Instructions

This year's format is slightly different from last year. If you participated last year, you will remember that each case had one case partner and was written from their specific perspective. This resulted in solutions that were very useful to the case partner, but not necessarily replicable to other organizations. This year, many case partners were consulted to give a broader perspective on endemic energy efficiency implementation barriers. ***Accordingly, this year's cases describe "typical" versions of problems, and your solutions will be judged on innovation and replicability.***

Each case provides information that reflects the most common elements of the problem and some contextual assumptions. But in real life, every instance of a problem can be different. Therefore, you have two options for developing your solutions:

1) *You can select one or more real-world examples, and use the specifics of their situation to inform your solution OR*
2) *You can propose a general solution based on the assumptions provided in the case text and create additional assumptions as needed.*

Under either option, solutions will be judged for innovation and replicability. Therefore, if you choose to focus on a specific real-world example, you should indicate where aspects of your solution might be adapted or changed to be more broadly replicable.

In addition, any assumptions that you change or add must be clearly stated, and the sources cited in your case solution. If you use an example(s) that has different parameters than the assumptions in the case, of if your proposed solution requires changes to the case parameters, you must explain the impact of these differences on the solution's success or replicability.

Introduction

Property Assessed Clean Energy (PACE) programs are designed to help property owners obtain low-interest, long-term financing for the high-cost energy efficiency and renewable energy measures, particularly long term capital improvements. While residential PACE programs incurred opposition from the Federal Housing Finance Administration (FHFA) that has caused many to suspend operations, the effect on commercial PACE programs has not been as dire, and so this model continues to offer an innovative way to support clean energy projects in the private sector. PACE programs are in operation in a number of cities and states, while additional jurisdictions are finalizing the necessary enabling legislation and administrative rules.

PACE programs in operation, however, like many clean energy finance initiatives are often not achieving the levels of market uptake needed to attract major capital providers, reduce transaction costs, and build confidence. Without this needed scale, PACE programs are not likely to be sustained; while some cities have succeeded in marketing PACE programs through intensive small-scale engagement, this resource intensive model does not translate well into a larger and more viable program.

The Challenge

You were recently promoted to Program Director of an emerging statewide PACE program aimed at commercial buildings. Your previous position was at the city level where you effectively launched and implemented a PACE program targeted to large commercial consumers in your district. Your strategy was to target buildings or portfolios ripe for PACE financing and provide intensive technical support and consulting to them to encourage uptake of the program. Funding to set up and administer this program came from the American Recovery and Reinvestment Act (ARRA), but this funding has since been spent.

Now you have been tasked to scale up your operation to the state. Taking into account best practices and barriers from existing statewide programs, you have been asked to draft a business plan, strategy and roadmap outlining a path for the sustainable state-wide administration of the new program. As this funding option is relatively new, the state is concerned with the risk involved and have asked that you put together an analysis, including proposed solutions, of all of the identified and potential barriers including, but not limited to: education/market acceptance, lien holder consent, complicated application/administration, market identification, intrastate coordination[1], effects on commercial borrowing capacity[2], methods for tracking and evaluating the program's success, etcetera. In developing this plan, you have the freedom to completely reorganize your operations for optimal scaling but need to keep resources in check including time, human capital, and cost.

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[1] The ability of governments and/or organizations to respond nimbly to the development of this market should be taken into account

[2] Property assessments are generally, though not always, treated as an expense, not capitalized on the balance sheet as a long term liability.

Design Considerations

The state would like the focus to remain on commercial buildings as they are still concerned with the letter issued by the FHFA in July 2010 concerning the senior lien status associated with most PACE programs. Multifamily building owners are increasingly expressing interest in PACE as it can help address capital constraints. The state will entertain classifying the multifamily building sector as commercial if the business plan can make a compelling case for doing so. The state is still concerned about how to address the issue of lien holder consent and has recommended that you include in your program design a method for addressing this issue as it pertains to commercial buildings, specifically addressing complications that arise from the commercial mortgage backed security (CMBS) structure.

The state has increased the administrative budget for your office[3], which consists of an interdisciplinary staff of six, with the express guidance to ramp up your program operations to the state level. The program delivery method employed at the city level, including intensive technical support, worked well but your team's time now must be allocated to ramp up operations for a larger geographic region and you must take this into account when framing your new program design. To address both program delivery and capital needs, you must assess how to leverage your program budget or other sources of capital[4] to get your new program up and running, including the potential opportunities to partner with local governments, utilities, associations of property owners and managers, trade associations, mission-driven and for-profit lending institutions, Regional Energy Efficiency Organizations (REEOs), and the like. All stakeholder roles, including staff, should be clearly defined and feasible.

Interstate Considerations

Your state enacted legislation permitting counties and municipalities to adopt resolutions or ordinances establishing clean energy loan programs based on the "PACE" model several years ago. In your previous position as a city energy manager, you spearheaded the first successful PACE program in the state. You are now tasked with scaling up operations to a state-wide level. However, you must first get each local government to enable PACE, which entails negotiating agreeable terms with each local government, while promoting consistency across the state.

The state has given you autonomy over program design, but has asked that you take into account the needs and concerns of local governments. Your recommendations should cover program aspects such as: outreach and marketing, application process, property owner and project eligibility, project size limits, loan interest rates and terms, credit underwriting, loan terms and conditions (including whether or not energy savings must cover processing and/or financing payments), the ongoing administrative structure for servicing the loans, loan payments, closing process, and bundling and coordination of program services. While the program design must touch on all these aspects, you have the option to

[3] The budget currently covers the salaries of your team. You will need to justify the scale up cost to the state to set your starting budget. After scale has been achieved, the program should be largely sustainable with administrative costs equaling 2% of total loan volume.

[4] The state legislation includes provisions permitting local governments to issue general obligation bonds The fact that the municipality issues a bond in the amount of the project funded does not necessarily mean that municipal funds were used to fund the project. The bond can act to simply create a contract between the municipality and the PACE investor

allow specific decisions to be delegated to the local level, mandated at the state level, or a combination thereof.

Market Assessment

Achieving scale – both in number of localities participating and market uptake rates in each locality – is important for the long-term success of the program because lenders (both primary and secondary) need to see deal volume and total investment at levels that justify their involvement. Transaction volume is needed to keep per-loan transaction costs reasonable by spreading fixed as well as variable program costs over a volume of loans. Property owners and energy services providers such as contractors need to see a vigorous level of local activity to build interest and confidence that PACE is a real and lasting force. Because PACE is new and can be complex, achieving scale will require substantial outreach and marketing efforts and the budget to support them.

- Your state has seven large cities that account for 75% of its population, with a range of 100,000 to 700,000 and an average of 200, 000.
- The average cost of electricity is $00.13/kWh
- There are many contracting companies in your state, but most of them are unfamiliar with PACE

Office	Square Feet	% of Total Sf	No of Bldgs	% of Total Bldgs
Class A	150,000,000	50%	770	35%
Class B	120,000,000	40%	990	45%
Class C	30,000,000	10%	440	30%
Total Office	300,000,000	100%	2,200	100%
Hospitality	40,000,000	-	200	-
Multifamily	150,000,000	-	2,000	-
Industrial	200,000,000	-	1,000	-
Total	690,000,000	-	5,400	-

General Resources

- Commercial Property Assessed Clean Energy (PACE) Primer
- Templates
- PACE NOW
- DC PACE
- The Investor Confidence Project