Overview

Under the American Recovery and Reinvestment Act (ARRA) funding totaling $3.1 B is available for State Energy Programs (SEP). One of the program areas that the ARRA legislation encourages is the creation of long term funding mechanisms such as revolving loan funds (RLF), in order to extend the impact of the ARRA funds. By creating a revolving loan fund, states are not subject to expiration of the funds after the current three year ARRA timeframe. The only restriction is that the entire amount allocated to the loan program must be loaned in the initial three-year time period. Repayment can be stretched over additional years. Money recaptured through loan payments must be used for the same purpose unless an amendment is approved by the DOE redirecting their use.

Many states have applied for ARRA funding in order to setup a revolving loan fund for energy efficiency and/or renewable energy. Revolving loan funds are an excellent way to provide access to capital to borrowers who might not have other resources, reduce borrowing costs, and create jobs. States are encouraged to align the goals of their RLFs with overall SEP program goals.

This paper provides general information to states intending to set up a new RLF for the SEP.

The Basic Structure of a RLF

A RLF is a source of money from which loans are made. Loans are made to borrowers consistent with standard prudent lending practices. As loans are repaid by the borrowers, the money is returned to the RLF to make additional loans. In that manner, the RLF fund becomes an ongoing or "revolving" financial tool. The interest and fees paid by the RLF borrowers support program administration so that the fund’s capital base remains intact. Typically RLFs lend money with specific goals or borrowers in mind. The range of RLFs varies widely including such diverse area as affordable housing, historical preservation, energy efficiency, safe drinking water, and small business development. RLFs are typically administered by government agencies or non-profits with the goal of creating positive change within their community or target lending group.
Fund Operation

Other funding sources

Initial capitalization (ARRA Funding)

Revolving SEP Loan Fund

Administrative costs

Disbursements (Loans for ECM’s)

Principal, interest, and fees (From energy savings)

Loans

Loan Process

Loan Application → Application Review → Loan Closing Procedures

Loan Repayment ← Project Completion ← Project Construction
## General Steps to Setup a Revolving Loan Fund

**NOTE:** Steps do not necessarily need to be followed consecutively

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<td>Determine which department with oversee the program. Typically the State Energy Office with support from other government agencies or the private sector.</td>
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<td>8.</td>
<td>Set up a committee to review loan applications.</td>
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<td>9.</td>
<td>Determine the administrative duties and staffing needs associated with the program.</td>
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General Steps to Setup a Revolving Loan Fund (cont’d)

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| 10.  | Develop forms for the program.  
|      | a. Loan application  
|      | b. Loan disbursement  
|      | c. Reporting  
| 11.  | Define matrix for selecting which projects to fund. Such as ranking by payback or energy savings.  
| 12.  | Promote the RLF and capitalize with funds.  
| 13.  | Provide loans and technical assistance to borrowers.  
| 14.  | Track and monitor existing loans. Track and monitor progress towards program goals. Offer assistance to borrowers and communicate success of program.  |
Additional Details on General Steps to Set Up a RLF

1) **Review existing energy loan programs in your state.**

Twenty nine states currently have energy loan programs run by the state. Review existing energy loan programs in your state. The Database of State Resources for Renewable and Energy Efficiency is an excellent resource. ([http://www.dsireusa.org/summarytables/finee.cfm](http://www.dsireusa.org/summarytables/finee.cfm)) Look for ways to leverage these skills and experience from these programs.

If your state does not already have an energy RLF review other states RLF programs. Examples of states with existing energy RLF programs include Arkansas, Montana, Texas, and Utah. Gather information on their goals, administration, and lending practices.

2) **Review other RLF programs in your state.**

Review other RLF programs in your state and look to leverage expertise and knowledge from these programs. For example determine if you state has any EPA RLF programs such as Brownfield or Safe Drinking Water. Also looks for RLF programs for small businesses and affordable housing.

3) **Purpose and goal of revolving loan fund.**

The general purpose and goals of each states revolving loan fund should be illustrated and outlined. Short and long term goals should be laid out. For example the state of Arizona has outlined that it will establish a revolving loan fund with $2 M to be invested in energy efficiency and renewables. They expect the loan recipients will be primarily small business owners. The goals are $200,000 in costs savings, 2 million kWh annual savings, and a emissions reduction of 2 million lbs of CO₂. Also they believe that if the fund is turned over once in the first three years it will create 40 jobs.


4) **Determine the allowed uses of funds as well as prohibited uses.**

Adapted from 1. Utah R68 3-3-3


The SEP or other program administrator must determine what the RLF funds can be used for. For example, they could select technologies or applications that are eligible and not eligible for financing.

**Example:** The following are eligible for financing from the RLF:

- a) Building materials
- b) Doors, windows, and skylights
- c) Mechanical systems and components including HVAC and hot water
- d) Electrical systems and components including lighting and energy management systems
- e) Renewable energy systems such as wind, solar, geothermal, and biomass
f) Labor necessary for the construction or installation of the energy efficiency project

g) Design and planning of the energy efficiency project

h) Energy audits that identify measures that are included in the energy efficiency project

i) Commissioning, inspections or certifications necessary for implementing the energy efficiency project

Example: The following costs are not eligible for financing from the Fund:

a) The costs of a construction or renovation project that are not directly related to energy efficiency measures

b) Costs incurred for the acquisition of financing for the project

c) Costs for equipment or systems that reduce energy costs without also resulting in reductions in the use of energy

d) In cases for which the applicant receives a financial incentive or rebate from a utility or other third party for undertaking some or all of the measures in an energy efficiency project, such incentives or rebates are to be deducted from the costs that are eligible for financing from the Fund. No loans made from the Fund may exceed the final cost incurred by for the project

e) For an energy efficiency project undertaken as part of the renovation of an existing building, building components or systems that are covered by the prescriptive requirements of the State Energy Code must exceed the minimum Energy Code requirements in order for their costs to be eligible for a loan from the Fund

5) Set the requirements for borrowers.

Adapted from 1. Utah R68 3-3-3, 2. EPA Brownfield Revolving Loan Guidelines and 3.

Eligibility

The RLF administrator must determine who is eligible to receive the loans. Often loan programs are targeted to specific segments of the population such as low income, small business, or specific industries. The administrator should state eligibility requirements. For example, eligibility is limited to any resident in the state of Utah and loans must be used to fully or partially finance energy efficiency and renewable projects within buildings owned and operated by the applicant.

Application

The RLF administrator must determine what supporting documents and materials will be required with the loan application. Typically an energy audit performed by licensed agency is required. Some states such as Texas outline specific guidelines that need to be followed to calculate projected energy savings.

Reporting

The RLF administrator must determine what the reporting requirements will be during the loan term.

- In the period between project approval and project construction completion, the borrower shall complete and provide to the fund administrator a report at the beginning
of each quarter. The report shall include information on the progress in completing the energy project, its most-current estimate for the time of project completion, what proportion of the loan award has been disbursed in the quarter and total to date, and any notable problems or changes in the project since approval such as construction delays or cost overruns.

- If a borrower district fails to submit the quarterly reports described above, the SEP may freeze the remainder of the loan award escrow account.

- After loan funds have been completely disbursed, the borrower district shall complete and provide to SEP annual reports due at the beginning of the calendar quarter in which the anniversary of the loan repayment period began. This report shall include the following:
  
  o A description of the performance of the building and of the performance of the measures included in the energy efficiency project
  
  o A description of any notable problems that have occurred with the building or the project
  
  o A description of any notable changes to the building or to its operations that would cause a significant change in its energy consumption
  
  o Documentation of building energy consumption and cost in the prior year

**Insurance and collateral**

The RLF administrator should obtain adequate and appropriate financial security from borrowers and to act diligently to protect the interests of the revolving loan fund through collection, foreclosure, or other recovery actions on defaulted loans. It is recommended that all loans are properly secured. The administrator should determine, on a case-by-case basis, whether a lien on the property is appropriate collateral. Other collateral may include security interests in equipment, accounts, and personal guarantees.

6) **Loan Terms.**

The SEP RLF administrator must determine the terms under which the money if the RLF will be loaned out. Sample terms are shown below.

Adapted from 1. Rhode Island Energy Loan Program and 2. EPA Brownfield Revolving Loan Guidelines


   a. Term of the loan is a maximum of 10 years
   b. The maximum amount that can be borrowed is $500,000
   c. The minimum amount that can be borrowed is $10,000
   d. The funds can be used for up to 100% of the total project cost
   e. An administrative charge is assigned to each project which is spread out over the term of the loan. The administrative charge is:15% < $50,000, 10% > $50,000
   f. Interest rates should be set by the fund manager. Typically the rates charged are below market value but greater than zero percent.
g. Repayment of principal is required yearly on August 15 via a billing document. Repayment plans should be established so that funds are paid back in a timely and efficient manner. The repayment plan can be negotiated on a loan by loan basis if desired.

h. In the event of default that RLF administrator should make reasonable efforts to enforce the terms of the loan agreement including proceeding against the assets pledged as collateral to cover losses to the loan. Differences between assets seized and outstanding loan balances will need to be considered unrecoverable losses to the fund.

7) **Determine which department will oversee the program.**

A crucial component to setting up the program is to determine which governmental department will oversee the program. Historically energy revolving loan funds have been primarily run and administered out of the SEP office. Sometimes support is provided by other government agencies such as the Department of Commerce, Finance Division in Arizona or the State of Colorado program which will provide low cost capital to banks to lend to efficiency or renewable projects. In Utah the Board of the Utah Geological Survey and the SEP both manage and implement the program.

8) **Set up a committee to review loan applications.**

A committee setup to review loan proposals should consist of financial, energy, and contracting personnel. The committee takes responsibility for reviewing and awarding loan proposals.

9) **Determine the administrative duties and staffing needs associated with the program.**

Staff time will be required to review, disperse, process, and administer loans. Outstanding loans will also need to be monitored and payments tracked. Depending on program setup, the monetary size of the program, and the average size of individual loans the staffing needs of the program will vary. It is also possible to contract with an outside agency such as a bank to provide services like loan monitoring.

10) **Develop forms for the program.**

Sample Forms from the Texas Loan Star Program

Application - [http://www.seco.cpa.state.tx.us/ls/forms/ls_form_app.pdf](http://www.seco.cpa.state.tx.us/ls/forms/ls_form_app.pdf)
Loan Disbursement Request - [http://www.seco.cpa.state.tx.us/ls/forms/ls_form_disburse.pdf](http://www.seco.cpa.state.tx.us/ls/forms/ls_form_disburse.pdf)
Memorandum of Understanding - [http://www.seco.cpa.state.tx.us/ls/forms/ls_form_mou.pdf](http://www.seco.cpa.state.tx.us/ls/forms/ls_form_mou.pdf)
Proposed Category IV Worksheet for incremental costs for new construction - [http://www.seco.cpa.state.tx.us/ls/forms/ls_form_cat4.pdf](http://www.seco.cpa.state.tx.us/ls/forms/ls_form_cat4.pdf)

11) **Define matrix for selecting which projects to fund.**

The loan application committee should setup a matrix, process, or scorecard to determine the priority of projects to be funded with the RLF. The committee should decide which criteria are most important to them and weight them accordingly depending on program goals. Some things to consider in project
criteria include payback, dollars saved, energy saved, greenhouse gas reduction, job creation, financial need of borrower, renewable energy components, and project visibility. The DOE encourages states to select programs that save at least 10 million BTU per $1000 spent.

12) **Promote the RLF and capitalize with funds.**

Once the RLF has been established it needs to be capitalized and promoted. Promotion strategies must be targeted towards the specific goals of the program.

13) **Provide loans and technical assistance to borrowers.**

After the setups above are completed review loan applications and provide loans to borrowers consistent with your goals and prudent lending practices. If possible also provide borrowers with limited technical assistance during the application, construction, and reporting phases.

14) **Track and Monitor Loans.**

Develop procedures to track and monitor existing loans. Monitor and track progress toward program goals. Offer assistance to borrowers with the potential to default. Communicate program success.
Appendix:

The Appendix contains additional information that might be useful for states setting up a revolving loan fund. The Appendix contains information on: Common Issues with a RLF, Other Issues in Energy Efficiency Loans, Best Practices in Revolving Loan Funds, ARRA Revolving Loan Fund Encouragement, Examples of State RLF programs already receiving ARRA funding, Examples of existing energy RLF’s, and information on other Government RLF Programs.

Common Issues with a RLF.

Sourced directly from http://www.cdfa.net/cdfa/cdfaweb.nsf/pages/rlffactsheet.html

While revolving loan funds have plenty of benefits, there are some drawbacks. Since RLFs provide access to a flexible source of affordable financing, operating costs may come to exceed operating income, resulting in erosion of the fund’s capital base. Annual inflation also contributes to capital base erosion. In either case, the fund may require additional public investment to remain functional.

Review committees must also carefully weigh which loans to make. For example, making too many long-term loans could result in fewer new loans, slowing down the revolving mechanism and straining the fund. In other cases, borrowers who could make it without special support may apply for funds, thus limiting opportunities for high-need businesses.

Other Issues in Energy Efficiency Loans.

When administering energy efficiency loans 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 as well.

Best Practices in Revolving Loan Funds in Rural Affordable Housing.

(Adapted from http://www.ruralhome.org/pubs/credit/revolvingloanfunds.pdf )

- Structures should be customized to the specific needs of individual states and communities.
- In founding a loan fund, a clearly focused mission, good technical assistance, and solid initial capitalization are key.
- In structuring loan fund policies and procedures, successful funds start with simple, user-friendly procedures, and then diversify their lending products and practices.
- In the area of risk management, all types of funds must ensure that the collateral for each loan will cover the costs of a possible default, and delinquencies should be monitored as closely and as soon as possible. Familiarity with borrowers through in-house technical assistance (for development groups) and homebuyer education and counseling (for individuals) also helps to prevent delinquencies.
Finally, the longevity of a fund can be promoted through investment in information technology and staff capacity, so that the fund is able to handle increasingly complex financing deals and reporting requirements as it grows.

Make sure borrowers are aware that RLF funds are only one of the financing sources available to them. Inform borrowers of other SEP programs that may be of interest.

ARRA Revolving Loan Fund Encouragement.

- Section: 4.1 ARRA Overview. (Page23, DE-FOA-0000052)
  - States are encouraged to use their ARRA funding not only to support current energy efficiency and renewable energy projects but also to seed sustainable programs and put in place long-term funding mechanisms such as revolving loans and energy savings performance contracting that will provide lasting benefits and lead to long-term market transformation.

- Section: 5.5 Cost Sharing and Resource Leveraging. (Page28, DE-FOA-0000052)
  - To increase the impact of these stimulus funds, DOE encourages plans which achieve a high degree of leveraging, and/or projects that extend the impact of the funds. Examples of programs which provide high leverage are revolving loan programs and performance contracting.

- Section: 9.5 Optional Program Activities. (Page34, DE-FOA-0000052)
  - Programs for financing energy efficiency and renewable energy capital investments, and programs, which may include loan programs and performance contracting programs for leveraging additional public and private sector funds, and programs that allow rebates, grants, or other incentives for the purchase and installation of eligible energy efficiency and renewable energy measures in public or nonprofit buildings owned and operated by a state, a political subdivision of a state or an agency or instrumentality of a state, or an organization exempt from taxation under section 501(c)(3) of the Internal Revenue Code of 1986, including public and private non-profit schools and hospitals, and local government buildings


Examples of RLF’s already receiving ARRA financing.

The following states are receiving 40 percent of their total State Energy Program (SEP) funding authorized under the American Recovery and Reinvestment Act: Arizona, Connecticut, Florida, Idaho, Kansas, Minnesota, South Carolina, South Dakota, Utah, and Washington.

- Arizona - Energy Loan Program, $2 M
  - [http://az.gov/recovery/assets/docs/SEPSubApp09.pdf](http://az.gov/recovery/assets/docs/SEPSubApp09.pdf)

- Florida - E85/B20 Public Fueling, Conversion Revolving Loan Program, $ 5M
  - [http://www.flaseia.org/docs/SEPAllocationOverview.pdf](http://www.flaseia.org/docs/SEPAllocationOverview.pdf)

- Kansas – Efficiency Kansas Revolving Loan Program $34.2 M
  - [http://www.kcc.state.ks.us/energy/arra.htm](http://www.kcc.state.ks.us/energy/arra.htm)

- North Carolina - Energy Loan Fund, $18 M
Examples of Existing Energy RLF’s.


- The Texas LoanSTAR (Saving Taxes and Resources) Program finances energy related cost reduction retrofits for state, public school, college, university, and non-profit hospital facilities. Low interest rate loans are provided to assist those institutions in financing their energy cost reduction efforts. The program’s revolving loan mechanism allows borrowers to repay loans through the stream of cost savings realized from the projects.
- Program was initiated by the Texas Energy Office in 1988 and approved by the U. S. Department of Energy (DOE) as a statewide energy efficiency demonstration program.
- As of November 2007, LoanSTAR has funded a total of 191 loans totaling over $240 million dollars. As a result of these loans, the LoanSTAR Program has achieved total cumulative energy savings of over $212 million dollars, which results in direct savings to Texas Taxpayers.
- The funding source is petroleum violation escrow funds (PVE) from the federal government. The size, $98.6 million, makes it the largest state-run building conservation program in the United States.
- The initial loans (1989-1994) were made for a period of four years with program paybacks averaging 3.4 years. All major projects had to be metered and monitored for savings verification.
- In 1995 the loan period was lengthened to eight years and metering and monitoring became an option for the loan recipient with the cost allowed to be rolled into the loan.
- In 2001 the payback period extended once again to the current 10 year maximum loan term.
- Currently, and for the first time since program inception, the LoanSTAR Program has expended all available funds for new loans and has requests of over $20 million dollars waiting for funding.

Utah - Revolving Loan Fund for Schools: ([Applied for additional $2.5 M under ARRA](http://www.rules.utah.gov/publicat/code/r638/r638-003.htm))

- **HB 351**, signed in 2007, created a $5 million revolving loan fund to provide zero-interest loans for energy efficiency projects in K-12 schools and school districts in Utah. Loans are provided for the retrofit of existing buildings as well as energy efficiency upgrades to new buildings. However, loans cannot be used for new buildings to meet the Utah energy code. Loans for new construction can only be used for measures which surpass the prescriptive requirements of the Utah energy code and result in a completed building which exceeds the performance standards of the energy code for its building type by 10%. Loans can be between $5,000 and $250,000 per project. Districts may apply for and receive multiple loans provided their total indebtedness to the fund does not exceed $500,000. In addition to loans, technical assistance will also be provided to help public agencies and school districts conduct energy audits, design and implement energy efficiency projects, and maximize energy savings.
Rhode Island – Energy Revolving Loan Fund (http://www.energy.ri.gov/programs/efficiency.php)

- In 1991, the Energy Conservation Revolving Loan Fund was created with monies provided by the U.S. Department of Energy (DOE).
- In 1995, legislation was signed by the Governor which added the availability of funding for water conservation, and water and sewer cost reduction measures.
- The Rhode Island Office of Energy Resources expanded the Revolving Loan Program to include municipalities effective January 1, 1999. Direct funding from DOE for the Institutional Conservation Program (ICP), a 50-50 matching grant for schools, was eliminated and is now replaced with the Fund to create a self-perpetuating fund not only for state agencies but also municipal buildings. In addition, the Fund began funding the incremental cost of alternatively fueled vehicles effective January 1, 1999.
- The Fund began funding the incremental cost of alternatively fueled vehicles effective January 1, 1999.
- Rhode Island Energy Loan Fund Terms and Conditions can be found here.
  - http://www.energy.ri.gov/programs/efficiency_terms.php

Ohio – Energy Efficiency Revolving Loan Fund


Montana – Alternative Energy Loan Fund

- http://www.deq.state.mt.us/energy/Renewable/altenergyloan.asp

Report documenting 16 States with residential energy efficiency loan funds

- http://www.energyprograms.org/briefs/0701-GrantLoanPrograms.pdf

Other Government RLF’s.

EPA Brownfield’s Clean Up Revolving Loan Fund (BCRLF) http://www.epa.gov/brownfields/applicat.htm

- Brownfield’s Cleanup Revolving Loan Fund Administrative Manual

- SRF Fund Management Handbook