

# Revolving Loan Fund Structure Comparison

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Jeff Pitkin, Senior Consultant/Subcontractor to Lawrence Berkeley National Laboratory

*This work was funded by the U.S. Department of Energy Office of State and Community Energy Programs, under Contract No. DE-AC02-05CH11231.*



# Financing Structures Comparison

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This resource provides a high-level overview and comparison of four common revolving loan fund financing structures used by states, including:

- [Direct Lending](#)
- [Co-lending](#)
- [Interest Rate Buydowns](#)
- [Loan Loss Reserves](#)

See the [overview table](#) for a comparison across all four financing structures and [additional resources](#) for comparison tools and sample documents.

State energy offices should supplement this information with program guidance and award terms and conditions for the Energy Efficiency Revolving Loan Fund Capitalization Grant Program



# Direct Lending

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Under a **direct** lending model, the state acts as direct lender to borrowers.

## Key features:

- State originates and services loans (or contracts these functions to a third-party administrator).
- State is at liberty to set all terms of the loans, e.g., underwriting criteria, interest rates, and loan terms.

## Examples:

- [Texas LoanSTAR Program](#)
- [California's Advanced Rebate Program](#)
- [Minnesota's Combined RLF and Commercial PACE Program](#)



# Co-lending

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Under a **co-lending** model the state provides a portion of the loan capital for the lender's loan up front, typically at a reduced interest rate or no interest (like a loan participation agreement). As a result, the borrower's principal payments are pro-rated between the lender and the state, and the lender can earn its normal interest rate on its share of the loan, while the borrower enjoys a lower overall interest rate resulting from the state's share of the loan.

## Key features:

- Typically, lender is responsible for loan underwriting, origination and servicing.
- Master agreement between state and participating lenders; participation agreement for each individual loan.
- Lender provides the state its share of monthly payments received; lender and state share in loan defaults as agreed upon.
  - ▣ If desired, state can *subordinate* its share of the loan, taking a greater share of losses due to loan default, to offer risk protection to the lender (similar impact to a loss reserve).

## Example: [Nebraska Dollars and Energy Saving Loans Program](#)

- Provides no-interest capital of 50% if rate is greater than 3.5%; 65% if less; provides 90% of capital for 1% interest rate for projects with public schools.
- Program has operated since 1990 and has issued > 30,000 loans (>\$385 million).



# Co-lending Illustrative Example

Co-lending Illustrative Participation Structure								
Loan Amount	100,000.00							
Period (in months)	60.00							
Interest Rate	1.00%							
State Co-lending %	90%							
<div style="border: 1px solid black; display: inline-block; padding: 5px;">Borrower</div>								
Period	Payment	Interest	Principal	Principal Balance	State RLF Principal (90% Share)	Lender Interest	Lender Principal (10% Share)	Lender Total
0				100,000.00	(90,000.00)		(10,000.00)	(10,000.00)
1	1,709.37	83.33	1,626.04	98,373.96	1,500.00	83.33	126.04	209.37
2	1,709.37	81.98	1,627.39	96,746.57	1,500.00	81.98	127.39	209.37
3	1,709.37	80.62	1,628.75	95,117.82	1,500.00	80.62	128.75	209.37
4	1,709.37	79.26	1,630.11	93,487.71	1,500.00	79.26	130.11	209.37
5	1,709.37	77.91	1,631.46	91,856.25	1,500.00	77.91	131.46	209.37
55	1,709.37	8.52	1,700.85	8,525.83	1,500.00	8.52	200.85	209.37
56	1,709.37	7.10	1,702.27	6,823.56	1,500.00	7.10	202.27	209.37
57	1,709.37	5.69	1,703.68	5,119.88	1,500.00	5.69	203.68	209.37
58	1,709.37	4.27	1,705.10	3,414.78	1,500.00	4.27	205.10	209.37
59	1,709.37	2.85	1,706.52	1,708.26	1,500.00	2.85	206.52	209.37
60	1,709.68	1.42	1,708.26	-	1,500.00	1.42	208.26	209.68
<b>Total</b>	<b>102,562.51</b>	<b>2,562.51</b>	<b>100,000.00</b>		-	<b>2,562.51</b>	<b>100,000.00</b>	<b>2,562.51</b>
<b>Internal Rate of Return (IRR)</b>					<b>0.00%</b>	<b>9.37%</b>		



# Interest Rate Buydowns

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Under an **interest rate buydown (IRB)** model, the state makes a one-time, lump sum payment (per loan) to lender to reduce lender's normal interest rate by an agreed-upon percentage (e.g., financing points or prepaid interest).

## Key features:

- Typically, lender responsible for loan underwriting, origination and servicing.
- Master agreement between state and participating lenders; and a form for approval of individual loans/payments.
- IRB payment typically calculated as present value of difference in monthly payments, discounted at lender's rate (see [IRB illustrative example](#)).
- Borrower gets lower interest rate and monthly payment, lender gets the same expected yield.
- Program terms could require that if loan is paid-off or refinanced before maturity, lender refunds pro-rata share of buydown payment.
- Program doesn't revolve funding and supports finite amount of loans.
  - State could decide to use this for only certain sectors, technologies, geographic locations or consumer income/credit levels.

**Examples:** Utility low interest rate financing programs; NYSERDA program (closed).



# IRB Illustrative Example

The IRB payment is typically calculated as present value of difference in monthly payments, discounted at lender's rate.

## Illustrative example:

- Normal loan \$100,000 5yrs at 5% = \$1,887.12/mo.
- Reduce rate \$100,000 5yrs at 2% = \$1,752.78/mo.
- Present value of difference at 5% = \$7,119.16

Loan Amount	100,000.00						
Period (in months)	60.00						
Normal Interest rate	5%						
Interest Rate	2.00%						
Borrower							
			Principal		Interest	Lender	
Period	Payment	Interest	Principal	Balance	Lender Interest	Rate Buydown	Principal (10% Share) Lender Total
0				100,000.00		7119.16	(100,000.00) (92,880.84)
1	\$1,752.78	\$166.67	1,586.11	98,413.89	166.67		1,586.11 1,752.78
2	\$1,752.78	\$164.02	1,588.76	96,825.13	164.02		1,588.76 1,752.78
3	\$1,752.78	\$161.38	1,591.40	95,233.73	161.38		1,591.40 1,752.78
4	\$1,752.78	\$158.72	1,594.06	93,639.67	158.72		1,594.06 1,752.78
5	\$1,752.78	\$156.07	1,596.71	92,042.96	156.07		1,596.71 1,752.78
55	\$1,752.78	\$17.43	1,735.35	8,720.00	17.43		1,735.35 1,752.78
56	\$1,752.78	\$14.53	1,738.25	6,981.75	14.53		1,738.25 1,752.78
57	\$1,752.78	\$11.64	1,741.14	5,240.61	11.64		1,741.14 1,752.78
58	\$1,752.78	\$8.73	1,744.05	3,496.56	8.73		1,744.05 1,752.78
59	\$1,752.78	\$5.83	1,746.95	1,749.61	5.83		1,746.95 1,752.78
60	\$1,749.87	\$2.92	1,749.61	-	2.92		1,749.61 1,752.53
<b>Total</b>	<b>105,163.89</b>	<b>5,166.55</b>	<b>100,000.00</b>		<b>5,166.55</b>	<b>7,119.16</b>	<b>- 12,285.71</b>
<b>Internal Rate of Return (IRR)</b>							<b>5.00%</b>



# Loan Loss Reserve

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Under a **loan loss reserve (LLR)** model, the state provides a dedicated account to reimburse lender for a portion of lender's loan defaults.

## Key features:

- Lender responsible for loan underwriting, origination and servicing as typical.
- Master agreement between state and participating lenders; monthly reporting of portfolio loan balances and claim for any loan losses.
- Program terms define:
  - **Criteria for loan default** – typically 90 or 120 days past due.
  - **LLR is funded at portfolio percentage** – % of loan principal (e.g., 5%) or a fixed dollar amount; LLR is decreased for payments for losses and may also be decreased for loan amortizations/payments over time.
  - **Loss percentage** – the portion of the outstanding principal balance of an individual defaulted loan that is paid to the lender (e.g., 75%) – the lender retains loss for the remainder (e.g., 25%).
- State and lenders could establish different portfolio percentages or loss percentages for certain sectors, geographic locations, or consumer credit levels as a means of expanding lender underwriting criteria.
- Since the state is providing coverage for a portion of lender's expected losses, this structure should allow the lender to reduce program loan interest rates.

## Example: [Michigan Saves Program](#)

- Program provides 5% portfolio reserve and covers 75% of individual loan losses.
- Program has operated since 2010 with several credit unions and has issued \$450 million in loans.



# LLR Illustrative Example

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- 5-year loan at 5% for \$100,000 issued by lender with LLR program structure offering 5% LLR portfolio support and 75% of individual loan losses once loans are 90 days past due.
- Lender collects 12 payments, principal balance of \$81,945, at which point borrower stops making payments.
- Once loan is 90 days past due, lender submits a claim for 75% of the loss (calculated as 75% of the loan principal balance) of \$81,945, or \$61,458.
- Assuming sufficient balance remaining in LLR account, LLR pays lender \$61,458. Lender's retained loss is \$20,487 (\$81,945 - \$61,458).
- Program terms may require that if lender subsequently realizes recoveries from additional borrower payments, lender will refund/credit the LLR for 75% of the recoveries collected.



# Financing Structure Comparison

Features	Direct Lending	Co-lending	Interest Rate Buydown	Loan Loss Reserves
<b>Leveraging private capital</b>  <i>Example ratio of lender capital to state funding (on initial funds prior to any recycling of capital)</i>	Low 1:1  N/A	Low (based on committed funds); Med-High (assuming repayments) Varies based on co-lending percentage.  <i>Example: 1.33:1            Assumes state provides 75% of loan capital. The RLF funding is repaid, other than loan defaults, and can revolve to support additional loans.</i>	Low-Med Varies based on term, lender's normal interest rate, and desired interest rate reduction.  <i>Example: 14:1            Assumes 3% reduction of 5yr loans with normal interest rate of 5%. The RFL funding is repaid and does not revolve.</i>	High Varies based on portfolio percentage.  <i>Example: 20:1            Assumes 5% portfolio percentage. The RLF funding is returned, other than amounts used to cover a portion of lender's loan defaults and can revolve to support additional loans.</i>
<b>Ability to offer lower interest rates to borrowers</b>	High	Med	High	Low May be minimal impact from loss coverage.
<b>Ability to expand borrower access to financing</b>	High	Low-Med Although lender sets underwriting terms, state can dictate minimum underwriting terms for loans it will make eligible.	Low-Med Although lender sets underwriting terms, state can dictate minimum underwriting terms for loans it will make eligible.	High LLR can support lender using more expansive underwriting criteria.
<b>Administrative complexity for lenders</b>	N/A	High Each loan requires separate agreements.	Low	Med
<b>Administrative complexity for state</b>	Med-High	High Each loan requires separate agreements.	Low	Med

# Additional Resources

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The [RLF Resource Library](#) includes additional resources to support states in designing and managing an RLF program. Key resources include:

- ❑ **RLF Portfolio Pro Forma**, an Excel-based tool that enables users compare scenarios for loan portfolios across co-lending, interest rate buydowns, and loan loss reserves structures. The tool can help answer questions such as:
  - ❑ What is the amount of loans that can be supported for an assumed amount of RLF funding?
  - ❑ What is the amount of RLF funds needed to support an assumed amount of loans?
  - ❑ What amount of funds can be leveraged under different financing structures?

Access the RLF Portfolio Pro Form Excel file and a brief video tutorial of the tool in the RLF Resource Library under Part 3: Selecting Financing Structure.

- ❑ **Sample documents** such as RFPs and lender agreements across financing structures (access in the RLF Resource Library under Part 4: Case Studies and Sample Documents).



## Contacts

*Jeff Pitkin, [jeff.pitkin@outlook.com](mailto:jeff.pitkin@outlook.com)*

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## Acknowledgements

This work was funded by the U.S. Department of Energy Office of State and Community Energy Programs, under Contract No. DE-AC02-05CH11231. We would like to especially thank Sean Williamson and Emily Slusser for their support of this work.

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