Revolving Loan Funds
“Basics and Best Practices”

TAP Webinar
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Overview

Purpose:
• To inform state and local officials about revolving loan funds and how to set one up

Agenda:
• Summary
• Existing Programs
• RLF Structure
• Loan Process
• ARRA Opportunity
• How to Setup an RLF
• Best Practices
• Risk Management
• Results
Summary

• A revolving loan fund (RLF) is a source of money from which loans are made. As loans are repaid, additional loans are made

• Benefits
  o Helps encourage investment in efficiency and renewable energy
    ➢ Information and technical assistance reduces transaction costs
    ➢ Provides access to capital
    ➢ Typically results in reduced borrowing costs
  o Helps create jobs
  o Reduces energy consumption and provides environmental benefits
  o Can leverage existing capabilities of energy programs

• Considerations
  o Other programs could have higher impact: $ / BTU
  o Only one of many sources of capital
  o Prudent risk management needed to ensure longevity of fund

• Conclusion: RLF’s are a good use of ARRA capital inflow
  o Not subject to ARRA fund expiration
  o Limited program administration and staffing requirements compared to other uses of funds
There are a large number of existing energy loan programs for both EE and RE.

For energy efficiency (EE):
- 29 states have state level programs
- 34 states have utility operated programs
- 5 states have municipal programs
- Some have hybrid programs that combine public and private sector

Source: DSIRE Web Database (http://www.dsireusa.org/summarytables/finee.cfm)
RLF Basic Structure

Other funding sources

Initial capitalization (ARRA Funding)

Revolving Loan Fund

Administrative costs

Disbursements (Loans for EE/RE)

Loans

Principal, interest, and fees (From energy savings)
Loan Process Overview

The process should be customized for each program
The ARRA Opportunity

<table>
<thead>
<tr>
<th>RLF’s are an accepted and encouraged use of ARRA funding</th>
<th>$3.4 B for SEP</th>
<th>$3.5 B EECGB</th>
<th>$5.0 B for WIP</th>
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<tbody>
<tr>
<td>RLF funds not subject to expiration after the current three year ARRA timeframe</td>
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<td>Must be lent out in 3 year period</td>
<td>Repayment over additional years</td>
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<td>Money recaptured through loan payments must be used for the same purpose</td>
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<td>Unless approved by DOE</td>
<td>Eligibility and procurement must meet program requirements</td>
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RFL’s Extend the Impact of ARRA Funds
Starting an RLF: Begin With The Basics

- Review existing programs in your state
  - Energy loan programs and other RLF’s like EPA programs
  - Look to leverage expertise and knowledge

- Determine a clear purposes and goal for your RLF
  - e.g. To increase small business energy efficiency investment
  - e.g. Annual savings of $200,000 and 2 M kWh

- Determine the allowed / prohibited uses of funds
  - e.g. Allowed: Building energy efficiency investments
  - e.g. Prohibited: Costs of obtaining financing
Determine Requirements

**Borrowers**
- Eligibility
- Reporting
- Insurance or collateral
- Repayment

**Loan terms.**
- Maximum length
- Max and min loan amounts
- % of project funding that loan can be used for
- Administrative fees
- Interest rates

**Program Forms**
- Loan application
- Loan disbursement
- Reporting
- M&V
Finalize Program Details

• **Staffing considerations**
  - Who will be responsible for the program
  - Administrative duties, staffing requirements, and skill sets needed
  - Setup a committee to review loan applications
  - Leverage existing expertise from other agencies or the private sector

• **Define matrix for selecting projects**
  - e.g. ranking by payback or energy savings
  - States are encouraged to setup programs that save at least 10 million BTU per $1000 spent
Program Operation

- Capitalize with funds
- Market and promote the RLF
- Provide loans and technical assistance to borrowers
- Track and monitor existing loans
- Track and monitor progress towards program goals
- Offer assistance to borrowers
- Communicate success of program
Standardization versus Customization

- National harmonization of terms, approval procedures, M&V, etc, between programs could allow for packaging of loans

**Potential Positives:**
- Allows for assets tiers and simplified loan tracking
- Increased impact of programs through leveraging
- Increased efficiency and renewable energy investment
- Reduced transaction costs

**Potential Negatives:**
- Could stifle innovation
- Reduced ability to customize program
- Reduced potential program flexibility for borrowers
- Risk and return are difficult to standardize for efficiency
Risk Management

• Insure that loans are properly secured or guaranteed
  o OMB A-87 states that losses constitute an unallowable cost
  o Losses must be covered by non-federal funds
  o **Recommend: Loan guarantee component in each RLF**

• Familiarity with borrowers and technical assistance helps to prevent delinquencies

• In energy efficiency proper characterization of the improvements to be made to save energy is crucial
  • Due diligence is essential to verify engineering estimates
  • Monitoring and verification is important to dispute resolution

• Fees and rates must be set properly to prevent erosion of capital base

**Proper risk management is a key driver of program success**
Best Practices

• Customize program to the needs of target audience
• Start with a user-friendly approach plus simple policies and procedures
  o Will be a great help to program marketing and subscription
• Clearly define program goals and mission
• Provide good technical assistance to borrowers
• Invest in information technology and staff capacity
• Make borrowers aware of other financing sources and risks
• Inform borrowers of other energy programs that may be of interest and leverage overlapping capabilities

A well designed program will help people save time, money, and energy

Source: Adapted from “Housing Assistance Council Best Practices in Revolving Loan Funds”
Results

- ~ $1 B in loans made by SEP of Oregon, Texas, and Nebraska combined to date
- Average for these programs across all sectors is ~ 15 million source BTUs per $1000 dollar loaned\(^1\)
- Average simple pack back ~ 8.7 yrs
- Specific results vary due to the heterogeneity of energy investments, energy prices, and incentive programs
  - HVAC, commissioning, lighting, solar, wind, etc

Long track record of success in energy loan programs across sectors and locations

Sources: 1. ORNL Evaluation of State Energy Programs in 2002 2. Energy Information Administration
Thank You

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Frequently Asked Questions

Q: What will the impact of my program be?
A: It depends on program size, target audience, loan terms, etc.

Q: What should I do to safeguard funds in the event of default?
A: Have proper collateral and loan guarantees.

Q: Is energy efficiency a good investment?
A: Yes paybacks are short and returns are high.
Average Payback Calculation

- Average simple pack back ~ 8.7 yrs
- Estimated to communicate results. Calculation details below
  - Average for these programs across all sectors is ~ 15 million source BTUs per $1000 dollar loaned
  - 3413 BTU per kWh
  - Average nationwide commercial electricity price 1998-2008 = $0.0837 kWh
  - 3413 BTU per kWh x $.0837 x 1e6 = $24.52 per MBTU of site electricity
  - Site to source ratio for electric BTU’s is 3.34
  - =(1/3.34)*$24.52 = $7.21 per source MBTU electricity
  - For natural gas assume 1 site BTU = 1.05 source BTU
  - Average nationwide commercial natural gas price 1998-2008 = $8.83
  - Assume source BTU’s are 66% electricity and 33% natural gas
  - Average price per source MBTU = $7.70
  - .015 source MBTU per $1 invested * $7.70 spent per source MBTU = $.115 $ saved annually / per $ spent
  - = 8.66 year pack back

Acronym Glossary

ARRA = American Reinvestment and Recovery Act
BTU = British thermal unit
EE = Energy efficiency
EECGB = Energy efficiency conservation block grant
OMB = Office of Management and Budget
RE = Renewable energy
RLF = Revolving loan fund
SEP = State Energy Program
WIP = Weatherization and Intergovernmental Program