



Centre College Green Revolving Fund Charter

Centre College GRF Mission Statement

Centre College, through the implementation of a Green Revolving Fund, will broaden the capacity of the college to prepare students "for lives of learning, leadership, and service" in a society desperate for sustainable solutions to global problems. The Green Revolving Fund will be an ideal method with which to provide preferential funding to sustainable projects (namely, projects that increase energy efficiency and decrease total energy costs), with the ultimate goal of rendering the college carbon neutral by 2040. Its aims will be to catalyze change toward a sustainable future for the college, students, faculty and staff through the implementation of practical reforms, as well as stimulate a collective environmental conscience whose temporal and geographic boundaries will extend far beyond the college itself.

GRF Goals

The Green Revolving Fund, in efforts to improve overall sustainability and achieve carbon neutrality by 2040, will facilitate the completion of the following initiatives:

Influence campus culture to be more sustainable:

- To serve as a role model in sustainability initiatives for other institutions of higher education, community groups, non-profit organizations, businesses, and governmental bodies.
- To transform Centre College into a leader in sustainable practices and demonstrate that sustainability can be financially viable.

- To exceed local, state, and federal environmental regulatory standards through funding innovative techniques and best-in-class sustainable practices.
- To promote broader societal action by exemplifying best practices in greenhouse gas mitigation.
- To encourage students, faculty and staff to be proactive and engaged in the process of transitioning the world to a sustainable future.
- To create a mechanism for reducing the College's GHG emissions in perpetuity by dedicating cost savings to provide funding for similar projects in the future.

Enable project development and financial security:

- To enable development and implementation of projects that reduce the College's GHG emissions by providing a source of funding.
- To fund pilot projects that prove the functionality and cost-effectiveness of innovative methods of emissions reductions that could then be implemented on a wider scale.
- To buffer Centre's budget against rising energy prices.
- To ensure that beneficial and profitable green projects do not go unfunded due to capital constraints.
- To empower students, faculty and staff by inviting project proposals from the entire campus community.
- To facilitate investment in renewable energy, alternative fuels, and energy efficiency.

Foster networking:

- To reconnect with alumni and approach external benefactors to solidify the prominence and longevity of the fund.
- To create relationships with other colleges in the process of taking steps towards a sustainable future.
- To show potential students that Centre is an institution that acts on its promises and that is committed to sustainability and carbon reduction

Financing

A Green Revolving Fund needs an initial allotment of capital in order to invest in projects. Usually there is enough seed money to invest in multiple small projects such as lighting retrofitting or insulation in a building. These small projects typically have the shortest payback period because it is easy to identify areas of great inefficiency. Over time, the projects have to become more ambitious to be effective. Thus, the size of the

Green Revolving Fund either needs to start large and maintain its capital, or the fund needs to grow in size. The easiest solution for Centre College is to have a fund that starts relatively small and grows, because our initial estimates for seed money are less than our goal.

We have chosen \$1 million as our long-term goal because other peer schools with similar student body and endowment have a fund of comparable size. Since we are starting with a small fund and growing it quickly, all of the savings will go to the fund directly. There will be no interest on savings until the project pays itself off. Once this occurs, 25% of the savings will be realized for the college and 75% will go to growing the fund. Five years after the project has paid itself off, Centre College will receive all of the savings from the project. The college will benefit not only from lower expenditures, but also from a decrease in the emissions of greenhouse gases. All money that contributes to the Fund will go directly into an independent Green Revolving Fund account separate from the college budget.

Seed Money

Colleges have received money from a variety of sources in order to initiate a Green Revolving Fund. The potential sources and how much can be expected to receive from each one will be explored in this section, and a general overview is shown in the chart below.

Sources of Seed Money	Potential Amount
Alumni Donations	\$20,000
Air Travel Mitigation Fee	\$4,500 annually
Faculty Funding	\$1,000
SGA and Club Funding	\$2,000 over four years
Utility Rebates and Incentives	
Grant Proposals	Potential
End of Year Budget Surplus or Endowment	Potential
Cost Savings or Revenue from existing projects	Potential

Alumni donations campaigns will be coordinated through the Alumni Office to maximize the effectiveness of requesting donations for the fund. Specific targets for this campaign will be alumni who have jobs in environmentally-related fields as well as those with environmental degrees. Cornell's alumni and volunteer contribution to a Green Revolving Fund was \$13,663 of a \$50,000 goal¹. If the campaign is more targeted and well organized, then Centre College can raise at least \$20,000.

The Air Travel Mitigation Fee (ATMF) is an established fee to offset emissions from students studying abroad. The average amount from the ATMF is about \$4,500 annually. Adding the fee to the Green Revolving Fund will help make the fee more efficient by having a constant supply of new funds. There will only be one group to decide how to spend the money, so it will not waste faculty and administrative time. Adding the Air Travel Mitigation money to the Green Revolving Fund also helps the ATMF be used more efficiently by pooling resources. Off-campus programs has already given CEA permission to reallocate the money from the ATMF to the Green Revolving Fund.

Finally, faculty will be asked to use their program money to help start the Green Revolving Fund. Seed money can also come from an end of the year budget surplus or the endowment. The budget surplus is an unreliable option due to the volatile nature of the budget; thus, the endowment is much steadier source of funding. If Centre doubled the amount from other funds, then the total seed funding would be \$84,000.

Size of the GRF

The median size of a GRF is less than \$50,000 per student². The smallest is \$423 per student at Lane Community College. For Centre, this would be a \$550,000 Green Revolving Fund. As a percent of endowment, the average is 0.4% which would be \$854,000 for Centre. As projects begin to become profitable, the size of the fund will grow to include more ambitious projects. We are aspiring to exceed average expectations for a Green Revolving Fund for a college of our size so that we will be a leader among peer colleges.

Centre can begin with a relatively small GRF and grow the fund over time to a \$1,000,000. This would be 0.43% of total endowment which is still in the range of other GRF's. Large projects can be implemented that will make large scale changes. The initial projects will be low hanging fruit, so the fund needs to grow to ensure that it remains capable of financing future and more ambitious projects. For example, Pearl Hall's total cost was \$11.5 million. Most of the costs would need to come from donations and capital

¹ <https://crowdfunding.cornell.edu/project/5448106f14bdf753bf423b55>

² http://www.aashe.org/files/documents/resources/greening_bottom_line.pdf

budgets but environmental savings could come from the GRF. Therefore, \$1 million is large compared to the average size of GRF's at comparable colleges, but is still not high enough to shoulder the costs of large-scale projects independently. The Green Revolving fund can then be used to either fund small projects, or improve the efficiency of larger projects.

Performance Metrics

Return on investment is the standard metric for comparing Green Revolving Funds and projects. Most established Green Revolving Funds have approximately a 30% return on investment. For several years after creating the fund, Denison had a 17.7% return on investment³. A good goal for Centre College will be to have a 20% return on investment through the first five years and then a 30% return on investment afterwards.

Carbon reduction is another parameter that will be used to analyze the progress of the fund. The President's Climate Commitment has set goals for Centre to become carbon free by 2040⁴. This plan also includes goals to reduce carbon emissions by 25% by 2020 and 50% by 2030. To meet these goals, Centre has focused on energy conservation, waste minimization, and sustainable energy sources. The establishment of a Green Revolving Fund will help increase progress towards achieving these benchmarks.

³ <http://greenbillion.org/wp-content/uploads/2014/04/Denison-FINAL.pdf>

⁴ <http://www.centre.edu/about/sustainability/presidents-climate-and-advisory-committee/>

Structure

The Board

The Green Revolving Fund Board will manage the fund, select projects from proposals, and allocate funds. The board will be composed of:

- One representative from the Centre Environmental Association, elected by members of CEA.
- Two student representatives, selected by the GRF board, preferably one with experience in finance/ economics and one who is a current member of SGA.
- One staff representative from Facilities Management.
- One administrative representative from the Finance Office.
- One faculty representative from the Environmental Studies Department.
- The Sustainability Fellow/Director, who will also serve as a facilitator at meetings. (This position will be reserved for the individual who holds this title, whenever such a person is employed by the college.)

Terms

- The CEA representative will serve for one academic year.
- The student representatives will serve for the remainder of their academic career at Centre College, after being selected. One student from the sophomore class will be selected at the end of each spring semester, and will begin his or her term the following fall semester. There will be one junior and one senior sitting on the board each year.
- The staff and faculty representatives will serve as long as they wish to serve, or until all other members of the board decide it is appropriate to find a replacement.

Selection process

- The CEA representative will be selected from active members of the club by other members of the club during CEA's yearly elections, and serve as an officer of CEA.
- The student representatives will apply for the position by submitting an application to the GRF Board, which will then vote on a representative. Other applications will be kept for future use, should the occasion arise that a member must be replaced.

- The faculty, staff, and administrative positions will submit an application and be selected by a majority vote of the GRF board members.

*The initial selection process for the representatives applying for board positions will be conducted by the President's Climate Commitment Committee and the Centre Environmental Association.

The Meetings

The board will meet once a month to review project proposals. The meetings will be open to all Centre students, faculty and staff, as well as Danville community members who have interests in the proposed projects. After all of the proposed projects have been presented, the non-board members will leave the meeting and allow the board members to discuss and vote on the projects to be funded. A two-thirds majority of the board is needed to approve a proposal. The list of approved projects will be reported the next day through email to the appropriate parties.

In the final meeting of each academic year, the GRF Board will create a report detailing the projects that have been approved for that year, as well as relevant progress on any ongoing projects. The financial costs and savings for each project will be included in the report to measure progress towards the payback period.

Assessing and Reporting Financial and Environmental Performance

The Centre Green Revolving Fund Board will release an annual report summarizing the financial and environmental performance of the fund. The committee will estimate savings of potential projects by running front-end cost analyses. Current usage patterns and the technology specifications of the project will be used to predict performance.

The Billion Dollar Challenge's GRITS (Green Revolving Investment Tracking System) may be used in the future to help assess the financial and environmental performance of the Green Revolving Fund. This system will be used to do the following:

- Input real cost and savings data to track realized financial gains and resource-use reduction over time.
- Measure cumulative carbon emissions abated from a variety of energy-saving projects.
- Report on project and fund success through project-specific and aggregate fund

- Predict future fund balance to make more informed funding decisions.
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Proposals

The establishment of the Green Revolving Fund will allow for innovative projects that will invest in campus environmental improvement. All potential projects will be proposed to the GRF board, who will evaluate and discuss proposals to decide which will create the greatest improvement in environmental impact on campus. Criteria for accepted projects include, but aren't limited to:

- Viability as a financial investment in the GRF model
- Quantifiable improvements in energy efficiency, emissions reductions, or other metrics of environmental impact
- Demonstration of a commitment to interact with and educate the Centre community on environmental issues regarding the college

Any student, faculty, or staff member of Centre College can submit a project proposal, and proposals can be authored by more than one individual. Proposal authors should be aware of the functionality of the GRF and the necessary financial criteria for a successful project. Projects must increase efficiency or decrease waste in a way that can be effectively measured, and the estimated payback period should be known before presenting a proposal to the GRF committee.

Project proposals should be filled out using the form below and submitted at least one week before the next meeting of the Green Revolving Fund Board, so that board members have time to read and prepare for the proposal presentation. The form below has more specifics on what criteria should be considered and known before a proposal can be successfully submitted. Any individual or group interested in creating a project to be carried out within the GRF should feel free to contact members of the Board for assistance in creating their proposal.

Centre College Green Revolving Fund Proposal Form

In order to submit a project to the Green Revolving Fund Board, please complete the following form. Fill out all sections to the best of your ability while trying to provide as thorough and accurate information as possible. For assistance with any questions while filling out the form, please contact GRFB MEMBER (xxx xxx xxxx).

Project Title:**Project Leader:**

Name:

Phone:

E-mail:

(If there are relevant secondary contacts for the proposed project, please add their contact information below the project leader's)

Project Overview: Describe the project - what will the money be used for? How will the project increase energy efficiency on Centre's campus, or otherwise fulfill the mission statement of the GRF?

Implementation Plan: How, when, and where will the project be carried out? How long is it expected to take? Who will be overseeing the project?

Project Costs: Provide an estimate of the financial costs of the proposed project - what will be the initial cost? Will there be additional maintenance costs over time?

Project Benefits: Provide an estimate of the savings that the project will provide - what is the timeline for the project's payback period? What efficiency upgrades or emissions reductions will be realized by the project?

Project Start Date:

Project End Date:

Total Funding Request:

Once complete, please send this form to GRFB MEMBER (grfb.member@centre.edu) and be prepared to present your proposal idea at the next monthly meeting of the Green Revolving Fund Board. The presentation should last 10-15 minutes, and should highlight each of the subject areas listed in the proposal form. Be aware that if this proposal is submitted less than a week before the next meeting, the presentation may be postponed until the following meeting.