American Cities
Climate Challenge

SAINT PAUL'S ENERGY CONSERVATION REVOLVING LOAN FUND

WHAT IS A REVOLVING LOAN FUND?

A revolving loan fund (RLF) is an internal source of money from which loans can be made. It is called "revolving" because the money that is initially lent out, in this case to St. Paul's five departments, is ultimately repaid and reused for new projects, thereby recirculating the original capital. Usually, repayments of principal go back into the RLF, and interest payments and lending fees that the borrower pays are used to manage the RLF so that it does not need an additional budget for operations. Seed capital for an RLF can come from public budgets, ratepayer funds, bond issuances, grants, and private capital. RLFs have become a useful mechanism for financing energy efficiency projects in cities, counties, and states, as well as at institutions such as universities (City Energy Project—New York Case Study).

The Saint Paul internal program started with a cash balance of $1 million received through the city's Sewer Service Enterprise Fund.

Saint Paul, Minnesota	**160+ city facilities**
Population: 307,000	Building stock: 3.2 million sq ft
Politics: Progressive Democrat	Energy cost/year: $8.5 million

SEED FUNDING

In 2008, the city of Saint Paul created an RLF, also known as the Energy Conservation Investment Fund, as an internal program dedicated to retrofitting and increasing the energy efficiency of its municipal buildings.

The city has completed more than 600 energy efficiency projects through four revolutions since the program's inception. In 2018, Saint Paul committed to making its municipal facilities carbon neutral by 2030 as part of its Climate Action and Resilience Plan. To support this goal, it expanded its RLF from $1 million to $5 million, using cash reserves.

INVESTING IN EFFICIENCY—EXPANDING THE REVOLVING LOAN FUND

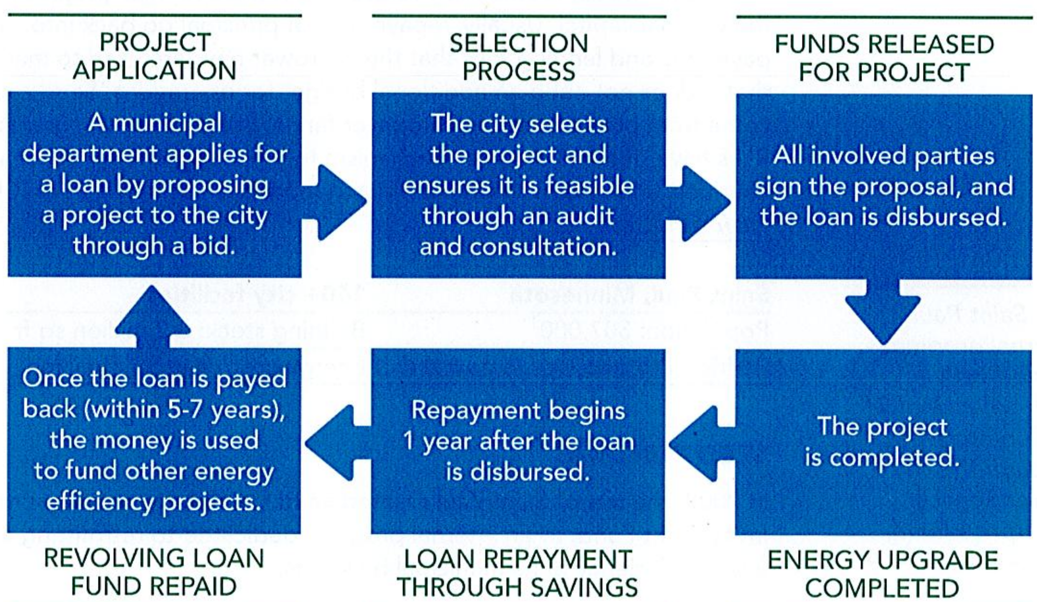
The upfront cost of making structural changes to a building is often a barrier to implementing smart energy efficiency. Saint Paul expanded its RLF for this very reason—a loan fund offers the dual benefits of removing financial barriers to energy efficiency improvements that can result in substantial energy savings. These savings, especially for smaller cities such as Saint Paul, can help enormously with long-term budgeting. For Saint Paul, using an RLF for energy efficiency improvements resulted in $1.6 million in savings from 2009 to 2018, as can be seen in the table below.

Revolving Loan Fund Projects & Savings: 2009 to 2018

Number of projects		629
Electric savings	$	1,404,750
Gas savings	$	272,026
Total energy savings	$	1,676,776
Energy rebates received from utility	$	1,424,301
Cumulative energy savings plus rebates	$	3,101,077

In addition to increasing energy efficiency and savings, Saint Paul's RLF ties into the city's Climate Action and Resilience Plan by bringing its building stock closer to carbon neutrality. Prioritizing energy efficiency in city operations sets a good example for building owners in Saint Paul, encouraging them to use Energize Saint Paul, a resource aimed at helping the community increase efficiency, reduce utility cost and improve the city's building stock.

HOW SAINT PAUL'S REVOLVING LOAN FUND WORKS



Audits: To identify and scope energy efficiency projects, the city can perform audits internally or use an independent third party. Saint Paul works closely with the Center for Energy and Environment, a nonprofit organization contracted directly with the city's utility provider, Xcel Energy, to perform lighting audits at no charge. Other third-party contractors are paid through the RLF, and those fees are rolled into the overall project costs.

Rebates: During the audit phase of each project, utility rebates are taken into consideration and applied directly to the loan. For some projects, this means trimming tens of thousands of dollars off the upfront loan amount.

Energy Efficiency Savings Go to the Borrower

Energy efficiency improvements result in lower utility bills. With revolving loan funds, it is common to see the savings from energy efficiency improvements funneled directly back into the loan fund even after the loan is paid off. This type of model can be seen in San Antonio, where they replenish their RLF more quickly with longer-term savings to support more projects. Saint Paul designed its program to do the opposite—they allow the borrower of the loan to keep the savings after the loan is paid off. Although this aspect of the program may seem trivial, it has a major effect on whether agencies participate and implement energy efficiency upgrades. Allowing the borrower to reap the longer-term cost benefits of their energy efficiency improvements increases RLF participation and allows a steady surplus of savings after repayment to maintain the energy efficiency upgrades.

Common-Sense Management and Payment Buffer

The priority of the Saint Pauls' RLF is to ensure that all the cash savings from the energy efficiency upgrades are equal to, or exceed, the yearly loan payment.

Saint Paul designed their RLF so that most, if not all, projects approved will have a positive cash flow when paying off a loan.

Before a loan is disbursed, the borrower must go through several phases of auditing and planning to ensure that the proposed upgrades are in line with the loan amount and that the year-round savings are enough to pay off the loan within seven years.

With Saint Paul's program, time is on the borrower's side rather than the lender. Borrowers only make one payment per year during their payback period, which allows enough time to ensure that energy efficiency savings are maintained and accumulated to make the yearly payment.

SUCCESS AND EXPANSION

Jim Giebel, Saint Paul's Energy Coordinator, manages the RLF. He works under the Office of Real Estate and Financial Services, where project planning and paperwork for the RLF is handled. Managing the program internally, as opposed to third party management, ensures city familiarity with the buildings and personnel that operate them.

Giebel, who has a background in finance and marketing, has served as Saint Paul's Energy Coordinator for 11 years. Although his position does not give him the authority to make institutional change, he can make recommendations to the mayor and city council, which can result in institutional change. In 2018, teaming up with the city's Chief Resilience Officer, Russ Stark, Giebel suggested that the existing RLF should be expanded to meet the city's aggressive carbon neutrality goal.

During the negotiation phase of the RLF's expansion, Giebel's priorities were to 1) increase the cash balance of the loan fund, 2) increase the loan limit, and 3) extend the repayment period. The rationale behind these priorities was to make energy efficiency improvements more accessible for municipal agencies. The more time and money allowed, the more confidence these agencies will have in their projects when borrowing.

With Giebel's experience in finance and Stark's more than 10 years in local politics, the duo made a compelling case to the mayor and city council that expansion of the existing RLF was critical to the city achieving its carbon neutrality goal. Through meetings, memos, and calls, their pitch proved effective, and the fund was granted the maximum amount it could be allotted: $5 million. The city council passed a resolution that increased the loan fund, increased the loan limit from $100,000 to $250,000 per loan, and allotted a repayment period of 5 years, with 7 years allowed on a case-by-case basis. By quintupling the loan fund, increasing the individual loan maximum, and relaxing the repayment terms, Giebel and Stark have helped ensure that the RLF will result in more loans for projects to reduce emissions in Saint Paul.