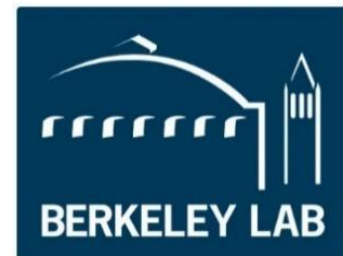


Revolving Loan Fund Bootcamp

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Presented by U.S. DOE and Lawrence Berkeley National Laboratory



Facilitators



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Training motivation

- This training aims to help SEO staff maximize energy benefits to their states by leveraging IIJA funds and/or other capital sources to support revolving loan funds.

- Available Federal funding sources include:
 - ▣ IIJA Section 40109
 - ▣ IIJA Section 40502 (Revolving Loan Fund)
 - ▣ SEP Annual Appropriations
 - ▣ Unspent funds from the American Recovery and Reinvestment Act (ARRA)



Training objectives

- The bootcamp will help participants:
 - ▣ Understand the opportunities, needs and limitations of RLFs and other related financing mechanisms
 - ▣ Review examples of successful RLF program designs that they may wish to replicate or incorporate
 - ▣ Spur ideas on how maximize RLF impact



Agenda

- Overview of revolving loan funds (RLFs)
- Setting goals and expectations
- RLF program design: Considerations and options
- Questions and discussion among states



Overview of revolving loan funds



RLF description

- States use energy revolving loan funds to support a variety of projects across multiple end use sectors
 - ▣ Projects: Energy efficiency, renewable energy, and water efficiency
 - ▣ Sectors: Residential, commercial, public/institutional; some funds serve only one sector, others serve multiple sectors

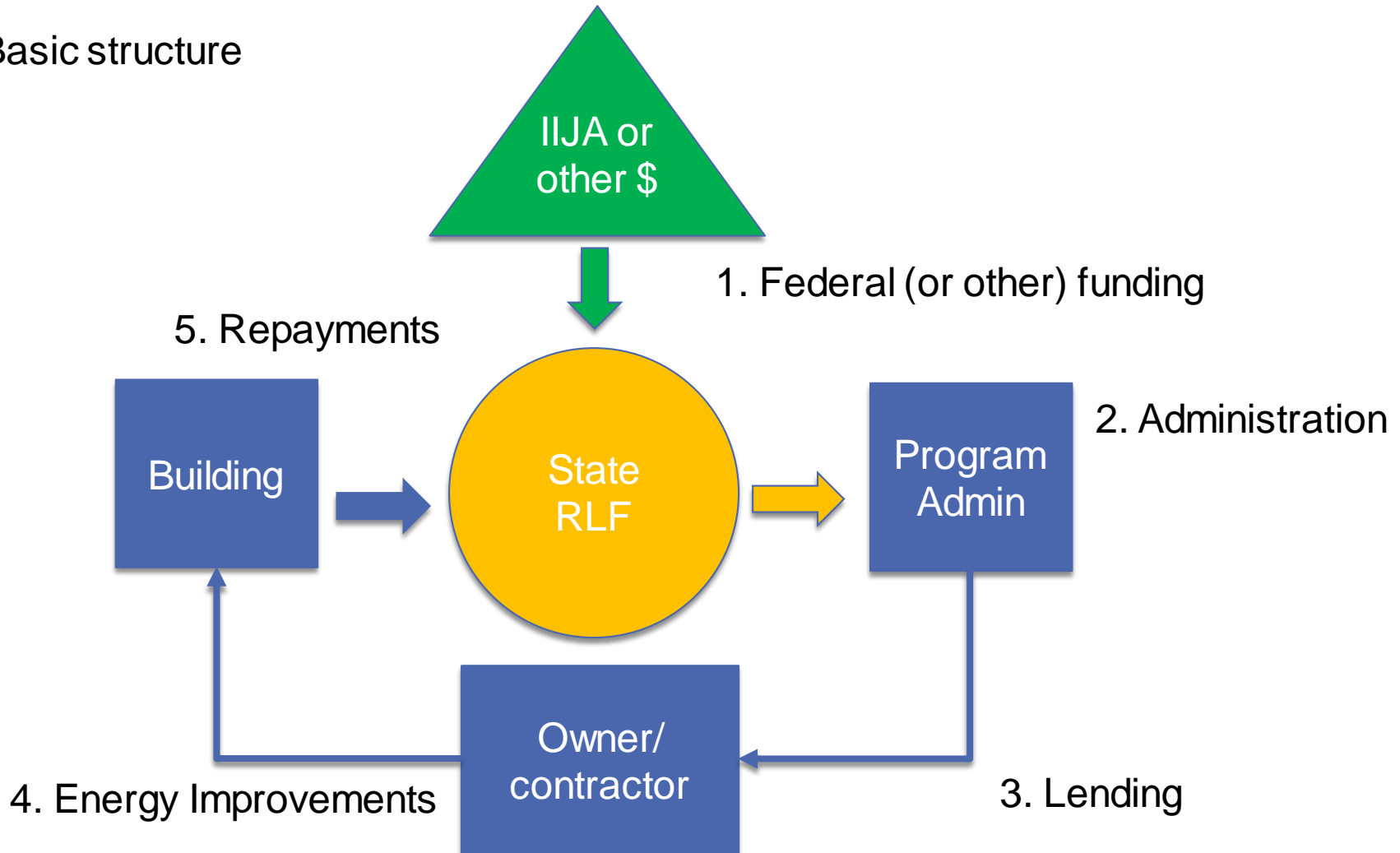
- States employ a variety of program administration structures
 - ▣ Discussed in detail later in this training

- States have leveraged multiple funding sources
 - ▣ Petroleum overcharge funds
 - ▣ Federal funding: American Recovery and Reinvestment Act (2010), [forthcoming: Infrastructure Investment and Jobs Act (2021)]
 - ▣ State funding – appropriations, cap-and-trade revenues
 - ▣ Utility customer funds (less common)



RLF description

□ Basic structure



Setting goals and expectations



Goals and metrics

- What are your goals for the RLF?
 - ▣ Clean energy (energy savings, decreased emissions, regulatory requirements)
 - ▣ Economic (economic development, workforce development)
 - ▣ Consumer (increased comfort, improved health outcomes, bill savings, improved asset value)
 - ▣ Societal (broader participation in the clean energy economy/transition, electric grid impacts, support for LMI households or small businesses)
 - ▣ Program self sufficiency and protecting the corpus

- How do you measure performance?
 - ▣ Clean energy: Number of projects? Size of project? Improvements with most savings (energy savings, emissions savings)? Meeting legislative or regulatory energy goals?
 - ▣ Economic: Dollars invested? Dollars leveraged? Jobs created?
 - ▣ Consumer: Dollar value of bill savings?
 - ▣ Societal: Number of participants from target groups?
 - ▣ Program sustainability: Minimizing losses? Preserving funds?



Gap analysis

- A gap analysis identifies market need for clean energy financing in a given state by:
 - ▣ Reviewing existing sources of programmatic and private-sector financing
 - ▣ Consulting with stakeholders to determine suitability of existing sources
- Gaps may exist for multiple reasons
 - ▣ Access: Certain segments of a sector (e.g., small commercial, credit-challenged residential, local governments) may not be able to access capital at all
 - ▣ Terms: capital may be available, but may be expensive, require quick payback, or be otherwise be ill-suited to certain energy projects
- State RLFs that fill gaps tend to provide more value
 - ▣ Enable new projects rather than competing with or displacing other financing already available



RLF activity

- How much clean energy have RLF programs been able to fund?
- Who participates (income, credit)? How much do they borrow? How well have RLF participants repaid their loans?
- What are the lessons learned from programs created or enhanced under ARRA?



RLF lending and sourcing

- Berkeley Lab studied 12 State Energy Office RLF programs. In 2014, those program invested approximately \$74M in energy efficiency.
- Where the funds went (investment by sector):

Total Loan Volume (\$M)	Residential Sector (\$M)	Number of Residential Loans	Commercial / Industrial Sector (\$M)	Public / Institutional Sector (\$M)	Number of Non-Residential Loans
\$74	\$17	1,595	\$12	\$45	92

- Where the funds came from (capital source):

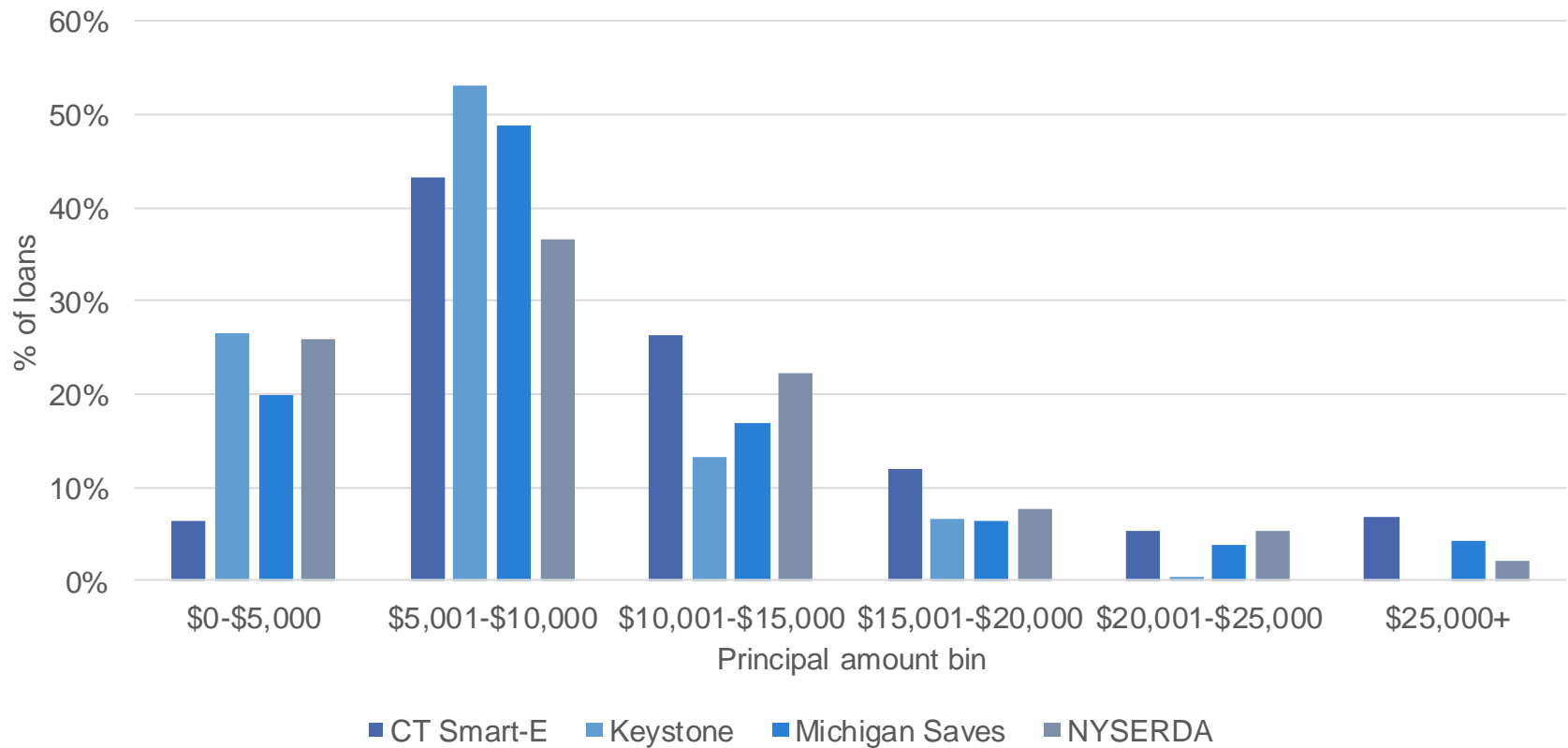
Utility (\$M)	Private Sector (\$M)	Public Sector (\$M)	Portfolio Sale (\$M)
\$10	\$9	\$44	\$12

Source: *Energy Efficiency Program Financing*, Deason, et al, Berkeley Lab 2016



Residential participant loan size

- Loan principal amounts in the Connecticut Smart-E loan, Keystone HELP, Michigan Saves, and Green Jobs Green New York programs over 10 years:

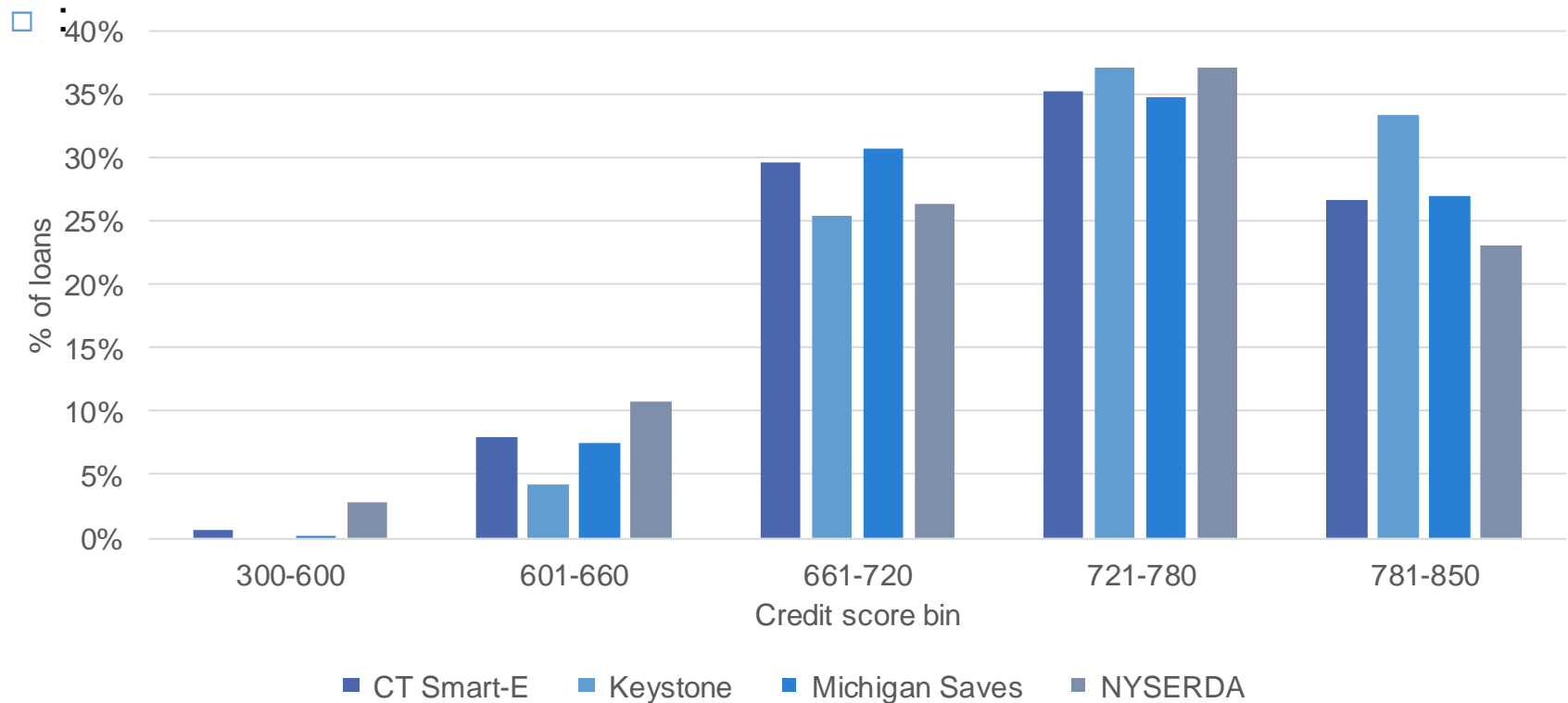


Source: *Long-Term Performance of Energy Efficiency Loan Portfolios* SEE Action 2021



Residential participant credit

- Borrower FICO scores in the Connecticut Smart-E loan, Keystone HELP, Michigan Saves, and Green Jobs Green New York programs over 10 years:

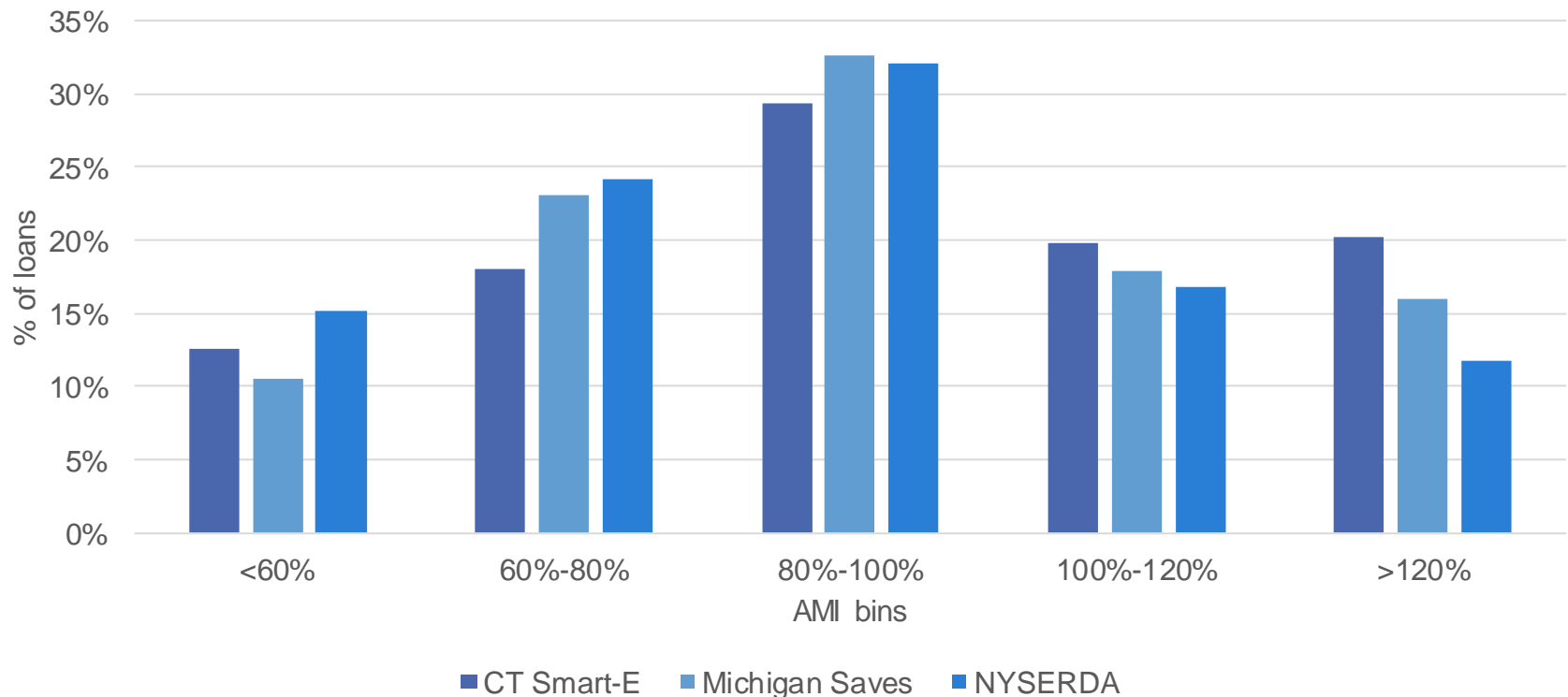


Source: *Long-Term Performance of Energy Efficiency Loan Portfolios* SEE Action 2021



Residential participant income

- Program participation in the Connecticut Smart-E loan, Michigan Saves, and Green Jobs Green New York programs by Area Median Income (AMI) bin over 10 years:



Source: *Long-Term Performance of Energy Efficiency Loan Portfolios* SEE Action 2021



ARRA funding for RLFs: Facts and figures*

- 35 states capitalized RLFs using funds from the American Recovery and Reinvestment Act; total capitalization was \$566 million
- Most state RLFs have loaned out their initial capitalization amount
 - ▣ RLFs capitalized using these funds have loaned \$796 million
 - ▣ Some states have loaned out funds 2+ times
- Ten states account for 68% of this loan volume (\$)

* Figures and statistics based on PAGE data (as of 6.1.22). PAGE data is self-reported by states.



ARRA RLF success factors

- *Leverage:* Funds with high lending volume either:
 - ▣ Used multiple sources of revolving capital (e.g., funds established before ARRA that used ARRA funds to supplement their existing resources);
 - ▣ Engaged private capital providers – through co-lending models or by using federal money as a credit enhancement to spur private lending; or
 - ▣ Replenished capital via secondary market transactions

- *Administration:* Many successful funds engaged third parties to help with some aspects of program administration, rather than relying exclusively on SEO staff and resources

- *Partnerships:* Many successful funds partnered with contractors, community groups, local credit unions, or banks to help advertise the program and drive uptake



RLF program design: Considerations and options



RLF functions

- Marketing and outreach
- Loan origination
- Loan servicing
- Monitoring and reporting



Marketing and outreach

- Stimulate awareness and uptake of financing product
- May be most effective to integrate with contractor sales process



Loan origination

- Process financing application
- Perform credit evaluation (e.g., loan origination/underwriting)
- Generate loan documents
- Disburse loan proceeds



Loan servicing

- ❑ Collecting and processing loan repayments
- ❑ Sending out statements (if required)
- ❑ Delinquency collections
- ❑ Default collections



Monitoring and reporting

- Regular and consistent process (monthly)
- Review applications received/processed, loan issued, repayments, and delinquencies/defaults
- Comply with reporting requirements from capital provider and Federal flow down requirements (where applicable)



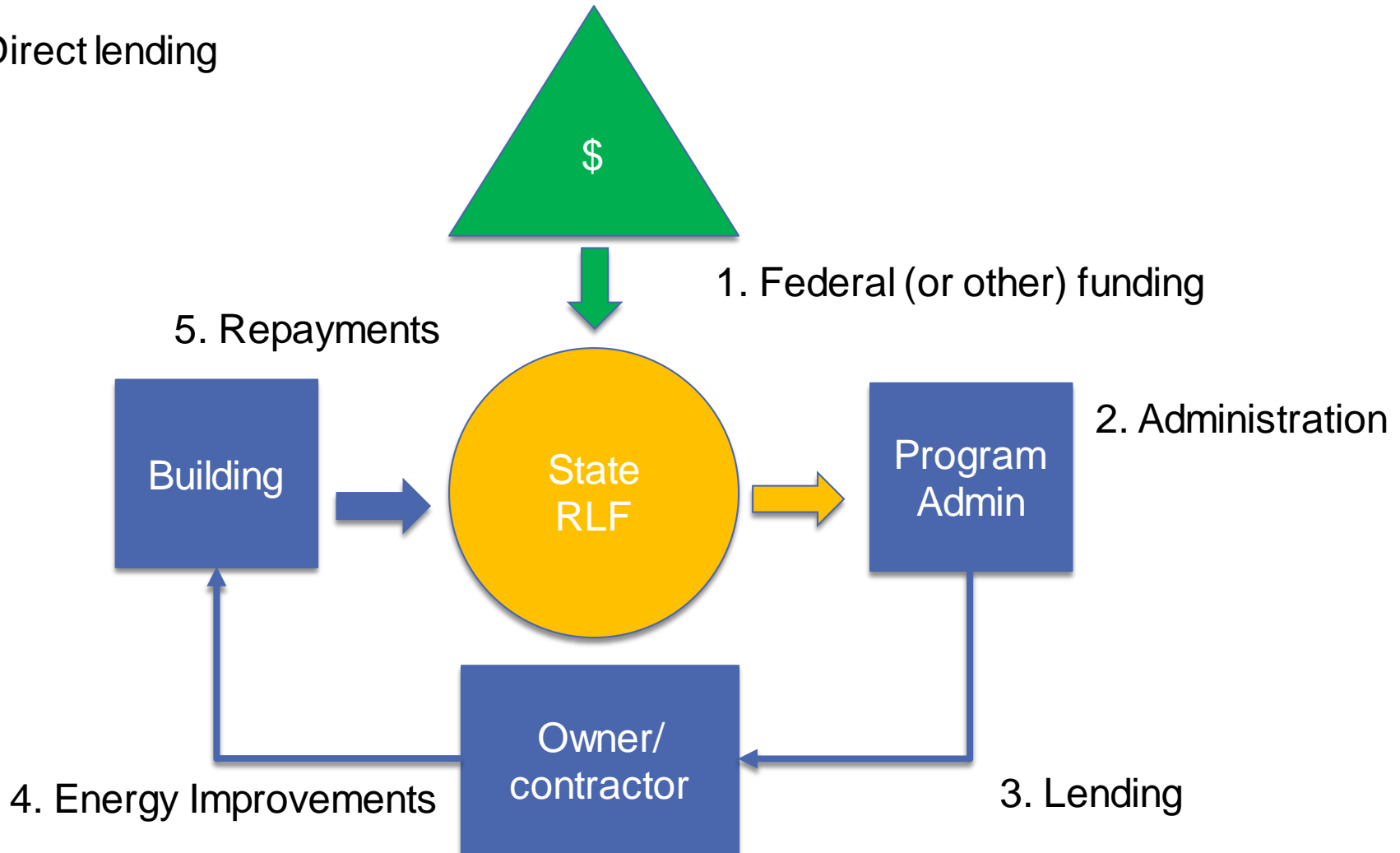
Options for RLF lending structure

- Direct lending
- Co-lending
- Interest rate buydown
- Credit enhancement (loan loss reserves)



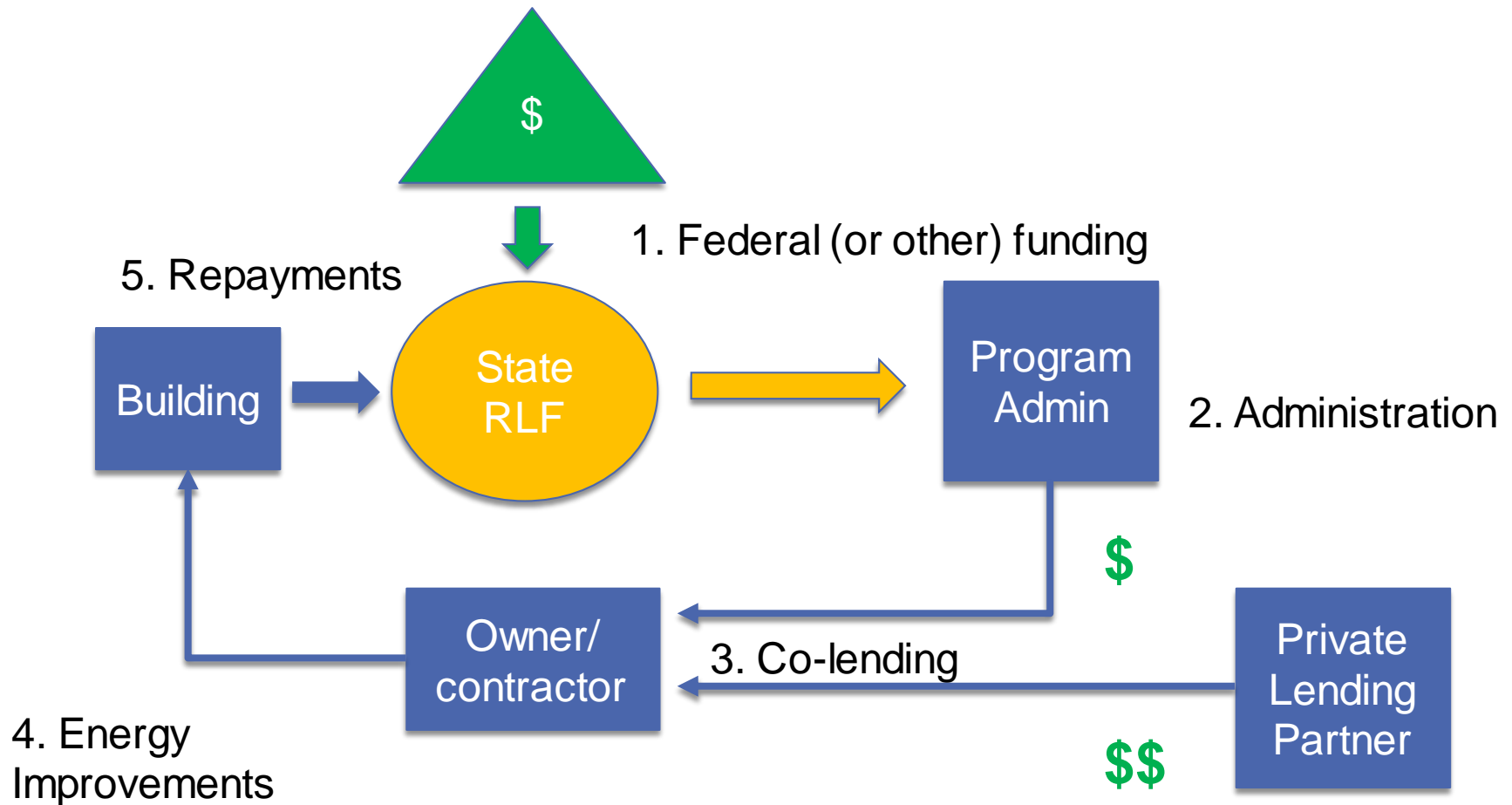
Program structure: Direct lending

- Direct lending



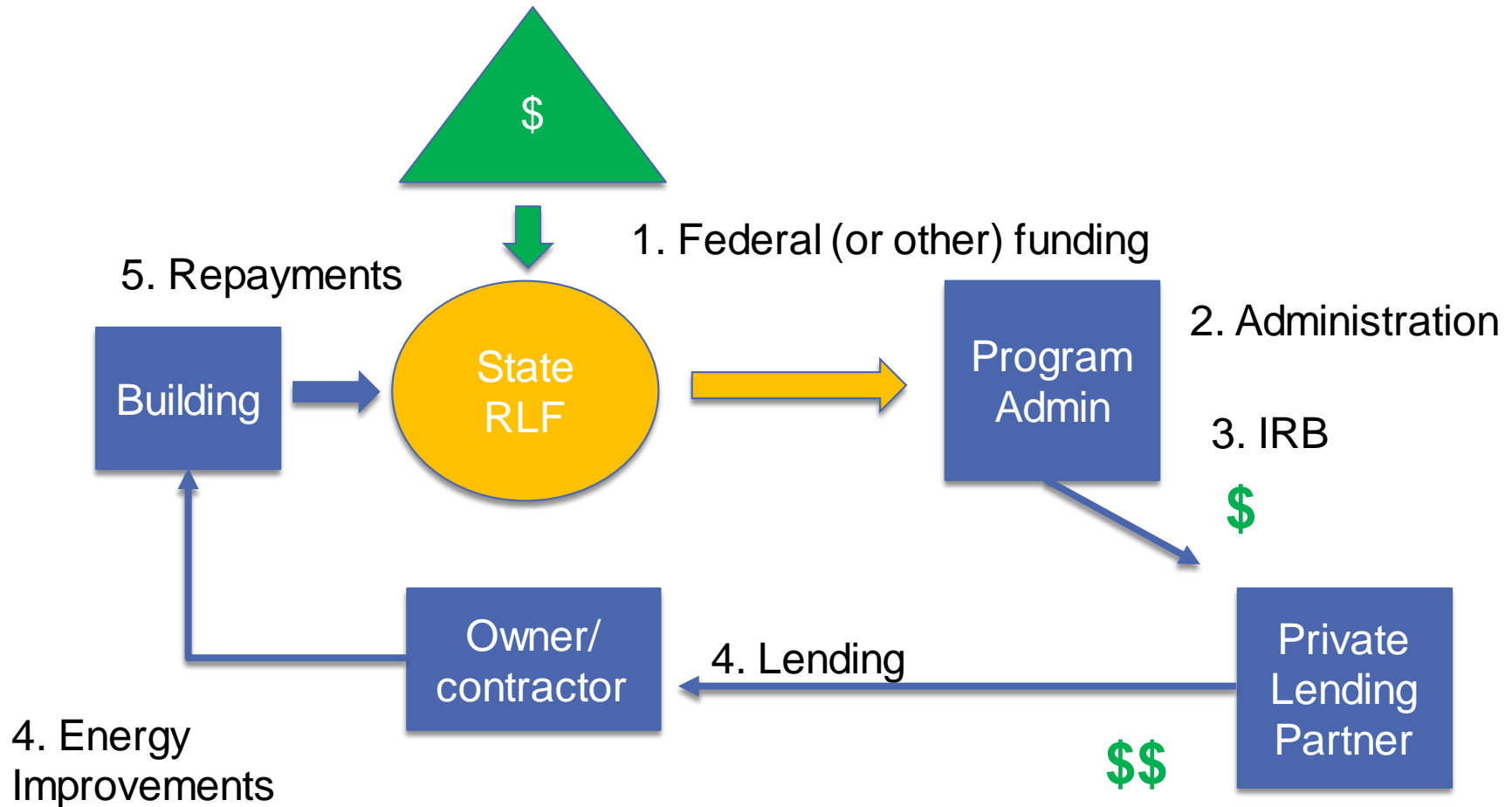
Program structure: Co-lending

□ Co-lending model



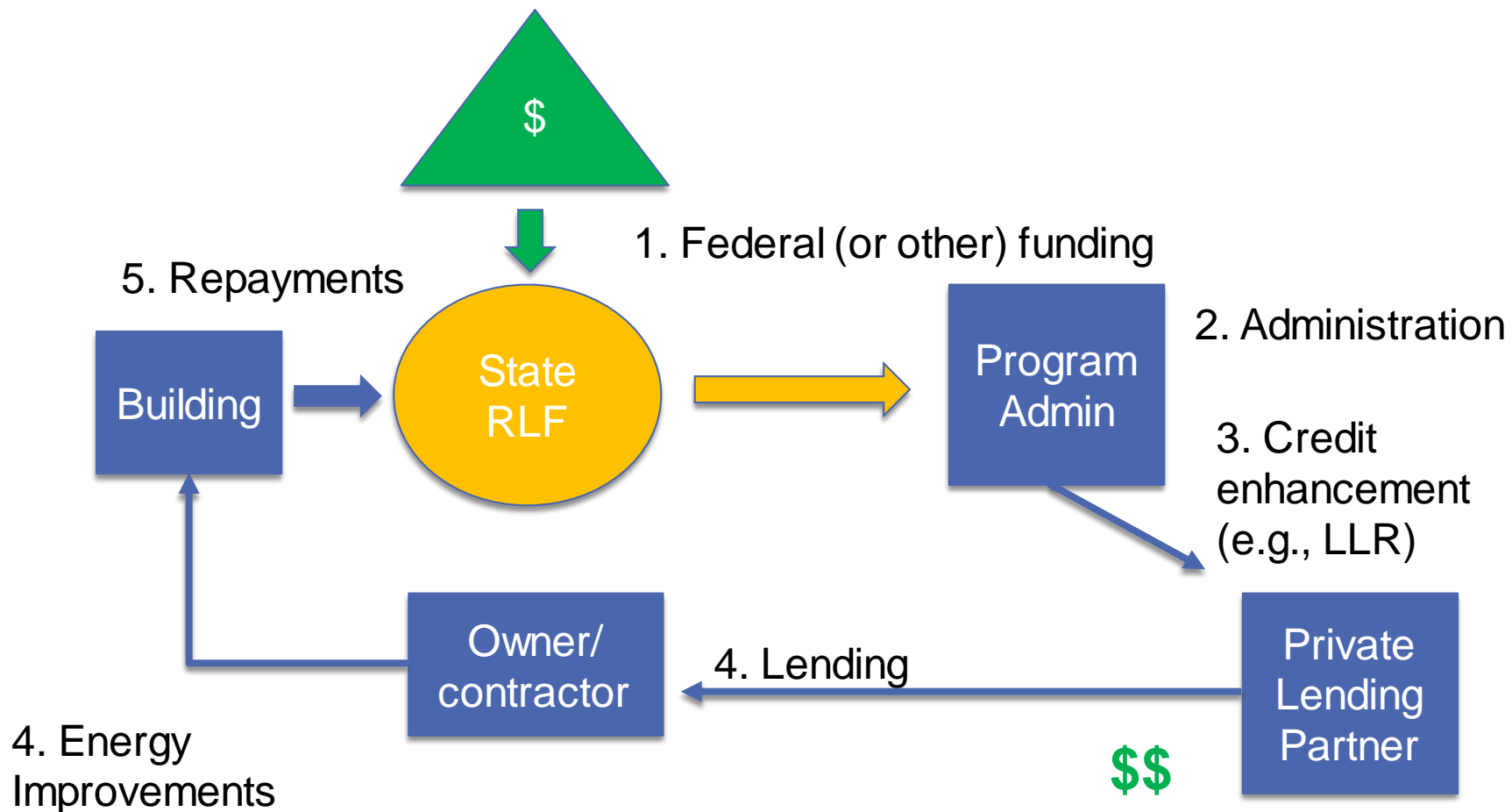
Program structure: Interest rate buydown

□ Interest Rate Buydown (IRB) model



Program structure: Credit enhancements (loan loss reserve)

□ Loan Loss Reserve (LLR)



Options for RLF administration

- ❑ Self-administered – SEO performs all functions internally
 - ▣ Example: Texas State Energy Conservation Office LoanSTAR Program
- ❑ Partially Outsourced – SEO contracts out for certain tasks (e.g. loan origination, loan servicing)
 - ▣ Example: NYSERDA Green Jobs-Green New York Program
- ❑ Fully Outsourced – SEO contracts out for program delivery
 - ▣ Example: AlabamaSAVES Program



Advantages/disadvantages of administration options

Option	Advantages	Disadvantages
Self-administered	<ul style="list-style-type: none">• Control program delivery	<ul style="list-style-type: none">• Requires expertise that may not be available in house• May compete with other staff and program priorities
Partially Outsourced	<ul style="list-style-type: none">• Access external expertise (particularly important for compliance with federal/state regulations for lending and loan servicing)• Alleviate some staff burden	<ul style="list-style-type: none">• Small number of fee-for-service providers (except servicing)
Fully Outsourced	<ul style="list-style-type: none">• Same as Partially outsourced• Alleviate more staff burden	<ul style="list-style-type: none">• Same as Partially outsourced• Less control over program delivery



RLF program design tradeoffs

- Risk tolerance
- Beat the market or complement the market
- Broadening access to underserved borrowers
- Policy goals vs financial goals



RLF program design elements

- Project eligibility
- Borrower eligibility
- Loan underwriting standards
- Types of loans
- Loan terms



Leveraging partnerships

- Engaging private capital can dramatically expand the potential volume of lending and resultant energy impacts that a RLF can achieve
 - ▣ Many RLFs that have attained high volumes (though not all) have engaged private capital
- Infrastructure Investment and Jobs Act directs that State shall, to maximum extent practicable, use the grant to leverage private capital
- How to do this?
 - ▣ Listening sessions with stakeholders – contractors; lenders; utilities
 - ▣ Deliberately and persistently build partnerships
 - ▣ Attract private capital – avoid competing with it
 - ▣ Cross-promotion opportunities



Financial terms

- The financial terms offered to customers impact fund uptake, fund sustainability
- Balancing act
 - ▣ Low interest rates = higher demand, potential run on the money; high interest rates may result in little demand
 - ▣ Long loan terms = more projects that pencil out for borrowers, but slow repayment; some private capital providers will be unwilling to offer longer terms
- Changes to terms create timing considerations



Protecting the corpus

- Successful RLFs often face challenges in maintaining available funding
 - Unavailability could have negative market impacts (e.g., frustrated program partners, frustrated program participants/potential participants, and reputational impacts that could hinder participation in future program initiatives)

- Factors that can improve fund sustainability:
 - Strong underwriting criteria
 - Effective servicing and monitoring
 - Setting interest rates sufficient to cover anticipated losses and expenses, including administration costs
 - IIJA RLF provision caps administrative costs at 10%



Generating program participation

- Determine who is best equipped to be responsible for lead generation
 - ▣ Contractors
 - ▣ Program staff
 - ▣ Community organizations
- Integrated approach to project generation – financing is one piece
- Community-based participation



Resources

- NASEO State Energy Revolving Loan Fund resources
 - ▣ www.naseo.org/issues/energy-financing/revolving-loan-funds
- NASEO Energy Finance
 - ▣ <https://www.naseo.org/issues/energy-financing>
- DOE resources
 - ▣ <https://www.energy.gov/eere/slsc/revolving-loan-funds>
- Berkeley Lab research on energy efficiency financing
 - ▣ <https://emp.lbl.gov/projects/financing-energy>
- Specific Berkeley Lab reports:
 - ▣ Long-term Performance of Energy Efficiency Loan Portfolios <https://emp.lbl.gov/publications/long-term-performance-energy>
 - ▣ Energy Efficiency Program Financing <https://emp.lbl.gov/publications/energy-efficiency-program-financing>
 - ▣ Energy Efficiency Financing Program Implementation Primer <https://emp.lbl.gov/publications/energy-efficiency-financing-program>
- NYSERDA Green Jobs-Green New York loan data
 - ▣ www.nyserda.ny.gov/Researchers-and-Policymakers/Green-Jobs-Green-New-York/Data-and-Trends
- Minnesota Trillion BTU application document
 - ▣ <https://www.sppa.com/wp-content/uploads/Trillion-BTU-Loan-Application.pdf>



Questions and discussion among states



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