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STATE AND LOCAL ENERGY EFFICIENCY ACTION NETWORK

Financing Program Data Practices

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ACEEE Finance Forum

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About SEE Action

- Network of 200+ leaders and professionals, led by state and local policymakers, bringing energy efficiency to scale
- Support on energy efficiency policy and program decision making for:
 - Utility regulators, utilities and consumer advocates
 - Legislators, governors, mayors, county officials
 - Air and energy office directors, and others
- Facilitated by DOE and EPA; successor to the National Action Plan for Energy Efficiency



The SEE Action Network is active in the largest areas of challenge and opportunity to advance energy efficiency



Financing Solutions Working Group



Bruce Schlein, Director of Alternative Energy Finance at Citi



Bryan Garcia, President and CEO, CT Green Bank

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Our Network | Resources | Recent Actions | Events | Technical Assistance | Energy Efficiency Benefits

POLICY & PROGRAM RESOURCES

Publications

ENERGY EFFICIENCY FINANCING

Financing is one of several linked strategies to drive and enable customer demand for energy efficiency. Financing alone does not lead to energy savings, but it may be an effective tool for helping customers overcome the high up-front costs of a range of energy efficiency investments.

Key Focus Areas

Broad customer access to attractive capital can enable widespread adoption of energy efficiency improvements by scaling and leveraging secondary markets, reflecting a true assessment of risk, providing more liquidity, and reducing borrowing costs. SEE Action has identified four key focus areas in financing:

- **Improve Data Access.** Improve data collection practices and access to quality data on energy efficiency financing product performance.
- **Improve Program Design.** Help energy efficiency financing program administrators align program strategies with customer needs, and share lessons learned from experiments in energy efficiency financing program design.
- **Support Effective Financing Tools.** Explore whether novel financing tools and capital sources are more effective than conventional ones in addressing the unique barriers of energy efficiency financing.
- **Clarify Regulatory Treatment of Financing.** Identify how state public utility commissions are treating financing initiatives under the regulatory framework, share successful approaches.

Key Initiatives

SEE Action is currently working on several initiatives that will provide state and local entities and their partners with the tools and information

Guidance Documents from the Network

- Accessing Secondary Markets as a Capital Source for Energy Efficiency Finance Programs: Program Design Considerations for Policymakers and Administrators**
Efficient access to capital from secondary markets—reselling energy loans to investors to replenish program funds—is being advanced as an important enabler of the energy efficiency industry “at scale.” However, the role that secondary markets can play in bringing energy efficiency to scale is largely untested. Only a handful of secondary market transactions of energy efficiency loan products have been executed to date, and it is too soon to draw robust conclusions from these deals. At the same time, energy efficiency program administrators and policymakers face near-term decisions on whether and how to access secondary markets as part of their energy efficiency deployment strategy.
- Energy Efficiency Financing Program Implementation Primer**
Provides key considerations for policymakers, energy efficiency program administrators, and program partners on implementing successful energy efficiency financing programs for existing buildings.
- Credit Enhancement Overview Guide**
Provides considerations for state and local policymakers and energy efficiency program administrators designing and implementing



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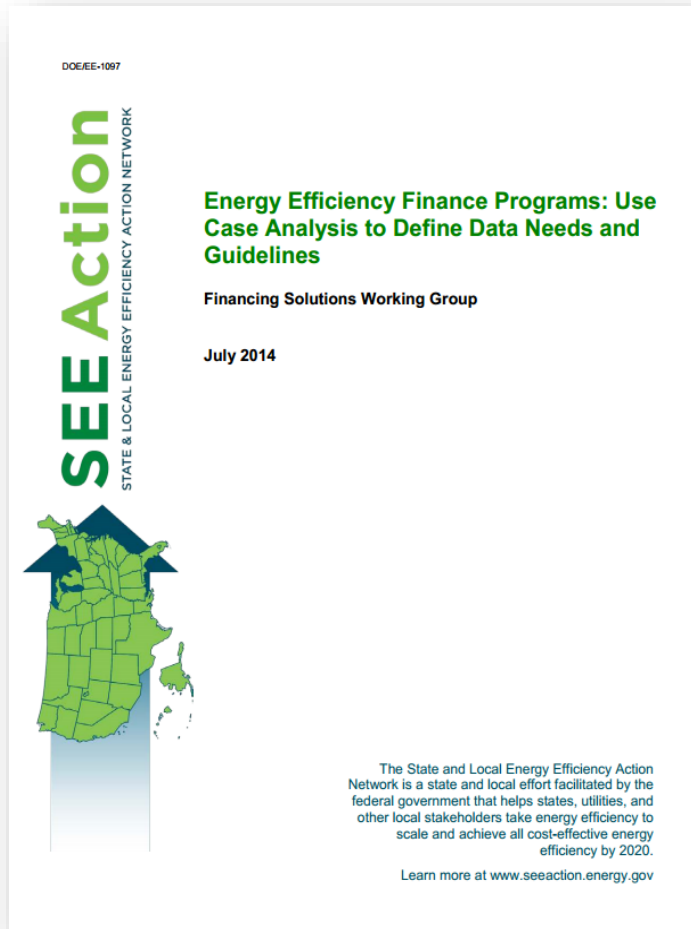
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Session Overview

- Part 1: Panel
 - **James Finlay**, *Finlay Consulting*
 - **Kerry O’Neill**, *Connecticut Green Bank*
 - **Mimi Frusha**, *Renew Financial*
- Part 2: Group Discussion
 - If all residential EE lending programs collected common data fields, what would that data set look like?
 - What kind of analysis could be done on that data set, and to answer what questions?



Energy Efficiency Finance Programs: Use Case Analysis to Define Data Needs and Guidelines



- **Report Motivation**

- To take a foundational step towards the establishment of common data collection practices for energy efficiency lending, to benefit
 - Program administrators and policymakers
 - Lenders and investors

- **Process**

- Review existing practices for data collection for energy efficiency financing programs
- Discussions with various stakeholders
- Identify high-priority needs, characterize potential uses for finance program data, and identify use cases that describe how stakeholders use data for key objectives and actions

Four Data Categories Explored

Examples

Customer Data

- Address
- FICO
- Annual Income
- Electricity Provider

Financial Products Data

- Principal
- Term
- APR
- Loan Status
- Lender Name

Facility-Level Data

- Floor space
- Year Constructed
- Heating Source
- Building Type

Energy Efficiency Project Data

- Measure(s) Installed
- Total Invoiced Cost
- Ex-Ante Energy Savings
- Ex-post Energy Savings

Energy Efficiency Finance Programs: Use Case Analysis to Define Data Needs and Guidelines

Sample loan product-related data fields:

- Loan principal
- Date loan funded
- Interest rate
- Principal balance,
- Loan term
- Remaining term
- Loan status (delinquent, charged off, days past due)
- Loan product
- Secured asset value
- Other debt encumbered against the asset
- Loan to value ratio
- Days past due
- Amount overdue
- Charge off amount
- Charge off reason
- Collection fees paid
- Origination channel
- Early repayment amount
- Early repayment fees
- Security taken



Two Main User Groups Have Different Data Priorities

Data Category	Data Priority	Lenders and Investors	Data Priority	Program Administrators and Policymakers
Customer	●	Customer data, including FICO scores, income, and debt, are used for analyzing loans and portfolios.	●	Few critical needs; however, demographic information and participant characteristics could be used in assessing a program.
Financial Products and Performance	●	This data is important for collections, risk assessment, and other operational activities.	●	This could impact credit enhancements or capital provided to a program.
Facility-Level Data	○	Lenders are unlikely to use this data.	○	This information can help with analysis, but is relatively unimportant to stakeholders.
Energy Efficiency Project	○	Lenders did not report that EE project-level data would be used in eligibility or pricing.	●	Program administrators use EE project savings (and cost) data to evaluate the impact of the program.

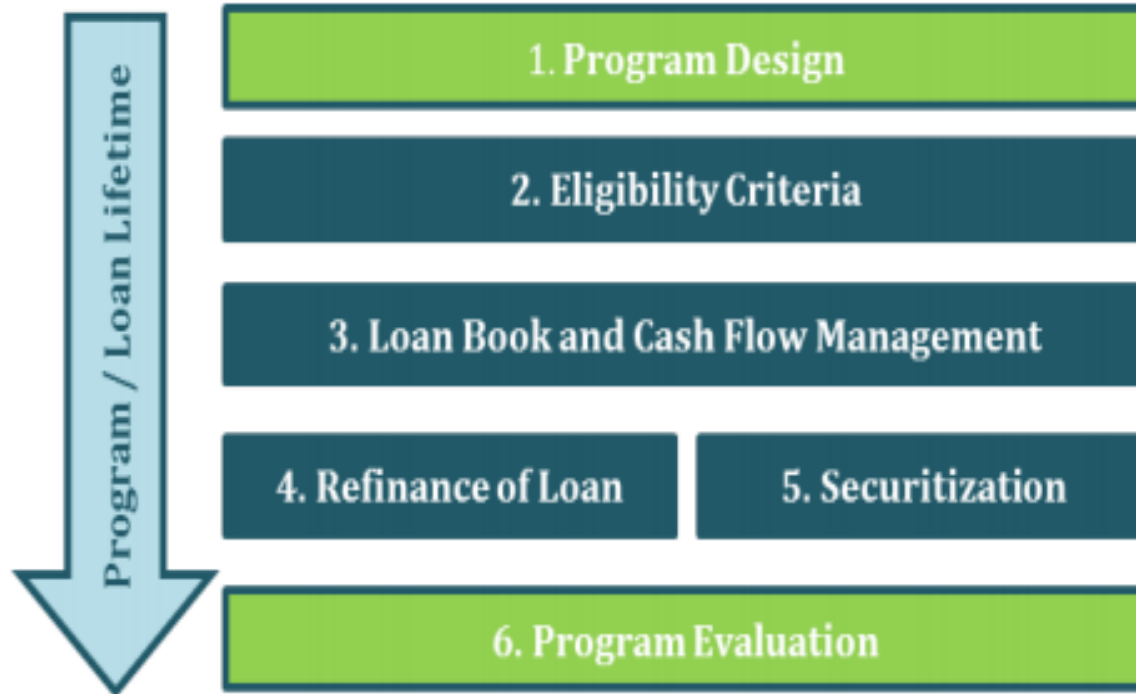


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Data Priority	
High	●
Medium	◐
Low	○

Six Use Cases Created



Outputs

Data field	Applicable Programs	Design & Implementation	Eligibility Criteria	Loans Management	Refinancing	Securitization	Program Evaluation
Loan ID	■	◐	●	●	●	●	◐
Primary Lender Name	■	◐	◐	●	●	●	◐
Requested Loan Principal	■	○	◐	○	○	○	◐
Loan Request Date	■	○	○	○	○	○	◐
Original Loan Principal	■	●	◐	●	●	◐	●
Loan Approval Date	■	○	●	○	○	○	◐
Loan Funded Date	■	●	●	●	●	●	●

and more...



Common Data Fields and (Some) Data Definitions

Ultimate Vision: Residential energy efficiency financing programs using unsecured loans collect a common core data set using the same data definitions. This enables lenders to understand these products and builds confidence, ultimately attracting more investment. This also allows program administrators to understand and refine their performance as compared to peers.

Goal of current effort: Focusing on residential sector, unsecured loan programs, develop (1) a core set of recommended data fields and (2) sample data definitions.

Common Data Fields

- Sufficient for broadly applicable analyses
- May be augmented, by programs, for their specific needs

Data Definitions

- For subset of core data fields
- In collaboration with the Building Energy Data Exchange Specification (BEDES)



Group Discussion

1

Who are you?

Imagine you had your “dream dataset” -- what kind of analysis would you perform with the data?

What question(s) would you be trying to answer with the analysis, and for what purpose?



Group Discussion

2

Now describe your dream dataset. What are the critical data fields it includes?

How much data history would you have?

What data quality issues would concern you / would be resolved in your dream data set?



Group Discussion

3

What challenges arise when you compare information about loans across programs?

