Impact Evaluation of Energy Efficiency Financing Programs

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## Policy Context: Financing as a Primary Energy Efficiency Strategy

<table>
<thead>
<tr>
<th>Financing Program (State)</th>
<th>Ratepayer Funds Utilized</th>
<th>Complement or Substitute?</th>
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<tbody>
<tr>
<td>Statewide Financing Pilots (CA)</td>
<td>$65.9 M (additional $9M in reserve)</td>
<td>Both. Financing pilots are currently operating as resource programs alongside other portfolio resource programs.</td>
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<td>New York Green Bank (NY)</td>
<td>$947M ($165M initial funding, $782 follow on request)</td>
<td>Both: “the effect of the Green Bank on reducing the cost of capital can also enable the potential reduction or even the possible elimination of incentives in some sectors over time.”</td>
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<td>Connecticut Green Bank (CT)</td>
<td>$39.6M (2014)</td>
<td>Both. Connecticut’s Comprehensive Energy Strategy notes a “goal of transitioning programs away from government-funded grants, rebates, and other subsidies, and towards deploying private capital to finance energy efficiency.”</td>
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<td>HEAT Loan (MA)</td>
<td>Approx. $15M (2013)</td>
<td>Complement: “to the extent that access to low-cost capital is a barrier for certain customers, financing can alleviate that and encourage energy efficiency investments.”</td>
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<td>On Bill Repayment Programs (IL)</td>
<td>Up to $12.5M</td>
<td>Complement. Utilities are directed to ensure that on-bill lenders explain both financing offerings and incentives that may also be available.</td>
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Considerations for Resource Acquisition Impact Evaluation

Adjustment 1
Impact of Financing on Savings Generated

Did financing generate more savings than would have otherwise occurred (e.g., necessary for project to go forward, or for larger/more efficient project)

Yes

No

Adjustment 2
Impact of Program Financing (vs. Private Alternatives)

Did the project need program-supported financing (as opposed to private/other financing—home equity loan, credit card, vendor financing, etc.) to move forward?

Yes

No

Project does not yield additional savings beyond baseline

Adjustment 3*
Impact of Combining Financing with Incentives

Would the project have occurred without incentives and other non-financing program elements?

Yes

No

Yes, but would have been smaller

* Especially important in jurisdictions seeking to understand impact on savings if financing is substitute for incentives
Considerations for Market Transformation Evaluation

• Early Indicators:
  – Availability and accessibility of financing options to customers
  – Customer awareness of and attitudes toward financing options

• Mid-Stage Indicators:
  – Changes in interest rates, terms, and underwriting criteria offered for energy efficiency financing
  – Changes in levels of credit enhancement needed to achieve given rates and terms
  – Changes in incentive levels and other supports needed to drive financing participation
  – Number of financial institutions that see EE financing as a viable business and begin offering efficiency-oriented loan products without assistance from utilities or government agencies

• Ultimate indicators:
  – Increased use of financing for energy efficiency investments
  – Increased savings attributable to energy efficiency financing
Thank You

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