ENERGY UPGRADE CALIFORNIA® STATEWIDE FINANCING PILOTS MARKETING EDUCATION & OUTREACH PLAN

November 4, 2014

Funding for this plan provided by ratepayers under the auspices of the California Public Utilities Commission

Table of Contents

Executive Summary

This plan provides a comprehensive design for strategy and implementation of marketing, education, and outreach (ME&O) for the statewide financing pilots authorized by the CPUC for energy efficiency and demand response projects in the single family residential, multifamily, small business, and medium to large non-residential sectors. It addresses contributions to be made over the two-year pilot period 2015-2016[1] by several stakeholders including the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), the four (4) major Investor-Owned Utilities (IOUs) PG&E, SCE, SCG and SDG&E, the Center for Sustainable Energy (CSE) and a variety of strategic partners.

This ME&O plan is the product of a rapid and robust stakeholder process that kicked off August 7, 2014 and will continue during implementation. Of necessity, the plan has been researched and written prior to and concurrently with development of pilot program implementation details, and therefore contains assumptions regarding program infrastructure and seeks to provide flexibility for ME&O implementers to adjust to final program design and market responsiveness during the implementation period. CSE reviewed a great deal of market research and conducted interviews and focus groups in development of this plan (as documented in the appendices), and the ME&O strategy is based upon lessons learned and best practices informed by a variety of energy financing programs around the world.

Per CPUC direction, this plan focuses first and foremost on additive ME&O opportunities for the financing pilots and assigns budget resources to those. To drive demand for energy efficiency and demand response projects to be financed, the plan relies on close coordination with ME&O conducted by the IOUs and their implementers for ratepayer-funded energy efficiency and demand response programs and with the Energy Upgrade California® Statewide ME&O brand largely funded by those programs. This ME&O plan focuses on a “behind the scenes” market facilitation approach designed to support success of the pilots by facilitating uptake of the financing products created by the pilots rather than an “out in front” marketing sales approach that would market the financing products solely or directly. Tactically, this translates into a multi-layered approach in which ME&O focuses on strategic partners as both an audience and a channel to ultimately drive loan and lease action by borrowers.

The plan is comprised of three main strategies outlined below. A few key tactics supporting each strategy are listed as sub-bullets. This list of tactics is not comprehensive.

1. **Aim financing at the “first-cost” barrier for projects rather than marketing it as stand-alone**
    a. IOUs to integrate financing messaging and calls to action into energy efficiency and demand response programs’ ME&O and account representative communications
    b. CSE to integrate financing messaging and calls to action into Energy Upgrade California Statewide ME&O demand-side management campaigns and resources

[1] Extended to 2017 for financing products launching in 2015 based on A.12-07-001 et al: Assigned Commissioner’s Ruling Clarifying Operation of Energy Efficiency Finance Pilot Programs – Page 3

c. CSE to develop and provide resources and tools for contractors and other strategic partners to integrate financing messaging and calls to action into their marketing
d. CSE worked with the IOUs to define target audiences' particular barriers to financing energy projects and the variety of marketing solutions that could overcome each of those barriers to develop the financing ME&O strategies in this plan
e. Implementers of Ratepayer-Funded Programs (RFPIs) to target customers primed for program participation who need financing to "close the deal"
f. CSE will leverage and build upon the Statewide ME&O education and outreach channels to support financing awareness in conjunction with energy education. The primary channels for this additional support will be retail, where customers are already primed for energy management actions and may use financing to go further, and community-based organizations that will be used to increase outreach to low and moderate income and hard to reach communities.
g. Additional resources will be leveraged through continued collaboration with RFPIs

2. **Leverage trusted messengers such as contractors and other strategic third-parties to deliver ME&O but do not expect them to become financing experts if they are not already**
    a. CSE will develop cooperative marketing for financial institutions, contractors and other partners that is appropriate for the partner and ready to use
    b. CSE will coordinate with CAEATFA to provide contractor education and training via a hybrid of in-person training and online modules that will help contractors know when to introduce financing into the project discussion and how to address barriers consumers may perceive
    c. CSE will coordinate with CAEATFA to provide IOUs information for their existing program trainings for contractors at IOU energy centers and through other channels
    d. Contractors and other strategic partners will have tools for use with their customers that help communicate the benefits of financing and do not require them to be experts

3. **Help potential borrowers understand the benefits of financing and differentiate between financing products to aid their decision-making and overcome the "confusion" or "wall of information" barrier**
    a. CSE, in coordination with its management of the Energy Upgrade California Statewide ME&O program, will provide a central online repository for financing information and a consumer decision-making tool that will aid customers in choosing how to finance an energy project. This tool will be developed in phased rollout based from simple to more comprehensive.
    b. CAEATFA will develop an education and outreach strategy that includes a support network for contractors to guide their participation in the financing pilots
    c. The IOUs will train Energy Advisors and Account Representatives already providing customers with rebate and incentive information to also assist customers with financing

d. CSE will develop video marketing for targeted customer segments that communicates the benefits of financing and doing energy improvements. These videos will be hosted in a central location and distributed throughout the pilot stakeholder network.

The strategy and activities are designed to provide high level direction and budget for implementation through the launch of the single family residential, the predevelopment stages for multifamily and EFLIC and the remaining pilots using the on-bill repayment mechanism. However, approximately 20% of the implementation budget is held in a reserve line item with the intent of reviewing program progress and activities to best prioritize the remaining dollars where they are most effective in reaching the goals and objectives of the program.

Compliance with Regulatory Decisions

This plan is in compliance with CPUC Decision D.13-09-044, which requires "ME&O Plans shall include training for all pilot programs, including engaging financial institutions (FIs), contractors, and other market participants and borrowers."[2] Additionally, Resolution E-4663 directs "CSE, as program administrator, to draw up an integrated statewide plan, with the collaboration and input of the Joint Utilities, CAEATFA and Commission, and drawing on the expertise of market research and best practices in this emerging area of marketing. We expect the plan will include multiple components, roles and responsibilities."[3]

The Resolution goes on to say that the "development of an ME&O plan should consider the full range of market actors, including contractors, real estate professionals, lenders, retailers and community based organizations to evaluate which can best support the pilots."[4] Additionally it calls out that "D.13-09-044 recognized the natural synergies between the ME&O needed for the finance pilots and the statewide coordinated Energy Upgrade California ME&O effort, recognizing that financing is a strategy to reduce the first cost barrier to taking demand side management action."[5]

Appendix A of Resolution E-4663, further defines requirements to which this plan complies:

- "CSE will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The financing pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly."
    - *This directive is fulfilled throughout the plan, but focused especially on pages **9-11, 16, 37, and 65-83***

[2] D.13-09-044, Page 84 Marketing
[3] Resolution E-4663, Page 11: 3.1 Marketing, Education and Outreach
[4] Resolution E-4663, Page 31: Discussion of Marketing Comments
[5] Resolution E-4663, Page 37: Findings

- “The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.”
    - *This directive is fulfilled on pages* ***15-29, 30-37, and 38-83***
- “CSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CSE may convene sector and pilot specific financing strategic partner advisory groups.”
    - *This directive is fulfilled through references and footnotes throughout the entire plan, but specific market research has been documented in a table which could be found in* ***Appendix A*** *on pages* ***87-161***
- “Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and customers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.”
    - *Contractor outreach and training on pages* ***26-33***
    - *Development of education information for contractors and customers on pages* ***38-50***
    - *Ongoing support to contractors and FIs on pages* ***35-37***
    - *Cooperative marketing campaigns on pages* ***51-54***
- “As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.”[6]
    - *This is fulfilled on pages* ***38-43, 54-64, 71-75, and 75-78***

[6] Resolution E-4663, Page 40: Appendix A

Introduction and Background

Assembly Bill 758 (2009) directed the California Public Utilities Commission (CPUC or the Commission) to investigate the use of utility ratepayer-supported mechanisms to finance energy efficiency investments. When the Commission approved the 2013-2014 energy efficiency programs for the Investor Owned Utilities (IOUs) in Decision 12-11-015,[7] it also approved the use of up to $75.2 million of ratepayer funds for innovative EE financing programs.[8] Implementation details were deferred to a subsequent decision.

In September 2013, the CPUC approved seven financing pilots in Decision 13-09-044 *Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs*. The Investor Owned Utilities (IOUs) were ordered in this decision to perform a number of compliance-related activities to implement the different financing pilots. As part of the implementation of the financing pilots, D.13-09-044 established an 'administrative hub', the California Hub for Energy Efficiency Financing[9] (CHEEF), to coordinate the various market participants, manage funds and data, and increase the flow of private capital by offering a standardized open market. The California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) was asked to assume, and accepted, the role of the CHEEF and to establish the regulations for the seven pilots.

The Commission noted in D.13-09-044 that "it makes sense to coordinate marketing efforts discussed in this proceeding with the larger umbrella platform"[10] of the Energy Upgrade California statewide marketing education and outreach program (Statewide ME&O). Subsequently in Resolution E-4663, the Commission directed "CSE, as program administrator (for the Statewide ME&O) to draw up an integrated statewide plan, with the collaboration and input of the Joint Utilities, CAEATFA and Commission, and drawing on the expertise of market research and best practices in this emerging area of marketing."[11] The Statewide ME&O program is a distinct program designed to build a statewide marketing, education and outreach infrastructure under the Energy Upgrade California brand umbrella. As envisioned in D.12-05-015, this umbrella will support integrated targeted marketing of all statewide programs through one coordinated platform increasingly over time. Currently, Statewide ME&O is

[7] In Decision 12-05-015, *Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education and Outreach*, the Commission ordered the IOUs to design a new set of financing programs to be offered as pilot programs on a consistent and statewide basis. The IOUs were ordered to hire an expert financing consultant to design the new financing pilot programs (Ordering Paragraphs 21 and 22, p. 400). Subsequently, the Commission indicated in Decision 12-11-015, *Decision Approving 2013-2014 Energy Efficiency Programs and Budgets*, that in order to allow time for sufficient review and consideration, the financing pilots were deferred to a separate proceeding with authority delegated to the assigned Commissioner to finalize the design and launch of the pilots (Ordering Paragraphs 22, p. 135). At the conclusion of the Commissioner's review process, Decision 13-09-044, *Decision Implementing 2013-2014 Energy Efficiency Pilot Programs*, was issued and approved seven pilot programs to be deployed in phases.

[8] D.12-11-015, p. 67

[9] D.13-09-044, p. 65

[10] D.13-09-044, p. 85

[11] CPUC Resolution E-4663, June 26, 2014, p. 11

charged with repositioning the Energy Upgrade California brand as a broad integrated demand-side management brand and educating residential and small business consumers about energy management action, which includes messaging the benefits of energy efficiency and demand response actions and highlighting programs that support those actions, including financing.

To address the complexity of rolling out multiple financial products and to provide the most comprehensive support for the new pilots, CSE was directed to develop an integrated statewide ME&O plan. This Financing Pilots ME&O plan defines the strategy for supporting the launch of the pilot products and outlines the implementation of ME&O for the two-year pilot period. In August, 2014, the assigned commissioner's ruling on Application 12-07-001 ordered that "Each finance pilot shall operate for a minimum of 24 months, beginning at the point that each pilot program begins operation, and shall provide for support of loans made under the program for the duration of loan terms even if/when a pilot ends."[12] To be successful, ME&O implementation must take a comprehensive, coordinated approach across multiple regions, working at the local, regional, and statewide level to leverage existing and planned ME&O for other programs, and at the same time it must serve as a central resource to streamline support of financial institutions, contractors, real estate agents and other messengers to raise awareness and of and spur adoption of pilot financing products. Success depends upon ongoing collaboration and cooperation between the IOUs, RENs, CSE, CAEATFA, the Commission, and other relevant actors working to execute the financing marketing plan and support the availability of financing pilots into all California households and businesses. The seven pilots are summarized in the table below.

<table>
<tr><th>Market</th><th>Pilot</th><th>On-bill Repay</th><th>Shut-off for non-payment</th><th>Market Segment</th><th>Budget</th><th>Est. Start</th></tr>
<tr><td rowspan="3">Residential</td><td>Single Family Loan Program (SFLP)</td><td></td><td></td><td>Single family resident (1-4 units) responsible for energy use. One-third of CE's must target low- and moderate-income households to provide higher enhancement as needed.</td><td rowspan="2">$25 M</td><td>Q1 2015 (CHEEF)</td></tr>
<tr><td>Energy Finance Line Item Charge (EFLIC)</td><td>X</td><td></td><td>Sub-program of SFLP in PG&E only with repayment of loan through utility bill.</td><td>Q2/Q3 2015 (CHEEF)</td></tr>
<tr><td>Master-Metered Multifamily Program (MMMFP)</td><td>X</td><td></td><td>Master-metered sub-sector of affordable housing (deed restrictions require 50% of units eligible for income qualifying households).</td><td>$2.9 M</td><td>Q3 2015 (CHEEF)</td></tr>
<tr><td rowspan="3">Non-Residential</td><td>Small Business OBR with Credit Enhancements Pilot</td><td>X</td><td>X</td><td>Small businesses following SBA definitions</td><td>$14 M</td><td>Q3 2015</td></tr>
<tr><td>Small Business Lease Provider Pilots: On-Bill Repayment and Off-Bill Repayment</td><td>X</td><td>X</td><td>Small businesses following SBA definitions. CHEEF to solicit at least two lease originators (max of 4).</td><td>$14 M</td><td>Q1 2015 Off-bill
Q3 2015 OBR</td></tr>
<tr><td>Non-Residential OBR without Credit Enhancements Pilot</td><td>X</td><td>X</td><td>Targets medium to large non-residential, but any non-residential can participate</td><td></td><td>Q3 2015</td></tr>
</table>

[12] A.12-07-001 et al. at 4: Assigned Commissioner's Ruling Clarifying Operation of Energy Efficiency Finance Pilot Programs

ME&O Roles: CAEATFA, CSE and IOUs

As discussed in the introduction, CAEATFA has assumed the role of the CHEEF and is establishing the rules for the seven pilots and serving as the pilot program's central administrator. In addition to its program administration role, CAEATFA has been designated $2 million in ME&O funding to design and implement education, outreach and training for contractors and financial institutions. Its efforts will focus on establishing the fundamental participation requirements and focus on recruitment and training on how to participate in the various programs. Given the program designs are still under development, CAEATFA's efforts towards education and outreach and training will be established outside of this plan, and will be coordinated ongoing with CSE's efforts to avoid duplication.

Financing Decision D.13-09-044 provides the following guidance, "In furtherance of the goals of this decision, the Commission finds it reasonable to allocate up to $10 million for customized ME&O. However, up to $8 million of authorized EE pilot funds should be released by the IOUs to explicitly promote the specific EE finance pilots authorized here through the statewide EE ME&O efforts, including integration of financing pilot information with the statewide umbrella outreach for all EE and demand side management programs. We also find it reasonable to direct the IOUs to release up to an additional $2 million to CAEATFA to perform contractor and FI outreach and training."[13]

Coordination between CAEATFA and CSE

CSE is the designated program administrator for the Statewide ME&O program and brand Energy Upgrade California and was designated in E-4663 to lead the financing ME&O coordination, working with CAEATFA, the IOUs and CPUC staff to develop this plan. In this role, CSE will also coordinate and conduct ME&O implementation.

CAEATFA and CSE will continue to work together to clarify the roles and responsibilities to avoid duplication with this comprehensive plan. This plan is designed to provide an overall strategy for financing pilots' ME&O, and therefore includes activities that ultimately may fall under CAEATFA's role for FIs or contractors. Certain strategies, such as recruitment of financial institutions, are not included in this plan as they are clearly only under CAEATFA's scope and are program rather than ME&O activities. This ME&O plan, drafted by CSE and approved by the CPUC, does not bind CAEATFA to any of the obligations or activities listed in this plan. CAEATFA and CSE will continue to coordinate throughout the life of the program on streamlining activities to avoid duplication. The Compliance section of this plan provides context surrounding the development and the expectations pertaining to coordination of the $10 million combined effort rather than two parallel strategies that run congruently.

The area of ME&O potential overlap between CAEATFA and CSE pertains to Contractor and FI ME&O. This table broadly denotes the roles and responsibilities for each in these areas. The strategies allocated to CAEATFA in the left hand column will be funded by the $2 million education, outreach, and training

[13] D.13-09-044 pages 85-86

allocation. Those in the right column will be funded by the $8 million allocated to CSE. Another table with more details about contractor support is in the ***Contractor Training*** section of the plan.

CAEATFA	CSE
Establish requirements for FI and Contractor participation/program rules; Engage financial institutions and qualify them for participation	Engage participating FIs and Contractors as primary strategic partners; Market to customers through contractors, financial institutions, and other strategic partners
Coordinate with CSE on contractor recruitment through statewide ME&O strategy	Coordinate with CAEATFA on contractor recruitment, qualification, and enrollment
Contractor and FI eligibility determination and vetting of qualifications. Determine participation approval	Organize networking events for contractors and lenders to develop partnerships, host stakeholders for statewide feedback meetings
Design, develop and implement contractor training on program requirements, participation and forms. Coordinate with statewide ME&O strategy on actual training avenues and strategies	Design, develop and implement contractor training on general financing products and selling financing to end-users. Coordinate with CAEATFA, IOUs, and participating FIs on trainings on financial product specific information
Design, develop and implement financial institution training on program requirements, procedures and implementation details	Design, develop and implement FI customer representative training on customer engagement and utilizing the marketing campaign provided to them to benefit from uniform messaging with the Energy Upgrade California brand
Support financial institutions during program lifecycle. This may include managing the relationship with the master servicer, administrative and program support, and seek feedback on overall process and program design	Design and manage cooperative marketing and outreach campaigns for FIs and Contractors
Support contractors during program lifecycle. This may include establishing a single point of contact, contractor list management, phone numbers and email address for support, regular roundtable feedback sessions conducted in collaboration with CSE and the IOUs	Provide FIs with cobranding opportunities and assistance with implementation

Role of the IOUs

The IOUs share pilot program administration and implementation responsibilities with CAEATFA and are a critical channel for financing ME&O. They have coordinated with CSE on development of this plan, participating in weekly calls and providing comments and feedback. This Working Group coordination will continue through implementation of the pilots. **Appendix D** describes the Working Group process.

The IOUs manage and market a large suite of energy efficiency and demand response programs designed to increase their customers' awareness of energy project benefits and secure those projects through rebates, incentives and technical assistance. These financing pilots provide the IOUs additional support to attract customers who otherwise could not complete a project and to encourage customers already doing projects to go for deeper savings. Upon approval of this plan, the IOUs will integrate financing ME&O into their other program and customer ME&O, leveraging those program budgets. The IOUs will define and deploy additional, targeted ME&O to their customers found in the ***Implementation Strategies and Tactics*** section of this plan, as approved by the CPUC, leveraging existing budgets per the parameters outlined in this plan. The IOUs are regulated by the CPUC and are accountable to the CPUC, and not CSE. Implementation of this plan will conform to the same governance process as Statewide ME&O with coordination from CSE, input from the IOUs and CAEATFA, and approvals and decisions by CPUC staff. The ***Implementation Strategies and Tactics*** section dives into further detail about process and expectations from the IOUs as they work towards a seamless integration of financing into their business offerings.

Measuring Goals and Objectives

As discussed in Working Group meetings developing this plan, the goal of the Statewide Financing pilots could be summarized as, “to facilitate a variety of energy projects with attractive third-party financing that otherwise would not have happened or are more comprehensive with greater savings than would have occurred without financing.” These can also be thought of in terms of ***Volume*** with the aim of getting more projects and more savings and ***Additionality*** with the aim of getting projects that may not have happened without financing. Volume is also critical to making the pilots valuable for Financial Institutions and thereby enticing them to participate and create attractive financing products that will, in turn, make the pilots more attractive to Contractors and other Strategic Partners.

The pilot goals are articulated in detail in SCG Advice Letter 4677 filed on behalf of CAEATFA:

- Broadening market eligibility and participation by funding credit enhancements designed to make financing options for EE improvements more attractive to both Customers and financing institutions;
- Encouraging customers to undertake larger and more in-depth EE projects;
- Obtaining lower interest rates, longer financing periods and/or other desirable financing terms for energy efficiency projects;
- Streamlining financing repayments and allowing transferring of payment responsibility to the subsequent utility customer – if both parties and the FI consent – through an OBR program;
- Enabling non-residential customers to pay their EE financing payment as part of the monthly utility bill, with the funds transmitted to the financial institution; and
- Developing a meaningful and privacy-protected database of financing repayment and energy efficiency project performance information to attract new energy efficiency finance products into the California market.

These overall pilot goals frame their implementation, and from thesethe ME&O objectives are derived from these pilot goals. The ME&O strategy is designed to “ladder up” to the ***Volume*** and ***Additionality*** goals of the pilots. ME&O for energy programs traditionally has only been measured in terms of building awareness, and has not been evaluated based on contributions to program participation. In contrast, this plan seeks to advance the potential for ME&O to move Target Customers from awareness and interest to action. Accordingly, the ME&O objectives include increasing the volume of Target Customers who enter the financing pipeline by taking initial action prompted by ME&O, such as submitting a pre-application for a loan for those lenders that provide it. However, many factors beyond the purview of the ME&O team, such as pilot program and financial product design and process, economic conditions, and other marketplace factors, will impact uptake of the financing pilots. Therefore, it is difficult, as it is with other energy efficiency programs, to draw a clear line from ME&O to pilot program participation.

Since so many factors influence the Target Customer decision and will affect distinct and measurable ME&O objectives, other than loan volume, they must be defined and evaluated to determine the effectiveness of the ME&O effort specifically.

Measurable ME&O Objectives:

1. Increased Strategic Partner awareness and understanding of financing pilot opportunities available to the relevant market sectors
2. Increased Strategic Partner communications with Target Customers (aka Potential Borrowers) about financing pilot opportunities
3. Increased Target Customer awareness of the availability of financing and the key differentiating benefits of the financing pilots
4. Increased volume of Target Customers taking initial action to seek financing

Measuring the ME&O Objectives

Opinion Dynamics (ODC) has been selected to evaluate the financing pilot programs this ME&O plan supports.

Target Customers refers to the target audience of large businesses, small businesses and residential multi and single family homeowners in California who have shown interest in making home or building improvements, participating in a relevant program, or obtaining secured financing, such as customers in a relevant program pipeline, customers at home improvement stores, customers who have recently purchased homes, customers who have obtained secured loans, and customers identified by utilities as likely to participate in a relevant program. These Target Customers are also referred to as **Potential Borrowers**.

This Plan relies heavily on trusted messengers to communicate with Target Customers. As used throughout this plan, the term **Strategic Partners** refers to the identified audience of trusted messengers communicating with Target Customers. Using a "market facilitation" approach, as defined within Resolution E-4663, financing ME&O will engage with Strategic Partners and provide them with the resources and training to inspire their Target Customers to take action. Depending on the market sector, the Strategic Partner varies as well as the technique for delivery. Strategic Partners include utilities, Energy Upgrade California statewide ME&O program, RENs, CCAs, financial institutions, real estate brokers, property management companies (for large and small businesses), contractors (for small businesses and residential customers), community based organizations (for small businesses and residential customers), and consultants (for large businesses, e.g. sustainability consultants).

The table below describes how progress towards the Objectives of the Plan will be measured by tracking key performance indicators. Much of this tracking will require cooperation from program administrators and participants.

Objective	Measurements
Increased Strategic Partner awareness and understanding of financing pilot	• Website traffic on pages designed for engaged/potential Strategic Partners

opportunities available to the relevant market sectors	• Attendance at Strategic Partner trainings sessions, networking events and feedback forums • Number of presentations on pilot opportunities at events hosted or attended by engaged/potential Strategic Partners • Volume of communications (and related metrics as available) to engaged/potential Strategic Partners • Surveys of Strategic Partners on awareness of key differentiating benefits of financing pilots and the value of tools and resources provided
Increased Strategic Partner communications with Target Customers about the financing pilot opportunities	• Website traffic from Strategic Partner sites • Inclusion of financing pilot information and/or tools on Strategic Partner websites and marketing materials • Traffic and usage patterns to tools by Strategic Partners • Volume of communications from Strategic Partners to Target Customers about pilot opportunities, reported by Strategic Partners (including Utilities)
Increased Target Customer awareness of the availability of financing and the key differentiating benefits of the financing pilots	• Website traffic on Energy Upgrade California pages for Target Customers • Traffic and usage patterns to tools by Strategic Partners • Traffic and usage patterns to tools by Target Customers • Volume of communications (and related metrics as available) from Strategic Partners to Target Customers, reported by Strategic Partners (including Utilities) • Volume of Target Customer engagements at Energy Upgrade California events that highlight financing opportunities • Volume of Target Customer requests for more information from Energy Upgrade California • Volume of Target Customer requests for more information from Strategic Partners, reported by Strategic Partners (including Utilities) • Survey of Target Customer awareness of the availability of financing and the key differentiating benefits of the financing pilots
Increased volume of Target Customers taking initial action to seek financing	• Volume of requests for more information, applications, pre-applications where available from all channels (attention paid to ME&O campaign timing) • Volume of Target Customer requests for more information from financial institutions, reported by financial institutions • Volume of applications and pre-applications for pilot financing, reported by financial institutions • Survey to determine percent of Target Customers interested in the financing pilots who take initial action

Target Audiences and Segmentation

Section Summary Table

Highlight	Description
Target Customers are property owners pursuing an energy project	Categories of property owners have been identified.
Strategic Partners are trusted messengers and will act as the main conduits for delivering marketing to the Potential Borrowers	These partners will learn how to integrate financing messaging into their sales process as a solution
Contractors have ME&O value according to volume	Hyper-targeting for specific behaviors will support deal flow.
Target Customer responsiveness must be continually monitored and ME&O strategy adjusted to remain hyper-targeted and focused on the goals	Targets will be analyzed and reconfigured if needed once the program has run for approximately 12 months.

Target Market and Strategies for Reaching Them

Potential Borrowers (highlighted in light blue in the figure below) are the Target Customers for financing ME&O. ME&O will reach these Target Customers through a variety of means. The green sections of the pyramid represent some of the ME&O strategies that will be implemented and will be discussed in greater detail in the ***Strategies*** section of this plan.

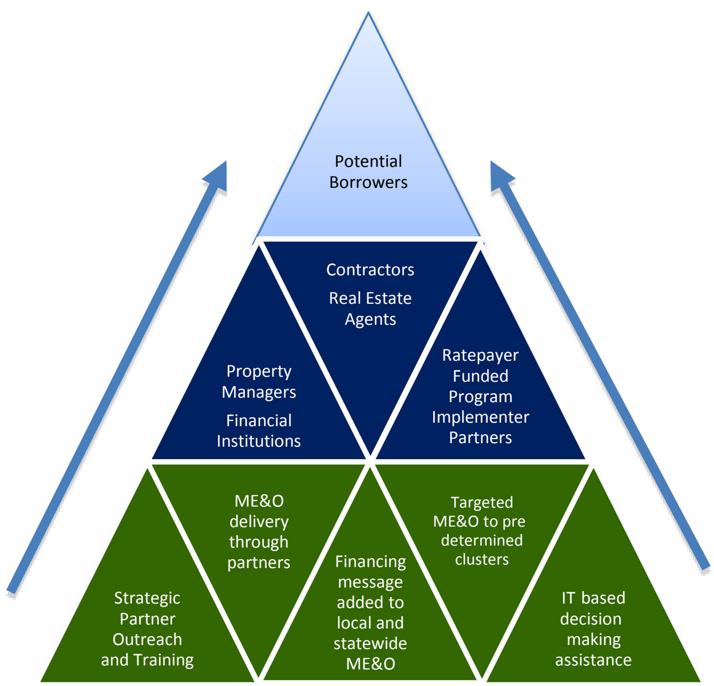


Figure 1: Pyramid demonstrating marketing strategy delivered through Strategic Partners

The most important channel for reaching Target Customers is Strategic Partners because financing is ancillary support for getting energy projects done and not the goal itself, and most Strategic Partners are already engaged with Target Customers in the action of promoting or producing energy projects. Financial Institutions are included in Strategic Partners because they have existing bases of customers for whom they are a relatively trusted messenger and a vested interest in promoting financing. The dark blue band in the middle of the pyramid represents this important channel. It is important to note that the ME&O plan uses the word "loan" often to describe the financial product, but there are various financial structures that could be used, including leases (a pilot program for small business) and potentially energy service agreements.

In the single family residential and small business sectors, contractors are central to getting an energy project scoped and completed and therefore are logical trusted messengers for financing information. Other trusted messengers include service professionals related to the home such as real estate agents. In the non-residential and master-metered multifamily market sectors, property management companies, real estate brokers and financial institutions are a few of the many trusted messengers that may have the attention of the building owner who can use financing as a way to fund an energy project. IOUs, RENs and their ratepayer-funded program implementers are also involved in promoting energy projects and associated rebates solutions and therefore they are also strategic partnership channels.

Strategic Partners: Target and Channel

Strategic Partners are those already talking to, and trusted by, Target Customers. To be successful, ME&O must target Strategic Partners to engage them as program allies and activate them as channels for getting to Target Customers. These partners are both primary in that they are involved directly in offering financing such as financial institutions or in energy projects such as contractors and rebate providers and secondary in that they are trusted in relation to the property but not directly associated with energy projects, such as real estate agents and professional organizations.

Primary Partners

Primary partners are defined as those that may be impacted by a customer's choice to move forward with financing the project, whether it is direct (income, origination fees) or indirect (incentives, program administration dollars). Three primary partners will be activated to deliver financing ME&O to Target Customers.

Ratepayer-Funded Program Implementers (RFPIs)

RFPIs include Investor Owned Utilities (IOUs), Regional Energy Networks (RENs), Community Choice Aggregators (CCAs), and the Energy Upgrade California Statewide ME&O Program (SWMEO). Aside from SWMEO, the RFPIs are also referred to as Program Administrators (PAs) and Program Implementers in the CPUC energy efficiency portfolio regulatory proceedings. All of these implementers have programs designed and budgets allocated for attracting customers to energy projects. RFPIs must add financing awareness messaging to their existing ME&O and work with CSE to make contractors and other strategic partners in these programs aware of the financing tools and their related pilots. The tactics for leveraging the RFPIs will go into more detail in the ***Implementation Strategies and Tactics*** section of this plan.

Financial Institutions

Both Financial Institutions and Contractors will be supported through a coordinated effort between CEATFA and CSE. To phrase it simply, CAEATFA will market ***to*** the FIs and Contractors, and CSE will market ***through*** those Primary Partners. Financial Institutions, in particular, have a multi-pronged role within the CPUC's Financing Program. CAEATFA will recruit FIs across the state and work with these institutions to design the various programs that meet the requirements defined in Financing Decision D.13-09-044 and Resolution E-4663.[14] Participating financial institutions will each design and offer financial products in the marketplace. CSE will work with FIs cooperatively to market financing to new and existing customers. Details about FI cooperative marketing are outlined in ***Implementation Strategies and Tactics*** section. As part of their participation, FIs are expected to help identify and target their customers for financing ME&O.

Targeted single family residential individuals for financial institution marketing may include:

- Homeowners that have recently purchased or refinanced a home using the lender for their mortgage
- Customers of the financial institution which have checking, savings, or investment accounts (ideally with a balance in them)
- Customers that have inquired or applied for a home equity loan/line of credit that are looking to do renovation work
- Customers that have applied for personal loans for renovation work on their home

In the non-residential sector, Financial Institutions may target:

- Business customers of the financial institution
- Commercial customers that have applied for or taken out lines of credit with the institution
- Small business customers using the financial institution for their financial needs
- Commercial customers who have researched or applied for capital improvement loans for their property.

CSE will provide financial institutions training on messaging and marketing tools and will facilitate regular networking events and feedback sessions aimed at creating relationships between FIs and Contractors to increase deal flow and personal interaction. CSE will also provide messaging and educate loan originators at participating financial institutions on selling program benefits through talking points, collateral information, and electronic communication

[14] Advice No. 4677 - Implementation of the California Hub for Energy Efficiency Financing (CHEEF) in Compliance with Decision (D.) 13-09-044

tools. FIs can advertise pilot loan products with cooperative marketing funds to attract new customers and show their existing customer base that the timing is good to do an energy project. A great example of success for this type of outreach: Elevations Credit Union[15] has partnered with the Boulder County and City of Denver EnergySmart program to use their own marketing and successful network to help bring new customers into the program, using educational ads and videos such as this one: https://www.youtube.com/watch?v=xzkW_wpstJk.

Contractors

Market research has shown that most of the successful programs in the single family residential and small business markets are contractor driven.[16] In these markets in particular, contractors, more than any other party, are the individuals making the sales pitch to a home/business owner. Financing, in addition to rebates and incentives, has become an integral part of energy efficiency programs. In the non-residential market, contractors still make up an integral piece of the puzzle, but the actual sales process usually involves other Strategic Partners.

Understanding the contractor's perspective is essential to designing a successful outreach and training program. Contractors incorporate energy programs to differentiate and support their businesses, and have varying capacity for the compliance costs associated with a given program. As one of the primary messengers to the Target Customer, contractors essentially become spokespeople for energy projects and financing, making it more important to provide the contractors with good training, clear messaging, and tools to help them build credibility within the marketplace and move projects forward towards implementation.

Some contractors will have a greater contribution to volume and deal flow than others. However, ME&O must provide opportunities for all contractors to utilize tools and training; contractor recruitment and training is discussed in more detail in the ***Contractor Recruitment and Training, Engagement and Support*** section. Financing ME&O will focus preliminarily on the following contractor types:

- Participating contractors in the Home Upgrade programs by IOUs and RENs
- Participating contractors in other IOU programs
- Contractors who participated in energy programs in the past
- Contractors who have and have expired BPI certification
- Contractors participating in PACE programs
- Contractors participating in other energy efficiency financing programs (empower, CHF, LA County SFR loan program, etc.)
- Contractors specializing in single, high cost measures such as HVAC

---

[15] Elevations Credit Union: https://www.elevationscu.com/energyloans

[16] Materials researched: Long Island Green Homes Consortium, NYSERDA, Oregon Clean Energy Works, Energize Connecticut, Better Buildings Residential Network, Boulder County EnergySmart, Keystone HELP program, SMUD, Midwest Energy How$mart, Illinois Energy Efficiency Loan Program, etc. See ***Appendix A*** for details

- Solar contractors that also work on energy efficiency projects
- IOU third party implementers not doing direct-install programs

Secondary Strategic Partners

Strategic Partners, as stated earlier, have direct and indirect influence over Target Customer's decision-making. Secondary partners have no "skin in the game," yet customers may rely on their advice during the decision-making process. Training and motivating these trusted messengers can influence customers to consider pilot loans.

Single Family Residential Strategic Partners

Single Family Residential homeowners consistently receive marketing information from a variety of sources attempting to motivate them to spend their money on one scheme over another. When it comes to making energy efficiency or demand response upgrades to one's property, some strategic partner's opinions have greater influence on the homeowner's decisions than others. CSE will conduct outreach to secondary strategic partners and design and disseminate tools for their use in business with Potential Borrowers. Secondary strategic partners include, but are not limited to:

- Real Estate Agents
- Property Management Companies
- Raters (BPI, HERS, HERS Whole House, LEED, DOE Energy Rating, GreenPoint)
- Specialty Contractors (Landscape, Pool, Plumbing)
- Professional Trade Associations (Real estate or contractor)
- Local Governments
- Existing financing programs including emPower and CHF
- Community Based Organizations (CBO)
- Retail Establishments
- Home Inspectors
- Appraisers
- Title Companies

These strategic partners will be educated in project pain points where financing can help solve a problem. If those partners are working on projects and their contractor is either not participating in the program or has not thought about recommending various financial products as a solution for funding a larger project, they can use their position and knowledge to influence the contractor and potential borrower.

Other strategic partners, such as real estate agents, retail associates, property management companies, have direct contact with the homeowners and bringing knowledge and support of financing energy projects can be seen as a form of positive customer service on the part of that partner. Real estate agents spend a lot of time cultivating their relationships with existing clients, so learning about lower cost financial products for energy projects could be very rewarding to the messenger who brings that piece of interesting news to their client.

Strategic Partners will be recruited through a video marketing strategy using a "what's in it for me?" approach. Upon recruitment, they will be trained and provided with a variety of ME&O tools that will allow them to promote their role to the target customer clients.

Existing financing programs such as CHF and emPower have actual hands on experience combining the financing messaging with rebates and incentives along with other wrap-around services. Those Strategic Partners may assist with outreach strategies, additional partner recruitment and many other vital tactics valuable to the success of the program.

Multifamily and Non-residential Strategic Partners

The majority of building improvement decisions in the master-metered multifamily and non-residential marketplaces are made with the help of Strategic Partner influences, many whom have been hired to analyze and provide advice exactly on these sorts of improvements. Strategic Partners in these sectors have direct and indirect influence on the Target Customer as well. Those with direct influence include:

- Property Management Companies
- Facility Managers
- Executive Boards
- Commercial Real Estate Brokers
- Tenants (especially triple-net lease tenants since they pay the utility bill)

Indirect-Influence Strategic Partners include, but are not limited to:

- Consultants (Architect, Engineer, Commissioning Agents, LEED/GreenPoint)
- Professional Associations (BOMA, NAIOP, USGBC)
- Local Governments (LGP participants, REN cities, etc.)
- Community Based Organizations (CBO)
- Equipment Distributors
- Lawyers
- Enterprise NGO (MMMF only)
- Affordable Housing Advocates (MMMF only)

Most building owners that have large portfolios of non-residential or master-metered multifamily projects tend to rely on their property management companies, real estate brokers, facility managers and consultants for direction and advice on these assets. For those large portfolio building holders, Strategic Partners assist with the decisions and will weigh variables in order to make recommendations and get approval for certain capital improvement projects. Therefore, for that target audience, the Strategic Partner also becomes the Target Customer because they need to be “sold” on the idea before they present it to their client for final approval.

The identification, training, and marketing assistance will be the same for the Strategic Partners in non-residential as residential, with the exception of the high performing real estate brokers and property management companies. Utilizing work that SoCalREN and the BayREN completed in their regions as part of Commercial PACE research, CSE will coordinate with those administrators to target high volume commercial property owners, ownership structures and property management companies. HR&A did the data collection and compilation in Southern California and Nexant in Northern California, and the local government customers have data organized for targeting messaging about financing looking at a variety of variables. An approach for reaching those target audiences through a multi-touch strategy will be designed and coordinated as part of implementation, in order to see if these firms are interested in having further training and are interested in supporting these financial products. Outside of targeting and educating those high profile strategic partners, the implementation team will work with the trade organizations such as NAIOP and BOMA to offer financing presentations, which should ideally interest both Strategic Partners and property owners’ interest in the audience. The IOUs have existing relationships with these trade organizations, and they will be called upon to coordinate with those partners to provide access to these audiences through presentations and additional marketing strategies.

For the master-metered multifamily sector, outreach will be conducted to the known organizations looking to assist the same markets, such as Enterprise and Adobe Communities. Relationships already exist between the implementation team and these organizations. In addition, SoCalREN, BayREN and the IOUs have developed multifamily programs resulting from their collaboration on the statewide HERCC committees over the past few years, and these programs have been marketing to, and building demand, for their energy programs for a number of years. Therefore, working through those existing partners will provide avenues for the Financing ME&O program.

The small business sector will arise out of the market research currently underway by the statewide ME&O team, but there are a number of resources to leverage for small business customers as well as other non-residential stakeholders. Besides contractors as mentioned above, local governments vary in terms of energy efficiency experience/infrastructure. Some have financing programs already (emPower, RENs, MCE), and they are high priority Strategic Partners discussed in the RFPI section. Generally leveraging local governments taking part in programs that operate regionally can be considered a cost-effective investment of resources to assist with statewide financing marketing. Many LGPs manage programs that provide audits and/or direct install programs that could be leveraged to encourage business to strive for deeper energy savings with the availability of new financing options. Strategies are discussed later in this document, which aims at bringing the right messaging and training to the right partner, so that they can deliver that message successfully to the right target customer at the right time.

Hyper-Targeting Potential Borrowers

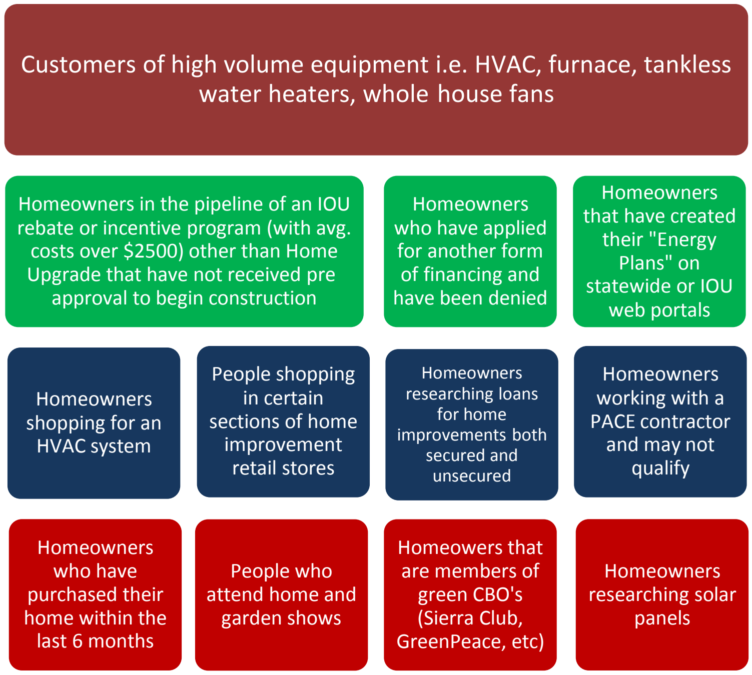
Target Customers or Potential Borrowers in the residential sector are responsible for paying the utility bills and making the decision whether or not to move forward with the energy project as well as how to fund that project. In the non-residential market, potential borrowers often have proxies receiving the marketing messaging and making the recommendation or decision such as property management firms, brokers, facility managers, lawyers, etc. while the potential borrowers in these scenarios could be foundations, REITs, corporations, or other legal entities.

Target Customers have many barriers to financing energy projects. Across sectors, the main barriers derive from lack of awareness of the opportunities and their benefits and competing priorities for limited investment dollars. According to Peter Krajsa, CEO at AFC First, "the average single-family Customer has $5,000-$10,000 in discretionary savings at any one time and the average cost of an energy efficiency upgrade is $5,000-$10,000." This is taking into account single measure and whole building comprehensive upgrades which currently average $14,000 for Home Upgrade participants in California. "Therefore, you are asking them to spend all of their available money; it's a big ask, so communication is key."[17] Financing, as a tool that can help address this upfront cost barrier and the right information at the right time, is critical.

The Target Customer for financing messaging is a property owner in the lifecycle of an energy project, either in the consideration or implementation phase. The consideration phase messaging promotes *Additionality*, and for those in the implementation phase, the messaging promotes *deeper energy savings*. Financing ME&O will seek predetermined clusters of customers in these phases to target. Those in the consideration phase may include shoppers in home-improvement stores. They will be targeted with financing awareness messaging via the Statewide ME&O retail channel. They can also be targeted by Strategic Partners. They may also include those who have started work on a project with the utility company or with a contractor. Financing ME&O to those customers will focus on how they can deepen the energy savings of their projects.

[17] Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors - http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf

Figure: Residential Target Customer Tiers



Residential Target Customers

Program participants will provide a good source of pre-qualified customers but only a portion of those needed. Home Upgrade is a perfect example of the ideal customers for marketing financing: the projects are high cost, the simple paybacks for the installations are over time, and the pain points for selling a whole-house improvement are similar to selling an energy project loan. However, if you look at the data provided by the statewide Home Upgrade Working Group, dated September 2014, there are 6894 completed Home Upgrade projects across the state between January 2013 and September 2014, approximately 21 months which is similar with the timing for the Single Family Loan Program. Assuming every single one of those projects went through the SFLP financing, at an average cost of $13,454 per project, the total loan loss reserve (LLR) contribution to the holding account (at 10%) would be $9,275,187, a relatively small piece of the $21 million set aside for the single family loan program credit enhancement. Other Target Customers, not yet involved in an energy program, likely will have longer ME&O cycles. They will need education and assistance with the energy project as well the financing. They may not be ready to pull the trigger or move forward, they may have hesitations, or they may need more information. ME&O for these customers must be conducted in coordination with Statewide ME&O and IOU and other RFPI ME&O as well as through Strategic Partners.

Statistics have shown that a large number of new property owners do substantial renovations and upgrades on their properties within the first 45 days of moving into the property. However, most standard mortgages won't allow for renovation and improvement dollars to be financed as part of the purchase. Financing ME&O will seek to reach those Target Customers through the real estate industry and retail partners since both are a source of advice for customers.

Customers looking for HVAC are another target for financing since HVAC systems are expensive. Jeremy Epstein, Senior Associate at Harcourt Brown & Carey, offers this insight: Typical 'urgent' HVAC or home repair installations ($3,000 to $15,000) are the Customer's financing 'twilight zone' - too big for a credit card, too small for a home equity loan. No matter how hard the program markets to the customer, this type of customer will never pay attention to the message until it happens to them. At that time, the homeowner tends to focus on getting the repair or replacement and marketing messages must be well positioned and clear and simple to appeal to them.

Developing partnerships with large volume contractors such as Lennox approved contractors, Trane, or Carrier distributors or contractors with opportunities and messaging offering alternatives to what they were previously providing their customers may help hyper-target those single measure specialists close more deals. The strategy involves approaching the distribution channels and discussing the opportunities and options with those stakeholders prior to introduction to the contractor base. Many contractors already have maintenance agreements with homeowners and notifying them of different options may lead to volume in the residential market. However, this will depend on the attractiveness of the financial product and process. If neither of those aspects can meet the distributor or contractor requirements, then this will not be an effective strategy and focus would turn to the other choices.

Financing ME&O will raise awareness among low-to-moderate income customers working with the Energy Upgrade California Community Ambassador Program (community based organizations) and with the IOUs via coordination with their income-qualified programs. These trusted messengers will be given talking points, training, and information needed to present the options as a benefit or a solution. Easy access to decision tools and simple payment plans will help contractors and lenders capture these customers also.

Non-Residential Target Customers

The Statewide ME&O small business market segmentation study is under development. CSE will coordinate the small business pilot for Statewide ME&O with the Financing ME&O to develop an integrated campaign to promote energy action and financing to that sector. Additionally, Financing ME&O will focus on business owners looking to make improvements on their property, investigating borrowing money, or applying for rebates and incentives at one of the IOUs. All three of the examples listed above would be in conjunction with working either with a contractor, financial institution, or IOU, so having them deliver the messaging will be vital.

For the master-metered multifamily program, the target audience is NGOs that represent low income multifamily properties. Since the goals and credit enhancements are minimal for this project category, the strategy for outreach to these property owners is to use existing relationships RFPIs and contractors have with those organizations. The majority of these building owners are cash-strapped and finding energy savings to offset the cost of the loan may be the only way those properties can afford to make the necessary energy improvements. RFPIs and contractors benefit from these projects via good press and community goodwill and that will be true of the lender as well. Statewide ME&O will work with Financing ME&O to support earned media opportunities for these projects.

Medium and large non-residential target audiences can be segmented a little more linearly. Owner-occupied properties are much easier targets for energy projects, since they don't need the permission of multiple tenants. However, more and more property owners of mixed-use or multi-tenant buildings are pushing through the boundaries of energy project implementation. Targets for this sector can be represented in the graphic below. Please note that the pie pieces are all the same and are not representative of the size of the sector:

Figure: Medium/Large Non-Residential Target Customers

Similar to the residential and small business sector, those properties that are somewhere in the pre-approval stage of an IOU rebate or incentive are top priorities for financing messaging. As the ***Implementation Strategies and Tactics*** section of this plan will attest, the IOUs will have the responsibility of utilizing their influence over their customers to promote the financing when the time is right. The IOUs will be given marketing messaging, talking points, and collateral ideas and will be expected to identify exactly who those non-residential customers are that need financing as a solution to be presented to them via their Account Representatives.

Outside of the most obvious target audience, other identifiers are included in the pie chart above: Jones Lang LaSalle and CB Richard Ellis, along with other property management companies, all have green initiatives for their company and the companies they manage.

Property management companies have been selected as Strategic Partners for this very reason. They know their clients inside and out, and normally they design and construction manage the tenant and building improvements on the properties. For those properties looking to achieve LEED NC or EBOM certification, it's a "no-brainer"; they are most likely doing energy projects. Those property management companies have the ability to influence the target clients with information and advice on which direction to go, such as offering an alternative to PACE or performance contracts with ESCOs. The same applies to government buildings, which are often either managed in-house or using a third-party management company. Many state and federal governments, as well as Fortune 500 corporations, have mandates about the efficiency or certification of buildings that they can lease from. Property owners that cater to this type of clientele are better targets than those who do not.

In 2012, Governor Brown issued an Executive order requiring all State of California buildings to "go green" with additional requirements that buildings larger than 10,000 square feet have to achieve a USGBC LEED Silver certification or higher.[18] Government buildings don't pay property taxes, and they have tight budgets, so Strategic Partners that can discuss state building plans for "going green" with the Department of General Services are prime candidates for information about solutions.

Behavior Segmentation and Tactics for Engaging that Customer

Finding types of behaviors that help identify target customers helps to design a plan of action that delivers messaging and opportunity at the right time in the decision-making process. These behaviors help further define the target audience for each of the financing product types with more precision, so that a focused implementation plan can be designed cost-effectively.

In addition to the behaviors or types of people listed previously, some additional characteristics that make Target Customers attractive (apply to residential and non-residential small, medium, or large unless otherwise distinguished) include, but are not limited to:

- Customers that may have cash, but can find a benefit to financing the project instead
- Customers that are interested in energy efficiency or demand response, but don't have the cash in hand to pay for the replacement or more energy-efficient product(s)
- Residential Customers who are moving into a property and don't have renovation cash
- Residential and non-residential customers that have limited cash flow and good credit
- Customers that wouldn't qualify for a PACE loan because their equity position in the property isn't high, or didn't meet other PACE program underwriting requirements
- Existing customers of the CHEEF Participating Financial Institutions that are comfortable working with that lender

[18] http://gov.ca.gov/news.php?id=17506

Articulating the Behavior Segments

Customers that may have cash, but can find a benefit to financing the project instead

These individuals will need to understand the benefits of financing rather than just paying outright. Since the non-residential product is developing concepts around potential loan transferability, marketing the differentiating characteristics in the collateral messaging could help promote the loan products.

Customers that are interested in energy efficiency, but don't have the cash in-hand to pay for the replacement

This type of customer, from a policy perspective, is precisely the reason for creating these financial products. These individuals can be targeted during trigger points in their life, such as HVAC replacement or home purchase. Customers in this category will respond well to messaging about the monthly payments, so they can envision how the payment plan fits within their current budgets. Contractors can "upsell" various energy efficiency projects and achieve deeper energy savings by using quick calculation methodologies and tools, so that everyone is looking at the same analysis.

In the "Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors,"[19] Jeremy Epstein, Senior Associate at Harcourt, Brown & Carey states, "A successful program recruits and trains contractors on how to better utilize special financing and monthly payment plans to increase both their closing rates and market penetration for more energy efficient home improvements." He goes on to suggest the following best practices and program design questions, "Learn From Verizon, Toyota, ADT, pest control, landscaping & everybody else: monthly payment NOT interest rate or total cost, standardize bids for the contractors in your program, solutions/services to be provided (itemized), total price due upon completion (payment due if not financed) , monthly price option (monthly payment if using loan program), how can your program equip contractors to provide the above? Energy Efficiency lending programs are competing against credit cards. Most Customers (and contractors) will follow the path of least resistance even if it is more costly." Offering simple solution-oriented messaging and tools that help the Customer make decisions they are comfortable with will "accomplish the program goal (helping Customers install energy efficiency improvements) without overburdening contractors or Customers with complexity."

Residential and Non-residential Customers that have cash flow constraints, yet good credit

Cash-flow is often a major concern for small businesses. It is not uncommon for small businesses to manage inventory and receivables through lines of credit and other financial

[19] http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf

products. Those types of small business owners would need to be educated on the financing offerings as well as the benefits of using financing for energy efficiency projects immediately versus over time. Since the small business marketplace has four types of financial products to choose from, the goal is to seamlessly match the product available to the needs and wants of the customer. This can be done with cooperative marketing and sales from the financial institutions, or marketing efforts brought in by property management companies, brokers, and other partners. Most non-residential customers understand cash flow implications, rate of return, and interest rate provided. Providing the options for making these improvements along with the cash flow implications, at the time of project planning, will lead to an informed customer making an informed decision about whether or not his is doable.

Customers that wouldn't qualify for a secured loan because their equity position in the property isn't high, or didn't meet other secured loan program underwriting requirements

Property secured financing, both commercial and residential, requires a certain level of equity in the property receiving the lien. The outstanding mortgage plus the new lien cannot go over the total value of the property. With the decline in property values since the 2008 financial crisis, a large number of property types in California depreciated in value. However, that doesn't necessarily mean that the financial health of the property owner has declined. Payments may have not gone up; payments may have been skipped only to try to force a refinancing consideration by the lender, or other factors which can make a property owner "ineligible" for a secured loan product. Secured loans generally rely on the "total loan to value" calculation in lieu of property owner credit rating, as a method of qualifying borrowers for financing.

Property Assessed Clean Energy (PACE) assessments, one of the secured financial product types, are increasingly popular in California and several providers are advertising and raising awareness of the availability of PACE assessments for energy projects. Many members of the contractor community work on both IOU/REN incentive and financing programs in addition to PACE programs. Messaging comparing a variety of financing offerings and partnering with PACE providers and contractors to help deliver this messaging is a valuable way to get the word out to the target market in this category. Ideally, these partners would present both the secured options as well as the unsecured pilot program options to the customers at the same time, and allow the customer to choose which financial product best fits their needs. Peter Krajsa, CEO at AFC first, the only financial institution running the national PowerSaver Loan program, recommends that contractors should "Give their customers all the ways they can pay for upgrades and then let them choose which option they prefer."[20]

---

[20] Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors - http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf

Existing customers of the financial institutions that are comfortable working with that lender

Financial Institutions can directly market to these customers and educate their loan officers and customer service representatives to help match these customers with the loan products best for them. The availability of approved energy efficiency measures (EEMs) is crucial to this marketplace since the majority of the communication is coming directly from the lender to their customer, and neither of those stakeholders are experts in energy efficiency, demand response, nor distributed generation. Training leaders within each participating financial institution will be important to help existing customers learn about the benefits of these financing products. CSE will provide training and cooperative marketing opportunities for these financial institutions.

Contractor Recruitment and Training, Engagement and Support

Section Summary Table

Highlight	Description
Contractors will be recruited, trained and supported by a coordinated effort between CSE and CAEATFA	The plan identifies a strategy for implementation but does not bind CAEATFA to activities or responsibilities.
Contractors will be recruited in two phases as the various programs roll out to the public.	Since contractors are such an integral channel, they must participate in the training and support provided.
Contractor training will be implemented using a multi-pronged approach so that it fits the various business models and schedules of the contractors	Training will leverage existing avenues such as Home Upgrade contractor communications and the IOU training centers; Video training modules will be made available for those that wish to train on their own schedule.
Networking events and other feedback sessions connect contractors and financial institutions in teams to hold customers hands and close deals	Unbiased assistance and support may also be made available through IT solutions plus a single point of contact for contractors to receive help from the implementation team in the form of a telephone hotline, emails, regularly scheduled roundtable calls, and in-person quarterly meetings
CAEATFA will train contractors on program components, required paperwork, QA/QC and assist contractors in connecting with participating financial institutions to learn more about the different financing products available under the programs.	CSE will provide training on marketing tools and messaging to increase demand for financing and help contractors use financing to increase sales volume.

Overview

Contractors, as stated in the previous sections, are a vital component of the financing program, especially in the single-family residential and small business programs, since they have a leadership role as a trusted messenger for their customers. This chapter will discuss the joint process for recruitment, training, and support of the contractor community. CAEATFA and CSE have shared responsibilities as it pertains to contractors. Please note that although this is an integrated plan, nothing stated within the implementation strategy should give the perception that CAEATFA is bound by the activities stated within. This section is a comprehensive blueprint for the contractor piece of the program, per market research recommendations, and not a contract committing a state entity to any responsibilities. CSE will continue to collaborate with CAEATFA to develop non-duplicative processes to recruit, train and support contractors that participate in the programs.

Just as delivering simplified, streamlined offerings is important to getting customers to invest in energy efficiency, so too is delivering a training program that is easy for contractors to participate in. While the program must be widely accessible to the residential and non-residential market, the initial efforts should focus on recruiting contractors who are already working within the energy project space. Even more targeted would be those contractors already qualified to participate in IOU incentive programs. The rationale is simple: If participating contractors are highly successful, their participation can be leveraged and promoted as a way of attracting new contractors into the program. If the participating contractors struggle with financial product process, then outreach efforts will be ineffective at enlisting new participants, no matter how aggressive or robust of an engagement strategy.

A Multi-Pronged Approach

The approach to contractor recruitment and training, engagement and support is multi-layered:

Recruitment and Training

CAEATFA will recruit target contractors using a two phase approach. Beginning with the single family residential contractors, they will focus initial recruitment efforts on contractors already enrolled in incentive and financing programs throughout the state. This could include Home Upgrade and Advanced Home Upgrade Participating Contractors, HVAC QI/QM, CSI Thermal, CAEATFA's existing financing programs, CHF, emPower, etc.

Peter Krajsa, the CEO of AFC First, stated that "A successful program recruits and trains contractors on how to better utilize special financing and monthly payment plans to increase both their closing rates and market penetration for more energy efficient home improvements. Additionally, financed jobs are, on 41% average, larger than cash jobs."[21] Therefore, those contractors that leverage financing as a solution for their customers are perceived as offering greater customer service in addition to contracting for larger projects.

The Phase I contractors will be quickly recruited and training sessions will be scheduled and performed in order to get active contractors qualified and marketing the financial products as part of their regular routines. Leveraging the existing infrastructure, trainings can be coordinated with the IOUs at their training centers across the state on a regularly scheduled basis with continual outreach from the IOUs funneling contractors to those venues and training sessions. There are many other opportunities for the financing training to "piggy-back" on

[21]Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf

existing courses scheduled throughout the IOU territories that will be explored and coordinated as the program progresses. Training needs to adapt to the market needs and if non-residential training, for example, responds better to presentations hosted by the equipment lease distributors' place of business, then CSE and CAEATFA will adapt to those requests. At this time, it is premature to state all of the training venues since the programs are still under design. However, the data will be gathered and attendee numbers based on in-person versus online training will help provide program implementers with assistance in future planning for contractor recruitment and training.

Due to an expedited launch schedule and a desire to get the preliminary "early adopter" participating contractors up and running, training for Phase I contractors, especially for the single family residential, will likely begin with PowerPoint presentations made by members of the implementation team. Ongoing training will be offered in-person and with online video education modules and participation with be monitored to determine the best training option going forward. In a previous program providing sales training to HVAC contractors, CSE found video training to be a successful avenue for getting busy contractors to participate.

The training content will be a coordinated effort between CAEATFA and CSE, so that the attendees have the ability to complete their program and ME&O training at the same time. Other training modules will be developed as feedback is received from the contractors, but from a starting point, there will be three modules created:

> ***Pilot Program Requirements:*** This training module will provide details on the pilot program participation for contractors. Topics may include eligibility requirements, maintaining participation status, paperwork requirements, program rules, Master Servicer's role and responsibilities, data requirements, utility bill impact analysis, and many other program-related training subjects. This training will be required of contractors interested in participating in the program, and contractors taking this training should be expected to have a greater understanding of the QA/QC and submission requirements in order for their customer's project to receive a credit enhancement.
>
> ***Financing Solutions:*** This Financing Solutions training module will provide a general overview of the different ways target customers can finance projects: cash, credit cards, secured and unsecured financial products, on-bill financing and on-bill repayment, etc. This training will talk about the pros and cons for each financing category and then discuss where the CPUC pilots fit into an existing marketplace. Training will be broken up into sections based on market sector (residential, non-residential) as well as marketing strategies, so that the participants may choose which modules to take relevant to their customer or staff member focus. This training will go over the tools the statewide ME&O financing program is providing to these contractors in order to help them succeed as trusted messengers of the program. The training will discuss some of the marketing messaging and opportunities offered to contractors across the state, and

how the financing fits into the IOU incentive process. Content will be developed through a collaborative approach between a small group made up of representatives of CAEATFA, the IOUs, Statewide ME&O, and participating financial institutions. Contractors should exit this training with a greater understanding of the benefits of different financing categories, as well as how these new products and tools differ from the financing programs they may already have been accustomed to using. In addition, contractors should have an awareness of the other training modules offered, what the expectations are for learning those modules, and the assistance the program will provide to help them promote financing to their end-user clients.

Financing as a Solution for Overcoming Energy Project Barriers: This module will take the information learned in the previous two modules and train contractors on effective marketing messaging, marketing tools and presenting energy project financing as a way to increase sales. Training will focus on the customer experience and address the various target audiences and barriers to their success. This module will be segmented into categories that will help address the variety of market sectors, as well as the different business models in the contractor industry. Contractors that currently offer a single measure (insulation or HVAC) do not have the same business strategy as those contractors working in the whole house energy efficiency market. Solar contractors focusing primarily on the non-residential pilot without the credit enhancement may choose to focus on different aspects of the marketing and sales training than the small business lease provider marketplace.

The curriculum will be developed to focus on sales and marketing basics, and then assist contractors on how to integrate the financial products into their sales pitch, talking points, and best practices. The educational trainings will provide value to different types of contractors, ultimately leading to a robust workforce, as well as foster and support financial loan volume. Contractors taking this module should expect to be able to speak comfortably about "net monthly payment" strategies, an approach highly recommended by the market research sources found in ***Appendix A***. They will learn when the best time to integrate financing as an option into their sales pitch, and how to recognize the behavior segmentation within their clients. Participants will understand the barriers to entry from the different customer groups and help develop their own methods for overcoming each of those barriers within their sales pitch, motivating the customer to move forward with the project.

Why Online Training?

Training for the initially launched pilots will be offered at IOU energy centers and via webinars. During this period online training will be developed for use on an ongoing basis.

Contractors will be provided with instructions on how to most benefit from the online learning platform, and they will be instructed to offer training to managers, sales staff if applicable, and field staff, along with any sub-contractors who will be working with Target Customer clients in the field. Every contractor firm that signs up for training access will have follow-up by someone from the contractor management or marketing team in the form of a phone call. In person assistance will be offered to construction companies expected to perform in volume (definition to be determined) and customized training at construction company offices will be accommodated if those contractors' participation in the training is determined to be beneficial to the program goals and objectives.

An online learning platform will be used for the following reasons:

1. To provide all contractors the same level of training and support, regardless of when they choose to enter into the program. The process of keeping the training standardized allows for an equal experience for all attendees, including those firms that have new staff members joining on or moving into this field as it grows.
2. The online platform allows for more data points than workshops or webinars. For example, one such platform, LearnerNation, has a social profile so that trainees can see which courses they have assigned to them, discussion forums where questions can be asked and answered for all to see, and the administrators can track contractor trainee progress and development with ease. The tool's Knowledge Index Report helps to identify competency gaps within the organization. Learners can use the Smart Exam Study Guide to generate personalized lesson plans.[22]
3. Webinars and workshops across the state are very labor-intensive, costly and take many hours out of a contractor's day that can be spent doing business. Contractors may not have the proper company representatives in attendance, and attention levels fluctuate depending on the individual's activities that day. Rooms need to be rented, refreshments normally purchased, and travel costs incurred with less than ideal results. Statistics have shown the following[23]:
    a. Within hours after listening to a lecture or speech, you will only be able to recall 50% of the message.
    b. 48 hours later above average listeners only remember 25% of the message
    c. Only 15% of adult listeners are above average listeners

The program will provide a clear pathway for non-participating contractors to participate over time as financing volume and program momentum builds. Initial outreach capacity does not allow for a full-scale contractor engagement at pilot onset, so a longer-term plan will be created to allow for scalability as contractors start to believe and understand how financing energy projects can increase their business. As witnessed in the nascent PACE marketplace, the contractor industry can drive volume if they can integrate the program into their marketing

[22] http://www.learnernation.com/tour?&__hssc=&__hstc&hsCtaTracking=9dc3e5e2-2fe5-4b64-97c4-d836db6aa4cf%7C112a7077-8b20-4c4a-9a12-6ac1deeddc45

[23] http://www.authorstream.com/Presentation/lyjones-398059-listening-speeches-barriers-effective-education-ppt-powerpoint/

approach and sales pitch. Contractors need to conceptually buy into the program, as they are a pathway to sustaining the market after the pilots end.

Contractor Engagement and Continual Support

As stated repeatedly throughout this plan, contractors are a critical channel for ME&O success. This means first marketing ***to*** the contractors and then ***with*** them. A contractor-centric approach has worked well for other programs, and can be achieved by "first enticing the contractors to use the financing products, which is the first 'pitch', and then enabling them to sell to customers; that's the second pitch. In other words, when it comes to contractors, it's like catching a fish, then teaching the fish how to fish. The program has to offer something to the contractors that gets them to act, then enables them to get the customers to act."[24] Although this quote is not necessarily the most relevant of analogies, the concept of business-business-customer (BBC) marketing is supported by HBC's quote.

CSE and CAEATFA will work to maintain a high level of engagement with contractors, and train them to be effective in communicating the loan programs as a financing option to clients. "Engaging a smaller number of contractors across the state with an intimate understanding of the loan programs is better for a program than engaging a large number of contractors with a shallow understanding[25].

CAEATFA will establish a support system for the contractor community. These liaisons will be a single point of contact for support to help contractors sell the program, as well as answer any questions about the various financing products offered by the participating financial institutions. The EnergySmart program in Boulder County, Colorado continues to state that "Tight management of contractors has an impact on loan program implementation and sales." The single point of contact will direct questions about customer marketing to CSE's team, or to the IOU programs if it is pertaining to rebate and incentive information. CAEATFA and CSE will build a decision matrix for the contractor liaisons to know who to funnel each subject to, so that the process is simple and straightforward to the contractor calling for information.

CSE will maintain continued program accessibility for contractors through updates to the contractor training online portal and ongoing contractor communication. Program consistency, as well as simplicity, is important, aimed at providing contractors with the information, marketing materials, and training that they need to use the financing pilots and marketing materials. Significant uptake can often occur using simple, low cost methods of communication and training.

[24] 08/15/14 - Part II "Are We Fishing In The Wrong Pond?" Thoughts on Contractor Engagement for Financing: http://www.harcourtbrown.com/topics/news/
[25] EnergySmart - Your Efficiency Solutions: Boulder County and City of Denver Loan program - http://www.energysmartyes.com/

Feedback and Networking

The plan is to establish a clearly defined process for addressing and incorporating feedback into the pilot programs that allows for changes in direction or program adjustments in a timely manner. Previous program efforts indicate contractor feedback mechanisms are important. Otherwise, contractors lose faith in the pilots and participation declines.

The program plans to hold regularly scheduled networking events, with the intent of facilitating partnerships between financial institutions and contractors. Feedback from the financial institutions has been that contractors prefer to choose a few lenders to work with, and then they work together on bringing energy projects through financing to completion. Some contractors will prefer to offer an unbiased analysis of the financing options for a particular project, and some will prefer to use the online application tools that individual lending institutions provide their clients. Whichever way a contractor chooses to work, there will be a solution for them to use. CSE will design a financing tool to be hosted by the Energy Upgrade California website which will help distill the differentiating characteristics between the CPUC financing pilots and other products that are available in the marketplace. The Financing Concierge System (FCS) will be discussed in greater detail in the next section, and it will be designed for customers to use to get an idea about the financing opportunities available to them. In Phase 2 of the tool, however, the team will work with the contractors to help expand the system in order to give those interested contractors an online solution or app they can use to help find a financial solution which fits their customers' needs.

Feedback will be a continual process implemented by CAEATFA's Contractor Manager, but managing contractors across the entire state with unified messaging will take planning and structure. There will be two formats for contractor discussion and feedback:

The Roundtable Conference Call: According to the American Evaluation Association "roundtables are excellent venues for giving and receiving targeted feedback, engaging in in-depth discussions, and meeting colleagues with similar interest."[26] Roundtable Conference Calls will be held at regularly scheduled intervals and will be designed to offer an avenue for contractors and the implementation team to engage in discussion about what is working and not working. The roundtable conference calls were utilized in other places, and they were successful for smaller contractors to have an opportunity to be heard, learn from others, and save their questions for the regular calls. The calls will have minutes and notes posted onto the online learning platform and best practices identified will be carried onto the discussion forums within the online learning tool for other contractors to see.

Retrofit Advisory Council[27] (RAC) integration: With funding from the Department of Energy Rooftop Solar Challenge, CSE has started Retrofit Advisory Council Financing Committees in

[26] http://www.eval.org/p/cm/ld/fid=171

[27] Funded by the San Diego Regional Climate Collaborative, the RAC is a forum for local government staff to collaborate with stakeholders from San Diego Gas & Electric, non-profits, home performance contractors, home

three large population centers (San Diego, Los Angeles, and the Bay area). In the past year, RAC and Sunshot teams have developed an online Financing Guide, a PACE Policy Guide, webinars and financing case studies. The DOE has funded CSE to expand the scope of the Advisory Councils in order to satisfy the needs of the marketplace, and this is an opportunity to leverage funding and structure already in place. Rather than create new working groups, CSE will invite financing pilot stakeholders to attend RAC financing committee meetings, which will provide updates on program milestones, new products launching, analysis, and overall feedback loops with the attendees. The RAC will work with other regional non-profit and trade organizations, such as LGC, LGSEC, BOMA, and USGBC to co-brand and co-produce certain meetings as a method for increasing attendance and reach of the messaging. These regional councils will be open to stakeholders including contractors, financial institutions and Strategic Partners.

Roles and Responsibilities: CAEATFA and CSE - Contractors

CAEATFA's Contractor Manager	CSE's Representative
Recruit and enroll contractors to participate	Coordinate on collateral distribution, marketing campaign material preparations, recruitment avenues
Verify contractor qualifications and eligibility	N/A
Develop curriculum and train contractors on program participation, master servicer, utility bill impact requirements, etc.	Develop curriculum and train contractors in all on messaging, sales techniques, and tools
Develop and manage QA/QC process	Coordination on templates and graphics
Manage participating contractor list as applicable during pilot roll-outs	Coordinate on contractor list placement on Energy Upgrade California website, integration with other lists, and with IOUs on their websites
Ongoing support for contractors including liaison concept, single point of contact, hotline phone number, central email address	Respond to referred questions pertaining to marketing and outreach, management of cooperative marketing campaign, cobranding, and online training platform
Schedule and manage the regular roundtable conference calls with the contractors	Attend roundtable calls
Participate in RAC feedback and networking events with financial institutions and contractors	Organize and promote RAC meetings, working with stakeholders on content, regional consistency, and data reporting.

energy raters, real estate agents and others to advance a sustainable market for energy upgrades in the San Diego area. Resources developed by the RAC include an energy efficiency-financing guide.

Implementation Strategies and Tactics

Section Summary Table

Highlight	Description
Strategies, messaging, and activities are a result of market research and the stakeholder map exercise	Both can be found in the Appendices
The marketing messaging needs to plant the seed that financing is a solution to the problem of "how am I going to pay for this energy project?"	Messaging that communicates the benefits of financing will be developed and tested. It will be tailored by channel and distributed for use and directs users to the statewide website where they can be educated on the differentiating qualities of the CPUC financing products.
An integrated marketing campaign will leverage the Statewide ME&O team's expertise.	This marketing campaign will set the groundwork for Strategic Partner's training and customer-facing marketing efforts. All partners will utilize the same marketing strategies
Statewide strategies will be developed as tools and support for the partners	Video marketing for training and messaging, some online ads and direct mail will leverage IOU customers identified. An online tool will help demystify the differentiating variables for the customers and help them communicate directly with chosen Financial Institutions
Contractors and Financial Institutions will benefit from a cooperative marketing and cobranding campaigns	Both prescriptive and custom approaches available for them to cobrand and design their own marketing campaigns which will be cost shared
RFPIs are expected to integrate the pilot financing messaging following campaign guidelines into their existing marketing materials at no additional cost	Funding has been identified for each entity to assist them with costs that have been considered extra. Some funds to IOUs are pass-through based on their fiscal responsibility
A reserve fund has been set up to allocate funding towards those strategies and activities that are proving to be successful.	CSE will continually evaluate the data and outcomes of the activities and determine the best approach once all programs are launched.

Strategy Overview

This section defines general and specific strategies and tactics for Financing ME&O implementation based on best practices and solutions identified through market research and the stakeholder map exercise, both of which can be found in the Appendices. The stakeholder map exercise examined barriers to participation and developed strategies to address each of these barriers.

These pilots and other relatively new mechanisms such as Property-Assessed Clean Energy (PACE) are supporting the creation of new energy project financing products, which are not yet widely recognized as common financial products. Because the pilots are intended to lift the marketplace for energy project participation overall and because consumer education is still needed on the benefits of energy action and financing energy projects, the ME&O strategy will be to promote the entire product category of "energy projects with financing" with special features for the financial products sponsored by the CPUC.

The strategy will focus on "behind the scenes" approaches—educating and training Strategic Partners and providing them with support and tools to sell to Target Customers such as messaging, training and cooperative marketing—and "out in front" approaches that leverage local program marketing and the Statewide ME&O brand campaign and tools.

In considering the market for energy financing it may be helpful to consider a common reference for new products and technologies—Rogers' diffusion curve, which ranges from innovators and ***early adopters*** through ***the early and late majority*** to the ***laggards***. Financing for energy efficiency and demand response projects is still at the very early stages of the curve—developed, used and promoted by those early adopters who are excited by energy as a new asset class.[28] New products often flounder in moving from the small committed few to the larger more pragmatic majority because a technology is disruptive or ask people to change their conceptions or behavior—this challenge is often referred to as *crossing the chasm*. Companies that manage for this disruption or human aversion to change with people-centered design are more successful. These financing pilots do not ask Target Customers to change financing behavior but they do require a different conception about valuing energy savings, and they rely on Strategic Partners, such as financial institutions and contractors, to change conceptions and behavior. Also, pilot details are not yet finalized. No quality or quantity of ME&O can compensate if the pilots are not people-centric and do not facilitate participation by Strategic Partners and Target Customers.[29]

Recognizing that energy project financing is not yet something most people are familiar with and data has shown that IOU projects have fallen through because the customer felt they had no method of paying for the project, ME&O will focus on Target Customers most likely to participate. These customers are on a continuum in understanding the value of energy projects and financing them and collaboration among ME&O partners is critical for each customer type. The two top-tier Target Customers and some tactics for reaching them are:

- **Those in the pipeline of IOU incentive and rebate programs are already "sold on energy"** and require information at the right time from a trusted messenger to consider financing.
    - IOUs and other RFPIs will use customer information to target financing marketing to program participants via direct marketing and account representatives
    - CSE will offer training for participating contractors about how to use financing to sell energy. This training will be offered online and via IOU Energy Centers in conjunction with program training.
    - CSE will develop IT tools for Target Customers to learn about and make decisions on energy financing and for Strategic Partners to help them

[28] Lombardi, N. Are Investors Confident Enough to Invest Billions in Efficiency Projects? Green Tech Media. August 2013 http://www.greentechmedia.com/articles/read/Are-Investors-Confident-Enough-to-Invest-Billions-in-Efficiency-Projects

[29] Smith, R. All the Marketing in the World Won't Make a Bad Product Good. Wall Street Journal. June 2014. http://blogs.wsj.com/accelerators/2014/06/09/ryan-smith-all-the-marketing-in-the-world-wont-make-a-bad-product-good/

- **Those "interested in energy or building improvement"** such as contractors' customers (proactive such a remodelers and reactive such as HVAC replacement), shoppers at home-improvement stores, and people seeking information on energyupgradeca.org and IOU websites require more integrated messaging that speaks to the joint benefits of the energy project and financing.
    - CSE will work with the Energy Upgrade California marketing partners to develop and test messaging and distribute it to partners. The Working Group participants will provide input and feedback.
    - CSE will arm Strategic Partners with tools to use financing to help sell energy projects
    - IOUs will provide financing messaging on their websites and in their other program marketing materials along with other strategies for maximizing customer potential
    - Energy Upgrade California Statewide ME&O will provide financing messaging on the website and in marketing materials

What the Stakeholder Map Tells Us

The Stakeholder Map, found in **Appendix C**, along with the ***Barriers and Marketing Solutions Matrix*** was created to identify the most prominent barriers for each cluster of financing pilot stakeholders. Some of the barriers are for financing an energy project only, and some are barriers for doing an energy project as a whole. As an example, if a customer has no money, then doing any kind of energy project is impossible in that customer's mind. With financing available, that may no longer be the case, but the marketing solution in that particular case would need to promote the financing as a solution for doing the project. Decision-making for energy projects is still a process for most stakeholders, even if the financial cost benefit makes sense.

Therefore, the strategies and messaging need to have a balance between "science and art." Taking into account the market research found in ***Appendix A,*** this section will define the strategies for ME&O as well as the activities and expectations. Of particular note, the strategies have as much detail of implementation as possible, and those details will be refined as the strategies are designed and implemented, based on feedback, marketplace reaction, and program participation. To summarize, this plan outlines the strategy and funding to launch the pilots. ME&O success will be continuously monitored and CSE will refocus strategy, activities and related funding to maximize what is working to achieve volume and support the pilot goal of getting new projects and deeper savings.

Main Statewide Strategies

Develop and Deploy Customer-Facing Marketing, Education and Outreach

Customer-facing ME&O messaging will be developed by sector to be integrated into energy program and primary and secondary partner marketing and outreach. The Financing ME&O team will work with the Working Group and the Energy Upgrade California Statewide ME&O team and marketing partners to design and develop an energy financing education and sales campaign along with cooperative marketing campaigns for delivery by the associated Strategic Partners. A creative brief will be developed and circulated for Working Group feedback before campaign materials are created. Following the same process as Statewide ME&O, program partners will be able to review and comment on creative and final approval will be provided by CPUC staff.

This team will develop an action-oriented message, content for collateral material, talking points for stakeholders, and tools and templates that can be used under the umbrella brand guidelines. Some of the ideas for marketing collateral include, but are not limited to:

- Elevator speech
- Talking Points for various stakeholders, Strategic Partners, government bodies
- Flyer promoting financing for each market sector audience
- Postcards for electronic, print, and direct mail campaign
- Digital tools
  - Web buttons
  - Online ads
  - Banners
  - “Stickers” which can be placed on existing collateral to grab attention
- Templates for contractors to use
- Case studies from each market sector for contractors to use
- Marketing materials in foreign languages corresponding to the statewide ME&O plan
- Cooperative marketing materials
  - Door Hanger
  - Brochure
  - Pull-up banner
  - Display graphics
  - Print ads
  - Door magnets

Customer-facing marketing shall be consistent and designed to speak to the Target Customers as though the message was coming from the entity delivering that message. Marketing materials will be designed and distributed as necessary and will be developed in congruence with the CAEATFA pilot roll out schedule.

CSE will work with CAEATFA to leverage design services, where applicable, in order to help brand materials developed under CAEATFA’s scope of work, including recruitment and training of contractors and Financial Institutions. For consistency and unified messaging, CSE will collaborate continually with the IOUs and CAEATFA stakeholders to make sure they have materials and content needed to be successful with their integration of financing into their program offerings.

The Statewide ME&O web manager will integrate financing messaging where appropriate on www.energyupgradeca.org and a widget will be provided to the IOUs and other partners pointing to the financing finder and the Financing Concierge System as it is developed. Coordination will allow for the integration of the video marketing campaign, as well as the seamless movement between the various sections and the Financing Tab on the website.[30]

Marketing Messaging

The marketing for the financing has a very simple objective: plant the seed of financing an energy project as a solution. The ***Target Audience*** section of this plan defined a variety of behavior segments that apply to both residential and non-residential potential borrowers helping to define ***WHEN*** would be the best time to ***"plant the seed"***. The messaging itself covers ***WHAT*** that seed is offering.

Financing, in general, has two interpretations. On the one hand, it is positive because it helps a customer get something they want immediately but may not have the money for. Car dealerships, appliances, furniture, cosmetic enhancements utilize *"financing"* or *"credit"* as a very positive solution. Financing doesn't create that need, nor convert a want into a need, which good marketing does. However, financing can make the ***want*** or ***need*** happen ***now*** with low monthly payments. On the other hand, financing can be perceived as a negative. When asked about financing, people generally do not want to take on more debt and express disinterest in financing itself. This is especially true in the residential and small business markets. Larger businesses are more accustomed to managing debt.

Financing ME&O must keep the connotation of financing on the positive, and the challenge is that many Customers view energy-related improvements as a necessity rather than a want or a need.

Energy Upgrade California is promoting the benefits of doing energy projects in the residential market currently, and developing a campaign for small business in 2015. The IOUs also have utility-integrated marketing and account representatives to "sell energy" to their customers. CSE will work with its Statewide ME&O marketing vendors to develop several messages for limited testing that cast financing in a positive light and support interest in energy action as a want or need.

In addition to visual marketing, all stakeholders will be trained to talk about financing to their customer audiences using this messaging. Having talking points, a developed "elevator speech" and consistency across the trusted messengers will further the perception on the positive rather than on the negative, since these stakeholders are promoting an exciting concept that people ***WANT***.

[30] As of November 4, 2014, CSE is in the process of selecting a digital vendor for the establishment of an Energy Management Tool as part of the integrated statewide website and "My Energy Plan." Selection of the vendor and functionality of the selected tool will impact level of effort needed to develop the Financing Concierge System.

Implementation Activities, Budget and Timeline

Implementation Activity	Budget	Leveraged Effort	Timeline
Additional work by Statewide ME&O marketing agency of record to concept and test financing messaging for use across channels. Some of these costs will be incurred by Statewide ME&O also. This is cost-share. Any budget not used will be put in the TBD allotment to support effective strategies.	$250,000	Statewide ME&O portion of cost-share	Q4/ 2014-Q2/2016
Marketing expenses for paid search, digital and direct marketing and advertising to targeted customers	$425,000		Q2/2015-Q3/2016
Integration of financing messaging into statewide ME&O communications plan and marketing campaign	$0	Included in Statewide ME&O scope of work	Q1/2015-Q4/2016
Additional work by Statewide ME&O website administrator to integrate financing changes to web functions. Any budget not used will be put in the TBD allotment to support effective strategies.	$150,000		Q4/ 2014-Q2/2016
TOTAL	**$825,000**		

Financial Institution Target Customer Marketing

Financial Institutions have various target audiences that are already their customers. In addition, there are opportunities available for financial institutions to obtain new customers for their portfolio of services through this program. Although CAEATFA's education, outreach and training will focus on recruiting financial institutions to participate in the program, along with training them on the program process and participation requirements, the statewide Financing ME&O plan will focus on the financial institution's customer engagement strategy.

Financial Institutions will have some specific marketing strategies, which are over and above what was included in the cobranding and cooperative marketing sections of this plan. The main target audience behavior segmentation characteristics, which apply to financial institution marketing and outreach, are those existing customers of the FI. Those customers can have existing loans, checking, saving, investment, or other types of accounts. The reason why this is a targeted characteristic is because that audience already understands the concept of financing and won't view it as a negative. In fact, those customers that have taken out loans before and paid them back may look at the benefits as a positive. Therefore, the marketing in this case would not have to necessarily sell financing as a solution, but more about using financing to upgrade one's home. Following the same pathway as the other marketing strategies, the FIs would engage those existing customers using the marketing channels they already have: customer service representatives, direct contact, lobby experience, and advertising.

Customer Service representatives

The staff within the financial institution can help guide their customers towards solutions, which solve many problems. Unlike messaging for other stakeholders, the FIs wouldn't necessarily wish to send their clients to the Financing Concierge System to the risk that they may find a more attractive financing solution and go with them. Therefore, the marketing messaging for the FIs centers on, "taking a loan out with us…" The methods for training the customer service representatives would be following the contractor training methods as well as the strategic partner methods, both aimed at being non-interruptive of their core business yet concise and to the point training that can be immediately adapted to their working environment. The customer service representative will be given talking points about the marketing campaign messaging and they will be able to comfortably speak about the benefits of this exciting opportunity this institution is participating. Customer Service representatives can work with their internal organizations' management to determine the process for qualifying those customers for financing while having them at the location.

Direct Contact

The financial institutions will be given many opportunities to reach out to their customer base directly to promote these CPUC financing pilot products. Depending on what methods of communication the FI currently uses to communicate with the customers, the financing program team will have marketing materials ready and available for them to insert into their process. Newsletter articles, electronic communication templates, website graphics, web buttons and links will all be made available following the statewide Energy Upgrade California infrastructure in place. Additionally, the Customer marketing videos created directly for the financial institutions will be presented with a Media Distribution Guidebook, which will identify methods for posting and distributing the videos in a manner that gets the highest view rates with action-oriented messaging leading the Customers back to the FI for action.

Lobby Experience

The lobby experience represents signage and customer engagement at the time the Customer is in the lobby of the financial institutions. Although the majority of financial management is done online and through encrypted communication, many customers, especially those in the hard to reach markets, physically come to the financial institution location to do business. Generic banner signs with the tagline and "ask us how" will be created and FIs will be asked where they can be displayed most appropriately. The financing implementation team will coordinate with the FI marketing departments and location general managers to make sure that all activities are coordinated and understood to be cross-promotional for a good cause.

Advertising

The main method the Financing Program can assist the financial institutions is with advertising through the cooperative marketing campaign Custom option, described later in this section. However, in addition to CPUC pilot specific messaging, the implementation team would work with the financial institution to identify opportunities already planned by the FI in which the energy project loans messaging can be inserted. Sticker-type attention getting messaging with tag-lines could be added to newspaper ads, magazine ads, and online ads. Furthermore, the implementation team can work with the FI to look for opportunities for earned media and social media promotions.

Multimedia Digital Marketing and Training

Appendix E provides the background, research, and detail as to why video marketing is a valuable channel for training contractors and financial institutions, recruiting secondary partners and attracting target customers with action-oriented messaging to those market segments most likely to take action.

Thorough analysis of the education and communication needs for each of the stakeholders determined that six categories of videos needed to be mapped out for the Financing ME&O Plan. After realization that most of the messaging will be focused around using the how financing is a solution for the barrier of first cost, the videos needed to offer target customer education in addition to simplified training for the trusted messengers providing the guidance to those customers.

The plan covers 2015 and the first two quarters of 2016. In addition to creating the videos, a Media Distribution Guidebook will be created for partners on the best use for each video marketing tool, the intent, and the best process for placement.

Given the number of partners and trusted messengers, and distribution platforms involved in the video marketing program, it has been recommended to host all the marketing videos (not including the training videos) on a singular YouTube channel. Partners will be given embed codes for the relevant videos to display them on their websites and in their social media channels. This will enable CSE to make the videos available widely, while also using YouTube Analytics to measure and track a variety of stats and gather useful data about view counts, audience retention, traffic sources etc. and to track and measure views from any web-accessed links. Videos displayed using the source files and not through the YouTube channel (generally live settings (lobbies, trade shows, showrooms, Point-of-Sales, etc.) won't be trackable.

The advantages to this approach are that it is free and tracks all the web-accessed videos in one place. The disadvantages are that it cannot track click-thrus from referrals. When the videos are uploaded to YouTube, the privacy settings will be configured so that certain videos are unlisted and only viewable through the specific link provided. Unlisted videos will not show up in YouTube search results or on the channel page. In this way, the various partners can be given embed links to the videos they are to promote and distribute with the relevant language versions, Call-To-Action and/or co-branding.

Draft Marketing and Training Videos

Video Category	Description	Format	Languages	Strategy
Introduction to financing/Promotional video	General program aspirational video to be used on statewide, IOU, and/or state government websites	Hybrid live action with graphics	English with Spanish subtitles	Refresh of video in 2016
Overview for sector: Residential products	Designed for orgs to promote all types of financial products offered. To be played during retail interception strategy, trade shows, FI lobbies, etc.	Motion Graphic & Typography,	English Spanish typography version	Refresh in 2016
Overview for sector: non-residential products	Designed for orgs to promote all types of financial products offered. To be played during retail interception strategy, trade shows, FI lobbies, etc.	Motion Graphic & Typography	English Spanish typography version	Refresh in 2016
Residential: Single Family homeowners – General Population	Overview of financing and using the Financing Concierge System	Hybrid live action with graphics	• English • Spanish • Mandarin subtitles • Korean subtitles • Vietnamese subtitles	Updated in 2016. Testimonial videos for each sub-market
Residential: Single Family low and middle income homeowners	Special messaging for hard to reach communities plus EFLIC program marketing	Hybrid live action with graphics	• English • Spanish • Mandarin subtitles • Korean subtitles • Vietnamese Subtitles	Refresh of video in 2016. Testimonial videos for each sub-market
Residential: Master-metered multifamily	Overview of MMMF program and benefits of energy efficiency financing	Hybrid live action with graphics	English	Testimonial videos for each sub-market
Non-Residential: Small Business loan and lease	Small business market overview of loan versus lease financial products, benefits, and processes	Animated whiteboard & character.	• English • Spanish Subtitles • Mandarin Subtitles	Refresh of video in 2016. Testimonial videos for each Small Business and Non-Residential Target Market
Non-Residential: Loan product overview	Aimed medium and large office, industrial market representatives including REIT managers, property managers, facility managers, etc.	Animated whiteboard & character.	English	Refresh of video in 2016. Testimonial videos for each Small Business and Non-Residential Target Market
Non-Residential:	What's in it for me? Overview	Video in 3-D	• English	Updated in 2016.

Video Category	Description	Format	Languages	Strategy
Strategic Partner Recruitment	of how to help promote the financing messaging for Property Management companies, real estate brokers, etc. who may not see the value at first	motion graphic	• Spanish Subtitles Mandarin Subtitles	Testimonial videos for each Small Business and Non-Residential Target Market
Financial Concierge Tool: Contractors Residential + Non-residential	How to use the FCS, enter in the data, interpret the reports, qualify Customers for financing	3D Motion Graphic	English with Spanish Subtitles	Updated in 2016 to include best practices and lessons learned
Financial Concierge Tool: Financial Institutions	How to use the FCS, enter in loan eligibility criteria, run reports, compare products	3D Motion Graphic	English with Spanish Subtitles	Updated in 2016 to include best practices and lessons learned
Financial Concierge Tool: Strategic Partners	How to use FCS, analyze information, present reports to client/boss	3D Motion Graphic	English	Updated in 2016 to include best practices and lessons learned
Training and Education: Training on Financial Products	Aimed at educating contractors, strategic partners, IOU account reps, etc.	Webinar + graphics + some animation, role modeling	English with Spanish Subtitles	25 minutes broken into 7-8 segments of 3-4 minutes each
Training and Education: How to sell financing	Aimed at educating contractors	Webinar + graphics + some animation, role modeling	English with Spanish Subtitles	25 minutes broken into 7-8 segments of 3-4 minutes each
Training and Education: Close Sales With The Financial Concierge System	Aimed at educating contractors	Webinar + graphics + some animation, role modeling	English with Spanish Subtitles	25 minutes broken into 7-8 segments of 3-4 minutes each

Figure 2: Video marketing Audience Map

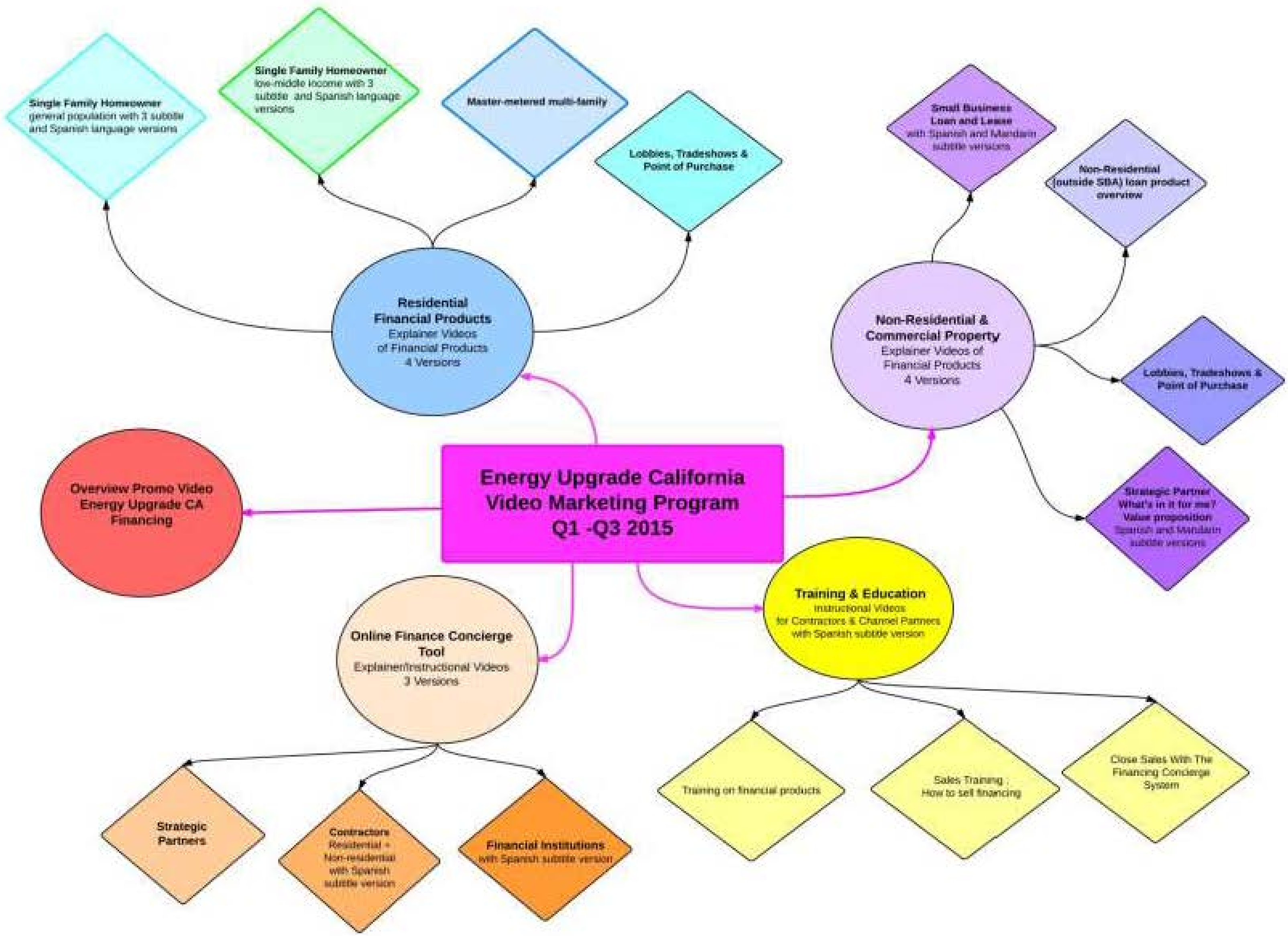
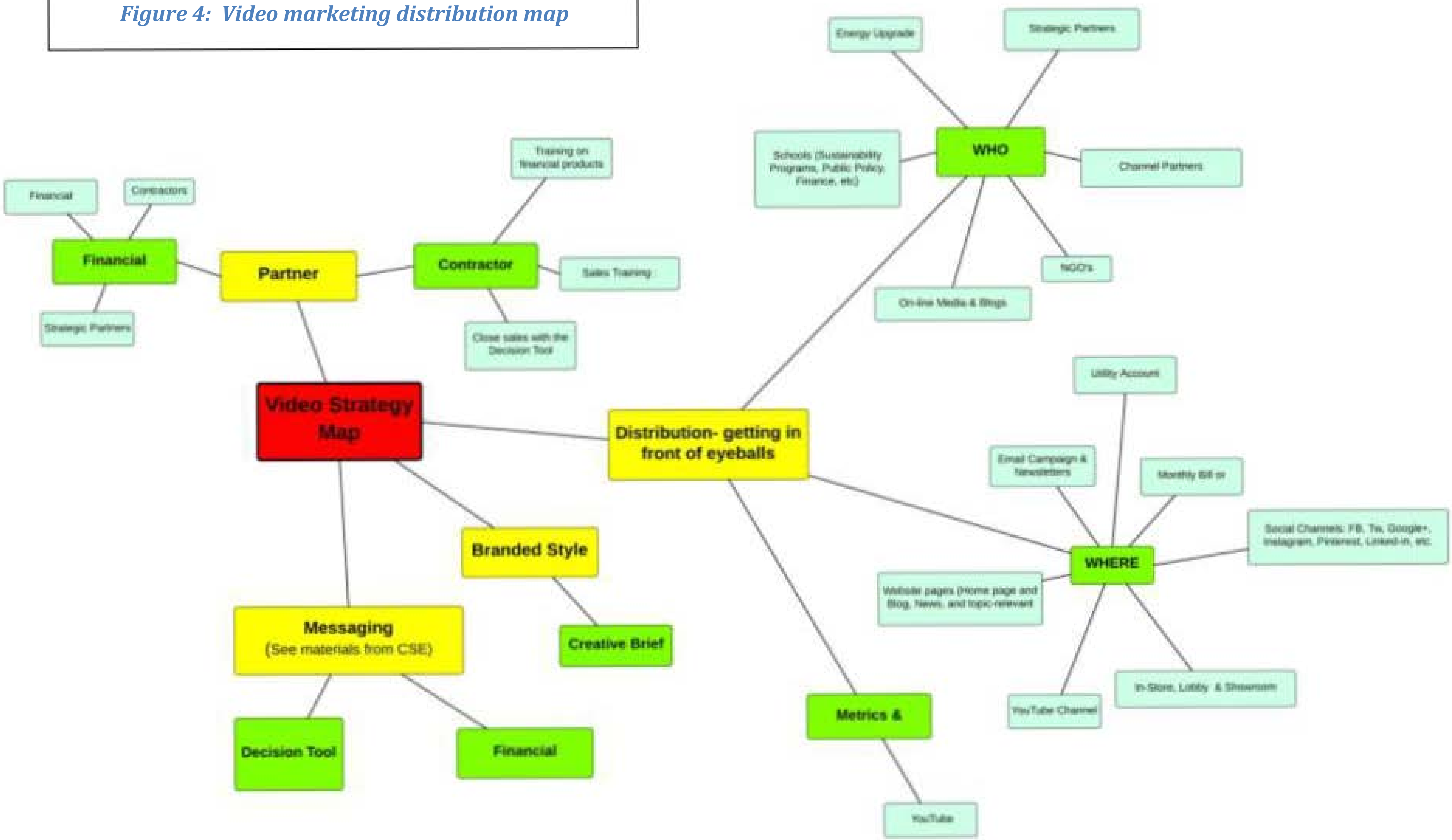


Figure 4: Video marketing distribution map



Video Marketing Activities and Budget

Activity	Budget	Timeline	Entity Responsible
Finalize Creative brief and solicit vendors for proposals, work with vendor on design and execution of training videos and marketing videos in collaboration with the Statewide ME&O vendors	*Included In CSE Administrative budget and Statewide ME&O Campaign*	Q4, 2014-Q2, 2016	*CSE*
Create marketing videos for different customer markets	$300,000	Q1 2015 - Q2 2016	*CSE & Vendor tbd*
Design training videos for contractors and other partners	$250,000	Q1 2015 - Q2 2015	*CSE & Vendor tbd*
Integration of training videos onto online platform	$200,000	Q1 2015 - Q2 2015	*CSE & Vendor tbd*
Create Media Distribution Guidebook to be used as a tool to maximize outreach of video marketing campaign	$25,000	Q1 2015 - Q2 2015	*CSE & Vendor tbd*
Distribution of videos to partners promoting to customers	$50,000	Q1 2015 - Q4 2016	*CSE*
Marketing videos integrated into the Statewide ME&O and IOU ME&O in social media, earned media, and digital marketing at events, kiosks, retail outreach, etc.	*Included in Statewide ME&O Campaign Included in IOU Marketing*	Q2 2015 - Q4 2016	*CSE & IOUs*
Total	**$825,000**		

Cobranding Marketing Campaign

Cobranding is defined as having more than one entity place their logo on marketing pieces so that the marketing pieces become representative of both agendas. The Energy Upgrade California Brand Guidelines have strict cobranding requirements and permissions, and the financing program will adhere to those rules. A procedure for submitting cobranded materials for approval will be established following the Statewide ME&O process and this will be a task considered part of their marketing scope and no additional funds will be allocated for this effort.

Cooperative Marketing

Cooperative marketing has been a very effective strategy for working with primary strategic partners. The general concept is that Financing ME&O will pay for a percentage of any participating contractor's or participating financial institution's marketing costs as long as the graphic and content receives pre-approval from the program and follows the brand and messaging guidelines. CSE managed a cooperative marketing program for the Better Buildings Neighborhood Grant under DOE and members of the CSE team designed and managed aspects of the SoCalREN co-op as well. Learning and processes from these programs will be leveraged as much as possible in order to take advantage of existing infrastructure and resources.

Preliminary Set-up

As part of the design development of the cooperative marketing program, CSE will identify an online printing service to partner on the program design. The vendor will be chosen through a solicitation process with discounted rates based on volume.

Participants will have two ways they can participate one method is to have cobranded marketing materials printed and drop shipped to them ***(Prescriptive)*** and the other way is by uploading design proposals which are vetted and approved through the system ***(Custom).***

As part of the set-up, collateral material that can be slightly customized is uploaded to the site and catalogued for users to add to their cart. Forms and instructions will created and included in the partner resource library within the Energy Upgrade California statewide website.

Process

Contractors, Financial Institutions, and local governments in the EFLIC low-to-middle income sub-pilot identified cities[31] enroll to begin receiving the program benefits. Once the participant has enrolled, they will be given log-in information to the cooperative marketing web portal where they will see their opening balance. The opening balance will say $0 until a contractor has brought 3 loans through the loan approval stage. The only purpose of this is to allow the funding to go to those contractors closing loans in order to maximize the usage of the marketing dollars. If another milestone or metric should be determined once the programs are up and running, CSE will adjust this. Financial Institutions and the EFLIC local governments shall see the full amount upon application approval to participate in the program.

When the Prescriptive pathway is chosen, users shop for the various items they want, similar to Amazon online shopping, and they will order quantities of various items which will be made available to them through the program such as brochures, posters, banners, stickers, and branded giveaways. Once an order is calculated and fits within the participant's available balance, the participant is asked to customize each item by uploading their logo and other information allowed to be added to that item. Once the shipping costs are calculated and the marketing order is complete, the submit button is selected and the order begins processing, crediting the account for the amount "spent."

---

[31] Please see the EFLIC program write up on page 70 for clarifications on that program design

For the Custom pathway, the participant will submit artwork if available and a small description of the proposed marketing or advertising, including quotes for pricing and details about time frames. The graphics will be reviewed against the brand guidelines and the implementation team will work with the participant to edit and revise the artwork to make sure it meets the criteria and messaging of the program. Once the artwork is approved, the participant will receive an approved email and they are confirmed to order the marketing directly from their vendor. The participant submits the invoice with proof of payment after that is complete, and submits it to the program for reimbursement. The implementer will notify the online vendor of custom projects redeemed, so that the balances could be updated within the online ordering system.

Payment to the online vendor

The printing vendor will be given a balance of $200,000 which they will use as a baseline to bill draw against each month. At that time, the vendor will submit a report defining all of the items ordered, quantities, and other reporting metrics requested, and the implementer will provide them with payment to bring their balance back up to $200,000. At the conclusion of the program, the vendor will return whatever remains of the $200,000 balance to the implementer.

The vendor is responsible for maintaining each participant's available credit balance for both the Prescriptive and Custom projects and spending history, provided to the implementer monthly as part of the invoice and report.

Participation balances

Each participating Financial Institution and contractor will be given a **$3,000** total credit upon approval that can be used either for prescriptive or custom marketing projects. There is a **$1,500** cap on prescriptive marketing using the provided funds, leaving **$1,500** for the participant to use for Custom marketing solutions. Printing has not been inexpensive through a printer participating in a coop program. Therefore, any strategic partners looking to utilize more than $1,500 in prescriptive monies should really use an outside printer for those efforts. Additional funds for contractors will be offered based on performance milestones following the table below. These bonus funds can be used for either prescriptive or cost-share.

Cooperative Marketing Contractor performance awards

CPUC Pilot loan products originated	Cooperative marketing debits to account
10	$1,000 additional
20	Debit received at 10 + $2,000
50	Debit received at 10+20 + $4,000

A contractor has the opportunity to earn a total of **$10,000** in available marketing funds **($1,500** for prescriptive and **$8,500** for either prescriptive or custom matching projects) for bringing **50** projects or more to the financial institutions representing CPUC pilot projects and resulting in loans originating.

Financial institutions will not have the opportunity to earn more cooperative marketing funds based on the same performance metrics because they are expected to originate loans. Depending on available funding, a strategy for rewarding those Financial Institutions investing in marketing efforts as a result of the cooperative marketing dollars will have the opportunity to earn more **($2,000)** funds they can apply towards the cost-share.

Key Performance Indicators (KPI)

Experience with this program design under ARRA with contractors has shown it to be a successful strategy for obtaining buy-in and support from the local contractor community as well as allowing for innovative marketing to occur at the local level.

However, since this is a large budget that will be assigned to this marketing strategy, several KPIs will be tracked closely and it will be adjusted if they are not being met. The progress and participation will be evaluated quarterly in order to gauge the effectiveness of this marketing strategy against loan volume and feedback. CSE is aware that programs need time to effectively ramp-up but the caps and dollar amounts can be altered depending on the success and interest of the program over time.

Volume of participation: Not all participants will want to take advantage of the **$3,000** credit offered to them, nor do they see a value in the Custom program involving a 50% reimbursement of funds for marketing. As long as the majority of participants (51%) in the program are taking advantage of the Prescriptive option, getting cobranded marketing materials distributed within the marketplace, the program is having an impact. Additionally, since custom options require a participant's financial contribution, a lower threshold (35%) should be assumed to occur while still proving the program to be successful.

Participant feedback: CSE will discuss the cooperative marketing program during the variety of feedback sessions, which will occur whether it is a breakout session as part of the RAC meetings, or on the bi-monthly roundtable phone calls. The participants will be asked questions about their overall attitude and opinion on the effectiveness and opportunity of this strategy, and program revisions can occur as a result of this feedback and input.

Number of participants reaching maximum benefit: The number of contractors originating over 50 loans or more through the program, receiving the performance bonuses, would indicate a direct correlation between the cooperative marketing program and the loan products.

Cooperative Marketing Budget

Assumptions	Explanation	Dollars Budgeted
300 contractors statewide participate	$3,000 starting 50% make 10 loans = $1,500 bonus 25% make 20 loans = $2,000 bonus 15% make 50 loans = $4,000 bonus	$900,000 $225,000 $150,000 $180,000

20 Financial institution participate	$3,000 starting 50% make bonus = $2,000	$60,000 $20,000
Local Government participate	$0 dollars come from EFLIC budget of $100,000	$0
CSE Administration of program	10% of implementation dollars per year Includes check cutting, organization with printer, coordination with brand manager, participation approval, custom design review and approval, management of appeals process, etc.	$307,000
Print Vendor set-up costs	Estimate	$50,000
	Total = $1,892,000	

Financing Concierge System Overview

Background

Market research indicates "because customers generally do not seek financing for its own sake, it must be seen as a way to enable Californians to close a sale, especially for those who have difficulty meeting the up-front cost of making their homes more energy efficient." [32]

The process of presenting financing, and using it as a solution for customers, rests on the shoulders of the contractors, trusted messengers, and marketing efforts. Customers need to be made aware that financing is available to them in addition to overcoming any perceived concerns they may have about taking on debt or using loans as a way of improving their property comfort and performance.

Harcourt Brown & Carey's Preliminary Assessment and Recommendations report goes on to advise "To the extent possible, the financing should be made available to the energy user through a simple, point-of-sale process that does not require the potential borrower to interact with third parties directly (e.g., banks, mortgage bankers, finance companies, lease companies, etc.)."[33]

Jeremy Epstein, during a peer exchange group presentation went one step further to stress that a "Program delivery tool should include the following: accept applications online via program website, through integrated applications on contractors' websites…"[34]

[32] Energy Efficiency Financing in California: Needs and Gaps (Page 10) by Harcourt Brown & Carey presented to the CPUC on July 8, 2011.

[33] Energy Efficiency Financing in California: Needs and Gaps (Page 8) by Harcourt Brown & Carey presented to the CPUC on July 8, 2011.

[34] Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors: http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf

After reviewing the market research from programs tackling similar market sectors, a variety of themes began to emerge and a solution to take shape. This solution must offer a simple user experience while moving the customer down the pathway of taking action. One misstep and the customer could easily lose motivation and decide not to move forward with any kind of project. Therefore, a sound solution has the following characteristics:

- Users need to think they are receiving impartial education about financial products available to them
- Users need to be able to verify the information suggested to them by their trusted messenger
- Users need to be able to view a snapshot of their customized situation
- Users need to be provided with enough information to feel educated, while not getting overwhelmed
- Users each have a 5-10 minute attention span
- Users want to be entertained
- Users want the perception of choices, but prefer a recommendation from someone they trust

Financing programs in territories like Colorado and Oregon combatted many of those barriers with concierge-type assistance. They had financing specialists that were made available for their customers to answer simple questions about products and interest rates, all the way to looking over their personal financial reports and helping them decide which direction to go in.

The evaluation for programs offering this type of "hands-on" service has actually shown that these concierges help distill information about financing, resulting in slight increases in participation, but were not cost effective. In fact, the Oregon program canceled their concierge element. In this plan, two sets of concierge-type services are described that would leverage the infrastructure already in place by the IOUs. First, CAEATFA's scope of work includes the on-going support of the contractors, and the implementation design is moving towards having a single point of contact from representatives of CAEATFA's Contractor Management team to help contractors with financing-related issues as they work with customers in the different market sectors. Secondly, the Financing implementation team will coordinate with the IOU Energy Advisor programs to become resources for customers to go to for assistance and support as it pertains to financing. Energy Advisors currently assist the customers with energy project development and rebate and incentive programs, so increasing their knowledge and reach will provide residential and non-residential customers with well-rounded assistance.

Both of these sources, however, are solving only some of the needs listed above. To efficiently meet the scale of market adoption these pilots hope to achieve, the solution will need to be IT based. An online concierge will provide users with an experience that satisfies their needs and wants cost-effectively, can provide services to all customers in the state, and can begin tracking the data from interest into action.

Developing an IT solution

A variety of IT tools are already available to California's energy customers from several sources including the IOUs and private and public interest stakeholders. Each of these addresses various aspects of customers' knowledge about their energy use and many also promote program participation. All tools currently stop short of providing significant information related to financing energy projects, although the Energy Upgrade California website currently offers a central financing finder tool. Since these pilots are available on a statewide basis and the financing institutions providing the loan products operate across IOU and CCA service territories, it makes sense to leverage functionality from that Statewide ME&O program and for this plan to bridge the gap between that and a more comprehensive approach.

Phase I: Leveraging the Statewide ME&O Energy Management Tool

The Statewide ME&O team, as of this draft plan, has been soliciting quotes for an online energy management tool that helps users of the statewide website build on their "Plans" into actual energy projects. The statewide team is expected to announce a decision on November 7, 2014 as to which vendor is selected. Whichever functionality is provided for financing with the base system, the Financing Concierge System will build off of that. Ideally, the base system would work with Green Button to obtain historical utility use data to use as a baseline, and then builds load profiles based on the actual tariffs charged rather than an adjusted weighted average. Based on the knowledge provided, users would begin choosing the types of measures or equipment they would like to think about replacing. This tool then would pull performance specifications, coming up with a replacement strategy, which can then be positioned almost as a "to do list." From there, the user has many options including finding contractors, incentives, and information about demand response and distributed generation, carbon implications, and financing.

The financing section of the energy management tool would take that customized project, and through a series of questions, help the user see the participating financial institutions in most of the programs around the state. Each institution would have a range of basic eligible criteria and then an estimated monthly payment, based on the costs identified through that project built on the tool, at that interest rate and loan terms. The statewide website currently identifies each of the financing programs available with filtering options, the contact information of that lender, and a link to contact them directly for more information.

Both finalist vendors currently offer a certain level of customization within their base energy management tool offering, and the financing team will work closely with the approved vendor to make sure as much preferred functionality as possible is covered by this funding source, so that it minimizes the obligation under the financing program ME&O budget. Therefore, the effort of getting the final vendor's system customized with the base functionality will be considered Phase I. Pending vendor approval and contracting by the end of the year, that functionality and programming/customization can occur prior to the launch of the single-family home program in early March, 2015.

Phase II: Integration of Decision-Making Software into the System

Consumers make many of their financial decisions as a result of emotional or non-rational variables, rather than cost or annual percentage rate (APR) alone. Research and feedback from lenders indicates that underwriting requirements are not standardized, and they change regularly using different variables. According to some lenders, the only constant seems to be FICO credit score and Debt-to-income (DTI) ratio requirements. Everything else is based on the loan originator and the potential borrower. This was supported by feedback received in a series of focus groups held by PG&E that APR was the leading differentiator when qualifying competing loan products.

However, in talking with contractors and potential borrowers, many factors help sway decision-making related to financing that are not numbers based; these "intangible qualities" can range anywhere from proximity to lending institution, method of monthly payment, familiarity with the loan officer, personal recommendations from friends or family, lender name recognition, additional services offered by that lender, etc. In the non-residential market, those "intangible qualities" are even more complex and can include variables such as paperwork requirements, loan origination fees, time to close, personal guarantee requirements, etc. In both cases, developing a decision-making tool, which helps those customers help prioritize the "intangible qualities" in conjunction with the main eligibility criteria factors, will provide a more comprehensive service to those customers than what can be offered by contractors or lending institutions directly.

The current marketplace involves contractors and lenders depending on personal relationships with customers to close loans. In feedback sessions with a variety of financial institutions, they stated a preference for these ratepayer-funded ME&O dollars to facilitate partnership capabilities between contractors and lenders, so that contractors could funnel projects through their lender partners and the lender representatives could provide guidance and feedback to those customers. The ME&O implementation team sees no problem in that sales model. However, an obligation of this ME&O is objective support of the financing pilots overall, therefore it is important to provide those stakeholders that want it with a scalable, impartial option. In addition, objectives of the program include figuring out how the CPUC pilot financial products stack up against the existing products in the crowded marketplace. The only way to offer unbiased consultation, along with trackable data for measurement, is to provide users with side-by-side comparisons of financial products, and then measure the user's behavior once they have received that information.

1000Minds design-making software[35] is an award winning[36] online platform based on the PAPRIKA method (***P****otentially* ***A****ll* ***P****airwise* ***R****an****K****ings of all possible* ***A****lternatives*) of decision-making. The 1000Minds website explains PAPRIKA method in its simplest form:

"The PAPRIKA method involves you (the decision-maker) answering a series of simple questions. Each question requires you to choose between two hypothetical alternatives described according to two criteria at a time from the set of criteria you specified for your application and involving a tradeoff between the two criteria. The method begins by identifying all such pairs of hypothetical alternatives. One pair is randomly selected and presented for you to pairwise rank, based on your expert knowledge and subjective judgment. After answering the first question, you are asked to pairwise rank another pair of hypothetical alternatives – with a different combination of two criteria and again involving a tradeoff between the criteria. And then to rank another pair of alternatives, and then another, and so on. Such simple pairwise-ranking questions are repeated with different pairs of hypothetical alternatives, all involving trade-offs between different

[35] www.1000minds.com

[36] When 1000Minds won a Consensus Software Award (sponsored by IBM and Microsoft), the judges said: "In removing complexity and uncertainty from decision-making processes, 1000Minds has blended an innovative algorithm with a simple user interface to produce a tool of great power and sheer elegance."

combinations of the criteria, two at a time, until enough information about your preferences has been collected to accurately rank the alternatives you're considering. From your answers, preference values representing the relative importance, or 'weights', of the criteria are obtained via mathematical methods (i.e. linear programming). These preference values are used to rank any alternatives you may have entered or all hypothetically possible ones (all possible combinations of the criteria)”[37]

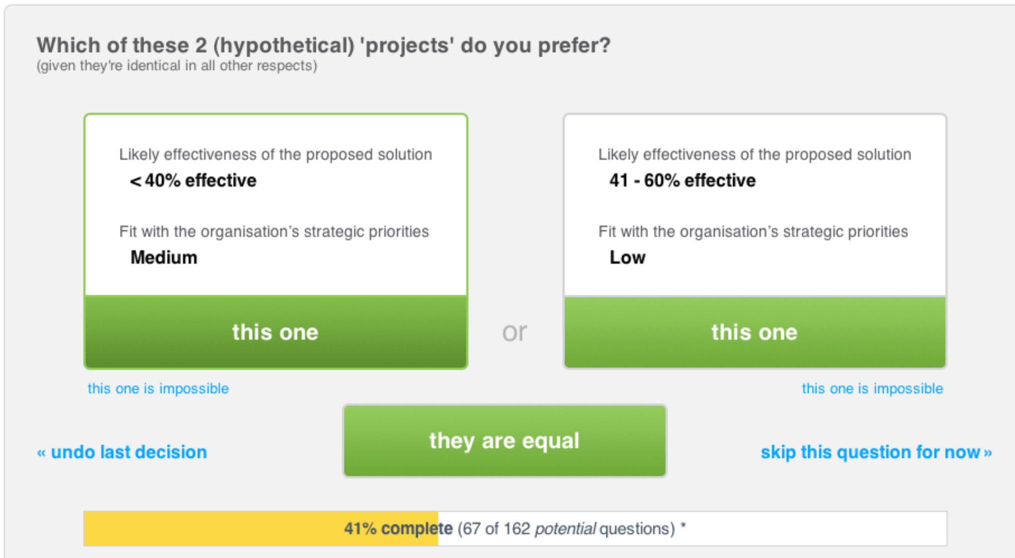


Figure: An Example of such a pairwise-ranking question, involving 'projects' in this example

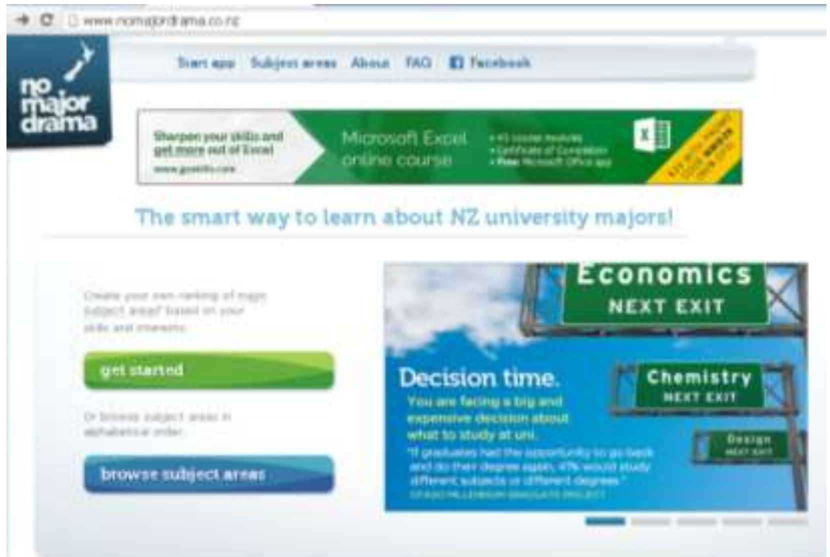
The Financing Concierge System (FCS) Phase II goal is to design an additional function, hosted on the financing tab of the statewide website, to help customers work through a series of pairings, using the 1000Minds software algorithms, to arrive at a ranking of the financial products available to the customer for their energy projects based on financial and “intangible” qualities. 1000Minds is a patented algorithm that is available for relatively no cost. Building the algorithms to decide which “intangible qualities” are important for the different customers within the different sectors and then figuring out which decisions have more weight than others is what will take the time.

This effort will be implemented by CSE, working in conjunction with the Strategic Partners identified within this plan and various stakeholders in order to arrive at the best solutions. A series of surveys and feedback sessions are already underway and available at www.energyupgradeCA.org/financing. Surveys for contractors and financial institutions will provide preliminary information about functionality and follow up research will need to be coordinated, concepts matured, and beta versions tested prior to Phase II launching on the statewide website. Phase II will include the decision-making functionality for the major sectors of the program pilots including single-family residential, small business, and non-residential. Each sector's decision-making priorities differ and will result in three tools programmed prior to being able to finish the phase.

Working with the developer of the 1000Minds software, an existing website already has the model of functionality that can be used as a base model for Energy Upgrade California's financing program needs. www.nomajordrama.co.nz was created to help students of a university choose a major that best fit what is important to them.

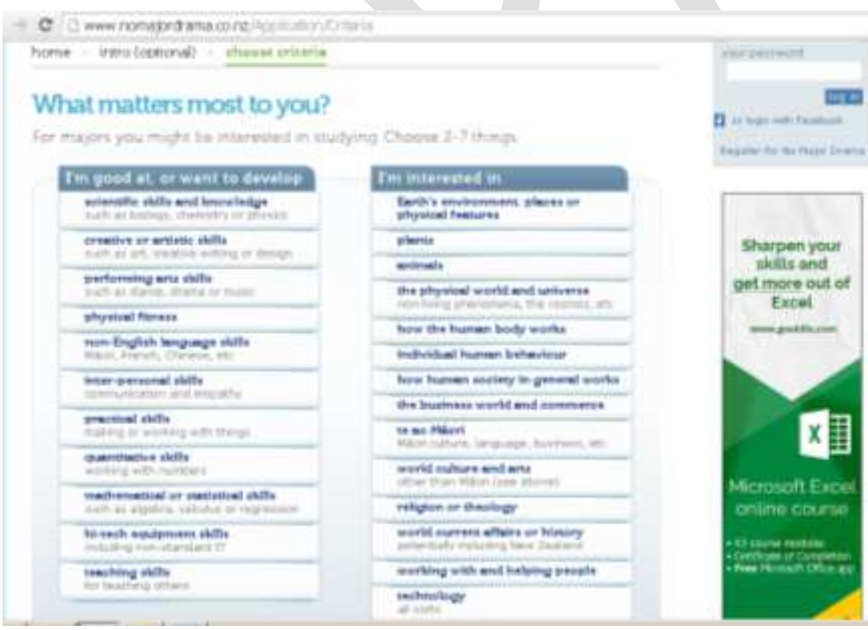
[37] http://www.1000minds.com/about/paprika-method

As the user opens the home page, in Energy Upgrade California version, they would be able to get started or see a list of the financing products available to them, ideally bringing them back to the Energy Management Tool on the statewide website.



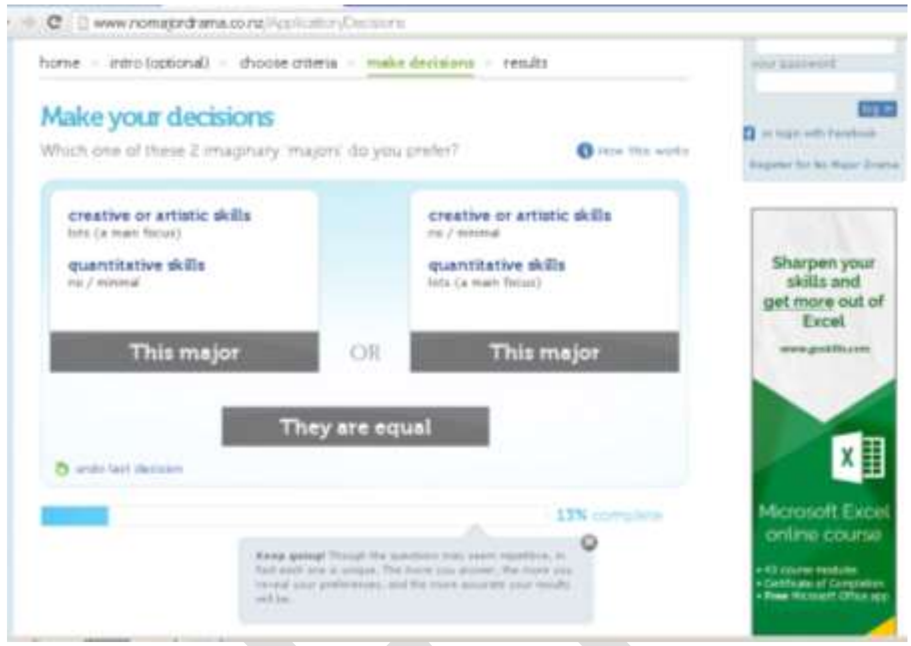
The user will click "get started" to see a second page that describes the process, meaning how the user will use the tool in order to get a report that they can use to help them make an informed decision.

The following page is made up of two columns, one with of a series of criteria based on areas of interest in one column and qualities which matter most in the other. The user selects a number of choices, which then immediately tells the system how the user feels about the unselected choices. In the statewide financing version, the criteria selection would be replaced with those "intangible qualities" discussed earlier, and the "I'm interested in" would be choices about secured versus unsecured, interest rates, FICO score, DTI, etc. That way the user can tell the computer to eliminate those loan products for which the user isn't eligible for as a variable. Of note is the login and password function on the upper right hand corner of the page. This will tap into and correlate with the Energy Upgrade California identification as an integrated part of the database, combining the information collected here with the "My Plan" sections already looked at, or to be completed, by the user during his journey.



The user experience can come from a variety of sources and the system will be designed to keep that in mind. Users can login to access their historical energy data and build a robust profile online as a way to truly "manage" their energy. Users can access this page directly through marketing materials and have introductory instructional information, which guides the user into this decision-making tool directly before any other steps.

Users can access this page directly through marketing materials and have introductory instructional information, which guides the user into this decision-making tool directly before any other steps. Users can come here from an IOU IT tool, prioritizing their financial products before going back to the IOU website to continue looking for rebates and incentives now that they feel more confident about financing options.

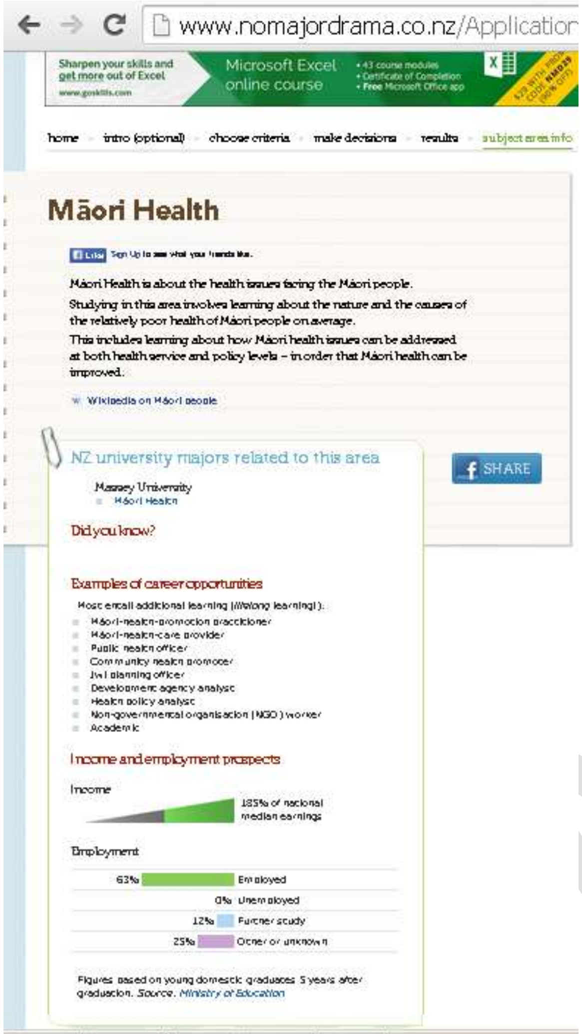


The user continues on his journey through the tool by answering a number of qualifying questions. Depending on the answer, the weights and priorities begin to illuminate. The number of criteria chosen and possible combinations is what determines the numbers of questions. Whichever the number of total questions are part of the process, a status bar along the bottom of the window shows the user where they are in the process. As the questions continue, the tool will have the user answer questions based on priority to the user, in this case “This major”, in Energy Upgrade California’s case “This quality” or the user can be given a quality and asked if it is important to them like “Does having a security guard on premises at all retail locations matter to you?” and the choices are “Yes, No or Impartial.”

“Your Results” are displayed in a ranked order based on the answers the user gave. They are shown in order from most attractive to least attractive based on the algorithms preprogrammed into the system. After randomly choosing one box over the other in this example, Maori Health came out as being most preferable for my choices. The user can choose to click on the category, Maori Health, the bar graphic on the right side of the result screen, or view the decision weights.

All of the information programmed into the majors, or in this case, participating financial institutions, is preprogrammed in and can include data on a variety of factors as well as which “intangible qualities” apply to that FI.

When the user chooses to look at their decision weights, the report shows the user overall which characteristic had more value to that user over the others. What might be important to one person will not necessarily coincide with his/her spouse or even the trusted messenger. However, this level of customer segmentation information provided to lenders receiving interest from a customer is priceless. Additionally, the data received by participants from residential and non-residential will help craft programs for many years to come as a result of this level of market analysis. Feedback from participants is always good, unless the person is asking questions untruthfully because they are part of a study. This IT solution would be able to provide solutions for the customer, marketing data about that customer for the Strategic Partners, and behavior segmentation information on a micro level for the CPUC.



Leveraging Santa Barbara County’s EmPower program, a simple calculator was developed using an MS Excel platform to provide information to customers on various financial aspects of their project. It includes monthly payment calculators based on the annual interest rate and how the estimated energy savings bill impact will effect that monthly payment. Additional functionality will be added to the Results report that provides a financial analysis report for the customer.This information would apply the various energy-related financial analysis found in the calculator on the next page. All of the calculations would be automatically calculated based on information that was collected by the customer throughout the quick questions period. The financial analysis tool, combined with the required Utility Bill Impact Analysis, will allow the customers and contractors enough of an idea of the estimated impact these upgrades will have on the property.

Figure: Santa Barbara County EmPower Financial Calculator

1. CURRENT HOME PROFILE

Size of Home (sq ft)	1,600
Average Monthly Utility Bills (electric and gas)	$150
Cost/square foot	0.09
Issues Identified	
Cold/drafty	Y
Hot/stuffy	N
Dusty/allergies/indoor air quality	N
Broken system	N
Old/inefficient system	Y
Noise	N
Aesthetics	N
Property value	Y
Environmental impact	N

2. PROJECT ESTIMATE

Project Cost	$16,000
Projected Energy Reduction	30%
Estimated Energy Upgrade (and CSI) Rebate	$3,000
Out of Pocket or Deposit	$0
Remaining Project Cost to be Financed (less re	$13,000

3. LOAN DETAIL

Interest Rate (depends on creditworthiness)	5.90%
Loan Term (below $5,000 is 60 months, above i	180
Monthly Payment (Estimated)	$109

4. NET PROJECT IMPACT

Average Monthly Energy Bill Savings	$45
Net Monthly Cost (less rebates)	$64
Additional Incentives (i.e. tax credits)	$500
Deferred Maintenance over 5 or 15 years	$2,000
Adjusted Net Monthly Cost (less expected deferr	$50.11
Issues Resolved	
Cold/drafty	Y
Hot/stuffy	Y
Dusty/allergies/indoor air quality	Y
Broken system	Y
Old/inefficient system	Y
Noise	Y
Aesthetics	Y
Property value	Y
Environmental impact	Y

5. DAILY EQUIVALENTS

On a daily basis, your net project cost equals:		$1.67	Which equals....
		0.6	Lattes
	or	0.5	Gallons of Gas
	or	0.2	Movie Tickets

6. LONG TERM ENERGYS SAVINGS (15 years)

Over 15 years, you will save this amount in utilit	$8,100

**Assuming utility prices stay the same (very conservative)*

Once a user has completed their decision-making effort, they can email the report as part of a request for loan information from a particular lender based on their preferences, it can be sent to the contractor, or even posted on the user's Facebook page. The Administration portal allows for aggregated information to be organized and reported on in a variety of filters, so that both the marketing team and evaluators can quantify various messaging and campaigns and their result on participation in the FCS or contacting the lender.

Phase II would be launched prior to the non-residential program launch in Q3 2015. Ideally, the single family residential version of the software will be programmed and skinned so that it fits seamlessly onto the Energy Upgrade California website and integrates with the Energy Management tool as close to the beginning of Q2 2015 as possible with the other sectors being developed throughout Q2 2015.

Phase III: Develop a Plan for Increased Functionality

In Working Group meetings discussing the original design for the FCS tool, feedback ranged from the idea that contractors would never use this," to "financial institutions will never allow this," to "it's an aggressive scope for a two year pilot." Therefore, only Phases I and II will be built within the pilot period, unless based on funding availability and evaluation of previous phases, it is determined that Phase III needs to be expedited and included within the pilot period.

Functionality Expansion Concept

Phases I and II will bring information to customers and help them prioritize the qualities of financial institutions that are enticing for them. However, market research has shown that without the ability to obtain pre-approval of the loan by the contractors at the kitchen table, a percent of participants will not go through with the project. The concept for Phase III is to define a strategy, including costs, for building out a fully functioning system leveraging the existing phases by December 15, 2016.

A fully functioning system will include the following characteristics:

- Interfaces (API) with public information data sources in order to auto-populate information about title, lien holders, square footage, etc. about any property by entering in the address.
- Interfaces with Credit Karma, allowing users to be able to obtain their credit scores for free, and lock it protected into the data field on the form
- Collect all information financial information lenders require in order to complete a standard loan application
- Interfaces (API) with the participating FI online application forms and auto-populate the loan document, along with electronic signature, for the loan docs while the contractor is at the kitchen table, in order to submit the applications directly and obtain pre-approval where applicable.

- Calculate debt to income ratio, loan to value estimates, and other financial calculations based on information provided and assumptions.
- Interfaces (API) with the IOU online incentive application forms so that contractors can build their rebate or incentive applications online and have the information used for their bank submittal and credit enhancement qualification.
- Provide an enhanced financial analysis report to the end users taking into account NOI for commercial properties, Net present value, and other calculations used by non-residential customers when comparing financing options
- Include an online chat service during office hours for hands on assistance with the tool and financial products offered
- Adapt the entire functionality into an app that can be useful to contractors out in the field, either as an application or mobile version of the website.

Ideally, this tool can be used eventually by contractors, strategic partners, and customers to consolidate the various steps required by lenders, IOUs, and CAEATFA and the CPUC into one platform. Phase III would include market research, discussions with contractors and FIs, quotes from vendors, and behavior-based development tool design mechanisms completed. CSE will report on development and use of the tool functionality created in Phases I and II and based on this will develop further information regarding a Phase III tool as more is known about market response to the tools and the loans and leases created by these pilots.

Conclusion

The Financing Concierge System doesn't already exist in any of the market research performed to date as part of this project. Other projects around the country that have had human advisors or concierge representatives assisting them project manage their own energy journeys has increased participation and led to greater success than other programs. However, human assistance aimed at solving the problems and overcoming the barriers listed within this document would never come close to being cost-effective as a statewide strategy.

Utilizing technology to create a digital system which acts like a concierge in that it provides guidance, information, advice, and confidence, will assist the stakeholders overcome the barriers and guide them towards the action needed to gain financial institution confidence in the energy efficiency marketplace. Leveraging other program efforts will spread the development cost more evenly across a variety of efforts since this tool will be useful for a number of objectives greater than financing marketing alone.

Finally, implementing the development approach in a phased plan will allow the ratepayers to feel comfortable with various levels of functionality before the next phase is too far along.

Collaboration with Strategic Partners

IOUs (PG&E, SoCalGas, SCE, and SDG&E)

The IOUs provided suggestions in their original PIPs on how they could best follow the statewide strategy of leveraging the existing programs to add messaging about financing. The following table lists several low-cost strategies and tactics suggested by the IOUs for implementation. Additional ME&O activities, which are aimed at benefitting the statewide financing ME&O efforts, have been added in order to best leverage the existing IOU infrastructure as required by the CPUC. The statewide financing ME&O team will continue working group meetings in order to best collaborate on successful integration of financing into the IOU program placemat. Allocation of financing budget has been determined per the CPUC's directive in Resolution E-4663.[38] All strategies should be implemented and tracked, so that progress can be evaluated and successful activities expanded.

Strategy	Clarification	Budget Allocation
STRATEGY 1: Awareness messaging leading to program participation	Using financing to get more projects done with those customers who may have walked away otherwise directly benefits other IOU program. Therefore, it is up to the IOUs to perform the following activities: 1. Analyze ME&O approaches to every IOU energy efficiency and demand response program and decide internally how to best promote the financing message in those programs 2. Determine the best approach to adding information about the CPUC financing pilots to their websites. 3. Utilization of the approved messaging and integrate into existing collateral material, both electronic and print, as determined by the IOUs to be effective in its promotion of the context 4. Provide opportunities for customers to link to the statewide Energy Upgrade California website (besides through the Energy Advisor programs) in order to become more educated on the CPUC financing pilots in addition to other financial products in the marketplace. 5. Identify opportunities for the Financing ME&O campaign to become integrated into	$0

[38] Page 31: "…we are hesitant to authorize marketing funds to the IOUs unless and until an evidenced based marketing plan indicates exactly how the funds will be used and that the IOUs are the best entities to perform those roles. We agree with CCSE (CSE) that development of an ME&O plan should consider the full range of market actors, including contractors, real estate professional, lenders, retails and community based organizations to evaluate which can best support the pilots."

	existing outreach channels. This includes, but is not limited to: a. Events with in-person presence b. Events with ethnic outreach vendor or staff targeting ethnic markets c. Bill inserts d. Electronic Communications with customers e. Newsletters f. Any related program-specific advertising (print, radio, TV) 6. Distribution and staff member use of talking points provided by the statewide implementation team	
STRATEGY 2: Monthly marketing metrics reports resulting from awareness messaging activities listed above	Marketing metrics tracking ME&O inclusion. All entities using financing ME&O funds must provide CSE with KPI data for monthly reports to the CPUC. CSE will create a protocol for all parties doing outreach and marketing within 60 days of approval, so that those metrics can be accounted for on a regular basis.	$0
STRATEGY 3: Inclusion of the Ratepayer funded financing products into the Financing Concierge System database	This includes the IOU financing as well as ARRA continuation financing programs. As the FCS database is developed for the financing information, the IOUs will act as the single point of contact in obtaining that information within 21 working days of the request by CSE. CSE will create a protocol as part of the FCS development process.	$0
STRATEGY 4: Collaboration with both the California Department of Community Services and Development to ensure low income customers that are eligible for the Weatherization Assistance Program (WAP) are made aware of the program prior to exploring the financing option. WAP provides additional home improvements at no cost	IOUs will work with these providers to promote both the CPUC financing pilots as well as the financing tab on the Energy Upgrade California website to the low and moderate income residential market. The IOUs will work with the WAP providers to identify avenues where financing could assist those involved get additional renovation work completed at the same time the WAP contractors are installing the weatherization measures. The combined improvements could cause greater financial benefit due to reduction in utility bills and greater energy savings.	$0
STRATEGY 5: Coordination with the Workforce Education and Training (WE&T) programs the IOUs currently work with to identify trusted messengers and additional promotional opportunities for “selling” financing to the target audiences	IOUs will develop a strategy for the promotion of both the CPUC financing pilots as well as the financing tab on the Energy Upgrade California website through the WE&T efforts.	$0
STRATEGY 6: Apply IOU customer segmentation to understand the motivations, demographics and psychographics in order to	Any targeted marketing campaign needs the actual lists of names for outreach. The marketing plan identifies the types of customers that are ideal for messaging about financing resonating during their	$0

identify targeted customer behavior segmentation profiles and contact information that meet the target audience characteristics in each of the pilot sectors: Single Family Residential, low and moderate income, and master-metered low income multifamily, small business, and medium to large non-residential building	decision process. The IOU's responsibility would be to analyze their customer data and develop distribution lists for the marketing campaign Since this information is subject to the privacy guidelines, the only activity described here is the preparation of the information and data. CSE is not requesting that information to be shared in any way that would violate CPUC regulations	
STRATEGY 7: Identify current and past customer information and look for behaviors primed for inclusion in financing messaging including, but not limited to: • **CARE high usage customers** • **Past ESA Program participants and identify any measures they could benefit from but were not available through the ESA program** • **Past EUC (EUC-home upgrade)program decliners** • **High usage customers (non-CARE)** • **High bill or bill payment assistance call center contacts** • **Participants in the MIDI pilot program** • **OBF application participants not approved or on wait list**	The list to the left is slightly different to the activities above in that the IOUs will actually develop a plan for reaching out to these individuals, either through their account representatives, Energy Advisors, or other method, and discuss the opportunities now available to them. This information will be tracked following an evaluation metric developed in collaboration with ODC, CSE, and the IOUs. As these audiences are contacted, documenting their responses and reasons for either participating or not participating will be very useful to the CPUC and EM&V team as they evaluate the effectiveness of the program. This evaluation metric should be developed within 90 days of plan approval, so that the IOUs can develop a plan and begin implementation. These customers are more primed for enticement of energy programs which may not have occurred due to financial situation at that time. However, circling back with these customers promoting financing as a solution by the IOUs could benefit the customers and the IOUs tremendously. The objective of this exercise would be to look for those current and past customers that also fit in the behavior segmentation	$0
STRATEGY 8: Using the contact lists identified in strategies 6 (and any customers that would be deemed appropriate from strategy 7); implement the multi-level outreach campaign, designed by CSE through its Statewide ME&O vendors, utilizing the IOU existing infrastructure. **This campaign's intent would be aiming to build awareness of the**	CSE, through the Statewide ME&O contract, will work with its vendors to design a marketing campaign and tag-line strategy (tested and presented for feedback by stakeholders). Some of the ideas that will be considered for target customer outreach include, but are not limited to: • Direct mail of financing solution messaging • Electronic communication series of financing solution messaging • Digital Marketing Campaign (texting) • Video Marketing and training (Concept described in another section of this plan.	$0 *Additional funding for third-party expenses, such as direct mail, may be made available and approved by the CPUC. At this time, all funding for third-party expenses is maintained in the reserve budget for*

financing opportunities, the IOU program offerings, and the statewide website IT tools developed.	Content included here) • Tag-line call out • Website buttons and banners • Google Ads • Door-hanger canvassing • Posters • Social Media The IOUs will be provided with graphic elements and marketing collateral that they will be able to cobrand and distribute, following the marketing campaign direction. A detailed strategy with direction should come in a guide or list from CSE, providing tools and guidance to help the IOUs successfully follow the same plan as other implementers without duplicating strategies and activities	*future programming*
STRATEGY 9: Key Customer Contact Personnel Training on financing pilots, talking points, strategies for integration into programs, trusted messengers, etc.	CSE will coordinate with the IOUs on identifying the best strategy and method for offering training for their customer service representatives. These stakeholders would include Program Managers, implementation staff, Account Executives, event staff, ethnic outreach consultants, third party program implementers, LGP implementers, call center staff, etc. Strategy 8 takes care of the design of customer facing marketing materials whether it is collateral, web, social media, etc. The human interaction allows for the greatest opportunity to promote the financing pilot programs and opportunities available to those segments. In the residential and non-residential sectors, providing education, training, talking points, marketing tips, and behavior profiles of target customers, the IOUs can impact that participation in the financing program considerably through its own representatives. Therefore, identification and recruitment of the key IOU staff and consultant team members working with customers on the IOU programs, would be trained on how to profile their customers, what are the trigger behaviors, and what messaging to provide them with to help them find the identified solutions.	$0
STRATEGY 10: Active local government participant incentive for promotion of the customer-facing marketing campaign designed and distributed through CSE's statewide ME&O team. **Local government programs,**	IOUs will assist the local governments, either directly or through the LGP third-party program administrators, to integrate the marketing messaging provided to them. Examples include, but are not limited to: • Posters to be mounted at government buildings, libraries, community centers, etc. • Flyers/brochures displayed	$0 *Additional funding for LGP expenses may be made available and approved by the CPUC. At this time,*

through the IOUs, have a variety of opportunities to help promote the financing programs offered. Local governments are secondary partners due to their community outreach, economic development, and community development. **Local governments have events that could be leveraged, cable stations that could help spread marketing materials, and special relationships with the business community that can be engaged both as potential projects but also to promote the messaging to others.** **Local governments, in general, have limited resources, which is why the LGPs normally have program implementation groups assisting them with the identification of energy project improvements they can perform on their own buildings, methods for alignment with the statewide Strategic Plan, and promotional opportunities for coordinating with Home Upgrade or other high profile programs.** **The financing program is going to utilize the LGP infrastructure for further implementing the ME&O plan strategies. The LGP program managers will assist by authorizing the governments and implementation teams to utilize their resources to help promote financing when targeted audiences are identified.**	• Web buttons and banners added to government website (if possible) • Post cards handed out at community events • Draft article to be distributed to community residents through LG's most effective choice • Letter of participation in campaign distributed to council/elected officials • Posting or distribution of marketing videos onto website or local cable station (if possible) • Coordination with the Statewide ME&O Community Based Organizations (CBO) activities	*all funding for third-party expenses are maintained in the reserve budget for future programming*
STRATEGY 11: Leverage existing relationships with all sectors of the contractor community and trade associations to support the goals and objectives of the financing program and persuade them to engage in the program pilots and training system.	IOUs will be responsible for leading contractors to the training and finance program involvement as well as promoting the benefits for the contractors and keeping the contractor community motivated and interested.	$0
STRATEGY 12: Identify and	IOUs will leverage their strategic partner	$0

facilitate partnerships with solar providers and regional water authority partners to leverage financing messaging and maximize benefits of EE improvements	relationships to recruit those entities to assist with promoting the customer-facing marketing campaign for financing awareness. This could include water districts they are beginning to work with as part of the water/energy nexus efforts beginning across the state, in addition to their coordination with the CEC on Preferred Resources, AB758, etc. Activities may include: • inviting entities to sign up for online training, coordination on outreach events • recruitment into contractor training • providing support advice to those entities throughout the duration of the program • and others	
STRATEGY 13: Leveraging and expanding the Energy Advisor Programs for the different IOUs and market sectors. **Per this integrating ME&O plan, CAEATFA's contractor manager will provide an ongoing support system for the Participating Contractor community throughout the program lifecycle, which was recommended in more than one program's best practices identified through the market research.** **However, potential borrowers, mainly in residential and some in small business, may require hands-on assistance of which the Financing Concierge System cannot provide. Additionally, it is difficult to provide a concierge for just financing without awareness of the energy project and energy programs.** **Each IOU has a combination of IT tool and/or human interaction element to their Energy Advisor program. Although this is not a statewide solution, each IOU will need to make the effort to at least allow their programs to fulfill the activities provided.**	The online Energy Advisor or "my plan" tools will need to be able to do the following minimum activities: • Provide information about the CPUC financing pilots at opportune moments of the customer "journey" • Analyze the customer experience and identify places which can guide the customer to the statewide website whenever it is determined to be beneficial. • Include financing messaging in any printout report or leave behind presented to the customer For any of the programs that offer in–person advisory assistance to residential, MF, or commercial customers, the program needs to be expanded to include the following: • Contact information depending on IOU for customers to call which will be posted on the Financing tab of the statewide website. • Attend training about the financing pilots, differentiating factors, and selling financing to help energy projects happen • Learn the talking points and messaging necessary to provide guidance and bring feedback to the IOUs about customer behavior that can help educate the marketing strategies	*Cost $800,000 total for labor and expenses for this effort, cost-shared 50% with the IOU because this is providing great benefit to energy incentive marketing as well. What this means is that a plan needs to be presented to show 2x the amount provided to reflect the cost-share component* $400,000 to be allocated as follows: PG&E (41.2%) = $164,800 SCE (29.1%) = $116,400 SDGE (16.05%) = $64,200 SCG (13.65%) = $54,600 *Additional funding for third-party expenses may be made available and approved by the*

		CPUC. At this time, all funding for third-party expenses are maintained in the reserve budget for future programming
Additional strategies may be identified based on program progress, feedback, and analysis of data	Activity will be decided upon and if funding is required, will be taken from this reserve line item budget.	$0

Total per IOU implementation of Strategies 1-13

IOU	Total amount
PG&E	$164,800
SCE	$116,400
SDG&E	$64,200
SCG	$54,600
Total IOUs: $400,000	

Note: Several aspects of the pilots are yet to be determined and financial institution participation will have a significant effect on pilot product design and necessary ME&O. Strategic Partners will be able to apply for additional funding through a process still under development and subject to approval by CPUC staff. At this time, the funding allocation will remain in the reserve budget until after program launch and preliminary feedback on progress can be obtained.

EFLIC Pilot Marketing Plan

The one exception, which doesn't fit the statewide ME&O mold, is the EFLIC pilot program, which is a sub-program of the Single Family Loan Program. After reviewing PG&E's implementation strategy for this pilot program, it is necessary to separate the various efforts, so that it becomes clear how to differentiate between the statewide program's roles and PG&E's role.

Since EFLIC is the only pilot program offered in the PG&E territory only, the sub-program should be looked at as a regional pilot within the SFLP statewide market. As with most pilots, the idea is to test theory of idea as a way of determining whether or not the uptake warrants that idea becoming a scaled up program design. PG&E has already contracted with a vendor to assist with the predevelopment activities and planning surrounding the EFLIC pilot. Those three predevelopment activities have three components: Participating Financial Institution/s, temporary Master Servicer, and Program Implementer. In addition to those three, PG&E also is providing marketing and outreach support from its own staff.

In the pre-development phase of the program, the FI/s can determine if they wish to focus on specific regions within PG&E territory or offer it territory-wide. However, once the CHEEF begins to manage EFLIC through the Master Servicer, any lender can sign-up to participate in the pilot and offer the line charge options to any single family borrower in PG&E service territory.

Additionally, once the Master Servicer for the program transfers over to the CHEEF, the Financial Institution/s and the Program Implementation will need to keep going, supplemented by the statewide financing ME&O funds. The current PG&E consultant has been working with the EFLIC concept, along with an interested lender, for a period of time focusing on the low-to-moderate income (LMI) single-family residents. This adds an additional component to the evaluation and measurement of this program. However, due to the added perception of security resulting from the line item charge, the EFLIC model may be a good opportunity to target that hard to reach market, and credit enhancement requirement, with additional incentives. With an objective of one-third of the single-family credit enhancements going to LMI customers, it would make sense to try and “sweeten the deal” in every way possible.

The PG&E service territory will be separated into 2 markets for evaluation purposes: test market and control market. The control market is the entire PG&E territory offering both the on-bill EFLIC program and the off-bill SFLP. Opinion Dynamics can analyze the loan volume for the areas of PG&E that weren’t called out for the low-to-moderate income test pilot to then build assumptions about the EFLIC program versus the SFLP. In the control market, the following components are tested:

a. Is the borrower more aware of the relationship between the upgrade and the energy behavior since the debt and the energy use are next to each other on the same page?
b. Is the lender more comfortable loaning at more attractive rates due to the security the illusion of OBR provides and the implied perception of utility shut off due to non-payment?
c. How does combining “a”&”b” effect participation in low-to-moderate income in this general population?

For the test market program design, the implementation team would select a few larger, diverse, geographic areas within the PG&E territory, and partner with an active local government, who would then engage with contractors and community based organizations (leveraging the statewide ME&O strategy and organizations) to reach out to those low-to-middle income homeowners with two additional variables for Opinion Dynamics to analyze:

a. How did the EFLIC program perform in the test market versus the general market?
b. How did the focus and additional marketing by the local government and CBOs effect uptake in the program?
c. What would the effect be on the low-to-middle income participant if they received an additional incentive during a two-year period, following the upgrade, based on performance and energy use behavior?

“c” is an additional variable worth testing because of its implications for the low-to-middle income residents moving forward. Success with this program design could result in an attractive program that can be rolled out quickly.

The MESA program (Matched Energy Savings Accounts) is a concept analysis presented by Saving Neighborhood Energy in the Spring, 2014. The Concept Report can be found in **Appendix F** of this report.[39] The program basically matches dollar for dollar, up to a cap per year, based on verified energy savings through a MESA savings account for two years following construction. The program has been recently funded to build its infrastructure and IT platform and a variety of stakeholders are looking at funding the seed money for the incentives. CSE is not asking for the seed money as a part of this pilot. However, the implementation strategy would be to set-aside a sum of money for additional marketing and outreach costs to bring awareness of this special component to those hard to reach markets in the designated territories. If the seed money for the dollar match doesn't come through, then the funding will be returned to CSE to reprogram in a more successful strategy.

The table below reflects the strategies required for the EFLIC pilot program and the responsible funding party for funding the implementation. The statewide ME&O financing implementation team will coordinate with PG&E and its implementers to best leverage the SFLP promotional dollars, the EFLIC specific additional promotional dollars, and the additional low-to-middle income marketing dollars.

Statewide Financing ME&O	PG&E existing marketing	PG&E EFLIC DI funds	Additional funding by Financing ME&O
Marketing and promotion of the single family loan program to target customers through the partners and awareness marketing campaigns	Call center support of the EFLIC program. Distribution of talking points and training of staff as needed. Leverage strategic partnerships with CBO's and local government parties in those communities	Cultivate and grow relationships with local contractors and participating lender(s) to educate them on the EFLIC program so that they can in turn educate and sell customers on the program	$0
Training of contractors on financing in general, using financing to make sales, and how to use the online tools and marketing campaigns	Website changes to PG&E website to reflect EFLIC offering in focused regions of the PG&E territory	Recruitment of contractors for participation in EFLIC program	$100,000 *Additional co-op marketing dollars available for the participating FIs, local governments, and contractors focusing on the low-to-middle income EFLIC pilot territory (remains in CSE's budget)*
Integration of the EFLIC specific content into the	Utilizing the data already segmented as part of the	Development of contractor training	$0

39 www.energyintoassets.org

online training tool for contractors specifically working on EFLIC	IOU additional funding, segment the data additionally in the participating communities in order to identify homeowners meeting the qualifying income brackets for additional targeting. This would include: • Segmentation by income • Segmentation by age and square footage of home • Segmentation by demographic area • Segmentation by energy use profile	materials and content about participating in the EFLIC program	
Coordination with participating lenders on entering the eligibility terms into the Financing Concierge System	Packaging of deemed energy savings projects or emergency HVAC system replacement with EFLIC financing messaging	Development and recruitment of lenders' training materials and content about participating in the EFLIC program	$0
Inclusion of the EFLIC specific financing in the FCS tool so that contractors will be able to use the Financial Analysis Report to demonstrate the bill impact to the potential borrowers	Facilitate the ability to do a bill insert, provided to PG&E, to all customers in the EFLIC territory	Development of Customer agreements and forms needed for participation in the EFLIC program	$0
Design a grass roots marketing campaign aimed at reaching out to the target audiences as identified by PG&E through their data identification exercise	Coordinate marketing campaign with the ESA and low income direct install programs in order to reach the hard to reach markets. Included would be: contractor engagement and recruitment, assistance with distribution of marketing materials to program implementation team, and education of Program Managers on intent, goals and objectives	Coordination with CHEEF on migration to their management of the program	$300,0000 *PG&E additional costs for customer facing outreach (EFLIC specific collateral*, social marketing, events), contractor support, printing costs, website updates, etc.* **In coordination with the statewide ME&O team*
Create training tools and talking points for PG&E's identified strategic partners already working with them in an outreach capacity such as real estate agents	Collect and report on marketing metrics over and above what is listing in the IOU activities section of this plan	Coordination with the CHEEF Master Servicer on data requirements, IT improvements, and data transfer	*Statewide ME&O's CBOs working in the highlighted territory will receive additional funding out of another table*
Coordination with Saving	Links to MESA promotion on	Training of contractors on	$150,000

Neighborhood Energy team on MESA program marketing and messaging. Coordination and collaboration on customer-facing campaign	website, education of call center staff, other marketing integration with pilot programs	MESA as an additional tool to help close the energy project with EFLIC financing for the targeted low-to-middle income homeowners in the selected geographic regions	*Reserve fund in CSE budget programmed for additional marketing costs associated with MESA kicker only if seed money for MESA occurs during the program pilot period*

Summary Table for EFLIC

Entity	Amount
PG&E	$450,000
CSE	$100,000 contingency

Other Strategic Partners

The main goal of the Strategic Partner strategy is to look at the marketing efforts that have been authorized by the CPUC from the 2013-14 Energy Efficiency Portfolio in addition to the Decision on the 2015 funding as part of Rulemaking 13-11-05.[40] CSE has called out the coordination and integration with the IOUs, with appropriate and recommended funding, earlier in this section. However, there are additional Ratepayer Funded Program Implementers (RFPIs) that have infrastructures and systems in place, which can be utilized and leveraged to assist with program success.

Energy Upgrade California Statewide ME&O

Since the Statewide Financing ME&O strategy is merely a subset of the Energy Upgrade California brand, there are considerable opportunities to look at the messaging and look for ways to educate Customers on the financing component. Portions of this effort were discussed earlier in the marketing campaign segment, but there are a number of resources pertaining to the statewide program, which can be leveraged and utilized: Research, EM&V, Retail Strategy, Community-Based Organization Strategy, and IT platforms. This is in addition to working with the entire marketing team and vendors on the seamless integration of financing, where appropriate, into the Communication Plans and the statewide energy management campaign.

Target Customers of the Financing ME&O Plan, in general, have already made some kind of decision to move forward with managing their energy, so the Energy Upgrade California marketing efforts will "plant the seed" in those situations where financing is appropriate and guide users to the Financing Tab and decision tools where those customers are ready to go from **interest to action**.

[40] Decision Establishing Energy Efficiency Savings Goals And Approving 2015 Energy Efficiency Programs And Budgets(Concludes Phase I Of R.13-11-005) - Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues

Research

Part of the Statewide ME&O plan included market research surrounding the Small Business Customers. A solicitation is currently out for proposal as of the draft Financing ME&O Plan, and the selected vendor is tasked with defining the target audience for the small business market, the behavior segmentation that can capture that target audience in the proper mindset, and methods of marketing that have resonated well for this sector in the past.

The Financing Implementation team worked with the statewide team on the scope of work and research topics, resulting in financing as a prominent part of the vendor's research. This leveraged research will help the combined teams work together to adapt the marketing campaign for the small business sector, keeping in mind the importance and focus of the goals and objectives.

Additional research includes the testing of the messaging surrounding the tagline and overall financing marketing campaign. The vendor assisting with the development and design of the marketing campaign will leverage the Statewide ME&O resources to make sure the marketing call to action resonates and is properly communicated throughout the collateral material, online presence, and video marketing campaign.

EM&V

Opinion Dynamics (ODC), as stated earlier in the Measurement section of this plan, is the assigned EM&V team for the financing pilots. ODC currently has developed a scope for evaluating the Statewide ME&O implementation in order to provide recommendations to the CPUC as well as gauge the success of the various strategies outlined in their plan. Although Financing ME&O wasn't originally included in that scope when it was first established, the CPUC, IOUs, and CSE realize the importance of looking at how the ME&O goals and objectives were met and its result on the overall financing pilots' performance. CSE, through the statewide ME&O contract, will work with the CPUC and ODC to assist with that effort.

Retail Strategy

The retail outreach strategy is where financing messaging can make an impact to the results of the effort, and the financing program call to action will be added to this campaign, still in its infancy, in the following ways:

- Talking points aimed to educate the customer about financing options and driving them to the web portal will be integrated into the vendor and sales associate training programs.
- The program will look for situations to partner with Participating Financial Institutions. This could be setting up a joint event promoting both the Statewide ME&O plus a representative from an FI at a table near the entrance to a home improvement store. The Retail vendor and interested FIs will have the opportunity

to have strategy sessions where they can work on the best approach for reaching Target Customers for any or all of the market sectors.

- Whenever possible, retail establishments will play the marketing videos for financing on television displays, on a computer at the table, or in the training sessions.
- The retail strategy vendor will discuss the integration of the in-store financing into the financing program, in coordination with CAEATFA, with the retail partnerships they have established.

These retail strategy additions are over and above what is already under contract with the vendor, so the changes will be funded by the financing program budget.

Community Based Organization Strategy

The Community based organizations (CBOs) participating in the Energy Upgrade California statewide program will be treated the same as the Strategic Partners. They will be engaged through the statewide program and delegated to assist in the following ways:

- Volunteer to attend the same training as the other Strategic Partners
- Follow the Media Distribution Guidebook for the marketing outreach materials provided to them by the financing program. This includes posting the videos to their website and/or sending out electronic communications with educational videos included in the communication.
- The financing ME&O program will provide them with additional funding for any third-party expenses such are printing any collateral information, event entry costs, cobranded display materials, and other expenses.
- As stated previously in the EFLIC pilot program design, the CBOs working with the low-to-middle income homeowners in the targeted geographic areas will be partnering with the local governments and contractors, aimed at promoting the line item charge in addition to the MESA performance incentive to those targeted homeowners.

IT Platform

The Energy Upgrade California web portal, www.energyupgradeca.org is leveraged throughout the ME&O plan for financing. The Financing Tab will be built out to reflect the marketing campaign, the Financing Tab will host the content and present the information aimed at turning **interest into action** for the customers. Additional funding has been provided for the website vendor in order to integrate additional financing marketing into other areas of the website, in addition to the work needed on the financing tab. This could include embedding the customer-facing marketing videos, adding web buttons or quick links to financing from the home pages, and various other administrative duties.

The most valuable tool to be leveraged from the Statewide ME&O team is the online Energy Management Tool, currently under development. An open solicitation is under way. The functionality and integration of the FCS will depend upon which vendor is eventually selected for the Statewide ME&O's Energy Management Tool. However, the phased approach for the FCS will leverage whatever the functionality is of the statewide ME&O's tool to the maximum possible. For the customer experience, the intent is for it to look like a single tool, where the user is moving back and forth between the project information and the financing tab and FCS tool. As the phases of the FCS align with the "platinum" version, the information built within the Energy Management Tool can be eventually verified against the contractor's scope of work and then moved towards packaging both the project and the financing in a way that allows the lender to provide an expedited pre-approval.

Non-Residential

Energy Upgrade California covers small business in addition to Multifamily and Single Family residential. The website, however, will need to be altered for the medium/large non-residential that are sent directly to the financing tab of the website and then decide to investigate the brand. Further conversations will need to occur with the statewide marketing team and the web designers to decide how to guide any non-residential target customers that veer off the financing pages to either the IOU individual incentive programs, or another source. This effort will be covered by the financing program ME&O budget.

Small Business, however, is part of Energy Upgrade California and the marketing campaign for that sector is waiting for the results from market research. Therefore, the financing program has an opportunity to be designed into the program from the beginning stages. Promotional messaging on loans versus leases and on-bill repayment will be built into the design of the marketing campaign for small business so that target customers in this sector will benefit from the knowledge at the same time that the awareness campaign for energy management is bringing "planting the seed" for doing energy projects. No additional funds will come from the financing program budget for this effort although implementation team coordination will have an associated cost for labor.

SoCalREN, BayREN, Marin County CCA, EmPower

The RENs and Marin County were authorized to implement financing programs as part of the ARRA Continuation financing under the IOU 2013-14 energy efficiency portfolios, which recently received extensions pending through 2015. The Empower program, implemented as an ARRA continuation contract with Santa Barbara County, has been managing a financing-based single-family whole-house marketing campaign since the beginning of the ARRA funded programs. The main strategy with these groups will be to include their financing products in the Financing Concierge System, and then help leverage their marketing plans to promote financing as a whole into their activities. Similar to the IOUs, the implementing team would coordinate with these entities and discuss where financing could be entered into the equation in order to make the marketing messaging more compelling. The Financing program would cover any reprint costs or third party costs that are outside of the regular program marketing.

SoCalREN

SoCalREN has a variety of efforts underway including Home Upgrade incentives, a multifamily incentive program, workforce training, single family residential financing for Home Upgrade participants, Cool Comfort financing focusing on HVAC specific loans, and now they are currently soliciting PACE financing implementers for LA County. Los Angeles County leads an Advisory Group made up of regional government entities such as Western Riverside, Coachella Valley, San Bernardino, San Gabriel Valley, South Bay, and San Joaquin Valley groups. SoCalREN could help identify numerous strategic partners that could attend training, distribute collateral information, or participate in the RAC feedback sessions.

Additional efforts, not included in the leveraged marketing campaign inclusion, which would be coordinated with CSE, the SoCalREN program has three efforts, which could provide additional assistance to the marketing efforts of the statewide financing program: the real estate outreach and training program, the CHERP Home Upgrade community engagement program, and the Public Agency Financing Program.

Real Estate Outreach and Training

The real estate agent program, implemented by Build It Green both in Northern and Southern California, is a stakeholder already identified as an important strategic partner both in the residential and non-residential market sectors. The program in SoCalREN recruits real estate agents for training about energy efficiency and in particular, the Home Upgrade incentives available to their clients. The training results in Certified Green Real Estate Professional Certifications (CGREP), which is an approved green designation by the National Association of Realtors (NAR), the presiding trade organization for the industry. The financing ME&O program will work with Build It Green, through the REN, to discuss opportunities to add training materials about financing, the financing concierge system benefits, and talking points into their training program statewide. Arming real estate agents alone may not be necessarily fruitful work, but if the bulk of the training is already being implemented, adding in modules about financing benefits based on the educational videos already being made, enticing them with the Strategic Partner offerings, will be valuable work to leverage. The financing program will reserve funding for SoCalREN's assistance in making this program successful and helping to educate and raise awareness of the real estate community.

CHERP and SoCalREN

The CHERP program began as a pilot in the City of Claremont to try to have 1% of the residents perform a Home Upgrade equivalent project in their residence during the ARRA grant period. Due to the success of that program, the SoCalREN team has brought CHERP to other communities within the SoCalREN territory. Since financing is promoting the same messaging as the CHERP marketing materials, the statewide financing team will work with SoCalREN to identify what are the best ways to integrate the promotion of financing into that program as a solution. The customer facing marketing videos can be promoted online, through electronic communication, at events, etc. Additionally, local financial institutions working in that area could assist with additional efforts of marketing that are specially branded to reflect the CHERP effort.

Coordination can come in the form of contractor participation, local government engagement, and CBOs can be leveraged from the Statewide ME&O program to help promote successful campaigns within the areas of focus for CHERP.

The financing program will provide funding assistance for the administration and integration of financing messaging into the CHERP program in addition to implementation of strategies for using the CHERP cities as a control group for the EFLIC pilot if feasible.

Public Agency Financing Program

LA County has funding from the CPUC to promote financing to a variety of market sectors. Including those existing programs in the FCS tool will be coordinated with the SoCalREN team. The Financing Sub-Program of SoCalREN has financing promotion for public agencies. In the recent 2015 proposed budget and implementation strategy, SoCalREN asked for additional funding to promote their Energy Lease financing product to all public agencies statewide. Local governments are a focus of both the IOU LGPs, the Long Term Strategic Plan, AB758, and the SoCalREC program, piloting a "turnkey project delivery" program aimed at expediting energy project implementation for local governments. The statewide Financing ME&O would like to provide funding to leverage that REN program, to do the following activities:

- Add the energy lease financing product to the FCS tool on the Energy Upgrade California web portal
- Promote the combined financial product offerings to local governments statewide, including the REN territory. This would allow a "solution-based" marketing approach, leveraging the REN funding and implementation strategy, rather than promoting just one financial product.

BayREN

The BayREN, similar to SoCalREN, has most of its single family residential focus on the Home Upgrade Program, providing many opportunities to leverage financing in its marketing messaging. BayREN's Home Upgrade Advisor Program will be utilized and the advisors will be trained in the same manner as the statewide retail strategy. Those trusted messengers will need to be able to perform the following activities:

- Provide an elevator speech about the financing opportunities that are available in the state
- Explain the concept of "using one's utility bill as a savings account"
- Provide a convincing argument to Customers to use the Financing Concierge Service located on the Energy Upgrade California website in order to find the most attractive financing opportunity for their custom situation
- Be able to differentiate between the CPUC's financing pilots, residential PACE, and the BayREN's financing products.

According to BayREN's PIP "…the BayREN Home Upgrade Advisor program is a full-service customer support experience designed to provide education and options to homeowners as well as trusted third-party advocacy and guidance throughout the upgrade process should homeowners have concerns or issues with their contractor. The HUA service, by filling a key gap in PG&E's program offerings, has the potential to dramatically increase uptake of projects by interested homeowners."[41]

BayREN's Multifamily program includes both incentives and financing. The program offers technical services to look for bundling measures for both master-metered multifamily and others. The multifamily program implementers will be trained on the target audiences for the financing program and the benefits of using the Financing Concierge System. Additionally, the financing product would be entered into the FCS, so that those stakeholders looking for multifamily financing would be able to view whichever loan product makes sense for their project type. Contractors working on the Multifamily program would be engaged to take the financing training offered and learn about how to discuss financing options when presenting the analysis to the clients.

Marin Clean Energy

Marin County CCA has a number of CPUC authorized programs for energy efficiency including Green Home Loans, which use a line item charge to pay back the debt. The Financing team will work with MCE to make sure their loan product is included as part of the FCS. In addition, MCE will be asked to help promote the use of the FCS to its constituents since the residential loan products offered through the pilots may fill in the gaps where their loan product is missing coverage. Additionally, residents of Marin County should be able to see the Financial Analysis Report and other benefits the statewide program offers. MCE uses an interactive tool called "My Energy" which can

[41] http://www.abag.ca.gov/bayren/Appendix%20A%20%20BayREN%20Program%20Implementation%20Plan%20(PIP).pdf

possibly be leveraged by funding the construction of an API directly to the FCS. That way, MCE users can interact with the FCS without leaving the MCE website.

MCE also has a multifamily financing program in conjunction with incentives and technical assistance. Inclusion of this financing program in the FCS tool will allow more multifamily building owners the option of finding financing. The overall goal is to find relative opportunities and then compare them on an equal playing field so that the Customer can make informed decisions about which financial product to use.

EmPower

Santa Barbara County team members would be engaged to provide specific lessons learned and best practices for the single-family residential product in particular. Collaboration and coordination with the EmPower team will assist the statewide team provide coverage in the central areas of California. Additionally, outreach and marketing support for participating contractors and financial institutions focused on the central localized areas, including San Joaquin Valley, can be managed in conjunction with the central coast program. The statewide financing ME&O team will work with local governments participating in LGPs, REN activities, and ARRA continuation activities to strategize an approach for communicating with additional strategic partners and target customers in order to increase participation within this area of the state.

Conclusion

The implementation plan for the statewide financing ME&O program is based on strategies derived from overcoming barriers to participation for different stakeholders in the various market sectors. Those barriers lead to solutions, which results in planned activities based on those solutions. Every strategy is a result of the objective of overcoming the variety of barriers identified while keeping focus on the goals of the ME&O which is Volume and Additionality. Activities need to be crafted to be action-oriented and continue to push and guide the customer towards doing a project and using financing as a vehicle for getting the project moving forward.

Broad strategies aimed at capturing the general public's awareness and education such as the online website presence, the contractor and financial institution cooperative marketing, video marketing, and cobranding allow strategic partners to do the majority of the local outreach since the message coming from those trusted messengers are much more likely to be heard than a general marketing strategy. At the end of the day, it is the direction given from those strategic partners which is going to sway the customers to move forward with implementation using financing as a solution to their problems. Arming those trusted messengers with tools for communication following a consistent process will result in customers from all sectors receiving unified messaging that turns the concept of utility bills upside down into a positive.

Summary Table for Strategic Partner Strategy

Strategic Partner	Amount	Contract

Statewide ME&O	Research = $0 EM&V = $0 Retail = $100,000 CBO = $100,000 IT = $0 (included in marketing campaign table)	$200,000
SoCalREN	Real Estate = $50,000 CHERP = $50,000 Public Agency Financing = $50,000	$150,000
BayREN	$100,000	$100,000
Marin Clean Energy	$30,000	$30,000
EmPower	$80,000	$80,000
TOTAL = $560,000		

Budget Summary

In CPUC Decision D.13-09-044, the financing pilot programs have been allocated $8,000,000 budget for the implementation of the ME&O Plan. In addition, the CPUC has approved up to $2,000,000 for CAEATFA to implement non-duplicative education, outreach and training efforts for financial institutions and contractors. Please note that while this plan includes a broad description of CAEATFA's role and responsibilities, CAEATFA's budget for implementing this effort is not included below.

In Resolution E-4663, the IOUs were given 5% or $400,000 out of CSE's budget for their assistance in the drafting of this plan.

CSE was given $750,000 for Administration work between 7/2014 and 12/2015, at which time there may be adjustments after CPUC review.[42]

Therefore, the total remaining budget for implementation activities is ***$6,850,000***

As of this draft, CSE is working with CPUC on a mechanism for distributing funding in a simplified open process using an implementation plan proposal strategy for those parties who have not-to-exceed funding budgets. Once a mechanism is approved, parties would submit plans with itemized budgets and timelines for their funding, with approval by the CPUC before authorized. All funding is subject to marketing metric tracking following protocols under development.

NOTE: These budget line items are place holders for program roll-out and will be adjusted by CSE and the CPUC once roll-out implementation progress can be analyzed and funding can be allocated to those hyper-targeted activities which are deemed most likely to help reach the goals and objectives. This exercise will occur by the earlier of 12 months of a pilot program implementation or March 2016. At that time, a revised budget will be created to support the updated program strategies.

Activity	Budget	Entity	Detail Page
CONTRACTOR TRAINING AND SUPPORT			
Training Curriculum for Contractors, Partners, FIs	$100,000	CSE	**28**
RAC Meetings	$100,000	CSE	**32**
DESIGN A MARKETING CAMPAIGN			
Additional work by Statewide ME&O marketing agency of record to concept and test financing messaging for use across channels. Some of these costs will be incurred by Statewide ME&O also. This is cost-share. Any budget not used will be put in the TBD allotment to support effective	$250,000	CSE	**36-38**

42 Application 12-07-001: Assigned Commissioner's Ruling Clarifying Operation Of Energy Efficiency Finance Pilot Programs filed 8/25/2014

strategies.			
Marketing expenses for paid search, digital and direct marketing and advertising to targeted customers	$425,000	CSE	
Integration of financing messaging into statewide ME&O communications plan and marketing campaign	$0	N/A	
Additional work by Statewide ME&O website administrator to integrate financing changes to web functions	$150,000	CSE	
MULTIMEDIA MARKETING AND TRAINING			
Finalize Creative brief and solicit vendors for proposals, work with vendor on design and execution of training videos and marketing videos in collaboration with the Statewide ME&O vendors	$0	CSE	**41-45**
Design marketing videos for different customer markets	$300,000	CSE	
Design training videos for contractors and other partners (curriculum not included)	$250,000	CSE	
Integration of training videos onto online platform (LearnerNation as described in the Contractor Section)	$200,000	CSE	
Create Media Distribution Guidebook to be used as a tool to maximize outreach of video marketing campaign	$25,000	CSE	
Integrate completed videos into marketing campaign	$0	N/A	
Distribution of videos to partners promoting to customers	$50,000	CSE	
Marketing videos integrated into the Statewide ME&O communication plans, in social media, earned media, and digital marketing at events, kiosks, retail outreach, etc.	$0	N/A	
ONLINE DECISION TOOL			
Financing Concierge Tool Phase 1	$250,000	CSE	50
COOPERATIVE MARKETING			
300 contractors statewide participate **$3,000 starting - $900,000** **50% make 10 loans = $1,500 bonus** **25% make 20 loans = $2,000 bonus** **15% make 50 loans = $4,000 bonus**	$900,000 $225,000 $150,000 $180,000	CSE	**47-49**
20 Financial institution participate **$3,000 starting** **50% make bonus = $2,000**	$60,000 $20,000	CSE	
Local Government participate **from EFLIC program**	$100,000	N/A	**58**
Administration of program **10% of implementation dollars per year** **Includes check cutting, organization with**	$307,000	CSE	**47-49**

printer, coordination with brand specialist, participation approval, custom design review and approval, management of appeals process, etc.			
Print Vendor set-up costs	$50,000	CSE	
STRATEGIC PARTNER STRATEGIES			
Statewide ME&O – CSE – retail and CBO	$200,000	CSE	**61-68**
SoCalREN – LA County – real estate, PA financing, CHERP	$150,000	SoCalREN	
BayREN – ABAG – MF and HU Advisor	$100,000	BayREN	
Marin Clean Energy – MCE – general cross promotion	$30,000	MCE	
EmPower – Santa Barbara County – central CA support and ME&O	$80,000	Santa Barbara County	
EFLIC PILOT			
PG&E – Grass roots marketing	$300,000	PG&E	**57-61**
CSE - $100,000 in co-op budget	$150,000 hold for MESA (if seed money funded)	CSE	
IOU COORDINATION STRATEGIES			
PG&E – Energy Advisor	$164,800	PG&E	**51-57**
SCE – Energy Advisor	$116,400	SCE	
SDG&E – Energy Advisor	$64,200	SDG&E	
SCG – Energy Advisor	$54,600	SCG	
SUB TOTAL			
	$5,502,000		
Reserve	$1,348,000	CSE	
Note: Reserve funding for specific ME&O strategies to be prioritized based on final pilot design and market response will be able for all implementers to apply for additional funding through a process still under development between CSE and the CPUC. At this time, the funding allocation will remain in the reserve budget until after program launch and preliminary feedback on progress can be obtained.			
TOTAL			
	$6,850,000		

Conclusion

The Statewide Financing ME&O is a joint effort between the statewide ME&O implementation team and a group of other stakeholders working with customers from different sectors towards a unified goal. This plan aims to clarify the method behind the ME&O strategy which is defined as a series of simple to implement strategies and tactics. Similar to the objective of the customer and contractor messaging, the intent of the plan is to package an overwhelming amount of complexity into fewer and easier to understand steps and action items, enabling technology to help where appropriate.

Many of the lessons learned have come from other energy programs around the country, and we hope that these strategies and the trackable and measurable activities, that ladder up to support them coupled with compelling messaging, will create new best practices for future efforts in creating value in sustainable energy projects.

Appendix A: Market Research Spreadsheet

Reference	Website	Author	Date	Audience	Positive Qualities	Additional Information	Follow Up	Notes & Key Takeaways
SBA Article - Financing Energy Efficiency Projects	http://www.sba.gov/content/financing-energy-efficiency-projects	N/A	N/A	Small Business	"It's your business decision to weigh your competing needs for capital versus continuing increases in operating costs for energy." "Remember, even a longer return-on-investment on energy efficiency results in affordable comfort, and new, more reliable equipment that will pay for it with energy savings." "Strategic energy efficiency investments are your hedge against the certainty of higher utility bills that you cannot control."	Mostly links to other resources and nothing new	Pressed on link "prioritizing energy efficiency projects" which brought me to another article which discussed working with a contractor for help.	Part of their Energy Efficiency series for small business owners
NY Times - Success stories in energy efficiency	http://green.blogs.nytimes.com/2009/07/29/success-stories-in-energy-efficiency/?_php=true&_type=blogs&_php=true&_type=blogs&_r=1	KATE GALBRAITH	JULY 29, 2009	Varies	Had information on the Long Island Green Homes program	Outdated and mostly spoke about the McKinsey report	"Efficiency Vermont: This “energy-efficiency utility,” the first of its kind in the nation when it was created in 2000, provides Vermont homes and businesses with special incentives to stay efficient — helping Vermont to become the only state in which gains in energy efficiency are offsetting projected increases in electricity consumption. Efficiency Vermont’s operations are financed by a surcharge on Customers’ bills."	

Long Island Green Homes website - Town of Babylon, Suffolk County	http://ligreenhomes.com/how_it_works	N/A	N/A	Residential	Easy to use online assessment form. "We help you pay for it." "If you like, the LIGH program can finance the cost of the work for you." "The program will pay the contractor the entire cost of the energy-efficiency improvements." "Under a separate contract with the homeowner, the Town sets up a monthly payment plan with you to pay us back over time for the cost of the work." "The best part is that we structure it so your savings will cover the monthly payments." "For example, if our energy auditor projects that you will save $100 per month off of your utility bills, you'll repay the Town $90 per month until we're paid back in full." "This financing option includes a fixed 3% interest rate, and the payments move onto the next homeowner if you move." "Because these improvements are permanent fixtures to your home, every homeowner qualifies for	Webpage showing community support similar to endorsements from trusted sources: http://www.longislandgreenhomes.org/community.html	"Research Solid Waste Fund: "The Town is not making loans to residents. The Town is expanding the definition of solid waste to include energy waste, based on its carbon content. By defining energy waste in this way, the Town is able to provide energy-efficient improvements to Babylon residents' homes from its solid waste fund. This type of measure is known as a "benefit assessment." A benefit assessment can be established when a municipality provides a specific improvement on a parcel of property for a public purpose, assessing the cost of the benefit against the property. In the case of Long Island Green Homes, the energy-efficient improvements to homes serve a vital purpose,	"" We don't need billing details, only what you consumed (electricity is listed in kw/h, oil in gallons delivered, and gas in ccf or therms)." Website highlights homeowners of the month and tells a story about how they did a carbon analysis and determined that residential homes equate to 38% consumption of resources in their town. "Since October 2008, LIGH has been helping hundreds of Babylon homeowners reduce their monthly utility bills (and carbon footprint) by 20-40%. Our goal is to help every Babylon household reduce their carbon footprint by eliminating wasted energy in homes. Daily

					the financing – there is no need to provide any personal credit score or financial history." "Instead of paying inflated electric, oil or gas bills, you pay for the energy efficiency improvements from your utility bill savings. So you'll be paying less than you are now, and your home will be GREEN!"		remediating the environmental damage caused by leaky and inefficient homes." "The Town will provide for energy saving improvements up to $12,000 per home and the homeowner will pay for the improvements through a monthly benefit assessment fee. The amount of the monthly benefit assessment fee is structured to be less than the monthly savings on a resident's energy bills resulting from the energy-efficient improvements. The Town will charge a 3% administrative fee which will be built into the monthly payments residents will make to pay for the improvements." "	operations are handled by the Green Team, which is assembled of knowledgeable professionals that are eager to help guide you through the process." "Something needed to be done, and simply making people aware of the issue would not be enough. Babylon residents needed help to overcome the upfront costs associated with making their homes more energy efficient. The Long Island Green Homes program was launched to do just that. Babylon residents are educated about their homes' efficiency by BPI certified energy auditors, and can make improvements that pay for themselves in

								energy savings.""
Long Island Green Home Consortium	http://www.longislandgreenhomes.org/				"75% of Long Island homeowners have invested in more insulation in their homes" 1] According to a 2008 survey by the Long Island Index, 75% of Long Island homeowners have invested in more insulation in their homes. 74% have started using more efficient lighting. "The Long Island Green Homes Consortium is a cooperative effort of Long Island municipalities and Organizations." "The goal of the Consortium is to reduce energy costs and usage for Long Island homeowners by helping them get comprehensive home energy audits and make cost effective energy upgrades to their home. Programs are available to all Long Island homeowners, no matter what town, city or village they live in." "Join the thousands of Long Islanders who have already upgraded their homes. Improve the value of your home and save money, while you help bolster Long Island's economy and create green jobs. The more we all save on energy bills, the more money stays on Long Island, boosting our local economy." The towns of the LI Green Homes Consortium are committed to making it simple for you to improve the energy performance of your home and get the best benefits and incentives possible from State and utility energy efficiency programs. Contact your town's Green Homes program today. Staff is available to help you get started and be there for you from start to finish."			
NYSERDA	http://stars.nyserdagreenny.org/how-it-works	N/A	29-Jul	Residential	"ON-BILL RECOVERY LOAN With the On-Bill Recovery Loan, your monthly payments may not exceed your estimated average monthly energy cost savings. Your loan payments are built right into your utility bill so you will not have an extra bill each month. Your energy savings essentially pay for your work. Interest rate is 3.49%; interest rates subject to change. Loan payment built into your utility bill. Loan amounts from $1,500 - $25,000 with loan term of 5, 10 or 15 years. Balance may be transferred to new owner when home is sold. A declaration is filed with the County Clerk to		"NYSERDA's loan provider, toll-free at 1-800-361-5663 SMART ENERGY LOAN The Smart Energy Loan is a more traditional loan that offers affordable interest rates and simple repayment options.	"ENERGY-SAVING EDUCATION DELIVERED RIGHT TO YOUR INBOX. Join our mailing list to stay informed about all the ways NYSERDA can help you reduce energy waste. As a thank you, we'll send a link to download comfort at home, our annual

					record the obligation of the loan. (This is not a lien on the property.) You must own the home and be named on the utility account. The home must be served by a participating utility, including: Central Hudson Gas & Electric, Con Edison, PSEG-Long Island, NYSEG, National Grid (Upstate NY customers only), Orange & Rockland, and Rochester Gas & Electric. * The On-Bill Recovery Loan is not available for Renewable Heat NY Residential Pellet Stoves, Pellet Boilers, or Advanced Cordwood Boilers."		Interest rate is 3.49% for automatic bank withdrawal (3.99% for pay by check); interest rates subject to change. Monthly payments made to NYSERDA's loan servicer Loan amounts from $1,500 - $25,000 with loan terms of 5, 10, or 15 years If you sell or transfer the property, you remain responsible for the balance of the loan You must own the home or be an authorized representative of the property owner"	magazine filled with real success stories as well as tips and information that can help you save big on energy costs. JOIN NOW"
Guidance on Designing and Implementing Energy Efficiency Market Transformation Initiatives		Ken Keating, Consultant to Energy Division	07/08/14	Market transformation	"The most important and foundational aspect of the market transformation paradigm is the focus on the market, not the program "Academics define a market as a system for voluntary exchanges of certain goods and services between individuals or groups,	""Understanding the market that may be a target is the first third of planning. The next third is designing an appropriate set of activities to strategically interact with the market. As part of this, it is important to spend time	"1. Link energy efficiency to other needs that customers value highly--new products can succeed only if they meet real customer needs; 2. The market must be defined clearly enough to be targeted; 3. The market must be characterized so that program administrators can understand the opportunities and barriers as well as the relationships in the market; 4. Identify a baseline for the targeted measure or practice, to be tracked over	

					according to rules. At its simplest level, a market involves manufacturers, sellers of products or services, and Customers, but most are far more complex. They involve wholesalers, distributors, professionals who deliver the product to Customers, as well as associations of interested parties, and even regulators. Utilities are only big players in the energy market. They and their programs will generally be tangential to other markets.""	understanding what appropriate program targets could be and to develop a program logic and metrics in line with these expectations. " "Once the market is understood, and the target measure or behavior is determined, the design of the program – using insights from social science, marketing, and the experience of market informants – can proceed. A good market transformation program consists of a series of strategic interventions involving solid knowledge of the market and coordination with other market actors, and is pursued using well defined market tools and tactics. A well-designed market-based program will recognize and use market forces, find allies, promote	time; 5. Use the value-added chain to influence downstream adoption of energy efficiency; 6. Seek to apply market leverage by working with natural allies; 7. The identified market/product nexus must produce large enough savings if successful to justify the resources (i.e., large technical potential is available); 8. There is a coherent market and program theory, usually captured in a logic model, that connects the expected actions with the desired outcomes; 9. Focus on early adopters in opening markets for innovative products, such as energy efficiency products; 10. Don't fall into the chasm between early adopters and getting to the general public; 11. Use different approaches to early adopters and mainstream markets; 12. Continue to measure and monitor key market indicator even after a particular market has been transformed for ongoing progress tracking;"

						competition and share risks. A market-based program approach is also frequently tied to non-energy benefits that can make the desired product or service a preference in the market. This is where having a large set of tools at the program designer's disposal is important. Well-designed market transformation programs are not about incentives, but rather are about strategic partnerships with market actors seeking similar goals for their own purpose. A good design looks for points of leverage and identifies the barriers that must be addressed.""	
OREGON—Clean Energy Works (OR CEW)	"http://www.cleanenergyworksoregon.org/rebates-financing/ Loan comparison: http://www.cleanenergyworksoregon.org/rebates-			Residential	"The Oregon Clean Energy Works program is a good model for achieving program participation goals—in just a few years it has grown substantially. How they did it: Launched as a pilot program in June 2009,	"Program Description: On-bill financing program for whole-home energy upgrades designed to reduce energy use 10–30%. Program systematically reduced barriers to	We want to ensure that your home performance project fits your pocketbook. To make it easier and more affordable, we assemble all available rebates into one convenient package to offset the cost of your project. First, we deliver all the same available utility and Energy Trust of Oregon cash incentives. Next, The CEW Bump delivers additional benefits with

	financing/regions/ portland-metro/"				OR CEW provides long-term, low-interest financing to homeowners for whole-home energy upgrades. At the onset of the program a participation goal of 500 loans in the first year was established. As of February 2011, the program had met this goal and had to turn away applicants. The high success rate of the pilot program can likely be attributed to a variety of strategic choices. For one, expert "Energy Advocates" and pre-selected contractors conduct all inspections, allowing for all customer questions and concerns to be addressed immediately. These experts receive training and are monitored by the program to avoid negative customer experiences and protect the reputation of the program. Customers are helped throughout the process of determining which improvements to make, how to file all paperwork, and how to get the proper financing for their projects. In addition, the program is structured with an "on-bill" financing option that	residential energy efficiency adoption—upfront costs, project complexity, and Customer hesitation in selecting contractors. The loan product was developed based on modeled savings, historic measure costs, and assumptions regarding how many projects would be completed in each category. The program managers were able to roughly estimate the savings associated with different levels of investment. Underwriting Criteria: Credit score and utility history"	further offsets to the total project cost – for upgrades not typically covered by utility incentives. Combined with special promotions, you're looking at up to $3,250 in savings. Plus – the 100 Point Performance Check ($250 value) and a final Quality Inspection ($250) add in a whole lot of value. Additional home performance services available through Clean Energy Works include radon mitigation, seismic upgrades and solar installations. - See more at: http://www.cleanenergyworksoregon.org/rebates-financing/#sthash.H00fcYGh.dpuf

					allows customers to pay back loans through their utility bills. This approach leverages the existing relationship between the customer and the utility company and helps the customer to link the loan repayment directly to a reduction in energy costs. In addition, the OR CEW program targeted very specific customers by pre-screening to find the homeowners who were most likely to act quickly and the homes most likely to achieve high energy savings. Customers were screened based on a minimum required credit score and a history of utility bill payment. Depending on the projects undertaken and the type of dwelling, loans were offered at attractive rates from 3.99% to 5.99%, with a term of up to 20 years. Average loan size has been around $12,500, with monthly payments of approximately $70."			
Energy Trust of Oregon Commercial Financing Market Research Report			04/01/14	non-residential	""The research indicates that there does appear to be interest in financing and that some might implement more energy efficiency upgrades if affordable financing	"This is one of the most significant findings from this research, which demonstrates how more specific information	"The financing would have to be an extremely good deal: interest rate would need to be low and some adding that the	"Many said their decision-making process is not complicated and/or that they are unsophisticated

					options are available. Respondents' attitudes toward financing shifted from less positive to more positive as the interview progressed and more information was shared about financing." "Perhaps one of the most significant findings revealed is that many respondents want financing messaging to include specifics about the "offer". For those who initially find financing a turn-off, general messages about financing may fall on deaf ears. Just knowing that you can do it may not be enough. • Level of specificity: The level of specificity desired about the financing "offer" varied. Some want messaging to include specific interest rate information and some even want information that is particular to their project, including ROI and payback. For others, saying something as simple as "competitive rates" or "it's a good deal' may be enough to pique their interest.""	broadens customer thinking and their willingness to consider financing. Although this was quickly clarified in the interviews, it revealed that the word "financing" may mean different things to different people and could lead to misunderstandings in communication efforts. The term "borrowing money" seems to be a clearer term. Other suggestions for financing messages included: • Messaging should clearly differentiate reasons to finance from messaging about reasons to do energy efficiency upgrades in general. 14 • The impact on bottom line and cash flow. • The ease of using financing and those resources are available to guide the business owner through the	payback would need to be quick financing options need to show how you're recapturing costs in energy savings to make it more feasible for government agencies. The respondents from private business were very firm in stating that they would never finance an energy efficiency project by choice because they prefer to avoid debt. This is in contrast to the respondents from government agencies that say their budget practices and systems prevent them from pursuing financing."	when it comes to thresholds and other "financial" aspects of the decision-making process. Many attributed this to their business being small. Some mentioned they rely on payback information provided by Energy Trust or their contractors. Specifically, about half reported having no criteria such as payback or ROI. Small business: Among those that have threshold criteria, a couple expressed concern that financing might result in long payback periods or that the energy savings/loan cost equation might not deliver as promised leaving them in a vulnerable cash flow position. For OBF, public agencies won't need to do an RFP

						process. • The value of getting things done now rather than wait. • The value of reinvesting in core business. • How financing can help meet sustainability goals. • How other businesses have taken advantage of financing programs successfully. • Rising energy costs."		so it saves them time and money. "Among private business respondents who said they would be very unlikely to consider a commercial loan, one said it was too much work or “too many hoops to jump through”, and two respondents expressed negative feelings about banks with one saying that banks don’t really want to lend money to small businesses and the other saying banks are untrustworthy. All but one government agency in this study rejected the commercial loan option immediately""
Energize Connecticut	http://energizect.com/residents/programs/Residential-Energy-Efficiency-Financing-Program			Residential	"Loan Details Loans ranging from $1,000 to $25,000* Funds must pay for qualifying energy efficiency improvements Interest rates are as low as zero percent	""rebates help you act now" Smart E Loans - 6 months no interest on Smart-E loans. Hurry, offer ends soon!	"Smart E: contact: CEFIA at (888) 337-5454 or smarte@ctcleanenergy.com GAS CONVERSION BUNDLE Pair a high efficiency boiler or furnace conversion with any of the following: Attic and/or wall insulation Ductless mini-split	

					Up to a 12-year term No fees to you or your contractor; no pre-payment penalty Unsecured, fixed-rate loans No home equity required Easy, quick application process CL&P customers can choose to repay their loan through their utility bill or through the Connecticut Housing Investment Fund, Inc. UI customers will pay their loan through their utility bill - See more at: http://energizect.com/residents/programs/Residential-Energy-Efficiency-Financing-Program#sthash.m7W4y9Jf.dpuf"	5 yrs.: 4.49% APR 7 yrs.: 4.99% APR 10 yrs.: 5.99% APR 12 yrs.: 6.99% APR Smart E Bundles: Energize Connecticut's Smart-E Loan now offers a lower interest rate for qualified energy improvement bundles. A special offer of 2.75% to 2.99% for a 10 year loan is available for these smart energy improvements You can add any additional Smart-E measures to your bundle as well!"	Solar PV SOLAR PV BUNDLES Go solar and add any of the following: Attic and/or wall insulation Ductless mini-split High efficiency boiler or furnace gas conversion SOLAR HOT WATER BUNDLES Install solar hot water and add any of the following: Attic insulation and wall insulation Ductless mini-split WINDOWS BUNDLE Install energy efficient windows and add: Attic insulation and wall insulation"
The Connecticut Light & Power					"Programs targeting the small business and commercial sectors (CT Small Business Energy Advantage and Commercial and Industrial Financing programs) have an 8.2% participation rate, which is the highest rate of any program targeting these sectors and the second highest participation rate of all programs surveyed. How They Did It: In conjunction with the	"The use of on-bill financing, which allows customers to easily see the benefits of their investments and simplify payment, is likely another factor that has contributed to the 8.2% participation rate. Furthermore, customers are offered the chance to have a fully-trained, CL&P-approved	"Loans must be used for the upgrading or replacement of existing equipment and systems. Loans range from $2,000 to $250,000, with subsidized low-interest financing eligible on the first $100,000. The balance of the project can be financed separately at market rates, or may be covered through a separate small business program for qualifying customers. For larger commercial and industrial customers, the average loan amount is between $25,000 and $50,000. For smaller business, the average loan amount is around $8,000."

					Connecticut Energy Efficiency Fund, Connecticut Light & Power offers its commercial and industrial customers financing options through the Commercial and Industrial (C&I) Financing and Small Business Energy Advantage (SBEA) programs. These programs offer interest rate buy-downs for customers who implement eligible energy-saving measures, keeping rates low. The Energy Efficiency Financing Programs, average loan interest rate is 10.5–15% prior to buy-down—the buy-down brings the interest rate to 0%. This is an extremely attractive loan term to customers, given the typically high costs of equipment upgrades."	contractor conduct an energy assessment of their facilities at no cost to them. Contractors provide customers with a comprehensive proposal outlining all measures that could increase energy efficiency, as well as an estimate of costs and energy savings. This valuable marketing tool simplifies the process and helps customers understand full energy savings potential, rather than simply making a reactive adjustment to one piece of equipment or system. As many customers lack the time, resources, or in-house expertise needed for in-depth analysis of energy use, this is a good method for targeting smaller businesses in particular."	
Connecticut Housing Investment Fund	"http://www.chif.org/page/energy-conservation-loan-program				"Single-Family Energy Conservation Loan Program The Energy Conservation	"Programs: Residential Energy Efficiency Financing Program	"The Cozy Home Loan helps you complete the energy improvements you need. Energy upgrades improve your family's comfort, health and reduce

	http://www.cl-p.com/Business/SaveEnergy/Financing.aspx"				Loan Program (ECL) and the Multifamily Energy Conservation Loan Program (MEL) provide financing at below market rates to single family and multi-family residential property owners for the purchase and installation of cost-saving energy conservation improvements. The program is administered by the Connecticut Housing Investment Fund, Inc. (CHIF) with funding from the Connecticut Department of Housing (DOH). Income This is an income-restricted program. Please click here for the current income limits. Loan Amount and Term Single family (1-4 units) homeowners may borrow up to $25,000 and multi-family property owners may borrow up to $2,000 per unit (a maximum of $100,000 per building) for a period of 10 years for eligible improvements"	Loan Details Loans ranging from $1,000 to $25,000* Funds must pay for qualifying energy efficiency improvements Interest rates are as low as zero percent Up to a 12-year term No fees to you or your contractor; no pre-payment penalty Unsecured, fixed-rate loans No home equity required Easy, quick application process CL&P customers can choose to repay their loan through their utility bill or through the Connecticut Housing Investment Fund, Inc. UI customers will pay their loan through their utility bill - See more at: http://energizect.com/residents/programs/Residential-Energy-Efficiency-Financing-Program#sthash.cGkXCsjT.dpuf"	your monthly utility bills. Take control of your energy costs today! You can finance almost any measure that reduces your home's fuel or electricity use or increases on-site energy production from clean energy sources. The maximum loan term is 10 years with a fixed 5.99% interest rate (5.99 APR). It can be paid off at any time with no penalties. Your rate and payment is fixed for the life of the loan. The minimum amount is $3,000 and the maximum is $25,000 (single family homes) or $50,000 (2-4 units). The Cozy Home Loan is a program run by the Housing Development Fund, a local nonprofit that has helped hundreds of Connecticut families become successful homeowners. Cozy Home Loans are administered on behalf of HDF by AFC First Financial Corporation. See more at: http://energizect.com/residents/programs/cozyhome#sthash.ru2oreYn.dpuf 75% of the total cost of your improvements must be directly related to energy savings. 25% of the total cost of your improvements can go to other energy and environment-related measures, for instance, healthy homes upgrades (i.e. asbestos or lead remediation), or roof repair. ENERGY STAR appliances are also eligible for this category"

C&LM Financing-Small	http://energizect.com/businesses/programs/CLM-Financing-Small-Business-Municipal-Loan-Program				"C&LM Financing-Small Business/Municipal Loan Program This is an interest-free loan offered to customers who implement qualifying energy-saving measures through an Energize Connecticut incentive program. The loan must be used to upgrade or replace existing electric or natural gas equipment with high-efficiency equipment. The loan limits range from a minimum of $500 to a maximum of $100,000. Financing for the Small Business & Municipal Loan program has a maximum loan term of up to 48 months. (Please consult appropriate Small Business Administrator.)"		"Take advantage of interest-free loans to help pay for qualifying electric and natural gas energy-saving measures. They're available to commercial or industrial businesses participating in the Small Business Energy Advantage (SBEA) program and municipalities participating in a retrofit program. Loans ranging from $500 to $100,000 are available through the Connecticut Energy Efficiency Fund to help upgrade or replace existing electric and gas equipment with qualifying high-efficiency equipment. With repayment terms up to 48 months and a convenient on-bill payment option, these loans make it easy to make the smart choice to save energy. - See more at: http://energizect.com/businesses/programs/CLM-Financing-Small-Business-Municipal-Loan-Program#sthash.BhmJbCGN.dpuf"
Low-Interest Loans for Commercial & Industrial Customers	http://energizect.com/businesses/programs/Low-Interest-Loans-for-Commercial-Industrial-Customers				"If your commercial or industrial business isn't eligible for our interest-free Small Business and Municipal Loan program, invest in energy-saving equipment with help from a low-interest loan. Loans ranging from $2,000 to $1 million are available through the Connecticut Energy Efficiency Fund to help upgrade or replace existing electrical or gas equipment with qualifying high-efficiency	"This is a low-interest loan offered to commercial and industrial customers that implement energy-saving measures through a qualifying Connecticut Energy Efficiency Fund program: The loan must be used to upgrade or replace existing equipment with high-efficiency equipment The loan limits range from a minimum of $2,000 to a maximum of $1 million, with subsidized low-interest financing offered on the first $100,000 of the loan. Call your utility program administrator for current interest rates. The balance can be financed at market rates provided by two approved lenders Financing for the Small Industrial &	"All commercial and industrial customers of CL&P or UI qualify except for new construction or major renovation projects and those projects which participate in Energize Connecticut's Small Business Energy Advantage program. For natural gas-saving measures, the

					electrical or gas equipment. Subsidized low-interest financing is offered on the first $100,000 of the loan. The balance can be financed at market rates. With repayment terms to 60 months, these loans make it easier to make the smart choice to save energy."	Commercial Loan has a maximum loan term of 60 months"	company must be a firm customer of CNG, SCG or Yankee Gas. Commercial and industrial customers must be in business for a minimum of three years and have good credit standing. See loan application for details."
Toledo/Lucas County Port Authority - Better Buildings Program	http://www.toledoportauthority.org/en-us/services/financingservices.aspx				"NNOVATIVE FINANCING PROGRAMS The Toledo-Lucas County Port Authority has developed a national reputation for innovative business financing, assisting over 340 economic development projects representing a total investment of more than $1.8 billion while helping to create and retain nearly 18,500 jobs. Financing Options include: Fixed Interest Rate Revenue Bonds Infrastructure Financing Conduit Revenue Bonds Ohio 166 Regional Loan Program U.S. Small Business Administration 504 Loan Program"	"Laurie Cantrell or Joe Bajas One Maritime Plaza Suite 701 Toledo, OH 43604-1866 Phone: 419-243-8251"	
The Economist: Financing energy efficiency Money for nothing	http://www.economist.com/news/finance-and-economics/21601292-green-loans-are-proving-less-popular-among-homeowners-expected-money		Apr 26th 2014		""In Britain, the Green Deal offers loans over a 25-year period, with repayments added to energy bills. Countries including France and Canada have similar initiatives." Green loans have not been a flop everywhere. Around 250,000 households in Germany	"Participation is low for these kind of loans Reason 1: Homeowners are unimpressed chiefly because the interest rates on the loans look high. The Green Deal charges 7%; some PACE schemes a hefty 8%. As these rates are fixed for decades, they will inevitably look unattractive when (as now) short-term interest rates are low. Reason 2: Many people also doubt they will save enough on their energy bills to	Need to research the German Green loans and figure out their secrets to success

					sign up for them each year. They do so because they need pay only 1% interest on them each year, thanks to an annual public subsidy of €1.5 billion ($2.1 billion). Whether that is an efficient use of taxpayers' money is another question"	cover the repayments. For instance, claims in Britain that installing loft insulation can cut energy bills by 20% have been dented by a government study that found it reduced gas consumption by only 1.7% on average. Others fear that green loans may reduce the value of their home. In America, firms that underwrite mortgages are hostile to PACE loans." .	
The Guardian: How a green investment bank really works	http://www.theguardian.com/environment/damian-carrington-blog/2012/may/24/green-investment-bank-energy-efficiency	Damien Carrington's Environmental Blog			"So what has KfW achieved? Since 2001, its loans have helped insulate and seal over 2m homes, employing 200,000 people a year in the process. Since 2006, 156m tonnes of carbon have been saved, equivalent to over a quarter of the UK's total annual emissions. The key is very low interest rates, currently 1-2%. These are delivered via KfW's top credit rating, topped up by further government subsidy of the interest rate. In 2011, the state put in just under €1bn, which KfW turned into €6.5bn in loans, which created a total investment of €18.5bn – that's a 20-fold leverage on the state subsidy. "This programme is self-sustaining," Macioszek adds. "If the state puts in €1.5bn [to subsidize interest rates] it gets back €3-4bn in tax income on the works. This programme is one of the most important and most successful we have." In the UK government has talked of Green deal loans around £6,000: German homeowners can borrow up to €75,000 via KfW. The latter sum gets you a very cozy and efficient home indeed, often including some domestic low-carbon power generation. In the KfW scheme, the higher you aim, the better the deal. For the most efficient homes – Passivhaus standard - you get up to 12.5% of the loan handed back to you. And if you don't like loans, you can get a grant of Damien Carrington's Environmental Blog up to 20% of the cost of the works. It all adds up to a massive commitment to energy efficiency."		
KFW: German Investment Bank	https://www.kfw.de/kfw.de-2.html				"For whom? For everyone who is investing to make an older residential building more energy-efficient or purchasing a newly refurbished home Refurbishment into a KfW Efficiency House - what does this mean?	"Individual Measures If the costs and effort of a complete refurbishment would be too high it is also possible to implement only individual measures. Financing is available for: Thermal insulation of walls, roof and floor space Renewal of windows and exterior doors	"Application for grant: with KfW Loan: up to EUR 75,000 per housing unit for energy-efficient refurbishment plus a repayment bonus calculated on the loan amount.

					The energy standards are laid out in the Energy Conservation Ordinance (Energiesparverordnung/ EnEV). These standards apply to new buildings. We promote the refurbishment of houses if after refurbishment they do not exceed a specific energy requirement for a comparable new house. KfW has defined five levels of support for a KfW Efficiency House. KfW Efficiency House 55 KfW Efficiency House 70 KfW Efficiency House 85 KfW Efficiency House 100 KfW Efficiency House 115 KfW Efficiency House Monument Simply put, the figures indicate in per cent how much of the maximum primary energy requirement specified by the EnEV the house consumes. The best standard (55) receives the highest support. In order to meet the high energy standard of a KfW Efficiency House, extensive investments such as the renewal of heating systems, thermal insulation and	Installation/renewal of a ventilation system Renewal of the heating system Optimization of heat distribution for existing heating systems What kind of promotional funds are available? Either a grant or a loan Grant per housing unit: 25.0 % for a KfW Efficiency House 55, not more than EUR 18,750 20.0 % for a KfW Efficiency House 70, not more than EUR 15,000 15.0 % for a KfW Efficiency House 85, not more than EUR 11,250 12.5 % for a KfW Efficiency House 100, not more than EUR 9,375 10.0 % for a KfW Efficiency House 115, not more than EUR 7,500 10.0 % for a KfW Efficiency House Monument, not more than EUR 7,500 10.0 % for the implementation of individual measures, not more than EUR 5,000 The grant is transferred to your account after completion of the refurbishment measures."	17.5 % for a KfW Efficiency House 55 10.0 % for a KfW Efficiency House 70 7.5 % for a KfW Efficiency House 85 5.0 % for a KfW Efficiency House 100 2.5 % for a KfW Efficiency House 115 2.5 % for a KfW Efficiency House Monument The repayment bonus is transferred to your account. This means you have to pay less. Loan: For individual measures up to EUR 50,000 per housing unit Loan application: with your bank"

					replacement of windows, are usually required."			
Cutting Carbon Costs: Learning from Germany's Energy Saving Program	http://www.brookings.edu/~/media/research/files/papers/2011/9/02%20germany%20energy%20power%20zulauf/0317_germany_energy_power_zulauf.pdf	"Anne Power Monika Zulauf"	March, 2011		"Germany's energy saving program is based on three pillars: o A clear legal framework and tight regulation at the national level, requiring energy efficiency upgrades to buildings and increased use of renewable energy sources among electricity providers; o Strong financial incentives through subsidies and loans to reduce energy consumption in the built environment at all levels of government. At the national level, these are provided via a public investment bank sponsored by the German government; o Information, promotion, and behavior change, working through regional and local bodies, developing enforceable standards through Energy Performance Certificates, and supporting model projects all over Germany Create a strong, enforceable legal standard to underpin change and create certainty about the	"The KfW, the investment bank of the federal and regional governments, is the main funder of investment in energy efficiency and renewable energy, rather than the federal government itself. It delivers specific programs agreed between the government and the KfW. The government negotiates conditions with KfW, including access to help, the amount of loan funding available, and the level of subsidy to reduce interest rates on loans. There is no legal limit to eligibility for loans and subsidies and there is built-in flexibility to allow some subsidy programs to apply in exceptional cases For all levels, the promotional	"The KfW, the investment bank of the federal and regional governments, is the main funder of investment in energy efficiency and renewable energy, rather than the federal government itself. It delivers specific programs agreed between the government and the KfW. The government negotiates conditions with KfW, including access to help, the amount of loan funding available, and the level of subsidy to reduce interest rates on loans. There is no legal limit to eligibility for loans and subsidies and there is built-in flexibility to allow some subsidy programs to apply in exceptional cases The three pillars of	"The combination of generous subsidies and low-interest loans with highly ambitious standards and a "whole house" approach generates an investment of around EU36,000 per home in energy efficiency and renewable technology, compared with £6,000 proposed for the United Kingdom EU€8000). In the United States, ambition levels are much lower and the level of federal investment in retrofits is correspondingly small, around EU3000. Germany's more generous and more exacting approach has led to much higher take-up Germany has

					direction of change • Provide enough incentives to draw people in, but use repayable loans on favorable terms rather than straight subsidies or tax concessions as a more reliable and sustainable funding mechanism • Provide qualified expert advice so that work is carried out to a high standard and promised energy gains are achieved • Link renewable energy generation to energy saving measures requiring high energy efficiency investment before subsidizing renewable energy through a feed-in tariff. This greatly increases the contribution renewable energy can make to meeting overall demand, saving money, doubling the value of renewable energy, and contributing to climate protection"	interest rate is equal. The difference consists in the scope of partial debt relief (in percent), in the sense of a repayment bonus which is granted to the borrower in addition to the favorable interest rate of the loan compared to market levels once the targeted efficiency level is reached and proven by an energy expert: For instance, the efficiency House 40 benefits from 10% debt relief. The maximum loan amount is 50,000 EUR. • Adopt a "whole house" approach to energy saving, even if measures are then adopted piecemeal, so people can prioritize and plan for ambitious levels of energy saving. This also makes it easier for the	the German approach—a clear legal framework; strong subsidy and loan programs; and promotional information, advice, and support—are driving fundamental changes in Germany which both international and national bodies agree are vital to efforts to combat global climate change and secure our future energy needs The links between German legislation/regulati on and subsidies change energy consumption behavior and drive strong take-up. The level of subsidy and size of loans grow with the level of ambition, as higher energy savings require more public financial support"	taken a comprehensive approach to retrofitting the built environment. Almost all domestic buildings—small and large, rented and owner occupied, multi story and single family, as well as many publicly owned buildings—are eligible for retrofit subsidies. Public policies aim to refurbish the entire housing stock and all public buildings in Germany by 2030 Channeling retrofit subsidies through a publicly supported investment bank gives weight to the program, increases efficiency and leverage, and inspires private-sector confidence. KfW does not have to promote itself,

						government, energy suppliers and builders to plan for the future • Develop new ideas through pilots and models, as this allows for experimentation and innovation in the public eye. In particular, apply retrofit methods to public buildings such as schools, nurseries, and children's centers, which can also provide educational benefits • Changing attitudes and behaviors are almost as important as retrofit measures themselves"		and instead relies on local banks to transact business on its behalf DENA's extensive access to experts, including architects, engineers, planners, researchers, increases its influence on clients. The agency's guidance and expertise reach a very large audience via local agencies"
Certified Action: Energy Efficiency Factsheet **Good Practice Factsheet KFW Energy Efficient Construction and Refurbishment - Germany**	https://www.kfw.de/inlandsfoerderung/Privatpersonen/Neubau/Finanzierungsangebote	Pedro Guertler and Sarah Royston of the Association for the Conservation of Energy and Dr Joanne Wade			"Benefits to financial institutions participating in Germany's program: In addition to the measurable promotional effects of the programs, for the commercial banks, savings banks and other on-lending institutions (such as insurance companies) who offer promotional loans to their customers, there are the following	"Win-win situation: The promotional scheme provides a win-win situation to all parties involved: (a) Customers benefit from very attractive promotional conditions (loans at low interest rate, partial debt relief or alternatively grants) (b) Commercial banks benefit from enhanced product spectrum for their clients which improves cross-selling potential as well as from additional liquidity without refinancing cost and from an attractive margin (c) Public budget benefits from additional income (tax and social security		"Bettina Dorendorf Kommunal- und Privatkundenbank / Kreditinstitute PKa1 Produktentwicklung Wohnen KfW Bankengruppe Niederlassung Berlin Charlottenstrasse 33/33a 10117 Berlin

					benefits which are the key motivators for them: (1) Reasonable margin as risk-premium/handling fee (2) No refinancing cost/additional liquidity available: the refinancing is provided by KfW (i.e. available refinancing volume of the on-lending institution can be used for additional lending purposes), customer needs can be fulfilled without providing liquidity (cost of liquidity highly depends on the bank´s financial strengths and general capital market conditions) (3) Cross Selling potential: as the maximum promotional loan amount covers in general only part of the financing need for the construction or refurbishment project, the commercial bank/on-lending institution has the opportunity to sell its own products in addition to the promotional loan and by this way round off the financing needs of the customer. (4) No up-front cost: offering the promotional loans does not cause any up-front or additional cost to the on-lending	contributions) (d) Economy benefits from job creation particularly in small and medium enterprises due to volume of investment triggered (e) Environment benefits from high volume of CO2 savings (f) The broad reach: high number of housing units reached and high number of investors incentivized to invest in energy efficient construction and refurbishment measures (g) Transparent and attractive scheme for customers (high and increasing level of demand) (h) Standard setting and wide acceptance (i) Systematic and comprehensive quality control (j) Mandatory involvement of energy experts (k) The continued development of energy efficiency in society."	Tel.: +49 30 20264-3277 bettina.dorendorf@kfw.de"

					institution (5) Free-of charge on-going training and information: bank employees are trained on a regular basis with regard to product conditions and application processes. (6) Potential disadvantage in case of not offering promotional loan"			
World Energy Council: Financing energy efficiency in buildings: an international review of best practice and innovation	http://www.wec-policies.enerdata.eu/Documents/cases-studies/Financing_energy_efficiency_buildings.pdf		June, 2013		"These barriers take a range of well-recognized forms. The Buildings Performance Institute Europe reported in 20101 that information failure, high subsidies, lack of technical expertise, uncertainty over savings, and externalities still characterize the energy efficiency market, while ‘split incentives’ discourage both building owners and occupiers from investing in energy efficiency measures if direct benefits are not perceived. Financial barriers include the initial cost barrier, high transaction costs, long payback time, and risk exposure. Furthermore, lack of knowledge among finance providers about energy efficiency prevents customers from accessing capital, and the	"Barriers to participation: wariness of investors and lenders about financing energy efficiency. This is usually owing to a mixture of high perceived risk exposure, long payback periods, lack of awareness and the absence of established methods for assessing the value of investments. In many of the cases studied, this had been a serious problem in the past, and had gradually been overcome through a range of measures. These have often	"Schemes may be more likely to succeed in reaching their target audiences if they have buy-in from a range of actors across the supply chain and wider society. Energy efficiency projects are often typified by a large number of stakeholders such as end-users, technology providers, engineering and construction firms, project developers, owners, investors, financiers, government agencies and utilities. Frequently the key to successful	"Trust and quality In the case of India’s BELP, trust was ensured through use of well-known brands and company involvement, as well as a warranty on products, and hologram quality mark. Close to 55% of the respondents purchasing directly from the retailers and 70% of the respondents purchasing under instalments valued the utility company’s branding as “important”. In Warm Up New Zealand and Germany’s KfW

					absence of standardized measurement and verification practice further increases transaction costs. Minimizing the occurrence of defaults and overdue payments through careful scheme design is also an important element of keeping scheme costs down. 'Pay As You Save' (PAYS) schemes, for example, must also have an effective and socially responsible way to deal with defaults. Britain's Green Deal finance, an example of PAYS, recoups loans via a surcharge on electricity bills. Delinquency can thus lead to electricity disconnection, although there are safeguards in place to protect vulnerable Customers. BELPhad a bill-based repayment mechanism, and there was a disconnection option if customers do not pay bills. Since the lamp cost is small relative to an electricity bill, disconnection due to the scheme is not a serious issue in this kind of scheme. However, if it were scaled up to a PAYS	involved state guarantees. Such guarantees are intended to send a clear signal to financial institutions that projects in certain emerging sectors are worth lending to, for both commercial and social reasons. They can in some cases be seen to create a 'breathing space', that is an environment in which energy efficiency investments gain a chance to prove themselves and develop a positive investment track record which can later mean that there is no need for a continued guarantee. Barrier of high administration costs: High administrative costs can be one cause of high interest rates and fees, and can reduce a scheme's cost-effectiveness. Estonia's KredEx	stakeholder engagement is to map out, understand and work with the dynamics of power and influence stakeholders have over each other. Knowledge and capacity Institutional challenges do not only concern the relationships between stakeholders, but also the capacity of the different stakeholders; in other words, the knowledge, skills and expertise they can bring to a scheme. This challenge is especially problematic in contexts where energy efficiency is a new and emerging sector and technologies are not widely known. For example, a major obstacle to the development of micro-finance for energy in Kenya was a lack of	programs the use of customers' existing banks promotes trust. In a very different context, a similar principle applies to Kenyan microfinance; microfinance groups are likely to be trusted by their members, as they already have a stake in them. Complexity and hassle If schemes' target audiences are particularly diverse, a range of financial offers may be needed to accommodate their different financial circumstances and needs. At the same time, research into successful energy efficiency retrofit schemes has shown that it is vital to make the customer journey as easy as possible: any breaks in the process result in some customers

					loan for more costly measures, this would need to be considered. Combining offers with a mix-and-match approach can be effective; in Estonia, a KredEx grant may be combined with a renovation loan to decrease the share of required self-financing and maximize access to assistance. In Warm Up New Zealand, grants are combined with loans for certain groups; a deliberate effort to target vulnerable customers. A similar approach is now being adopted in the UK, with loans under the Green Deal scheme being offered to all Customers, and additional subsidies under the Energy Company Obligation being offered to certain eligible households. In these examples, diverse and complementary offers are used to ensure that the needs of vulnerable Customers are met. This relates to issues of equity (discussed further below); the needs of marginalized groups may be catered for by more flexible or local approaches. However, these may be less	schemes have found that loans have lower administrative costs (for the institution) than previous grant-based schemes because most of the work is done by the banks. The banks' work of course also entails administrative cost, although it is likely that these are lower per customer account than is the case for KredEx. High administrative costs may come about as a result of the absence of quick, simple, robust and established methods for assessing the value and risks of energy efficiency investments, as well as from investments' often small-scale nature and high specificity (meaning that administrative costs are high relative to the overall capital costs). In cases where schemes aim to establish	technical capacity within lending institutions such as Faulu, who did not employ energy specialists. This limited the value of advice available to potential borrowers. One scheme evaluation reported that even though the national micro-finance umbrella organization had trained its own staff in technical installation and equipment inspection, it was dependent on a single person for expertise on more complex products Research into successful energy efficiency retrofit schemes has shown that it is vital to make the customer journey as easy as possible: any breaks in the process result in householders losing interest and take-up rates	losing interest and take-up rates falling. Successful schemes use a streamlined assessment and installation process and schemes where assessors are prepared to make weekend / evening visits to the householder have been shown to be particularly successful. Audience and marketing A key barrier to most schemes is awareness among potential beneficiaries; both of energy efficiency in general and of the scheme in particular. Furthermore, if people are aware of energy efficiency technologies, they may have negative perceptions of them. Any engagement approach needs to take into

					efficient, more risky and so more expensive"	standardized methods of assessment, measurement and verification in the first place, relatively high administrative costs may be unavoidable, at least until methods are agreed and have become more commonplace. In either case a challenge for schemes is to keep administrative costs low as well as to identify a suitable means of covering them."	falling. Successful schemes use a streamlined assessment and installation process and schemes where assessors are prepared to make weekend / evening visits to the householder have been particularly successful in the UK For KfW, Germany's banks, building societies and credit unions market the scheme to property owners, often when the latter are seeking finance for general property refurbishment. Supporting this are energy efficiency campaigns run by DENA (the German Energy Agency), and a range of KfW promotional activities including KfW awards, information campaigns and a KfW academy to	account the needs, behaviors and priorities of the target audience; how, when and why they use energy and why they might wish to participate in a scheme. To facilitate systematic thought about finance scheme design and operation for a wide variety of different purposes and in a broad range of contexts, we provide energy efficiency finance scheme 'decisions map'. This takes the form of a matrix (to be found in section 6) containing conclusions and recommendation s for each of the main barriers, mapped out across each of the areas of context. It illustrates the importance of a thorough approach to

							train business partners. The success of this activity is indicated by the high rates of take-up."	energy efficiency finance which builds on the vast wealth of experience already accumulated from around the world, and is designed to facilitate this type of approach. In many cases, engagement based on Customer priorities means using messages that focus on financial savings. However, in the US, as well as emphasizing money-saving, PACE schemes are often described as 'home improvement' schemes, a description that resonates with the public's interest in renovating and adding value to their homes."
Part II "Are We Fishing In The Wrong Pond?" Thoughts on Contractor	http://www.harcourtbrown.com/topics/news/		08/15/14		"So what would a contractor-centric EE finance marketing push look like? In my mind, it's a two-step	"The way you would do this with contractors is with case studies and examples of how some contractors are selling more and larger projects, as a result of utilizing financing. Make the		"Good example of direct marketing to contractors: https://www.gogecapital.com/en/

Engagement for Financing					process: First you have to entice the contractors to use your financing product, which is the first “pitch” Then you have to enable them to sell to a customer, that’s the second pitch. In other words, when it comes to contractors, it’s like catching a fish, then teaching the fish how to fish. In other words, you’ve got to offer something to the contractors that get them to act, and then enable them to get the customer to act."	non-participants feel like they are missing out- “why would you leave money on the table?” is one common question you want your advertising to get at— people hate leaving money on the table. Then from there- once you have the contractor “hooked”- you work is to enable them to sell EE and EE financing for you. What I’ve learned from having been engaged on this side of things for quite some time is the more time you can devote to enabling each contractor to sell, the better your results will be."		Customer-credit-financing/business/index.html Contractors often choose established and easy-to-use finance options like GE’s and the Wells Fargo home improvement credit cards instead of utility or state-based financing program offerings."
MassDevelopment GREEN LOAN PROGRAM	http://www.massdevelopment.com/financing/loans-guarantees/green-loan-program/				"Loans are available in the amounts of $50,000 to $500,000 and are net of project-related rebates or subsidies. Loans may only be made for projects that receive approval for a utility rebate under a public utility sponsored energy efficient program authorized by the Massachusetts Department of Public Utilities or approval for a subsidy from a state/federal energy efficiency incentive.	"Loans are filed through Mass Saves http://www.masssave.com/business We provide business customers, including Multi-Family and Non-Profits, with the opportunity to apply for a loan from participating lenders to assist with the installation of qualified energy-efficient improvements in	"Energy efficiency improvements that may be eligible for the Financing Program High Efficiency Lighting/Controls Motors/Variable Frequency Drives Compressed Air HVAC Commercial and Industrial Kitchen Equipment High Efficiency Natural Gas Equipment Custom Measures Service details: Scheduled interest payments on the loan will be pre-paid by the local utility or energy efficiency provider in lieu of a portion of the MassSave incentive for the qualifying measure. Pre-negotiated	

					Funds may be used for: HVAC replacements or improvements Windows, insulation, and other building improvements Lighting Energy control systems Chillers and Boilers Hot water heaters Photovoltaic panels"	their facility. Scheduled interest payments on the loan will be pre-paid by the local utility or energy efficiency provider in lieu of a portion of the incentive or rebate. Loans are available up to 7 years, contingent on the amount of the quantifying incentive. Maximum loan amounts are determined by the project installed cost as well as your ability to pay back the loan. Financing is subject to approval by the participating lender, and improvements require pre-approval from your utility or energy efficiency provider. Real money that flows directly to your bottom line Interest Free loans available from $5,000 to $500,000 Terms up to seven years The energy	rate of prime plus 100 basis points with a 6.25% floor. Financing subject to third party approval. Additional Terms and Conditions may apply. Must use a participating lender from approved list Improvements require pre-approval from your utility or energy efficiency provider and must comply with program terms & conditions. View approved list of Lending Institutions"

						efficiency measure may qualify for additional incentives Benefits of energy efficiency improvements Better lighting conditions Increased comfort Improved work environment Lower fuel cost A pathway to corporate sustainability initiatives Monetary savings"		
Better Buildings Residential Network Financing & Revenue Peer Exchange Call Series: Effective Loan Program Design and Integration with Contractors	http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCEwAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf	"Jeremy Epstein, Senior Associate at Harcourt Brown & Carey Krajsa, CEO at AFC First (Residential Network Member)"	July, 2014		"The Following Is Not Deep Contractor Engagement: Delivering Group Presentations To Contractors Providing Energy Loan Program Literature Creating Interest Rate Calculators Deep Contractor Engagement Is Developing An Intimate Understanding and Tie Into Individual Contractor Processes Programs Are Run In The Field - Be There All The Time Quality Over Quantity, (you need fewer than you think)	"Believe it or not, it's not about making loans! Energy Loans Are Tools That Are Able To Provide Support To An Energy Efficiency Program. No Different Than An IR Camera. The Objective Is To Install Measures (Solutions) Not Make Loans. Loans are another tool you give to your contractor Some thoughts on sales No One Really Wants A Loan, So Marketing &	" Learn From Verizon, Toyota, ADT, Pest Control, Landscaping & Everybody Else … Monthly Payment NOT Interest Rate or Total Cost Standardize bids for the contractors in your program! Solutions/Services To Be Provided (itemized if possible) Total Price Due Upon Completion (payment due if not financed) Monthly Price Option (monthly	"Typical "urgent" HVAC or home repair installations ($3,000 to $15,000) are the Customer's financing "twilight zone" - too big for a credit card, too small for a home equity loan. • The vast majority of energy efficiency improvements • Customer doesn't want a lien on their home • Time sensitive – Customer needs

					• A contractor may be great technically, but if they don't have the financial stability to stand behind their work or warranty they can damage the program. • A successful program recruits and trains contractors on how to better utilize special financing and monthly payment plans to increase both their closing rates and market penetration for more energy efficient home improvements. • Despite our common dreams Energy Efficiency is still something that is "sold" and not "bought" Program delivery tool: Accept Applications Online via program website • Through Integrated App on Contractors Website • Call Center and Toll Free Numbers • "Your Money and Energy Saving Investment is just $58 a month!""	Advertising Loan Programs Directly To Customers Yields Little Results. Answer/Solve The Following For Customers With Outreach: I Want To Be Warm I Don't Want A High Gas Bill I Want A New Furnace (and I want it today) So don't train your contractors to sell loans. Equip them to sell solutions. Sales Training Basics •Lender and Program Overview •Financing 101 – Why it works •Contractor benefits •How to present to homeowner •Program details and process •Sales tools •FAQ"	payment if using loan program) How can your program equip contractors to provide the above? Recruiting contractors: • Partner with contractor trade groups • Program wide contractor intro breakfasts • Use the power of your program PR • Contractors will promote the program if they can see that it will help them increase their sales • If it is too bureaucratic they won't promote it • Contractor qualification standards should align with national standards and others (WHEEL, BPI) The Four Secrets of Success for Contractors • Don't make	work done ASAP • Contractor-Driven • "Come-on" or "Teaser" (0% for 6 months type) Financing is not the answer for a major capital purchase and can hurt contactor credibility • Borrower typically wants longer term or lower rate than he can get from bank • Solution: Unsecured point of purchase loan programs with (lower rates based on simple product qualification – ENERGY STAR) "Whole house" improvements are larger projects which generally require financing • More project driven, less time sensitive • Contractor is the expert • More customer thought, engagement and

							assumptions as to who will finance • Don’t make the customer ask the embarrassing question “Do you have financing?” • Put an estimated monthly payment option next to your price on every proposal • Give your customers all the ways they can pay you (cash, credit cards, EnergyLoan Monthly Payment) - let them choose which option they prefer."	foresight • Borrower may not have adequate home equity for an loan • Solution: “Home Performance with ENERGY STAR” model with Energy Audit, recommendations and lower rates than ”Reactive” financing Energy Efficiency lending programs are competing against credit cards. • Most Customers (and Contractors) will follow the path of least resistance even if it is more costly • Accomplish program goal (helping Customers install energy efficiency improvements) without overburdening contractors or Customers with complexity"
	http://api.ning.com/files/cwh76f0JjblRYpNgg6yj9oaKx*-6bdFxcDMKtKeNCE	"Jeremy Epstein, Senior Associate	July, 2014		"Lessons learned from AFC First: Choose contractors that are financially stable and have both sales and technical staff. bureaucracy in your program		"Discussion: Overcoming challenges to contractor	"Tips for Contractor training Teach the basics:

	wAUgjYLwddHLeaC5XTDzqV3hKlynl8Yvr9iVNOEg6OUP98C*JFmxgT/072414_LoanDesign_CallSummary_Final.pdf	at Harcourt Brown & Carey Krajsa, CEO at AFC First (Residential Network Member)"			provides one-on-one engagement opportunities as much as possible. AFC First uses on-demand videos to train contractors to promote energy efficiency retrofit loan programs. The company is creating mobile and web-based tools for its contractors. AFC First provides an electronic app for the contractor to link to the loan program through their own site rather than on a general site where they are listed among competitors. Know the competition and your audience. The competition: Approve people for loans quickly; credit card competitors approve borrowers instantly. Credit card financing also offers higher interest rates, but might delay interest rates for several years making the loan more attractive to borrowers. The audience: Train contractors to communicate in terms of low monthly payments. Even when interest rates are competitive, people tend to understand the concept of monthly payments better. The average Customer has $5-10K in discretionary savings at any one time and the average cost of an energy efficiency upgrade is $5-10K Therefore, you are asking them to spend all of their available money; it's a big ask so communication is key. There is a continuum of types of contractors On one end there are the "true believers" who do a small number (e.g., 2) of jobs a year, but do them really well; they will drive customer satisfaction, but not volume On the other end there are the "window guys" who are all about quantity over quality and give the market a bad name The sweet spot to target is in the middle – those stable companies who have sales staff separate from instillation staff and who do	integration Design the loan pre-approval process to be as fast and convenient as possible. Approve a borrower's credit first. This step can provide enough confidence for the contractor to move forward with their work. Provide a means for contractors to track project approval status, such as access to the online system. Limit paperwork and bureaucracy as much as possible. Provide on-going contractor support. Offer one-on-one sales training. Assist with materials production and standardization. Meet contractors where loan sales happen: in the field. While the business owner may understand the importance of	equip contractors to talk financing on a basic level, and connect them to the program's lender who can answer questions the contractor cannot. Emphasize effective messaging: People want to solve issues of comfort, health, safety, and/or lower their carbon footprint. They don't want energy efficiency, and no one wants debt. Communicating cost: Emphasize the importance of communicating service prices as low monthly payments rather than the total cost of the loan to the borrower. Example: It will cost $200/ month to replace a furnace; versus it will be an $8,000 loan. A slight shift in perspective can make all the difference. Work with

					relatively high volumes of work relatively well; these are the hardest to please – offer at least one as a recruitment tool"		the loan program, the contractors in the field are responsible for promoting financing options to customers. ▯ Conduct targeted outreach after the busy season, such as in late summer and the fall. ▯ Connect financing to their business success: financed jobs are, on average, larger than cash jobs."	contractors to standardize bids. ▯ Train contractors to always offer payment choices; never assume a customer is not interested in financing. ▯ Offer a comparison between your program and typical credit card financing."
EnergySmart - Your Efficiency Solutions **Boulder County and City of Denver Loan program**	http://www.energysmartyes.com/				"Elevation Credit Union: https://www.elevationscu.com/energyloans https://www.youtube.com/watch?v=xzkW_wpstJk For businesses: EnergySmart and Elevations Credit Union are working together to offer Elevations Energy Loans to businesses and homes. Energy Loans can help you achieve a more efficient, comfortable and affordable building. Energy Loans can be used for a wide range of energy efficiency and renewable energy upgrades including insulation, air sealing, heating, cooling, water	"EnergySmart was initially funded by a $12.5 million, 3-year grant from the U.S. Department of Energy's BetterBuildings Program. The grant goals of at least 10,000 homes and 3,000 businesses served by the end of 2013 were successfully achieved. Of the original grant funds, $7.1 million continues to be held in a loan-loss reserve supporting $35 million in financing for home and business	"Make the financing process as convenient as possible to enable your contractors to sell more services. ▯ Maintain a high level of engagement with contractors, and train them to be effective in communicating the loan program as a financing option to clients. ▯ Engaging a smaller number of contractors with an intimate understanding of	"Loan details: Home Energy Loan rates starting as low as 2.75% APR. Fixed rates starting as low as 2.75% APR*. 36, 60, 84 or 120 month terms. Minimum loan of $500 Property must be located in Boulder County or Denver County, Colorado. Before a loan can be issued, an Energy Advisor will work with you to ensure your project

					heating, windows and solar PV. Interest rates start as low as 3.75% for business energy loans.* Loans can be paid in part or in full with zero prepayment penalty. Energy Loans can be combined with rebates to fully fund your business upgrades. This exciting financing is available to businesses and commercial property owners in all Boulder County communities for qualified energy efficiency and renewable energy projects in existing buildings. Free EnergySmart advising is available for borrowers. LEARN MORE The Elevations Energy Loans are also available to residents in all Boulder County communities and businesses and residents in Denver. *Potential borrowers must have been in business for at least two years with profitable operations, positive net cash flow and no previous foreclosures."	energy improvements. EnergySmart will continue with local funding to expand services beyond energy efficiency to also assist residents and businesses with water conservation, recycling and composting Over $3million out the door since August 2012 Avg Loan size $9,500 Dedicated Contractor Manager Rebates and Financing bundled together Buy in from Xcel Energy and co-promotion Emphasis on monthly payments Emphasis on selling solutions, not debt Direct advertising helpful at the beginning to create brand awareness- but impact difficult to measure For residents: Interest rates start	the loan program is better for a program than engaging a large number of contractors with a shallow understanding. Consider hiring a contractor manager for your program to organize trainings and address questions and concerns. Tight management of contractors has an impact on loan program implementation and sales. Choose a low-risk capital provider, such as the PowerSaver program. Benefits: Make home energy improvements affordable. Save money by reducing your utility bills. Improve the comfort of your home. Save time by working with an	meets loan eligibility criteria and any available rebates $25 processing fee will be applied and all borrowers will be required to become members of Elevations Credit Union."

						as low as 2.75%. Loans can be paid in part or in full with zero prepayment penalties. Energy Loans can be combined with rebates to fully fund your home upgrades"	energy advisor to prioritize projects. You may also qualify for local rebates to reduce your costs even further."	
Pennsylvania's Keystone HELP (Home Energy Loan Program)	http://www.keystonehelp.com/				"Pennsylvania's Keystone HELP (Home Energy Loan Program) • Supported by PA Treasury, DEP • Over 11,000 loans, $100 Million in financing • 1% annualized charge off (1/3 less than typical Customer loans) • Single Measure and Whole House – the deeper the retrofit, the lower the rate • Enhanced with ARRA funds in Philadelphia market • Secured Loans to 120% LTV via Power Save"	"For immediate release July 17, 2013 Keystone HELP Partners Win Energy Financing Award Home energy program gains national recognition for third time this year Harrisburg – The Pennsylvania Keystone Home Energy Loan Program (HELP) has figured prominently in another national energy award, as the Council of Development Finance Agencies (CDFA) today named Bostonian Partners as the winner of the 2013 CDFA Excellence in Energy Finance	"Earlier this year, working with Bostonian, the Pennsylvania Treasury sold several thousand loans made through Keystone HELP. The innovative sale, one of the first of its kind in the country, marked an important milestone in national efforts to develop a secondary market for such loans. "We are honored to be recognized by CDFA on behalf of Treasury and its team of professionals for this transaction, which we believe will be the start of a larger secondary market initiative in Customer energy loans across the country," remarked Thomas F. Dooney, Managing Director of Bostonian Partners. "The Keystone HELP program fundamentals and portfolio loan quality greatly contributed to the success of this inaugural secondary market transaction." Through Keystone HELP, Treasury makes low-interest loans available for high-efficiency furnace or boiler replacements, geothermal heating and cooling units, insulation installations, door and window replacements, and other measures to help Pennsylvanians conserve energy while saving on their	

						Award. Bostonian Partners won for their work on a secondary market sale of the Keystone HELP portfolio. It is the third time this year that Keystone HELP has either won or been associated with a national energy award. In May, State and Local Energy Report magazine recognized Keystone HELP as the winner of its fifth annual Single Family Residential Energy Efficiency Award. In June, Keystone HELP won the Alliance to Save Energy's 2013 Andromeda Star of Energy Efficiency award."	residential energy bills Marketing tools for contractors: Susan Moring (smoring@afcfirst.com AFC First Monthly Payment Labels Use these labels as a sales tool for customers. You can write in the estimated monthly payment for a customer, and stick the label right on your job proposal when you hand it to them. Designed to be printed on Avery 5160 label sheets on your color copier."	
ACEEE Paper: WHAT HAVE WE LEARNED FROM ENERGY EFFICIENCY FINANCING PROGRAMS?	http://pacenow.org/wp-content/uploads/2012/08/ACEEE-Sep-2011-paper.pdf	Sara Hayes, Steven Nadel, Chris Granda, and Kathryn Hottel	09/01/11		"Based on our research we were able to make some general observations. Key findings include: penetrating the market of potential customers; Some residential programs have high rates of application decline; Residential loan	"Programs must be “sold” to borrowers—Some programs with lower than market interest rates reported low numbers of project applications. Customers don't seem to take advantage of the	"Marketing—There are a number of programs that offer zero or below market interest rates; however, the great financial terms of the program alone are not enough to	"In addition to a simple and straightforward application process, program administrative requirements should minimize the amount of time and effort a program participant must

					program participants tend to be "reactive;" Project bottlenecks sometimes occur due to burdensome and inflexible program requirements; Minimum program size can attract additional lenders; Good loan terms don't assure the success of a program; The housing market crash has tightened the lending market; Some programs with interest rate buy-down have found the costs to be high; and There is a lack of uniform criteria for evaluating credit of small businesses and institutions. In order to maximize energy savings we make several recommendations for achieving "deep retrofits" including: Require whole house energy audit to educate Customers about all cost-effective options; Package loan programs with utility incentives and rebates; Require additional complementary measures to reach	opportunities provided by a loan program simply because it's a "good deal." The reasons behind Customer behavior are beyond the scope of this survey; however, program administrators have observed that marketing makes a significant positive difference in the number of applications received. Multiple respondents indicated that packaging programs for ease of use by Customers is also a very important factor affecting whether the program will be used by a wide pool of borrowers. In addition to marketing and packaging, respondents indicated that one-on-one counseling on a project-basis is helpful Tier benefits—In order to achieve deep retrofits, programs can be	"sell" it. Respondents indicated that investment in ongoing marketing efforts throughout the life of a program can make a significant difference in program participation. Marketing can raise public awareness of the opportunity provided by the financing mechanism and legitimize the program in the eyes of the target audience. In Oregon the CEW program has included a significant marketing effort. Marketing efforts have included utility mailers, targeted e-mails, radio, and print ads. The CEW effort led with messages related to comfort (such as, "Cold in the winter, hot in the summer? We can help!") and economics (such	expend. For example, some programs approve loans almost instantly while a contractor is still in the home. A program can provide all necessary assistance that a participant might need, a "one-stop shop" that assists participants with all aspects of the program from application through home audit, review of proposed measures, contractor selection, and evaluation of savings. This is the approach of the Oregon Clean Energy Works program, which exceeded its participation goals in the first phase of the program. A major aim of CEW was to streamline the entire home upgrade process from energy assessment through financing

					beyond the "reactive" market; Tier program benefits (such as loan terms) to incentivize greater energy savings; and Train participating contractors to ensure the credibility of the program and the achievement of energy savings."	designed so that benefits to participants increase according to the level of energy savings a project achieves. One such method is to offer lower interest rates for projects that achieve deeper energy savings. In the MHELP program, participants receive a 9.99% interest rate for replacement of equipment; however, participants can qualify for a 6.99% interest rate if they include upgrades to insulation and duct sealing as part of the project. In the Pennsylvania HELP program, interest rates are significantly lower (2.99% versus 7.99%) if air sealing and insulation are included as part of the project."	as "lower your home energy use with no upfront costs"). Homes are also recruited through social marketing targeted to neighborhoods through open houses, door hangers, and information tables at local events. A program representative indicated that these marketing efforts have been crucial to achieving participation goals and maintaining public interest in the program. A better use of the limited resources of efficiency loan financing programs is to target potential participants who don't already have opportunities for achieving the energy savings offered by the efficiency financing program. This approach can maximize a	and installation. According to a program administrator, CEW met this goal by offering a fully guided, bundled service. Upfront costs were eliminated and confusion with contractors was greatly reduced. Participants could apply online and received intensive hand-holding from "Energy Advocates" with credible technical expertise. CEW placed a strong focus on being Customer friendly, providing excellent service, and using the highest quality vetted contractors Methods by which a program might be structured to target a specific group could include issuing loan guarantees for the target group to lower a

							program's limited resources and impact. Potential target participants may include low-income individuals, individuals with marginal credit ratings, and small to mid-sized businesses."	private lender's risk or for the organization administering the program to function as a lender. The Efficiency Vermont Agricultural Services (VT Ag) program guarantees the loans made to farmers, which also results in a 100% application approval rate. In some cases utilities act as lenders. When a utility is the lender it can base application approval on whether the customer is paying the utility bill as opposed to a credit review. This can result in a significantly higher approval rate for program applicants than more traditional methods. The Kansas How$mart program is an example of a residential

								program where the approval rate approaches 100% because approval is based on a customer's good standing with the utility. The Efficiency Vermont Lighting Plus Program (VT Light) was designed for a very specific target audience and was retired after three years due to market saturation."
SMUD: Sacramento Municipal Utility District	http://www.smud.org/en/rebates/Pages/index.aspx				Tier benefits—In order to achieve deep retrofits, programs can be designed so that benefits to participants increase according to the level of energy savings a project achieves. One such method is to offer lower interest rates for projects that achieve deeper energy savings. In the MHELP program, participants receive a 9.99% interest rate for replacement of equipment; however, participants can qualify for a 6.99% interest rate if they include upgrades to insulation and duct sealing as part of the project. In the Pennsylvania HELP program, interest rates are significantly lower (2.99% versus 7.99%) if air sealing and insulation are included as part of the project.			
Midwest Energy How$mart	"http://www.mwenergy.com/howsmart.aspx http://ww2.wapa.gov/sites/Western/es/pubs/esb/Documents/July2011/jul111.htm"		July, 2011		"Now you can make efficiency improvements and reduce your Midwest Energy bill at the same time, often without an up-front capital investment. You don't even need to own the property! How$mart® provides money for energy efficiency improvements such as insulation, air sealing and new heating and cooling systems. Participating	"The need to help this particular group of customers led Midwest Energy to create How$mart. In 2006, natural gas prices spiked, and threatened to rise more over the winter. The city of Hays, which receives a franchise fee from Midwest Energy, offered the	"Midwest Energy launched How$mart with utility capital, but takes advantage of low-interest loan funding when available to save customers money and keep program costs down. The co-op was the first utility to partner with Efficiency Kansas, a program the Kansas Energy Office created with Recovery funding to further Midwest Energy's How$mart program and bring its benefits to parts of the state not served by Midwest Energy. The timeframe on the investment is generally 15 years for residential	

					customers repay the funds through energy savings on their monthly Midwest Energy bills. HowSmart Logo How$mart® program features: No up-front capital is required for qualifying investments. (Customers have the option of "buying-down" the cost of non-economic improvements when the projected savings will not cover the entire cost.) Monthly How$mart® surcharge covers the cost of qualifying improvements. The surcharge is always less than the projected savings. The How$mart® surcharge is tied to the location. If you move or sell the property, the next customer pays the surcharge. (Full disclosure to subsequent customers is required.) Participating customers must start with an energy audit to determine potential savings. Midwest Energy will develop a conservation plan with recommended improvements. Customers may choose	excess fees resulting from higher fuel prices to help offset utility bills for low-income customers in Hays. The only catch: the customer had to get a free energy audit from Midwest Energy. As so often is the case, however, those audits didn't translate into the necessary improvements, Volker recalled. "We kept going back to the same places and asking why the tenants didn't make the improvements," he said. "The answers were always the same: they didn't have the money, or the property wasn't theirs to improve." The co-op found the answer in Pay as You Save, or PAYS, a program developed in Vermont in the late '90s. The model essentially offers the mass market the same kind of	customers and 10 years for non-residential customers. Midwest Energy has expanded the payback time frame for geothermal heat pump systems for residential customers. Although How$mart does not cover residential lighting upgrades, commercial customers can now get loans for efficient lighting. Another change in the program had to do with transferring the surcharge to a new customer. Participants must notify tenants or home buyers when the property changes hands that the new occupant is responsible for the How$mart surcharge on the utility bill. "Originally, we just put that requirement in the program contract, but we found that the information was not being shared," said Volker. How$mart participants now file a lien on their properties, so that an explanation of the surcharge shows up in the title search. "It's an administrative headache," Volker admitted, "but it is absolutely worth it." Midwest Energy has shown that going the extra mile for customers is just the smart way to do business, and industry peers agree. The Association of Energy Services Professionals (AESP) named How$mart the 2010 Outstanding Achievement in Energy Program Design or Implementation at its national conference in January."

					the contractor to complete the work. (Contractors must sign a Contractor Master Agreement, and tenants must have the written consent of their landlord.)"	energy services that are usually available only to large commercial customers. PAYS had never been fully implemented, so Midwest Energy consulted some of the original program developers. "How$mart is the first program in the country to comprehensively apply the PAYS model voluntarily," observed Volker. "We are charting new territory.""		
Illinois Energy Efficiency Loan Program	http://www.ilenergyloan.com/				"Make sure your loan program is on the SBA.gov website for EE loans for small businesses. Adds credibility MF: • 5.99% or less - Unsecured, Fixed Rate Financing • Loans up to $150,000 • 100% Financing Available • Up to 10 Years to Repay • Work must be done by an Approved Contractor"		"Residential programs have whole house, refrigerator, and HVAC only financing Small business: • Special 5.99% True Fixed Rate Unsecured financing • Loans from $500 to $20,000 • 100% Financing Available • Up to 10 Years to Repay – no prepayment penalty • No Fees to Customer or Contractor • Work must be done by an Approved Contractor"	
Third-Party Financing Was Solar's Catalyst. Can Energy Efficiency Find the Same Model?	http://www.greentechmedia.com/articles/read/the-power-purchase-agreement-broke-open-solar.-can-these-models-do-	Stephen Lacey	07/21/14		"In an update to a survey from last year, Noesis Energy released its latest findings about what is holding back efficiency project development in the U.S. Unsurprisingly,	"Nearly half of the energy managers surveyed said they never include third-party financing in their proposals. Three-quarters of	A lack of education in the market, an overly complicated closing process and distrust of the claimed savings	"However, based on current activity in the industry, some experts believe those numbers are ready to

	the-same				one of the chief factors is a lack of financing options -- or a lack of knowledge about those options. Among both internal energy managers and outside developers, Noesis found that two-thirds of all projects fail because of a lack of funds. That's a third-party financing problem, argues Noesis."	independent developers said they only rarely include those options or never include them at all. Why is that the case? Energy managers funding projects internally on a balance sheet may not need them. But developers pitching projects to customers simply aren't educated about what's out there, as the results shown in the chart below indicate."	are the three big obstacles preventing a surge in deal flow. Harmon said that lenders are actually seeking out Noesis for funding opportunities, but project developers aren't comfortable describing new financing arrangements to customers.	move. New funds for efficiency worth hundreds of millions of dollars are drawing in large investors; the state-level policy environment for efficiency is helping a handful of third-party financing models creep across the country; new underwriting standards in the works may help streamline financing; and deal volume is getting big enough to finally enable the securitization of projects. "We seem to be making progress," said Brad Copithorne, a financial policy director at the Environmental Defense Fund. "I'm cautiously optimistic." Project-level structures include equipment leases, shared

								savings, MESAs and the metered energy efficiency transaction structure (MEETS). These structures build on the energy savings performance contracts traditionally delivered by energy service companies in the public sector. But they are only now making an impact in the private sector as companies develop better software to prove savings and attract more banks willing to back the projects"
This May Be the Most Innovative Energy Efficiency Financing Tool Yet	http://www.greentechmedia.com/articles/read/This-May-Be-the-Most-Innovative-Energy-Efficiency-Financing-Tool-Yetkj	Stephen Lacey	06/19/13		"Meet the MEETS, also known as the metered energy efficiency transaction structure. Think of it like a power purchase agreement for energy efficiency. Harmon says the structure breaks down nearly every conceivable conflict between landlords, tenants, investors and utilities that stand in the way of	"Let's say a utility customer wants to invest in efficiency. A MEETS starts with a simple meter installed on that customer's building by EnergyRM to measure energy use and normalize the data. That provides the baseline for energy consumption.	"The utility then charges the building owner for electricity based upon the baseline data, just as it normally would without the efficiency upgrade. (Again, the building owner is getting a monthly rental payment from the investor, rather	"It means the building owner -- who receives monthly rental payments from the investor, continues her same relationship with the utility and has a more valuable building -- theoretically has no disincentive to upgrade the

					deep efficiency retrofits."	Next, an investor is brought in to finance a project on the building. Much like a third-party solar lease, the investor "rents" the building for installation of energy-efficient equipment and compensates the owner with a monthly payment. Once that energy-efficient equipment is operating, EnergyRM is able to measure the baseline consumption data against the efficiency savings, thus establishing the "metered energy efficiency.""	than going through the utility.) The investor who owns the energy efficiency project gets paid a premium by the utility over a twenty-year contract for each kilowatt-hour of metered energy efficiency, or "negawatts," delivered. The utility can then turn around and sell those energy reductions into the capacity markets or energy markets and get compensated for not having to build a new power plant."	facility. It means the investor -- which has a stable twenty-year agreement with the utility based on performance -- has every incentive to maintain and deepen energy savings. And it means the utility -- which gets fully compensated for the electricity sold to the building owner and can treat efficiency like a power purchase agreement for any other g"
How to untangle yourself from clean energy finance jargon	http://www.greenbiz.com/blog/2014/06/24/how-untangle-yourself-clean-energy-finance-jargon	Rachel Neil	Published June 24, 2014		"Asset Class: A grouping of similar types of investments that behave similarly in the marketplace and are subject to the same laws and regulations. Broad examples of asset classes include: 1. Equities (also known as stocks) – assets that represent ownership of part of a company. 2. Bonds – assets that	"Energy Services Agreement (ESA): In an ESA, energy efficiency is treated as a service rather than a product. In this type of agreement, a project developer evaluates a building and executes energy efficiency upgrades. The customer pays for	"Green Bank: Green banks are generally defined as public or quasi-public financial institutions that use public funds to attract private investment to clean energy projects. Green bank activities can include offering financing	"MACRS: The Modified Accelerated Cost Recovery System (MACRS) is the primary tax depreciation system used by the IRS. Depreciation is an income tax deduction that taxpayers can use to recover the

					guarantee a fixed payment stream. Bonds are often further categorized based on structure or source of the payments. Examples of these subclasses include municipal, corporate and mortgage bonds."	this energy service over time at an agreed upon rate. One way to structure the contract is to have the customer pay per unit of energy saved, which means they only pay for the actual savings and do not bear the risk of an underperforming project. Renewable Electricity Production Tax Credit (PTC): The Renewable Electricity Production Tax Credit (PTC) is a per-kilowatt-hour tax credit for electricity generated from qualified renewable resources including, but not limited to, wind, geothermal and closed-loop biomass. It incentivizes renewable energy in a market dominated by fossil fuels. This tax credit is generally only available for the first 10 years of	guarantees, creating new financial products, and helping alleviate market barriers and inefficiencies. Green banks in Connecticut, New York and Hawaii have hired staff with extensive experience in both the private and public sectors. Each of these banks has the authority and capability to work closely with private sector entities to design effective clean energy financing solutions. Secondary Market: The market(s) where securities and other assets can be purchased from somebody other than the initial issuer of the asset. For example, when a bank sells the mortgages that it originated as mortgage-backed securities, they are selling into a	cost of certain types of property over time. MACRS specifies different cost recovery periods for different types of properties, usually based on the expected useful life of that property. However, MACRS allows for a relatively short five-year cost recovery period for solar photovoltaic assets despite the fact that solar systems often have a useful life of 25 years or more. This accelerated recovery period increases the attractiveness of solar investment. Securitization: The process of combining financial assets into a pool and then selling portions of that combined pool on the secondary market to institutional

						production. The PTC is not typically used for solar generation. Tax Equity Investment (Third Party Ownership): Investment in solar development by a third party private investor who utilizes federal tax benefits to offset taxes they would otherwise owe. In such an arrangement, a third party investor owns the solar panels and collects the tax benefits while leasing out the panels, or selling the power through a Solar Power Purchase Agreement. The two primary tax benefits for solar investment are the Solar Investment Tax Credit (ITC) and the MACRS. In practice, tax equity investments are generally attractive for profitable financial companies and for a few wealthy individuals with extensive real	secondary market. Secondary markets are particularly important to clean energy finance because the payment obligations that are created through clean energy finance mechanisms like PACE and OBR (see definitions above) can be turned into an asset and sold on secondary markets. The ability to sell these assets on the secondary market is very attractive to investors and helps drive down the cost of capital for clean energy projects. Yield Co: A yield co is a publicly traded company that is created for the purpose of owning assets that produce cash flow. Some yield cos specifically focus on renewable energy assets. The income from these	investors, such as pension funds. The resulting asset (i.e. mortgage-backed securities) generally requires a credit rating from a rating agency assessing the risk associated with it. By allowing the original investor in a project to sell the resulting asset on the secondary market, securitization increases initial lenders' willingness to provide low-cost capital. This is particularly true if the resulting securities receive a high credit rating because the asset will be worth more on the secondary market. Solar Investment Tax Credit (ITC): The Solar Investment Tax Credit (ITC) is a 30 percent tax credit for the cost of

						estate holdings."	assets is then generally distributed to the shareholders as dividends. While yield cos are structured as a normal taxpaying corporations, yield cos that own renewable resources can use the tax benefits associated with clean energy investment to avoid paying taxes."	solar systems installed on residential and commercial properties."
FINANCE PROGRAM EVALUATION FOR THE CPUC	EM&V Plan: http://www.energydataweb.com/cpuc/#	"Opinion Dynamics - Dan Buch Dunsky Energy Consulting "	February 27, 2014		"Questions seeking to answer with SWF in programs: How has the program impacted the supply of financing available for energy efficiency improvements? How has the program affected the demand for energy efficiency?"			
Getting the Biggest Bang for your Buck: Exploring the Rationales and Design Options for Energy Efficiency Financing Programs		Mark Zimring, Merrian Borgeson, Annika Todd, Charles Goldman for LBL and the DOE	December, 2013		"1. What is the rationale for offering energy efficiency financing? (i.e. What problem(s) are you solving?) 2. Does financing address key barriers better or at a lower cost than other options for intervention? (i.e. Is financing the best option for solving this problem?) 3. What specific financing program design features best drive demand for energy efficiency? (i.e. How do you design	"The high up-front cost of some energy efficiency measures is one of several barriers to broader Customer adoption of these improvements. Secondary barriers include: renter/owner split incentives, long project paybacks, and balance sheet treatment that lead to Customer under-investment in EE in	"While private monies typically seek purely financial return, tax payer and utility bill payer funds target a range of system and public benefits (e.g., cost effective energy savings, reduction of environmental impacts of electricity production, diversification of	"In this context, tax payer and utility bill payer-supported financing programs could be used as temporary interventions to deliver more attractive and accessible financial products than are available in private markets today, while developing the

					the financing program for greatest impact?) As some policymakers and program administrators consider shifting the traditional mix of program offerings to rely more heavily on financing, it is important to undertake a more rigorous assessment of the ability of financing to overcome barriers to Customer adoption of property improvements that deliver cost effective incremental energy savings – and be able to compare the impacts of investments in financing programs (e.g., cost and level of energy savings, rate impacts) to other programmatic strategies. Robust assessments of financing's role in reducing energy use in buildings will help policymakers and program administrators make better choices about how to allocate limited tax payer and utility bill payer resources. Several EE financing programs have recently completed or are pursuing a secondary markets transaction (e.g.,	certain market segments. PACE and OBF satisfy some of those barriers. These products' novel security may offer value to lenders and investors that can be leveraged to expand Customer access to attractive capital beyond that which private markets can deliver through traditional financial product. But, it is still a "maybe" as to overcoming those barriers. *The value of PACE and OBF for overcoming the "split incentives" barrier remains uncertain and is based on the assumption that tenants will value the installed improvements and be willing to pay for them through a charge on their utility bill or an increase in their rent. **The value of	resource mix to reduce various risks). This more holistic view may lead to a different assessment of risk and return based on broader programmatic goals, and may warrant long-term provision of tax payer or bill payer direct loan capital, or credit enhancement to private markets, to deliver attractive capital to overcome barriers to adoption for hard to reach market segments Lower Customer defaults should yield some combination of reduced interest rates, longer loan lengths, and less restrictive underwriting criteria (so that more Customers qualify for financing). Lower interest rates and longer loan lengths would enhance project	requisite data on both project energy savings and the impact of that energy savings on financing product performance. This data could be used to substantiate to financial institutions the benefits of offering financing for efficiency improvements and enable a transition to fully private financing markets in the future that account for these attributes. It is important to note that EE financing programs have been operating for several decades and have not so far been structured or documented in a way that has led private capital providers to alter their risk assessments of this market (and, in some cases, program volumes have not been

					Pennsylvania's Keystone HELP program, New York's Green Jobs-Green New York program and Oregon's Clean Energy Works Oregon on-bill program). Residential home performance energy efficiency programs often offer rebates of 25 to 50 percent, yielding between two and four dollars of total EE investment for each rebate dollar expended. While rebates may deliver limited short-term leverage, utilized as part of market transformation strategies to build customer demand and reduce product costs, these tools may deliver very large long-term leverage. Many American Recovery and Reinvestment Act (ARRA)-funded EE financing programs targeted residential EE improvements and utilized five to 10 percent loan loss reserves (LLRs). LLRs are a form of credit enhancement that sets aside a limited pool of funds from which lenders or investors can recover a portion of their losses in the event of borrower defaults.	"transferability" for overcoming the "long project payback" barrier remains uncertain and is based on the assumption that subsequent tenants/owners will value the improvements for which they are being asked to assume the obligation to make debt payments. For many Customers and Customer classes, lack of demand for EE – not access to attractive capital to pay for these upgrades – may be the primary challenge. If program administrators reduce support for other program strategies in favor of financing, and Customer demand does not materialize, they risk missing their energy savings targets or other goals. Financing can (and often should) be combined with	cash flows by reducing a Customer's regular interest and principal payments and might support broader Customer EE adoption and deeper per-project energy savings. Today, however, financial institutions lack access to adequate data to assess and price both energy savings and the improvement in borrower financing repayment trends that these savings may deliver. From a Customer's perspective, rebates improve the economics of projects and have been demonstrated to drive EE adoption; financing, even with no interest, simply delays payment. From a program administrator's perspective,	large enough to warrant their attention) Tax payer and utility bill payer-supported financing programs could be used as a temporary or long-term intervention to standardize financial product terms across financial institution partners and/or to aggregate these financial products and facilitate secondary markets transactions. This access to secondary markets has the potential to deliver large pools of institutional investor capital for energy efficiency financing. We also acknowledge that "temporal variability" (e.g.,

					The Customer convenience of repaying financing on an existing tax or utility bill may reduce Customer debt aversion, facilitate the contractor sales process, or otherwise increase the uptake of EE improvements relative to offering financial products that are repaid on a separate bill. These benefits may be particularly effective with on-utility bill repayment, where a single bill might show the energy savings for which a Customer is making debt service payments and those payments."	other strategies (labeling, rebates, contractor training, etc.), but the right mix of strategies is something that needs to be carefully considered and tested. Ultimately, the “Customer demand” issue is central to any strategy’s potential to reach EE policy goals. A range of non-financing program strategies and other activities (e.g., rebates, technical assistance, labeling, codes & standards, workforce training, etc.) target other barriers to efficiency adoption such as lack of Customer understanding of EE benefits, uncertainty about energy improvement performance, or an inadequate supply of qualified EE service providers"	financing, if it leads to adequate EE adoption rates, may reduce program costs (and rate impacts) compared to rebate programs. Measurement questions: Does the availability of EE-specific financing drive these Customers to adopt energy efficiency? Relatively few participants utilize program-sponsored financing when they are required to choose between financing and rebates (Nadel 1990, Stern et al 1985). If program administrators shift away from rebates towards financing, what impact will this have on overall market penetration and participation rates? For those households and businesses that do	the value of supporting EE financing initiatives and the mix of financing products and programs one might choose to offer) may vary through time depending on evolving market conditions. For example, program-sponsored financing tools that rely on novel security (e.g., PACE, OBF) may be more effective during periods of weak real estate markets when households and businesses lack access to property-secured financing vehicles (e.g., mortgages, home equity lines of credit) that have traditionally supported much U.S. household and business borrowing for property improvements. Similarly, financing programs may be

							not have access to attractive financing tools, will they be more likely to participate in EE programs if financing is offered? Projects that deliver deep energy savings often have higher up-front costs. Attractive and accessible financing may be an important tool for driving those Customers that do adopt EE to make more comprehensive improvements; this hypothesis should be evaluated. Marketing note: The Customer convenience of repaying financing on an existing tax or utility bill may reduce Customer debt aversion, facilitate the contractor sales process, or otherwise increase the uptake of EE	more effective during periods when private sector interest rates are high; thus, low-cost programmatic financial products are relatively more attractive compared to a market environment of low private market interest rates Offering EE financing to Customers that lack access to other sources of capital to pay for these improvements may be more effective in driving Customer EE adoption than it is for the broader Customer base Customers that lack access to sources of capital may be "debt averse" and more concerned about the consequences if energy savings do not materialize

							improvements relative to offering financial products that are repaid on a separate bill. These benefits may be particularly effective with on-utility bill repayment, where a single bill might show the energy savings for which a Customer is making debt service payments and those payments Energy savings is often a sales “hook,” but many Customers decide to move forward with energy improvements to solve other household or business problems (e.g., comfort, aging or failed equipment) (Fuller et al 2010)."	and they are unable to make debt service payments compared to other Customers. Significant resources are often allocated to expanding Customer access to capital, but, in many cases, the average program participant would qualify for existing private financial products. Better understanding of the non-financing barriers to EE adoption amongst Customers that lack access to attractive private financial products may enable limited program resources to be allocated more effectively. If subsequent tenants & owners do not value the EE improvements, they may not accept the charge or may reduce the price they are

								willing to pay to purchase or occupy a property. This leads to uncertainty about whether transferability will increase Customer EE adoption. Substantial policymaker resources are often allocated to implementing transferable financial products despite the lack of evidence that Customers adopt EE or adopt deeper EE improvements when this feature is present."
Advertising watchdog tears up government's 'misleading' Green Deal ads	https://www.google.com/url?rct=j&sa=t&url=http://www.businessgreen.com/bg/analysis/2361950/advertising-watchdog-tears-up-governments-misleading-green-deal-ads&ct=ga&cd=CAEYASoTOTMxMjk2NzkzMTgxNDc5MTA0OTIaYWIzOTRjMjRhY2I5MDkxYjpjb206ZW46VVM&usg=	Jessica Shankleman	8/27/2014		"The British government has been banned from promising homeowners that they will make savings through its flagship Green Deal home energy efficiency programme, following a controversial ad campaign in national newspapers that contained a litany of "misleading" statements Following a complaint by Crystal Doors and	"DECC could not guarantee that Green Deal repayments would not exceed savings," said the ASA. "Saving calculations were based on what DECC would expect a typical household to save as a result of building improvements and the assumption that energy bills would rise in line with inflation. Because we considered the claims implied that savings were guaranteed, we concluded the ad was misleading." The ASA also criticized DECC for failing to mention that homeowners would have to pay for an assessment on their home to qualify for the Green Deal, and for		"The ads must not appear in its current form," said the ASA. "We told DECC to ensure they held sufficient evidence for claims made in marketing communications, including saving claims, their ads did not misleadingly imply savings

	AFQjCNHjnn44MbOMz5c5CY-J7eRxEPg4fQ				Windows, the ASA also found that DECC had misleadingly implied that the Green Deal guaranteed savings over the lifetime of the policy - the basis of the policy's so-called 'Golden Rule'. The Golden Rule promises that any expected financial savings must be equal to or greater than the cost of Green Deal loan repayments that are attached to the property's energy bill."	claiming that Green Deal assessors are "impartial", when they actually have a commercial interest in recommending energy savings measures to potential customers. Finally, the ASA said DECC had failed to back up claims that prices for properties taking part in the Green Deal had increased by 14 per cent, rising to 38 per cent in some areas."	were guaranteed and that ads did not misleadingly give the impression that Green Deal assessments were impartial or give the impression of being a Green Deal testimonial when they related to other schemes or work."
Clean Energy's Rising Star	http://news.medill.northwestern.edu/chicago/news.aspx?id=231527	AIMEE KEANE	AUG 21, 2014		"Chicago-born Claire Tramm has created an attractive energy finance model that is planning for the future. Tasked with analyzing carbon and energy efficiency cost curves, Tramm found what she called a "win-win" opportunity. "When you line everything up on the carbon cost curve, you find that some things don't actually net cost you anything to save carbon," she said."	What Tramm now sells is an agreement with a homeowner: Effortless Energy assumes the cost of an energy upgrade, whether it's a Nest thermostat, new boiler or both, and charges the homeowner for every "negawatt" or unit of energy saved within the contract period. She assumes the risk of energy savings materializing during that period. Contracts for homeowners run anywhere between 10 and 15 years,	With Tramm as energy director, the Chicago Infrastructure Trust took this micro financing model and executed it on a much larger scale. The trust, which was announced to great fanfare by Mayor Emanuel along with the help of former President Bill Clinton in 2012, is slowly gaining speed. It broke ground on the first municipal building energy retrofit in April and announced approval in June of a city pool retrofit project.

						and Tramm said her company is working on a one-year, scaled-down contract model to reach renters.	
How To Market Efficiency: What Clean Energy Can Learn From The Sara Lee Baking Company	http://thinkprogress.org/climate/2012/08/17/705421/how-to-market-efficiency-what-clean-energy-can-learn-from-the-sara-lee-baking-company/	"Adam James is a Special Assistant for Energy Policy at the Center for American Progress; Bracken Hendricks is a Senior Fellow at the Center for American Progress"	PR NEWS WIREAUGUST 17, 2012		The problem (along with the Sara Lee story), as it was explained by Richard Kaufmann, a senior adviser to Department of Energy Secretary Steven Chu, is that energy efficiency advocates haven't done enough to understand market segmentation. Sure, they understand market classification — residential single family, residential multi-family, commercial, industrial. But the range of motivating behaviors for the owners, building managers, and tenants who actually make the decisions on how and when to improve their properties within these real estate classifications has been left largely unaddressed.	"This makes a big difference when trying to match financing options for energy efficiency projects. If companies are serious about lowering customer acquisition costs, they need to learn their market segments — and learn them well. A make-it-easy client will be less interested in all the steps of the project, and so will be more likely to pay to have those things done for them. A do-it-yourself client will be inherently distrustful of financing options that cut them out of the loop. There are many other segments too. Conservative clients (not politically, but people who aren't early adopters)	"As clean energy providers learn to better match financing and service delivery to the real needs and motivations of their customers, a similar set of questions remain in meeting the needs of investors. While the total economic opportunity of building energy retrofits remains large, the investments themselves are quite small compared to traditional real estate projects. The potential yields of these investments are modest but very stable and, like a bond investment, an excellent hedge against inflation for institutional investors. However, entering this market today is complex and can seem risky, pushing some investors to seek higher rates of return for their capital and driving up interest rates to borrowers. Energy efficiency still has a clear path to the top. But no matter how good the investment, these smart, economically-productive energy upgrades will not sell themselves. The real task in front of the clean energy industry is to better understand the real estate market and what motivates owners and investors. Solving this challenge will start with finding what drive customer decisions, then using that market segmentation to get this product to scale. Regulatory solutions can help, and requirements to cut pollution and upgrade energy performance in buildings help focus

						need a big name before they get interested in signing up. Independent clients who want flexible contract terms — lease rather than buy, for example. Among commercial building owners, some want to be “green” to differentiate their property within the market and some are motivated only by the cost of capital for the loan; some owners will look deeper to go for every cost effective improvement that boosts the net operating income of the property; others will place pleasing their tenants above all other concerns and only move when an anchor tenant requests an energy upgrade; and another class of owners might only consider a whole-building retrofit when they refinance or make major changes to	owner’s attention. But until these Customer behavior questions are resolved by entrepreneurs and investors, the potential for energy efficiency will not be fully realized."

						the building."		
Ascentium Capital Joins Noesis Energy's Efficiency Project Financing Marketplace	http://www.sys-con.com/node/3167137	PR NEWSWIRE	SEPTEMBER 2, 2014 06:00 AM EDT		Noesis Energy, the fastest-growing financing marketplace for commercial energy efficiency projects, announced that Ascentium Capital has joined its syndicate of efficiency lenders that use Noesis to connect with more than 100 energy-efficiency companies that collectively propose over $1 billion in projects annually. Noesis is the world's leading lending marketplace that provides detailed energy savings and technical underwriting information to assist in project justification and financing worthiness	Unlike traditional lending, which typically only reviews a borrower's credit worthiness; Noesis performs a technical risk profile and ROI analysis, enabling lenders to consider the merits of the project. Lenders can then adjust underwriting to factor in the attractive cash-flow attributes of energy projects and offer the most competitive terms.	"With Ascentium Capital, Noesis concentrates its focus on the multi-billion dollar opportunity in energy-efficiency financing tied to projects that improve operating profits and property values of commercial buildings such as hotels, restaurants, corporate campuses, warehouses and other facilities. According to Navigant Research, building owners will spend $17 billion on efficiency investments in 2014, but despite the popularity of equipment financing, lending has yet to make significant in-roads into this market. Financing has been prevalent for traditional commercial equipment like computers and fleet vehicles, and with the help of Noesis and its marketplace, financing will be critical to unlocking billions of dollars of investment in energy-efficiency equipment and services such as lighting, air handling and building controls."	
Noesis.com Noesis Financing Services	https://www.noesisenergy.com/site/content/efficiency-finance				"What makes NFS unique? Noesis' financing offering is different from other equipment finance programs because Noesis' lenders can offer more competitive rates because they factor in the energy savings from the project – in addition to the credit of the borrower – when calculating the financing terms.	"Noesis Financing Services (NFS) is a full-service financing program for energy efficiency project developers (such as consultants, contractors, manufacturers and distributors) that provides the lowest rates on a wide range of EE	"How does Noesis get the best financing terms? The lending industry historically looked at the borrower's credit and, in asset-backed lending; the resale value of the equipment to price the risk	"What's Included in Noesis Financing Services? The following are available to all NFS Advantage and Advantage Plus partners. Competitive EE Project Financing – Range of EE

					Online EE Project Sales Tools – Unlimited access to Noesis' suite of web-based tools for identifying, evaluating and proposing efficiency projects, including: Savings Estimator – Get the building owner interested early-on through automated, one-page efficiency savings estimates Finance Estimator – Introduce up to 100% financing through instant cash flow analysis of the proposed efficiency investment Business Proposal Generator – Secure CFO approval through automated Efficiency Business Proposals for your project that summarize energy and financial savings forecasts Finance Finder – Find most leases through multiple, competitive bids from Noesis' syndicate of efficiency finance lenders"	financing vehicles, access to Noesis' team of project financing specialists and online EE projects sales tools. Working with NFS, project developers can win more deals – and win them faster – by offering 3rd party financing on every energy efficiency project proposal. There are two tiers of Noesis Financing Services: Advantage and Advantage Plus. NFS Advantage is designed for small to mid-sized companies looking to offer simple efficiency financing vehicles, access Noesis team of finance specialists and receive unlimited use of Noesis' easy-to-use, online sales tools for accelerating and improving their sales process. NFS Advantage Plus is designed for large energy efficiency	associated with a particular project and then determine the financing terms. This leads to, for example, two people with the same credit rating getting the same terms for$100K equipment purchase (assuming similar resale rates). What if one piece of equipment generates $50,000 in incremental annual cash flow and the other results in $5,000 in incremental cash flow? Are both equally as risky? What has not been done in the past – until Noesis – is factoring in the project economics into the pricing of risk. This lets the lender adjust their terms downward or upward, depending on the project savings. So, in the example above, the project with the $50,000 in savings should	financing vehicles sourced from Noesis' syndicate of efficiency lenders who offer the most competitive EE equipment financing terms because of both competitive bidding (multiple estimates per project) and the consideration of the forecast incremental cash flows from the new EE equipment when determining financing terms. Financing vehicles for NFS include: EE equipment leases (operating, capital and municipal) Financial agreements (e.g. bank loans) 3rd party specialized EE vehicles (solar PPA, PACE) C&I performance contracts

						companies looking for a full-service financing program with access to a range of simple to performance-based efficiency financing vehicles and unlimited use of Noesis' easy-to-use, online selling tools for accelerating and improving the sales process."	be less risky than the other and, as a result, would receive more favorable loan or lease terms. Second, Noesis also gets multiple bids for leases to ensure that the estimates are competitive, but also to advantage those lenders who are offering better terms because of the project economics. So, the better the projects, the better the terms."	(Efficiency Performance Lease, Shared Savings Agreements) – FOR ELIGIBLE ADVANTAGE PLUS PARTNERS ONLY"
Cadmus Energy Efficiency Financing Pilots - Focus Group and Stakeholder Interview Results			July 2013		"Findings across all groups: Know little about financing: not on radar screen, unfamiliar terms, uncertain how difficult to obtain an EE loan (MF primarily for last one) Timing of information important: want information early in decision making process Want flexible repayment: prefer longer term with smaller payments, want early pay-off options Interest rate key issue:	"Larger business conclusions: 1. Don't see OBR or transferability as benefits 2. Will likely require multiple communication approaches and interactions 3. Need to learn more, focus initial marketing on obvious benefits Small business conclusions: 1. found value in OBR and transferability 2. Need to learn more, focus initial marketing on obvious benefits Single Family Conclusions: 1. Have many questions regarding financing 2. Need to learn more, focus initial marketing on obvious benefits Multifamily Conclusions: 1. Need to learn more, focus initial marketing on obvious benefits		

					prefer fixed rates, use car and home loans as benchmarks"	2. Nonprofit sector will need additional help"		
California Joint Utilities Financing Research: Existing Programs Review CALMAC Study ID PGE0338.01		"Cadmus: Laura James Pat McGuckin Althea Koburger Carol Mulholland"	April 22, 2014		"Interest rates ranged from 0% to 9%. The most successful program, Manitoba Hydro's Power Smart, is in the middle of the pack at 4.8%. Market-based rates do not appear to be a deterrent to success. The maximum loan tenor (i.e., the duration of a loan) ranged from four years to 25. Most programs were in the 10 to 15 years range. Deeper retrofits tend to have longer payback periods, so longer tenors are often necessary in order to reduce the size of the monthly loan payments and allow for positive or neutral cash flow (i.e., the average energy savings exceed or are equal to the loan payments). Maximum loan amounts varied widely. On the residential side, the maximum varied from $2,500 (Windsor PAYS) to $200,000 (HERO PACE). Commercial maximum loan amounts ranged from $100,000 to $600,000, and two of the	"Commercial loan programs are not necessarily more complex than residential loan programs, but they are more diverse. Programs ranged from supporting multi-million dollar retrofits with complicated underwriting requirements to single-measure equipment upgrades underwritten based on the customer's utility bill payment history. For Midwest Energy's How$mart in particular, there are only slight variations between the residential and commercial programs. Loan loss reserves (LLRs) have been a popular tool to push financing markets to offer more options for energy efficiency retrofits, by reducing the risk to	Managers of nearly all programs believed that the contractors' role as a sales channel was critical to customer uptake. The Mass Save HEAT Loan was an exception. HEAT program staff reported that most leads come through their website or call center, and are then distributed to contractors for follow-up and fulfillment	"Credit enhancement is a key tool for initially attracting lender interest. Once lenders are engaged in a successful program, however, they may accept a reduction or elimination of the enhancement. CEWO has eliminated its LLR; MI HELP has increased its leverage over time; and HEECP reduced its loan guarantee from 50% to 35% while increasing participation. In SBEA's turn-key program, customers have to do "virtually nothing", an important feature for busy business owners. Manitoba Hydro, one of the longest running programs, feels it

					international programs – China and Hungary – had no maximums. On the residential side, larger maximum loan amounts correlated to larger average loan sizes."	lenders associated with learning a new and evolving market. LLRs may be achieving their goal. A prime example is Clean Energy Works Oregon (CEWO), which reached an agreement with its lenders to dissolve the LLR as of January 1, 2014. All lenders agreed to continue to offer special financing for program participants, with the same rates and tenors as when the LLR was in place. Tracking the financial offerings through this program over the next few years could provide insight into market transformation."		has been able to streamline the process to keep costs down and increase interest from customers and contractors. Manitoba Hydro and Windsor PAYS report that the required level of customer service is very high. Manitoba Hydro has reduced costs by streamlining its program, but customer service remains expensive. Programs have used different interest rates successfully. Keystone HELP and Michigan Saves HELP both found that very low interest rates were effective but unnecessary, and both decided that program funds were better spent on cash incentives. On the other hand, SBEA and HEAT have had remarkable

								success with 0% financing, in addition to generous rebates. SBEA nearly doubled program uptake by doubling the maximum loan tenor from 24 months to 48 in order to reduce monthly loan payment size. Many projects had previously not been able to meet the program's bill neutrality2 requirement. China found that the lender partner that marketed to the lender's existing customers fared much better than the lender partner that tried to draw in new business by promoting the loan guarantee."
Energy-Efficiency Financing Customer Research - Focus Group Findings		"Cadmus: Carol Mulhollan d Linda Dethman	June 2013	Medium to large Business	"During the discussion about loans and financing the majority of respondents reported that they: Have a limited	"In response to the proposed financing pilot discussions, most medium-to-large business respondents said	"Conclusions one through three is unique to the medium-to-large business sector, while conclusions	"4. Limited familiarity with energy-efficiency financing and its terminology will challenge the

		Allie Marshall Cynthia Kan"			awareness and knowledge of energy-efficiency financing. Want to learn about loan options as soon as possible in the decision-making process. Consider interest rates to be very important factor when considering a loan. Prefer a fixed interest rate. Use home mortgages and car loans (which are typically secured and have single digit rates) as benchmarks for interest rates. Value choice of repayment period. Prefer a longer period with smaller monthly payments. Want the option to pay off the loan early. Most medium-to-large focus group respondents also said they: Prefer to use internal business capital to fund energy saving capital improvements. Rarely use loans/financing for energy efficiency. May use credit cards, but most pay them off monthly. Are uncertain about how difficult it would be	they: Are uncertain they would trust contractors to represent loan opportunities. Are comfortable with and would prefer PG&E to reach out to them about loans. Are comfortable undergoing a traditional credit review. Are willing to accept modest fees and prefer fees to be rolled into the loan. Prefer a loan that is flexible and can cover improvements needed to help their business become more energy efficient. Found it appealing that loans that do not preclude them from PG&E rebates. Do not have a strong preference for on-bill repayment. Found the possibility of disconnection of utility service as a result of	four through six are applied to all sectors. 1. Two central features of the on-bill repayment pilot are 1) on-bill repayment and 2) transferability. The pilot is based, in-part, upon business owners identifying value in the opportunity to make loan payments on or as part of the utility bill and that the loan will stay with the meter if they sell the building or move, if renting. However, this study indicates that medium-to-large business decision-makers do not clearly see on-bill repayment or the transferable nature of the loan as benefits. To make the non-residential OBR pilot more appealing, the benefits of on-bill repayment and transferability will need to be clearly communicated to the target	success of the pilots. Outreach will be more effective if: Information is tailored to each customer sector and delivered through multiple channels. PG&E and sector-specific trusted sources are prominent. Messaging and specific communication approaches are tested with customers prior to launch. 5. Pilot sponsors will face many questions from customers about financing and loan options. Focus group respondents identified the following issues and topics as key elements to address in outreach efforts about loan programs and products: Why PG&E is interested in providing

					to obtain a loan for energy efficiency. Upgrade to more efficient equipment when current equipment fails, with these caveats: PG&E rebates have influenced many of them to take proactive action. Business sustainability norms within the company have influenced some."	nonpayment as unacceptable. Found it appealing that projected energy savings would offset monthly loan payment. However, some respondents voiced some concern about savings actually being realized."	audience. 2. Due to the complexity of these topics, communication efforts will likely require multiple interactions. For many customers it is also likely that a face-to-face discussion with a knowledgeable and trusted source, such as a PG&E representative or a local lending institution, will be needed to assist customers through the loan process. 3. To attract medium-to-large business customers to learn more about the pilot, initial marketing needs to focus on easily identifiable benefits such as: Market-based interest rates. All energy-efficiency equipment is eligible. The loan may cover additional	financing. Coordination of the loan offering. Role, responsibilities, and contact information of key PG&E staff, local lending institutions, and contractors (if appropriate). Anticipated loan terms: Interest rate Unsecured or secured Fixed or variable Repayment options Return-on-investment Evidence that making efficiency improvements will reduce utility bills Connection to utility service, which the majority of respondents saw as a deal breaker 6. While contractors are integral to delivering energy-efficiency upgrades to the marketplace,

							materials beyond energy-efficiency equipment to improve the overall efficiency of the building. not preclude PG&E rebates. ? Projected energy-savings to offset monthly loan payment."	customers generally do not see contractors as trusted messengers about loan products. The pilots will need to enable contractors to be effectively involved in promoting financing and loans."
		"Cadmus: Carol Mulholland Linda Dethman Allie Marshall Cynthia Kan"	June 2013	Small Business	"During the discussion about loans and financing the majority of respondents reported that they: ? Have limited awareness and knowledge of energy-efficiency financing. ? Want to learn about loan options as soon as possible in the decision-making process. ? Prefer an unsecured loan. ? Consider interest rates to be very important factor when considering a loan. ? Prefer a fixed interest rate. ? Use home mortgages and car loans (which are typically secured and have single digit rates) as benchmarks for interest rates.	"In response to the proposed financing pilot discussions, most small business respondents said they: ? Are uncertain they would trust contractors to represent loan opportunities. ? Are comfortable with and would prefer PG&E to reach out to them about loans. ? Are comfortable undergoing a traditional credit review. ? Are willing to accept modest fees and prefer fees to be rolled into the loan. ? Prefer a loan that is flexible and can	"2. To attract small business customers to learn more about the lease pilot, initial marketing needs to focus on easily identifiable benefits such as: ? Capped interest rate. ? Capped fees. ? All energy-efficiency equipment is eligible. ? The lease does not preclude PG&E rebates. ? Projected energy-savings to offset monthly loan payment. ? Repayment could be paid on-line.	"5. Providing information to customers early in the energy-efficiency upgrade decision making process will be important to influencing the efficiency choices that are made. Communication channels should match the trusted representatives that segments identified, including: ? PG&E marketing and communications ? PG&E representatives ? Lending institutions ? Local governments

					Value choice of repayment period. Prefer a longer period with smaller monthly payments. Want the option to pay off the loan early. Most small business focus group respondents also said they: Prefer to use internal business capital. Rarely use loans/financing for energy efficiency. Are uncertain about how difficult it would be to obtain a loan for energy efficiency. Do not have a strong preference about submitting lease application to a lender or to PG&E. Most often upgrade when equipment fails Many also noted PG&E rebates had influenced them to take energy efficiency actions"	cover improvements needed to help their business become more energy efficient. Found it appealing that loans that do not preclude them from PG&E rebates. Found value in on-bill repayment. Reacted to the possibility of disconnection of utility service as a result of nonpayment as unacceptable. Found it appealing that projected energy savings would offset monthly loan payment. However, respondents voiced some concern about savings actually being realized. Conclusions one and two are unique to the small business sector. However, conclusions three through six apply to all sectors. 1. Small business	3. Limited familiarity with energy-efficiency financing and its terminology will challenge the success of the pilots. Outreach will be more effective if: Information is tailored to each customer sector and delivered through multiple channels. PG&E and sector-specific trusted sources are prominent. Messaging and specific communication approaches are tested with customers prior to launch. 4. Pilot sponsors will face many questions from customers about financing and loan options. Focus group respondents identified the following issues and topics as key elements to address in outreach efforts about loan	6. While contractors are integral to delivering energy-efficiency upgrades to the marketplace, customers generally do not see contractors as trusted messengers about loan products. The pilots will need to enable contractors to be effectively involved in promoting financing and loans."

						respondents found a number of the lease features, listed in Table 3, appealing, and unlike the medium-to-large business respondents, these respondents also found value in on-bill repayment and transferability. The current small business lease pilot may include transferability and these customers may also be eligible for the non-residential on-bill repayment option, which does include transferability."	programs and products: interested in providing financing. Coordination of the loan offering. Role, responsibilities, and contact information of key PG&E staff, local lending institutions, and contractors (if appropriate). Anticipated loan terms: Interest rate Unsecured or secured Fixed or variable Repayment options Return-on-investment Evidence that making efficiency improvements will reduce utility bills Connection to utility service, which the majority of respondents saw as a deal breaker"	
		"Cadmus: Carol Mulhollan d Linda	June 2013	Single Family	"During the discussion about loans and financing the majority of respondents reported that they:	"In response to the proposed financing pilot discussions, most single-family respondents said	"Conclusions one and three are unique to the single family sector. However,	"4. Limited familiarity with energy-efficiency financing and its terminology will

		Dethman Allie Marshall Cynthia Kan"			Have limited awareness and knowledge of energy-efficiency financing. Want to learn about loan options as soon as possible in the decision-making process. Prefer an unsecured loan. Consider interest rates to be very important factor when considering a loan. Prefer a fixed interest rate. Use home mortgages and car loans (which are typically secured and have single digit rates) as benchmarks for interest rates. Value choice of repayment period. Prefer a longer period with smaller monthly payments. Want the option to pay off the loan early. Most single-family focus group respondents said they: Prefer to use their own funds. Only use loans/financing for energy efficiency when funds are not available. Are uncertain about how difficult it would be to obtain a loan for	they: Are uncertain they would trust contractors to represent loan opportunities. Prefer to work with a lender, but are also comfortable with outreach from PG&E. Are comfortable undergoing a traditional credit review. Are willing to accept modest fees and prefer fees to be rolled into the loan. Prefer a loan that is flexible and can cover improvements needed to help their home become more energy efficient. Found it appealing that loans that do not preclude them from PG&E rebates. Do not have a strong preference for on-bill repayment. Reacted to the possibility of disconnection of utility service as a	conclusions four through six apply to all sectors. 1. Interest rates are a critical and driving feature in how single family respondents view financing options. These respondents base what they consider to be a reasonable interest rate on home mortgages and car loans and expect an energy-efficiency loan to offer similarly low to zero interest rates. Careful dissemination of financial product information by trusted financing experts (for example local lending institutions) will be required to educate this sector on how interest rates, loan tenors, security, and other factors affect the product offering, and the incremental benefits of the financing pilot offerings relative to other	challenge the success of the pilots. Outreach will be more effective if: Information is tailored to each customer sector and delivered through multiple channels. PG&E and sector-specific trusted sources are prominent: PG&E marketing and communications PG&E representatives Lending institutions Local governments Messaging and specific communication approaches are tested with customers prior to launch. 5. Pilot sponsors will face many questions from customers about financing and loan options. Focus group respondents identified the following issues

					energy efficiency. Upgrade equipment under these three scenarios: Planned replacement. Equipment fails. Respondent reaches point of being excessively uncomfortable. PG&E rebates influenced them to take action. View return on investment as a key consideration for obtaining a loan. Fresno area respondents were particularly knowledgeable about energy efficiency, probably due to participating in Fresno's energy-efficiency programs."	result of nonpayment as unacceptable. Found it appealing that projected energy savings would offset monthly loan payment. However, some respondents voiced skepticism about savings actually being realized."	comparable options on the market. 2. Single family respondents have many questions regarding financing such as how projected energy savings will be achieved and who is accountable for assisting them with their loan. Providing single family customers in-person communication opportunities with financing and pilot experts, at least initially in the participation process, will ease their concerns. 3. To attract single family customers to learn more about the pilots, initial marketing needs to focus on these easily identifiable benefits such as: A wide range of energy improvements are eligible. The loan may	and topics as key elements to address in outreach efforts about loan programs and products: Why PG&E is interested in providing financing. Coordination of the loan offering. Role, responsibilities, and contact information of key PG&E staff, local lending institutions, and contractors (if appropriate). Anticipated loan terms: Interest rate Unsecured or secured Fixed or variable Repayment options Return-on-investment Evidence that making efficiency improvements will reduce utility bills Connection to utility service, which the majority of

							cover additional materials beyond energy-efficiency equipment to improve the overall efficiency of the home. used with PG&E rebates. In addition, marketing for the WHEEL pilot needs to focus on: No customer or program fees."	respondents saw as a deal breaker 6. While contractors are integral to delivering energy-efficiency upgrades to the marketplace, customers generally do not see contractors as trusted messengers about loan products. The pilots will need to enable contractors to be effectively involved in promoting financing and loans."
		"Cadmus: Carol Mulholland Linda Dethman Allie Marshall Cynthia Kan"	June 2013	Multifamily	"During the discussion about loans and financing the majority of respondents reported that they: Have limited awareness and knowledge of energy-efficiency financing. Want to learn about loan options as soon as possible in the decision-making process. Prefer an unsecured loan. Prefer a fixed interest rate.	"In response to the proposed financing pilot discussions, most multifamily respondents said they: Are uncertain they would trust contractors to represent loan opportunities. Prefer outreach from a trusted third party, such as a nonprofit housing association as well as from PG&E.	"2. Reaching the key decision makers for the non-profit housing segment will also be a challenge as these customers have investor groups, which may be out-of-state and multiple in number. Respondents pointed out their investors are required to approve debt	"5. Pilot sponsors will face many questions from customers about financing and loan options. Focus group respondents identified the following issues and topics as key elements to address in outreach efforts about loan programs and products:

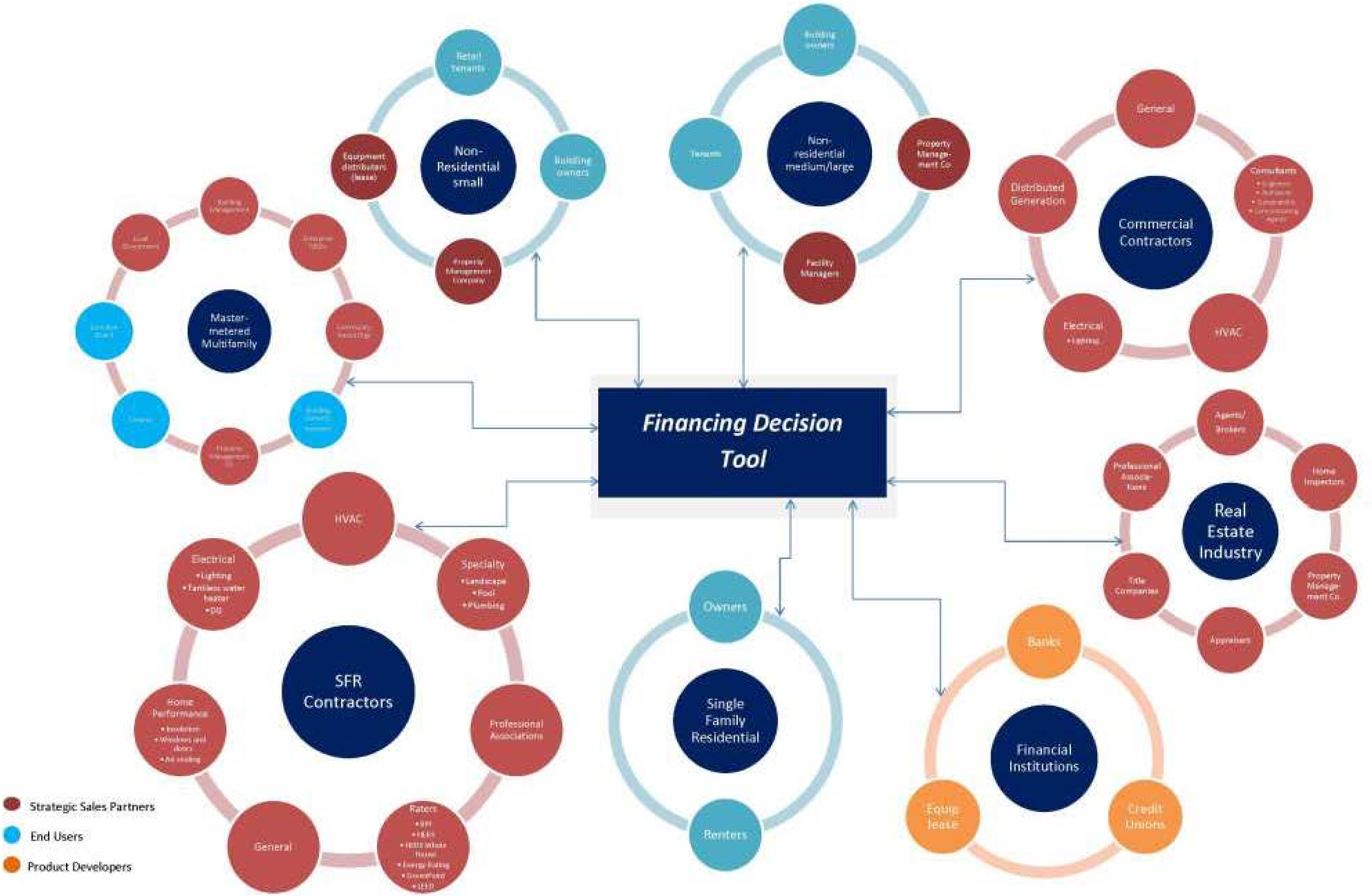
					Use home mortgages and car loans (which are typically secured and have single digit rates) as benchmarks for interest rates. Value choice of repayment period. Prefer a longer period with smaller monthly payments. Want the option to pay off the loan early. Most multifamily decision-makers (building owners and managers) also said they: Prefer to use internal capital. California Housing Partnership Corporation (CHPC) respondents have used loans/financing for energy efficiency. Market rate respondents are not aware of loans/financing for energy efficiency. Believe it would be difficult to obtain a loan for energy efficiency. Complete in-unit upgrades when units are vacant – avoid disturbing tenants for retrofits. Large scale projects, such as windows, are completed on a total building-by-building basis. Do not have a strong	Are comfortable undergoing a traditional credit review. Are willing to accept modest fees and prefer fees to be rolled into the loan. Prefer a loan that is flexible and can cover improvements needed to help their building become more energy efficient. Found it appealing that loans that do not preclude them from PG&E rebates. Reacted to the possibility of disconnection of utility service as a result of nonpayment as unacceptable. Found it appealing that projected energy savings would offset monthly loan payment. However, some respondents voiced skepticism about savings actually being realized. Conclusions one	related financial agreements; however unsecured on-bill payment may avoid this requirement. To clarify these loan requirements, further discussion is needed with sector representatives. 3. To attract multifamily customers to learn more about the pilot, initial marketing needs to focus on easily identifiable benefits such as: Lower interest rate than similar financial products. The loan may cover additional materials beyond energy-efficiency equipment to improve the overall efficiency of the building (both common areas and individual units). The loan can be rebates. Projected energy-savings to	Why PG&E is interested in providing financing. Coordination of the loan offering. Role, responsibilities, and contact information of key PG&E staff, local lending institutions, and contractors (if appropriate). Anticipated loan terms: Interest rate Unsecured or secured Fixed or variable Repayment options Return-on-investment Evidence that making efficiency improvements will reduce utility bills Connection to utility service, which the majority of respondents saw as a deal breaker 6. Providing information to customers early in the energy-

					preference about submitting loan application to lender or PG&E. ▯ Due to constrained staffing, CHPC respondents require loan to cover the cost of staff hours as well as the project."	and three are unique to the multifamily sector. However, conclusions four through seven apply to all sectors. 1. One critical challenge to engaging nonprofit multifamily complexes is the extremely limited staff time allotted for both energy-efficiency upgrades as well as loan applications. Respondents in this study overwhelming agreed that a loan would need to cover not only the project cost, but the internal staff time to complete the energy upgrade project as well. Exploring a loan option that would partially or fully cover the staff time required to complete a project would increase this segments ability and willingness to participate."	offset monthly loan payment. ▯ Loan is transferable. 4. Limited familiarity with energy-efficiency financing and its terminology will challenge the success of the pilots. Outreach will be more effective if: ▯ Information is tailored to each customer sector and delivered through multiple channels. ▯ PG&E and sector-specific trusted sources are prominent. ▯ Messaging and specific communication approaches are tested with customers prior to launch."	efficiency upgrade decision making process will be important to influencing the efficiency choices that are made. Communication channels should match the trusted representatives that segments identified, including: ▯ PG&E marketing and communications ▯ PG&E representatives ▯ Lending institutions ▯ Local governments ▯ Nonprofit housing associations ▯ Multifamily housing associations 7. While contractors are integral to delivering energy-efficiency upgrades to the marketplace, customers generally do not see contractors as trusted messengers

								about loan products. The pilots will need to enable contractors to be effectively involved in promoting financing and loans."

Appendix B: Stakeholder Map

Table of Contents



Financing Decision Tool
Retail Tenants
Non-Residential small
Building owners
Equipment distributors (lease)
Property Management Company
Building owners
Tenants
Non-residential medium/large
Property Manage-ment Co.
Facility Managers
General
Distributed Generation
Commercial Contractors
Consultants
Electrical
• Lighting
HVAC
Master-metered Multifamily
Agents/ Brokers
Professional Associa-tions
Home Inspectors
Real Estate Industry
Title Companies
Property Manage-ment Co.
Appraisers
HVAC
Electrical
• Lighting
• Tankless water heater
• DG
Specialty
• Landscape
• Pool
• Plumbing
SFR Contractors
Home Performance
• Insulation
• Windows and doors
• Air sealing
Professional Associations
General
Raters
Owners
Single Family Residential
Renters
Banks
Financial Institutions
Equip lease
Credit Unions
Strategic Sales Partners
End Users
Product Developers

Stakeholder Map: Master-metered Multifamily

Barriers to Entry for Financing EE and DR Projects

- Building Managers
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge that there are different financing products available
  - Too many vendors make the decision overwhelming
  - Don’t know how to present the opportunity to the building owner/property management company
  - Lack of confidence in contractor pool that isn’t already their vendor
  - React to emergencies rather than act proactively
  - Not held accountable for performance in this field (rewarded for vacancy rates)

- Enterprise NGOs
  - Lack of knowledge that there are different financing products available
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Inexperienced staff people
  - Financial partners aren’t an approved FI
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out

- Community-based Organizations
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Limited resources
  - Inexperienced staff people
  - Don’t know how to present the opportunity to the building owner/property management company

- Building Owners/Investors
  - Lack of cash flow to make improvements without assessing the property
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Utility bill is an income source for the owner
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - Difficulty in navigating available funding options and lack of access to capital.
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings.

- Property Management Companies
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Process adds work to them without any perceived benefit
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - No motivation to bring this to the owner/investor
  - Additional layer of complexity when paying down the debt (off-bill)
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings.

- Tenants
  - Perception that construction will inconvenience the tenants

- Executive Board
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Status-quo is easier than change
  - Suspicious of performance of upgrade
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings.

- Local Government
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Combative relationship with building owner
  - Concerns about renovations meeting code compliance
  - Political climate of jurisdiction may not promote energy efficiency
  - Limited resources
  - Don't know how to present the opportunity to the building owner/property management company

- Community Development Financial Institutions (CDFIs)
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Limited resources

Marketing Solutions for Overcoming these Barriers

- Building Managers
  - Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
  - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Enterprise NGOs
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

    - Work with the NGO's to have their Financial partners apply with the CHEEF proactively
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Community-based Organizations
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - Work with the NGO's to have their Financial partners apply with the CHEEF proactively
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Building Owners/Investors
    - Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Include information about energy performance insurance, the importance of M&V, automation and DR

    - Property Management Companies
        - Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Keep marketing materials simple with easy to follow steps and ways to skip over sections
        - Include information about energy performance insurance, the importance of M&V, automation and DR

    - Tenants
        - Help tenants facilitate property engagement workshops aimed at explaining the benefits and minimizing fear of the unknown in order to maximize neighbor buy-in and support

- Executive Board
  - Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Include information about energy performance insurance, the importance of M&V, automation and DR

- Local Government
  - Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Help building owner promote their upgrade as an environmental steward of the community
  - Promote the benefits of pulling permits and following code enforcement rules
  - Use the increased income to the municipality as a method of obtaining stakeholder support within the jurisdiction
  - Utilize branded collateral material and promote the program through the PIO regular low-cost channels

- Community Development Financial Institutions (CDFIs).
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - Work with the CAEATFA to have their Financial partners apply with the CHEEF proactively
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Include information about energy performance insurance, the importance of M&V, automation and DR

Stakeholder Map: Small to Medium Sized Businesses

Barriers to Entry for Financing EE and DR Projects

- Building owners
  - Limited resources, financial, operational and management
  - Lack of knowledge regarding benefits to borrowing money to implement EE/DR projects
  - Lack of knowledge that there are different financing products available
  - Difficulty in navigating available funding options and lack of access to capital
  - Perception that the enrollment process or participation requirements will be cumbersome
  - Energy efficiency is disadvantaged as an investment, a 30% tax credit is available for renewable energy projects but not for energy efficiency
  - Responsible for debt of service, even if savings are not achieved
  - Additional debt and assets affect the borrower's balance sheet, return on equity and various financial metrics
  - Most property owners have to satisfy a lengthy capital expenditure process to acquire debt
  - Financial partners aren't an approved FI
  - Lack of knowledge of tax implications

- Energy Efficiency Participation Barriers
  - Focus on core business investments (revenue growth) over cost savings (avoided energy costs)
  - Lack of confidence in contractor pool that isn't already their vendor
  - React to emergencies rather than act proactively replacing ageing assets
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings
  - Doing nothing is easier than changing
  - Suspicious of performance of upgrade
  - Concerns about renovations meeting code compliance
  - Perception that construction will inconvenience the employees (Medium)

- Tenants (This is written for tenants in general as 'retail' is too specific)
  - Tenants are not inclined to fund improvements to their leased space because they often do not know how long they will occupy the property or the lease precludes enhancements
  - Perception that the enrollment process or participation requirements will be cumbersome
  - Responsible for debt of service, even if savings are not achieved

    - Additional debt and assets affect the borrower's balance sheet, return on equity and various financial metrics
    - Don't know how to present the opportunity to the building owner/property management company
    - Financial partners aren't an approved FI
    - Lack of knowledge of tax implications

- Energy Efficiency Participation Barriers
    - Tenants are generally not willing to make improvements that will benefit the property owner
    - Lack of confidence in contractor pool that isn't already their vendor
    - React to emergencies rather than act proactively replacing ageing assets
    - Doing nothing is easier than changing
    - Suspicious of performance of upgrade
    - Process adds work to employee without any perceived benefit (Owner not managing process - Medium)
    - No motivation to bring this to the owner/investor (Medium)
    - Perception that construction will inconvenience the employees (Medium)
    - Not held accountable for performance in this area (i.e. Lower energy costs and energy efficiency doesn't fall within Facility Manager's goals - Medium)

- Equipment Distributors (Lease)
    - Lack of knowledge regarding benefits to borrowing money to implement EE/DR projects
    - Lack of knowledge that there are different financing products available
    - Don't know how to present the opportunity to their customer
    - Difficulty in navigating available funding options for customers
    - Uncertain how financing products will work with existing sales cycle
    - Fear offering financing will slow down sales cycle
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of knowledge of tax implications

- Energy Efficiency Participation Barriers
    - Doing nothing is easier than changing

- Property Management Company
    - Lack of knowledge of regarding benefits to borrowing money to implement EE/DR projects
    - Lack of knowledge that there are different financing products available
    - Don't know how to present the opportunity to the building owner/tenant
    - Additional layer of complexity when paying down the debt (off-bill)

    - Perception that the enrollment process or participation requirements will be cumbersome
    - No motivation to bring this to the owner/investor (Medium)

- Energy Efficiency Participation Barriers
    - Not held accountable for performance in this area (i.e. Lower energy costs and energy efficiency doesn't fall within Facility Manager's goals - Medium)
    - Lack of confidence in contractor pool that isn't already their vendor
    - React to emergencies rather than act proactively
    - Not held accountable for performance in this field (rewarded for vacancy rates)
    - Perception that construction will inconvenience the tenants
    - Doing nothing is easier than changing
    - Suspicious of performance of upgrade

Marketing Solutions for Overcoming these Barriers

- Building Owner
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Create case studies from On-Bill Financing program participants to showcase positive impact energy efficiency upgrade made in combination with loan
    - Collaborate with local FI's to create and distribute co-branded collateral
    - Leverage local CBO's and associations for promotion and speaking opportunities
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
    - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Keep marketing materials simple with easy to follow steps and ways to skip over sections

        - Help building owner promote their upgrade as an environmental steward of the community

- Tenants (This is written for tenants in general as 'retail' is too specific)
    - Create case studies from On-Bill Financing program participants to showcase positive impact energy efficiency upgrade made in combination with loan
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Collaborate with local FI's to create and distribute co-branded collateral
    - Leverage local CBO's and associations for promotion and speaking opportunities
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
    - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Keep marketing materials simple with easy to follow steps and ways to skip over sections

- Equipment Distributors (Lease)
    - Train strategic partners on how to sell financing using messaging that has been tested and suggested through market research principles
    - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project

- Create case studies from On-Bill Financing program participants to showcase positive impact energy efficiency upgrade made in combination with loan
- Collaborate with local FI’s to create and distribute co-branded collateral
- Have a phone number available for someone to call when they have questions about all financial products in the marketplace
- Provide easy to understand financial decision tools which lay out the business numbers for each product
- Promote EE solutions during regular maintenance, or through comprehensive sales techniques
- Keep marketing materials simple with easy to follow steps and ways to skip over sections

- Property Management Company
    - Leverage property management associations and publications for financing option education
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Create case studies from On-Bill Financing program participants to showcase positive impact energy efficiency upgrade made in combination with loan
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Leverage property management associations for financing option education
    - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
    - Keep marketing materials simple with easy to follow steps and ways to skip over sections

Stakeholder Map: Non-Residential Medium/Large

Barriers to Entry for Financing EE and DR Projects

- Facility Managers
  - Lack of technical expertise about energy management/energy use
  - Lack of incentive to promote EE/DR
  - No accountability or relationship with tenants who may be pushing improvements
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge that there are different financing products available
  - Too many vendors make the decision overwhelming
  - Don't know how to present the opportunity to the building owner/property management company
  - Lack of confidence in contractor pool that isn't already their vendor
  - React to emergencies rather than act proactively

- Property Management Companies
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Process adds work to them without any perceived benefit
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - No motivation to bring this to the owner/investor
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings.
  - In buildings with master meters, property management accounting systems are not set up to handle allocations appropriately across building occupants
  - Contract legalities are too difficult to manage across multiple tenants; in multi-metered building, each tenant has to sign a loan agreement making the process difficult to manage and maintain
  - In REIs, the way that capital and expenses are reported shows financed projects as a negative expense, which makes investors question the project. It is easier to budget projects as a capital expense with no financing
  - Loans are seen as a high risk proposition; if tenants default on a loan then property managers have to wait to get the space leased again until the legalities are worked out

- Building Owners/Investors

Barriers will be different depending on who pays the utility bill. There is a split incentive problem – whoever is paying the bill is most interested in EE and/or Financing projects. It makes no difference to the other party.

- Lack of cash flow to make improvements without assessing the property
- Lack of knowledge of tax implications
- Lack of knowledge that there are different financing products available
- Perception that outside of lighting, difficult to make a multi-measure project pencil out
- Difficulty in navigating available funding options and lack of access to capital.
- Lack of resources for owners to identify energy efficiency opportunities in the buildings.
- Competing low or no-cost alternatives, such as existing IOU on-bill financing, will always be a "better" deal.
- Return on Investment must fall within shorter timeframes (2-3 years) to make a project pencil out.
- Large scale building owners commonly buy & sell properties on a regular basis. A building with a loan agreement is seen as a liability

- Tenants

  Barriers will be different depending on who pays the utility bill. There is a split incentive problem – whoever is paying the bill is most interested in EE and/or Financing projects. It makes no difference to the other party.

  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Status-quo is easier than change
  - Perception that bills will go up
  - Perception that construction will inconvenience business operations
  - Lack of relationship with building owner; property management company serves as the "gatekeeper"

Marketing Solutions for Overcoming these Barriers

- Facility Managers
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
  - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Property Management Companies
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

        - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Keep marketing materials simple with easy to follow steps and ways to skip over sections

    - Building Owners/Investors
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
        - Provide easy to understand financial decision tools which lay out the business numbers for each product

    - Tenants
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Provide easy to understand financial decision tools which lay out the business numbers for each product
- Keep marketing materials simple with easy to follow steps and ways to skip over sections
- Help tenants facilitate property engagement workshops aimed at explaining the benefits and minimizing fear of the unknown in order to maximize neighbor buy-in and support

Stakeholder Map: Commercial Contractors

Barriers to Entry for Financing EE, DR & DG Projects (where applicable)

- General Contractors
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge that there are different financing products available
  - Don't know how to present the opportunity to the building owner/property management company
  - Lack of ability to identify which financing product is best suited for the customer/project
  - The more complex the project, the harder it is to sell
  - Lack of phase payments precludes contractor participation due to high carrying costs of projects
  - Sales process different, and can be more complex, than residential retrofits
  - Lack of understanding about commercial building owner triggers and timing delays
  - Deficient business/sales skills
  - Outdated business systems
  - Limited resources
  - Many customers don't speak English
  - Process adds work for them without any perceived benefit
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - Perception that the enrollment process or participation requirements will be cumbersome

- Consultants
  - Engineers
    - Lack of knowledge that there are different financing products available
    - Too many vendors make the decision overwhelming
    - Don't know how to present the opportunity to the building owner/property management company
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Pressure to value engineer design by client
    - Process adds work to them without any perceived benefit
    - Not part of scope
    - Not part of financial decision process

  - Architects
    - Lack of knowledge that there are different financing products available
    - Too many vendors make the decision overwhelming
    - Don't know how to present the opportunity to the building owner/property management company

        - Lack of ability to identify which financing product is best suited for the customer/project
        - Process adds work to them without any perceived benefit
        - Not part of scope
        - Not part of financial decision process

    - Sustainability Consultants
        - Lack of knowledge that there are different financing products available
        - Too many vendors make the decision overwhelming
        - Don't know how to present the opportunity to the building owner/property management company
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Not part of scope
        - Too small of a project
        - Not part of financial decision process

    - Commissioning Agents
        - Don't know how to present the opportunity to the building owner/property management company
        - Process adds work to them without any perceived benefit
        - Not part of scope
        - Not part of financial decision process

- HVAC Contractors
    - Lack of knowledge that there are different financing products available
    - Don't know how to present the opportunity to the building owner/property management company
    - Energy efficiency can slow down the decision process
    - Financing can slow down the decision process
    - Many customers don't speak English
    - Customers looking for emergency replacement equipment have no patience
    - Competition isn't pulling permits (unfair playing field)
    - Vendor or distributor financing already available
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome

- Electrical Contractors
    - Lack of knowledge that there are different financing products available
    - Don't know how to present the opportunity to the building owner/property management company
    - Lack of ability to identify which financing product is best suited for the customer/project

- Many customers don't speak English
- Perception that the enrollment process or participation requirements will be cumbersome

- Lighting Contractors
  - Lack of knowledge that there are different financing products available
  - Don't know how to present the opportunity to the building owner/property management company
  - Lack of ability to identify which financing product is best suited for the customer/project
  - Many customers don't speak English
  - Perception that the enrollment process or participation requirements will be cumbersome

- Distributed Generation Contractors
  - Only interested in DG instead of multi-measure whole building
  - Focused on business model they are used to working with
  - Lack of knowledge that there are different financing products available
  - Don't know how to present the opportunity to the building owner/property management company
  - Lack of ability to identify which financing product is best suited for the customer/project
  - Many customers don't speak English
  - Perception that the enrollment process or participation requirements will be cumbersome

Marketing Solutions for Overcoming these Barriers

- General Contractors
  - Provide opportunities for contractors to learn about financing options and benefits through workshops /webinars /conferences
  - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
  - Create collateral material explaining the opportunities and financial implications of the financial products available
  - Provide opportunities for consultants to learn about financing options and benefits through workshops, webinars, conferences
  - Create collateral material explaining the opportunities and financial implications of the financial products available
  - Provide opportunities for contractors to learn about financing options and benefits through workshops, webinars, conferences
  - Create collateral material explaining the opportunities and financial implications of the financial products available
  - Provide opportunities for contractors to learn about financing options and benefits through workshops, webinars, conferences

    - Create collateral material explaining the opportunities and financial implications of the financial products available
    - Provide opportunities for contractors to learn about financing options and benefits through workshops, webinars, conferences
    - Create collateral material explaining the opportunities and financial implications of the financial products available

- Consultants
    - Engineers
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

    - Architects
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to understand financial decision tools which lay out the business numbers for each product

  - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

- Sustainability Consultants
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)
  - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
  - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- Commissioning Agents
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create an unbiased resource for local contractors people to go to in order to get customized solutions about their particular project
  - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)

        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

- HVAC Contractors
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Create fill in the blank templates to take some of the headache out of financial calculation and comprehensive project presentation
    - Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
    - Provide marketing materials in a variety of user languages

- Electrical Contractors

- Help contractors promote their services as an environmental steward of the community and as a local business
- Promote the benefits of pulling permits and following code enforcement rules
- Use the increased income to the municipality as a method of obtaining stakeholder support within the jurisdiction
- Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
- Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
- Create collateral material and promote the program through the PIO regular low-cost channels explaining the opportunity and financial implications of the financial products available
- Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
- Create an unbiased resource for people to go to in order to get customized solutions about their particular project
- Have a phone number available for someone to call when they have questions about all financial products in the marketplace
- Provide easy to understand financial decision tools which lay out the business numbers for each product
- Promote EE solutions during regular maintenance, or through comprehensive sales techniques
- Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
- Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
- Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
- Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
- Create fill in the blank templates to take some of the headache out of financial calculation and comprehensive project presentation
- Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
- Provide marketing materials in a variety of user languages

- Lighting Contractors
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward

        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
        - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
        - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
        - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create fill in the blank templates to take some of the headache out of financial calculation and comprehensive project presentation
        - Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
        - Provide marketing materials in a variety of user languages

- Distributed Generation Contractors
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product

- Promote EE solutions during regular maintenance, or through comprehensive sales techniques
- Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
- Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
- Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
- Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
- Create fill in the blank templates to take some of the headache out of financial calculation and comprehensive project presentation
- Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
- Provide marketing materials in a variety of user languages

Stakeholder Map: Real Estate Industry[43]

Barriers to Entry for Financing EE Projects

- Agents/Brokers
  - Lack of awareness of benefits of energy efficiency (EE) and utility EE programs
  - Limited understanding of EE financing programs
  - No tangible incentive to promote energy efficiency
  - Unwillingness to delay property sale transaction in support of participating in utility rebate or financing program
  - Reluctance of selling features (i.e., energy performance) to clients

- Building Inspectors
  - Lack of awareness of benefits of energy efficiency (EE) and utility EE programs
  - Limited tools to capture energy improvement opportunities that is publicly accessible
  - Need for building performance education and training

- Property Management Co.
  - Lack of knowledge of benefits of borrowing money to implement EE/DR projects
  - Lack of knowledge of tax implications
  - Lack of knowledge that there are different financing products available
  - Process adds work to them without any perceived benefit
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - No motivation to bring this to the owner/investor
  - Additional layer of complexity when paying down the debt (off-bill)
  - Lack of resources for owners to identify energy efficiency opportunities in the buildings.

- Appraisers
  - No industry standard to quantify value of energy efficiency improvements

- Title Companies
  - N/A

---

[43] Resources:

1. ACEEE. *Valuing Energy Efficiency in the Real Estate Community*. 2012
2. Harcourt Brown & Carey. *Energy Efficiency Financing in California: Needs and Gaps*. July 8, 2011
3. Center for Sustainable Energy. *Energy Upgrade California 2013-2014 Marketing Plan*. March 26, 2013
4. CNT Energy and National Home Performance Council. *Unlocking the Value of an Energy Efficient Home. August 2013*

- Professional Associations
  - Lack of awareness of benefits of energy efficiency (EE) and utility EE programs
  - Limited understanding of EE financing programs
  - No industry standard to value energy efficiency improvements
  - Weak relationship between real estate professionals and building performance industry

Marketing Solutions for Overcoming these Barriers

- Agents/Brokers
  - Increase awareness of utility EE programs and their associated value proposition
  - Provide an education module specifically directed towards real estate professionals
  - Establish direct partnership opportunities and cooperative marketing opportunities
  - Consider financial incentive to agents/brokers to incent participation in utility financing pilot programs
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

- Building Inspectors
  - Increase awareness of utility EE programs and their associated value proposition
  - Promote available training through various existing utility sponsored programs

- Property Management Co.
  - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
  - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
  - Keep marketing materials simple with easy to follow steps and ways to skip over sections

- Appraisers
  - Increase awareness of energy efficiency benefits in building performance
  - Promote the use of assigning value to building performance

- Title Companies
    - N/A

- Professional Associations
    - Partner with realtor associations, MLS agencies, and regional associations to promote energy efficiency knowledge and action
    - Provide an education module specifically directed towards real estate professionals
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

Stakeholder Map: Single Family Loan Program

Barriers to Entry for Financing EE Projects

- Owners
  - Lack of awareness of utility EE programs
  - Lack of awareness of how investments in EE can positively impact their electric bill
  - Competing priorities for limited disposable income
  - Concerns about payback
  - Lack of knowledge that there are different financing products available
  - Inability to qualify for financing
  - Low credit rating may impact their ability to qualify
  - Distrust of contractors (project costs, workmanship, licensing, etc.)
  - Owner may have already invested in solar
  - Owners considering solar may not be aware of importance of EE investment for right-sizing system
  - Lack of knowledge of tax implications

- Renters
  - No value proposition for investing in a rental property they don't own
  - Lack of available finances
  - Lack of awareness of utility EE programs
  - Lack of awareness of how investments in EE can positively impact their electric bill
  - Lack of awareness of actual utility spend because this expense is included in their total rent
  - Renter turnover contributes to lack of interest in EE investment

Marketing Solutions for Overcoming these Barriers

- Owners
  - Increase awareness of utility EE programs and their associated value proposition
  - Promote financing as integrated messaging with utility marketing programs
  - Proactively identify EE solutions that benefit solar customer:
    - For owners who installed system but did not do EE first, promote low cost EE solutions that would still be of benefit
    - For owners considering solar, actively promote EE as an important first step to reducing utility cost and solar system size
  - Promote list of contractors qualified by CHEEF for participation in SLFP
  - Provide information regarding potential tax credits available for EE investment

        - Provide financial institutions and contractors with marketing resources, training and support to promote financing pilots
        - Develop EE Financing Decision Tool that helps owners identify financing solutions

    - Renters
        - Increase awareness of utility EE programs and their associated value proposition
        - Encourage renters to be better informed about their actual utility costs as a component of their total rent
            - Renters may be able to influence property owner to invest in EE as a way to lower their monthly utility cost
        - Promote EE as a “win-win” for both the owner and the renter
            - Lower operating costs
            - Lower utility tenant bills
            - Higher tenant satisfaction
            - Higher occupancy rates

Stakeholder Map: Single Family Residential Contractors

Barriers to Entry for Financing EE and DR Projects

- General Contractors
  - Lack of marketing funds
  - Lack of access to utilities' customer information and energy use performance
  - Don't know how to present the opportunity to the building homeowner
  - Product availability is limited based on market size and demand
  - Lack of ability to identify which financing product is best suited for the customer/project
  - Multiple finance products available, requires time to acquire knowledge
  - Perception that the enrollment process or participation requirements will be cumbersome
  - Deficient business/sales skills
  - Outdated business systems
  - Many customers don't speak English
  - The more complex the project, the harder it is to sell
  - Complex topic, seen as secondary to overall business strategy

- Home Performance
  - Insulation
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of marketing funds or marketing skills
    - Don't know how to present the opportunity to the building homeowner
    - Lack of access to utilities' customer information and energy use performance
    - Perception that scope is too small to influence the client's decision about financing
    - Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
    - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

  - Windows and Doors
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of marketing funds or marketing skills

        - Don’t know how to present the opportunity to the building homeowner Lack of access to utilities’ customer information and energy use performance
        - Modeled energy savings doesn’t usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
        - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

    - Air sealing
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Perception that the enrollment process or participation requirements will be cumbersome
        - Lack of marketing funds or marketing skills
        - Don’t know how to present the opportunity to the building homeowner
        - Lack of access to utilities’ customer information and energy use performance
        - Perception that scope is too small to influence the client’s decision about financing.
        - Modeled energy savings doesn’t usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
        - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

- Electrical
    - Lighting
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Perception that the enrollment process or participation requirements will be cumbersome
        - Lack of marketing funds or marketing skills
        - Don’t know how to present the opportunity to the building homeowner
        - Lack of access to utilities’ customer information and energy use performance
        - Modeled energy savings doesn’t usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
        - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

    - Tankless Water Heater
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Perception that the enrollment process or participation requirements will be cumbersome
        - Lack of marketing funds or marketing skills

        - Don't know how to present the opportunity to the building homeowner
        - Lack of access to utilities' customer information and energy use performance
        - Perception that scope is too small to influence the client's decision about financing
        - Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
        - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

    - Distributed Generation (non-PV)
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Perception that the enrollment process or participation requirements will be cumbersome
        - Lack of marketing funds or marketing skills
        - Don't know how to present the opportunity to the building homeowner
        - Lack of access to utilities' customer information and energy use performance
        - Not enough evidence of home appreciation for distributed generation, so collateralizing the energy savings is difficult and unpredictable

- HVAC
    - Project often too expensive for a credit card but not large enough for a home loan
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of marketing funds or marketing skills
    - Don't know how to present the opportunity to the building homeowner
    - Lack of access to utilities' customer information and energy use performance
    - Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
    - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable
    - Quick timing of HVAC change-outs conflict with longer EE or DR projects

- Specialty
    - Pool
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Perception that the enrollment process or participation requirements will be cumbersome
        - Lack of marketing funds or marketing skills
        - Don't know how to present the opportunity to the building homeowner

    - Lack of access to utilities' customer information and energy use performance
    - Perception that scope is too small to influence the client's decision about financing.
    - Not enough evidence of home appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable

  - Landscaping
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of marketing funds or marketing skills
    - Don't know how to present the opportunity to the building homeowner
    - Lack of access to utilities' customer information and energy use performance
    - Perception that scope is too small to influence the client's decision about financing
    - Lack of utility rebates to offset scope costs

  - Plumbing
    - Lack of ability to identify which financing product is best suited for the customer/project
    - Perception that the enrollment process or participation requirements will be cumbersome
    - Lack of marketing funds or marketing skills
    - Don't know how to present the opportunity to the building homeowner
    - Lack of access to utilities' customer information and energy use performance
    - Perception that scope is too small to influence the client's decision about financing.

- Professional Associations
  - Lack of ability to identify which financing product is best suited for the customer/project
  - No real influence on the borrower's decision
  - Lack of knowledge that there are different financing products available
  - No direct contact with borrower
  - Limited resources
  - Inexperienced staff people
  - Perception that outside of lighting, difficult to make a multi-measure project pencil out
  - Confusion about true market demand for EE in marketplace
  - Competing relationships or products (to organization or association)

- Raters
  - BPI

- No direct contact with borrower
- Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
- Lack of ability to identify which financing product is best suited for the customer/project
- No real influence on the borrower's decision
- Lack of knowledge that there are different financing products available
- Not part of scope

- HERS
  - Lack of ability to identify which financing product is best suited for the customer/project
  - No real influence on the borrower's decision
  - Lack of knowledge that there are different financing products available
  - Not part of scope

- HERS Whole House
  - No direct contact with borrower
  - Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
  - Lack of ability to identify which financing product is best suited for the customer/project
  - No real influence on the borrower's decision
  - Lack of knowledge that there are different financing products available
  - Not part of scope
  - Deficient business/sales skills to motivate homeowners

- GreenPoint Rated
  - Lack of ability to identify which financing product is best suited for the customer/project
  - No real influence on the borrower's decision
  - Lack of knowledge that there are different financing products available
  - Not part of scope
  - Don't know how to present the opportunity to the building owner
  - Lack of ability to identify which financing product is best suited for the customer/project
  - Deficient business/sales skills to motivate homeowners

- LEED for Homes
  - Lack of ability to identify which financing product is best suited for the customer/project
  - No real influence on the borrower's decision

        - Lack of knowledge that there are different financing products available
        - Not part of scope
        - Don't know how to present the opportunity to the building owner
        - Lack of ability to identify which financing product is best suited for the customer/project
        - Deficient business/sales skills to motivate homeowners

    - DOE Energy Rating
        - No direct contact with borrower
        - Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers
        - Lack of ability to identify which financing product is best suited for the customer/project
        - No real influence on the borrower's decision
        - Lack of knowledge that there are different financing products available
        - Not part of scope

Marketing Solutions for Overcoming these Barriers

- General Contractors
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Promote EE solutions during regular maintenance, or through comprehensive sales techniques
    - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
    - Provide easy to navigate web/app services so that anybody can find financing solutions for their project type

    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Create fill in the blank templates to simplify financial calculation and comprehensive project presentation
    - Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
    - Provide marketing materials in a variety of user languages

- Home Performance
    - Insulation
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.

    - Windows and Doors
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Create collateral material explaining the opportunity and financial implications of the financial products available

        - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward

    - Air Sealing
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward

- Electrical
    - Lighting

    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward

  - Tankless Water Heater
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward

    - Distributed Generation (non-PV)
        - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
        - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward

- HVAC
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward
    - Coordinate financing products with vendor or distributor rebates available
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace

- Provide easy to understand financial decision tools which lay out the business numbers for each product
- Promote EE solutions during regular maintenance, or through comprehensive sales techniques
- Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working
- Provide easy to navigate web/app services so that anybody can find financing solutions for their project type
- Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
- Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
- Create fill in the blank templates to simplify financial calculation and comprehensive project presentation
- Provide marketing tools in fill-in-the-blank print version as well electronic/digital whenever possible
- Provide marketing materials in a variety of user languages

- Specialty
  - Pool
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

  - Landscaping
    - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create collateral material explaining the opportunity and financial implications of the financial products available

        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

    - Plumbing
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

- Professional Associations
    - Provide opportunities to learn about financing options and benefits through workshops/webinars/conferences
    - Create collateral material explaining the opportunity and financial implications of the financial products available
    - Create an unbiased resource for people to go to in order to get customized solutions about their particular project
    - Have a phone number available for someone to call when they have questions about all financial products in the marketplace
    - Provide easy to understand financial decision tools which lay out the business numbers for each product
    - Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)

- Raters
    - Promote coordination between contractors and raters

    - BPI
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create collateral material explaining the opportunity and financial implications of the financial products available

        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles
    - HERS
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

    - HERS Whole House
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

    - GreenPoint Rated
        - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
        - Create collateral material explaining the opportunity and financial implications of the financial products available
        - Provide easy to understand financial decision tools which lay out the business numbers for each product
        - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

    - LEED for Homes

- Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
- Create collateral material explaining the opportunity and financial implications of the financial products available
- Create collateral material explaining the opportunity and financial implications of the financial products available
- Provide easy to understand financial decision tools which lay out the business numbers for each product
- Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

- DOE Energy Rating
  - Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Create collateral material explaining the opportunity and financial implications of the financial products available
  - Provide easy to understand financial decision tools which lay out the business numbers for each product
  - Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles

Barriers and Marketing Solutions Matrix

The following tables below were developed from compiling the barriers for financing energy projects for each of the stakeholders found on the Stakeholder Map. When the marketing solutions were cross-referenced against the barriers, it became apparent that certain solutions solved many problems. This made it clear that those solutions should be integrated into the plan and activities. The table below summarizes the most prominent marketing solutions and identified barriers for each market sector. The stakeholder audience benefitting from that strategy has an ***X*** in the corresponding box. The purpose of putting the tables here is to draw that pathway between the marketing tactics chosen for the statewide strategy along with the reasons why they were chosen and who is expected to benefit from those tactics.

Single Family Residential

Strategy	Barriers	***Stakeholder benefiting***		
		Contractor	***Homeowner***	***Strategic Partner***
• Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward. • Promote coordination between contractors and raters	• Competing relationships or products (to organization or association)			**X**
• Promote financing via integrated messaging with utility marketing programs	• Lack of awareness of utility EE/DR programs	**X**	**X**	**X**
• Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward • Create collateral material explaining the opportunity and financial implications of the financial products available	• Don't know how to present the opportunity to the building homeowner	**X**		**X**
Coordinate financing products with vendor or distributor upstream program recipients	• Quick timing of HVAC change-outs conflict with longer EE or DR projects • Lack of utility rebates to offset scope costs	**X**		
Create an unbiased resource for people to go to in order to get customized solutions about their particular project	• Lack of ability to identify which financing product is best suited for the customer/project	**X**	**X**	**X**

Strategy	Barriers	*Stakeholder benefiting*		
		Contractor	***Homeowner***	***Strategic Partner***
	• Perception that scope is too small to influence the client's decision about financing			
Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working	• Perception that the enrollment process or participation requirements will be cumbersome	**X**		
Create fill in the blank templates to simplify financial calculation and comprehensive project presentation	• The more complex the project, the harder it is to sell	**X**		
Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis	• Lack of marketing funds	**X**		**X**
Develop EE Financing Online Tool that helps owners identify financing solutions	• Concerns about payback • Inability to qualify for financing • Low credit rating may impact their ability to qualify	**X**	**X**	**X**
Have a phone number available for both contractors selling financing as well as one for customers looking for assistance to call when they have questions about all financial products in the marketplace	• Limited resources	**X**	**X**	**X**
• Include marketing messaging about post-construction behavior and its effect on utility bills • Educate homeowners on the utility bill impact analysis and how it is not meant to be a performance guarantee • Engage Real estate community including appraisers to see the value in using the green addendum to the appraisal reports	• Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers • Not enough evidence of property appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable	**X**	**X**	**X**
Include messaging that these pilots are statewide in the marketing materials	• Product availability is limited based on market size and demand	**X**	**X**	**X**

Strategy	Barriers	***Stakeholder benefiting***		
		Contractor	***Homeowner***	***Strategic Partner***
Include messaging about the value proposition of energy projects including comfort and health	• Confusion about true market demand for EE in marketplace • Competing priorities for limited disposable income	**X**	**X**	**X**
Keep marketing materials simple with easy to follow steps and ways to skip over sections	• Complex topic, seen as secondary to overall business strategy	**X**	**X**	**X**
Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)	• Lack of confidence in contractor pool that isn't already their vendor		**X**	**X**
• Proactively identify EE solutions that benefit solar customer: • For owners who installed system but did not do EE first, promote low cost EE solutions that would still be of benefit • For owners considering solar, actively promote EE as an important first step to reducing utility cost and solar system size	• Owner may have already invested in solar • Owners considering solar may not be aware of importance of EE investment for right-sizing system		**X** **X** **X**	**X** **X** **X**
Promote EE solutions during regular maintenance, or through comprehensive sales techniques	• Inexperienced staff people • React to emergencies rather than act proactively	**X**	**X**	**X**
Provide easy to understand financial decision tools which lay out the business numbers for each product	• Deficient business/sales skills • Project often too expensive for a credit card but not large enough for a home loan • Perception that outside of lighting, difficult to make a multi-measure project pencil out	**X** **X**	**X**	**X** **X**
Provide financial institutions and contractors with marketing resources, training and support to promote financing pilots	• Lack of awareness of how investments in EE can positively impact their electric bill	**X**	**X**	**X**
Leverage the statewide Energy Upgrade California website's Green Button function into marketing campaign	• Lack of access to utilities' customer information and energy use performance	**X**	**X**	**X**

Strategy	Barriers	Stakeholder benefiting		
		Contractor	*Homeowner*	*Strategic Partner*
Provide marketing materials in a variety of user languages (based on SWMEO's plan)	• Many customers don't speak English	X	X	X
Provide opportunities to learn about financing options and benefits a variety of methods	• Multiple finance products available, requires time to acquire knowledge	X		X
Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles	• Lack of marketing skills • No direct contact with borrower • No real influence on the borrower's decision	X		X
Work with the CAEATFA to have their Financial partners apply with the CHEEF proactively	• Financial partners aren't an approved FI	X		

Multifamily

Strategy	Barriers	Stakeholder benefiting		
		Contractor	*Homeowner*	*Strategic Partner*
• Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward. • Promote coordination between contractors and raters	• Competing relationships or products (to organization or association)			X
• Promote financing as integrated messaging with utility marketing programs	• Lack of awareness of utility EE/DR programs	X	X	X
• Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward • Create collateral material explaining the opportunity and financial implications of the financial products available	• Don't know how to present the opportunity to the building homeowner	X		X
• Leverage REN and IOU relationships with local governments to understand the promotional strategies and community benefits	• Political climate of jurisdiction may not promote energy efficiency		X	X

Strategy	Barriers	*Stakeholder benefiting*		
		Contractor	***Homeowner***	***Strategic Partner***
Coordinate financing products with vendor or distributor upstream program recipients	• Quick timing of HVAC change-outs conflict with longer EE or DR projects • Lack of utility rebates to offset scope costs	**X**	**X**	
Create an unbiased resource for people to go to in order to get customized solutions about their particular project	• Lack of ability to identify which financing product is best suited for the customer/project • Perception that scope is too small to influence the client's decision about financing	**X**		**X**
Create collateral material explaining the opportunity and financial implications of the financial products available	• Utility bill is an income source for the owner		**X**	
Create communication channels such as roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working	• Perception that the enrollment process or participation requirements will be cumbersome	**X**		
Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis	• Lack of marketing funds	**X**		**X**
Develop EE Financing Online Tool that helps owners identify financing solutions	• Concerns about payback • Inability to qualify for financing • Low credit rating may impact their ability to qualify	**X**	**X**	**X**
Have a phone number available for both contractors and strategic partners selling financing as well as one for building owners looking for assistance to call when they have questions about all financial products in the marketplace	• Limited resources	**X**		**X**
Help building owner promote their upgrade as an environmental steward of the community	• Combative relationship with building owner			**X**
Help tenants facilitate property engagement workshops aimed at explaining the benefits and minimizing fear of the unknown in	• Perception that construction will inconvenience the tenants		**X**	**X**

Strategy	Barriers	Stakeholder benefiting		
		Contractor	Homeowner	Strategic Partner
order to maximize neighbor buy-in and support				
• Include marketing messaging about post-construction behavior and its effect on utility bills • Educate owners on the utility bill impact analysis and how it is not meant to be a performance guarantee • Engage Real estate community including appraisers to see the value in using the green addendum to the appraisal reports	• Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers • Suspicious of performance of upgrade	X	X	X
Include messaging that these pilots are statewide in the marketing materials	• Product availability is limited based on market size and demand	X	X	X
Include messaging about the value proposition of energy projects including comfort and health	• Confusion about true market demand for EE in marketplace • Competing priorities for limited disposable income • Not held accountable for performance in this field (rewarded for vacancy rates) • No motivation to bring this to the owner/investor • Status-quo is easier than change	X	X X	X X X X
Keep marketing materials simple with easy to follow steps and ways to skip over sections	• Complex topic, seen as secondary to overall business strategy • Lack of knowledge of benefits of borrowing money to implement EE/DR projects • Additional layer of complexity when paying down the debt (off-bill)	X	X	X X
Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)	• Lack of confidence in contractor pool that isn't already their vendor			X

Strategy	Barriers	*Stakeholder benefiting*		
		Contractor	***Homeowner***	***Strategic Partner***
• Proactively identify EE solutions that benefit solar customer: • For owners who installed system but did not do EE first, promote low cost EE solutions that would still be of benefit • For owners considering solar, actively promote EE as an important first step to reducing utility cost and solar system size	• Owner may have already invested in solar • Owners considering solar may not be aware of importance of EE investment for right-sizing system		X	X
Promote EE solutions during regular maintenance, or through comprehensive sales techniques	• Inexperienced staff people • React to emergencies rather than act proactively	X	X	X X
Promote the availability of the MF Single Point of Contact to walk property owners through each step of the process	• Too many vendors make the decision overwhelming • Lack of resources for owners to identify energy efficiency opportunities in the buildings.		X	X
Promote the benefits of pulling permits and following code enforcement rules	• Concerns about renovations meeting code compliance			X
Provide easy to understand financial decision tools which lay out the business numbers for each product	• Deficient business/sales skills • Perception that outside of lighting, difficult to make a multi-measure project pencil out • Lack of cash flow to make improvements without assessing the property • Difficulty in navigating available funding options and lack of access to capital. • Process adds work to them without any perceived benefit	X X X X	X X	X X X X
Provide financial institutions and contractors with marketing resources, training and support to promote financing pilots	• Lack of awareness of how investments in EE can positively impact their electric bill	X		X
Leverage the statewide Energy Upgrade California website's Green Button function into	• Lack of access to utilities' customer information and energy use performance	X	X	X

Strategy	Barriers	*Stakeholder benefiting*		
		Contractor	***Homeowner***	***Strategic Partner***
marketing campaign				
Provide marketing materials in a variety of user languages (based on SWMEO's plan)	• Many customers don't speak English	**X**		
Provide opportunities to learn about financing options and benefits through a variety of different methods	• Multiple finance products available, requires time to acquire knowledge	**X**		**X**
Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles	• Lack of marketing skills • No direct contact with borrower • No real influence on the borrower's decision	**X**		**X** **X**
Work with the CAEATFA to have their Financial partners apply with the CHEEF proactively	• Financial partners aren't an approved FI	**X**		**X**

Non-residential (Small Business, Medium/Large Property)

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
• Coordinate with the existing energy efficiency programs through IOUs, RENs, and SWMEO to integrate financing as a solution to help the project move forward.	• Competing relationships or products (to organization or association)			X			X
• Help tenants facilitate property engagement workshops aimed at explaining the benefits and minimizing fear of the unknown in order to maximize employee buy-in and support • Help building owner promote their upgrade as an environmental steward of the community	• Perception that construction will inconvenience the employees (Medium)		X X	X X		X X	X X
• Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles	• Status-quo is easier than change		X	X		X	X
• Promote financing as integrated messaging with utility marketing programs	• Lack of awareness of utility EE/DR programs	X	X	X	X	X	X
• Provide opportunities to learn about innovative sales techniques using financing as a tool to get the project moving forward	• Don't know how to present the opportunity to the building homeowner			X			X

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
• Create collateral material explaining the opportunity and financial implications of the financial products available				X			X
Leverage REN and IOU relationships with local governments to understand the promotional strategies and community benefits	• Political climate of jurisdiction may not promote energy efficiency			X			X
Coordinate financing products with vendor or distributor upstream program recipients	• Quick timing of HVAC change-outs conflict with longer EE or DR projects • Lack of utility rebates to offset scope costs	X X	X	X	X X	X	X
Create an unbiased resource for people to go to in order to get customized solutions about their particular project	• Lack of ability to identify which financing product is best suited for the customer/project • Perception that scope is too small to influence the client's decision about financing	X		X X	X		X X
Create case studies from previous financing program participants (OBF, PACE, CEC, ARRA) to showcase positive impact energy efficiency upgrade made in combination with loan	Building owners don't think this applies to them		X			X	
Create collateral material explaining the opportunity and financial implications of the financial products available	• Utility bill is an income source for the owner		X			X	
Create communication channels such as	• Perception that the enrollment	X			X		

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
roundtable discussions, networking events, or webinars where contractors and financial institutions can discuss what is working or not working	process or participation requirements will be cumbersome						
Design a cooperative marketing program which helps contractors receive financial assistance for cobranded marketing efforts they produce on a cost-share basis	• Lack of marketing funds	X		X	X		X
Develop EE Financing Online Tool that helps owners identify financing solutions	• Concerns about payback • Inability to qualify for financing • Low credit rating may impact their ability to qualify	X X X	X X X	X X X	X X X	X X X	X X X
Have a phone number available for both contractors and strategic partners selling financing as well as one for building owners looking for assistance to call when they have questions about all financial products in the marketplace	• Limited resources	X	X	X	X	X	X
Help building owner promote their upgrade as an environmental steward of the community	• Combative relationship with building owner • Energy efficiency is disadvantaged as an investment, a 30% tax credit is available for renewable energy projects but not for energy efficiency		X	X		X	X
Help tenants facilitate property engagement workshops aimed at	• Perception that construction will inconvenience the		X	X		X	X

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
explaining the benefits and minimizing fear of the unknown in order to maximize neighbor buy-in and support	tenants						
• Include marketing messaging about post-construction behavior and its effect on utility bills • Educate owners on the utility bill impact analysis and how it is not meant to be a performance guarantee • Engage Real estate community including appraisers to see the value in using the green addendum to the appraisal reports	• Modeled energy savings doesn't usually correlate with amount of reduction in utility bill, resulting in credibility problems with customers • Not enough evidence of property appreciation for energy upgrades, so collateralizing the energy savings is difficult and unpredictable • Suspicious of performance of upgrade • Responsible for debt of service, even if savings are not achieved		**X** **X**	**X** **X** **X**		**X** **X** **X**	**X** **X** **X**
Include messaging that these pilots are statewide in the marketing materials	• Product availability is limited based on market size and demand	**X**	**X**	**X**	**X**	**X**	**X**
Include messaging about the value proposition of energy projects including comfort and health	• Confusion about true market demand for EE in marketplace • Competing priorities for limited disposable income • Not held accountable for performance in		**X**			**X**	

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
	this field (rewarded for vacancy rates) • No motivation to bring this to the owner/investor • Status-quo is easier than change						
Keep marketing materials simple with easy to follow steps and ways to skip over sections	• Complex topic, seen as secondary to overall business strategy • Lack of knowledge of benefits of borrowing money to implement EE/DR projects • Additional layer of complexity when paying down the debt (off-bill)		**X**			**X**	**X**
Partner with contractor trade organizations to help build credibility for the participating contractor's accreditations and memberships (BBB, IHACI, BPI, etc.)	• Lack of confidence in contractor pool that isn't already their vendor	**X**	**X**	**X**	**X**	**X**	**X**
• Proactively identify EE solutions that benefit solar customer • For owners who installed system but did not do EE first, promote low cost EE solutions that would still be of benefit • For owners considering solar, actively promote EE as an important first step to reducing	• Owner may have already invested in solar • Owners considering solar may not be aware of importance of EE investment for right-sizing system		**X** **X** **X**	**X**		**X** **X** **X**	**X**

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
utility cost and solar system size							
Promote EE solutions during regular maintenance, or through comprehensive sales techniques	• Inexperienced staff people • React to emergencies rather than act proactively	X	X	X	X	X	X
Promote the benefits of pulling permits and following code enforcement rules	• Concerns about renovations meeting code compliance	X		X	X		X
Provide easy to understand financial decision tools which lay out the business numbers for each product	• Deficient business/sales skills • Perception that outside of lighting, difficult to make a multi-measure project pencil out • Lack of cash flow to make improvements without assessing the property • Difficulty in navigating available funding options and lack of access to capital. • Process adds work to them without any perceived benefit • Return on Investment must fall within shorter timeframes (2-3 years) to make a project pencil out. • Perception that bills will go up • Additional debt and assets affect	X	X	X	X	X	X

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
	the borrower's balance sheet, return on equity and various financial metrics • Most property owners have to satisfy a lengthy capital expenditure process to acquire debt • For lease providers: Uncertain how financing products will work with existing sales cycle						
Provide financial institutions and contractors with marketing resources, training and support to promote financing pilots	• Lack of awareness of how investments in EE can positively impact their electric bill	X	X	X	X	X	X
Leverage the statewide Energy Upgrade California website's Green Button function into marketing campaign	• Lack of access to utilities' customer information and energy use performance	X		X	X		X
Provide marketing materials in a variety of user languages (based on SWMEO's plan)	• Many customers don't speak English	X		X			X
Provide opportunities to learn about financing options and benefits through a variety of methods	• Multiple finance products available, requires time to acquire knowledge • Split incentive issue if tenants are triple net leases - Tenants are generally not willing to make improvements that will benefit	X	X	X	X	X	X

		Stakeholder Benefiting					
Strategy	**Barriers**	*Contractor*	*Small Bus Owner*	*Strategic Partner*	*Contractor*	*Med/ Large Bldg. Owner*	*Strategic Partner*
	the property owner • Focus on core business investments (revenue growth) over cost savings (avoided energy costs) • Not held accountable for performance in this area (i.e. Lower energy costs and energy efficiency doesn't fall within Facility Manager's goals - Medium)						
Train strategic partners how to sell financing using messaging that has been tested and suggested through market research principles	• Lack of relationship with building owner; property management company serves as the "gatekeeper" • Lack of marketing skills • No direct contact with borrower • No real influence on the borrower's decision • For lease providers: Fear offering financing will slow down sales cycle	**X**		**X**	**X**		**X**
Work with the CAEATFA to have their Financial partners apply with the CHEEF proactively	• Financial partners aren't an approved FI	**X**		**X**	**X**		**X**

Appendix C: Working Group Process

In September 2013, the Commission directed the launch of seven financing pilots in Decision 13-09-044. In keeping with direction provided in D.12-05-015 (May 2012), the Commission noted in D.13-09-044 that "it makes sense to coordinate marketing efforts discussed in this proceeding with the larger umbrella platform"[44] of the Energy Upgrade California statewide marketing education and outreach program (Statewide ME&O).

Subsequently in Resolution E-4663, the Commission directed "CSE, as program administrator (for Energy Upgrade California SWMEO), to draw up an integrated statewide plan, with the collaboration and input of the Joint Utilities, CAEATFA and Commission, and drawing on the expertise of market research and best practices in this emerging area of marketing." [45]

This document outlines a proposed process and timeline for development of this plan. CSE aims to convene a "go-to-market" Working Group to work collaboratively at the local, regional and statewide level to simplify benefits messaging and the call to action in order to increase participation in energy efficiency and demand response projects in various building types through awareness and adoption of financing solutions.

Plan Development and Goals

The Financing ME&O Plan will outline objectives, target borrowers, strategies, tactics, timelines and budgets for the various tasks and activities. It will allocate budget to specific markets, channels and tactics and specify where an RFP will be required. These items will cover all channels and sectors served by the pilots including single family, multifamily and non-residential small, medium, and large non-residential. It will identify related market actors and strategic partners, and each of their barriers to participation along with recommended tactics for reaching those market actors. It will also address related collaborative marketing efforts to be done by the statewide Energy Upgrade California team and by the IOUs and RENs in coordination with their core program marketing efforts.

The financing pilots are being launched into what is fast becoming a crowded marketplace of local, regional, and national energy financing efforts competing to support uptake of energy related actions and services. These pilots, which are now authorized to support energy efficiency and demand response measures, are being designed to achieve the following goals:

- Encourage customers to invest in projects that will achieve deeper energy savings;
- Overcome the "first cost" barrier of energy efficiency upgrades;
- Leverage ratepayer funds while bringing in private capital;
- Increase sales of energy efficient products and services; and

[44] D.13-09-044 pg. 85
[45] CPUC Resolution E-4663 June 26, 2014

- Reach a broader set of customers and market segments. "[46]

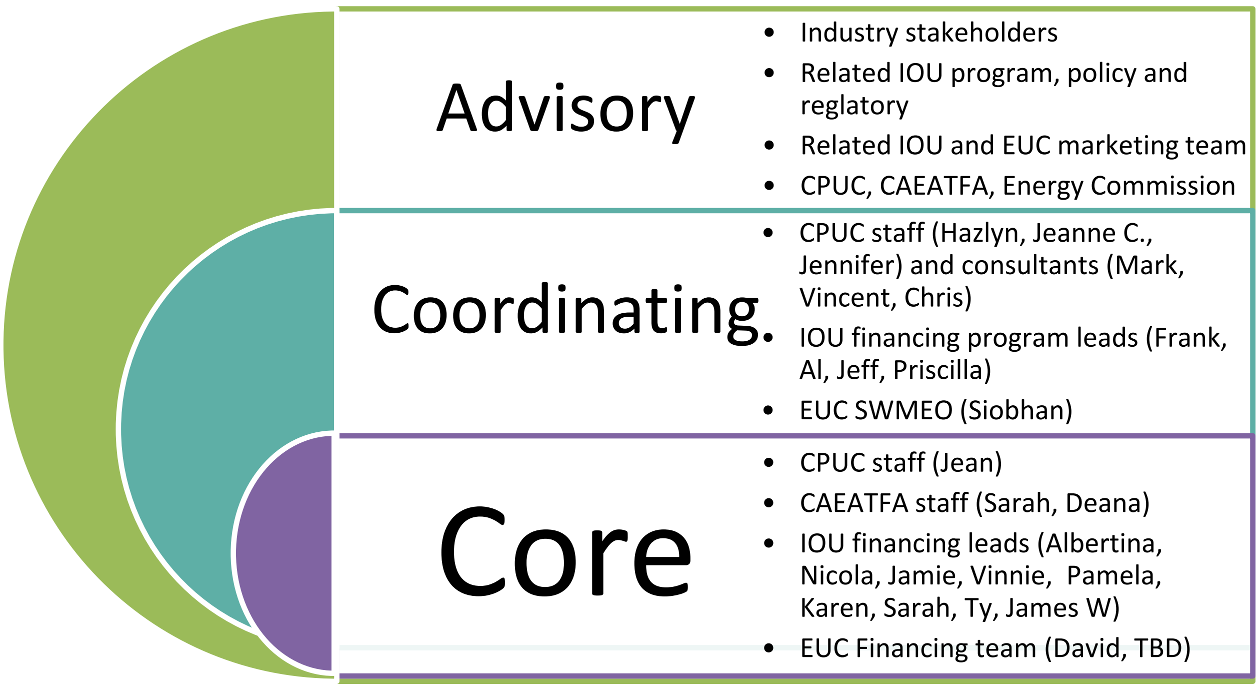
The ME&O plan aims to define a strategy for introducing the pilot financial products into this marketplace to position them to effectively reach these goals. This may involve positioning pilot financial products alongside products already in market to enable market actors to effectively communicate, and target borrowers to best understand the benefits of energy measures and financing as a tool, and to determine which financing product is best for which project. It also will likely require tracking positive and negative reactions by the various market sectors and target customers to provide feedback to the financing pilot program teams and refine the financing products to best serve the marketplace over time.

The ME&O plan will take a comprehensive, coordinated approach to ME&O across multiple regions working at the local, regional and statewide level to simplify benefits messaging and the call to action in order to increase participation in energy efficiency and demand response projects, whether they participate in an IOU incentive program or not, in various building types through awareness and adoption of financing solutions.

[46] 2013-14 Joint IOU-ED EM&V Plan Version 3 April 28, 2014 pg. 253

Working Group Composition and Estimated Time Commitment by Category

The Financing pilot “go-to-market” Working Group is comprised of three tiers.



The **Core Group** will be made up of the active stakeholders responsible at their respective organizations for marketing and outreach for the financing programs. In addition, there will be one representative from the program team to provide subject matter expertise in order to streamline the process. This group will do most of the collaboration, coordinating regularly over the phone and through email. The Core team will have weekly meetings, led by CSE, in which collaboration and updates will be shared and solutions discussed. Although CSE is ultimately responsible for drafting the Financing ME&O Plan, members of the Core Group will provide input and feedback. Core Group members will be asked specifically for their input to help define target customers and objectives, and develop tactics for local marketing participation from their organization. In order to best accomplish the goals and deliver the statewide ME&O plan on time, decision milestones will be scheduled as deadlines so that nothing pending will hold up the group’s ability to complete the plan draft.

Core Group members are requested to commit to one hour of time per week between August 7 and December 1, 2014, three in-person meetings including the August 7 kick-off meeting, and approximately 10-15 total additional hours August-November for plan review and comment, coordination with internal stakeholders, and assigned section plan development with budget and schedule. The total time commitment anticipated is about 40-45 hours.

The **Coordinating Group** will be made up of stakeholders who will provide higher level support for plan development and ME&O implementation. Members of this group are comprised of the financing pilot program leads at the IOUs and affiliated CPUC and CSE staff. Coordinating Group members will be invited to attend in-person meetings and will provide consultative support to their Core Group counterparts and feedback to CSE on program design considerations, proposed strategy and the draft plan. Coordinating Group members will be invited to review drafts of completed sections as well as provide input as to how the implementation strategy defined fits into the larger portfolio of programs and efforts they are managing. The Coordinating Group members will receive all agendas and deliverables and will be able to provide feedback and comments as the development of the plan progresses.

Coordinating Group members will be asked to attend the two in-person meetings, to review and comment on the draft documents and may be called on for insight by the Core Group and/or CSE. Time commitment will vary based on interest and participation, and on average we expect a time commitment of about 20-25 hours total August-November.

The **Advisory Group** will not participate in the plan development directly but may be consulted due to their subject matter or program expertise and to ensure that existing efforts are complemented rather than duplicated. Advisory Group members will be asked to review the draft plan and provide comments that will be used in drafting the final plan. Advisory Group members may be solicited for market research or interviewed by CSE in order to better understand the experiences they have had as well as compile best practices and lessons learned.

Advisory Group time commitments will vary widely, and on average will likely be about 4-8 hours.

Plan Development Schedule

Originally, this ME&O plan was due for submission by October 20, 2014. However the Commission approved CSE's request for extension to submit this ME&O plan by November 4, 2014.

This revised schedule also allows for a 30-day window for the CPUC to review and approve the Financing ME&O plan and authorize the implementation to commence at beginning of 2015. The grid below outlines a high level schedule for development of the plan that has a draft for stakeholder review by October 2 and a final draft submitted via Tier 1 advice letter by November 7.

Proposed NEW Schedule	July 28 - Aug 5	Aug 4-8	Aug 11-15	Aug 18-22	Aug 25-29	Sept 1-5	Sept. 8-12	Sept 15-19	Sept 22-26	Sept 29-Oct 3	Oct 6-10	Oct 13-17	Oct 20-24	Oct 27-31	Nov 3-7
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
In-Person Meetings						**tbd**									
Drafts Complete															

Review and Feedback															
Core Team Work															
Advisory Engagement															
Market Research															
CAEATFA Board															
Training & Tool Dev.															

Guide:

Blue = Coordinating Group

Purple = Core Group

Peach = CAEATFA

Gold = Energy Upgrade California team at CSE

Green = Advisory Group

Working Group Process

The working group structure is intended to obtain knowledge and expertise from the variety of players within this financing marketplace and recognize unique roles and potential contribution while at the same time respecting time and budget constraints.

CSE will draft weekly agendas and send it out at least 2 business days prior to the weekly conference call along with any materials which need review prior to the meeting. The agendas will be distributed to both Core and Coordinating Group members given the assumption that Coordinating Group members will only join the meeting if their contribution is needed. All review materials, deliverables, and sections are open for all team members to review and comment on.

CSE will seek feedback on various components of the ME&O plan from the Core Group weekly throughout the development process and will document the range of feedback. While we will seek consensus where possible, it is not necessary for all members of the group to agree on components of the plan for those to be included. Where issues or concerns are raised those will be noted for the Commission's consideration in approving the final plan.

CSE seeks to work collaboratively with the working group to produce an evidence-based strategy grounded in best practices from around the country, market research, and implementation experiences and appreciates the time and commitment of all involved to help make these pilots as successful as possible.

APPENDIX D: “Making the Case for Video Marketing” Research Summary

Video marketing, as a tool to educate users on new products and services, builds trust in a brand and engages users to the point where they change their perceptions and/or buying behavior. Research took a look at user comprehension, future recall, social sharing and ecommerce behavior.

While much of the data collected addresses online video consumption almost exclusively, there are meaningful correlations which could be drawn between online and more traditional broadcast video.

Do People Prefer to Watch Video?

First, data that might illuminate any user predilection towards video in their online behavior was looked at. Specifically, looking at the behavior of visitors to web pages that contain video and video+text was analyzed for context.

[47]The first evidence comes from Digital Sherpa, who reports “80% of your online visitors will watch a video, while only 20 percent will actually read content in its entirety.”[48]

In another study on the science of video engagement, Diode Digital found that “before reading any text, 60% of site visitors will watch a video if available.”[49]

Further evidence can be found in the recent report released by Brightcove, a major online video distribution platform. According to their survey of 2000 respondents, “…seven in ten (76%) Customers cite video as their preferred content source when consuming brand information.”[50]

It has often been said that a picture is worth a thousand words and Forrester Research has shown that the value of video is exponentially higher. According to Dr. James McQuivey, “a minute of video is worth 1.8 million words.”[51]

---

[47] http://www.digitalinformationworld.com/2014/01/why-video-marketing-is-so-effective-in-2014.html
[48] http://www.digitalsherpa.com/blog/25-amazing-video-marketing-statistics/
[49] http://www.diodedigital.com/work/onlinevideo2013
[50] https://www.brightcove.com/en/company/press/consumers-rank-video-trusted-most-personable-and-authentic-brand-marketing-experience-according-brig

Successful marketing and educational campaigns rely on their ability to convey often complex or nuanced concepts in clear, concise terms, while reaching the widest audience. In both brand education and marketing, video is clearly the preferred method of message delivery by a large majority of Customers.

User Engagement & Behavior Change:

There is considerable data supporting the power of video to drive user engagement and its ability to influence buyer behavior. The improvements over print and other forms of media are not incremental; they are multiples of efficacy.

[52]But can video actually affect user's behavior? Can it influence people to do things in new ways that are much different from their old, established ways? Clues can be taken from this past summer's 'Ice Bucket Challenge'. In a NY Times article recently published, Vindu Goel talked about the phenomenon. In his analysis, "Perhaps nothing demonstrated Facebook's strengths in video more than the 'Ice Bucket Challenge,' this summer's social media phenomenon in which millions of people, from celebrities to unknowns, poured buckets of ice water over their heads and challenged others to do the same to raise money for research into amyotrophic lateral sclerosis and other charitable endeavors. Between June 1 and Sept. 1, Facebook said, more than 17 million videos related to the challenge were shared on its service. Those videos were viewed more than 10 billion times by more than 440 million people."[53]

Illustrating the power of video to drive sales in eCommerce, a 2010 ComScore report stated that "Retail site visitors who view video stay two minutes longer on average and are 64% more likely to purchase than other site visitors."[54] In Diode Digital's 2013 report on internet video, they "found that video promotion is 600% more effective than print and

---

[51] http://www.marketwired.com/press-release/a-minute-of-video-is-worth-18-million-words-according-to-forrester-research-1900666.htm
[52] http://www.digitalinformationworld.com/2014/01/why-video-marketing-is-so-effective-in-2014.html
[53] http://www.nytimes.com/2014/09/08/technology/facebooks-feeds-give-videos-a-boost.html?_r=0
[54] http://www.comscore.com/Insights/Press-Releases/2011/2/comScore-Releases-The-2010-U.S.-Digital-Year-in-Review

direct mail combined."[55] In the real estate market, video has had a profound impact on the ability of agents to effectively market a home. In fact, Digital Sherpa found that "Real estate listings with videos receive 403% more inquiries than those without videos."[56] When referencing the power of video in eCommerce, they go on to say that, "After visiting a video ad, 12% of viewers purchase the specific product featured in the ad".

After an analysis of multiple data sources, Andrew Follett of Video Brewery states "Businesses that incorporate video marketing into their overall marketing strategy see higher engagement rates, higher click-through rates and higher conversion rate. Why would you leave all that value sitting on the table?"[57]

Comprehension and Recall:

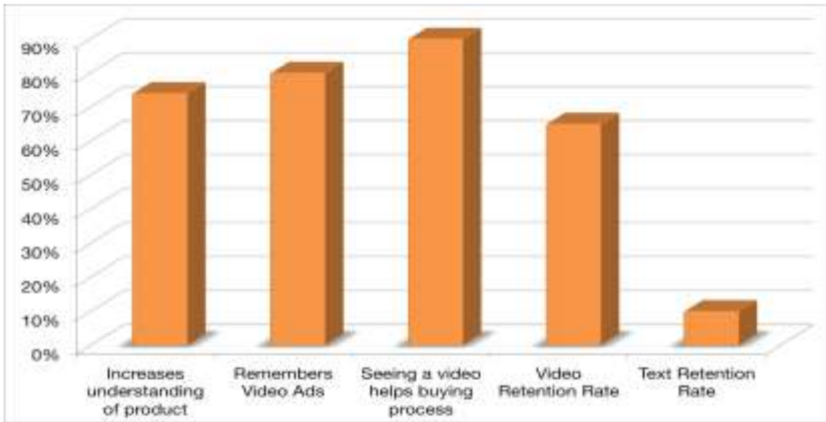
An increasing body of evidence leads researchers to believe that not only are users engaged in video more than print or still images, but both the comprehension and later recall of the subject of a video is greatly enhanced as well. A variety of studies have looked at the comprehension rate of people watching a video verses reading text.

The data can be summarized as follows: According to Digital Sherpa's digital marketing statistics from 2013[58], three key data points stand out:

- Videos increase people's understanding of a product or service by 74%
- 80% Of Internet Users Remember The Video Ads They Watch Online
- 90% Of Users Say That Seeing A Video About A Product Is Helpful In The Decision Process

Social Media Today reports "Video content consistently outperforms blogs and other text-based content. Pinterest boards now generate more revenue for retailers than tweets or Facebook posts."[59] They go on to say "One study shows the retention rate for visual information can reach 65% versus 10% for text-based information.

[55] http://www.diodedigital.com/work/onlinevideo2013
[56] http://www.digitalsherpa.com/blog/25-amazing-video-marketing-statistics/
[57] http://www.videobrewery.com/blog/18-video-marketing-statistics
[58] http://www.digitalsherpa.com/blog/25-amazing-video-marketing-statistics/
[59] http://www.socialmediatoday.com/content/internet-marketing-trends-and-tactics-2014-infographic



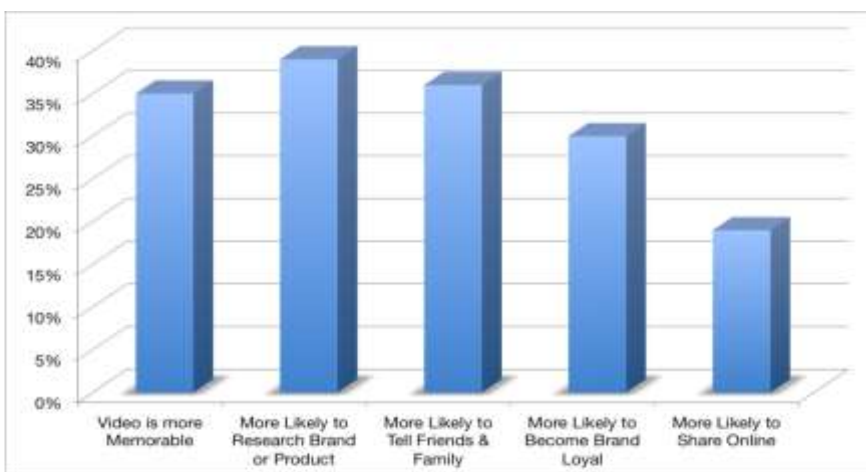
Video Comprehension and Recall vs. Text

Building Trust and Sharing

Beyond education, building trust in a brand is paramount when planning for long-term success. Confidence in a brand can trump price and a host of other considerations when Customers are deciding to buy. Can video offer advantages over other methods to foster trust in a new brand?

Some details emerge from the Brightcove report where they found: "Almost a quarter (24%) of the Customers surveyed said video is their 'most trusted' source of brand content. Explaining their choice, 44% said video was more 'appealing' to them, while engaging (28%), authentic (29%) and sharable (10%) were also cited as reasons for trusting video content over other forms of brand communication."[60]

High Quality Video Results in Better Recall and Reach



This bodes well for marketers who are introducing new products or services that may need to build that trust with the Customer from scratch. Brightcove goes on to say: "In addition, over a third of Customers

[60] https://www.brightcove.com/en/company/press/consumers-rank-video-trusted-most-personable-and-authentic-brand-marketing-experience-according-brig

(35%) cited brand video content as more memorable if it is of high quality. The research found that when Customers had a good video experience:

- Almost four in ten (39%) were more likely to research the brand or product further
- A similar amount (36%) were more likely to tell friends and family about the brand
- Three in ten (30%) said they were more likely to become brand loyal
- Just under a fifth (19%) said they were more likely to share content from that brand on social media"

[61]Some New Trends:

Video is evolving rapidly on two fronts: one is in the way content is created, and the second is in the way it is distributed. We are seeing new players enter the distribution market, providing publishers with ever-expansive, more cost-effective ways of distributing video than was previously possible with traditional channels. The power of video to connect people has not been lost on the biggest player in social media - Facebook. With 1.3 billion viewers, Facebook is making huge strides in showing how willing people are to share video.

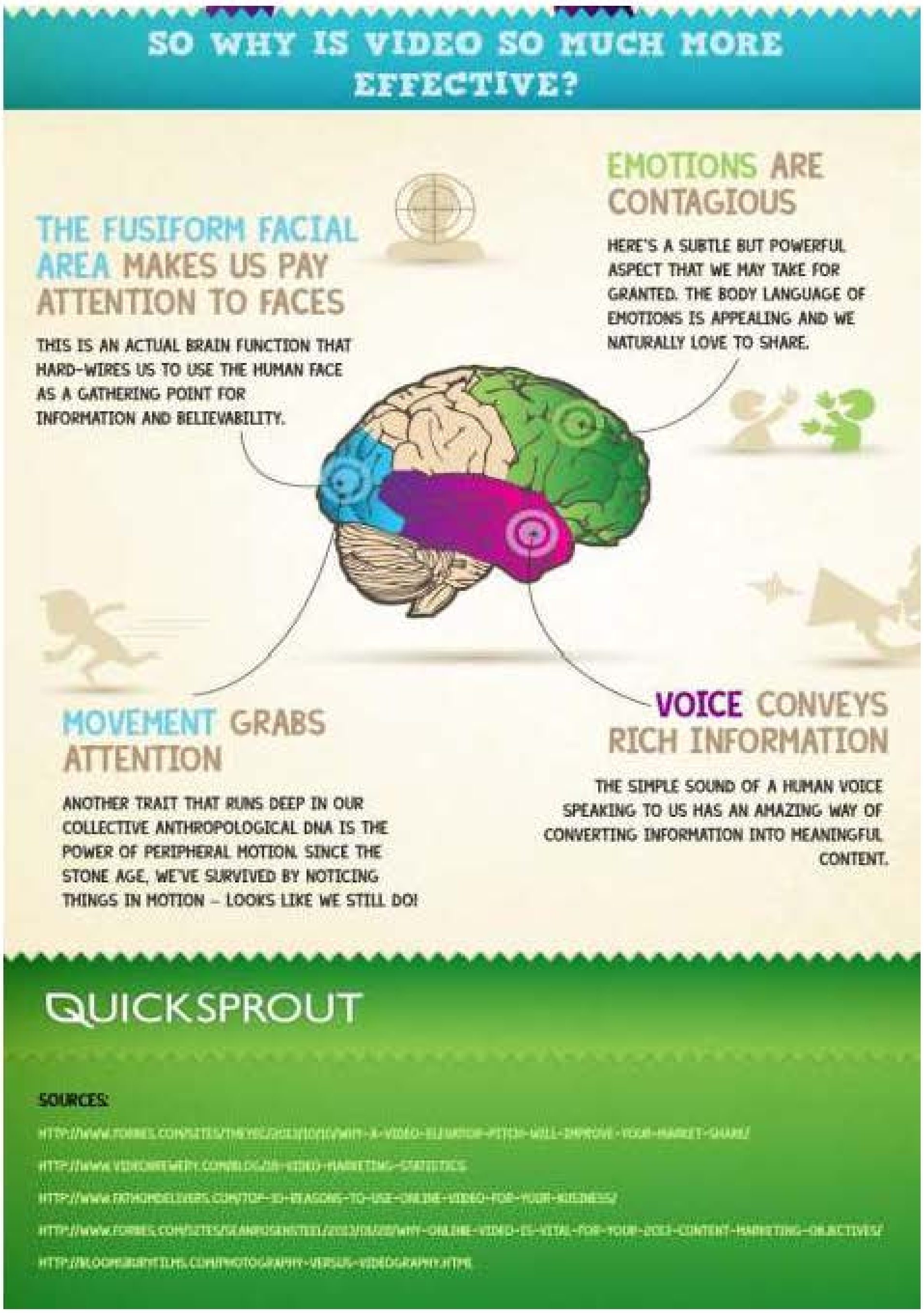
In the NY Times article, they outlined the power of this relatively new player in the field. Referring to a recent video posted by the singer Beyoncé, "On Friday morning, Beyoncé posted a video on Facebook and YouTube that took her fans behind the scenes to see the preparations for her live performance last month at the MTV Video Music Awards. In the first four hours, Facebook users watched the video 2.4 million times. On YouTube, the four-minute clip garnered just a few thousand views during that time."[62]

To help their members discover more video on their network, in June 2014 Facebook modified their news feed to favor video for those who tend to watch the videos they deliver. "People who tend to watch more video in News Feed should expect to see more videos near the top of their Feed. Conversely, people who tend to skip over videos without watching them should expect to see fewer

[61] http://www.digitalinformationworld.com/2014/01/why-video-marketing-is-so-effective-in-2014.html
[62] http://www.nytimes.com/2014/09/08/technology/facebooks-feeds-give-videos-a-boost.html?ref=media&_r=3

videos."[63] Further on in their report, the results of their testing shows that "this improvement resulted in more people watching more videos that are relevant to them. "

Video is being used in new and powerful ways that grab users' attention, delivering your message in ways they prefer, understand and remember.



[63] http://newsroom.fb.com/news/2014/06/news-feed-fyi-showing-better-videos/

APPENDIX F: Matched Energy Savings Accounts: Concept Analysis Report

Saving Neighborhood Energy
Transforming Energy into Assets for Families

Matched Energy Savings Accounts:
Helping Transform Energy into Assets for Families across California

Saving Neighborhood Energy is an innovative financing and asset-building initiative that catalyzes energy efficiency among ordinary Californians. Our Onbill Repayment Pilots are the first authorized in California. Our community-based pilots enable low- and moderate-income homeowners to access the home energy savings available to wealthier households, while reducing harmful carbon emissions.

Saving Neighborhood Energy is excited to unveil a first-of-its-kind performance-based energy incentive that helps families save money while saving energy. Our Matched Energy Savings Account (MESA) *effectively* matches the energy savings of underserved low- and moderate-income homeowners who have completed energy efficiency upgrades. When MESA is partnered with EE financing, our participating households can realize financial savings immediately.

The product itself is simple: Homeowners sign up with us after their energy upgrade, financing, or other energy-change motivation. Verified energy savings will be matched dollar for dollar for up to two years. Families can use their MESA savings account to invest in the things that matter most to them: education, paying off debts, jumpstarting a business, or saving for a rainy day.

The MESA was developed to achieve these primary objectives:

1. Incentivize Participation in Energy Upgrades by Families Too Often Left Out
By rewarding EE participation through matched deposits, and by offsetting the cost of financing energy efficiency, MESA will incentivize participation in energy efficiency programs. We expect the MESA to appeal especially to underserved populations, whose incomes are too high for grants but too low to purchase EE services.

2. Catalyze Demand for Energy Efficiency Financing
The MESA reduces effective cost of financing EE loan, complements innovative marketing with neighborhood-based organizations, and helps reach the underserved market. Families can achieve savings earlier in their loan terms, or move from a larger loan cost to bill-neutrality or better.

3. Transform and Reward Behavior
Lessons from behavioral economics show that repeated actions create habits. By rewarding reduced energy consumption – through our effective performance-based rebate– the MESA creates habits that continue long after the program ends. This addresses the "rebound effect" when households begin to use more energy, not less, after upgrades.

4. Build Household Savings over Time
Savings of $500 to $1000 per year are meaningful to hardworking households. This is especially in California, where 44% of all families are liquid-asset poor.

5. Adapt Proven Financial Products to Underserved Markets in Energy Efficiency
The MESA draws from key lessons in financial services, and can be adapted to single family and multifamily uses, with or without financing.

The MESA leverages key, evidence-based lessons from the asset-building field to help transform harmful carbon emissions into welcome financial savings for ordinary Californians.

www.EnergyIntoAssets.org

Full Report can be found at www.EnergyIntoAssets.org