

The Clean Energy Revolving Fund Charter MISSION The mission of the Clean Energy Revolving Fund (CERF) is to encourage global sustainability¹ on campus and in the community, by funding innovative projects that demonstrate environmental leadership and economic benefit. CERF will empower Macalester College and its students to build a sustainable community.

CERF will foster local projects that further the worldwide movement for a sustainable future. As an independent fund at Macalester College and administered by members from all parts of the Macalester community, CERF will fund renewable energy, energy efficiency and other cost-saving projects that demonstrate sustainable design.

GOALS OF CERF

1. To foster sustainable design and environmentally sound technologies and practices on the Macalester College campus.
2. To respond to budget shortfalls caused by energy prices by funding energy efficiency or renewable energy projects that benefit Macalester College.
3. To educate and inspire all members of the Macalester community about the potential for—and benefits of—conservation and renewable energy innovation.
4. To act as an exemplar of socially and environmentally responsible financial practices.
5. To serve as a role model on sustainability initiatives for other institutions of higher education, community groups, non-profit organizations, businesses, and governmental bodies.
6. To sustain itself financially and functionally into the foreseeable future without compromising—where possible supporting—other student, community, and institutional initiatives for a socially and environmentally just, benign, and sustainable world.

After receiving initial start-up capital, CERF will be entirely self-funding and will grow over time. Through a revolving mechanism drawing cost-savings from projects, CERF will replenish the fund while providing cost-savings to Macalester. CERF will make it easy and efficient for students and other Macalester community members to design projects. This will provide an unrivaled hands-on opportunity for individually structured environmental education while raising the awareness of the entire community. Furthermore, it will demonstrate that, contrary to common belief, self-funding sustainability projects are a crucial part of fiscal stability.

STRUCTURE OF CERF CERF will be managed by “The CERF Board,” a body composed of one trustee, one college administrator, one faculty member, one alumnus/ae, and two students. The CERF board will act as a decision-making, financing, and implementing body for conservation, renewable energy, and sustainability initiatives on Macalester College’s campus.

¹ Sustainability as defined by the Brundtland report: meeting the needs of the present generation without compromising the ability of future generations to meet their needs.

One member must be a Macalester college trustee approved through the board of trustees.

One member must be a Macalester College administrator approved by the president of the college.

One board member must be Macalester College faculty appointed by the faculty, if possible from environmental studies or a related field.

One board member must be a Macalester alumnus/ae. Alumni board members with relevant interests and experience will be selected by the CERF board.

Two members must be Macalester students. One will be appointed by the Sustainability Advisory Committee while the other will be an elected member of the Macalester College Student Government (MCSG). The MCSG representative will be approved by the MCSG.

Terms will be for two years, excepting the MCSG representative who shall be approved annually. Terms can be modified based on scheduling. Any board member can be reappointed by the designated body for further terms. New, qualified board members, however, should be appointed when possible. Should a board member resign, a replacement should be chosen through the established method at the earliest available opportunity.

PROCEDURAL PROCESS FOR CERF The CERF board members will communicate primarily via email on smaller proposals and ideas. The board will meet at least three times a year—while classes are in session—to discuss and approve larger projects, investments and management strategies. Co-chairs will be elected by the board for a one-year term. Any board member may propose a project, and other members of the Macalester community may also present proposals to the Board. While unformulated ideas may be presented briefly for Board discussion, suggestions, and help with proposal development, only thorough proposals with a clear target, financial plan, implementation plan and time line will be voted on.

It is expected that Macalester Conservation and Renewable Energy Society (MacCARES) will serve as a primary agency to help community members develop proposals, and anyone with an idea will be encouraged to work with the organization to develop a plan, although proposals from any source will be accepted for review. Cooperation, involvement, and discussion with CEIC, Facilities Management, and any other committees, departments, or other entities relating to the project will be strongly encouraged.

At meetings, the board will discuss policy, management strategies, and large proposals, and may modify these proposals either by scale, implementation plan, or financial parameters before voting on the proposal. Any board member may call for a vote. Consensus should be achieved where possible, but decisions will be made by majority rule subject to the consensus requirements cited below. Proposals for projects under \$2,000 may be proposed through e-mail (other members must be emailed with notification of the proposal) and the co-chairs may approve such proposals two weeks after email notification, unless another member objects.

Should a proposal pass, the board and non-board participants must proceed with implementation as rapidly as possible, including funding, installation, advertising and education. Students who are not board members should be involved in proposal implementation whenever possible, particularly in publicizing the project and community education.

The board may approve by consensus a finance mechanism for a particular project other than the ones outlined below, should the nature of the proposal or existing conditions merit such a change. The board may also modify existing payment plans by consensus at the request of the cost-savings recipient, as long as the alternative maintains the long-term financial viability of CERF. Special flexibility should be given in cases where energy cost pressures, such as unexpectedly high fuel prices, result in the need for a modification, as in allowing the cost saver to receive a higher percentage of the cost-savings immediately by deferring more of the payment into the future. Requests for such plan modifications, with an alternative proposal, can be proposed to the board by the financial recipient of a project's cost-savings.

The board may send suggestions to various campus bodies as to how they can operate in a more sustainable and/or cost-saving fashion without necessitating additional funding. Such suggestions should be approved by consensus.

The representatives on the board are responsible for presenting a report on the activities of CERF, on an annual basis, to the body they are representing. This report may highlight items of particular interest to their constituency, but should all contain a summary of projects funded by the CERF board, the long-term financial outlook, and the level of community involvement in project activities.

The board may amend this charter by consensus.

FUNDING PROJECTS This funding will primarily be used for projects that save money for a specific recipient(s) on fuel, electricity, water, building maintenance, storm water fees, or some other (or multiple) cost source(s) while making a positive impact on sustainability. The designer(s) of the proposal should choose one of the two funding parameters below based on feasibility and financial pressures on the recipient in terms of project size and pay-back period. The board may modify these plans, or an alternative strategy may be developed in the proposal.

1. From a project's calculated (or best estimate) annual savings, 50% of the cost savings will be paid to the fund by the cost-savings recipient. The other 50% of savings will accrue to the recipient of the project, providing some immediate financial relief. This process will be repeated over subsequent years until 125% of the initial project cost (adjusted for annual inflation) has accrued to the fund. After this point, all further savings will accrue to the project's recipients.
2. From a project's calculated (or best estimate) annual savings, 90% of the cost savings will be paid to the fund by the cost-savings recipient and the other 10% of savings will accrue to the recipient of the project. This process will be repeated over subsequent years until 110% of the initial cost (adjusted for annual inflation) of the project has accrued to the fund. After this point, all further savings will accrue to the project's recipients.

If at all possible, exact cost-savings measurements should be obtained, but in cases where this is unfeasible or costly, an educated estimate should be used. For example, the known energy savings ratio of a compact fluorescent light-bulb (CFL) should be used where the exact effect on electricity usage of a certain number of CFLs may be hard to measure quantitatively through electricity readings. The CERF board will decide whether exact or estimated savings are appropriate for each project.

Modified payment plans may be designed or approved either from the start or later in project lifespan by

request of the cost-savings recipient and approved by the board by consensus should conditions merit. All modifications may adjust the overall inflation-adjusted return goal in accordance with the change in project payment lifespan—accelerated payback should decrease overall return—so modifications should be seen as an adjustment of the balance between the period and the size of payback.

In all cases, project proposals should take advantage of local, state, or federal incentives for renewable energy or efficiency investments. In particular, state revolving loan funding can be used to maximize project investment, by buying back 50% of a project's debt to 0% interest. These incentives are liable to change due to new legislation and the CERF board should advise groups developing project proposals to research governmental incentives to include in their financing plan.

Occasionally, in exceptional circumstances, CERF may approve a project by consensus that does not produce a financial return should it: 1. Provide striking sustainability advantages or 2. Offset unusually high energy costs, as long as 3. Such a project does not threaten the long-term viability and success of CERF because other projects are adequately funding CERF to make up for the loss.

Funds for projects may be used for:

1. Materials or products that constitute the project—often the primary cost.
2. Professional work, installation, or design—costs should be minimized when possible, but for some projects, this may be the primary cost.
3. Research and testing or monitoring equipment—costs should be minimized, barring exceptional circumstances, which must be approved by the board by consensus.
4. Community education, outreach, and publicity—costs should be minimized, barring exceptional circumstances which must be approved by the board by consensus.
5. Proposal Development—costs should be eliminated, if possible. Student, staff, and faculty volunteer work should be utilized to the greatest extent possible. The research of proposals, technologies, existing campus conditions, and implementation strategies should be conducted through independent studies with professors to the greatest extent possible. Any campus surveying or similar work should be conducted through student groups such as: MacCARES, the Macalester Conservation Corps (MCC), Macalester's Minnesota Public Interest Research Group (MPIRG), Mac Bike, or MULCH. If possible, any funding required to develop the proposal itself should be found elsewhere, but the board may approve such funding by consensus.
6. Staff and work—the board may approve a salary by consensus—if possible, for a student employment position—for a work position(s) for a designated project(s) should conditions merit and the added cost still yields cost-savings to repay CERF. In some cases, a work position could be a proposal on its own, as long as over-all cost savings would still be realized. CERF should accept a minor loss should such a position yield dramatic benefits to campus sustainability or show potential to lead to other projects with better financial potential.

INVESTMENTS AND REVENUE GENERATION

CERF may also invest in conventional investment strategies that support its financial viability such as green investment funds, community investing, or money markets, as well as make innovative investments generating direct revenue such as the C-BED project proposal, as long as such investments further one or more goals of CERF without significantly compromising any of the others. To this end, investments that are highly liquid, or have a high rate of return will be particularly favored since they are less likely to lock up funding from core cost-saving projects. However, long term fiscal responsibility and the goals of sustainability, innovation, education, and community engagement should also be kept in mind. Since such investments are not savings-inducing, they will not be subject to revenue-splitting as funded projects are, and should instead be viewed as methods to manage CERF's funding flow in a socially and environmentally responsible manner. Specifically, CERF should not invest in any projects, businesses, or companies which promote unsustainable practices, non-renewable resources—particularly fossil fuel, nuclear, or large-scale hydroelectric—or a culture of disposal.

In certain cases, CERF may solicit loans from outside financiers interested in promoting innovation in environmental sustainability at Macalester. Such loans should be used for large projects yielding a return which can be used to repay the loan.

CERF should identify and apply for grants that support its core mission. In particular, it should seek to partner with grant providers to fund particular projects.

MANAGEMENT AND PROJECT TYPE PARAMETERS The CERF Board should be open both to smaller, rapid pay-back projects and larger, longer-term ones. All projects should seek to maximize the overall benefits of sustainability in a financially responsible manner. The Board should not exhaust the fund or over-use long-term projects in a single year to the extent that the amount of funding available for projects in the subsequent year is less than half that available in the current year. That is, at least 50% of the fund's value in a current year must either be held in a liquid investment or be regenerated through project or investment revenue or payback by the beginning of the following year. This target should be seen as flexible, and should not preclude the funding of any important, large, and long-term financially viable projects.

Applicable sustainability initiatives vary widely in type, source of savings, scale, and pay-back period. Simple projects such as re-fitting all incandescent light-bulbs on campus with compact fluorescent lamps or weatherizing old windows with more insulating glass and frames (lighting or weatherizing) tend to have one to two year payback times while others (photovoltaic cells for example) have pay-offs around 15+ years and are relatively expensive for installations of any size. Others, such as solar thermal or geothermal (alternative heating systems), are somewhere in the middle, but paybacks depend highly on fuel prices, which are highly variable but tend to rise over time. Specific campus conditions (for example, an efficient district heating system) also affect pay-off rates. All proposals should therefore be developed with a finance plan reflecting such conditions as accurately as possible and with the participation, advice, and/or help of many campus community members.