF?
   - Would you say that percentage is growing over time?

10. How important was OBF in enabling you to sell energy-efficiency projects, on a scale of 1 to 5, where 5 means "very important" and 1 means "not at all important"?

    - Why do you say that?

11. What equipment, financed through OBF, do you typically install for customers?

    - [IF MENTION MORE THAN LIGHTING] We are interested in your experience selling more comprehensive efficiency projects—that is, those that include more than just lighting. What challenges have you come across when selling comprehensive efficiency projects and how did you overcome those challenges?

    - [IF MENTION MORE THAN LIGHTING] Do you think OBF helps you sell more comprehensive projects?

12. If the OBF program started requiring vendors to sell more comprehensive projects (defined as projects that include more than just lighting), how would your company adapt to the requirement to install comprehensive projects if nothing else changed in the program?

    - What kind of support, if any, would be useful to enable you to sell more comprehensive projects? (IF INTERVIEWING LIGHTING VENDOR, PROBE: WHAT SPECIFICALLY WOULD MAKE YOU INTERESTED IN WORKING WITH OTHER VENDORS?]

Customer Participation Decisions

13. When you discuss financing options with energy-efficiency program participants, which of their departments typically are involved in decision making? [PROBE: ACCOUNTING/FINANCE, ENGINEERING, OPERATIONS, FACILITIES MANAGERS, DON'T KNOW, OTHER]

14. What criteria (e.g., payback, return on investment, availability of capital, financing) do customers use in assessing if they will go through with an energy-efficiency investment? What criteria do they use to assess whether or not to use financing? [PROBE: DOES PROJECT SIZE MATTER?]

15. The utility categorizes OBF participants as: taxpayer funded (government/institutional), small commercial/industrial/agriculture, and medium to large (>200 kW) commercial/industrial/agriculture. What is the main category your OBF customers fall into?

16. Would you say that [MAIN TYPE OF CUSTOMER] uses OBF because (1) they do not have capital on hand and need up-front financing, (2) they had capital but found 0% attractive, (3) OBF was convenient and made project approval easier, (4) something else, or (5) don't know?

17. Did customers have any concerns about the OBF program? [PROBE: ARE CUSTOMERS CONCERNED THAT THE PROGRAM FINANCING WILL NEGATIVELY AFFECT THEIR BALANCE SHEET OR REDUCE THEIR BORROWING CAPACITY? HAVE TO MOVE SOON?]

18. How do customers who do not use OBF usually pay for energy-efficiency improvements? [PROBE: UP-FRONT WITH CASH, PAYMENT PLAN, OBTAIN LOAN FROM BANK, REBATES ETC.]

19. If you could only offer customers rebates or financing through the utility, but not both, which would you choose to offer?

    - Why do you feel this way?

20. In the future, 0% financing may not be available. If OBF carried an interest rate competitive with the market, would you still offer it to your customers?

Program Promotion

21. Do you incorporate the OBF program into your promotional efforts? If so, how?

22. Which of your promotional activities have been most successful at enrolling organizations in OBF? Why do you think that?

23. When explaining OBF to customers how do you describe what participants are responsible for? [OPEN-ENDED]

    1. Participant is responsible for three, five, or 10 years of monthly payments
    2. It's like receiving measures for 'free'
    3. Participant won't notice any difference
    4. Sometimes monthly bill is a little higher if organization reduces energy use activities
    5. Other [PROBE]

24. To which kinds of organizations do you promote OBF and why?

25. Are there kinds of organizations to which you do not promote OBF? For what reasons?

Support Offered by IOU

We would like to know how well OBF resources support your ability to promote the OBF program. On a scale of 1 to 5, where 5 means "very helpful/supportive" and 1 means "not at all helpful or supportive" please rate the following items: [ASK FOLLOW-UP QUESTIONS IF RATING <4].

26. Program marketing materials

    26a. What aspects of the marketing materials have not supported your promotion activities?

27. OBF vendor handbook or guidelines

    27a. What aspects of the handbook make it difficult to promote OBF?

28. [SDG&E/SCE ONLY] OBF training from the utility

28a. What aspects of the training make it difficult to promote OBF?

29. Utility staff

29a. How do utility staff make it difficult to promote OBF?

Application Process and Rework

30. Were you responsible for any part of the application process (including the savings workbook)? [IF YES, PROBE: WHAT PART?]

30a. Did you encounter any difficulties, such as rejected applications? [PROBE: WERE ANY APPLICATIONS REJECTED BECAUSE THE PROJECT DIDN'T MEET PAYBACK CRITERIA? HOW DID YOU SOLVE THE PROBLEM?]

30b. Were any of your applications returned for clarification or rework?

30c. What are some things that could be done to reduce the number of applications requiring rework?

Communication

31. Are you able to communicate with utility staff in a timely manner concerning OBF topics and issues? [IF NO, PROBE: WHY NOT?]

Closing Question

32. In the future, do you plan to continue promoting OBF for efficiency projects?

Thank you for your time!

Focus Group Recruitment Screener and Guide

Recruitment Screener

Table B - 1 summarizes the purpose of each question in the screener. There are two segmentation questions that will get at potential participants' decision making and size characteristics. If the two characteristics are consistent, then recruitment will proceed. When responses to the two questions are not aligned with our target group characteristics, we will instruct the facility to put a hold on those contacts. The Cadmus team will review the responses provided by respondents on hold and guide the facility on how to proceed. This is an important step to ensure homogenous groups, especially for those contacts who are "on the cusp."

Table B - 1. Recruitment Screener Questions

Question	Screening for		
	Participation	Segmentation	Data Collection
Q1		#1 (takes precedence over Q5)	
Q2	X		
Q3	X		
Q4	X		
Q5		#2	
Q6			X
Q7			X
Q8			X
Q9	X		
Q10			X

Recruitment Script

[IF HAVE NAME] Hello, may I please speak with **[INSERT CONTACT NAME FROM SAMPLE]?**

[IF NO NAME] Hello, I'm calling on behalf of the California Public Utilities Commission. May I please speak with the general manager, the facilities manager, or a person who makes decisions about facility improvements?

I'm _____, calling on behalf of the California Public Utilities Commission. We are organizing focus group research in **[Irvine/Fresno/San Francisco]** to discuss what challenges your business may face when pursuing energy-efficiency improvements to your building, and whether being able to finance those improvements would help. **[*If needed:* We are not trying to sell you anything. This focus group is a group discussion with other similar customers led by a trained moderator to gather input*].** Those who participate in the focus group will receive **[$200/$250 *(for more distant participants in Irvine)*]** to thank them for their time. May I ask you a few questions to assess your eligibility and interest? **[If yes, continue; if no – check to see if there is a better time to talk; if no, terminate.]**

1. If your company decided to invest in energy-related capital improvements for your facility – investments of at least $1,000 or more, such as new lighting, HVAC equipment, insulation, or motors – how many people in your organization would have a major role in making that decision?
    1. 1 **[Assign to the small and singular decision making group]**[1]
    2. 2 or more unrelated persons **[Assign to the medium/large and complex decision making group]**

2. May I ask if that person/one of those people would be you?
    1. Yes **[Continue]**
    2. No - Could you refer me to someone who does have a key role in making these financial decisions? **[*Collect name and contact number,* thank and terminate, *and start call over*]**

3. I'd like you to think about energy-saving improvements you could make at your business. These could be things like putting in more insulation or making your lighting, HVAC system, or appliances more efficient. If you were able to make all these improvements, do you think your business could reduce its energy bills substantially, to some extent, or would there be very little effect?
    1. Substantially **[Continue]**
    2. To some extent **[Continue]**
    3. Very little **[Thank and terminate]**
    4. Don't know **[Terminate]**

4. Are up-front costs to installing these types of energy saving improvements a major barrier, a minor barrier, or are they not at all a barrier?
    1. Major Barrier **[Continue]**
    2. Minor Barrier **[Continue]**
    3. No Barrier **[Thank and terminate]**

5. Are you a small business?
    1. Small **[If also self-report as singular decision maker (1), assign to the small group]**
    2. Medium or Large **[If also self-report as complex decision maker (2+),assign to the medium/large group]**

[1] If respondent mentions one other person who is a close relative, such as a spouse or parent/child, treat as one decision maker

6. Does your business rent or own the facility you currently occupy?
   - ❑ Rent
   - ❑ Own

7. How many employees does your business have? ***[Locally and Nationwide]***
   1. _____

8. How would you best describe your business type or classification?
   1. Retail Trade
   2. Accommodation and Food Service
   3. Finance, Insurance, Real Estate
   4. Health Care
   5. Agriculture
   6. Manufacturing
   7. Construction
   8. Educational Services
   9. Entertainment and Recreation
   10. Government
   11. Record other [_____]

9. How interested would you be in attending a focus group, with other businesses, to talk about challenges to pursuing energy efficiency, and the types of financing that would help your company make efficiency improvements to reduce its energy bills?
   - ❑ Very interested **[Continue]**
   - ❑ Somewhat interested **[Continue]**
   - ❑ Not too interested **[Thank and terminate]**
   - ❑ Not at all/Don't know **[Thank and terminate]**

10. **[RECORD GENDER – Recruit mix as it falls]**
    - ❑ Male
    - ❑ Female

[Continue if they are a candidate] Invitation: I would like to invite you to participate in this discussion on January ***[TBD]*** in **[Irvine/Fresno/San Francisco]**. We are offering a **[$200/$250 *(for more distant participants in Irvine)*]** incentive to those who can join us for the 90-minute discussion, as well as refreshments. Does this sound like something you could participate in?

- ❑ No -> Thank you for your time. **[End call]**
- ❑ Yes -> Thank you. The California Public Utilities Commission greatly appreciates your input. As mentioned earlier, the focus group will be no longer than 90 minutes and held at **[INSERT FACILIY AND DIRECTIONS]**. Will **[INSERT APPROPRATE GROUP TIME]** work for you?

Groups	Fresno	San Francisco	Irvine
Large /Medium & Complex Decision Making	NA	6PM	8PM
Small & Singular Decision Making	6PM; 8PM	8PM	6PM

- ❑ No -> Thank you for your time. **[End call]**
- ❑ Yes -> Thank you. May I ask your e-mail address or preferred phone number so I can send a reminder to you when we get closer to the actual date?

RECORD ALL INFORMATION ON COVER SHEET

Contact Name:

Business Name:

Organizational Title:

Preferred Telephone number:

E-mail:

Date contacted:

Business type:

Number of Local Employees:

Number of National Employees:

Rent/Own:

Gender:

Please contact me if you have any questions prior to the focus group at **[INSERT FACILITY NUMBER AND CONTACT NAME]**. Thank you again for you time and we look forward to getting your feedback on the program.

[Provide directions and details about parking, which will be paid for, in the confirmation message.]

Focus Group Discussion Guide

Warm up (5 min)

Thanks for coming today! We're glad you're here, and we really appreciate your taking the time to share your ideas with us.

- Please turn off any cell phones if you haven't already.
- Bathrooms are located…[give directions]
- We're here to learn about your opinions, so please remember there are no right or wrong answers.
- Our discussion will take about 90 minutes. As you may remember from the invitation call, we'll be talking about what challenges your business has faced when pursuing energy-efficiency improvements, and whether being able to finance those improvements would help. You all have been asked here because you each have individual experiences. We want to hear from everyone about those experiences and to gather your opinions and advice. We want to hear your opinions, no matter how much you feel you know or don't know about the topics we discuss.
- We'll be recording the session today, but this is for our research purposes only. Your name will not be attached to any quotes we use in our reports.
- This room has a two-way mirror and some of our clients observing this group.
- Any questions before we begin?

Introduction (10 min)

1. As we go around the table, please introduce yourself and tell us the type of business you're in and your position/title at your business. Please also read (1) what you wrote as the two biggest barriers to pursuing energy-efficiency projects and (2) what benefits you are looking for when pursuing energy-efficiency projects, while I list them on these flip charts.
    a. *Benefit probes:*
        i. *Better equipment performance (i.e., brighter lights or more comfortable temperature)*
        ii. *Return on investment (probe: how long)*
        iii. *An increase in the value of the building*
        iv. *Reduced maintenance*
        v. *Making the building more energy efficient*
        vi. *Good for environment/right thing to do*
        vii. *A rebate program is available to help reduce the costs for this type of improvement*
        viii. *Availability of up-front financing with competitive terms*
    b. *Barrier probes:*
        i. *Lack of up-front capital*

ii. *Lack of low cost financing*
iii. *Budget constraints*
iv. *Potential debt concerns (aversion or limit)*
v. *Time*
vi. *Identifying trustworthy contractors*
vii. *ROI, i.e., project performance concerns*
viii. *Technical assistance*
ix. *May need to move soon*
x. *Finding a trustworthy contractor*
xi. *Split incentives (when tenant pays energy bills, owners have no incentive to make improvements. Tenants don't make investments in property they don't own.)*

2. Before we continue, can I get a show of hands for those who own their facility? And how about those who rent?

Energy-Efficiency Actions and Barriers (10 min)

3. All of you are here today because your business received either an on-site or online energy audit in the last two years. How many of you recall this audit?

4. How important do you think energy efficiency is to your businesses? *[Probe: why do you think this?]*

5. How many of you have completed any of the recommendations from the audit? *[Ask for a show of hands and note number]*

6. For those of you who have been able to make the recommended energy-efficiency improvements, what have you done?

    a. Were there any recommendations that you did not pursue? Why weren't you interested in those recommendations?

    b. Why did you complete those improvements instead of others that were recommended? *[Probe: energy savings, less financial investment, easy to do/took only little time, could do it myself/with staff i.e., not hire out, etc.]*

Financial Decision Making (20 min)

Now I'd like you to tell me how financial decisions to invest in capital improvements for your business are made.

7. What in your opinion drives the decision to invest your company's capital in any project these days? In efficiency projects?

8. Let's focus on energy-efficiency comprehensive improvements *(explain "comprehensive" as needed)*. How are these decisions made?

    a. Who makes the final decision?

    b. Is there a schedule or cycle for making these types of decisions?

c. What kinds of improvements would you include in this category?

9. How likely do you think your business is to use its capital for comprehensive energy-efficiency projects – that is, projects that save energy through a variety of improvements, such as a more efficient HVAC, lighting, insulation etc.?

10. How many of you have **used** or **considered** financing for an energy-efficiency project? *[Have them raise their hands for each and note number]*

    a. When might you consider doing this? When would this make the most sense for your company?

11. If you were to look into financing, how easy do you think it will be to secure financing for an energy-efficiency project?

    a. *[If difficult]* Please tell me what the challenges have been and if/ how you have been able to overcome them.

Financing Options (35 min)

Now let's talk more about loans for energy-efficiency improvements.

12. Does anyone know what typical interest rate you would be charged on an unsecured loan up to $100,000? Would you find that rate attractive for financing an energy-efficiency project? Why or why not?

13. If you were paying the up-front cost for an energy-efficiency project (without financing), what sort of payback period would you require?

14. *[Hand out comparison (see* Table B - 2*) and go through on-bill financing, tariffs, and then compare]*. Now I want to discuss two ways financing opportunities.

    a. *Key points for on-bill financing*:

        i. Suppose you could finance a project and the estimated energy cost savings would cover the loan payments. For example, if the finance payments were $100 per month, the average energy savings would also be $100 per month. Would you find this appealing? Would this enable you to do a project with a longer payback period? Why or why not?

        ii. Another feature of on-bill financing is that the cost of an energy-efficiency project is repaid as a line item on the utility bill instead of as a separate bill. Is this attractive?

    b. *Key points for tariff*:

        i. Instead of issuing a loan, which is a debt tied to the customer, the utility could issue a "tariff" or monthly charge, which is tied to the meter at the facility and is not a loan. The tariff stays in effect until the cost of the project has been covered. When the property is sold the tariff can automatically transfer to the new owner. Is this attractive?

ii. *[For building owners]* Would you be comfortable selling a building you own that has such as a tariff?

iii. *[For all]* Would you be comfortable moving into/buying a building with a tariff?

c. What are the advantages and disadvantages to having project costs financed as a recurring expense (non-debt; tariff) rather than a loan (debt; on-bill financing)?

Table B - 2. Comparison of Tariff and Loan Concepts

Feature	TARIFF (Surcharge on the bill)	LOAN (Installment on the bill)
Pays for the up-front costs of energy improvements, no money out of your pocket	Yes	Yes
Monthly energy cost savings equal or exceed the monthly finance payment	Yes	Yes
The repayment obligation is tied to the:	Utility Meter	Customer
Customer is obligated to:	Pay tariff only as long as the customer is billed for that meter	Pay off the full amount of the loan
If the current customer moves:	The tariff and energy savings transfer to the new customer (unless the current customer agrees to pay off the tariff)	No transfer; loan must be paid off by current customer
Expense or Debt?	Expense, not debt	Debt

15. Now I'm going to read two options for loan would be repayment, and then I'd like to discuss which of these seems right for your business:

    a. Your loan payments are covered by the bill savings from the efficient equipment so you see no net increase in your bill.

    b. Your loan payments are larger than your savings so your bill is larger but you pay the loan off more quickly.

16. If low-interest financing were available for energy-efficiency projects, how interested do you think your business and other similar business would be in taking advantage of this opportunity assuming the monthly bill savings were greater than the monthly loan payment? Why do you say that?

Most people think loans come from banks, but utilities can also provide financing for energy-efficiency projects.

17. In your opinion, does it matter if it is a utility or a bank that provides the loan capital for your project? Why? *[If needed, add: assume the terms and conditions of the financing were the same.]*

18. How would you like to hear about financing for energy-efficiency projects – from your electric or gas utility, lender, or vendor (e.g., equipment supplier or contractor)? *[Probe why]*

19. *[Hand out exercise* (Table B - 3)*]* I'm going to ask you to complete this exercise while I step out of the room for a moment and check in with the observers. Please indicate how important the features on this sheet are when evaluating a financing offer for energy-efficiency projects. [*Moderator explains each feature before leaving*]. Note why you gave each feature the level of importance that you did. When I get back, we will discuss your thoughts.

Table B - 3. Exercise Ranking Importance of Features of a Financing Offering

Features of a financing offer	How important? (circle one)	Reason for rating
Interest Rate[2]	low / medium / high / it depends	
Bill Neutrality[3] (monthly cost savings and monthly payment/surcharge cancel out)	low / medium / high / it depends	
Repayment Period[4]	low / medium / high / it depends	
On-bill repayment (one bill)[5]	low / medium / high / it depends	
Utility vs. Lender as Capital Provider / Loan Servicer[6]	low / medium / high / it depends	
Loan vs. Tariff[7]	low / medium / high / it depends	
Availability of 15% Equipment Rebates along with Financing[8]	low / medium / high / it depends	

20. What concerns, if any, do you have about using financing for an energy-efficiency project? *(Probe as needed the following points, moderator will not read)* Does anyone have any ideas about how these concerns could be addressed?

    a. *Reluctance to take on additional debt for non-core activities*
    b. *Eligibility/Credit score*
    c. *Loan requirements i.e., term limits, loan amount, payment schedule*
    d. *Performance risk i.e., not realizing estimated savings*
    e. *Bill clarity*
    f. *Having to move before project costs recouped*
    g. *Other*

Utility Assistance (10 min)

21. Are you aware that your utility offers technical assistance (e.g., audits, estimating energy savings), cash rebates for equipment, and up-front financing to help you implement efficiency projects?

[2] Annual percentage rate (APR)

[3] Energy cost savings equal to or better than monthly payment/surcharge

[4] Time period over which the loan or equipment costs are paid off

[5] Mechanism where loan payment or surcharges are paid through energy bill

[6] More entities involved if lender is capital provider

[7] Loan is tied to the customer whereas the tariff ties repayment to the meter

[8] Equipment rebates are cash incentives from the utility to purchase efficient equipment. This does not have to be paid back and helps to offset the cost premium associated with more efficient equipment.

a. How important are each of these in helping you to pursue energy-efficiency improvements? [*Probe for most important and specifics, such as what kind of technical assistance*]

b. What else could your utility do to help you implement more comprehensive energy-efficiency projects at your facility?

Wrap Up (5 min)

Now just a few wrap-up questions.

22. What is the most effective way of reaching businesses like yours with information about utility efficiency programs?

23. One last question before you go. Based on today's discussion, what is your best piece of advice for how financing could help companies like yours invest in energy-efficiency projects?

Thank you for sharing your opinions and taking the time to participate. Your input is greatly appreciated. And don't forget to pick up your incentive on your way out.

APPENDIX C. PARTICIPANT SURVEY RESULTS

Introduction

The participant survey results presented in this appendix are used to support the findings and conclusions in the main body of the report, and have not been combined with research from other tasks.

Methodology

We conducted telephone surveys with customers from each IOU (SDG&E, SoCalGas, SCE, and PG&E) who had closed OBF loans. We obtained 76 completes out of a sample frame of 413 unique participants, and achieved an overall confidence/precision better than 90/10. We made up to six calls back to each participant in the sample frame in order to minimize non-response bias. We surveyed at least one respondent from each IOU and from each customer segment (Table C - 1). The number of completed surveys is proportional to the size of the participant sample frame; because SDG&E has the longest running OBF program, the largest proportion of the sample frame and resulting completes are from SDG&E customers. We conducted our analysis of these results over the entire sample, because sub-segments yield unreliable results due to small sample size.

Table C - 1. Completed Participant Surveys

IOU	Large CIA	Small CIA	G&I	Total	%
PG&E	0	1	0	1	1%
SCE	3	9	0	12	16%
SoCalGas	0	4	0	4	5%
SDG&E	7	50	2	59	78%
Total	**10**	**64**	**2**	**76**	**100%**
%	**13%**	**84%**	**3%**	**100%**	

Organization of Findings

The findings include the following topic areas:

- Customer Firmographics
- Sources of Information about OBF
- Type of Equipment Financed
- Customers' Decision Making
- Preference for Rebates vs. Loans
- Loan Repayment Experience
- Preference for Bank or Utility Capital
- Application Process Experience
- Experiences with Vendor

- Project Costs Covered by OBF
- Influence of OBF on Participants' Willingness to Pursue Energy-Efficiency Projects

For each topic area, we describe the research questions being investigated, present a summary of the results, and provide any relevant quotes to illustrate the findings.

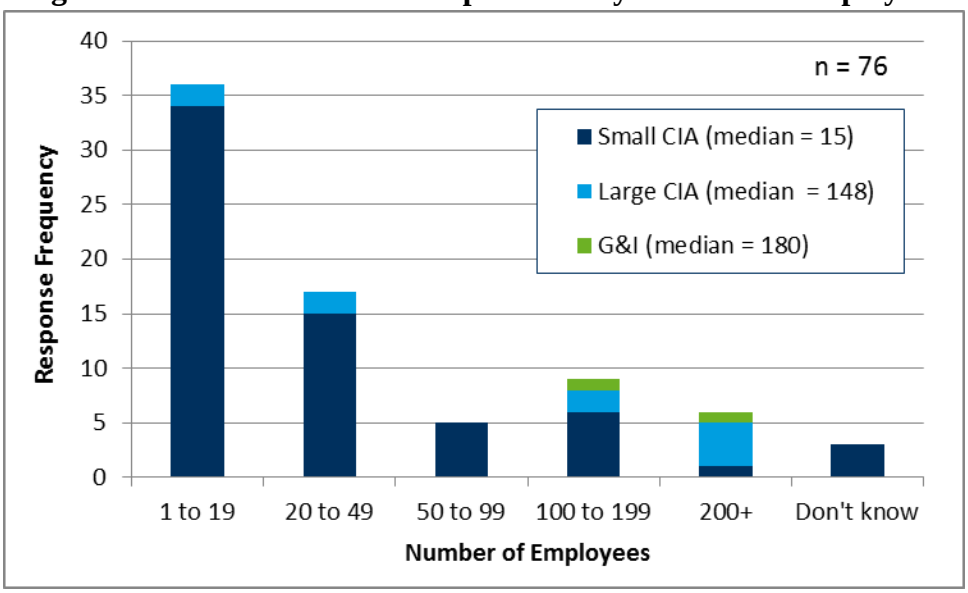
In addition, there are two sections near the end of this appendix that describes analysis built on multiple research questions. The first of these sections analyzes participant likelihood for completing an energy-efficiency project if OBF were not available, and the second section describes customers' willingness to pay for their energy-efficiency project at various interest rates.

Main Findings

Customer Firmographics

Cadmus asked respondents approximately how many people are employed full time at their facility. The results shown in Figure C - 1 are broken out by small CIA, large CIA, and G&I customers. Our segmentation scheme uses 200 kW as the cut-off limit between large and small commercial customers, while G&I companies are those who are taxpayer funded. Figure C - 1 shows the median organization size in parenthesis.

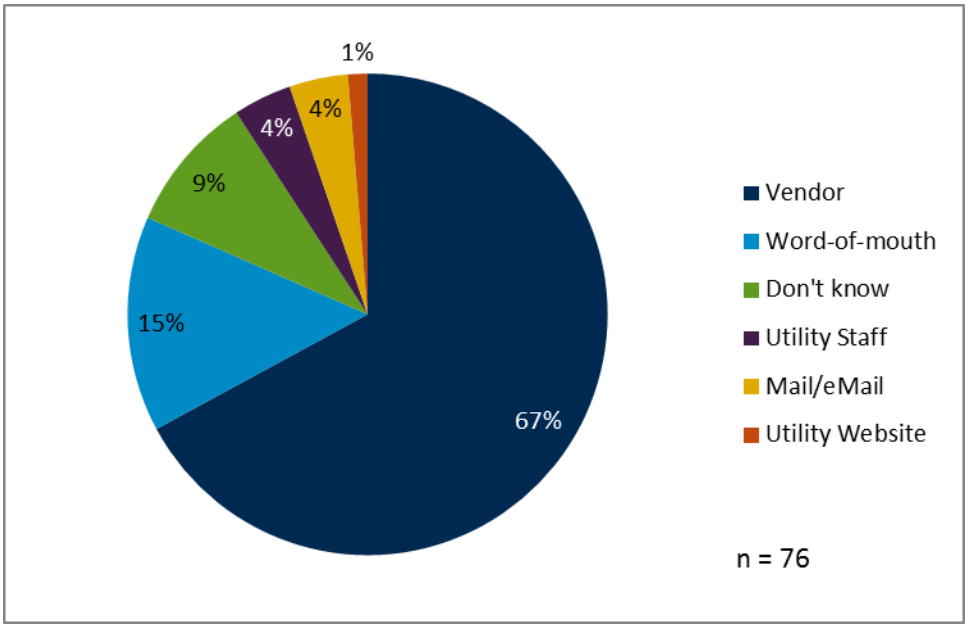
Figure C - 1. Distribution of Respondents by Number of Employees



Sources of Information about OBF

As shown in Figure C - 2, two-thirds of respondents indicated they initially learned about OBF through their vendor.

Figure C - 2. How Customers Learned about OBF



We then asked respondents what the best way is to promote OBF to businesses like theirs. Respondents recommended various outreach venues, most frequently mentioning going door-to-door as the most effective means for outreach (Table C - 2).

Table C - 2. How Best to Increase Awareness of OBF

Recommendation	Percent of Respondents
Door to Door	30%
Vendor	*20%*
Unspecified	*5%*
Utility	*5%*
Utility Email/Mail/Phone Call	22%
With the Bill (Insert or On-Bill)	8%
Flyers/Newspaper/Utility Website/Radio/TV	8%
Word of Mouth	7%
Trade Associations	4%
Wants List of Approved Vendors	3%
Other	12%
Don't Know	16%
*Total percent exceeds 100% due to multiple responses	N = 76

A few respondents who mentioned going door-to-door specified a preference for utility staff members to conduct this outreach because they do not fully trust vendors. Two customers

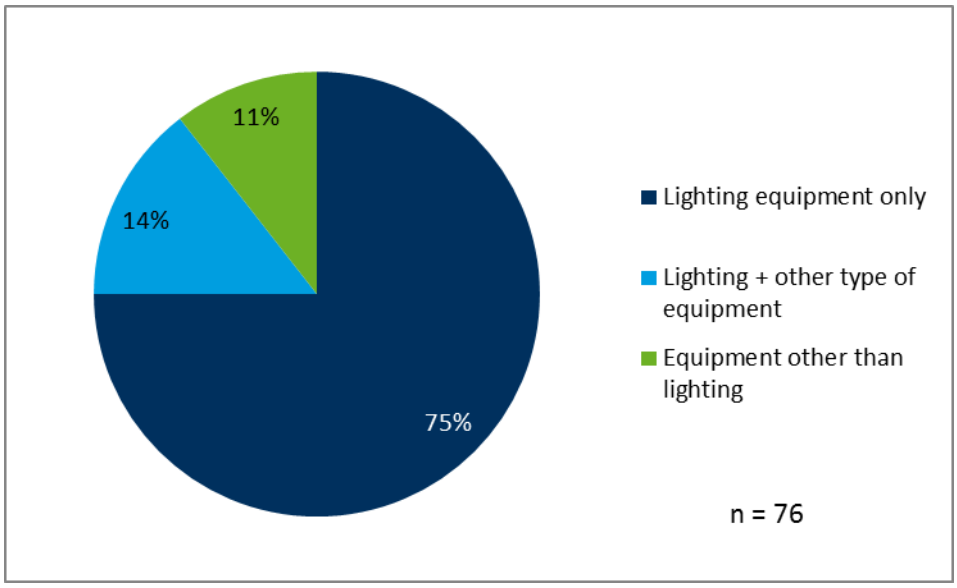
wanted to have a list of approved vendors, while another would like a list of vendors to avoid. As one customer said, "*insert in the bill [a] list of participating vendors. More confidence [that way and] not just people coming in and asking you to sign things*."

A few customers said outreach is best with the bill (or on the bill) "*because everyone looks at that."* But customers also cautioned that the best method depends on the size of the business, since accounts payable staff who look at the bills for larger organizations do not make decisions about efficiency projects.

Comprehensiveness of Equipment Financed

Most (75%) survey respondents installed and financed only lighting equipment (Figure C - 3). We then asked respondents who installed only lighting equipment if they considered or were offered other types of equipment at the time they participated in OBF; only 12% (7 out of 57 customers who installed only lighting equipment) responded in the affirmative. Customers who considered but did not install non-lighting equipment (e.g., AC, refrigeration, solar, induction units, fans) said either they did not need the non-lighting equipment, or the non-lighting equipment offered did not make financial sense: "*there has to be ROI."* One customer also commented "*everything is up to code.*"

Figure C - 3. Types of Equipment Financed



Customers' Decision Making

Customers indicated that upper management or the company owners were most often involved in decisions about efficiency projects (Table C - 3). A little over 10% said that a second decision maker was also involved.

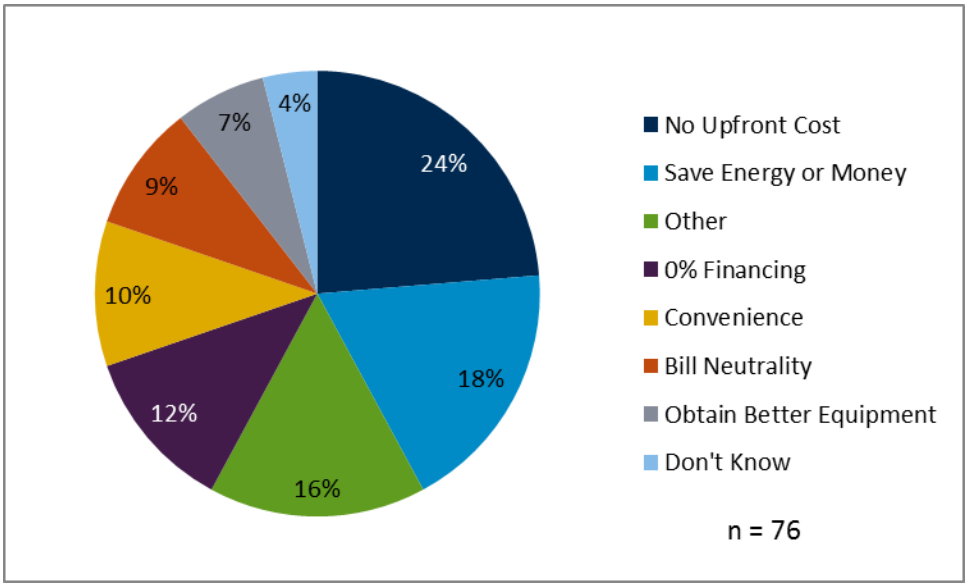
Table C - 3. Energy-Efficiency Project Decision Makers

Decision Maker	Response Frequency
Upper Management	38
Owner	38
Engineering	3
Facility Manager	2
Board or Council	3
Don't Know	1

Note: This table does not sum to 100% because some respondents supplied multiple responses.

One-quarter of respondents indicated that the main reason they used OBF is because it enabled them to upgrade without up-front costs (Figure C - 4). Some participants who wanted to avoid up-front costs noted they could not afford to pay for their project without OBF, while others said OBF helped them to better manage their cash flow.

Figure C - 4. Main Reason for Using OBF



Respondents also mentioned that bill neutrality, the 0% interest rate, and convenience as their main reason for using OBF.

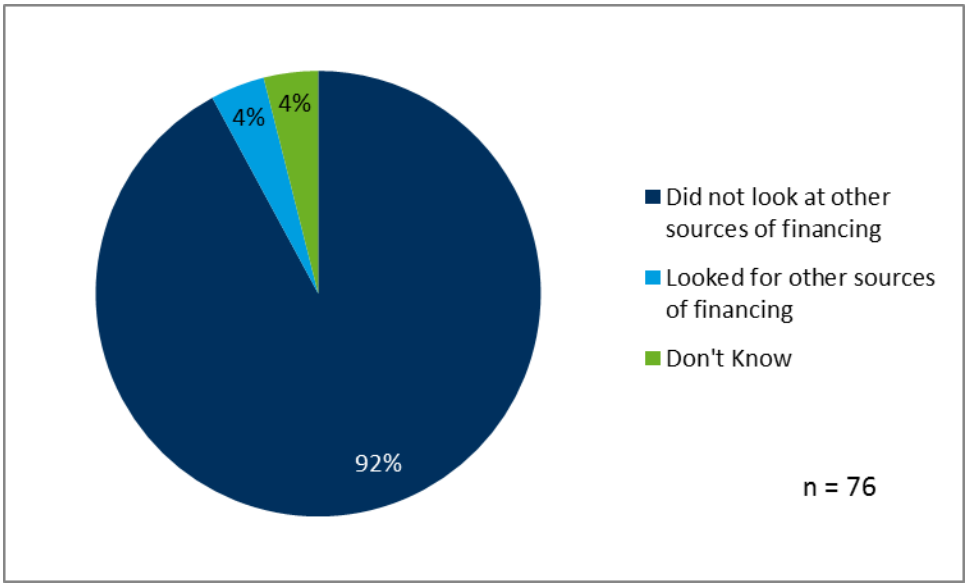
- *"We would be saving energy and that savings would pay for [the] upgrade."*
- *"It was basically free money."*
- *"It was convenient."*

Customers also provided general comments about OBF being an attractive offering, saying it was a "*financially good proposition.*" Only one small CIA customer mentioned it was "*virtually impossible to get a loan.*"

Cadmus also asked participants if they considered other sources of financing besides OBF. Figure C - 5 shows that 4% of customers reported looking into other options. Of those three

respondents, one G&I customer mentioned a loan from the California Energy Commission, one small CIA customer had financing available from a capital finance company, and another small CIA customer did not specify a funding source. These customers chose OBF because it offered the best interest rate, it had no fees, and they could pay for the loan on their utility bills.

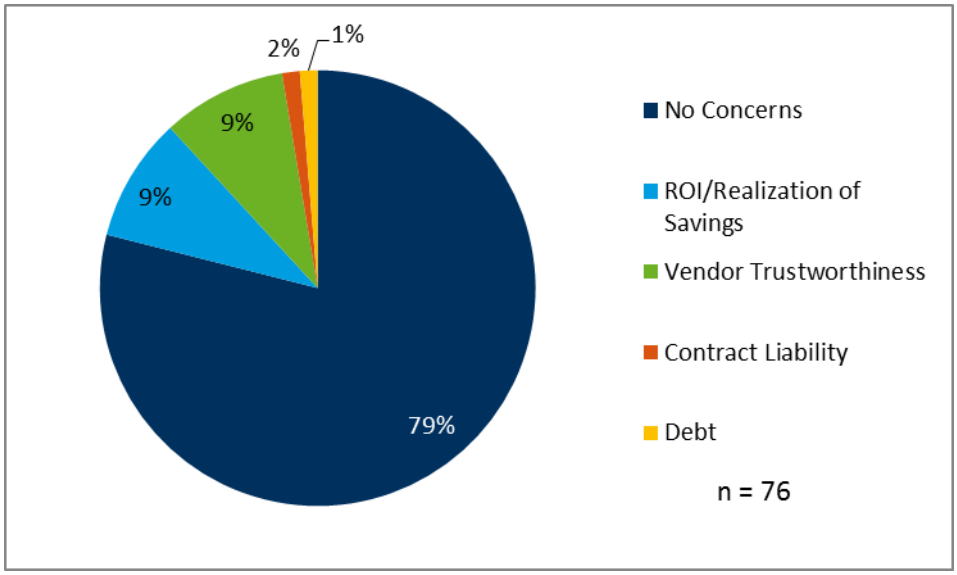
Figure C - 5. Customers Who Looked at Other Financing Options



Seventy-nine percent of respondents did not have any concerns about using OBF (Figure C - 6). Participants who did have concerns mentioned being worried about realizing cost savings or felt that vendors were not trustworthy.

- *"I did the [project] before half the property got leased out, and the lessee does not use 99% of lighting, and as long as they don't turn on I don't save a nickel."*
- *"Energy costs are not fixed, so we are saving electricity but were concerned we were not going to save money or ROI on lighting and AC."*
- *"The [vendors] involved, most of them used a reverse: [they] figured out how much money they could get from the utility and they bid the projects [at] that [amount], and they are all running that same scam. The problem you have is [that] in reality, everybody is getting reamed. It was ridiculous; one bid dropped from $50,000 to $20,000 after I declined and they ran the calculation again."*
- *"If I would agree to [OBF] it would be great, but I didn't agree to it. I was cheated. They come to you very quick, [saying] 'just sign here and we change your lights,' and it [the paperwork] was not clear at all. Later they say 'You signed. Why didn't you read it?'"*
- *"I never got the document and they used a false signature. They tricked the manager into signing the paper, and I was tricked out of $14,000 to save energy."*

Figure C - 6. Customer Concerns about OBF



Cadmus also asked customers their opinion on the loan repayment period and loan size. Figure C - 7 shows that 83% of customers were satisfied or not concerned with the repayment period. Customers who wanted a shorter repayment period said it should be under three years. One customer who wanted a longer repayment period said that the "*payment is too much, [I would like] two or three more years [to pay it off].*" One customer stated that there was not much that could be done about the repayment period, *"seeing as how it is based on estimated savings, you're pretty much stuck."*

Figure C - 7. Satisfaction with Loan Repayment Period

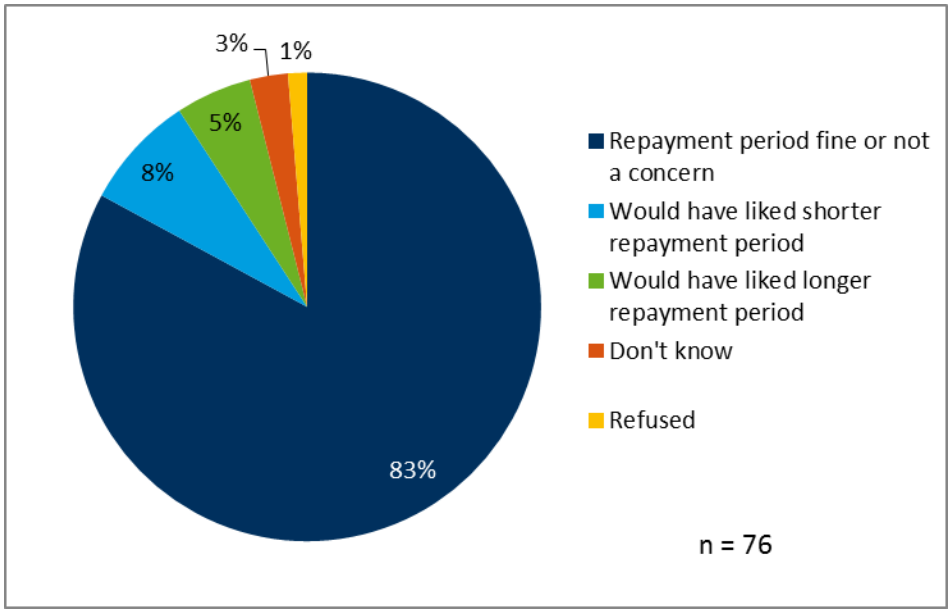
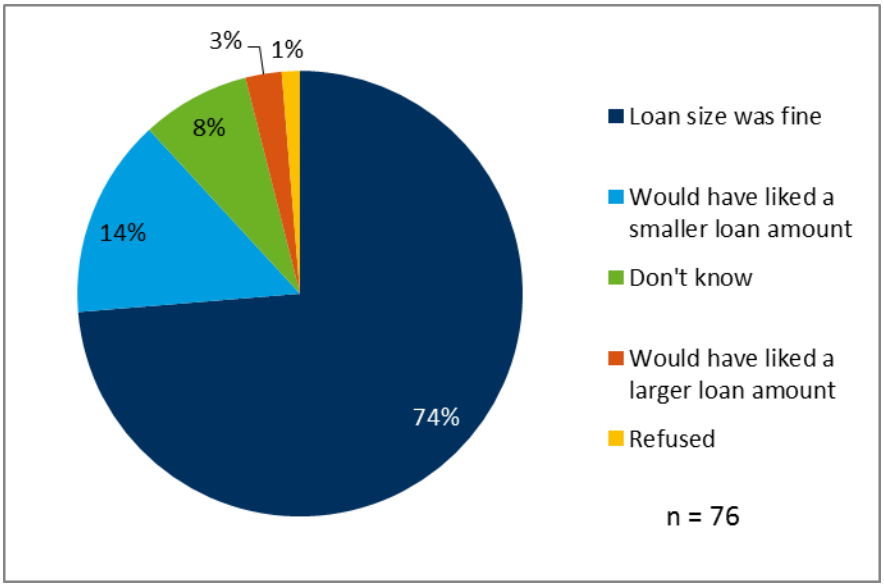


Figure C - 8 shows that 74% of customers were satisfied with the size of loan available through OBF. Cadmus reviewed the loan sizes for customers who wanted a smaller or larger loan amount, and found that the OBF loan limits appear to be adequate for all respondents. Most participants who wanted a smaller loan amount said that because they wanted a lower project cost, as opposed to wanting a loan for less than $5,000. The two respondents who wanted a larger loan amount had loans between $10,000 and $20,000; indicating that they did not run into loan cap limitations, but that the loan amount may have been limited by the bill neutrality requirement.

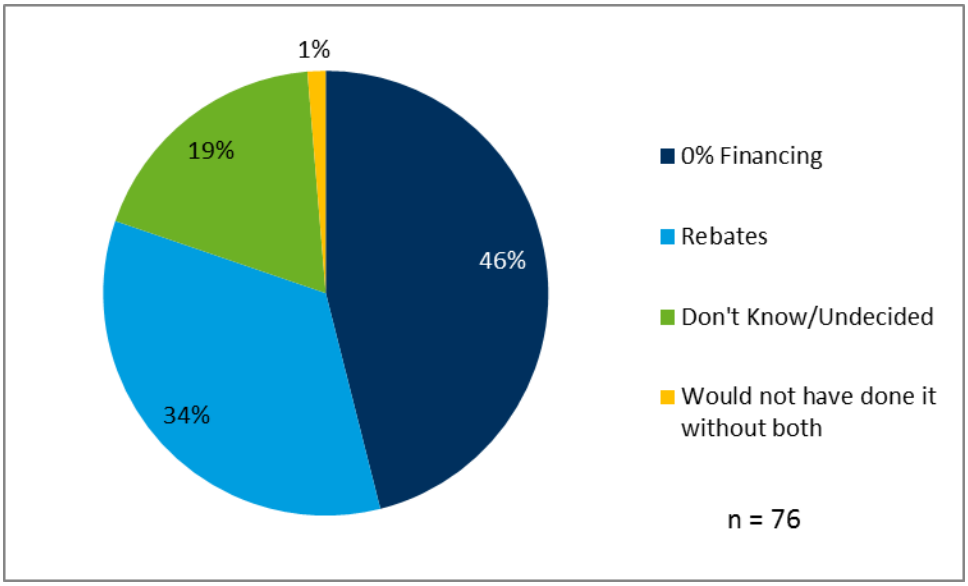
Figure C - 8. Satisfaction with Size of Available OBF Loan



Preference for Rebates vs. Loans

We asked a series of questions about how customers would have reacted in a couple of hypothetical situations. First, we asked participants their preference had they been forced to choose between 0% financing or rebates/incentives. Figure C - 9 shows that 46% of customers preferred 0% financing over rebates, while 34% of customers preferred the opposite. One respondent refused to answer, saying they would not have done the project without both 0% financing and the rebates. Respondents who answered "don't know" said it would depend on the size of rebates or whichever was a greater value.

Figure C - 9. Preference for 0% Financing vs. Rebates



Participants who preferred 0% financing said that even with rebates, they still would have had out-of-pocket costs, which was a problem for some customers who said they did not have cash when they completed the project.

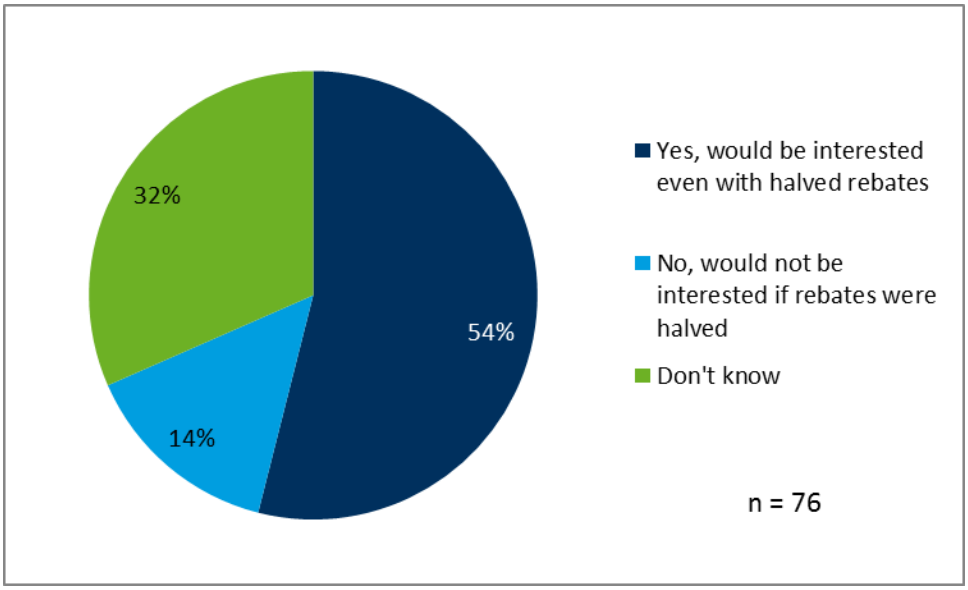
- *"We are in a recession, so the fact of the matter is that even if we had a rebate for the cost of the bulbs, we still would have had to come up with the cash."*
- *"If it was a bigger project we would have taken a loan."*
- *"[The 0% financing made it] instant and no change to cash flow."*

Participants who preferred rebates were the most concerned about the total cost of the project, rather than about coming up with the cash to pay for it. Some of these customers indicated they had the ability to pay for the project with cash.

- *"Bigger percent of [the] cost [is] covered by rebate."*
- *"If we can buy it for less and we can afford to pay, that is the way go."*

We then asked customers how they would feel about using OBF if the rebates were halved, but the interest rate remained at 0%. More than half still would have used OBF (Figure C - 10). A significant number of respondents (32%) were unsure whether they would still use OBF, and 14% would not have been interested in OBF if the rebates were reduced by half.

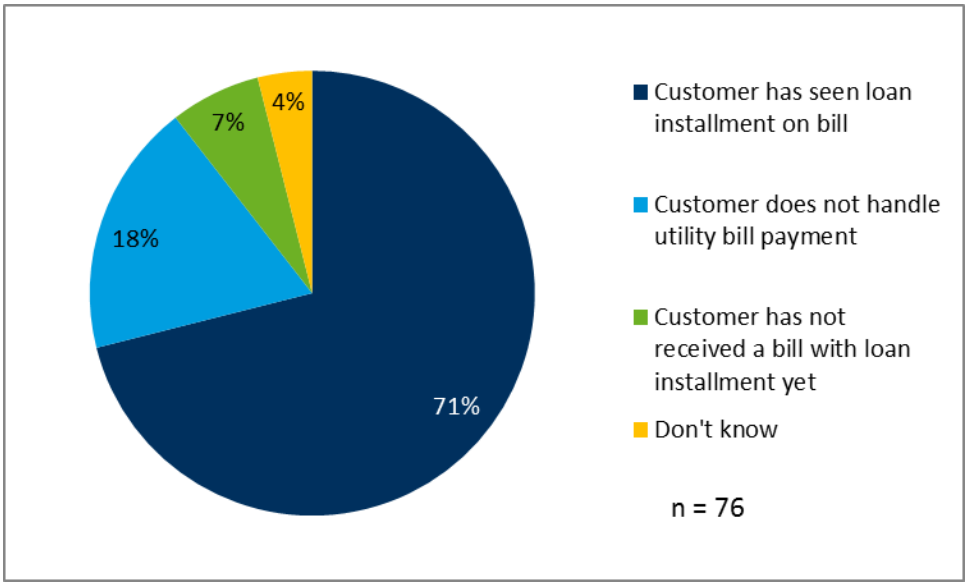
Figure C - 10. Willingness to Use OBF if Rebates were Halved



Loan Repayment Experience

Cadmus asked customers if they had seen a utility bill with their loan installment included; 71% had (Figure C - 11). Eighteen percent of respondents were not responsible for the bill payment (so had not seen it), and 7% had not received a bill with the loan installment included at the time of the survey; these customers were not asked to comment on the repayment experience.

Figure C - 11. Percentage of Customers Who Saw On-Bill Loan Installment



We asked respondents who had seen a bill with the OBF loan installment whether they had any difficulty with repayment through the utility bill. Table C - 4 shows that 85% of customers did not have any difficulty repaying the loan through their bill. Of customers who had difficulty, none said they had trouble with the repayment process; they had difficulty with the installment

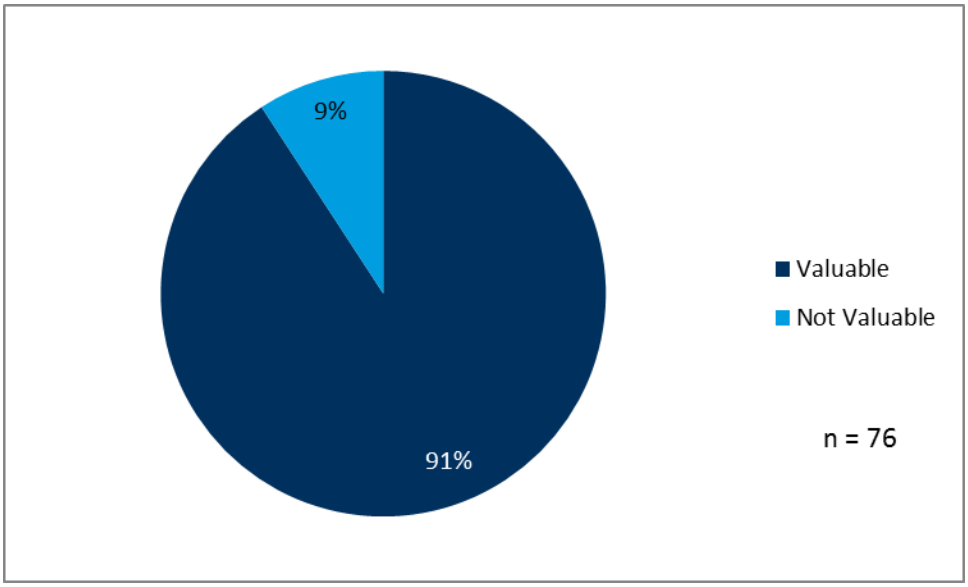
amount. Seven small CIA and one large CIA customer said they thought the bill was too high, either because a rate increase coincided with the beginning of the loan or because the vendor had charged them too much for the project. One customer said, the vendor charged "*$14,000 for a project I could do for $4,000*." Another customer said their vendor lied: "*[They] said I was going to save $200, but it was only like $120 saved.[It cost me] $11,000 for a $3,000 job.*"

Table C - 4. Whether Customers had Difficulty with Repayment Through Utility Bill

Customer Response	PG&E	SCE	SoCalGas	SDG&E	Total	Percent
No Difficulties	1	4	3	38	46	85%
Had Difficulties	0	2	0	6	8	15%
Total	**1**	**6**	**3**	**44**	**54**	**100%**

Next, we asked all survey respondents if they thought being able to repay the loan on the utility bill was a valuable feature; 91% said yes (Figure C - 12). Nine percent of respondents (who are small CIA customers) did not think it was a valuable feature.

Figure C - 12. Whether Customers Thought Repayment on the Bill was a Valuable Feature



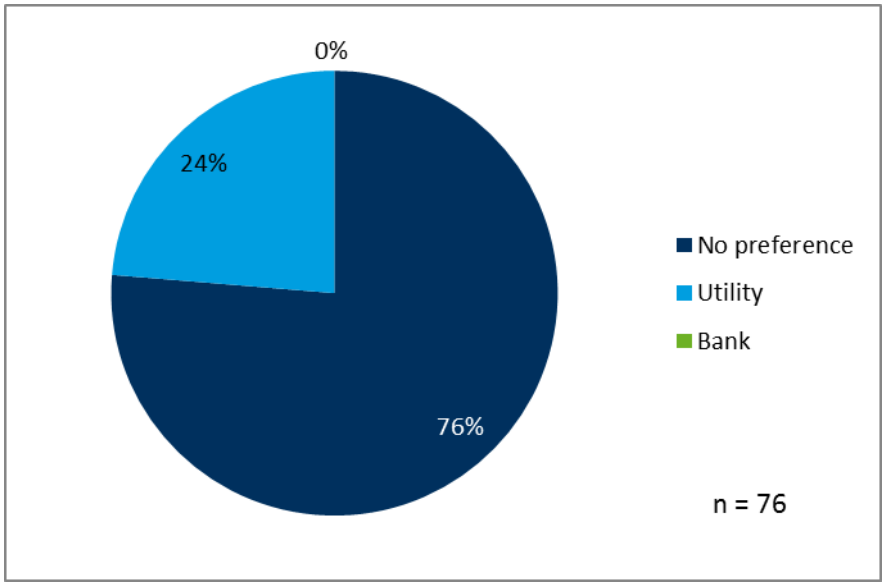
Preference for Bank or Utility Capital

Currently, the money for OBF loans comes from the utility, not from a traditional lender such as a bank. The CPUC is contemplating the use of third-party capital to increase the amount of funds available to finance energy efficiency. Thus, Cadmus asked customers, assuming the loan installments remained on the utility bill, if they would prefer that the loan money came from their utility or from a bank. Figure C - 13 shows that 76% of survey respondents do not have a preference as long as they can still pay the loan on their utility bill and the terms are the same. The remaining respondents prefer the utility (24%), in order to keep the process simple and avoid going through the application process with a bank. A few respondents also said it was better to work with the utility because they are uneasy trusting vendors or because they prefer to avoid banks. No respondents reported a preference for banks as the capital provider.

Customers preferring their utility gave the following comments:

- *"The problem here is the contractor who comes, we don't know who is [a] good guy or bad guy. But [when] we hear they are from [the utility], we know we can trust [them]."*
- *"[It's] nice to keep less people involved."*
- *"Why go through application process with a bank?"*
- *"My company doesn't like to take money from a bank."*
- *"With the way banks run now, they are so stupid."*
- *"I don't want to pay bank interest."*

Figure C - 13. Capital Provider Preference: Utility or Bank



Application Process Experience

Table C - 5 shows that 86% of survey respondents did not have any difficulties with the application process. Of the 11 respondents (four large CIA and seven small CIA customers) who reported difficulty with the application process, the most common complaint was that the approval process took too long. A few customers indicated that they had difficulties filling out the application or were distrustful of the vendor.

Table C - 5. Customers Experience with Application

Customer Response	PG&E	SCE	SoCalGas	SDG&E	Total	Percent
No difficulties	1	10	3	51	65	86%
Reported difficulties	0	2	1	8	11	14%
Total	**1**	**12**	**4**	**59**	**76**	**100%**

We asked all the survey respondents if there was anything that could have been done to improve the application process; 80% said the application process worked well and offered no recommendations. The recommendations provided by the remaining 20% of customers are summarized in Table C - 6.

Table C - 6. Recommendations for Improving Application Processing

Recommendation	Counts
Process paperwork faster	5
Have better vendor standards	3
Other support	3
Utility should work directly with customers	2
Have somebody fill out applications for customers	2

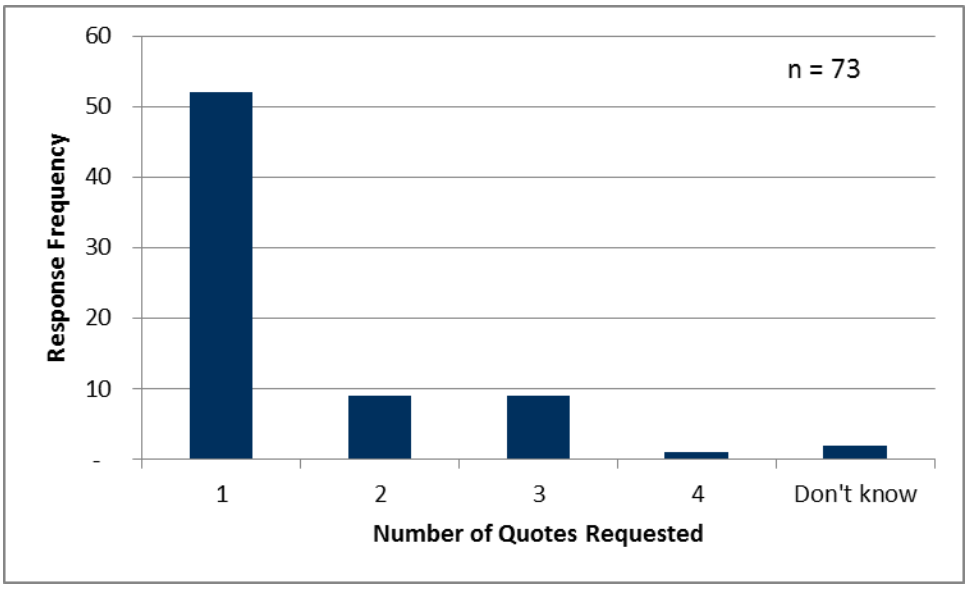
Aside from quicker processing, multiple customers recommended that their utility either work directly with the customers (reduce vendor involvement), or improve the education of vendors. One customer recounted that their vendor held up the process because some of the equipment was on back order.

Suggestions in the "other support" category were that respondents would have appreciated a better explanation of their new bill, or information on how to properly fill out the application forms.

Experiences with Vendor

Seventy-three out of 76 customers reported using a vendor for their energy-efficiency project. We asked these customers how many bids they requested and whether they had any difficulties working with their vendor. Figure C - 14 shows the number of quotes each survey respondent requested from their vendor; the majority of customers only had to request a single quote (including the one respondent from PG&E). A few customers, crossing multiple segments and utilities, had to request multiple quotes.

Figure C - 14. Number of Quotes Requested from Vendor



Of those customers who used a vendor, 86% reported having a good experience with their vendor (Table C - 7). The other 14% had issues with the work quality and reliability of their vendor, saying the vendors did a bad job and gave them "*the run around*" when they called the vendors to fix a problem. "*The guy came and installed the lights, and the [utility] engineer came in and found they did a bad job: they did not install properly and they damaged the door. I contacted them and still nothing happened, they don't pick up the phone.*"

Table C - 7. Customers' Experience Working with Vendors

Response	PG&E	SCE	SoCalGas	SDG&E	Total	Percent
Did not have difficulties	1	9	3	50	63	86%
Had difficulties	0	3	1	6	10	14%
Total	**1**	**12**	**4**	**56**	**73**	**100%**

We asked all the respondents if a utility-approved list of vendors would have made it easier for them to select a vendor; Table C - 8 shows that 61% of respondents would have found this helpful.

Table C - 8. Would Having a Utility-Approved Vendor List Make Vendor Selection Easier?

Response	PG&E	SCE	SoCalGas	SDG&E	Total	Percent
Would make selection easier	0	7	2	37	46	61%
Would not make selection easier	0	5	2	18	25	33%
Don't know	1	0	0	4	5	6%
Total	**1**	**12**	**4**	**59**	**76**	**100%**

Comments customers made to other survey questions also indicate that they would welcome a list of utility-approved vendors (and one customer had mentioned wanting a list of vendors to avoid).

Eight out of the 10 respondents who had issues with their vendor said that a utility-approved list of vendors would have made it easier for them to select a vendor (Table C - 9).

Table C - 9. Vendor Difficulties and Desirability of Utility-Approved Vendor List

Response	Utility vendor list would make selection easier	Did not think utility vendor list would make selection easier	Don't know	Total
No difficulty with vendor	36	24	3	63
Had difficulty with vendor	8	1	1	10
Total Customers Using a Vendor	**44**	**25**	**4**	**73**

Project Costs Covered by OBF

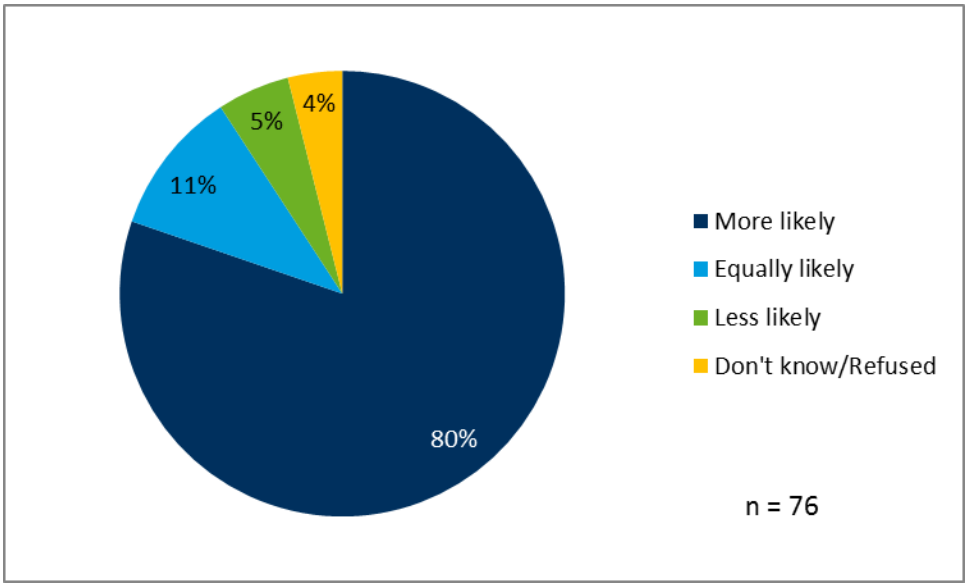
For 95% of respondents, OBF covered all their design, equipment, and installation costs. Four customers (two from SDG&E and two from SoCalGas) reported that OBF did not cover all their costs:

- *"[Some] wiring issues [were] not included."*
- *"Not labor or installation."*

Influence of OBF on Participants' Willingness to Pursue EE Projects

Eighty percent of customers said they are more likely to pursue energy efficiency in the future as a result of their experience with OBF (Figure C - 15). Customers who said they are less likely to pursue energy efficiency in the future had issues with their vendor.

Figure C - 15. Likelihood Customer will Pursue EE in Future



Likelihood Analysis

During the survey, we asked a series of questions to determine the likelihood that program participants would have considered or completed an energy-efficiency project if OBF had not been available.

The analysis allocates respondents into high, moderate, low, and no likelihood categories, based on their answers to the survey questions. Table C - 10 summarizes the results of that likelihood analysis, based off of five survey questions. The majority (77%) of customers were allocated as having low or no likelihood of proceeding with an energy-efficiency project without OBF.

Table C - 10. Likelihood Analysis Summary

Likelihood of Proceeding with EE Project	Large CIA	Small CIA	G&I	Total	
				Count	Percent
No Likelihood	7	46	2	55	72%
Low Likelihood	0	4	0	4	5%
Moderate Likelihood	2	6	0	8	11%
High Likelihood	1	8	0	9	12%
Total	**10**	**64**	**2**	**76**	**100%**

The results of the five questions used in the likelihood analysis are discussed next.

First, we asked customers if they still would have considered or conducted an energy-efficiency project if OBF were not available. Forty-eight respondents said they would not have accomplished the project without OBF (Table C - 11); these respondents were allocated to the "No Likelihood" category in Table C - 10.

Table C - 11. Action Customer Would have Taken if OBF were not Available

Response	Number	Percent
Would not have gone through with a project	48	63%
Still would have completed a project/or looked into doing a project	25	33%
Refused	1	1%
Don't know	2	3%
Total	**76**	**100%**

We asked additional questions of the 25 respondents who said they still would have done some type of project to further determine if they would have completed a project without OBF. We asked customers if they would have completed the project at the same time without OBF, or if the project would have been delayed. Fourteen respondents answered they would have delayed the project (Table C - 12) if OBF was not available. This response indicates a decreased likelihood that they would have completed a project without OBF. The eight respondents who answered they would have completed the project at the same time without OBF are considered to have a high likelihood of completing a project in the absence of OBF.

Table C - 12. Timing of Customers' Projects if OBF were not Available

Response	Number	Percent
Would have delayed the project	14	56%
Same time	8	32%
Don't know	3	12%
Total	**25**	**100%**

No respondents indicated that they would have installed equipment of a lower level of efficiency if OBF was not available (Table C - 13). Seventeen respondents said they would have installed equipment of at least the same level of efficiency without OBF.

Table C - 13. Equipment Level of Efficiency if OBF were not Available

Response	Count	Percent
Same efficiency level	16	64%
More efficient*	1	4%
Don't know	8	32%
Total	**25**	**100%**

* We recognize this does not make sense; we believe this customer must have misunderstood the question.

The availability or lack of OBF did not have a significant impact on the quantity of equipment customers intended to install (Table C - 14), with 19 out of 25 customers saying they would have installed the same quantity. Twenty-one respondents answered that they would have installed at least the same quantity of equipment without OBF, which indicates they were likely to have completed the project without OBF. Three respondents said they would have installed less equipment without OBF, which indicates they were less likely to have completed a project without OBF.

Table C - 14. Quantity of Equipment Installed without OBF

Response	Count	Percent
Same quantity	19	76%
More	2	8%
Less	3	12%
Don't know	1	4%
Total	**25**	**100%**

Eighteen respondents said they would have used available cash or company funds to pay for the energy-efficiency project if OBF had not been available, which indicates a higher likelihood they would have completed the project without OBF (Table C - 15).

Table C - 15. Method of Paying for Project without OBF

Response	Count	Percent
Would not have gone ahead with the project	1	4%
Would have leased the equipment	1	4%
With available cash or company funds	18	72%
Secured loan from a lender	1	4%
Don't know	4	16%
Total	**25**	**100%**

Table C - 16 shows that most respondents indicated that they would have used available cash to pay for the energy-efficiency project, regardless of whether they would have delayed the project or not.

Table C - 16. Crosstab of Customers who would have Delayed Project and Method of Payment without OBF

Would you have completed the project at the time that you did or would you have done it later?	If on-bill financing had not been available, how would you have paid for the energy-efficiency project you installed?					
	Available cash or company funds	Secured loan from a lender	Equipment lease	Would not have done the project	Don't know	Total
Would have delayed the project	10	1	0	1	2	14
Completed project at same time	7	0	1	0	0	8
Don't know	1	0	0	0	2	3
Total	**18**	**1**	**1**	**1**	**4**	**25**

Analysis of Customers' Willingness to Pay

Cadmus assessed customers' willingness to pay (WTP) using the contingent valuation method. In the telephone survey, we asked participants whether they would vote yes or no in a hypothetical referendum. We asked each respondent an independent set of double-bounded contingent valuation questions. Interviewers randomly asked respondents if they would have been willing to pay an annual percentage rate (APR) of 5%, 6%, or 7%. If the respondent answered yes to the starting APR, they were asked if they would have been willing to pay an amount 2% higher than the starting APR. Alternatively, if the respondent answered no to the starting APR, they were asked if they would have been willing to pay an amount 2% lower than the starting APR.

In estimating WTP, researchers have either used a linear or a logarithmic functional form. This refers to how the logit model is estimated. In a linear logit model, the explanatory variables enter the equation in the "raw" form, while in a logarithmic logit model, explanatory variables are first transformed to their natural logs and then enter the equation.

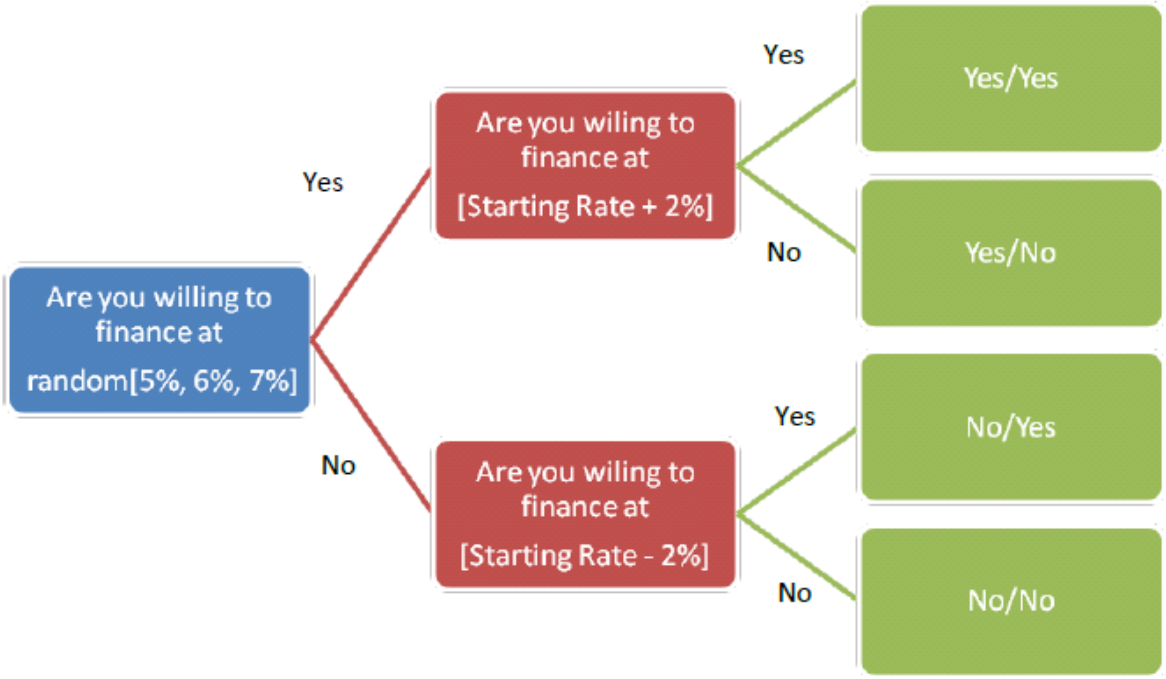
The linear logit is commonly used in literature. This type of model produces estimates of the mean and median that are considerably closer together than that produced by the logarithmic model. The linear model assumes symmetry in the distribution of respondents' WTP, while the logarithmic model assumes the distribution to be more asymmetrical (one long tail). Finally, the linear model corrections for data truncation (to ensure no negative WTP values are allowed) is very straightforward compared to how the logarithmic model makes this correction. For this study, Cadmus opted to use the linear model's functional form because it fits the data better.

The Model

In the double-bounded, dichotomous choice model, respondents are engaged in two rounds of questions. In a WTP experiment, if a respondent answers affirmatively to the initial question "*Would you have taken on the same project using OBF if the interest rate was [APR=5%, 6%, 7%]?*," they are asked a follow-up question using a higher APR value; alternatively, if they answer negatively, then the follow-up question uses a lower bid value. As a result, each respondent is placed into one of four categories: "yes/yes," "yes/no," "no/yes," and "no/no,"

each of which refers to smaller, more informative intervals around each respondent's WTP amount. Figure C - 16 illustrates the model we used for this analysis.

Figure C - 16. WTP Model Diagram



The arithmetic of the model is relatively straightforward. The probability of a respondents answering affirmatively to a given APR value is:

$$\text{Equation 1: } \boldsymbol{P_i^Y = prob(yes) = prob(WTP_i \geq APR)}$$

The probability of a respondent answering negatively is $(1 - P_i^Y)$. An individual's true WTP is unknown and can be treated as a random variable. Hanemann (1989)[9] shows that because WTP cannot take on a negative value, the mean of WTP can be expressed as:

$$\text{Equation 2: } \boldsymbol{E(WTP) = \int_0^\infty [1 - G(b)]db}$$

where the cumulative distribution function (CDF) is: $G(b) = Prob\{WTP \leq b\}$. If the CDF is assumed to be logistic, then:

$$\text{Equation 3: } \boldsymbol{P_i^Y = G(\propto + \beta APR_i) = \frac{1}{1+e^{-(\propto + \beta APR_i + \sum \delta Z_i)}}}$$

where Z_i represents a vector of additional explanatory variables. After the model has been estimated, the mean WTP can be derived directly from the estimated coefficients, as follows:

$$\text{Equation 4: } \boldsymbol{WTP = \frac{\ln(1 + e^{\propto + \sum \delta Z_i})}{(-\beta APR_i)}}$$

The denominator, βAPR_i, is the coefficient that was obtained from the logistic regression model for the APR variable.

Model Estimation

Table C - 17 displays the results of the reduced model. The vector of respondents' characteristics consists of the following variables:

- Loan = The amount of the loan received through OBF
- Employees = The number of employees working for the respondent
- Retailer = Respondent is a retailer (based on NAICS code)

To obtain the WTP as shown in Equation 2, the numerical values of the estimated coefficients are multiplied with the associated values for each observation for Loan, Employees, and Retailer. The estimated coefficients for the Employees and Retailer variables are highly significant. For example, the coefficient for Employees is negative (-0.05) indicating that as the number of Employees increases, WTP decreases. The coefficient -2.57 for the variable Retailer indicates that respondents classified as a retailer have a lower WTP. The Loan variable in the model is not significant.

Table C - 17 also displays the results of the chi-square test. Usually a variable is statistically significant if the p-value derived from the chi-square test is less than 0.10. In other words, the

[9] Hanemann, Michael *Welfare Evaluations in Contingent Valuation Experiments with Discrete Responses: Reply.* American Journal of Agricultural Economics, 71, 1057-1061. 1989.

observed coefficients are unlikely (less than 10%) to have been observed by chance, and we are 90% confident that these coefficients are not equal to zero (i.e., that the variable has no impact on the WTP). Of the variables representing respondent characteristics, only Employees and Retailer are considered significant.

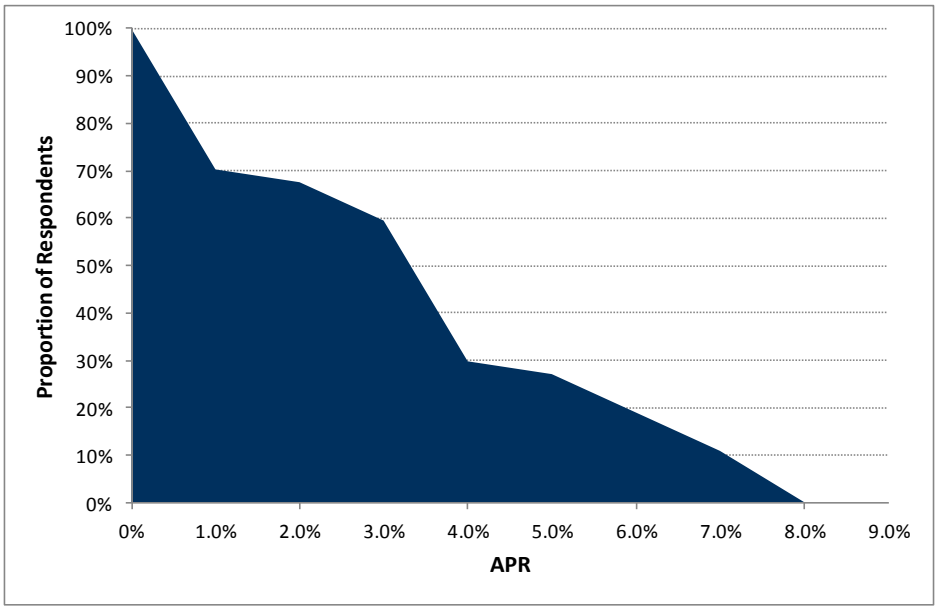
Table C - 17. Logistic Regression Results

Explanatory Variable	Coefficient	P-Value from Chi-Square Test
Intercept	3.8307	< .0001
APR	-0.5327	< .0001
Loan	9.31E-06	0.3182
Employees	-0.0534	0.0070
Retailer	-2.5753	< .0001

The results of the double-bounded logit model indicate a mean WTP of 3.27% APR. The highest maximum ARP that a respondent is willing to pay is 7.4% (while the lowest maximum APR a respondent is willing to pay is 0%).

Figure C - 17 represents the proportion of respondents who are willing to undertake a loan at each APR level.

Figure C - 17. Cumulative Distribution of Willingness to Pay (Predicted Values)



Cadmus used a bootstrap method to determine confidence intervals for these WTP estimates. This bootstrap involved taking 5,000 samples (with replacement) of equal size to the estimation sample and re-estimating the mean WTP for each sample. Using the empirical sampling distribution generated, we determined the confidence interval to be between 2.87% APR and 4.04% APR with 90% confidence.

APPENDIX D. PARTICIPATING VENDOR SURVEY FINDINGS

Introduction

The vendor survey results presented in this appendix are used to support the findings and conclusions in the main body of the report, and have not been combined with research from other tasks.

Methodology

This section describes the results of telephone surveys[10] with 29 vendors who helped deliver OBF at three IOUs: 19 from SDG&E, eight from SCE, and two from PG&E (SoCalGas does not officially use vendors to deliver their program). We asked these vendors to discuss their varied experiences with OBF in an effort to gain their perspective on the offering's strengths and weaknesses.

Table D - 1 shows that some of the vendors we surveyed participate in OBF with more than one utility. SDG&E, SCE, and PG&E provided the sample frame; for the analysis, we assigned vendors to a primary IOU based on the utility that provided the vendor's contact information.[11] Fourteen of the 29 vendors we surveyed also work in other utility areas: one of the two PG&E vendors works with SCE and SDG&E; three of the eight SCE vendors work with SDG&E; and seven of the 19 SDG&E vendors work with SCE and PG&E.

Table D - 1. Vendor Participation by IOU

Primary IOU	Primary IOU only	Secondary IOU			All Three IOUs	Total Vendors
		PG&E	SCE	SDG&E		
SDG&E	9		3		7	**19**
SCE	5			3	0	**8**
PG&E	1				1	**2**
Total	**15**	**0**	**3**	**3**	**8**	**29**

Organization of Findings

The findings include the following topic areas:

- Vendor Characteristics
- Sources of information and Experience with OBF
- Vendors' Reasons for Participating in OBF and Expectations for OBF
- Equipment and Comprehensiveness of OBF Projects

[10] Cadmus surveyed vendors from PG&E and SCE, while Research Into Action surveyed vendors from SDG&E.

[11] The list of vendors we received from SDG&E and SCE had a few vendors in common; we assigned the overlapping vendors to SDG&E to ensure the sample frame contained only unique entries.

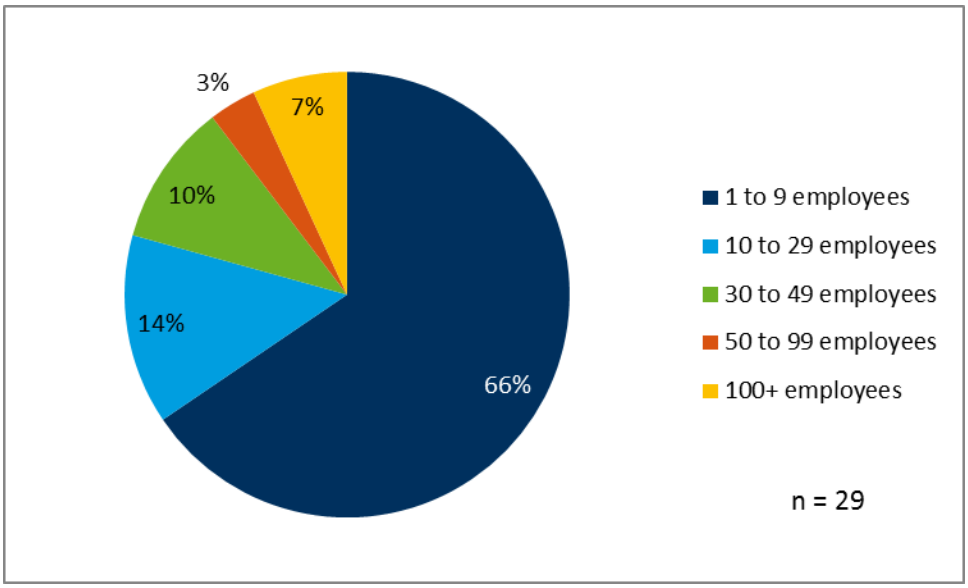
- Alternative Scenarios
- Promotion of OBF to Customers
- Customer Firmographics
- Customer Concerns and Criteria
- Application Processing
- Vendor Assessment of Utility Resources and Support
- Vendors' Future Plans for OBF

Main Findings

Vendor Characteristics

Two-thirds of the vendors we surveyed are from small companies with nine or fewer employees (Figure D - 1). Five of the vendors surveyed also reported being aggregator vendors, meaning that they aggregate utility program applications and projects over multiple sub-vendors.

Figure D - 1. Vendor Size by Number of Employees



Sources of Information and Experience with OBF

We began the survey by asking participating vendors a series of questions about their history with OBF in an effort to find out their familiarity with the program. First, we asked vendors to cite any and all sources that first pointed them towards OBF. Figure D - 2 shows that most vendors first learned about OBF through the utility (account executive, other staff, or email) or through word-of-mouth. Three mentioned they had learned about OBF at a previous employer and two learned of it through Portland Energy Conservation Inc., (PECI), and two from a seminar or workshop.

Figure D - 2. How Vendors Learned about OBF

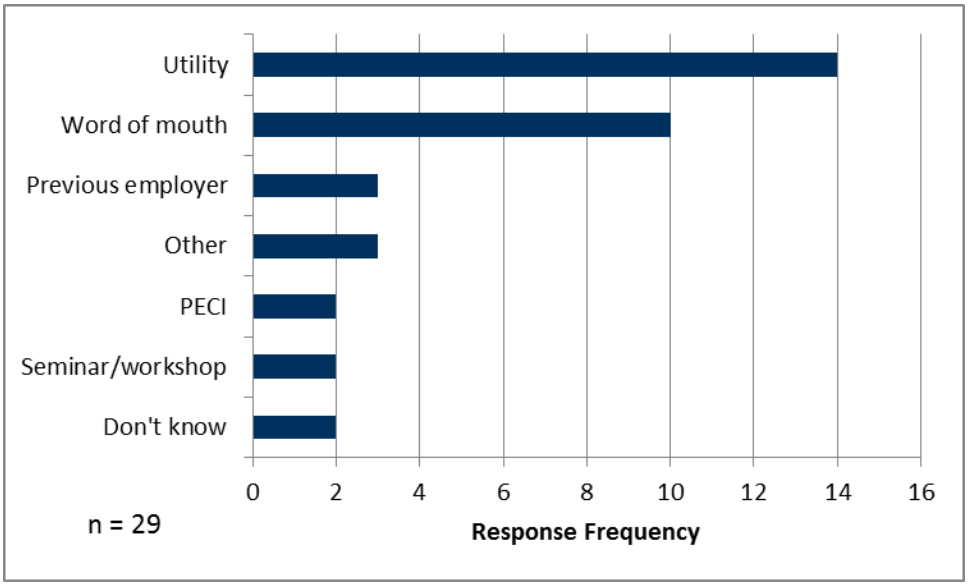
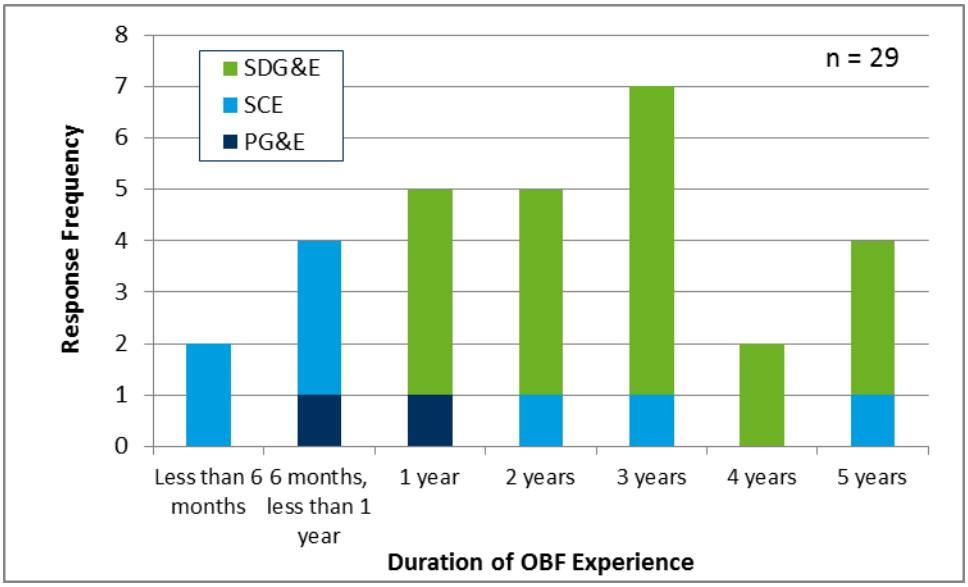


Figure D - 3 shows vendors working with SCE and PG&E had less experience with OBF, while vendors working with SDG&E have a longer history with OBF in general. This is consistent with the fact that SDG&E has offered OBF for a longer period of time than PG&E or SCE. The one SCE vendor who reported participating in OBF programs for 5 years also works with SDG&E's OBF program.

Figure D - 3. Duration of Vendors' Participation in OBF

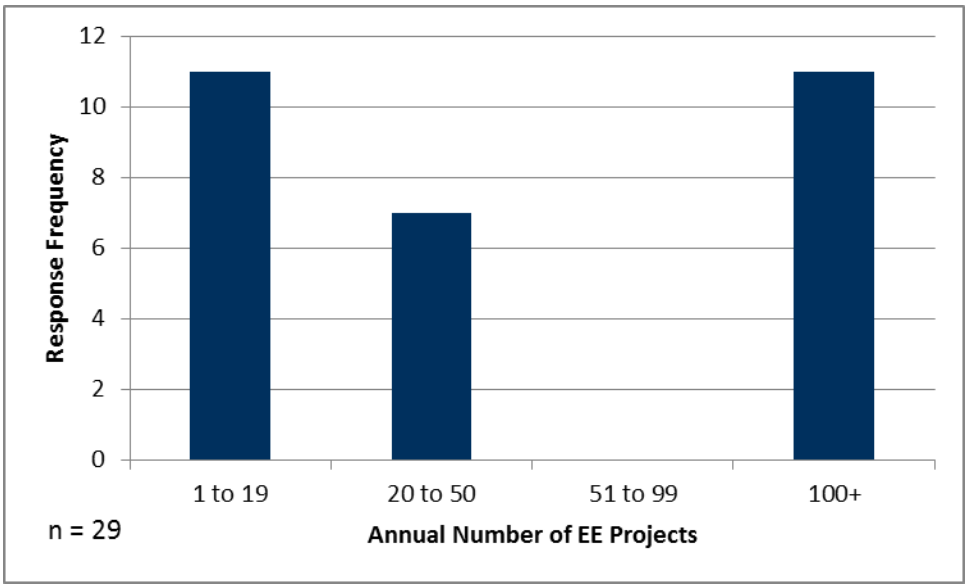


Note: Some vendors participate in OBF with multiple utilities.

We obtained mixed results when we asked vendors how many projects they complete each year as part of utilities' energy-efficiency programs (Figure D - 4). Just under two-thirds said that they complete between one and 50 such projects a year. No vendors reported completing between 50 and 99 projects a year, but 38% said they complete over 100 projects each year. Some vendors

who completed a smaller number of projects per year worked on larger, more time-consuming projects. One vendor noted that while they only worked on eight projects in the past year, "*each project was over $20,000, [which was] big as far as [we] were concerned*."

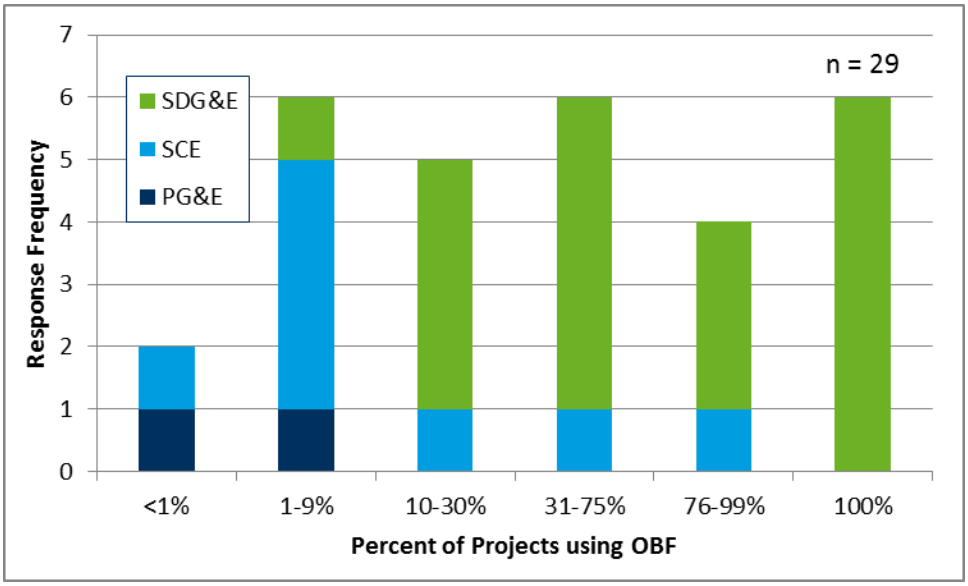
Figure D - 4. Number of EE Projects Completed Annually



We followed up by asking what percentage of their projects used OBF. These results were almost uniformly mixed when comparing all vendors together, as shown in Figure D - 5. However, upon reviewing the data from each individual utility, we noted some trends. Both of the PG&E vendors used OBF on a very small portion (less than 9%) of their energy-efficiency projects. This trend was also true for five of the eight SCE vendors: the remaining three each had a different response. Two SCE vendors said they would use OBF for more projects if funds were available, noting that "*the potential is tremendous*."

Only SDG&E vendors used OBF on the majority of their projects: 14 out of 19 told us that they used OBF on 31% or more of their energy-efficiency projects, with six of those saying that they use OBF for 100% of their projects.

Figure D - 5. Percentage of Vendors' EE Projects Using OBF



Note: Some vendors participate in OBF with multiple utilities.

Vendors' Reasons for Participating in OBF and Expectations for OBF

Vendors mentioned multiple reasons for offering OBF to their customers, but the reason they cited most was that OBF helps them sell to customers who otherwise wouldn't be able to afford an energy-efficiency project, especially given the slow economy. Vendors also mentioned that 0% financing is a big draw, as well as having the payment on the bill.

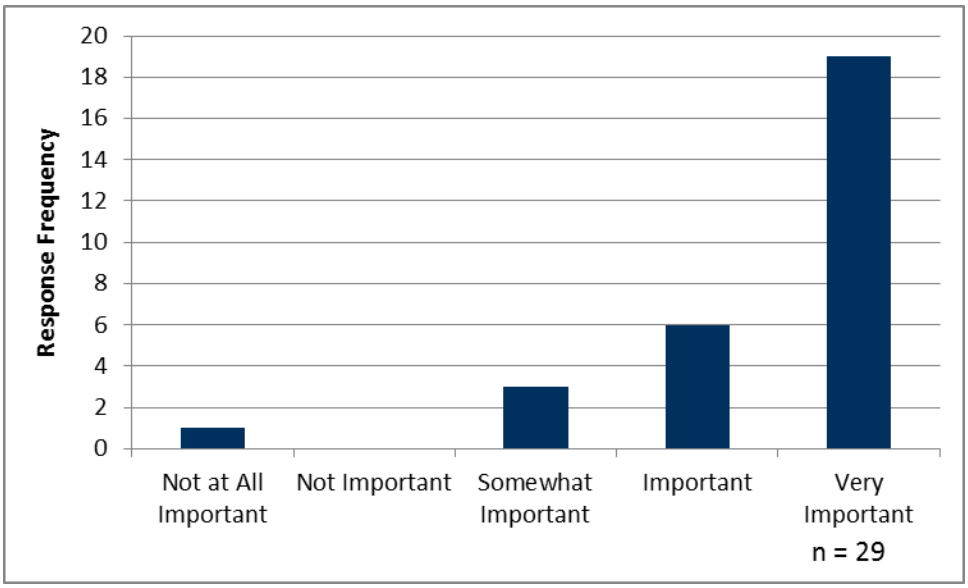
- *"The beauty of today's economic environment is that no one wants to pay money but everyone wants to save money. Rebates and OBF are tools."*
- *"Most of the customers have struggled to pay for retrofits, so the energy savings and putting it on their bill was great."*

One vendor, based in Massachusetts, had a good experience with OBF on the East Coast and thought it was going to work the same in California. "*OBF is seamless in the East; people love it. Basically [I] thought it was going to work the same way. It's been really slow and different [here than] from the East Coast, [it is] not [as] user friendly. [The] customer has to initiate [OBF]. It's a simple one-sheet, quick approval thing on the East, not so here though.*"

We asked vendors how important OBF was in helping them to sell energy-efficiency projects. Figure D - 6 shows that most vendors (97%, or 28 of 29) said that OBF was at least somewhat important in enabling them to sell energy-efficiency projects to customers, with 66% saying it was very important. Many of their customers were unable to finance or pay for retrofits. As one vendor noted, OBF "*allows [customers] to complete a project that they won't otherwise do, or else they'd have to wait.*"

Only one vendor said that OBF was not at all important in selling energy-efficiency projects because "*[we] offer our own financing. [We] dislike competing with OBF; our company is already offering 0% financing. We dislike this program because other vendors can offer OBF.*"

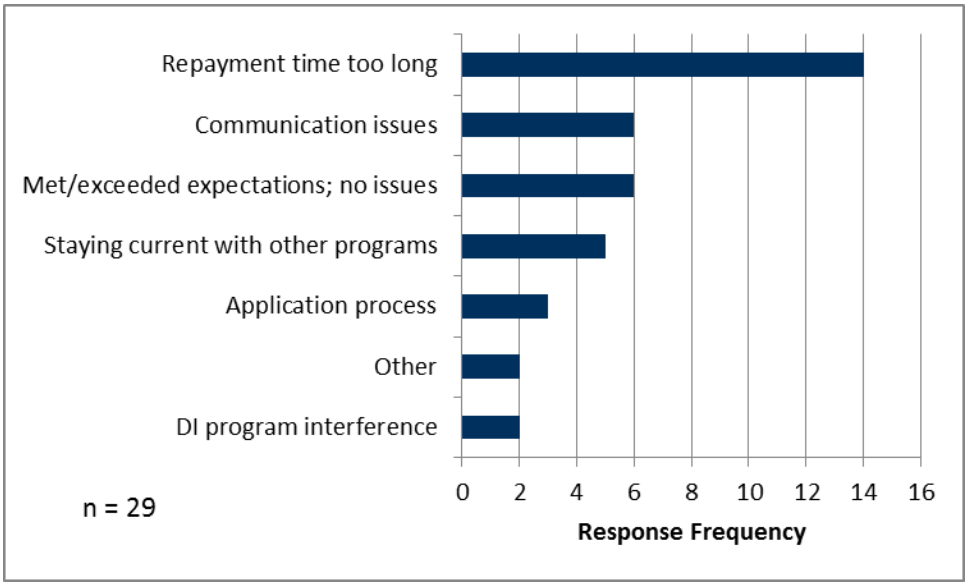
Figure D - 6. Importance of OBF in Selling EE Projects



We asked vendors if their experience with OBF differed from what they expected. Six out of 29 vendors (21%) said that OBF met or exceeded their expectations (Figure D - 7). These were all SDG&E vendors, but a few had also worked with SCE and/or PG&E. Two comments from these vendors indicated that SDG&E's OBF program is improving with time, and they indicated the issues were attributed to the underlying efficiency programs.

- *"I was expecting that it (OBF) would be more difficult. The program has improved much in the last seven months. [The] program [staff] communicates better and moves files more quickly."*
- *"[We] work a lot over with [OBF staff members], and both are fantastic: they are rigid but are good. Working with [them] is outstanding. OBF has gotten easier over time; all other [energy-efficiency programs] have gotten more complicated"*

Figure D - 7. Vendor Concerns with OBF



Many vendors disappointed with OBF gave more than one reason for feeling that way, but nearly half of vendors (48%) said it took too long to receive payment from the utilities. Another common issue is that vendors have difficulty staying current with changes to OBF or other utility programs (14%).

- *"The turnaround time on post-inspection was horrendous. [The utility] delayed payments almost eight months after [the project] finished."*
- *"SCE took more than four months to pay $300k. [It was] very difficult for the business to make it month-to-month with that much money out."*
- *"SCE wasn't really ready to launch, and [we] weren't expecting the rush of applications that they received. They were changing policies a lot, so we went through a lot of different changes with them. [It] seems like they're getting the flow of it now. From a vendors' standpoint, our cash flow was tied up because we weren't receiving money up-front, so we were waiting for the rebate."*

Six vendors mentioned having trouble communicating with the utility; they all would like to have one main point of contact and an easier way to track the progress of their projects. This issue applies to all utilities who use vendors as a delivery channel: SDG&E, SCE, PG&E. One vendor expressed appreciation for being able to work directly with an account representative, who helped usher through their project.

- *"We couldn't dream it would be so hard to deal with, try[ing] to run program through e-mail [and we] can't pick up the phone and find [the] status of where [we] are with them. [Instead of] having an online tracker, [we] have to go through e-mail and it takes forever. [The] issue with e-mails within the [utility is that we] get funding with OBF and then [the] incentive with EEBI, [and] communication between the two [departments] is not great. We did one entire school district and got a rep assigned to the account. Account executives push [the project] through. Without [the account executive], we'd be in trouble. [The process] needs an overhaul." (SDG&E/SCE vendor)*
- *"[I] wish that I had one person that I dealt with instead of three or four people. Roles of the people became muddled. [An] account rep that was supposed to rep[resent the] customer would take my questions and direct them to someone else; they bounced these [calls] back and forth. It took an ungodly amount of time to get the project through. A lot of red tape. Very bad experience." (SCE vendor)*
- *"[The] lead times [were an issue. We were told it would be] no more than three or four weeks to get paid, [then we] ended up waiting 15 weeks. [There are] 12 or 15 different hands that the paperwork goes through, [OBF] just needs some fine tuning." (PG&E vendor)*

A few vendors also mentioned issues caused by the direct install program:

- *"[OBF] used to be a great program. When [OBF was] changed to [a] 36 month payback, it moved customers to direct install, and customers get lighting for free. Only three large vendors are doing DI."*
- *"[My] company was not allowed to offer OBF for projects that qualify for DI."*

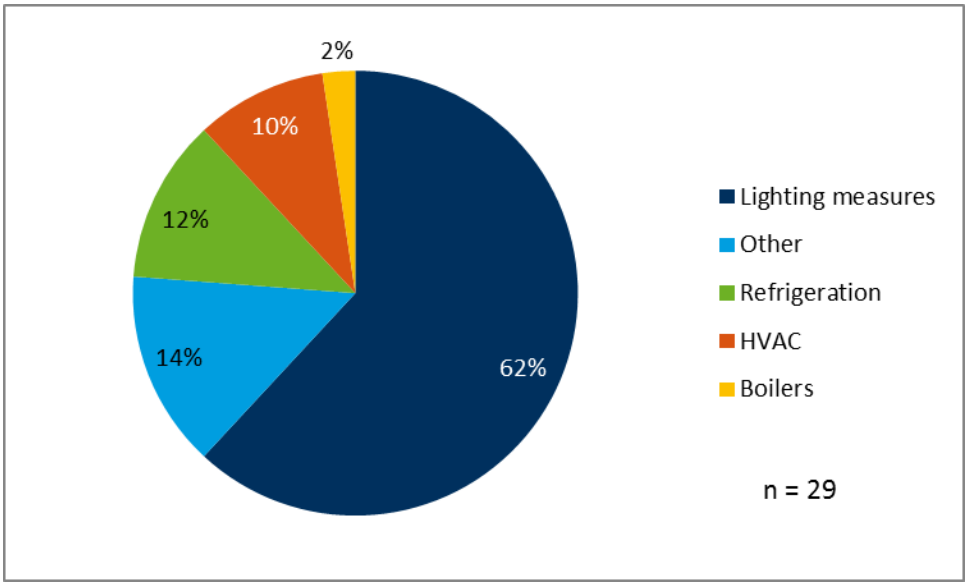
The remaining issues vendors mentioned included SCE becoming fully subscribed, applications being sent for rework, and the vendors finding the application process to be complicated.

Equipment and Comprehensiveness of OBF Projects

Nearly two-thirds of vendors surveyed said they typically install lighting measures for OBF projects (Figure D - 8). Twelve percent said they install refrigeration measures, and 10% said HVAC. Fourteen percent of vendors said they install "other" types of equipment for customers using OBF, including variable frequency drives, turbo pots[12] for restaurants, motors, and envelope measures.

[12] Turbo pots are a natural gas measure; they are normal cooking pots with an aluminum heat sink on the bottom to provide efficient and uniform heating. The turbo pot is estimated to cut heating time by approximately 50% compared to normal pots.

Figure D - 8. Typically Installed Equipment Financed Through OBF



We asked vendors who sold equipment other than lighting what the main challenges were with selling non-lighting equipment. A few sell non-lighting equipment as their core business, and did not indicate having any difficulties. Challenges cited by the other vendors include:

- *"Additional training [is] needed to install non-lighting equipment."*
- *"HVAC is more expensive and cost is a bigger barrier."*
- *"Non-energy upgrades are required before efficiency measures can be installed. Some labor and parts [are] not covered by OBF."*
- *"Explaining costs and benefits to the customer is easier with lighting."*
- *"Qualifying for underlying energy-efficiency programs, not OBF, [is difficult]."*
- *"The hardest thing is getting through the utility incentive programs. [This makes it difficult]because [we] can't get OBF without other programs. [The utility should] allow projects to go through OBF without rebates. Engineering review [would] still be necessary, but no participation [would be] necessary in other programs."*

Many of these vendors said that OBF helps them, or has the potential to help them, sell non-lighting measures. This is because they bundle lighting with non-lighting measures so that the overall project meets the OBF payback requirements.

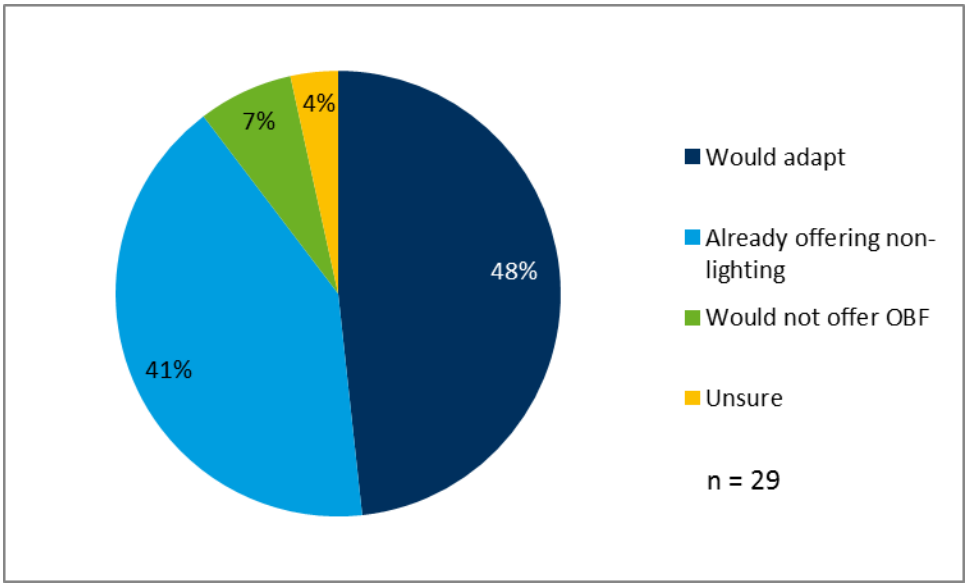
- *"The lighting generates more savings and is good to package with other non-lighting measures."*
- *"In theory, yes it [OBF] definitely does [help us sell non-lighting measures], but it's been rough so far. It would [help more] if it (OBF) wasn't such a mess."*
- *"We were doing lighting because of [the] five-year ROI and [lighting] fits project costs in the five-year return that OBF requires. We would throw in whatever we could try to find with HVAC [to make the project qualify]."*

When we asked vendors how they would react if, hypothetically, OBF began requiring them to include non-lighting measures, 48% said they would adapt to the requirement (Figure D - 9), either by adding new products or teaming with another type of contractor (vendors usually mentioned partnering with an HVAC specialist). For example, one vendor said: "*We would [adapt]. Historically, we're primarily lighting. [At] a lot of the facilities we did, lighting was the main load for that actual facility. Recently, we've made the decision to diversify, so we have some new product lines available to us. We'd probably bring those in to supplement our lighting work.*"

A number of vendors (41%) are currently offering non-lighting measures, so such a change wouldn't have any effect on them. A few of the SDG&E vendors said that the SDG&E OBF program already requires non-lighting measures in order to qualify for a five-year payback: *"[OBF] does somewhat require [non-lighting measures]. Some customers do not qualify for [OBF] if they only install lighting because it is a five-year repayment program. Lighting is only a three-year measure.*"

Only two vendors said that they would not offer OBF if it required them to include non-lighting measures, saying *"[I] don't think we could adapt. Basically it (lighting) is what we do."*

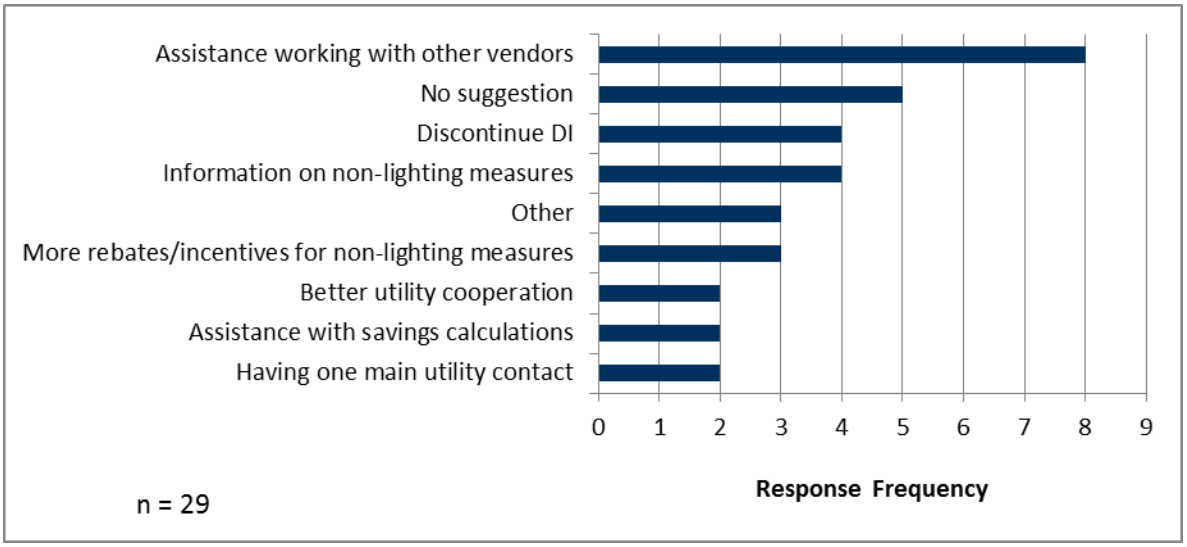
Figure D - 9. Reactions to Hypothetical Requirement for OBF to Include Non-Lighting Measures



Next, Cadmus asked vendors what type of assistance would help them sell more projects with non-lighting measures. Figure D - 10 shows that eight out of the 29 vendors recommended providing assistance for them to team with other qualified contractors, most often mentioning HVAC specialists. Seven vendors said that either having more information or having more rebates/incentives for non-lighting measures would help. Four vendors said that discontinuing DI would help, either because it makes identifying potential OBF customers difficult or because it reduces vendors' ability to aggregate measures with OBF. Six vendors mentioned the utility could help by either providing assistance with savings calculations or improving communication and cooperation. Vendors' recommendations include:

- *"[We] would be willing to work with non-lighting contractors if they do not share the liability for the non-lighting measures. [We] do not specialize in non-lighting measures. It's difficult to find contractors one can trust to partner with."*
- *"[We] would consider partnering with another contractor if [the] IOU had a way of recommending and scoring the quality of non-lighting vendors. [This] rating system should be based on [the] quality of work [the] vendor has done for the utility."*
- *"[We] would require the rebate department to add more measures in different categories. There are refrigeration and gas measures currently available. [They] need to expand these measures. All DI measures should be covered under rebates. If the utility got rid of DI, vendors could install these [other measures] (CFLs, door measures). DI only does [the] cheapest measures; vendors do audits. Once [a] customer does DI, they have reduced their savings opportunities, [which translates to a] reduced ability of [the] vendor to aggregate work at [the] customer site to [do a] project with OBF."*
- *"[The] biggest issue is benchmarking; benchmarking requirements are onerous."*

Figure D - 10. Recommendations to Help Vendors Sell Comprehensive Projects



Note: Multiple responses possible.

Vendor Reaction to Hypothetical Changes to OBF

We asked vendors a hypothetical question: which would they choose if they could only offer customers rebates or financing through the utility, but not both. Figure D - 11 shows that 55% would prefer to offer customers financing.

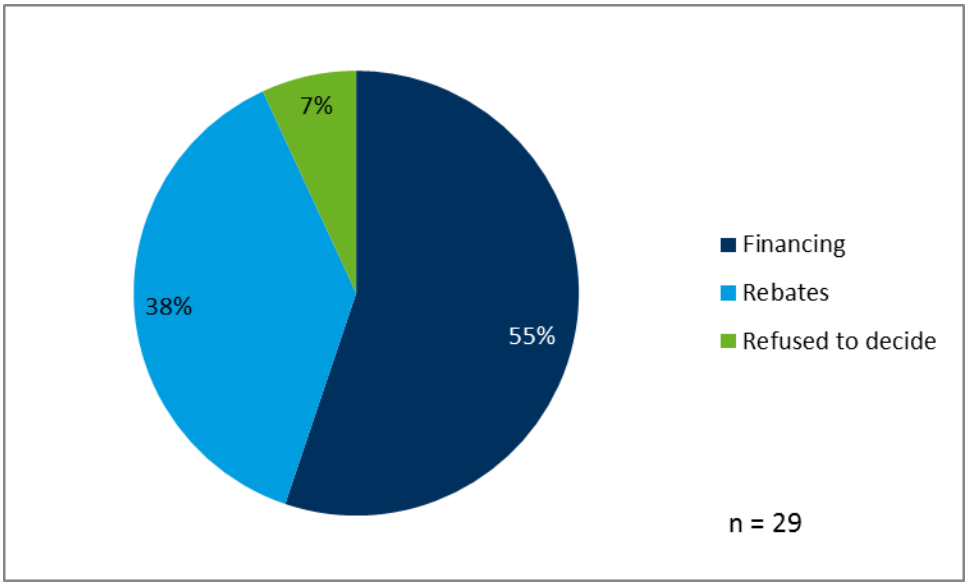
Vendors who prefer to offer financing over rebates said that OBF covers a larger portion of the project costs and allows customers to take action.

- *"You can offer rebates to people who don't have financing or cash and the rebates aren't enough to make them act. Rebates don't force action."*
- *"[Financing is] more important because customers need cash on hand for business. Financing makes it [the project] possible."*
- *"Rebates only cover 5-10% of project costs. OBF covers more of the project costs, which equals less to no money out of pocket."*
- *"Financing is more important for larger projects: [it] allows [customers] to purchase higher quality products and cover more measures."*

Vendors who prefer rebates to financing did so for various reasons, such as the rebates directly reduce the project costs, the vendor offered financing already, or they were more comfortable with rebate programs. Two vendors said they were concerned about people running into trouble with debt.

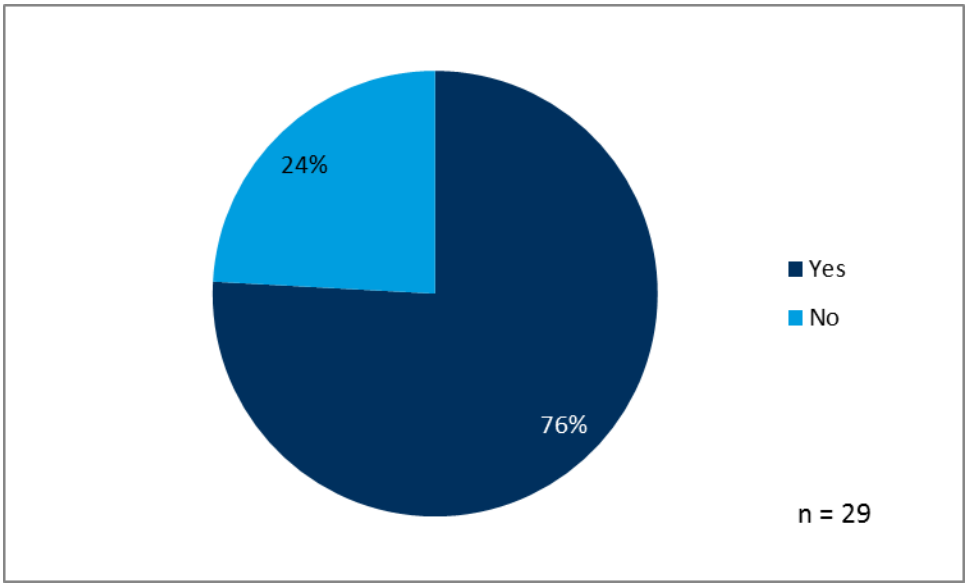
- *"If financing actually worked, then [I would pick] that, but you hurt people with the financing. The rebate is a guaranteed payback right now and it's faster."*
- *"[We would offer the rebate,] because [they] take the rebate money and that helps eliminate the bad debt choices that you might run into otherwise."*

Figure D - 11. Rebates vs. Financing Through Utility



Considering that the CPUC is looking into third-party capital to finance energy-efficiency projects, we asked vendors about offering OBF if it came with an interest rate competitive with market rates. Figure D - 12 shows that most vendors would still offer OBF.

Figure D - 12. Would Vendor Offer OBF at a Competitive Interest Rate?



A few vendors were on board with the idea of OBF having an interest rate as long as: 1) the interest rate was competitive, 2) the participation process continued to work well or was improved, and 3) the loan installment remained on the utility bill. Other vendors were concerned about being able to meet bill neutrality with interest factored in, or that they would experience a drop in the number of interested customers.

- *"If it [the interest rate] was competitive, then why not? Lower interest, not 12%, then, [we would still offer OBF]."*
- *"Definitely [we would still offer OBF]. Again, if [the installment is] on-bill, it's effortless and seamless for customers, [it has a] big sales advantage and convenience factor. [With] outside financing [there is] another bill, and even though [customers] were still saving, the extra bill [would feel] like an expense to them. Having [the] expense and savings on same bill is a very positive effect."*

The vendors who said they would not offer OBF if it carried a non-zero interest rate thought there were better options available through lenders or other venues:

- *"I would not offer [OBF with a non-zero interest rate]. It would not be bill neutral to the customer anymore."*
- *"No [I would not offer OBF with a non-zero interest rate]. [I] would prefer to go with a bank because [a] bank is quicker than [the] utility for repayment."*
- *"I'd prefer a private financier. I'm already looking for one, because these utilities just clearly cannot handle it (implementing OBF well).*
- *"No, absolutely not. [I would not offer OBF with a non-zero interest rate]. [Customers] can go to their own bank then."*

One vendor mentioned that they had tried to use outside funding, but it never worked out: *"[Outside funding means you] have to look at people's credit and their worth, and [that is] hard to do. Anytime we've tried using outside funding it has fizzled out and ruins everything."*

Promotion of OBF to Customers

We asked vendors to describe customers to which they do and do not offer OBF. Their responses were extremely varied; some vendors pointed out specific customer market segments, such as "*car dealerships use a lot of lighting,"* while others described any customer who would benefit from a retrofit. Responses about who they offer OBF to include:

- *"[We look for customers who] haven't done any energy conservation projects and [who] have equipment that is 25 years or older; Once we do a project, a lot of them [customers] come back and want to do more projects for other locations, etc."*
- *"[We offer OBF to] businesses with high wattage, older technology, with long hours of operation."*
- *"[We offer OBF to] large schools and large companies: K-12's, and 50+ employees for businesses."*

Some vendors offer OBF to all eligible customers; others indicated that they do not target certain types of customers because of the customers' lack of interest or inability to qualify. A couple of vendors said they avoid promoting OBF to any customers at all after having some negative experiences.

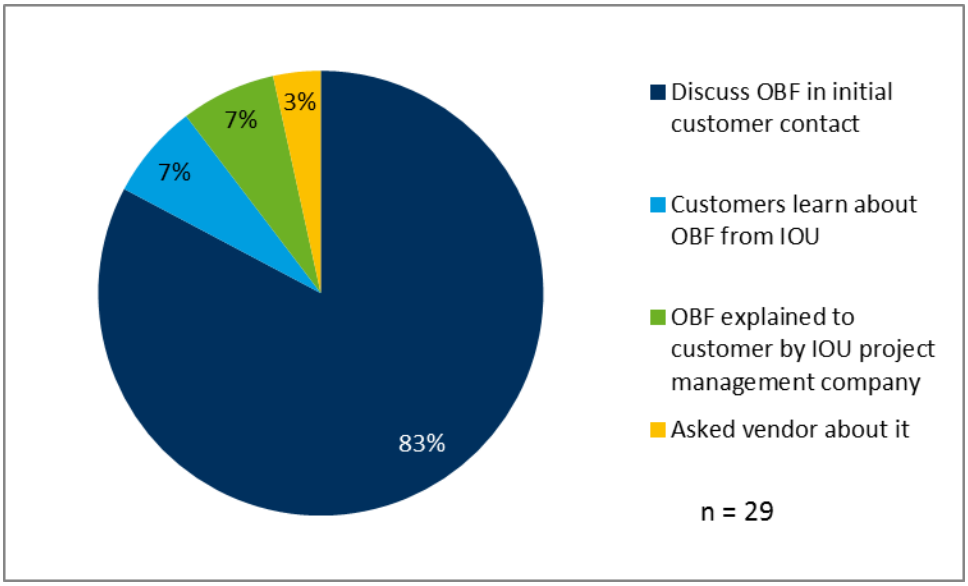
- *"[We avoid] corporations. Corporations have too much red tape to make decisions."*
- *"[We avoid] government organizations. [It is] difficult to find someone to sign loan documents. When [a] government organization is interested in a project, they already have funding lined up."*
- *"[We] offer it [OBF] to everyone, but found that the huge companies weren't so much interested."*
- *"[We do] not offer [OBF] to small 'mom and pop' companies, because they will not qualify. The size of the job would be too small because of OBF requires a $5,000 project minimum."*

Figure D - 13 shows that 83% of vendors said that their customers learned about OBF as part of the vendor's initial contact with the customer, most commonly when vendors go door-to-door promoting OBF projects to customers, but also through phone calls and mass mailings.

- *"I brought it (details about OBF) to [the customer] when they requested a job. That, or I just came in off the street and tried to show it to them."*
- *"Face-to-face discussions with the customer [are how we tell them about OBF]. [Our] sales staff shows customer the [utility] Website for more proof that OBF is a real program."*

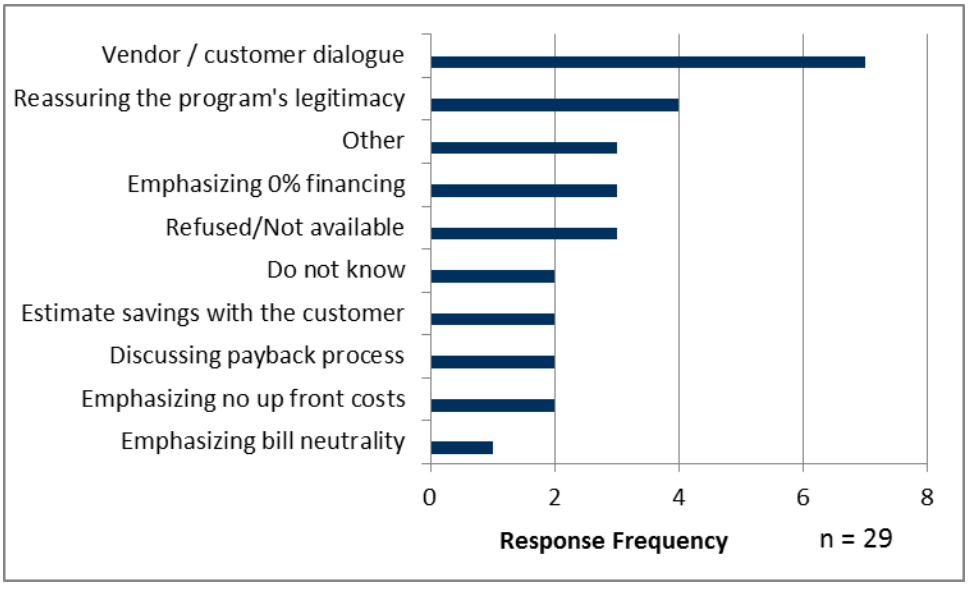
The remaining 17% of vendors said their customers learned about OBF from the IOU (7%), from a project management company such as PECI (7%), and, in one instance, the customer asked the vendor about the service (3%).

Figure D - 13. How Vendors Educate Customers About OBF



Vendors gave a wide range of activities that they found to be successful in encouraging organizations to enroll in OBF. Most vendors said that basic dialogue with their customers has been the most successful activity (24%), as shown in Figure D - 14. Other common activities were reassuring customers of the program's legitimacy (14%) and emphasizing the 0% interest rate (10%). Three vendors (10%) who had only done one OBF project each gave "other" as a response.

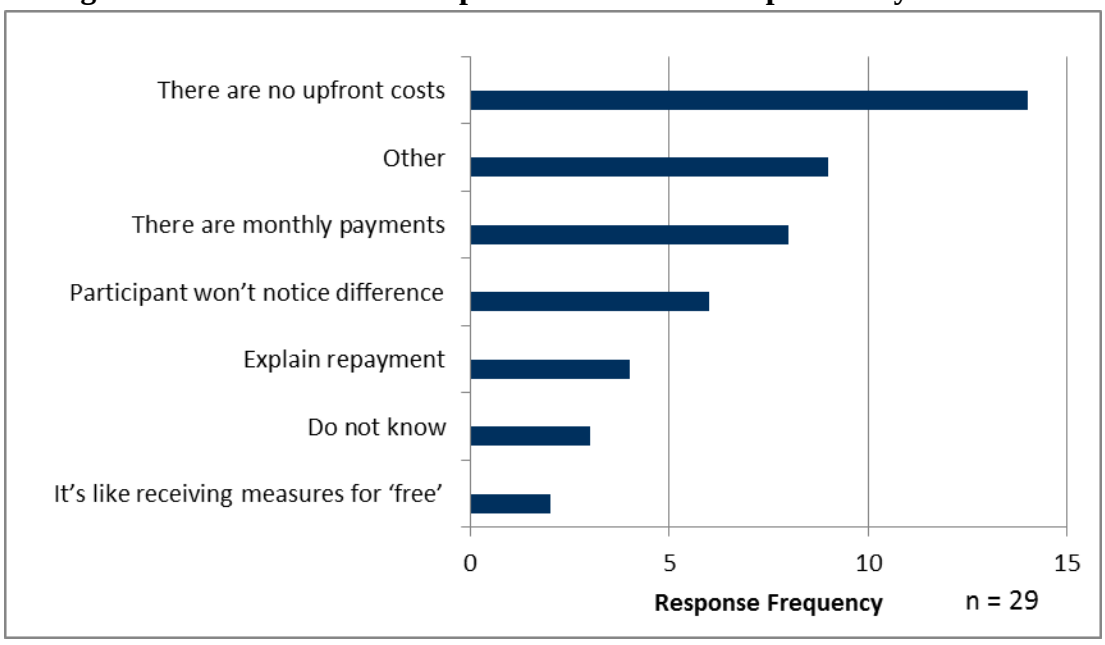
Figure D - 14. Vendor Activities that are Most Successful in Encouraging OBF Use



Most vendors said that when they explain OBF to customers, they most often tell them that there are no up-front costs for the measures they receive (48% of vendors; Figure D - 15). Vendors also tell customers that they are responsible for three, five, or 10 years of monthly payments (28%). Approximately 31% of vendors also cited "other" responsibilities that they describe to customers when explaining OBF. Those responsibilities include:

- *"[Their] bill will stay the same [and they] will get new lights. [They will] see [their] bill potentially decrease."*
- *"[I] let them know the process: if you're not communicating what the process is, it can confuse them. SDG&E does a fair job getting the docs through, so [we need to] educate the customers."*
- *"[I] just told them [customers] that they could get measures and it wouldn't really affect their budget."*
- *"[I tell them that they] can't have electricity disconnected [if they have OBF]."*[13]

Figure D - 15. Vendors Description of Customer Responsibility with OBF



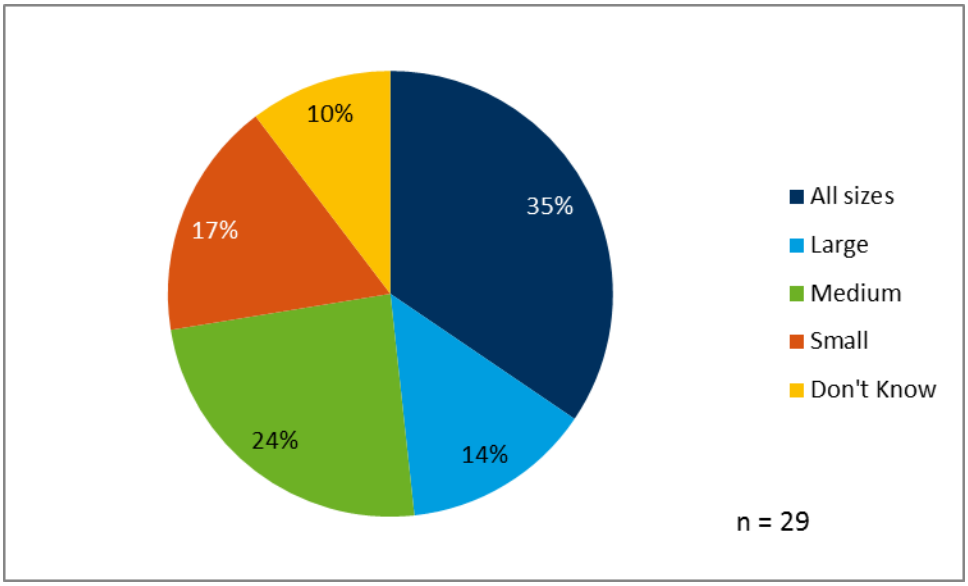
Note: Multiple responses possible.

Customer Firmographics

We asked vendors a series of questions about the types of customers they work with. First, we asked if their customers are usually small, medium, or large businesses. Vendors gave a variety of answers, some with exact numbers, and others with a more general response. A third of vendors tend to work with customers of all sizes (10 out of 29). Other vendors are fairly evenly split between working with small, medium, and large customers, as shown in Figure D - 16.

[13] This statement from the vendor is misleading, as disconnection can occur for partial payment of the bill.

Figure D - 16. Size of Vendors' Customers



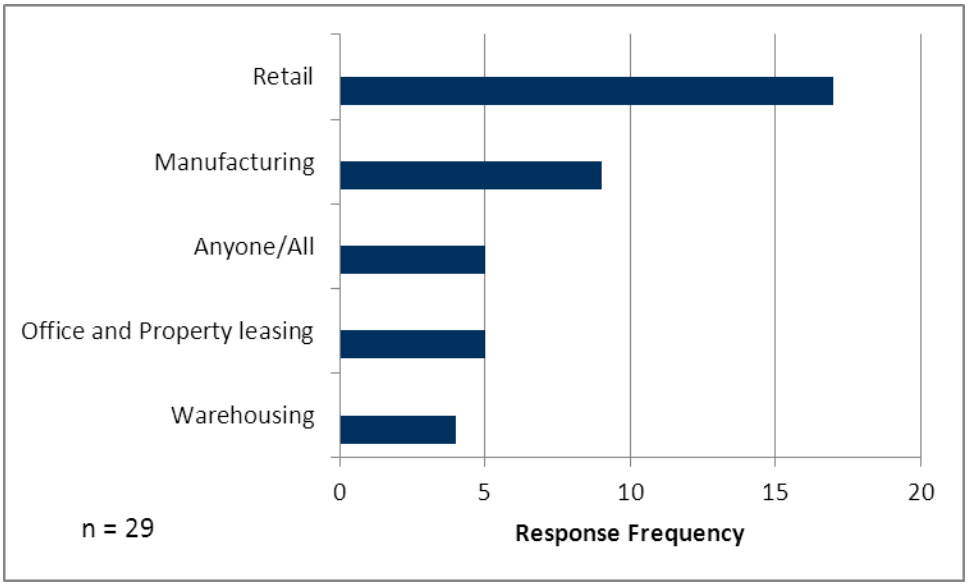
Only three vendors reported working with G&I customers. One vendor who works with small businesses (those with under 100 kW of consumption) noted that SCE set aside $12 million out of a $16 million loan pool for G&I customers, but only reserved $2 million for small CIA and $2 million for large CIA, which seemed inequitable. This vendor has 47 projects on the SCE waitlist; some of which have been waiting for funding since spring 2011. The vendor, who believed that SCE still had funding available for G&I loans, also reached out to the CPUC and requested that SCE be allowed to shift OBF funds to cover wait-listed projects for customers of all segments.

- *"We believe a mere $2 million in OBF initial funding for this market segment was a miscalculation, since the funds were used up less than four months, while other segments received disproportionately higher amounts of funding. Other OBF type programs, such as the one implemented in SDG&E, historically demonstrate a higher proportion of funding used in this market segment than only 12.5% of all funds allocated.*

  These wait-listed customers are small businesses that really need help in reducing energy costs. It will also help to create (maintain) jobs for the vendors and installation crews that will install the projects at a time when jobs are very important to our economy."

Next, vendors reported which sectors their customers came from, which varied from gas stations to naval bases (Figure D - 17).

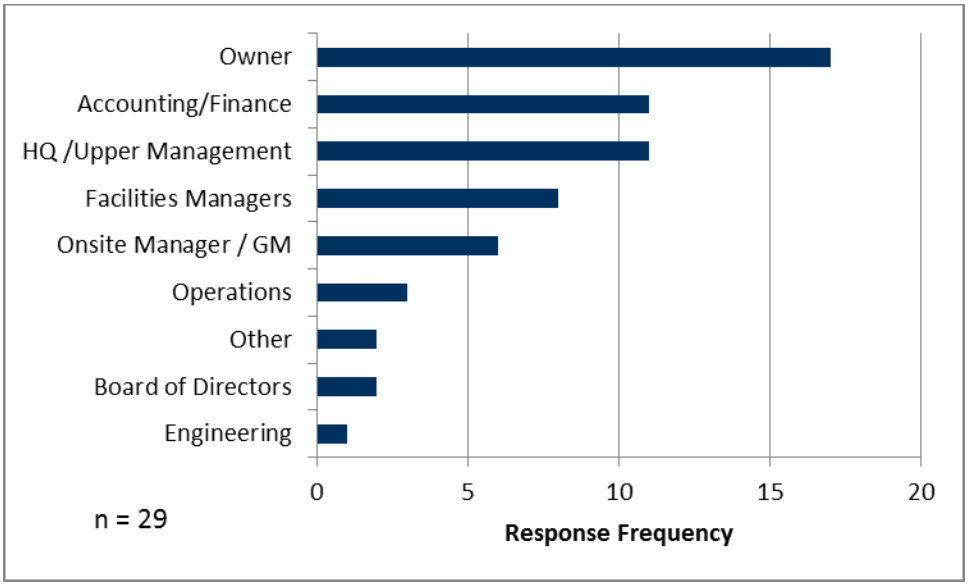
Figure D - 17. Vendors' Customers' Industry Classification



Customer Concerns and Criteria

Vendors reported who they work with when discussing financing options for energy-efficiency program participants; most often mentioning the owner, headquarters and/or upper management, and facilities managers (Figure D - 18). Accounting or finance department representatives were also common, mentioned by over one-third of vendors. As one vendor said: "*[Who we work with] varies: sometimes it is the facility engineer, sometimes we're brought to the CEO/CFO person.*"

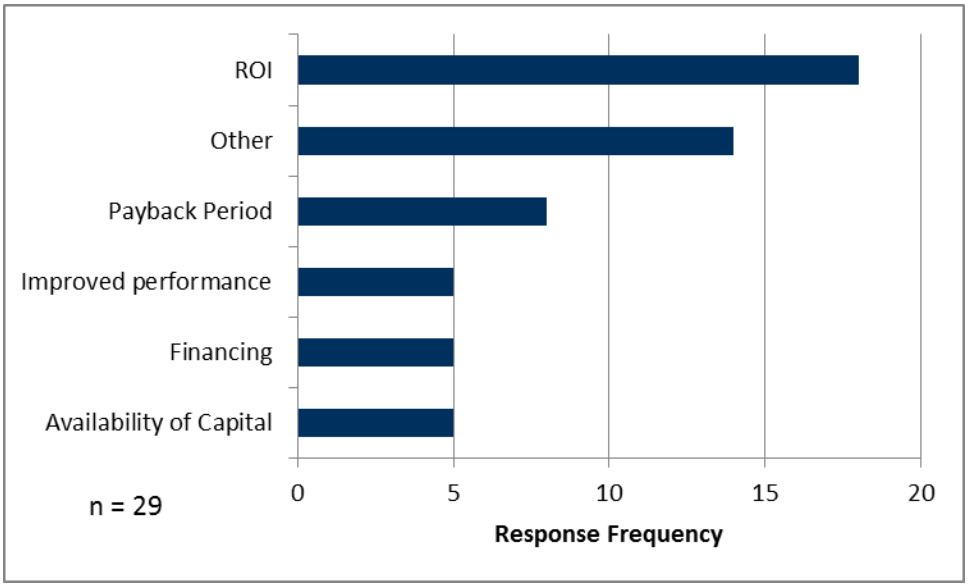
Figure D - 18. Customers' Department Handling Decision Making



Note: Multiple responses possible.

We next asked vendors what criteria their customers use to assess whether to make an energy-efficient investment. Vendors told us that customers are most concerned about getting a return on their investment, and ensuring that the savings are realistic (Figure D - 19). The payback period also was important; one vendor who primarily works with small CIA customers said that those customers like having a payback under two years. Several vendors said that customers consider multiple criteria, including avoiding out-of-pocket costs, having a vendor with a good reputation, and having equipment that is high quality. *"[Customers want to see] calculations and [have an] energy analysis. They want documentation that the program is legitimate. [They] also want to see the product, [to] be able to evaluate [the equipment] performance and aesthetics."*

Figure D - 19. Criteria Customers Use to Assess EE Investments



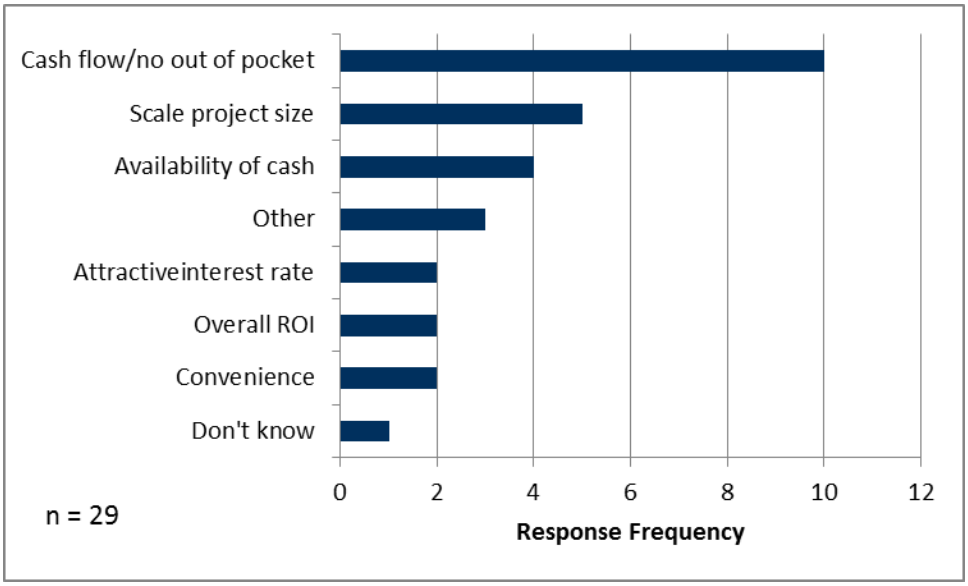
Note: Multiple reponses possible.

We asked vendors what criteria their customers use to assess whether or not to use financing for their project. According to one-third of vendors, the main reason customers consider using financing is to better manage their cash flow by removing up-front costs (Figure D - 20).

- *"They [customers] wanted to make sure that it [OBF] would remove the immense up-front costs [of the project]."*
- *"Because of the financing, we've been able to do the project because they [the customers] have no up-front cost."*

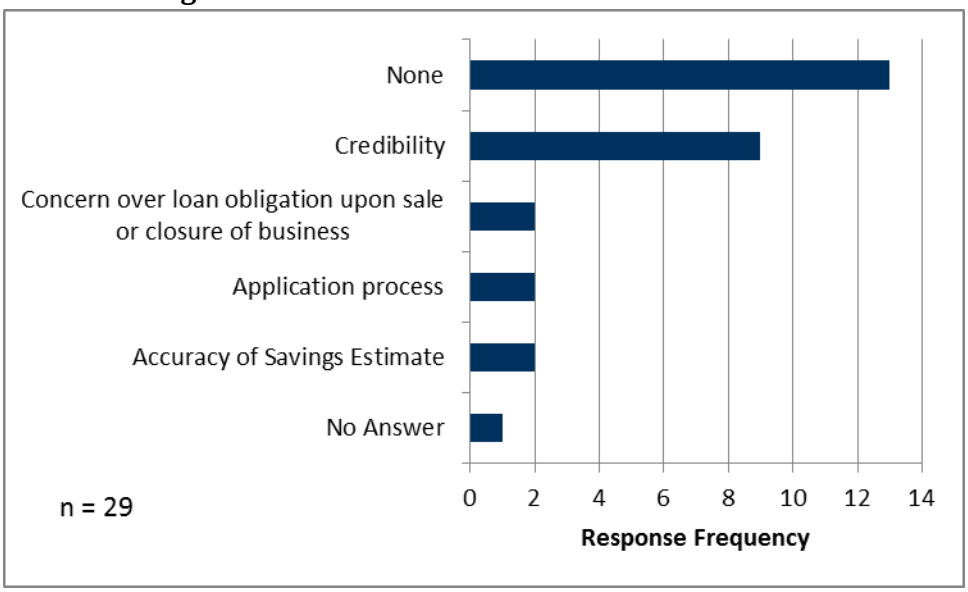
Other commonly mentioned considerations included flexibility to scale the project, and whether the customer had sufficient cash to pay for the project. A couple vendors also indicated that customers really like that OBF comes with no capital costs (i.e., 0% financing).

Figure D - 20. Criteria Customers Use to Assess Using Financing



When asked about customers' concerns with OBF, vendors most frequently reported that customers do not have any concerns after they explained how OBF works (Figure D - 21).

Figure D - 21. Customers' Concerns About OBF



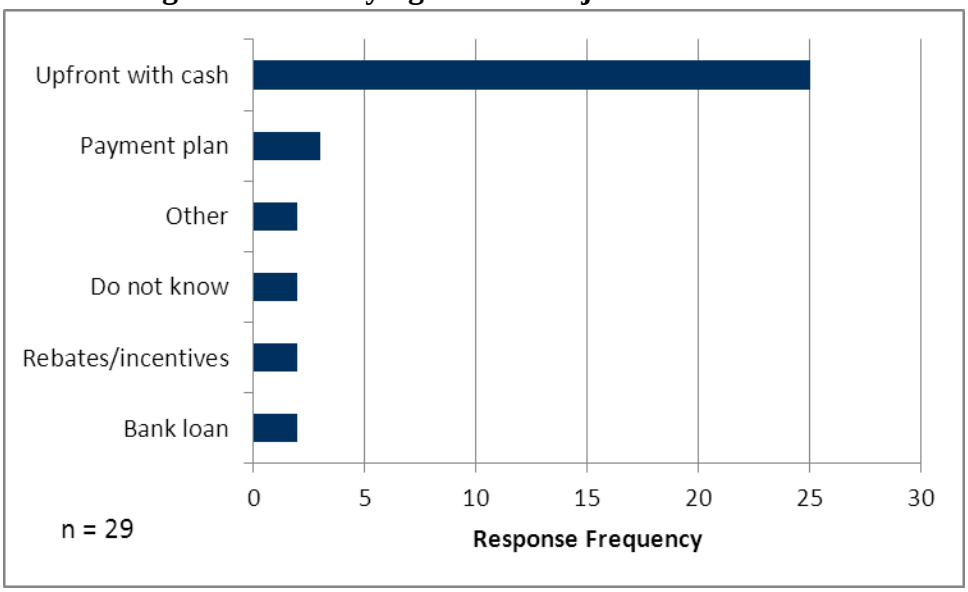
Note: Some vendors work in multiple service areas.

The most common customer concern mentioned by vendors is that the program sounds too good to be true; some vendors have to convince their customers that OBF is a credible program. One vendor said: "*[My] clients didn't buy the fact that this was an actual deal. No one believed me*!" Another vendor who works with school districts said that, "*the entire school district went along with OBF after the first school proved that it works."*

A few vendors said their customers can be concerned that the project may not actually turn out to be bill neutral, or they want to know what would happen if they went out of business, or what would happen if they sold their business before the loan was paid off. *"[We] aim for bill neutral, [but] saving units of energy doesn't always translate [to] dollar amounts. Things change, [for example] weather changes so [the energy savings] doesn't always translate into dollar savings. Sometimes [the projects] don't get bill neutral. [On the] front end [it is not a] problem, but later, when bill is not neutral, then what do you do? Maybe when bill neutral doesn't work, [we should] get SDG&E to help explain, [but that] doesn't always solve the problem.*"

Next, Cadmus asked vendors how their customers usually pay for projects. Twenty-five vendors most often said that customers who do not use OBF usually pay for energy-efficiency improvements up-front with cash. Other sources of funding they mentioned include payment plans, rebates and/or incentives, and bank loans. Full results are shown in Figure D - 22.

Figure D - 22. Paying for EE Projects without OBF

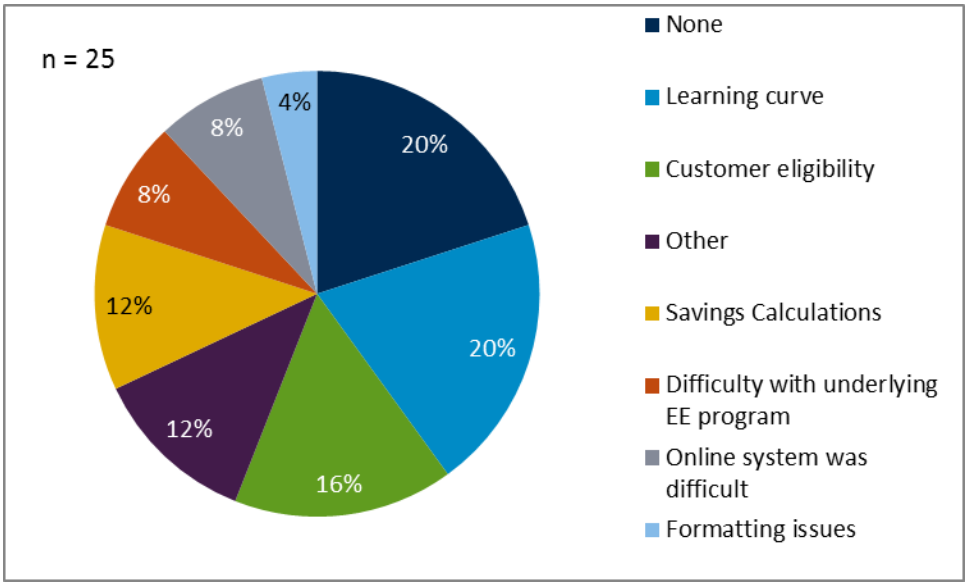


Note: Multiple reponses possible.

Application Processing

Most vendors (25 of 29) said they help their customers apply for OBF. Five of these 25 vendors reported having no issues helping their customers (Figure D - 23). A few vendors initially had problems but said that the rejection rate improved after they learned the process, or after they were able to resolve their issues working with the utility staff members.

Figure D - 23. Difficulties with OBF Application Process



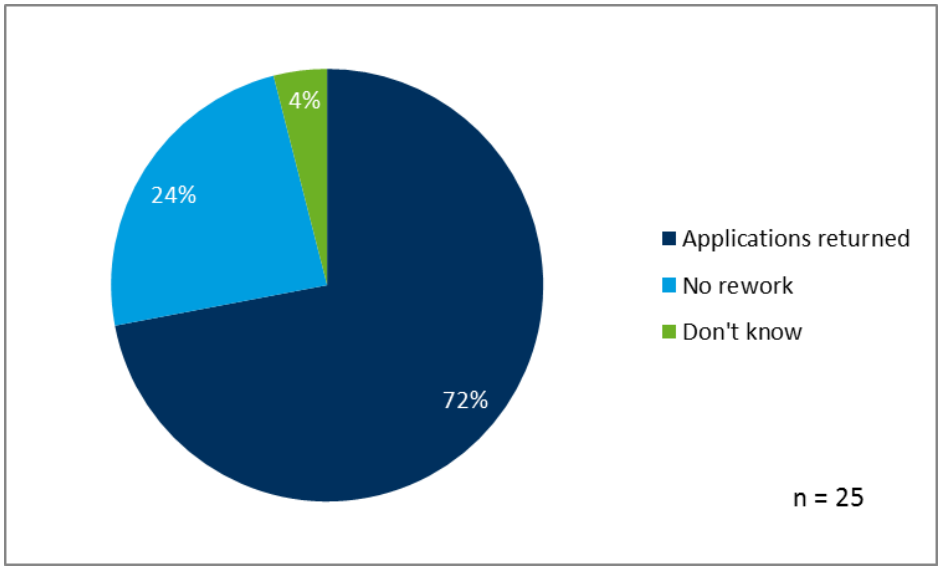
Some vendors had issues with customers not being eligible for OBF, either because they did not meet the payment history requirements or because they were eligible for DI. In one instance, a vendor recalled that their customer was rejected by the IOU because the company changed their name (but not their ownership or location).

Lastly, vendors mentioned having difficulty properly calculating savings, stating that they either had to redo the calculations or had issues complying with the underlying efficiency programs.

- *"The OBF application gets simpler [over time]. Efficiency program applications are often the problem. [We] left [the] bid program, [because the] application process and paperwork got bad, so [we] stopped doing that one. [We] shifted to EEBI; it is better due to [the application] process."*

Of the vendors who help their customers with the OBF application, 72% had at least one application returned to them for rework (Figure D - 24).

Figure D - 24. Whether Vendor had to Rework Applications



We asked these vendors if there was anything that could be done to reduce the number of applications sent back for rework. Many of the vendors who had their applications returned thought that it was due to their own error, and said that they need to become more familiar with the application requirements and process.

- *"It was really just our fault. SCE was computerized and we were used to paper, so we were often lost."*
- *"I think we just had to become familiar with it (the paperwork). Once you know it, [it's fine], but there were a lot of particular things that you run into that the class doesn't teach completely."*

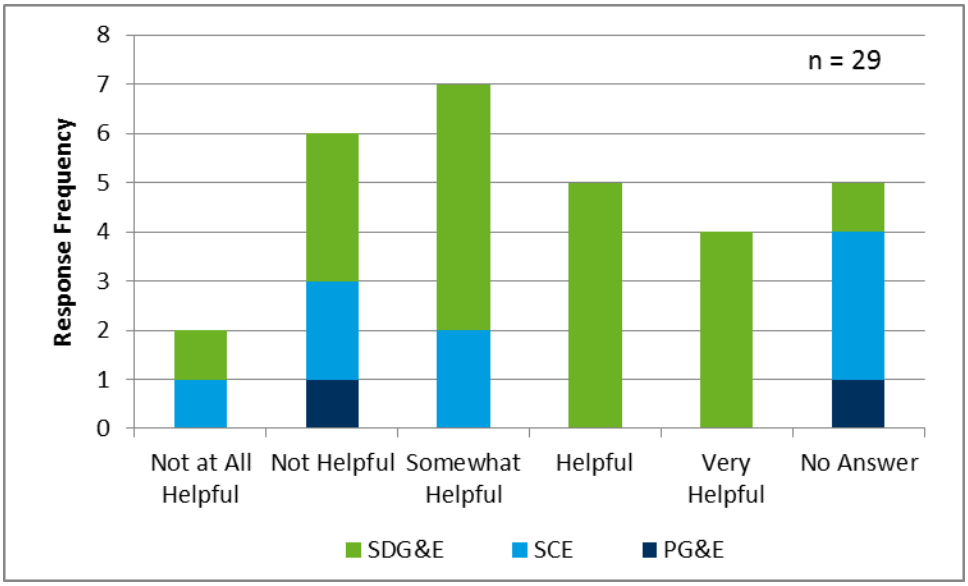
Three vendors said that, because the project changed from what they originally submitted, the application needed to be revised. One vendor said a few applications were returned because the customer did not qualify. Another vendor thought that the rework was a stall tactic the utility employed to delay payment.

Vendor Assessment of Utility Resources and Support

We asked vendors to rate the OBF marketing materials provided by the utility. Five vendors did not answer this question. Slightly more than half (16 of 29 vendors) said the OBF marketing materials were somewhat helpful to very helpful (Figure D - 25).

Eight vendors indicated the materials were not helpful or not at all helpful; usually because these vendors did not use the marketing materials with their customers, and instead they had to educate the customers directly. As one vendor said: "*Most customers don't read through the materials. Customers just need to see [that] the program is legitimate*." Another vendor explained that the market is "*flooded by unreputable [sic] vendors who were selling OBF as free*," and would prefer for the utility to market OBF more aggressively, such as by using bill inserts.

Figure D - 25. Rating of OBF Marketing Materials from IOU



Note: Some vendors participate in OBF with multiple utilities.

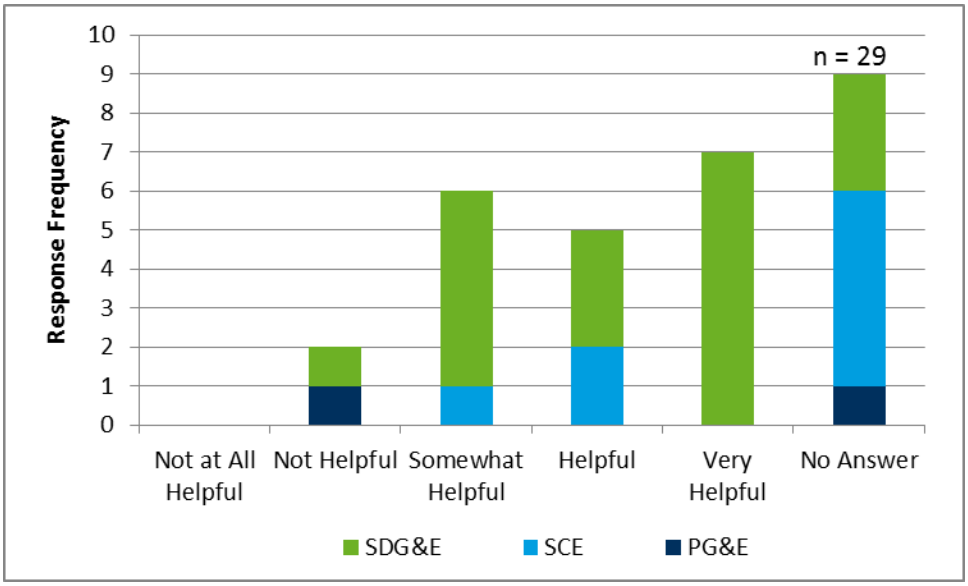
A few vendors said the marketing materials do not explain how the program works in enough detail, yet one also commented that they would like a simpler brochure. One vendor said they appreciated the newsletter from the utility. Eleven SDG&E vendors rated the online vendor handbook[14] from SDG&E as somewhat helpful to very helpful, one said it was not helpful, and seven declined to provide a rating.

Nearly two-thirds (18 of 29 vendors) said that OBF training was at least somewhat helpful (Figure D - 26). Seven vendors indicated that their experience with OBF training was very helpful. Two vendors said the training was not helpful because they did not get all their questions answered, such as when they asked which customers are eligible for OBF.

Nine vendors said that they are not familiar with the OBF training and gave no answer. It is surprising that three SDG&E vendors gave this response, because SDG&E requires their vendors to go through training before they can participate. It is possible that these vendor contacts had a colleague who attended the training.

[14] This was SDG&E specific, and is not applicable to SCE or PG&E vendors.

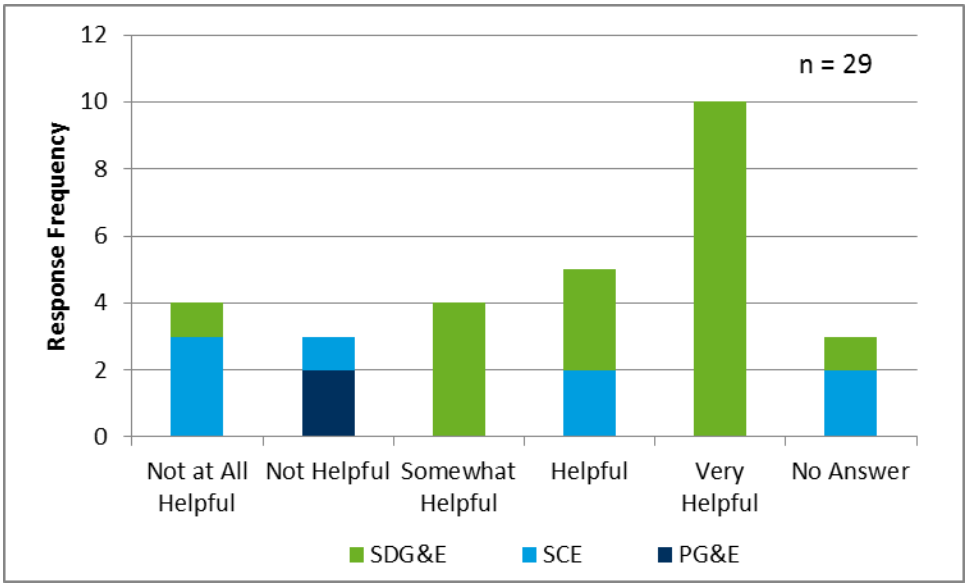
Figure D - 26. Rating of OBF Training



Note: Some vendors participate in OBF with multiple utilities.

When asked about the support received from utility staff members, two-thirds of vendors said the utility staff was somewhat helpful to very helpful (Figure D - 27). Vendors who did not find utility staff members to be helpful said it was difficult to reach someone who had all the answers, and that they were often transferred to multiple staff.

Figure D - 27. Vendors Rating of Utility Staff Support



Note: Some vendors participate in OBF with multiple utilities.

Overall, vendors were fairly split about whether they are able to communicate with utility staff in a timely manner (Table D - 2). Fourteen vendors said that they did not have any issues, ten vendors said that they were not able to effectively communication with utility staff, and five said they had mixed results. Because communication is often limited to e-mail, vendors said it is important to know the correct staff to contact.

- *"[On] any given day, the answer might be different. You can get in touch with them (the utility staff), but resolution is sometimes a lot more difficult."*
- *"The utility staff were always switching me back and forth between several people. They seemed very confused."*
- *"SCE is very difficult to get answers from in a timely fashion. It can take weeks to get an answer. With SDG&E, you know who you are dealing with. With SCE, you don't know who your e-mails are sent to because they go to an open e-mail address."*

Table D - 2. Timely Communication with IOU Staff

Response	PG&E Vendors	SCE Vendors	SDG&E Vendors	Total
Communication is timely	0	1	13	**14**
Sometimes timely	0	2	3	**5**
Communication not timely	2	5	3	**10**
Total	**2**	**8**	**19**	**29**

Note: Some vendors participate in OBF with multiple utilities.

Vendors' Future Plans for OBF

Most vendors (25 of 29) said they would continue promoting OBF to their customers (Table D - 3). All SDG&E vendors said they will continue their participation in the future.

Several vendors were tentative about using OBF in the future because project approval, communication, and payment processes were slow. Vendors hope that OBF can be improved, but many spoke about pursuing back-up plans if it did not. These vendors believe the utilities need to "fix" their practices.

Table D - 3. Vendors' Plans to Promote OBF for Future EE Projects

Response	PG&E	SCE	SDG&E	Total
Will continue to promote OBF	2	4	19	**25**
Might continue	0	1	0	**1**
Will not continue to promote OBF	0	3	0	**3**
Total	**2**	**8**	**19**	**29**

Note: Some vendors participate in OBF with multiple utilities.

Source survey question: In the future, do you plan to continue promoting on-bill financing for efficiency projects? (n=29)

APPENDIX E. ACCOUNT EXECUTIVE INTERVIEW RESULTS

Introduction

Cadmus interviewed 12 account executives who work with CIA or G&I customers with OBF loans or applications in queue. These 12 interviewees comprised four account executives each from SoCalGas, SCE, and PG&E. Because the SDG&E program is driven primarily by vendors and their account executives play a lesser role in OBF than at the other IOUs, we did not include SD&E account executives in this task.

The number of customers each account executive is responsible for ranges from 15 corporate customers with multiple accounts to thousands of unassigned customers. While the account representatives may be responsible for a large number of customers, they only actively work with a subset of that group at any given time. PG&E and SCE both assign account executives by customer type, while SoCalGas account executives are assigned either to a geographical area or by a particular industry. PG&E and SCE account executives who work with CIA[15] customers said they are assigned to customers such as: industrial food processing, national chains (restaurants, grocery stores), agriculture, and businesses under 200 kW. G&I account executives work with municipalities, K-12 school districts and universities, or a combination of the three.

Training and Assisting Customers with OBF

Account executives at each IOU received training, handouts, and other support to prepare them to offer OBF to their customers. They are kept updated through staff meetings and announcements. When needed, account executives consult with OBF program staff or other colleagues for additional assistance.

While the OBF training was generally helpful, the account executives reported that going through the process with a customer is what solidified their understanding. All four SoCalGas account executives and three each out of the four account executives at SCE and PG&E said the training was helpful in preparing them to assist customers. One account executive at SCE said they had to refer some questions to the OBF staff, and one account executive at PG&E said they need to better understand how OBF will impact the customers.

Account executives also mentioned that energy efficiency program staff might need additional OBF training, since their misunderstandings have caused many OBF delays at PG&E and SCE. (Please see the section on processing time, below.)

Identifying Potential Customers for OBF

Account executives were not given specific instructions to target OBF to a particular market segment; it is available for all account executives to market to qualified customers. As one account executive remarked, "*OBF is just a means to an end, so we don't really target anyone*." A few account executives look for customers who are interested in a retrofit but need funding or have cash flow issues; one SoCalGas account executive mentioned school districts and smaller

[15] CIA stands for Commercial, Industrial, Agricultural customers

business customers as prime targets. One SCE account executive, who works with customers having below 100 kW of demand, indicated that smaller customers do not have enough opportunity to participate because SCE has not allocated much funding for small CIA customers.

When asked which customer segments might be best suited for OBF, account executives gave a variety of responses (Table E - 1) which were often influenced by the type of customers they work with or by the type of measures they could offer.

Table E - 1. Ideal OBF Customer Segment

Utility	Small to Medium CIA	G&I	All Eligible	Other
SoCalGas	0	0	2	2
SCE	1	1	1	1
PG&E	2	0	1	1
Total	**3**	**1**	**4**	**4**

Four account executives said customers from all segments are good candidates for OBF if they need it and can meet the requirements. Three account executives said small to medium sized businesses would be the best candidates, but one disagreed, as indicated in the quotes below.

- *"Textiles would be the worst because they can't pay their bills. Chemicals might be good, depending on what they make. State agencies as well, they need financial support."*
- *"I have worked with small and medium sized businesses in the past – small mom and pop shops, with refrigeration, etc. can really use [OBF]."*
- *"I would say medium-sized businesses that aren't flush with cash but have aging buildings that need things like control systems. [Ideally] businesses that are large enough to get a good project out of, but the low-hanging fruit hasn't been picked yet. OBF is a good next step for energy efficiency beyond lighting projects."*
- *"I'd say small to medium sized customers [are ideal candidates for OBF]. Larger customers seem to be more sustainable, with better access to financing [and] more capital resources. Smaller customers need help. They need an option or an opportunity like this to propel them to do the project."*
- *"Municipalities—government and institutes—they really jump on this program. I wouldn't offer [OBF] to really small businesses, because they have the direct install program and also because they're here today, gone tomorrow."*

One SoCalGas account executive who works with universities noted that these customers are not comfortable with the OBF contract clause that holds them responsible for payment in the event of a natural disaster. Another SoCalGas account executive said that the drop in natural gas prices has made it harder to get customers interested in energy-efficiency programs, and thought it would be beneficial to factor this price decrease into the program design, perhaps by extending the payback period to eight or 10 years to enable more customers to qualify.

The majority of account executives do not discourage any eligible customers from applying for OBF, but two account executives from the IOUs who experienced recent start-up challenges noted situations in which OBF may not be the best option:

- *"I haven't discouraged [customers] by saying 'don't do it,' but I have told them that the wait process[16] and application process can be long and painful, [but I] never say no straight up."*
- *"I would never discourage [a customer from applying for OBF], it's a business decision. [But] if a project can pay for itself in six months, why go through the headache?"*

Account executives have been told not to limit the types of projects they recommend for OBF, and they look for any that might qualify. Three out of four SCE account executives said they market OBF for lighting projects, with one adding that their customer segment did not qualify for incentives covering other types of equipment.

OBF Application Process

Most account executives help their customers fill out energy-efficiency program and OBF applications, and provide assistance through the entire application process. They work with customers' vendors when requested; and said that vendors are usually helpful because they have a stake in a project's success. Account executives say the addition of OBF to a project usually does not impact which customer decision makers are involved. The account executives at SoCalGas complete the energy-efficiency program applications, but the OBF program staff usually complete the OBF applications. Not surprisingly, all the SoCalGas account executives said the application process is easy and quick. SCE and PG&E account executives have more mixed views of the application process because these programs experienced start up challenges.

SCE account executives reported some start-up challenges with OBF because the utility was not prepared to process the volume of initial applications and does not have enough staff to process the OBF applications. While the process is straightforward, it has experienced several delays, and account executives do not always get a quick response from OBF staff members. The slow communication means that account executives are not able to respond to their customers as quickly as they would like. One account executive said that it is not fair for customers to have to wait for loan funds without knowing whether money will be available for their project: *"I don't think that's fair for customers to have to sit in a line like that and be promised money, and then a year later that money is gone and they can only get X amount of money or nothing at all. [The customer] counts on this [OBF]."* Account executives at SCE, which ran out of OBF funds shortly after program launch, said that more of their customers will apply for OBF once more money becomes available and the queue is reopened.

Three of the four PG&E account executives said the application process is going well. One mentioned that OBF approvals take a long time because all applications go through one person. *"We have one person doing everything – signing, loan applications, and agreements; I always*

[16] This comment is from an SCE account executive in reference to the fact that SCE is fully subscribed and has a wait list for OBF

think about what [will] happen if he gets ill. I think that's a concern. [We are] probably understaffed. If we ever decide to scale this up, I'm not sure how we'll be able to do it."

At PG&E, one account executive finds the process difficult because the OBF and energy-efficiency program staff does not communicate well enough to keep the applications moving along. This account executive mentioned that if energy-efficiency program staff members receive more training on OBF, they will be better able to help move applications through the system.

Processing Time

In general, customers set the pace at which a project proceeds. Account executives across all three IOUs provided examples of both large and small customers who were able to move their project quickly, and could also provide examples of those who needed more time to make decisions.

On the utility's side, one SoCalGas account executive observed that OBF projects are approved more quickly than projects that do not use OBF: *"The approval process and pre-screen is very quick, and when the project is complete, the processing time to issue the check is very fast. A lot faster than our incentive processing. Probably the best internal process we have going at SoCalGas."* In contrast, three SCE and PG&E account executives have experienced longer processing times for projects with OBF.

SoCalGas account executives are generally satisfied with OBF application processing times, reporting that it usually takes between six and eight weeks for a project to go through both OBF and engineering review. In contrast, SCE account executives reported that it takes six months for their OBF projects to be approved, which they consider to be too long. Two SCE account executives reported receiving complaints about the amount of time it takes to process OBF applications.

PG&E account executives said that projects took longer to approve when OBF was first offered, but that the process has become more streamlined over time. One account executive said the credit approval process took too long, but that customers or vendors also caused delays by not having their "*ducks in a row*." One PG&E account executive observed that customers bogged down by their internal bureaucracy can take over a year to sign off on loan documents.

After applications are submitted, every project gets both the pre- and post-inspections required for every energy-efficiency project. Account executives agreed that the inspections do not add much processing time, and believe they are important for quality purposes. After a project passes the final inspection, the OBF payment is disbursed. Account executives from both PG&E and SCE were concerned about the time it takes to pay vendors for OBF projects. As one interviewee said, "*vendors don't have deep pockets like [the utility] does. We leave them hanging out a lot.*" Another PG&E staff member wants to see PG&E issue OBF loans as quickly as they issue rebate/incentive checks.

Value of OBF

Account executives said that most customers highly value OBF, especially in the current financial climate. OBF allows projects to proceed. Account executives offered several comments about OBF's value to both the utilities and customers:

- *"From 1 to 10, it's a 10 [in value]. From a G&I perspective, if cities had financing, they'd do the projects. Being as the state budgets are where they're at, they're thirsty for funds to upgrade. It'd help a lot. Definitely with customers too. These are cities; they need to retrofit old gyms, schools, etc. It's a big help."*
- *"It's actually the missing link of taking a project from [the] conceptualization stage to an installed project. The OBF has been the kicker to move forward with a project."*
- *"[Projects] wouldn't have happened otherwise. Customer said flat out they wouldn't do an energy-efficiency project without OBF."*
- *"It definitely [increases] the likelihood of the retrofit project happening. Probably allows for deeper measures, larger retrofits, [and] more expensive [projects with] more long-term benefits."*

One account executive who works with large industrial customers said OBF is not as valuable for them because these customers can afford retrofit projects. In contrast, another account executive who works with smaller customers said they didn't seem to be as interested in OBF and that it may be more helpful for customers with larger projects.

Account executives most commonly mentioned the 0% financing as the reason why customers use OBF. Other benefits they cited include the removal of up-front costs. Table E - 2 shows the reasons account executives reported that their customers use OBF.

Table E - 2. Reasons for Using OBF

Reason for Using OBF	Number of Times Mentioned
0% interest rate	7
Don't have cash for project	3
Preserve cash for other purposes	3
Other	2
On the bill	1
Bill neutrality	1

Account executives were quite vocal about the 0% financing:

- *"I think the main reasons [customers use OBF] are that it's essentially free money, the 0% interest rate, no loan origination charge, etc. Why on earth would you spend your own capital when OBF is available? It's also convenient to have on your bill. It's an easy sell, really."*
- *"I think the 0% interest rate is something that no one can compete with – that's a huge selling point. What seals the deal is that we go through a cost benefit analysis and show them how it works, how they can save, etc."*

Relative Value of Rebates and OBF

Four account executives said rebates and financing work "*hand in hand, can't take one over the other.*" However, account executives from all three IOUs also noted that financing is better in situations where the rebates "*aren't really substantial compared to what needs to get done.*"

According to SoCalGas account executives, the OBF program has been refined to the point where customers believe it is more valuable than the underlying energy-efficiency programs. SCE account executives said that because it takes so long to process OBF at their utility, larger customers prefer rebates over OBF; OBF seems to work better for SCE's smaller customers. One of the PG&E account executives also said that customers who "*truly can't [afford] a project*" are usually smaller and prefer OBF over rebates.

OBF Going Forward

Account executives from all three IOUs said OBF is a great program that they hope they can continue offering to their customers. SCE account executives said OBF was extremely popular while it was available, and they hope SCE will expand the program. PG&E account executives said that although OBF took a while to gain momentum, it continues to improve.

Thoughts About On-Bill Repayment Model

The CPUC is contemplating a new finance offering called on-bill repayment (OBR), so we asked account executives what they thought of hypothetical changes to OBF. We asked them about both third-party financing and the introduction of below-market interest rates.

Most account executives believe the introduction of third-party financing providers would introduce multiple issues, complicating the program and slowing down the approval process. Account executives expressed apprehension about lenders' need for customer information, as well as the utility's loss of control over part of the program process. For school district customers, OBF currently "*slides under the radar*" for approval by school boards and teachers' unions, but account executives believe that third-party financing will create more scrutiny and opportunities for them to reject the project. Some examples of the account executives' responses to OBR include:

- *"Lenders are in the business of making money. With the utility we can offer no interest. With terms and conditions, customers would have to deal with a whole number of admin layers, control, all those nuts and bolts [would be] in the hands of a lender. There would be a part where the utility would be cut out. We're very in tune with our customers' needs. It's a need-based process with efficiency for us, but lenders are in it for money, not for efficiency or meeting customers' needs. I'd be apprehensive."*
- *"It would kill the program. Customers don't want to deal with a bank. They just want this to be easy. We want to de-emphasize the whole financing aspect as much as possible. We should even go as far as changing the name to an 'assistance program.'"*
- *"If we bring an outsider in, I don't know how that'd change [our process]. If the quantity of paperwork didn't change too much and there wasn't a huge process change, I think it'd be ok, but I think customers really like it [the way it is] currently."*

Under OBR, the 0% interest would probably be replaced with low interest rate financing. Seven of the 12 account executives were adamant that 0% interest is a significant selling point for customers, and changing it would hurt their programs. "*[0% is] so huge, such a great selling point. It'd be a real shame to lose it.*" Several account executives reiterated that bringing in financiers with little technical background would be an even bigger challenge than an increased interest rate. Two account executives disagreed with the other 10, saying that they do not think an increased interest rate will pose a problem if it means that more customers have access to financing and the process remains smooth.

APPENDIX F. FOCUS GROUP RESULTS

Executive Summary

Introduction

The insights in this report are based upon six focus groups that The Cadmus Group conducted with California businesses as part of a larger study assessing on-bill financing (OBF) for the CPUC. These results will be used to inform CPUC decisions regarding current on-bill financing programs offered by the IOUs and development of future energy-efficiency financing programs.

During January 2012, Cadmus held two focus groups with large businesses and four focus groups with small businesses in Fresno, San Francisco, and Irvine. In all, 46 businesses participated, representing various industries, sizes, and renter/owner status.

The groups targeted key financial decision makers within businesses[17] who had received utility-sponsored energy audits of their facilities, either on-site or online. During recruitment, if a decision-maker said his or her business required multiple people to approve capital improvements, and also self-identified as a medium or large business, he or she was placed into a large business group. If a decision-maker said that he or she alone[18] approved capital expenditures, and self-identified as a small business, he or she was placed into a small business group.

Summary of Key Findings

Similarities Across Segments

The large and small businesses were similar in many important ways. Similarities across the segments are described below and summarized in Table F - 1.

Perceived barriers and benefits. The majority of participants in both segments reported up-front costs and lack of knowledge to be the two most significant barriers to improving their properties' energy efficiency. Although costs were clearly the primary barrier, many participants indicated that they struggled to identify the right equipment, available utility programs or tax credits, and a qualified contractor to complete the job. Participants agreed the primary benefit they look for in pursuing energy efficiency is cost savings.

Awareness and actions. Participants in both segments indicated that energy efficiency was important to their business. Participants across the two segments also reported that lighting was the most common energy-efficiency installation made in response to their recent energy assessments.

[17] The term business has been used in this document to cover all non-residential consumers. Institutional consumers may also be included in the groups.

[18] If two family members were involved in decision making, we considered that business to have a single decision maker

Financial decisions. Both segments reported a collaborative approach to decision making.

Responses to financing approaches. Participants agreed that a low- or zero-interest loan was the most appealing financing option. With regard to the desired project payback period, participants reported a preference of three to five years. The specific aspects of the presented loan offering (on-bill loans and tariffs) that participants found attractive were a simplified payment process and bill neutrality. Although participants were enticed by the loan offering, most indicated that they needed to see the details on paper before they were able to say with certainty whether they were interested in taking advantage of this offering.

Most participants indicated that they found the tariff idea appealing. Specific aspects of the tariff that participants identified as attractive were having the payment tied to the meter, bill neutrality, not incurring debt, a simplified payment process, and the idea that if they sold the property or moved they would not be held accountable for the remaining payments. Despite the level of interest in the tariff, participants had many questions, such as what would happen if the property sold, how were savings estimated, and how long would the tariff last. As with the loan, participants wanted more details before they determining whether they and their business would be interested in taking advantage of the tariff offering.

Businesses across the segments did not have a strong preference for who (utility, bank, vendor) provided the financing capital, but they did agree that they would need to trust the lender and understand and have confidence in the offering before being willing to participate in such a program.

Both large and small businesses agreed that the two most important features of a finance offering are an attractive interest rate and bill neutrality.

Utility programs and attracting greater program participation. Most businesses were familiar with at least some of the utilities' energy-efficiency programs, e.g., energy assessments and equipment rebates. In addition, a good portion of the businesses had participated in a utility efficiency program, reporting mixed experiences and results. Their experiences with utility efficiency programs affected their perceptions about financing energy efficiency.

Participants felt strongly that the best way to engage similar businesses would be reading about and talking with businesses that had successfully participated in a utility-sponsored financing program. Other outreach methods include direct calls, television and radio advertisements, social media (e.g., Twitter), and case studies.

Most participants suggested that they and others like them would be more inclined to explore financing options if the program was easily understood and the process transparent. Participants stressed the importance of trust in the lender and flexibility so that the financing package could be customized to fit their needs.

Table F - 1. Similarities Across Segments

Areas of Similarities	Description
Installing energy-efficient equipment	
Primary barrier	Up-front cost
Secondary barrier	Knowledge, i.e., identifying the right equipment, rebates, and contractor for the job
Desired Benefits	Cost savings
Energy-efficiency actions	
Actions taken	Of those who took action, both segments reported installing energy-efficient lighting
Importance of energy efficiency	Most in both segments valued energy efficiency
Project Payback	Participants preferred a three to five year payback period
Financial decision making	
How decisions are made	Nearly all businesses revealed a collaborative approach to decision making
Consideration of financing	Participants overwhelmingly preferred to use their own capital to invest as opposed to financing
Financing approaches	
Interest rates	Participants found zero to be the most appealing interest rate, although three to five percent was acceptable
Tariff (on-the bill, savings are equal to or greater than the loan installment, non-debt)	Participants were interested in the tariff, but had many questions
	Specifics aspects that were attractive included: - Having the payment tied to the meter and not the customer - Simplified payment process - Bill neutrality - Not incurring debt
Loan (on-the bill, savings are equal to or greater than the loan installment)	Businesses agreed that they would need to see the specific details of the loan before they could say if they were interested
	Specific aspects of the loan that were attractive included: - Simplified payment process - Bill neutrality
Sources of funding	The majority of businesses did not have a strong preference for who provided the loan capital nor who presented the financing offer to them. Participants wanted to be able to speak directly to the lender and needed to have trust in the lender.
Rating financing offers	Most important features: - Attractive interest rate - Bill neutrality
Financing concerns	Participants agreed that they needed to trust the provider and understand the offering
Utility assistance	
Program awareness	Businesses were familiar with at least some utility programs and a number had participated in them.
Take-away advice	
Reaching out	Case studies, direct call from utility rep., TV and radio commercials, newspaper ads, e-mail, Facebook, Twitter, on-bill ads
Best advice	Participants emphasized the importance of simplicity, transparency, and trust, as well as customizing the offering to each customer

Differences Across Segments

Although the large and small businesses were very similar, notable differences remained. Differences across the segments are described below and summarized in Table F - 2.

Perceived barriers and benefits. The large businesses were more concerned with the amount of time a project might take than the small businesses. Specific concerns were revenue loss during closure and potential customer loss. This segment also reported that an extended return on investment (ROI) was a barrier to implementing comprehensive upgrades because they need to realize savings quickly, i.e., a three- to five-year payback, to justify the up-front cost.

Another difference was that large businesses identified operational improvements as their secondary benefit, whereas the small businesses reported environmental benefits such as "*reducing [their] carbon footprint*" as key. Specific operational improvements cited were increased equipment performance, positive impact on employees and customers, and labor reduction, i.e., less maintenance. Both segments identified a short ROI as a benefit, although with slightly different emphasis. A few of the small businesses identified improving their property value as a potential benefit from property upgrades.

Awareness and actions. Large businesses reported making more comprehensive upgrades than small participants. These upgrades included refrigerators, freezers, HVAC, controls, low-flow faucet aerators and toilets, weather stripping, boiler regulators, and lighting.

Financial decisions. The large businesses who had a corporate office or council, or who were part of an international company, indicated that proposals sometimes got lost in the approval process.

Large businesses had a greater propensity to include equipment upgrades and property improvement in their annual budgets than the small participants, who replaced equipment on an as-needed basis. Although both segments indicated they were primarily focused on growing their businesses, the large businesses reported a greater likelihood of investing business capital in energy-efficiency projects. No small business and only a few large businesses reported that they had considered financing as a means to complete an energy-efficiency project.

The large businesses were uncertain what a typical interest rate might be for an unsecured loan up to $100,000. Small businesses most often thought four percent to six percent was the typical interest rate.

Responses to financing approaches. Although participants were interested in both the tariff and loan approaches, differences between renters and owners emerged. While renters were generally enthusiastic about the tariff, owners were concerned about potential challenges that might be presented if they needed to sell the property. Another difference between owners and renters arose regarding payback repayment preference. Owners reported that they could tolerate a longer repayment period as long as no bill increase was involved, whereas renters could not guarantee they would be at the same location and therefore preferred a shorter repayment period.

The large businesses identified repayment period as the third most important feature[19] of the financing options. The small businesses selected the availability of 15% equipment rebates along

[19] The two most important features were interest rate and bill neutrality.

with financing as the third most important feature, but this was only slightly more important than the repayment period.

Table F - 2. Differences Across Segments

Areas of Difference	Description
Installing energy-efficient equipment	
Barriers	Large businesses were more concerned than small businesses about: - The amount of time it might take to implement - The return-on-investment period
Benefits	- The large segment identified operational improvements -The small businesses identified environmental benefits and increasing property values
Energy-efficiency actions	
Actions taken	The large segment reported more comprehensive upgrades including refrigerators, freezers, HVAC, controls, low-flow faucet aerators and toilets, weather stripping, boiler regulators, and lighting
Financial decision making	
Thinking about replacement	-The large segment reported including replacement of equipment in their annual budgets -The small businesses indicated replacements happened on an as-needed basis
Use of capital	Large businesses were more inclined than the small business participants to think they would use their capital to invest in energy efficiency
Loan repayment period	Owners preferred a longer repayment period while renters preferred a shorter repayment period.
Consideration of financing	Only a few large businesses had considered financing, and only one had financed an energy-efficiency upgrade with a private loan. The large businesses were less certain about what a typical interest rate might be for an unsecured loan up to $100k. Small businesses thought interest rates were around 4-6%.
Financing approaches	
Tariff	Businesses reported that the tariff was a better fit for renters than owners
Rating financing offers	Third most important consideration: - Loan repayment period [large] - Availability of 15% equipment rebates along with financing/repayment period [small]

Background and Overall Research Goal

As part of a larger study assessing on-bill financing for the CPUC, The Cadmus Group conducted six focus groups with California businesses. These results will be used to inform CPUC decisions regarding current on-bill financing programs offered by the IOUS and development of future energy-efficiency financing programs

Objectives

The main objectives of the focus groups were to:

1. Assess awareness of energy efficiency and its importance to businesses
2. Explore how businesses decide to make investments in energy-efficiency projects, including motivations and barriers to investing in efficient capital improvements
3. Explore how utility programs can best encourage businesses to complete comprehensive energy-efficiency projects
4. Identify the level of interest in on-bill financing and its attractiveness to businesses for financing energy-efficiency improvements (especially comprehensive ones)
5. Assess sensitivity to various on-bill financing loan terms and conditions, rebates, and financing.

Methods

Cadmus worked closely with the CPUC and its evaluation oversight contractor, Itron, to develop a screener for recruiting participants and to develop the discussion guide.[20] We screened all focus group participants to ensure that they had interest in making energy-efficiency upgrades to their properties, thought their businesses had viable energy-efficiency opportunities, and regarded up-front costs as a barrier to investing in energy-efficient upgrades.

The groups targeted key financial decision makers within businesses[21] who had received utility-sponsored energy audits of their facilities, either on-site or online. Itron provided Cadmus with a sample frame of audit recipients pulled from their database. During recruitment, if a decision-maker said his or her business required multiple people to approve capital improvements, and also self-identified as a medium or large business, he or she was placed into a large business group. If a decision-maker said that he or she alone[22] approved capital expenditures, and self-identified as a small business, he or she was placed into a small business group.

During January 2012, Cadmus held two focus groups with large businesses and four focus groups with small businesses in Fresno, San Francisco, and Irvine. In all, 46 businesses participated, representing various industries, sizes, and renter/owner status.

[20] See Appendix A.

[21] The term business has been used in this document to cover all non-residential consumers. Institutional consumers may also be included in the groups.

[22] If two family members were involved in decision making, we considered that business to have a single decision maker

Table F - 3 shows the breakdown for the on-bill financing groups. The number and location of businesses that had received audits determined the make-up of the groups.

Table F - 3. On-Bill Financing Focus Group Make-Up

Groups	Irvine	Fresno	San Francisco
Large	1 group	NA	1 group
Small	1 group	2 groups	1 group

The total number of participants by group and segment is shown in Table F - 4.

Table F - 4. Segment Details (n=46)

Location	Segment	Number Rent	Number Own	Total
Fresno	small	4	3	7
	small	2	3	5
San Francisco	small	7	0	7
	large	4	3	7
Irvine	small	4	5	10*
	large	6	4	10
	Total small	17	11	29
	Total large	10	7	17

*One participant's ownership status was unknown

We selected group locations that would ensure representation across major metropolitan areas in the State of California. We used full-service focus group facilities for all three locations. During each group, we discussed similar questions (the Discussion Guides are in the Appendix), although the exact wording of questions and the amount of time spent discussing each question varied. Each group lasted approximately one and a half hours, and participants received a financial incentive for attending.

Report Structure and Approach

The next section discusses the focus group findings in more detail, and presents similarities and differences among the large and small decision makers. The following topics are covered:

- Participant characteristics
- Barriers to and benefits of installing energy-efficiency equipment
- Energy-efficiency actions
- Financial decision making
- Financing approaches and options
- Utility support awareness
- Advice for reaching businesses

As with all qualitative research, these results are not statistically representative of all nonresidential customers. Indeed, the research highlighted the diversity within this target audience. Our goal in reporting these focus group results is to present balanced and qualitative insights, along with memorable highlights.

Summary of Findings

Characteristics of Focus Group Participants

The majority (27) of the focus group participants reported that they were renting or leasing the facility in which their business was located. The remaining participants (19) said they owned both the business and the facility.

The large businesses reported employee counts ranging from 50 to 4,000. They included, but were not limited to, the following businesses types:

- Hospitality
- Manufacturing
- Healthcare
- Construction
- Education
- Real estate
- Property management
- Government

The small businesses reported employee counts ranging from 1 to 90 (the exception was one participant who reported 300 employees). They included, but were not limited to, the following businesses types:

- Retail
- Food service
- Manufacturing
- Healthcare
- Real estate
- Entertainment

Installing energy-efficiency equipment

As participants waited for their group to begin, they were asked to think back to the last energy-efficiency project considered or completed at their business and complete the following sentences.

The two biggest barriers my business faces in making energy-efficient improvements are:

The two biggest benefits my business looks for when making energy-efficient improvements are:

The barriers and benefits sections below are based on the written responses from this exercise and the in-group discussions that followed.

Barriers

Similarities Across Segments

Up-front cost was the primary barrier to upgrading their properties reported by both segments (see Figure F - 1 below). The segments also agreed that "knowledge," i.e., difficulty identifying the right equipment, rebates, and contractor for the job, was the secondary barrier.

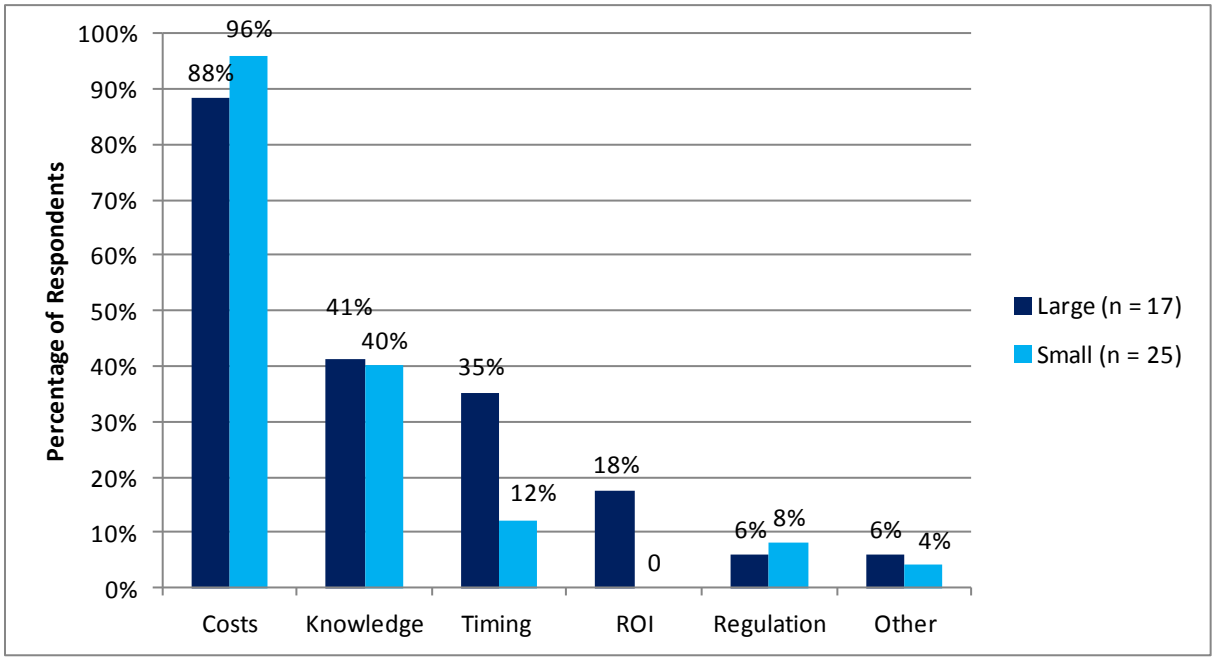
Differences Across Segments

Regarding differences across the two segments, the large businesses indicated that timing, i.e., the amount of time required to complete the project, was a much greater concern than for small businesses. The discussion circulated around potential revenue lost if the upgrade required temporary closure of the business and the possibility of losing clients during that time.

Other minor differences that surfaced between the segments were included in "other."[23] One small business indicated that to ensure that the building retained its aesthetic appeal, he could not always choose energy-efficiency equipment, e.g., lighting. One large business reported frustration as he perceived that the electricity rates continued to rise even as consumption decreased, and therefore he was not inclined to invest in energy-efficiency. Several participants in this group countered his argument by noting that even if the rates did increase, investing in energy efficiency would save him money, but he was not convinced.

[23] Only one participant from each segment was included in the "other" category.

Figure F - 1. Barriers to Upgrading Projects[24]



Benefits

Focus group participants cited the following common benefits from upgrading their property:

- Cost savings
- Operational improvements
- Environmental benefits
- ROI

Similarities Across Segments

Participants agreed that the primary benefit of upgrading their property was cost savings (Figure F - 2).

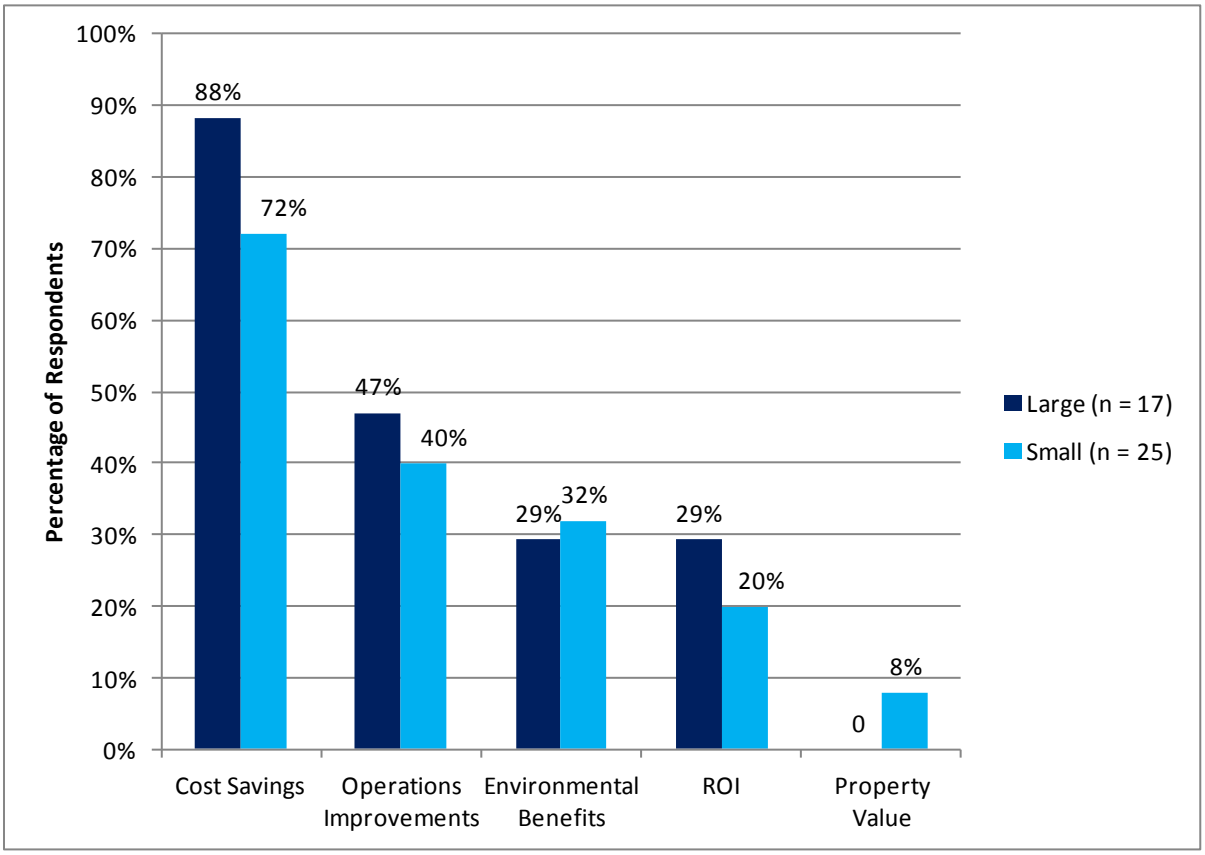
Differences Across Segments

Although the segments agreed that operational improvements, environmental benefits, and ROI were potential benefits, each segment stressed these slightly differently. Large businesses identified operational improvements such as increased equipment performance, positive impact on employees and customers, and labor reduction, i.e., less maintenance, as the secondary benefit. The small businesses indicated environmental benefits as their secondary benefit, saying that "*reducing [their] carbon foot print*" and "*doing the right thing for a better world*" was important. Although both segments indicated they wanted to see a "*fast payback*" or ROI, the large businesses stressed this feature more than the small businesses.

[24] Four small business participants did not fill out the pre-group exercise, therefore n = 25 and not 29.

One additional difference that surfaced between the segments was that a few of the small businesses identified increasing their property value as a benefit of energy-efficiency upgrades.

Figure F - 2. Benefits from Upgrade Projects[25]



Energy-Efficiency Actions and Importance

Since participants were recruited from a list of businesses receiving energy audits, we asked them if they remembered receiving an on-site or online energy assessment and if they had followed any of the recommendations in the audit. In addition, we asked all participants how important they thought energy efficiency was to their business.

Recall of energy assessment

The majority of businesses (78%) remember receiving either an onsite or online energy assessment. Of those, most were on-site assessments. The remaining 22% of participants did not remember receiving an assessment either on site or online.

Assessment actions

We asked the participants who remembered receiving an energy assessment if they had been able to complete any of the recommendations. The majority said they had followed at least one recommendation.

[25] Four small business participants did not fill out the pre-group exercise, therefore n = 25 and not 29.

Similarities Across Segments

Both segments reported they had most often installed more efficient lighting as a result of the assessment recommendations.

Differences Across Segments

The key difference between the two segments lay in the type and number of completed projects recommended by the assessment. Lighting was by far the most common completed recommendation for small businesses; although two participants did report more comprehensive projects. One reported installing a new HVAC system, windows, and a water heater; the other reported changing operating hours, installing occupancy sensors, and replacing old or inefficient motors.

The large businesses reported more comprehensive projects with a variety of equipment upgrades including refrigerators, freezers, HVAC, controls, low-flow faucet aerators and toilets, weather stripping, boiler regulators, and lighting.

Importance of energy efficiency

Similarities Across Segments

When asked how important energy efficiency was to their business, the majority of both segments reported it to be very important. They demonstrated the importance of energy efficiency in their business through describing the various efficiency improvements they had completed. Many participants had in-depth knowledge about energy efficiency measures. As one large participant noted, "*[It's] important because it relates to cost; we're always looking for ways to reduce operating costs and reduce tenant costs.*"

Those businesses that did not report energy efficiency to be very important fell into two camps: (1) those that preferred to use their cash for day-to-day business operations,[26] and (2) those that would like to invest in energy efficiency but did not have the capital or upper management support to do so. One example provided by a large participant was that although the "*owner says it's very important, looking at my budget, it doesn't look important.*"

Financial decision making

We asked participants what drives the decision to invest the company's capital in an energy-efficiency project and how that decision is made i.e., who makes the final decision. In addition, we asked how likely they thought it was that their business would use its capital on such a project. Furthermore, we probed whether the participants had ever used or considered financing for an energy-efficiency project, as well as how easy they thought it would be to secure financing for such a project.

How decisions are made

Differences Across Segments

Although both segments reported a collaborative approach to decision making, large businesses who had a corporate office or council, or were part of an international company, indicated that

[26] Energy efficiency was not viewed as a part of the day-to-day operations

their proposals sometimes got "*lost in translation*." When asked what this meant, one participant responded that although energy-efficiency was a company value, "*anything over $100,000 is a hard sell*."

Another difference between the two segments was their thinking about replacements. The majority of the small businesses indicated that they replace equipment on an as-needed basis. One participant said, "*if it's not broken, [I'm] probably not going to fix it*." In contrast, many of the large businesses reported that they plan replacement and upgrades and build them into their annual budgets, although several acknowledge replacement on an as-needed basis as well. A few small businesses noted they tried to plan replacements, but often had to reallocate the budget to meet other business needs during the year. One small business said with regard to scheduling, "*[it] never works because you need the capital and it may not match the schedule*."

Use of capital

Differences Across Segments

When asked if they thought their business would invest its capital in energy-efficiency, most small businesses said that they "*would rather spend money on growing revenues*." In addition, they were concerned by the costs. As one participant said, "*it can be such a big ticket and contractors are very expensive as well*." In contrast, more of the large businesses noted an interest in energy-efficiency investment. Despite this higher level of interest, the participants expressed hesitation about investing in energy-efficiency. As one participant summed it for the group, "*[I think about it] all the time, but I need to see the ROI and savings; [and I] have to trust the information*."

Consideration of financing

Similarities Across Segments

Initially, both segments overwhelmingly preferred to use their own capital to invest in energy efficiency as opposed to using financing. Very few had even considered financing energy-efficiency improvements. When asked how easy they thought it would be to secure financing for an energy-efficiency project, participants were divided in their views. Some indicated they thought it would very easy, others though it would very hard, and some had no idea how difficult it might be to secure a loan.

Financing Approaches and Options

We spent most of the discussion exploring what participants thought about several possible financing options. To start this part of the discussion, we asked participants what they thought the typical interest rate might be for an unsecured loan up to $100,000 and what interest rate would be attractive, i.e., would they consider using it to finance an energy-efficiency project. In addition, we probed on what they thought was an acceptable payback period.

We then discussed two financing approaches to pay for efficiency improvements: (1) a tariff (or surcharge) on their utility bill and (2) an on-bill loan. Both these options would assume a bill neutral project.[27] Next, we asked participants if it mattered who (i.e., utility, bank, or vendor) provided the loan capital to fund their projects and how they would prefer to hear about

[27] The estimated monthly energy savings would be equal to or greater than the payment/loan installment

financing opportunities. Finally, the financing discussion ended with an exercise in which participants rated (low, medium, high, it depends) seven aspects related to financing an efficiency project. As part of this exercise, we asked participants if they had any lingering concerns about using financing for an energy-efficiency project.

Interest rates

Similarities Across Segments

Both segments indicated that they found a zero percent interest rate the most appealing, although when pressed, two to three percent was still acceptable. A minority of both segments initially reported that they "*don't do that*," i.e., they were not interested in financing. It is worth noting that by the end of the discussion most of these participants were open to the idea.

Differences Across Segments

When asked what they thought a typical interest rate for an unsecured loan up to $100,000 would be, the small businesses gave a range between four and 20 percent, with most offering suggestions between four and six; whereas the majority of the large participants were hesitant to guess. One participant said, "[I] have no idea." The large businesses that were willing to guess provided estimates similar to those offered by the small businesses.

Project Payback

Similarities Across Segments

Most businesses stressed the importance of a short payback. When we asked what length they considered to be short, the most common response was between three and five years. Several participants in both segments pointed out that the life of the equipment was an important consideration when determining an acceptable payback period, i.e., the equipment must last much longer than the payback period.

Tariff v. Loans

We gave participants a handout describing two potential financing approaches (Table F - 5) for efficiency projects. This handout was used to guide and inform the discussion on the pros and cons of each offering i.e., tariff or loan. Both the tariff charges and loan installments would be paid through the energy utility bill. First, the moderator read each column, focusing on one financing offering at time. Then participants were asked if they preferred one over the other.

Table F - 5. Tariff/Loan Handout

Feature	TARIFF (Surcharge on the bill)	LOAN (Installment on the bill)
Pays for the up-front costs of energy improvements, no money out of your pocket	Yes	Yes
Monthly energy cost savings are equal to or exceed the monthly finance payment	Yes	Yes
The repayment obligation is tied to the:	Utility Meter	Customer
Customer is obligated to:	Pay tariff only as long as the customer is billed for that meter	Pay off the full amount of the loan
If the current customer moves:	The tariff and energy savings transfer to the new customer (unless the current customer agrees to pay off the tariff)	No transfer; loan must be paid off by current customer
Expense or Debt?	Expense, not debt	Debt

Tariff reactions

Similarities Across Segments

Most businesses found the tariff to be appealing. Specifics aspects that were attractive included having the payment tied to the meter and not the customer, bill neutrality, not incurring debt, and a simplified payment. But after discussing the benefits and challenges to selling and buying a property with a tariff, the majority of participants in both segments reported that the tariff appeared to be a better fit for renters than owners. The primary cause for concern by owners was that a tariff might impede the salability of a building. This concern, and others about a tariff, is illuminated below:

- Could one move the purchased energy efficient equipment off the property e.g., grocery store owner sells the property and wants to take the refrigerators to the new location?
- Would the rate payer (building owner) be able to control the payment, e.g., owner or tenant has variable business revenue and energy consumption?
- What would happen if the property was sold and the new owner or tenant consumed much less or more energy than the original, e.g., a manufacturing business that consumes a lot of energy sells the property to a warehouse business that consumes much less energy. Would the warehouse owner/tenant be responsible to pay the same amount as the manufacturing business?
- How long would the tariff be in place?
- How would the savings be determined? How can they be guaranteed?

Loan reactions

Similarities Across Segments

The majority of businesses found the on-bill loan appealing, although less so than the tariff. Specific aspects of the loan approach that were most attractive included simplified payment process and bill neutrality. Despite the interest in the loan, participants across segments agreed that they would need to see the specific details of the loan before they could say with certainty whether they were interested.

Differences Across Segments

When asked if they preferred a shorter loan repayment period with a higher payment, which would eliminate bill neutrality, or a longer loan repayment period with continued bill neutrality, a distinction arose between property owners and renters. The majority of owners tended to "*like longer payoff [period with] no bill increase*." The renters reported that they could not guarantee they would still be at that property for the duration of the loan and therefore preferred a shorter repayment period.

Source of funding

Similarities Across Segments

When asked if it matters who provided the loan capital (utility, bank, or vendor), the majority of participants indicated that it "*doesn't matter [who provides the capital]; only the structure of the loan matters*." A small number of those who disagreed with this approach where inclined to think the utility might be a good choice, but a vocal minority of participants in both segments questioned why their utility would want to provide financing, asking, "*why would people who make money off me want to save me money?*"

Differences Across Segments

We asked participants whether they had a preference for who should tell them about financing opportunities. Although some participants in both segments preferred to hear about financing opportunities from their contractors, others did not. Similarly, a few participants in both segments reported they would prefer hearing about financing opportunities from a bank and others indicated they would prefer to hear about these opportunities from the equipment manufacturer. The strongest trend across both segments was the desire to speak with the lender directly. One large business clearly stated, "*whoever is giving me the money is who I want to talk to*."

Rating efficiency financing offers

We gave participants an exercise to complete in which they rated seven features of a potential financing offer based on perceived level of importance (Table F - 6).

Table F - 6. Rating Exercise

Features of a financing offer	How important? (circle one)	Reason for rating
Interest rate[28]	low / medium / high / it depends	
Bill neutrality[29] (monthly cost savings and monthly payment/surcharge cancel out)	low / medium / high / it depends	
Repayment period[30]	low / medium / high / it depends	
On-bill repayment (one bill)[31]	low / medium / high / it depends	
Utility vs. lender as capital provider / loan servicer[32]	low / medium / high / it depends	
Loan vs. tariff[33]	low / medium / high / it depends	
Availability of 15% equipment rebates along with financing[34]	low / medium / high / it depends	

Similarities Across Segments

Participants agreed on the primary and secondary features of importance. The most important feature reported was interest rate. Although the groups indicated a tolerance for a range of interest rates (see Interest Rates section above), the critical takeaway was that the lower it was, the better. One large participant responded when asked to elaborate on his preferred interest rate, "*low, extremely low, zero*."

The second most important feature for both segments was bill neutrality. When asked to elaborate on what made bill neutrality important, several items rose to the top, all related to cost. One small business said, "*[I] may not notice the cost as much*." And a large business decision maker said, "*[I] can't let the operating budget go up*," indicating that with bill neutrality she wouldn't have to worry.

Differences Across Segments

A slight difference appears between the segments on the third most important feature. For the large businesses, repayment period was clearly the third choice. For the small businesses, the availability of 15% equipment rebates along with financing was just as appealing as repayment period. The difference is comparatively minor enough to conclude that repayment period and the availability of 15% equipment rebates are both important aspects of financing, although not as critical as the interest rate and bill neutrality.

[28] Annual percentage rate (APR)

[29] Energy cost savings equal to or better than monthly payment/surcharge

[30] Time period over which the loan or equipment costs are paid off

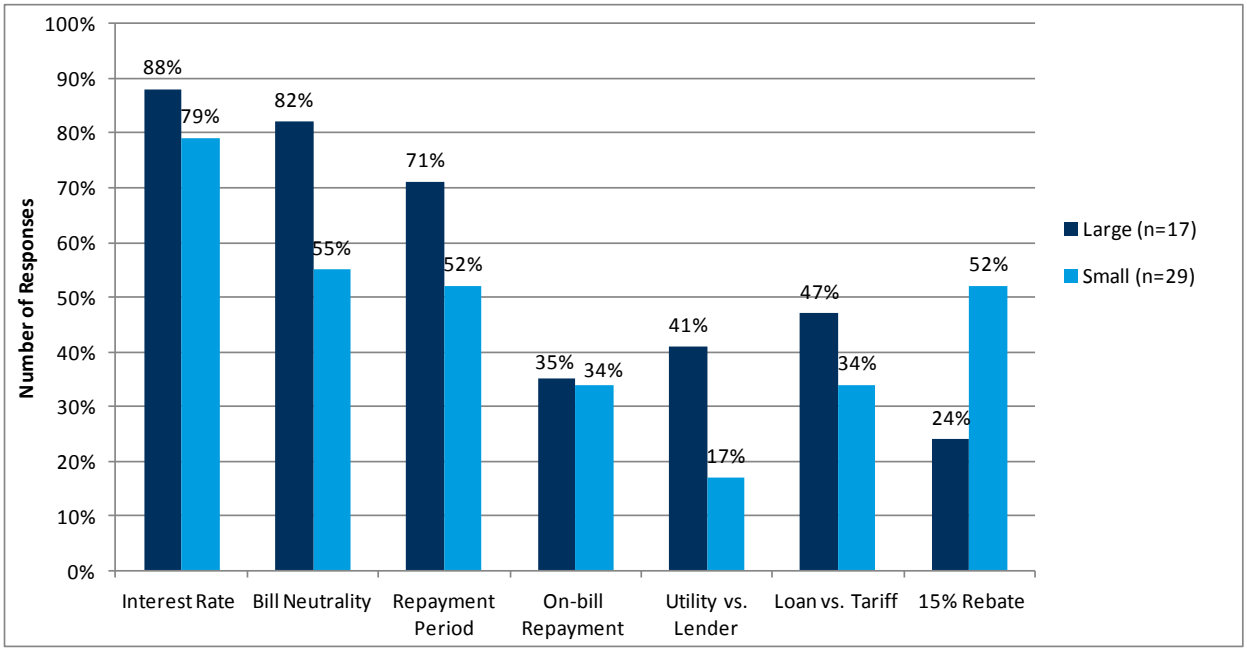
[31] Mechanism whereby loan payment or surcharges are paid through energy bill

[32] More entities involved if lender is capital provider

[33] Loan is tied to the customer whereas the tariff ties repayment to the meter

[34] Equipment rebates are cash incentives from the utility to purchase efficient equipment. This does not have to be paid back and helps to offset the cost premium associated with more efficient equipment.

Figure F - 3. Most Important Financing Features



Financing concerns

Similarities Across Segments

The key concern across both segments was a "*lack of trust and understanding*" regarding the financing offering and who may be behind it. One large business said, "*you can make the numbers dance the way you want them to dance*." An additional trust-related concern was whether the financing would be available when they needed it. As one small participant asked, "*[what happens] if they (the utility) don't have the money to do it [when I need it]*?"

Utility support awareness

We asked participants if they were aware that their utility offered technical assistance and how important they thought this was to helping them pursue energy-efficiency improvements.

Similarities Across Segments

The majority of participants in both segments were familiar with at least some of the utility programs, e.g., energy assessments and equipment rebates, but very few reported that they had heard of up-front financing. Quite a few participants in each segment had taken part in utility energy efficiency programs in the past, and they had had mixed experiences. For instance, some businesses were satisfied with program services and were eager to know about new program offerings. Others were more skeptical about achieving cost savings through taking efficiency actions due to increases in energy rates. The past experiences that businesses had with energy efficiency programs affected their responses to the financing options discussed in the groups.

Participants reported a wide range of opinions on how important energy efficiency programs are to pursuing energy-efficiency improvements. Although some were clearly in favor of rebates, others were less enthusiastic. The impact of the rebate appeared to be tied to the type of

equipment and the up-front cost, i.e., the higher the cost the more important the rebate. During the discussion one small participant pointed out that not all investments are treated the same, for example, "*lighting and HVAC maintenance – [there's] an important difference [in cost]*."

Advice for Reaching and Influencing Businesses

To conclude each of the groups, we asked participants to identify the most effective way of reaching businesses like theirs with information about utility programs. We solicited their best piece of advice for utilities to help businesses such as theirs to invest in energy-efficiency projects.

Reaching out

Similarities Across Segments

Although no clear consensus was reached regarding preferred methods of communication either across or within segments, trust was a common theme in both. One small participant said, "*[they have to] build trust and word-of-mouth [recommendations], make sure things (programs) are credible and available.*" Specific marketing tactics suggested by the groups included:

- Direct call from utility representative
- TV commercials
- Radio commercials
- Newspaper ads
- E-mail
- Facebook
- Twitter
- "*Big bold letters on the bill – not inserts, but right on the bill*."

Although there was disagreement over what might be most effective (e.g., some liked the idea of Twitter and others did not), the last suggestion did gain a significant amount of traction. A few participants in each segment also suggested an overarching educational public campaign to: help address the lack of trust: increase public awareness and understanding of financing options, why the utilities wanted to help, what the rebates covered, and how the program worked.

Best Advice

Similarities Across Segments

Both segments emphasized the importance of simplicity and transparency, as well as the importance of customizing the offering to each customer, as illustrated by their comments below:

- "*Make it very clear –make sure it's clearly defined, with end dates*" (small business)
- "*Honesty, ROI, costs, benefits, put it all on paper so it's all understandable*" (small business)

- " *[It has to be] simple, to the point, not 20 pages of fine print- and [provide] options*" small business)
- "*I'm really busy, keep it simple and straightforward, no cold calls with offers that are too good to be true, work with local businesses with credibility*" (large business)

In addition to the importance of simplicity and transparency, participants in both segments indicated they were interested in seeing case studies highlighting business similar to their own and who successfully used utility-based financing. One large participant said, *"[I] want to see a real-life model similar to our business; [I] want to see that it's worth it."*