

Sustainability Revolving Loan Fund (SRLF)



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1.0 Introduction

1.1 What is a Revolving Loan Fund (RLF)?

A Revolving Loan Fund operates on a fairly simple premise: An initial sum of money is set aside for the fund. The fund then finances projects that have a quantifiable monetary savings or return – such projects abound in the realms of renewable energy, energy efficiency, and energy conservation. A portion of the returns from these projects is reinvested into the fund until the project has been paid off. The money is then reused for more projects.

Some loan funds are designed to grow over time, so they can provide ever-greater benefits. These funds require that projects return slightly more money to the fund than the inflation-adjusted project cost. This does not deter projects because even with this requirement, loan fund money is easier to get and less expensive than borrowing from traditional sources, such as banks.

1.2 Purpose Behind the Project

Western Washington University strives to be a national leader in campus sustainability. From our commitment to green energy and waste reduction to WWU's sustainability committee and sustainability-minded courses, WWU incorporates sustainability into many areas of campus operations and academics.

The purpose behind the Sustainability Revolving Loan Fund (SRLF) is to provide an economically sustainable means by which to accomplish these goals. The SRLF is specifically designed to support sustainability projects that reduce the operational costs of the university.

1.3 Significance to WWU

With cuts to the university's budget, it is getting harder to find money for anything on campus, especially projects that have a high starting cost. For Western to continue in its drive for sustainability, funds must be available for the projects that make it so. Without a renewable fund in place, Western will lose much of its funding for sustainability as remaining funds are allotted to academics and other necessary programs.

The significance of a Sustainability Revolving Loan Fund (SRLF) for Western is the campus will be greatly benefited from sustainable projects. Making Western green is important not only for the impact on the environment but for educational purposes as well. Western can be another flagship for sustainability that others can see and emulate.

2.0 Methodology

2.1 Internet Research

Internet research included searches through the AASHE database for schools who had already implemented sustainability revolving loan funds. In addition to AASHE, the Green Report Card was a helpful internet research as to the sustainability efforts on university campuses across the U.S. Wikipedia for hard facts on each school researched (i.e. size of school, undergraduate count, endowment, etc.). See the attached resources for a list of important websites.

2.2 Contacts & Meetings

2.2.1 Tim Wynn, Director of Facilities Management. He is a valuable resource that knows the workings of physical change on campus. He has done many sustainability projects for the campus, and knows a great deal of getting the projects up and running. He knows about

PSE grants, other funding options, ESCO financing, and budgets for projects. He also has information regarding future projects, their costs, paybacks, and timelines.

2.2.2 Jamin Agosti, AS VP of Student Life. Jamin is the Chair of the Green Fee Committee on Western's campus. Jamin had insight into how sustainability projects are currently budgeted and prioritized at Western. He could also give direction on how the Green Fee and SRLF would work together to enhance Western's commitment to sustainability.

2.2.3 Timothy DenHerder Thomas, CERF Developer at Macalester College. Timothy was a student at Macalester College during the 2006-2007 time period when their Clean Energy Revolving Fund (CERF) was being developed and implemented. Timothy was a key player in the development of the CERF and gained a tremendous amount of insight and knowledge in how to set up and run this type of fund.

2.2.4 Sandy Fugami, WWU Mechanical Engineer. Mrs. Fugami works closely with Tim Wynn. She is a University Engineer and has technical information involving potential and past projects.

2.2.5 Rich Van den Hul is the VP for Business and Financial affairs at Western. He knows the budget. His main concern for the fund is where the money comes from: he doesn't want it to take away from other projects that need funding. He supports the project if the money comes from the Green Fee, or another such place that doesn't take away from the universities' budget.

2.3 Program Development – Use AASHE, other Internet sources and meetings to formulate a plan that fits Western and is feasible.

2.4 AASHE

AASHE is a valuable resource to use when setting this sustainability project. AASHE does a step by step tutorial on how to set up a revolving loan fund. The tutorial gives ideas in many areas regarding the fund. It covers such things as how to get money to start it, problems that may arise in setting it up, and how solve these problems.

2.5 People as a Resource.

The brains of others was a large part of getting this proposal together. There are people on campus knowledgeable about this kind of fund and some were trying to get a revolving loan fund started. Using these human resources we gained information on what could hold the fund back and why attempts at starting a similar fund did not go through. Seth Vidana gave us a background on the workings of the budget office, facilities management, and administration. He showed us who we would want to talk to about what.

3.0 Case Studies

3.1 Case Study #1 Macalester College CERF

All of the information in this case study was the result of an interview with Timothy DenHerder-Thomas. Timothy was one of the students who researched and pushed forward the CERF project. Timothy and his colleagues were major authors in the guide put out by AASHE called, "Creating a Campus Sustainability Revolving Loan Fund: A Guide for Students." Any

general background information on the size and financial standing of Macalester College was pulled from Wikipedia.

3.1.1 Background

Macalester College is a small private university of about 2000 students. According to Wikipedia, their endowment is about 550 million dollars. They never had a Green Fee and their Clean Energy Revolving Fund (CERF) was the first green project funding initiative. They had been purchasing green credits but students wanted to take the next step in reaching their goal of climate and energy neutrality. The plan is to achieve carbon neutrality by 2025 and be cash-positive (it will cost less than doing nothing).

3.1.2 Project Development (Fall 05 to 2006)

They set initial goal of securing \$100,000 in capital. They wanted \$25,000 for first year to get it started. They tried to get the initial money from somewhere outside the college budget. The students secured \$20,000 from the AS government and \$7,000 from the Environmental Studies Department. Six months after the project had been implemented administration input another \$40,000. About a year and a half after the fund was initiated the students decided they wanted to do bigger projects. The college committed to doing a full lighting retrofit of campus and the Board of Trustees contributed another \$35,000. The retrofit would cost 70,000 but saved 5% annually on energy. Although Timothy could not provide the actual amount of monetary savings, he said that 5% was considered an excellent payback.

3.1.3 Timeline

It took 1 month of campaigning with the AS government and Environmental Studies Dept. to gain their support. It took 6 months to get the organization and infrastructure set up. According to Timothy the 6 months for the set up of infrastructure was due to their lack of any sort of previous committees or systems of funding for sustainability projects (i.e. no green fee, etc.).

3.1.4 Stakeholders

There were 4 areas in which key stakeholders were outlined. This included Administration, AS Government, the Environmental Studies Department, and the Student Body. Within the Administration the Facilities Department and Financial Management Department played essential roles in the development and management of the fund. While the support of the Student Body was important to the other key stakeholders.

3.1.5 Challenges

- 1) Knowledge. The students working developing the CERF at Macalester had to meet with financial managers, lawyers, and administrators to learn the workings of the financial and university systems so that they could even begin to develop their Charter and make the project a reality.
- 2) Infrastructure. Macalester College had little or no experience with the management and development of a fund that is specifically designed to fund sustainability projects on campus.
- 3) Loan Requests. There was a lull in the use of the fund because there weren't as many project requests as Timothy and the administration had expected. There were a lot of little projects that had been completed rather quickly with the help of the fund, however programs or classes that initiated sustainability project development had not yet established a long list of projects or ideas for the college to move forward with. This was solved when

the college decided to do a campus-wide lighting retrofit and the fund grew substantially, as explained above.

3.2 Case Study #2: Iowa State

3.2.1 Background Information

Iowa State is a public university serving 28,000 people, with an endowment of 452.2 million.

3.2.2 Project Development

Iowa State's revolving loan fund got started very swiftly with the help of their president. The President recognized the need and set aside funds specifically for a revolving loan fund.

3.2.3 Timeline

With the full backing of the president it took less than 1 year to get a sustainability revolving loan fund set up and functional at Iowa State.

3.2.4 Stakeholders

The President. Iowa's fund was backed entirely by the president, without opposition.

3.2.5 Challenges

- 1) At first the buildings weren't metered, and so energy savings couldn't be measured. Now, every building gets an allotment of energy, and if they go over, they have to pay the extra, but if they go under, they get to keep the savings. This way it is really easy to see and get the benefits of energy conservation
- 2) Marketing. Mary Rankin, the Sustainability Program Coordinator, couldn't stress enough how important it is to keep marketing fresh. Many people on her campus do not know about the fund, or don't know enough to want to use it. Especially with the economy: people aren't thinking about spending money, they think about savings. If they knew the premise of the fund, there would probably be more projects.
- 3) The paperwork involved with keeping tabs on everybody was hard to figure out. A system was worked out eventually to keep things easy, in order, and operating efficiently, but it took a while to get there.

4.0 Research & Analysis

4.1 Stakeholders

- 1) Jamin Agosti, VP of Student Life. The VP of Student Life is the chair of the Green Fee Committee. The Green Fee is a potential primary contributor to the fund.
- 2) Tim Wynn, Director of Facilities Management. Having the support of the Director is important because it will mainly be sustainability projects that affect his department. Also, Tim Wynn acquires and implements the PSE Grants and he is crucial to the building of capital for the SRLF.
- 3) Board of Trustees. The board of trustees controls the budget on Western's campus. It will be important for them to understand where the money is coming from and where it is going so that we can have their support. There is potential for money to be pulled from the general fund and injected into the SRLF. For this to happen, the Board of Trustees needs to support the idea of the SRLF and be shown the SRLF works as to

gain their confidence.

- 4) Greg Hough, quality assurance manager of Western. While the implementation of sustainability projects will take place on a number of levels, when it comes to energy projects Mr. Hough will be a key stakeholder.

4.2 Initial Funding Sources

The most likely sources for the initial capital to start the SRLF would be the Green Fee and the Facilities Department. A proposal will be made to the Green Fee Committee to gather money for this account because the SRLF fits within the qualifications set for Green Fee projects. This proposal will be made by students involved in the program, either in the future or those involved with the Task Force (as will be explained later). The Facilities Department has been using PSE (Puget Sound Energy) Grants to fund its sustainability projects for years. While the PSE Grant pays for a sustainability project up front, the savings created from those projects can be allotted to the SRLF as a means to fund future projects.

4.3 Guidelines for Use

Projects vying for money from the SRLF must benefit WWU monetarily. They will be reviewed by a board for the following:

- 1) Payment: Projects must have a payment plan. Projects with quicker payback will likely be prioritized.
- 2) Sustainability: The purpose of the project should be to make Western's campus sustainable. Projects should lower energy costs, conserve resources, or serve a similar sustainable function.
- 3) Environmental Benefit: The projects should promote maintaining/reviving a healthy environment.
- 4) Campus Benefit: Projects should benefit the students and faculty of the campus directly. This fund should not fund other funds or investments.

4.4 Examples of Projects

1) In 2004, Facilities Management (FM) did a retrofit of the PAC for sustainability. It made the building more environmentally friendly and reduced energy bills. I am using the budget model for this example. The budget for the project cost \$156,017. FM predicted a grant from Puget Sound Energy (PSE) for \$18,175, and an infusion from WWU for \$18,000. This left \$119,842 to be financed.

To finance the project, we used an ESCO, which is an energy service company. These companies, among other things, look at sustainability projects and finance them. The model they use is similar to the model we propose for a revolving loan fund. They give loans and generate payback plans that use the money the projects save to pay back the loan.

In this instance, the plan was to have a loan that would be paid off in 12 years at 4.75% interest. With this model, we would pay \$38,762 more than what we needed financed, with the total cost of the project coming out to \$158,605. After 12 years, because the payments were slightly smaller than the amount saved by the project, savings would be \$260. After the 12 years when the project is paid off, it was predicted to save \$13,328 dollars a year.

If we were to use the proposed SRLF, interest would be halved to 2.38%, reducing the cost of the project with interest to \$138,080. Using a similar 12 year loan plan, with the smaller payments, the project would have saved \$20,776. After the project is paid off, the loan fund would have grown by the amount of interest, which is \$18,238. If we chose to pay off the PSE grant as well as the interest, the fund would grow by another \$18,175. This would reduce the 12

year savings to around \$2,600.

2) In 2004 FM hired McKinstry, a sustainability consulting company, to take a look at some potential projects for WWU. Using the information given by McKinstry, this is a potential future with \$30,000. They are both lighting upgrades, and have quick payback periods. The upgrades are for Wilson Library and the Steam Plant. After projected PSE grants, the projects would use nearly all the \$30,000 in the fund. But, using the longer projected simple payback period, after 5.2 years both projects would be paid off and WWU would be saving around \$7,000 a year.

4.5 The SRLF Board

The Board should have representation from those potentially affected by the projects proposed for it. It will consist of students, faculty, and administration. The goal of the board is to allot funds for projects that fulfill the guidelines and provide the greatest overall positive change to the campus. They will also report on the fund and advertise it if necessary. This board will decide on which projects to do. Although every project may not meet every guideline, the board should weigh the pros and cons of each project to keep the fund working to its full potential.

4.6 Task Force

As part of the conclusion of this research, it is pertinent that the next step be taken to insure the proper development and implementation of Western's Sustainability Revolving Loan Fund. It is the recommendation of this report that a Task Force of 4 or 5 key stakeholders from the Office of Business and Financial Affairs, Facilities Management, AS Government, and the Office of Sustainability meet monthly for 1 year starting in January of 2011 to develop a SRLF Charter, secure funding for the SRLF, and create the SRLF Board.

5.0 Resources

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6.0 Contact Information

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