

# Commercial Energy Efficiency Loans: What role do they play in the Efficiency Toolbox?

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# Overview

- **Project resources**
- **Loan program background**
- **Findings from project research**
  - **Program comparisons**
  - **Findings on commercial loan market**
- **Overcoming barriers to commercial sector energy efficiency**



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# Project Resources

- 2006 Process evaluation of the California Energy Efficiency Loan Fund
  - Offered in 2004-05 in 5 SF Bay Area counties
- Program theory and logic study and market characterization study of the New York Energy Smart Loan Fund
- Process evaluation of BPA Residential Loan Program
- Review of six comparable programs for best practices (including NYSERDA)



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# Background on Loan Programs

## → Reason for Loan Program:

- Lack of financing or capital seen as a barrier to investment in energy efficiency
- Operational savings appear to be opportunity to pay financing fees

## → Common Program Strategies

- Quantify economic benefits of energy efficiency investment & communicate to borrower
- Factor resulting savings into cash flow calculations at loan origination
- Use private lenders to provide loans



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# Three Basic Models For Loan Programs

- 1. Provide financing directly (utility)**
  - Leverage energy efficiency expertise
  - Bill payment history available/on-bill financing possible
  - Desire to provide customer service
- 2. Work with one private lender**
  - Simple relationship
  - Differentiation for lender
- 3. Work with multiple private lenders**
  - Attractive for MT logic



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# Residential Loans Have Been Successful

- Long history: launched via 1979 executive order
- Federal policy support and regulation
- Presence of Federal mortgage programs allow wider implementation
- Development and application of HERS provides standard measurement of home's energy efficiency



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# Commercial Loan Programs Less Common

- **There is little infrastructure for commercial loan programs:**
  - **No common or standardized rating system**
  - **No Federal program to ensure favorable loan terms**
- **Commercial projects are less uniform than single family homes**
- **Commercial projects often have complex financing issues**



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# Findings from Two Programs

- **California Energy Efficiency Loan Fund**
  - **Limited to San Francisco Bay Area**
  - **Program was not successful**
    - No loans were closed in 18 months
    - Few participant referrals from lenders
  
- **New York Energy \$mart Loan Fund**
  - **Offered statewide to all sectors**
  - **Reasonably successful**
    - Continuous operation for 6+ years
    - Model for California program



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# Comparison of Program Features

Features	Bay Area Program	New York Program
<i>Borrowers allowed to participate in other incentive programs?</i>	No	Yes
<i>Program integrated into efficiency portfolio?</i>	No	Yes
<i>Implemented statewide?</i>	No	Close
<i>Implementation time frame</i>	< 2 years	> 6 years (three renewals)
<i>How marketed?</i>	Participating lenders and program implementer	Part of NYSERDA portfolio and from participating lenders
<i>Firm program end date?</i>	Yes	No, operates continuously



# Findings on Commercial Loan Market

- **Do commercial end users lack access to attractive financing for energy efficiency or renewable energy projects?**
  - **Loans are readily available to qualified borrowers.**
  - **Borrowers typically qualify for loans using standard applications and credit screening.**
  - **Efficiency and renewable projects are treated no differently than other building construction projects – technology is not assessed.**



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# More Findings on Loan Market

- Do efficiency features improve credit worthiness of a loan?
  - Cash flow benefits are not formally calculated by private lenders.
  - Assessment of efficiency is a challenge for lenders with no rating system for efficiency benefits.
  - Amount of savings is unlikely to change the debt-to-income ratio or creditworthiness.
- Can a loan program overcome hassle and transaction costs?
  - Yes, if the program is tied to technical support or expertise in identifying and executing projects *prior* to loan application



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# And More Findings on Loan Market

- **Tap into the volume at large banks**
  - Larger statewide or national banks can be a challenge due to reluctance to change processes, but they represent a high volume of commercial projects
- **The role for lenders**
  - Lenders are experts in underwriting, not efficiency. They are an unlikely conduit for identification of efficiency projects and marketing of energy efficiency loans



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# Traditional Barriers to Commercial Sector Energy Efficiency Projects Remain

- These key barriers to energy efficiency investments can be addressed by loan programs these barriers are:
- Perceived High First Costs
  - Information or Search costs
  - Hassle or Transaction Costs
  - Performance Uncertainty



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# Perceived High First Costs

- Energy efficiency and renewable projects often have higher costs that are offset by the operational costs
- High first costs can be addressed by loan programs:
  - Providing favorable terms for efficiency or renewable investments
  - Allowing inclusion of related project costs thus increasing likelihood of funding projects that would otherwise not have happened



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# Information or Search Costs

- It is hard to learn about efficiency
- Loan program can reduce information or search costs:
  - Tie program to technical support or expertise in identifying and executing projects
  - Take referrals from other efficiency programs
  - Use lists of pre-qualified measures



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# Hassle or Transaction Costs

- Hassle or transaction costs reduce investment in efficiency
- Loan programs can reduce hassle and transactions costs with:
  - **A simple application process**
    - One page applications
    - Automatic referrals
    - Pre-qualified measures
    - Simple screening questions
    - Quick application approval
  - **With clear basis for approval spelled out prior to submittal**
  - **Recruit multiple lenders throughout loan program target area to ensure access to borrowers**



# Performance Uncertainty

- Performance uncertainty limits willingness to invest in efficiency
- Loan programs can address performance uncertainty by:
  - Providing testimonials or case study information from similar projects
  - Linking the loan to projects that have demonstrated they are technically sound
  - Offering the program from a credible institution: i.e. utility, government, Public Benefits organization



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# Other Things to Remember

- **Program time period demonstrates level of commitment**
  - The appearance of stability is important given long project timelines
- **Setting Realistic Loan Volume Expectations**
  - It takes a long time to build loan volume.
  - Most customers don't need a loan.
  - Particularly useful where customers must choose between rebates or a loan



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