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Introduction to the Green EDGE Fund

Mission Statement

The mission of the Oberlin College Green EDGE Fund is to support projects that promote environmental sustainability within the Oberlin community while demonstrating innovation, education, and leadership, and projects at Oberlin College that meaningfully improve efficiency and reduce resource consumption.

Funding Structure

The Green EDGE Fund is a student board that manages a set of accounts designated for loan and grant allocations. These accounts are financed by Oberlin College and student semesterly green fees, respectively.

Efficiency Loans are allocated to projects that reduce resource consumption and have clear and calculable financial savings for Oberlin College. This account operates on a revolving loan fund model; all financial savings directly resulting from these projects are paid by the College into the Efficiency Loan Account on an annual basis until 150 percent of the initial investment is repaid so that further loans can be made. Savings may be calculated based on conservative estimates or measurable changes in resource consumption data.

Sustainability Grants are allocated to projects that promote environmental sustainability within the Oberlin Community, and do not have clear and calculable financial savings for Oberlin College. These projects do not necessarily result in direct resource use reductions, but do promote environmental sustainability as defined by the sitting Board.

Green EDGE Fund Members – Fall 2013

Student Board Members:

- Will DiMaggio, Class of ‘14
- Noel Myers, Class of ‘14
- Richelle Romanchik, Class of ‘14
- Paul Paschke, Class of ‘14 – Student Senate Green Liaison
- Evan Tincknell, Class of ‘14

Board Advisor:

- Sean Hayes, Adam Joseph Lewis Center Facilities Manager and Community Outreach Coordinator

Administrators:

- Keith Watkins, Director of Facilities Operations
- Ron Watts, Vice President of Finance
Green EDGE Fund Members – Spring 2014

Student Board Members:

• Will DiMaggio, Class of ’14 – Project Manager
• Elaine Hinrichs, Class of ’16 – Vice-Chair
• Liam Leslie, Class of ‘15 – Secretary
• Nicole Le, Class of ’14 – Project Manager
• Julia Murphy, Class of ’17 – Outreach Coordinator
• Noel Myers, Class of ’14 - Treasurer
• Paul Paschke, Class of ’14 – Student Senate Green Liaison
• Yuran Pan, Class of ‘15 – Project Manager
• Evan Tincknell, Class of ’14 – Chair

Board Advisor:

• Sean Hayes, Adam Joseph Lewis Center Facilities Manager and Community Outreach Coordinator

Administrators:

• Keith Watkins, Director of Facilities Operations
• Ron Watts, Vice President of Finance

Meeting Dates, Times & Locations for Academic Year 2013-2014

September 19, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

September 26, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

October 3, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

October 10, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

October 17, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

October 31, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

November 7, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

November 14, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

November 21, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

December 5, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

December 12, 2013; 12:30 – 1:30 pm, AJLC, Room 216 (2nd Floor Conference Room)

December 18, 2013; 1:30 – 2:30 pm, Cox Administration Building, 2nd Floor Conference Room
February 13, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
February 16, 2014; 6:00 – 7:00 pm, Mudd Library, Room 108A
February 20, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
February 23, 2014; 6:00 – 7:00 pm, Mudd Library, Azariah’s Café
February 27, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
March 2, 2014; 6:00 – 7:00 pm, Mudd Library, Room 108A
March 6, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
March 9, 2014; 6:00 – 7:00 pm, Mudd Library, Room 108B
March 13, 2014; 12:30 – 1:30 pm, Wilder Hall, Room 112
March 16, 2014; 6:00 – 7:00 pm, Mudd Library, Room 108B
March 20, 2014; 12:30 – 1:30 pm, AJLC, 1\textsuperscript{st} Floor Conference Room
April 3, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 6, 2014; 6:00 – 7:00 pm, Mudd Library, Main Level Lobby
April 7, 2014; 1:00 – 2:00 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 8, 2014; 12:30 – 2:30, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 9, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 13, 2014; 6:00 – 7:00 pm, Wilder Bowl
April 17, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 20, 2014; 6:00 – 7:00 pm, Courtyard of Rice Hall and King Building
April 24, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
April 27, 2014; 6:00 – 7:00 pm, Mudd Library, Main Level Lobby
May 1, 2014; 12:30 – 1:30 pm, Cox Administration Building, 2\textsuperscript{nd} Floor Conference Room
May 4, 2014; 6:00 – 7:00 pm, Wilder Bowl
May 8, 2014; 12:30 – 1:30 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
May 12, 2014; 12:00 – 1:00 pm, AJLC, Room 216 (2\textsuperscript{nd} Floor Conference Room)
Previous Green EDGE Fund Projects

Previous Efficiency Loan Projects

Water-Heater Jackets in Woodland Street Housing: In the fall of 2008, the Green EDGE Fund took on its first project with the installation of insulating water heater jackets in college-owned Woodland Street houses. The cost of purchasing an installing one water heater jacket was between $30 and $40. Jackets were installed on more than 20 water heaters, reducing water-heating costs by an estimated 4-9% per year.

Low-flow Showerheads in Dascomb: In 2009, the GEF financed the replacement of thirty 2.35 gallons per minute showerheads with 1.5 gallons per minute showerheads in Dascomb Residence Hall. The project cost $900 for the purchase and installation of the low-flow showerheads, and has approximate savings of 56,355 gallons of water, 34 CCF of natural gas, and $866 per year.

Veggie-Oil Tractor Conversion: In the spring of 2009, the GEF provided an efficiency loan to the Grounds Department of Oberlin College to convert one of their Kubota tractors to run on vegetable oil. This project is ideal because it will reduce consumption of a fossil fuel and the college has ready access to large quantities of leftover vegetable grease from the dining halls. The loan of $2,895.88 covered the initial equipment and labor costs of the conversion by Sam Merrett of Full Circle Fuels, and simple payback was estimated to occur in 1.13 – 2.26 years or sooner depending on fuel prices.

Village Housing and Woodland Street Housing Efficiency Upgrades: The GEF provided an efficiency loan to fund a research project headed by two professors. The research aimed to determine the effectiveness of three different methods of promoting energy efficiency. 31 of Oberlin College’s village homes were targeted, with 24 of them receiving one of the three treatments: programmable thermostats, caulking and attic insulation, or financial incentives for reducing energy use. The remaining homes served as controls. Two homes on Woodland Street also received extensive efficiency upgrades from a separate loan under the same research project. For the GEF loan, the total cost of purchasing and labor for the thermostats, insulation and caulking was $10,200, and the estimated payback time from reduced natural gas use is approximately 8 years.

Hales Gym Lighting Retrofit: In the spring of 2010, the GEF financed a retrofit of the lighting in Hales Gym, which is used heavily by a variety of organizations. The project of replacing inefficient light bulbs with twenty-eight 200W high efficiency CFLs was estimated to cost a total of $3,000 for equipment and labor. Annually, this project is expected to save 10,000 kWh, approximately $1,000, and mitigate carbon emissions on the order of 10 metric tons. Simple payback was expected in 3.2 years.

LED Bulbs for EXIT Signs: In February 2011, the GEF allocated $1,750 to the purchasing of 100 LED kits to install in EXIT signs on campus that previously used incandescent bulbs.
Firelands Water Efficiency: In the spring of 2010, the GEF awarded an efficiency loan of $25,000 to cover the material and labor costs of replacing inefficient toilets and showerheads, and installing faucet aerators in the Firelands apartment complex of college housing.

Veggie Oil Tractor Conversion 2: New Holland: In the spring of 2010, the GEF allocated an efficiency loan of $5,250 to convert a second Facilities tractor to operate on waste vegetable oil, and to purchase a filtration system to purify the waste vegetable oil to fuel-grade SVO for all converted tractors.

CDS Compost Pulper: In August of 2011, a compost pulper was installed in Stevenson Dining Hall to process post-consumer waste more efficiently. The Green EDGE Fund partially funded this project by providing a grant of $30,000, and partnered with the Senior Class Gift, Bon Appétit, and capital funding to cover the full cost. The project is expected to save 250,000 gallons of water (under conservative assumptions), 650 ccf natural gas, and four short tons of carbon dioxide annually.

High Efficiency Hand Dryer: In the spring of 2011, the GEF allocated $5,000 to the purchasing and installing of 6 hand-dryers in Philips Gymnasium and Mudd Library to replace paper towel dispensers. This project is expected to reduce Oberlin College waste production by 1,300 tons annually and produce annual net carbon savings of 2.9 metric tons.

Conversion of Lawn Mower to Run on Veggie Oil: In the spring of 2011, the Green EDGE Fund financed the conversion of an Oberlin College Grounds Department lawn mower to be run on vegetable oil. This project cost $1,750 and is expected to reduce diesel consumption by approximately 125 gallons annually. Annual return on investment is estimated at $500 per year or 29% based on previous rates of diesel fuel consumption by the converted vehicle. At this rate, the project is expected to pay back fully in approximately 3.4 years.

Backhoe Vegetable Oil Conversion: In May of 2012, the GEF approved an efficiency loan of $3,500 for the parts and labor costs of equipping a Facilities backhoe with a recycled vegetable oil fuel system. The conversion is projected to save over 2000 gallons of diesel annually, resulting in approximately $6,400 per year. This particular investment, and the tractor conversions in general, have 100% payback periods of a single year. This project was part of a now larger-scale initiative to convert the Oberlin College Facilities vehicle fleet from diesel to vegetable oil systems.

Low-Flow Showerheads: In the spring of 2012, the Green EDGE Fund officially approved an efficiency loan for the purchase of low-flow showerheads in East and Barrows residence halls. This loan was for $2,000: $1,000 for the showerheads and $1,000 for to cover the cost of installation. To the knowledge of the GEF, these showerheads have not yet been installed.

Convert Facilities Truck 8 to Run Off Veggie Oil: In April of 2013, the GEF allocated $5,000 to the conversion of a Facilities truck to run off of vegetable oil from CDS. This conversion is estimated
to save the college $6,400 a year from the 2000 gallons of diesel avoided, which means the
payback period will be less than one year.

Previous Sustainability Grant Projects

POWER Pilot Project: In December of 2008, the Green EDGE Fund provided a $5,000 seed grant
to Providing Oberlin With Efficiency Responsibly (POWER) for the establishment of their offset
program. POWER weatherizes and insulates low-income and inefficient homes in Oberlin as a
carbon offset program. The amount provided was equivalent to insulating two homes, given the
insulation estimates provided by POWER.

Spin Dryer for SEED House: In the spring of 2009, the GEF provided Student Experiment in
Ecological Design (SEED) House with a grant of $150 for a spin dryer to make their laundry
system more sustainable and efficient. This model uses less electricity than conventional
clothes dryers.

Compost Tumbler for Union Street: In the spring of 2009, the GEF allocated a grant of $500 for
a compost tumbler for the organic materials generated by students living in Union Street Village
Housing. The compost tumbler was installed near Union Street housing during the summer of
2009.

Replacement of CRT Monitors: In December of 2009, the GEF approved a grant of $2,500 to
replace old, inefficient CRT monitors still in use in research laboratories with efficient, ENERGY
STAR LCD monitors. The project proposal was developed by Walt Owens of the Oberlin
Technology Store, and the project is the GEF’s first collaboration with the Technology Store.

Kahn Hall Composting: In the spring of 2010, the GEF helped finance Oberlin College’s first
dorm-wide composting system, organized by the Compost Work Group and maintained by
residents of Kahn Hall. A grant of $1,000 provided compost tumblers, a wheelbarrow, a hose,
and scales for measuring the amount of compost generated.

Johnson House Garden: In the spring of 2010, the GEF provided $6,000 worth of start-up funds
for a student-run garden behind a residence hall on campus, providing a unique educational
opportunity for Oberlin students. The produce from the garden goes to college dining halls and
coops.

High-Altitude Wind Power: In December 2010, the GEF approved a grant of $2,500 to fund a
student research project that sought to determine the feasibility of small-scale high-altitude
wind power in Lorain County. The grant provided a generator, a weather balloon, and the
materials to build a turbine.

OCS Community Garden Expansion: In the spring of 2011, the GEF provided $15,000 to expand
and improve the Oberlin Community Services building’s community garden to increase
productivity and accessibility to healthy and fresh produce. The garden is run through volunteer labor and its produce goes directly to those in need in the community rather than being sold.

**CDS Stevenson Balcony Garden:** In the spring of 2011, an ENVS 101 group and the CDS Recyclers proposed that garden boxes be placed along the balcony railing of Stevenson Dining Hall. The GEF approved a grant to $3,250 to fund this culinary herb garden.

**West Virginia Fruit Trees:** In the spring of 2011, the GEF granted $482 towards the purchase of 35 fruit trees to be donated and planted in Coal River, West Virginia. The fruit trees will provide local and more sustainable fruit to residents of the community.

**OSWAMP Rain Gardens:** In the spring of 2011, the GEF allocated $20,000 to Oberlin Stormwater Management Project (OSWAMP) for the design and installation of two rain gardens on Oberlin College’s campus. The gardens are used as a sustainable means to mitigate rainwater runoff and erosion on campus. The installation of plants such as deep-rooted native plants and grass sedges stop and reduce water flow from drain sewage systems. The OSWAMP rain gardens reduce the effects of urbanization on streams such as Plum Creek by creating a natural filtration system that prevents excessive pollutants from entering Oberlin’s ecosystem.

**Replacement of Antiquated Lighting at Oberlin Early Childhood Center:** In spring of 2011, the GEF helped finance $20,000 worth of electricity and lighting retrofits for Oberlin Early Childhood Center (OECC). This project was pursued for safety reasons as much as resource reduction savings. This project, which would have been an efficiency loan had it occurred on campus, was implemented at the center by a local contractor. After the retrofits, the OECC saw a drop in electricity bills as well as variable costs such as light bulb replacements.

**Johnson House Cold Frame Project:** In spring of 2011, the Resource Conservation Team applied for a $950 grant to fund hand-made cold frames to extend the growing season for their on-campus garden at Johnson House. The materials were purchased locally and built by RCT team members during a weekend workshop. These cold frames have effectively extended the growing season and increased student participation with gardening.

**Johnson House Compost:** In the fall of 2011, the GEF approved a sustainability grant to fund the construction of a compost enclosure for the Johnson House Garden for use by student residents. The grant covers $650 worth of materials and was constructed by an ENVS 101 group in coordination with the Resource Conservation Team and union construction representatives.

**Energy Orb Installation:** In the fall of 2011, the GEF allocated $8,000 to fund the total cost of installing 16 new energy orbs in Oberlin College residence halls. These new orbs are an expansion of the Campus Resource Monitoring System and the energy orbs that were installed in six residence halls in 2008. The visual feedback from energy orbs promotes environmental awareness and stewardship and helps residents increase reduction efforts during the annual Dorm Energy Competition of Ecolympics.
Ecolympics Water Bottles: In the spring of 2012, the GEF provided $815 for the purchasing of 300 reusable water bottles as incentives to reduce electricity and water consumption during the Ecolympics competition. The water bottles promoted the Office of Environmental Sustainability and the GEF, and are expected to help avoid plastic water bottle consumption by the recipients of the prize.

Residential Wonder Washes and Spin Dryers: In the spring of 2012, the GEF approved a sustainability grant of $975 for the purchasing of 12 Wonder Washes and 2 Spin Dryers for Burton’s Sustainability Hall. The project is intended to promote an alternative laundry initiative and provide energy efficient avenues to wash clothes during the annual Ecolympics campaign. Students are encouraged to ask their RA to rent these manual machines for a 3-hour period.

Expansion of Dascomb Reusable Container Program: In the spring of 2012, the GEF allocated a $7,000 sustainability grant towards the expansion of the Dascomb dining hall reusable container program to all students who eat in CDS. The program directly reduces solid waste by replacing disposable take-out containers with reusable containers. The grant covered the cost of 2,200 containers and carabineers with a $434 buffer.

Oberlin Beekeeping: In the spring of 2012, the GEF provided start-up funding for a student- and community-run apiary at an off-campus blueberry farm in the city of Oberlin. The sustainability grant of $1,000 funded the purchasing of bees and beekeeping equipment and the cost of hive maintenance. The apiary preserves traditional practices of beekeeping and provides a unique educational opportunity for Oberlin students and the community. The honey produced is sold to local sources for funding to operate the apiary.

Six Spin Dryers: In the spring of 2012, the GEF purchased six spin dryers for two clusters of residential dorms (ZEBRA and FYRE) as part of a larger washer-dryer sustainability project the GEF funded earlier in the year that proved popular among students. A $1,500 sustainability grant covered the cost of purchasing the spin dryers, which were available for student use by the fall of 2013.

Bioregional Dashboard in Prospect Elementary: In spring of 2012, the GEF allocated $29,000 to fund the purchase and implementation of a Bioregional Dashboard system at a local school, Prospect Elementary. The system included both Building and Bioregional Dashboard components, the former showing real-time information specific to Prospect’s resource consumption, and the latter displaying resource flows throughout the city of Oberlin. The project was an extension of research being conducted on resource consumption feedback strategies and technologies, and was funded in part to support the efforts of the Oberlin Project. This Bioregional Dashboard project also served as the pilot program for the highly anticipated installation of similar systems in the other three Oberlin public schools.

OSWAMP Rain Gardens at Prospect Elementary School: In the spring of 2012, the GEF approved a sustainability grant of $995 for Oberlin Stormwater Management Project (OSWAMP) to install a rain garden at Prospect Elementary. The $995 covers all the necessary costs for this
installation including all necessary materials for the project. This project created a more sustainable stormwater management system in Oberlin, and promotes sustainability within Oberlin and more specifically at Prospect Elementary.

POWER Low-Income Home Weatherization: In the spring of 2012, the GEF helped finance weatherization of approximately three inefficient low-income homes in Oberlin after proposal submitted by Providing Oberlin With Efficiency Responsibly (POWER). A sustainability grant of $10,000 was allocated to POWER that accounts for contractor expenses estimated at $3,000 per house, with a $1,000 buffer. This project reduces consumption for heating (primarily natural gases), which will in turn reduce carbon emissions.

Covered Bike Racks: In the spring of 2012, the GEF allocated $5,000 for the construction and installation of a covered bike rack prototype as designed by Steve Varelmann, College Architect. In the spring of 2013, the GEF allocated $25,000 for the purchase and installation of 5 additional covered bike racks of a slightly modified design to be placed in high-usage locations. Senior class and alumni gifts to the GEF cover half of the total project costs of $30,000. This project is part of a comprehensive effort to improve bicycle-related infrastructure on campus and therefore promote the use of bicycle transportation at Oberlin College. As of spring 2014, these covered bike racks have been installed directly south of French House, south of Langston, west of Bibbins Hall, and south of Dascomb.

Rotary International Club’s 75th Anniversary Tree Planting: In the fall of 2012, the GEF officially approved a sustainability grant of $3,000 for the purchase of 30 trees. These trees were part of a gift that the Rotary International Club was giving the city for their 75th anniversary. The GEF pursued this project because the planting of additional trees on campus will offset carbon, provide an opportunity for students to plant the trees, and is highly visible to students and visitors. This particular project also strengthened ties between the GEF and the City of Oberlin. These trees were planted, with the help of the Bonner Center, in October 2012.

Tree Planting: In the winter of 2013, the GEF officially approved a sustainability grant of $3,250 for the purchase of 25 Red Oak, 25 Red Maple, 25 Black Gum, and 25 Skyline Locust seedlings. The GEF also approved a $250 buffer should any unexpected costs occur. These trees were planted in April of 2013 with student involvement. These additional trees on campus will sequester carbon and be highly visible to the student body and visitors.

Bike Repair Stations: In the spring of 2013, the GEF approved a sustainability grant of $3,500 to the Office of Environmental Sustainability for the implementation of 3 separate bike repair stations on campus. Located in centralized locations on campus, each bike repair station is equipped with a pump as well as tools that are necessary for basic bike maintenance. The project is intended to promote bike use at the college by providing 24 hour access to bike care.

Ecolympics Prizes for Winning Dorms: In April of 2013, the GEF allocated $3,800 to prizes for the winning dorms of the annual Ecolympics campus-wide energy-reduction competition. The winning dorm was given one of four prizes: a Wonder Wash and spin-dryer, shower timers,
clothes drying racks, or a water refill station. Each of the four prizes was installed in a winning dorm. If used, each of them provides savings opportunities. The prizes have the potential for saving the college at least 24,000 gallons of water, 12,000 kWh and 27,000 lbs. of CO₂.

George Jones Farm Solar Powered Irrigation: In the spring of 2013, the GEF provided a grant of $14,500 towards the implementation of a solar powered irrigation system, a composting yard, and a vegetable oil capture and filtration system at George Jones Farm. This local organic farm supports Lorain county and the surrounding areas by providing organic food as well as education to the local community.

Oberlin Community Services People’s Garden: Back in 2011, the GEF funded the implementation of the OCS People’s Garden. In spring of 2013, the GEF allocated a grant of $2,100 to fund the expansion of this garden along with a weekly garden education workshop for children. The produce from the garden goes directly to the community rather than being sold. This project promotes sustainability and expands food access within the community of Oberlin. This project also strengthens ties between the GEF and OCS, as well as between the college and the community.

Zion CDC Infrastructural Improvements: In the spring of 2013, the GEF approved an allocation of $2,300 for infrastructural improvements at Zion Community Development Corporation (CDC). The grant covered a rainwater collection system as well as improvements to existing plant beds in the Zion CDC garden to allow for higher plant yield.


(Projects that have been officially approved by the GEF this academic year and either have been implemented or are in the process of being implemented. Project managers on the GEF serve as the primary contact for duration of project development and implementation.)

Efficiency Loan Projects

Goldsmith/Union Apartments Showerhead Retrofits

Summary: In the spring of 2014, the Green EDGE Fund officially approved an efficiency loan of $1,400 for the purchase and installation of low-flow showerheads in Village Housing apartments located on Union Street and Goldsmith Lane. Shower retrofits are an exceedingly simple and unobtrusive way to reduce water consumption.

Background Premise: Low-flow showerheads are a great way for the college to reduce water consumption and correspondingly save money on utility costs. Although reductions in gas consumption would be difficult to quantify, reduced water usage should additionally reduce demand on natural gas used to heat the water. Installing low flow showerheads results in drastic drops in water consumption, and has an extremely short economic payback period.
Cost-Benefit Analysis: Showerhead retrofits are exemplary efficiency loan projects because of their short payback periods and dramatic effect on resource consumption. Projected savings for this project total 422,400 gallons of water per year with annual monetary savings of approximately $7,284 per year. These projections are based on very conservative estimates of how many students will be using the showers, how often those students will use them, and how long their showers will be.

Additional Benefits: Most students living in these apartments will interact with these showerheads nearly every day. Signage placed near the showers will serve to remind inhabitants about the importance of taking small steps to reduce resource consumption and promote environmental sustainability through efficiency.

**Vegetable Oil Fuel System Conversion of Facilities Tractor**

**Summary:** In the spring of 2014, the GEF allocated $3,800 as an efficiency loan to the Grounds Department of Oberlin College for the parts and labor costs of converting another one of their Kubota tractors to run off of vegetable oil fuel.

**Background Premise:** Veggie-Oil Tractor Conversions have become a staple GEF project. These projects convert existing Ground's equipment that run off of diesel fuel into machines that run solely off of veggie oil produced from dining halls on campus. This particular conversion is of a Kubota 3540 Tractor belonging to the Ground’s Department of Oberlin College Facilities.

**Cost-Benefit Analysis:**
This project is ideal because it will reduce consumption of a fossil fuel and the College has ready access to large quantities of leftover vegetable grease from the dining halls. The loan of $3,800 will cover the initial equipment and labor costs of the conversion by Sam Merrett of Full Circle Fuels. The conversion is projected to save over 750 gallons of diesel annually, resulting in savings of approximately $3,112.5 per year. This results in a 1.2 year simple payback period.

**Additional Benefits:** The GEF continues to improve relations with administrative offices on campus as we help the College pursue its sustainability goals.

**Sustainability Grant Projects**

**OSCA ECC Purchase of “Shift Change” Film**

**Summary:** In the fall of 2013, OSCA’s Environmental Concerns Committee (ECC) was granted $165 by the GEF to allow for purchase the documentary Shift Change. The documentary is about worker cooperatives and focuses on Evergreen Cooperatives in Cleveland and Mondragon, Spain. The purchase of the film has helped the ECC form a relationship with Evergreen Cooperatives and educate membership about the nearby worker cooperative.
Background Premise: The Oberlin Student Cooperative Association’s membership is roughly a quarter of Oberlin’s student population. OSCA’s ECC is the arm specifically concerned with environmental issues.

Cost-Benefit Analysis: The only project expense is the cost of the film: $165.00.

Additional Benefits: The ECC has wanted to share this film in the past but did not have funds to purchase the film. Many students have expressed interest in the documentary and it will help spread ideals aligned with that of the GEF. The film will be viewed for many years.

Lilian Molina Workshop

Summary: In the fall of 2013, the GEF contributed a sustainability grant of $900 to the honorarium of grassroots organizer Lilian Molina. These funds were combined with funds from Student Finance Committee’ad hoc, student organization Anti-Frack, and the Environmental Studies Department to fully cover all the expenses of bringing Lilian Molina to Oberlin College.

Background Premise: Lilian Molina is a Mestiza Environmental Justice Advocate, youth development expert and community organizer. The workshops she led in Oberlin focused on Environmental Justice, Environmental Racism, Classism and Anti-Oppression. This GEF project funded two four-hour sessions of workshops that aimed to educate and empower the campus’ student body.

Cost-Benefit Analysis: Given the current scope of the GEF, the cost of funding this project ($900) was worth the benefits of promoting sustainable thought on campus and publicity for the GEF.

CMF/ENVS 101 Map Printing

Summary: In the fall of 2013, the GEF granted $35.70 for the printing of site maps for potential carbon offset projects. Two students in ENVS 101 proposed creating and hanging the maps around campus to raise awareness of the efforts being taken to achieve carbon neutrality.

Background Premise: Oberlin College has set a goal of carbon neutrality by 2025. Oberlin students created the Carbon Management Fund (CMF) to address this goal by generating local carbon offsetting projects. Much research is needed to further the potential of carbon offsetting projects, and mapping is a necessary part of this research. Collaboration between the CMF and classes through class projects will benefit both parties in the process of creating carbon offsets.

Cost-Benefit Analysis: The total cost of this project is the $35.70 used for printing the posters. The posters were created and hung in December 2013 and helped publicize the GEF in addition to promoting interest in carbon neutrality and carbon offsetting.
Carbon Management Fund Tree Planting Purchases and Labor Costs

**Summary:** In October of 2013 the GEF approved $900 to fund the purchasing of 10 white swamp oak trees and 8 red oak trees in North Fields on campus. A separate grant was also approved for $376 to fund the labor costs of planting the trees.

**Background:** The project was proposed as a sort of pilot for the GEF’s newest branch: the Carbon Management Fund (CMF). The tree planting is a carbon-offsetting project that will sequester carbon, thus mitigating the effects of carbon emitting processes. The tree planting also improves air quality and adds to biodiversity in North Fields - an area that has faced a considerable reduction in biodiversity due to human interference.

**Cost-Benefit Analysis:** This project was approved as a sustainability grant and has considerable benefits. The project had a labor cost of $376.00 with a $900 price tag for the trees. The project will sequester carbon, increase biodiversity and help Oberlin in achieving its carbon neutrality goals for 2025. The project was also important in kick-starting the Carbon Management Fund, which is now receiving $5 a semester from each student who does not waive the fee. Establishment of the CMF is important for the GEF since it will serve as a third arm of the GEF (the other two arms being sustainability grants and efficiency loans).

**RCT Trash/Recycling Receptacles**

**Summary:** In the fall of 2013, the GEF approved a grant of $36,000 for the purchase of new waste receptacle stations as part of a pilot study to decrease contamination of recyclables on campus. The proposal was written by Bridget Flynn in the Office of Environmental Sustainability (OES) and the Resource Conservation Team (RCT), a student group on campus dedicated to reducing resource consumption at Oberlin College. The proposal was for 25 waste receptacles to be put in Fairchild Dormitory, the Science Center, and Philips Gym with the intent of further expansion if it proved to be an effective means of educating and clearing confusion regarding waste on campus.

**Background Premise:** Education of what is and isn’t recyclable on campus has proved to be a difficult problem to tackle considering the high turnover of students. The goal is to provide clear and consistent signage to waste collection on campus in hopes of reducing contamination of recyclables across campus. OES and the RCT have led multiple campaigns in an attempt to clear up recycling confusion on campus, and this is an ongoing effort to educate in hopes of changing campus culture regarding waste. The receptacles will have two receptacles, “landfill” and “recycling”, with the ability to expand if the city of Oberlin adds organic waste to their collection system in the future.

**Cost-Benefit Analysis:** The total cost of purchasing and installing the 25 Max-R waste receptacles was $36,000. This pilot project will allow RCT to complete comparative waste audits in order to establish the effectiveness of side-by-side trash and recycling bins in one station for reducing contamination and increasing proper usage of recycling receptacles. If the waste
audits show meaningful reductions in cross-contamination, the GEF would be interested in expanding the receptacles project to other areas of campus to reach more students and further the benefits.

Additional Benefits: The waste receptacles will replace the traditional 2-bin system found throughout campus. Not only will this provide for more consistent receptacles across campus, but it will also be more aesthetically pleasing because the bins themselves are housed in a cabinet. The GEF will be advertised since the receptacles will feature of our logo and mention of our involvement in making the project happen.

“From Coal to Carbon Neutrality” Workshop Raffle Prizes

Summary: In the fall of 2013, the GEF supplied a number of prizes that promote sustainability for the “From Coal to Carbon Neutrality” workshop event. The prizes included 1 bike, 20 bike lights and 30 water bottles and funded by a grant of $975 from the GEF.

Background Premise: In November 2013, the Office of Environmental Sustainability (OES) in conjunction with the Committee on Environmental Sustainability hosted a workshop as a part of the From Coal to Carbon Neutrality campus dialogue series. This event was an interactive college-community workshop focusing on how we can mobilize to achieve carbon neutrality. The event included a series of small-group workshops with the intent of having college students, faculty, staff, and administrators come together to discuss carbon neutrality and what it takes to get there. The event was formed with collaboration of and contribution from a wide-range of student groups.

Cost-Benefit Analysis: The cost of this project was simply for the purchase of $975 worth of sustainability-related raffle prizes. By providing $975 worth of funding for the purchase of a bike, bike lights and water bottles, the GEF promoted engagement in sustainable behavior and increased awareness of the GEF and the OES within the Oberlin community.

Power Shift Conference

Summary: In the fall of 2013, the GEF approved a grant of $990 to supplement Student Finance Committee (SFC) funding for Oberlin students to attend Power Shift 2013 in Pittsburgh, PA.

Background Premise: The Power Shift conference sought to mobilize students over issues of social and environmental justice. Power Shift provided students with an opportunity to engage in a mutual exchange of ideas and strategies regarding environmental activism. Through professional workshops, guest lecture series, and student networking, Oberlin students learned about strategies for launching effective campaigns in support of climate justice. After the conference, the student attendees were required to publish a reflection of their experiences in the Oberlin Review in hopes to educate the student body and encourage future attendance.
Cost-Benefit Analysis: The $990.00 grant provided partial funding for 9 students and full funding for 9 students. Though there is not a clear and timely payback, this project increased the sustainability of natural resources by encouraging the development of well-informed and competent environmental activists within our local community.

Ecolympics Prizes

Summary: In the spring of 2014, the Green EDGE Fund awarded a sustainability grant to the Oberlin Environmental Sustainability Office to purchase three water refill stations as prizes for the winning dorms of the annual Ecolympics campus-wide competition. These refill stations serve as infrastructural improvements to these ResEd facilities.

Background Premise: Ecolympics is an annual competition, part of Campus Conservation Nationals, which promotes sustainable behavior through resource reduction competitions and educational events on campus and beyond. During this three-week event, dorms compete to lower their electricity and water use, and top reducing dorms are awarded prizes. These prizes are designed to incentivize participation in campus-wide sustainability practices. Ecolympics typically saves over 24,000 gallons of water, 12,000 kW hours, and 27,000 lbs. of carbon dioxide overall. This year, the three dorms who reduced their water and electricity usage the most were awarded with three new water refill stations to be installed in the dorms (one per dorm).

Cost-Benefit Analysis: The risk for these installations is relatively low since these refill stations have been installed as Ecolympics prizes previously (and funded by the GEF, to boot!). The stations are much more aesthetically pleasing than traditional water fountains, and also display the number of plastic water bottles presumably saved because of the stations. They are fixtures currently being installed around campus, but not ubiquitously throughout dorms. The installation of these stations both encourages sustainability practices locally where they’re placed, but indicate a larger movement on the College’s part to encourage similar behavior and infrastructure.

Additional Benefits: Funding this project supports the continuation of Ecolympics as an event on campus that should continue, and should also expand (as it has in the local public schools). It strengthens the relationship between different environmental groups and offices on campus, and is a great project that exemplifies the concepts and principles the GEF works to espouse, promote, and practice.

CBSM Research

Summary: In the spring of 2014, the GEF approved a proposal by Cindy Frantz of the Oberlin Psychology Dept. and Bridget Flynn of the Office of Environmental Sustainability to conduct a Community Based Social Marketing pilot study to determine students’ responses to different types of power strips, shower timers, as well as conduct a survey on local transportation.
Background Premise: Oberlin’s commitment to environmental sustainability requires that students get involved in energy reducing behaviors. This pilot study will help flesh out consumerism and how it relates to green technologies. Understanding why students choose particular devices over others can provide key insights into helping reduce resource consumption on campus.

Cost-Benefit Analysis: A grant of $750 covered the cost of purchasing a variety of styles of power strips and shower timers for the research.

Additional Benefits: The ability to better understand the psychology behind consumer culture related to products that help reduce resources is key to promoting a sustainable culture on campus. This research, although a pilot study, helps pave the way for integrating energy reduction and participation by larger groups on campus.

Dionysus Disco Glassware

Summary: In the spring of 2014, the GEF allocated $1,615.75 to the Student Union Board for the purchase of plasticware for serving beer and other beverages at the Dionysus Disco (the ‘Sco). These reusable plastic cups will replace disposable plastic cups, lowering the ‘Sco’s cost of operations and reducing a sizable portion of the venue’s plastic waste output.

Background Premise: For several years, the Student Union Board has discussed the possibility of using reusable cups for serving beer and other beverages at the Dionysus Disco, located in the basement of the Student Union. The ‘Sco currently uses disposable plastic cups to serve drinks, which generate a large amount of plastic landfill waste. To make this project sustainable, the ‘Sco will rely on the cooperation of the staff of the Dionysus Disco, as well as some employees of the CDS establishment in Wilder. Various representative of CDS and the Student Union have worked out an arrangement in which a CDS employee supervises a member of the ‘Sco staff as they wash the dishes in the DeCafé Hobard dishwasher in the morning hours.

Cost-Benefit Analysis: The GEF allocated a sustainability grant of $1,615.75 to this project for purchase of reusable plasticware cups, the use of which allows the ‘Sco to increase the sustainability of their operations, reduce their recurring financial costs, and improve the atmosphere of the venue.

Oberlin Food Rescue Bike Trailer

Summary: In the spring of 2014, the GEF approved a sustainability grant of $1030.20 for the cost of purchasing a bike trailer. This bike trailer will be used to bring food from various places in Oberlin to Oberlin Community Services in order to reduce food waste and bring more healthy produce to food banks. The Oberlin College Bike Co-Op in conjunction with OCS have partnered with Pizza Hut and Campus Dining Services on this project so far. Noel, Yuran, and Paul served as project managers for this proposal.
Background Premise: The project has two primary goals: reduce food waste and bring more healthy produce to food banks. Our inspiration comes from Boulder Food Rescue, a non-profit organization in Colorado that redistributes produce from grocers and restaurants that would otherwise be thrown away to non-profits that serve those in need, and Food Recovery Network, which does similar work but focuses on college cafeterias. About a quarter of the residents of Oberlin, Ohio are below the poverty line. Many lower income people are partially dependent on food banks like the one in Oberlin Community Services in order to put food on the table. But much of the food donated to OCS is semi-perishable and non-perishable, like canned soup, bread, pastries and cereal. While these foods are important, these food banks have trouble getting other items like fresh fruits and vegetables that are essential to a healthy diet.

Cost-Benefit Analysis: Sustainability grants are for projects that provide clear and tangible sustainability benefits to the College, though the benefit is not measured in monetary terms. The GEF was confident in this project’s success because of the precedent set by previous similar initiatives. This project will allow for healthier food choices at a local food bank and will help reduce Oberlin’s foodprint regarding food waste.

Additional Benefits: This project will help relationships between Oberlin College students, The Green EDGE Fund, Oberlin Community Services, and the people living in the city of Oberlin.

**OFM Food Stamp (SNAP) Incentivization Pilot Program**

Summary: In the spring of 2014, the Green EDGE Fund officially approved a sustainability grant of $1,300 to create a SNAP-incentivization pilot program for the Oberlin Farmers’ Market (OFM) over the summer of 2014. The grant will allow for the purchase of $1,300 worth of additional standardized Electronic Benefit Transfer (EBT) tokens from the USDA. The program will distribute one dollar in tokens for every dollar a SNAP client spends at the market, providing a 100% increase in purchasing power and an incentive to shop at the OFM.

Background Premise: The city of Oberlin is home to many low-income neighborhoods and struggles with issues of food access. The Oberlin Farmers’ Market has potential to increase access to fresh and local food among low-income community members. Although the OFM currently accepts SNAP and is already equipped with an EBT processing machine, EBT transactions on average comprise insignificant percentages of total weekly market purchases. Low EBT presence in farmers’ markets is common across the United States, but recently implemented summertime SNAP incentivization programs in some cities have been remarkably successful in increasing the representation of SNAP clients among market consumers. The OFM will implement a similar incentivization pilot program this summer with the purpose of encouraging maximum participation by SNAP clients and limiting stigmatization. Last year, OFM consumers spent approximately $1,300 total in EBT. Therefore the OFM requested funding for an additional $1,300 in tokens to provide a 100% increase in purchasing power for all EBT holders, for transactions all summer of 2014. Prior to and during implementation, the incentivization program will be promoted with coordinated community outreach efforts.
Oberlin market managers will carefully track weekly EBT purchases during the trial period then conduct a data analysis of the results after the program is finished.

**Cost-Benefit Analysis:** The only cost of funding this pilot program is that of purchasing $1,300 worth of additional standardized EBT tokens for the Oberlin Farmers’ Market. At the end of the summer, any excess tokens will be stored for future years or future pilot programs, or exchanged for cash to return to the GEF. The GEF pursued this project because it will expand access to local, high-quality food to low-income households in the community. The OFM is an important community asset that has potential to become a significant source of fresh produce distribution to Oberlin residents. This project will increase investment in the local food system and promote the OFM.

**Additional Benefits:** The investment in this community-based project by the GEF has the potential to strengthen bonds between the Oberlin community and the College.

**Hybrid Refuse and Recycling Collection Vehicles for Oberlin Public Works Department**

**Summary:** In the spring of 2014, the Green EDGE Fund officially approved a sustainability grant of $30,000 to support the City of Oberlin’s investment in hybrid technology for their new refuse and recycling collection vehicles. Three vehicles needed to be purchased, but it remained unclear whether the City of Oberlin would approve an additional $100,000 for each of the three vehicles to equip them with hybrid hydraulic drive systems. In order to support and incentivize this investment, the Green EDGE Fund approved a $10,000 award for each vehicle purchased with the hybrid technology. Evan Tincknell served as project manager for this proposal. Oberlin City Council has since approved the purchase of all three vehicles with hybrid hydraulic drive systems.

**Background Premise:** Early in 2014, the City of Oberlin Public Works Department’s entire fleet of refuse and recycling collection vehicles was destroyed in a fire at the storage facility. In the immediate aftermath, the City was forced to rent replacement vehicles at exorbitant prices. Two replacement vehicles were purchased in April of 2014, and three additional vehicles awaited approval from City Council in May of 2014. It remained unclear whether investment in the hybrid hydraulic drive systems would be supported. The Public Works Department was in the process of applying for additional grant funding, and claimed that any financial support would help sway City Council’s decision to fund the remaining expenses.

**Cost-Benefit Analysis:** The hybrid technology nearly doubles the fuel economy for each vehicle on which it is installed, resulting in 45% improved fuel efficiency. Although this funding is being made to support efficiency technology with clear calculable payback, it is not an efficiency loan. While the improved fuel economy will reduce fuel consumption by 2,200 gallons/year and corresponding CO2 emissions by 230 MT/year, the investment is not expected to reach 100% financial payback. The Green EDGE Fund supports the implementation of technology that promotes efficiency and sustainability regardless of financial payback, and has offered this grant to show support for the City of Oberlin and efforts to reduce its carbon footprint.
Natural Meadowing

Summary: In the spring of 2014, the GEF approved a sustainability grant of $5,420 for the creation of natural meadows on campus. The All-OSCA Environmental Concerns Committee in collaboration with the Permaculture Exco and the Oberlin Grounds Department designed a meadowing project for the lawn spaces next to Harkness and behind Old Barrows. They plan to create sweeps of meadow landscaping. The spaces will emulate nature and “foster a sense of place and the realization that nature welcomes our presence if we manage encounters wisely.” Paul Paschke served as project manager for this proposal.

Background Premise: This endeavor has many objectives. First, this project hopes to create biologically diverse, resilient, self-sustaining ecosystems on campus that will serve to benefit our human and natural communities. Second, this will educate OSCA members and other students in the theory and practice of permaculture and to make them more aware of the natural communities we live within here in North Central Ohio. Third, there will be a reduction in the college’s contribution to carbon pollution through a reduction in the amount of fuel burned to mow the lawns and through the carbon sequestration function inherent to these plants. Fourth, we hope to reduce the workload for groundskeepers in OSCA spaces and allow them the time to use their efforts elsewhere.

Cost-Benefit Analysis: Sustainability grants are for projects that provide clear and tangible sustainability benefits to the College, though the benefit is not measured in monetary terms. The GEF was confident in this project’s success because of the precedent set by previous similar initiatives. There is carbon sequestering that is done by these the native plants and fuel savings from not mowing these areas, but the GEF is still in the process of calculating those savings through the Carbon Management Fund.

Additional Benefits: These areas will have native plants that will make these spaces more beautiful and will redefine conventional notions of grounds keeping, weed management, and what a college campus should look like.

Leadership & Sustainability Summer Camp

Summary: In the spring of 2014, the GEF allocated a sustainability grant of $11,600 for the purchase of 16 bicycles and 2 scholarships for local Ohio high school students to attend the new Foresight Leadership and Sustainability Initiative camp in Oberlin this summer. Noel Myers served as project manager for this proposal.

Background Premise: The GEF was excited about the prospect of helping out this sustainability summer camp in our local operating area, and wanted to ensure local residents were enabled to participate. We designated funding for two scholarships for two students from Lorain county, with an emphasis on Oberlin High School, to attend this innovative camp. In addition, the GEF will be purchasing 16 new bikes for the camp students to build and maintain over the camp period before being donated to Oberlin College's Bike Co-Op after the two week camp is
This will provide the Bike Co-Op with necessary new bike capital to lend to students during the semester.

Cost-Benefit Analysis: The GEF allocated $6,400 towards to ensure local students, Oberlin residents in particular, are able to attend this sustainability camp at Oberlin this summer. The other $5,200 portion of the grant will go towards the purchasing of 16 bikes to be built. The camp participants will learn how to put a bike together, and gain familiarity with a sustainable mode of transportation, and then the bikes will be put to good use at Oberlin for years to come. This project promotes general education around sustainability and is a project that the EDGE Fund feels is worth pursuing. It is exciting that we can continue to support sustainability efforts in our local community as we all strive to find solutions to environmental challenges.

Pending Projects 2013 – 2014

Kahn Solar PV

In spring of 2013, the GEF began the process of facilitating the installation of solar photovoltaic panels on the roof of Oberlin’s new Sustainability-themed first-year residence hall. A request for proposals (RFP) was written and circulated among local contractors and solar companies. Bids were received for the installation of a 10kW array, and the Green EDGE Fund worked throughout the summer of 2013 collecting necessary information from Oberlin College administrators and the bidding parties in order to select the most feasible and cost-effective option. By the end of fall semester (2013), a Letter of Intent (LOI) was submitted to BoldAlternatives—the company selected for the installation. BoldAlternatives provides a financing option that reduces our financial investment to a minimum by allowing a third party investor to benefit from state and federal solar incentives. Facilities Construction & Planning took the reigns for the final stages of the project in order to facilitate development of necessary documentation and legal agreements. A 10kW solar PV array is expected to be installed on the roof of Kahn Hall during the summer of 2014.

Alexander Deeter served as project manager during the spring of 2013, then Evan Tincknell took over the project in the fall of 2013 since Alexander Deeter graduated in 2013. Evan Tincknell and Julia Murphy served as project managers follow up on this project during spring of 2014.

RCT Greenhouse

The Green EDGE Fund is waiting on revisions to a proposal written by the Resource Conservation Team (RCT) for a campus greenhouse.

GEF Solar Information Kiosk
The Green EDGE Fund is looking into funding the installation of a screen kiosk that would display information about the North Fields Solar Array and the Bioregional Dashboard. We are hoping to place the display in a central location that can be viewed by a majority of students.

**Kahn Solar Thermal**

Kahn Residence Hall was built with mounting structures for both Solar PV and Solar Thermal technologies. The Green EDGE Fund has already gone through the process of creating a project to install Solar PV on Kahn, and is ready to pursue Solar Thermal. More information on this pending project can be found in the following section.

**Other Green EDGE Fund Activities**

The Green EDGE Fund has had a very productive academic year. We acquired a fantastic new faculty advisor, Sean Hayes, who has guided us in making structural improvements within the EDGE fund. We have been working on public outreach through promotional posters, revisions to our website and general interest meetings. We have developed an effective system for calculating and submitting Efficiency Loan paybacks. At the end of spring semester, Evan and Noel tackled the revision of our Charter Document to bring it up to date on our structural shifts. A huge change in the Green EDGE Fund this year involves the establishment of the Carbon Management Fund. In the Fall 2013 semester, a student referendum called for the creation of a local carbon-offsetting program to work towards the College’s goal of Carbon Neutrality by 2025. The CMF was created by a group of Oberlin Students to address this need. The Green EDGE Fund gave its support by taking the CMF on as a third arm, such that in additional to efficiency loans and sustainability grants, the Green EDGE Fund will also be involved with CMF grants. A separate CMF account will fall under the EDGE Fund’s counsel and require EDGE Fund approval for carbon offsetting projects. These projects will require much research and documentation to ensure that they sequester carbon or otherwise offset greenhouse gases, and will likely involve changes in agricultural practices, anaerobic methane digesters, and the planting of natural meadows and trees. Many of these carbon offsetting projects will be developed in partnership with Oberlin College class projects and will be located within the local region and community. The establishment of the CMF is still in progress, so there will be many developments related to this new branch of the Green EDGE Fund in the coming months and years. Also this year, the Green EDGE Fund contracted a student designer to develop a new logo, which is featured on the cover page of this annual report.

**Development of Request for Proposals:**

A new addition to the Green EDGE Fund in spring 2014, senior Nicole Le became interested in the infrastructure of the Fund and its projects. Her first task on the GEF was to develop a Request for Proposals for the Kahn Hall Solar Thermal project that had been approved the year before. In addition to suggestions from advisers Sean Hayes, Bridget Flynn, and Meghan Reisterer, Nicole also worked with Oberlin College Architect, Steve Varelmann of the Facilities Planning and Construction office in an effort to create a GEF RFP that would align well with the needs of FP&C for subsequent implementation. The included version of this RFP is
still in its early stages, and should be worked on in the future with the help of FP&C to continue developing the infrastructure that will allow the transition of large projects from GEF to the College as efficient as possible.

During the development of this initial RFP, Nicole came across several instances of project RFPs for similar college revolving loan funds in the sustainability community. Stepping away from the Kahn Solar RFP, she invested in creating an RFP that the GEF could use to solicit proposals on campus and otherwise, that included all the information necessary from start-to-finish. She solidified the conditions of the GEF proposal process, and established quantifiable GEF metrics for the first time. The RFP, as it stands, needs only to change deadlines and GEF contacts, as necessary, and add new Charter stipulations (once available). This RFP template is subject to the interpretation and amendment of future Green EDGE Fund Boards.

Nicole would like to thank the National Renewable Energy Laboratory and the Penn State Reinvention Fund for the public availability of their Request for Proposals, which served as exemplars from which the GEF could learn.

Appendixes

Compiled in the following pages in this order:

1. Kahn Solar PV documentation
   i. RFP
   ii. Student Senate Resolution
   iii. Signed Letter of Intent
2. Revised Charter Document Draft
3. GEF RFP
4. Working Kahn Solar Thermal RRP
Kahn Solar PV RFP:

Date: May 22, 2013

From: Alex Deeter, Evan Tincknell, Noel Myers, & Ren Wiscons
Board Members, Green EDGE Fund
To: Solar Installation Companies

RE: Oberlin College Kahn Dormitory
169 N Professor St, Oberlin, OH 44074
Request for Proposal

Oberlin College respectfully requests your company submit a proposal for a 10 kW photovoltaic solar system for our Robert Lewis Kahn Hall located at 169 N. Professor Street, Oberlin Ohio 44074

Oberlin College hopes to collaborate with a firm that articulates considerable experience in photovoltaic solar systems as well as flexibility in design and installation to incorporate existing structures relating to Kahn Hall’s roof design. This project is unique in that roof racking and wiring on the building has already been built into the dormitory. For this reason, the college aims to engage with solar firms presenting designs and installation.

Please help the College to further its sustainability initiatives by submitting digital copies of proposals emailed to etinckne@oberlin.edu.

The following document provides guidance in the preparation of proposals related to this project. For additional information or clarifications, please feel free to contact the College.

Thank you,
The Green EDGE Fund
Oberlin College
Oberlin College is a private liberal arts college and world-class conservatory of music founded in 1833. Oberlin has continually shown its commitment to social progressiveness and inclusion, from offering non-discriminatory education by omitting tuition from working students’ loans in the mid-1800s, to being the first college offering bachelor’s degree programs to women, and one of the first offering programs to African Americans. Oberlin College is accredited by the North Central Association of Colleges and Schools, Higher Learning Commission. Oberlin is known for its higher level integrative approach to education, which contributes to the culture, environmental activism, social diversity, and student involvement livening the campus life today. Oberlin’s enriched progressive history motivates campus initiatives and student activities to this day. The collaboration between one of the world’s most prominent conservatories and historically significant liberal arts colleges is a unique cultural environment concentrated within a small town in rural Ohio. As such, students have the opportunity to engage with the community generating an atmosphere of inclusion and togetherness. Together, Oberlin’s campus and community create a place of urban sensibility reflecting the music, arts, sciences, and cultural richness of the world at all levels. Oberlin's size, residential character, and selectivity provides an atmosphere that is conducive to intellectual and personal growth.

Kahn Dormitory
169 N. Professor St, Oberlin, OH, 44074
Robert Lewis Kahn Hall, opened in August 2010, is the most recently constructed dormitory on Oberlin College’s campus and is dedicated to introducing first-year students to the diversity of sustainable practices on campus. In conjunction with programming focused on habitual energy and water conservation and sustainability pledges agreed to by all residents, students living in Kahn Hall have access to efficient infrastructural technologies such as high-efficiency washers and dryers, passive ventilation through centralized chimneys, dual flush toilets, and automatic shut-off heating and cooling units. Throughout Kahn Hall’s construction process, the design team wanted to ensure future growth and development of the building’s technological attributes, most prominently solar energy. Many of the initial sketches of Kahn Hall included a rooftop solar system, as shown in the presence of pre-existing panel racking and wiring. The system was not installed because it was not financially feasible at that time. The construction of Kahn Hall took place less than 10 years after the completion of Oberlin’s Adam Joseph Lewis Center, and closely followed the construction of the East College Street Sustainability District by a private firm, Sustainable Community Associates. Kahn Hall is a symbol of the continuing sustainable movement in Oberlin.

Sustainability
The sustainable building initiative began unofficially with the construction of the Adam Joseph Lewis Center (AJLC) for Environmental Studies in the year 2000 as a site flexible enough for students to implement design experiments in a modular and resilient facility. The AJLC was designed with a 59 kW rooftop solar system. A few years later the building’s solar system was expanding over the parking lot with an additional 101 kW making the building energy neutral. The rooftop system is a monocrystalline photovoltaic installation whereas the parking lot installation is a polycrystalline photovoltaic system. The
other works include the renovation of the Allen Memorial Art Museum, rewarding it a LEED Gold certification. The Kohl Building for Oberlin Conservatory’s Jazz Studies Department was completed in 2010. In 2012, we finished the installation of a single axis tracking, polycrystalline 2.27 MW system. We have also had students build a passive tracking solar panel. Our goal for this installation is to provide an educational system that diversifies the current solar technology employed on our campus. Priority will be given to firms that show commitment to educational sustainability in line with those of Kahn Dormitory. This includes a preference for design and construction process transparency in addition to material and labor sourced as locally as possible.

Goals that will be discussed and further defined include:

- Transparency of the design and construction process is an important component to the Kahn solar array project as the building is designed to be used as an educational tool for the college’s students not only technologically, but economically and politically as well. The solar system installed will be monitored by the college’s campus-wide dormitory energy efficiency program, supported by Lucid Design, and will be displayed for students and faculty to connect meteorological changes with building energy production changes to elicit environmentally-triggered consumption changes. (The monitoring should not be included in your proposal.)

**Schedule**
The RFP must be submitted no later than June 14th, 2013. We can schedule site visits as needed. We would like the project to be completed before the next academic school year beginning in mid-August.

**Scope of Work**
Originally when the Kahn dormitory was built, a combined solar thermal and electric system was planned to be installed. The project was not completed due to a lack of funds. However, the racking, wiring, and plumbing were installed. A schematic of the currently installed racking and electrical/control room is attached as well as a couple pictures in this document. Because of the unique situation with the current racking and wiring, we are requiring prospective companies to perform a site visit to evaluate the roof. As seen in the images, there are metal plates in the spaces that the modules would go.

The type of system we are looking for is a 10 kW photovoltaic solar power system. We are not looking to install the solar thermal at this time. 10 kW is also the upper limit of Oberlin’s net-metering ordinance. We would like the ability to add solar thermal at a later date and do not want to use all of the racking. This being said, we would like the installation to be as visible from the ground, focusing on the western racking units.

Ideally, we are looking for American-made modules from a company that is at least five years old. We want a seasoned company with a strong warranty because of past issues we have had with other solar modules and companies going out of business.

Transparency: We are an academic institution and are installing thin film instead of other technologies because of the educational value of different technologies on campus. We have some classes that can relate to this project. They would be interested in knowing the process and development of the project. In your proposal, please state how you would accomplish this.
We are a non-profit institution and do not naturally have the appetite for the tax incentives associated with this type of project. We understand that this is not a common request for such a small system, but it would be helpful if your proposal included options for us to benefit from the incentives. We are currently exploring avenues on our end for this part of the project as well. This is optional.
Other
For the installation, we allow construction between 10 AM and 7 PM.
The Proposal should also include:

1. 3 examples of similar projects your company has done including, costs, project timeline, contact information for project owner. We understand these will be different because of our existing racking and wiring.
2. All equipment to be used with manufacturer information and any warranties associated.
3. Estimated annual output production
4. Project schedule

For any questions regarding this project, please e-mail or call Evan Tincknell.
etinckne@oberlin.edu 413-658-7127

Attachments can be downloaded on Google Drive: https://docs.google.com/file/d/0B-NiHKI6mrc7cGF5cExsYlZxSW8/edit?usp=sharing

End of document.
Resolution Endorsement of 10kW Solar PV Installation on Kahn Hall

Whereas, the roof of Robert Lewis Kahn Hall was initially designed to include solar PV panels, which were not installed due to unforeseen limitations of project budget and;

Whereas, the Green EDGE Fund (GEF) is a student group at Oberlin College funded by students via a waivable $20.00 semesterly fee that provides funding for projects that promote sustainability and efficiency within the Oberlin Community and;

Whereas, the GEF has actively pursued installation of a 10kW solar PV system that would fit on preexisting racking currently in place on the roof of Robert Lewis Kahn Hall and;

Whereas, a Cleveland-based solar company called BoldAlternatives has offered a funding mechanism which allows an anonymous third party for-profit entity to fund installation of the solar array and;

Whereas, that anonymous third party then collects on renewable energy tax incentives while selling electricity produced by the installed PV system to Oberlin College for a rate equal to less than the rate currently paid for electricity by Oberlin College and;

Whereas, after the anonymous third party beneficiary has earned a small margin of interest (estimated 8 years), the PV array is then donated at no cost to Oberlin College and;

Whereas, the total expenditures of the GEF would total XXXX (<10% of the current available funds in the account currently designated for GEF Sustainability Grants and;

Whereas, 79% of Oberlin College students who responded to a senate referendum item in April of 2013 supported further development of a 10kW PV array on Kahn Hall and;

Whereas, the Student Senate of Oberlin College is the central governance organization for the student body; therefore be it,

Resolved, that the Student Senate of Oberlin College urges the administration actively endorse the installation of a solar 10kW PV array on the roof of Robert Lewis Kahn Hall.
Solar Action LLC

Solar Action, LLC
2708 Dryden Road
Shaker Heights, OH 44122

Alexander Deeter
Oberlin College
Oberlin, OH 44074

Re: Non-Binding Letter of Intent

May 13, 2013

Dear Mr. Deeter,

This non-binding Letter of Intent ("Letter of Intent") shall confirm our mutual intentions to engage in exclusive negotiations toward a formal Solar Services Agreement ("SSA") by which Oberlin College would agree to allow Solar Action, LLC ("SOLAR ACTION, L.L.C.") to install a Solar Electric Generating System ("System") at the Robert Lewis Kahn Hall ("Site"). While we anticipate that all of the terms and conditions will be fully set forth in a later SSA, we confirm our current mutual agreement to be as follows:

1. Negotiation of Definitive Agreements
   We shall proceed to engage in negotiations in an attempt to agree upon and execute the SSA including at least these following provisions:

   a) **Term**: The term of the SSA will be 15 years.

   b) **System Size**: SOLAR ACTION, LLC intends to install a System of approximately 10,000 Watts.

   c) **Space**: Oberlin College will lease the required space for the System to SOLAR ACTION, LLC for $1 per year.

   d) **Electricity**: Oberlin College will purchase all electricity generated by System during the term of the SSA.

   e) **Electricity Rate**: SOLAR ACTION, LLC will charge Oberlin College a rate equal to 5 percent (5%) per KWH less than the fully loaded KWH costs charged by Oberlin College's primary electric utility (approximately 10¢/KWH). This rate will index annually on January 1st of each year.

   f) **Solar Renewable Energy Credits**: Oberlin College, or their assignee, agrees to purchase all Solar Renewable Energy Credits (SREC) from SOLAR ACTION, LLC for $ 0.05 per kWh for the duration of the agreement.

   g) **Cooperation**: SOLAR ACTION, LLC and Oberlin College will work together to seek government and utility approval for the installation and for the incentives available.

   h) **Maintenance**: Oberlin College will allow SOLAR ACTION, LLC access to the System as required for maintenance. SOLAR ACTION, LLC will be solely responsible for the ongoing monitoring and maintenance of the System.

   i) **Ownership**: Notwithstanding d), e), and f) above, SOLAR ACTION, LLC will retain all benefits of System ownership including but not limited to the value of electricity generated, tax credits and grants earned, environmental credits, renewable energy credits, accelerated depreciation, and other favorable tax treatments.
j) **Termination:** Upon termination of the SSA, the System will be purchased or donated for a value based upon an independent assessment of fair market value.

2. **Confidentiality**
Through negotiations and discussions regarding the establishment of a long-term contractual relationship and for ONE YEAR thereafter, SOLAR ACTION, LLC and Oberlin College agree not to disclose proprietary and confidential information to outside third parties unless required by law. Oberlin College shall not disclose the design and/or concept of the System and/or its financing to any party without the prior approval of SOLAR ACTION, LLC.

3. **Exclusivity**
Oberlin College agrees that it shall not negotiate with any parties other than SOLAR ACTION, LLC and/or affiliates thereof with respect to a SSA at the Oberlin College Site.

4. **Warrants**
Oberlin College hereby warrants and represents that they are the owner of the Site. As required by the State of Ohio, SOLAR ACTION, LLC may require Oberlin College to provide a Lien Report or evidence of title, and any and all other loan agreements that encumber said property.

5. **Effect of this Letter of Intent**
This Letter of Intent is intended merely as a guide in the negotiations and preparation of the SSA on terms and conditions satisfactory to the parties hereto, and nothing contained herein shall be construed to preclude other provisions from being included in the SSA, provided that such other provisions are consistent with the content of this Letter of Intent and otherwise satisfactory to the parties hereto. While the parties intend to proceed promptly to complete and execute the SSA, it is expressly understood that this is a Letter of Intent only, and no liability or obligation of any nature whatsoever is intended to be created between either of the parties hereto except as set forth in Paragraphs 2 (Confidentiality) and 3 (Exclusivity) hereof.

6. **Termination**
This Letter of Intent may be terminated at any time, by mutual consent of the parties, and by Oberlin College on notice to SOLAR ACTION, LLC. Upon such termination, this Letter of Intent shall have no force and effect other than under Paragraph 2 (Confidentiality).

Please acknowledge that this Letter of Intent correctly sets forth non-binding intentions at this point by countersigning the enclosed duplicate of this Letter of Intent in the space provided below and returning one fully executed original to SOLAR ACTION, LLC.

Understood, Agreed & Accepted:

[Signature]
Alexander Deeter, Oberlin College

[Signature]
Robert Martens, Solar Action LLC

by:________________________

dated: 11/15/13
The Oberlin College Green EDGE Fund
Ecological Design & General Efficiency

OFFICIAL CHARTER
(Last Updated Summer 2014)

1. MISSION
The mission of the Oberlin College Green EDGE Fund is to support projects that promote environmental sustainability within the Oberlin College & City community while promoting innovation and education, and projects at Oberlin College that meaningfully improve efficiency and reduce resource consumption.

2. STRUCTURE

2A. Funding Structure: The Green EDGE Fund is a student board that manages a set of accounts designated for loan and grant allocations. These accounts are financed by Oberlin College and student semesterly green fees, respectively.

2A1. Efficiency Loans are allocated to projects that reduce resource consumption and have clear and calculable financial savings for Oberlin College. This account operates on a revolving loan fund model; all financial savings directly resulting from these projects are paid by the College into the Efficiency Loan Account on an annual basis until 150 percent of the initial investment is repaid so that further loans can be made. Savings may be calculated based on conservative estimates or measurable changes in resource consumption data.

2A2. Sustainability Grants are allocated to projects that promote environmental sustainability within the Oberlin Community, and do not have clear and calculable financial savings for Oberlin College. These projects do not necessarily result in direct resource use reductions, but do promote environmental sustainability as defined by the sitting Board.

2A3. Carbon Management Fund (CMF) Grants are allocated to projects that provide verifiable sequestration of carbon and are situated in or around Oberlin. These carbon sequestrations are meant to be attributed to specific areas of the College for which carbon offsets have not yet been acquired.

2B. Governing Structure: The Green EDGE Fund is comprised of the Student Board, the Student Senate Liaison, the Office of Environmental Sustainability Liaison, the Primary Administrative Board Member, the Secondary Administrative Board Member, and receives support from a designated faculty advisor and several other administrative and faculty advisers. The Student Board is primarily
responsible for decision-making processes with direct oversight from the two administrative board members. The faculty advisor provides feedback on a regular basis and attends all weekly meetings. Monetary allocations must be approved by one of the two Administrative Board Members as detailed in section 3C. Input is sought from all relevant and available parties whenever important decisions are made by the Student Board.

2B1. Student Board:
The Student Board is the primary decision making body of the Green EDGE Fund, and is responsible for seeking counsel from faculty and administrators in pursuit of developing and reviewing project ideas and project proposals.

2B1a. Officer Positions:
The Student Board is responsible for electing members to officer positions each year based on individual qualifications and interest. Officer position descriptions are subject to adjustment on a semesterly basis.

- **Chair:** responsible for coordinating meetings, preparing agendas, maintaining semester outline, and circulating all relevant information to attendees; expected to meet individually with Green EDGE Fund Faculty Advisor at least once every two weeks.
- **Vice Chair:** responsible for producing a semesterly and annual report; expected to meet individually with Facilities Operations Director at least once every two weeks.
- **Treasurer:** responsible for managing payback calculations and keeping up-to-date accounting records; expected to meet individually with Controller at least once every two weeks.
- **Public Outreach Coordinator:** responsible for managing online presence and coordinating public events and advertising; expected to meet individually with Office of Environmental Sustainability at least once every two weeks.
- **Secretary:** responsible for recording minutes and action items during meetings, and circulating meeting summaries.
- **Account Manager:** responsible for edgefund@oberlin.edu account; expected to promptly forward or respond to received emails, and to maintain the online calendar and documents.

2B1b. Student Board Terms of Service:
Recruitment of new members is the responsibility of incumbent members of the Student Board. They are responsible for recruitment of new members once each academic year or as deemed necessary. Once elected to the board, student members have the option to act on a voluntary basis or to earn one (1) semester course credit by designating their service to the board as a private reading with the faculty advisor. Board members are encouraged (time and skills permitting) to advance and support the Fund’s work by cooperating and consulting with potential and former grantees, partners, and stakeholders in proposal development, project generation, and internal documentation and infrastructure.
2B2. Student Senate Liaison
The Student Senate Liaison is selected by Student Senate on a semesterly basis, and serves as a voting member of the Student Board. The Student Senate Liaison is expected to attend all weekly Green EDGE Fund meetings and meet the same expectations as Student Board members.

2B3. Office of Environmental Sustainability (OES) Liaison
The OES Liaison is employed as a paid OES student worker and serves as a voting member of the Student Board. The primary focus of this position is the development of large-scale efficiency projects, associated metrics, projected and actual savings, and outcome reports. The OES Liaison is expected to attend all weekly Green EDGE Fund meetings, and attend regular OES staff meetings. Hiring for this position is coordinated by OES staff, Faculty Advisor, and Student Board Chair. A full job description is included as an addendum.

2B2. Administrative Board Members
The Oberlin College VP of Finance is responsible for serving or delegating the position of Primary Administrative Board Member, and for selecting a Secondary Administrative Board Member.

2B3. Faculty Advisor
Any Oberlin College faculty member is eligible for this position. The faculty advisor is selected by the Student Board with consultation from administrative stakeholders, and is expected to serve until no longer able or until the majority of the Student Board votes to seek a replacement.

2B4. Administrator and Faculty Advisers
Counsel and support is regularly provided by several administrative offices and faculty members. Most notably, by employees from the Office of Environmental Sustainability, Facilities Construction and Planning, Facilities Operations, and the Office of Finance. Seeking counsel from faculty is also highly encouraged, as we are fortunate enough to be surrounded by PhDs with vast knowledge of their respective areas of interest.

3. ADMINISTRATIVE PROCEDURE
Unless otherwise specified, group decisions require majority support and votes are carried out based on the standards of Robert’s Rules of Order. [footnote description or link would be useful here]

3A. Regular Meetings
The Student Board members meet weekly with their faculty advisor to review progress and revise short-term and long-term goals. These meetings are outlined at the beginning of each semester in the Semester Outline.
The Student Board members also meet weekly without their faculty advisor to provide one another with feedback and support with regard to project development and other short-term goals. This is a less formal meeting, and can be used to provide consultation to prospective proposal authors.

3B. Project Development
The Student Board is expected to be directly involved in the development of efficiency loan and sustainability grant proposals, and are encouraged to submit proposals themselves. Conversely, CMF projects are not to be designed or developed by Student Board members.

The process for creating and submitting project proposals is outlined in a semesterly Request for Proposals (RFP). The RFP outlines and describes the semester’s deadlines, application requirements, submission process, review criteria, and scoring rubric. It is updated at the start of each semester and circulated to Oberlin students, faculty, administrators, and community members.

3C. Project Approval
Student Board members are primarily responsible for reviewing and approving project proposals. An extended meeting of the Student Board is required to review final project proposals.

Projects under $1000.00 require final approval by the Secondary Administrative Board member. Projects over $1000.00 require final approval by the Primary Administrative Board member. Following proposal review by the Student Board, necessary documentation is drafted for projects approved by the Student Board, and is presented at a Full Board meeting to Administrative Board Members for their final approval.

3D. Award Allocations
Once a project proposal is approved by the Student Board, an approval document is drafted. Approval documents are 1-page documents that briefly outline the approved allocation and benefits of supporting the approved project. This document includes the account to be charged and the method for allocating funds (i.e. reimbursement, personal check, direct withdrawal). Approval documents must be signed by a representative of the Student Board, and by the relevant Administrative Board Member as detailed in section 3C.

Following final approval from Administrative Board Members, award letters are drafted by the Student Board and sent to award recipients. Award letters are 1-page documents that briefly outline the approved allocation and any necessary documentation or clarification required before the award can be distributed.

3D1. Sustainability Grant Allocations
The Student Board and Administrative Board Member must approve sustainability grant proposals based on “standard metrics” outlined in the RFP. Following approval, funds will
be allocated through the Controller’s Office; all transfers and payments must be finalized by June 30th, the end of the fiscal year. Sustainability grant awardees are required to submit a proof of implementation to the Green EDGE Fund, in addition to a project progress report (subject to individual project scope and need), 3-6 months from the date of project implementation.

3D2. Efficiency Loan Allocations
The Student Board and Administrative Board Member must approve sustainability grant proposals based on “standard metrics” and “efficiency loan metrics” as outlined in the RFP. The Student Board is also responsible for tracking, calculating, and securing approval (through the Oberlin Finance and Controllers Offices) for Efficiency Loan paybacks. Per agreement with Oberlin College in 2007, the Green EDGE Fund will recoup up to 150% of total loan amount through resource savings accrued by the College.

3D3. Carbon Management Fund (CMF) Allocations
CMF projects are developed by a third party capable of calculating the amount of carbon expected to be sequestered, and then reviewed by the Green EDGE Fund Board. The Student Board and Administrative Board Member must approve sustainability grant proposals based on “standard metrics” and “CMF metrics” as outlined in the RFP.

3E. Charter Changes
All proposed changes to the mission, structure, or decision-making processes described in this document must be reviewed and approved by a majority of the Student Board and receive final approval from both Administrative Board Members.

The board may approve a proposal as follows: a board member makes a motion to approve the project, followed by another board member who seconds the motion. A vote is proposed, and all present and voting Board members may approve, disapprove, or abstain.

4. APPROPRIATE USE OF FUNDS

4A. Projects
All grants and loans are primarily to be used for materials or products and costs directly associated with implementation. Although preference is given to infrastructural development, sustainability grants can also be granted to a wider variety of projects that promote environmental sustainability in the Oberlin Community. The following types of projects require consensus of the Student Board: faculty or student research; workshops or guest lectures; wages or labor costs not associated with installation; advertising, prizes, or incentives.

4B. Publicity
The Student Board is authorized to allocate funds for public engagement. This allocation is made at the beginning of each semester based on estimates of upcoming expenditures. Unspent publicity allocations are carried over to the following semester.

4C. OES Liaison
The OES Liaison is to receive funding from the Sustainability Grant Account for no more than 10 hours per week at wage rate equivalent to that of other OES student workers.
OBERLIN COLLEGE

GREEN EDGE FUND

FALL 2014 REQUEST FOR PROPOSALS

INTENT TO APPLY DUE:

FULL PROPOSALS DUE:

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GREEN EDGE FUND CONTACTS
Evan Tincknell, Chair
Elaine Hinrichs, Vice Chair
Liam Leslie, Secretary
Noel Myers, Treasurer
Will DiMaggio, Board Member
Julia Murphy, Board Member
Yuran Pan, Board Member
Nicole Le, Board Member

GEF GRANT REQUIREMENTS

OVERVIEW:
The Green EDGE Fund is seeking innovative projects from students, faculty, and community members across Oberlin College. The GEF provides two different kinds of funding: efficiency loans and sustainability grants. We have these two types of projects because we have two funding sources. Part of our funding comes from the college administration, which has asked us to only invest in projects with clear financial paybacks (the efficiency loans). The other part of our funding comes from activity fees paid by the student body, which supported using the funding for either efficiency projects or general sustainability projects (the sustainability grants).

If a proposal could receive either source of funding, we will give it much higher priority as an efficiency loan than as a sustainability grant. We prefer projects with a revenue stream that can fund more proposals in the future.

ELIGIBILITY:
Proposals will be accepted from student organizations, course-based teams, and ad-hoc groups formed in response to the GEF grant opportunity. Affiliation of teams with formal student organizations or course, and inclusion of an advisor are strongly encouraged, but not required.

Approved projects must additionally meet these two requirements: (1) publicized recognition of the Green EDGE Fund’s contribution and (2) submission of a report on the use of the funds and the project’s outcomes (by a date to be determined by the sitting Board per project).

EFFICIENCY LOAN REQUIREMENTS:
Efficiency loans are given for projects that directly reduce energy use on campus and have clear and timely financial paybacks into the fund. The efficiency loans are not like a standard bank loan, where the borrower pays back with interest; instead, our "loans" are paid back with monetary savings achieved through efficiency improvements.

SUSTAINABILITY GRANT REQUIREMENTS:
Sustainability grants do not have any payback requirements, and are granted towards projects that address sustainability in a broader sense on campus or the Oberlin community at large. We expect them to be used without recovering any of our investment. Hence, these funds support projects that increase Oberlin’s sustainability but don’t produce easily quantifiable savings: example sustainability projects include covered bike racks, a student operated garden, and a community renovation program.

Proposals will be reviewed by the Green EDGE Fund Board who will make recommendations for priority ranking to the Oberlin College Vice President of Finance. An offer will be awarded based on priority ranking and availability of funds.
SUBMISSION PROCESS:
Intent to Apply (web form due ___)
Full Proposal (email as PDF attachment to edgefund@oberlin.edu by ___ at ____ pm)

INTENT TO APPLY INSTRUCTIONS
Applicants are encouraged to complete the Intent to Apply webform. This pre-proposal document will introduce the project and team members to the Green EDGE Fund, and allow for consultation in regards to eventually submitting a strong full proposal. The Intent to Apply includes the following elements:

1) Team information
2) Title of proposal
3) Statement of Purpose
   a. Brief statement of the problem as it relates to sustainability, and how the project will build upon past work in related fields
4) Project Description
   a. This section should briefly describe the proposed project activities that will be carried out by the team should the project be awarded
5) Strategy
   a. Describe how the project will utilize campus and/or regional entities or physical features as assets to the proposed project, and how the project is aligned with the GEF principles provided in the RFP
6) Partnerships
   a. If known at the time of submittal, include any faculty, campus staff, students/student groups, community, and/or industry partnerships. If specific individuals or entities are unknown, provide a general description of the type of collaboration intended.
7) Outcomes
   a. What are the anticipated benefits this project will have for the university community? As appropriate to your proposed program, please also indicate any anticipated benefits to your partners.
FULL PROPOSAL PREPARATION INFORMATION

The proposal shall be submitted in accordance with the instructions below. As always, feel free to contact a board member to ask more questions or clarify the best format and content of your proposal.

FORMATTING INSTRUCTIONS

- A page is defined as one side of an 8.5" x 11" sheet of paper.
- 12-point font, single-spaced, 1-inch margins on all sides.
- The full proposal is not to exceed 5 pages. Shorten or lengthen the Proposal Body and Budget Description as necessary for the needs of your specific proposal. Optional letters of support and other ancillary documents you may want to include (i.e. diagrams, quotes, commitment of outside funds, etc.) should be attached following the end of your full proposal, and are not counted towards the page count.

Title Page (1 page):

- The Title Page includes the project title, type of proposal, amount requested, name of your organization, team members, and contact information (telephone numbers and email addresses). The title should be succinct and capture the essence of your offer.
- Include the Green EDGE Fund logo on this page.

Proposal Body (not to exceed 3 pages): The proposal shall be organized in the following sections:

- Statement of Purpose
  - Define goal of the project
- Project Objectives and Background
  - Briefly describe the project objectives and, as necessary, describe the project's context.
  - State the specific objectives for the project and how they will be pursued
- Implementation, Project Plan, and Timeline
  - Describe key processes and engagement methods you will use to complete the project among your team and College.
  - Outline how you envision the implementation of the project. Who will be involved? Have you met with relevant stakeholders? Do you have a schedule or deadline?
  - Describe the key metrics your group will use to assess the outcomes of the project
  - Describe how the outcomes of the project will be accessed and communicated to the College community.
  - Define key activities and milestones
- Difficulties and Risks
  - Please explain areas of uncertainty associated with the implementation and/or outcome of the project. How difficult will it be to execute? What are the risks?

Budget Description/Justification (not to exceed 2 pages)

- Budget Table (costs and sources of labor and materials)
  - Provide a description of how funds will be used and why they are needed
- Projected Costs & Savings
  - What are the estimated resource and monetary savings? Please explain how these estimates were reached and cite sources.
  - Examples include, but are not limited to:
    - Costs: Initial Equipment/Supplies, Initial Labor, Annual Maintenance
Savings: Annual Electricity Savings (KWh), Annual Natural Gas Savings (Ccf), Annual Water Savings (Ccf), Annual Carbon Equivalent Savings (tons), Annual and Lifetime Monetary Savings

Grant Administration
- Please clarify who will be in charge of managing this project and its finances. Include contact information and qualifications.

Other Funding
- Describe any matching or leveraged funding
- Have you sought funding or plan to seek funding from any other sources? If this project is not funded by the EDGE fund will it still go forward?

Potential pitfalls and alternative methods
- Please elaborate on any concerns or doubts you have with regards to the accuracy of your budget calculations above, or on alternative budget choices that would still allow the project to move forward.

Disclosure of Conflict of Interests
- If necessary, note affiliations or relationships of team members with outside partners (i.e. College offices, third-party companies, etc.).

Ancillary Documents
Optional Letters of support
### FULL PROPOSAL SCORING RUBRIC

<table>
<thead>
<tr>
<th>Merit Criteria</th>
<th>Clearly defined and aligned with GEF goals (4)</th>
<th>Defined and aligned with GEF goals (3)</th>
<th>Implied alignment with GEF goals (2)</th>
<th>Not present/not aligned with GEF goals (1)</th>
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<tr>
<td>Does the proposal have a clear statement of purpose and identification with sustainability challenge?</td>
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<td>Does the proposal clearly articulate the project’s economic benefits/effects?</td>
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<td>Does the proposal clearly articulate the project’s social benefits/effects?</td>
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<td>Will the project have lasting impacts that will advance sustainability now and in the future?</td>
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<td>Are advisors to the team identified with appropriate expertise to support student leaders?</td>
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<td>Is the project implementation and timeline well-articulated and planned?</td>
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<td>Does the proposed project include participation from students with diverse backgrounds and disciplines?</td>
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<td>Will the project impact students, faculty, staff, and community members beyond the immediate proposed team members?</td>
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### Budget Criteria

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<tr>
<th>Does the proposed budget address all necessary components of the project’s costs?</th>
<th>Definitely Fund (4)</th>
<th>Fund (3)</th>
<th>In need of further development (2)</th>
<th>Insufficient alignment with RFP (1)</th>
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<td>Does the proposal allow for budget flexibility?</td>
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<td>If applicable, are there significant savings resultant of the project?</td>
<td>Definitely Fund (4)</td>
<td>Fund (3)</td>
<td>In need of further development (2)</td>
<td>Insufficient alignment with RFP (1)</td>
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### Overall evaluation
SOLICITATION PROVISIONS

LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF OFFERS
The Green EDGE Fund understands that not all projects will necessarily fall under the established timeline. Please contact us if you feel you have extenuating circumstances.

GENERAL ACCESS
The Green EDGE Fund’s 2014 Annual Report is available to potential applicants as a resource. It includes the details of projects we have funded in the past, and expresses the Green EDGE Fund’s recent goals and focuses both internally and externally. There is additional information about projects and board members on the EDGE Fund website (http://ocsites.oberlin.edu/edgefund/). Finally, please email us (edgefund@oberlin.edu) if you are interested in seeing strong examples of proposals from the past, and we can make that information available.

End of document.
OBERLIN COLLEGE GREEN EDGE FUND

2014 REQUEST FOR PROPOSALS

“KAHN HALL SOLAR THERMAL”

FULL PROPOSALS DUE:

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    Corporate Experience
    Past Performance
    Pricing-Labor Rate Proposal
    Price (cost) evaluation
Evaluation Process: Proposal Scoring Rubric
Proposal Preparation Information
Solicitation Provisions
Notice Regarding GEF Payments to Subcontractors
**GEF RFP Contact:** Nicole Le, GEF Board Member
Oberlin College
135 West Lorain Street, OCMR 1571
Oberlin, OH 44074
Phone: (858) 213-5803
Email: Nicole.Le@oberlin.edu

Electronic (PDF) copies of forms and appendices can be found on GoogleDrive at:

Project Description

**Overview:** Oberlin College’s Robert Lewis Kahn Hall is the most recently constructed dormitory on Oberlin College’s campus and is dedicated to introducing first-year students to the diversity of sustainable practices on campus. In conjunction with programming focused on habitual energy and water conservation and sustainability pledges agreed to by all residents, students living in Kahn Hall have access to efficient infrastructural technologies such as high-efficiency washers and dryers, passive ventilation through centralized chimneys, dual flush toilets, and automatic shut-off heating and cooling units.

Originally when the Kahn dormitory was built, a combined solar thermal and electric system was planned to be installed. The project was not completed because it was not financially feasible at the time of construction. However, the racking, wiring, and plumbing were installed, and as of spring 2013, the GEF has secured funding and a subcontractor to install a photovoltaic solar array onto half of the extant racking. Installation is scheduled to commence June 2014.

Kahn Hall hot water service has been supplied by conventional steam-powered indirect water heaters. The College’s steam boiler supplies the water heaters through insulated piping. The condensing steam is a very powerful energy source to the water heaters and hot water supply to the facility has been proven significant. The boiler is fed by either fuel oil or natural gas, or decision made based on current pricing and availability.

GEF is planning to fund the design, purchase, and installation of a solar thermal collector system to preheat the indirect water heaters thereby reducing boiler fuel consumption. A schematic and photographs of the remaining racking (with the PV array occupying x amount of the currently installed infrastructure) is attached in Appendix 1. Because of the unique situation of previous and ongoing installation for solar structure on Kahn Hall’s roof, we require prospective companies to perform a site visit to evaluate the roof.

**Water Heating Profile & Current Procedures:** There is ___ remaining space in the mechanics room. The College’s current hot water temperature is ___ with ___ gallons used for ___ occupants in the building.

**Proposed Subcontract Award and Period of Performance**

**Technology Solicitation Type:** We are looking for a solar thermal domestic water heating system that will maximize the solar thermal collector's capacity in ___ amount of surface area. The collector's maximum capacity is ___, and the remaining surface area of racking is ___. There are ___ racks left at ___ square meters each. We will take bids for all types of solar thermal technologies including evacuated tube systems, flat plate collectors, etc., but a large part of our selection is based on the premise that the technology proposed will elicit close to 100% thermal capacity in the summer time. The College can provide a solar pathfinder to allow company pre-assessment of local climate conditions before final proposals are due.
Subcontractor Solicitation Type: Ideally, we are looking for American-made modules from a seasoned company that is at least five years old with a strong warranty and solid record of viability.

Transparency: In addition to expanding sustainability infrastructure and practices on campus, GEF and the College’s goal for this installation is to provide an educational system that diversifies the current solar technology employed on our campus. Priority will be given to firms that show commitment to educational sustainability in line with those of Kahn Dormitory. This includes a preference for design and construction process transparency, in addition to material and labor sourced as locally as possible. Transparency of the design and construction process is an important component to the Kahn solar array project as the building is designed to be used as an educational tool for the College’s students not only technologically, but economically and politically as well. The solar system installed will be monitored by the College’s campus-wide dormitory energy efficiency program, supported by Lucid Design, and will be displayed for students and faculty to connect meteorological changes with building energy production changes to elicit environmentally-triggered consumption changes.

The Green EDGE Fund intends to award one labor hour subcontract(s) under this solicitation. The anticipated period of performance is a twelve (12) month basic period with four 12-month option periods with funding available of approximately _____ if all options are exercised.

Offerors are hereby notified of GEF’s desire that the selected Offeror ensure continuity of services for existing projects, ie photovoltaic solar array installation, currently managed by incumbent Subcontractor project managers. GEF intends to give favorable consideration to proposals that demonstrate the Offeror’s capacity achieve successful transition.

Competitive Negotiated Subcontract

This solicitation will be reviewed by the Green EDGE Fund Board (GEF) using criteria (see Section __) that results in an award that is most advantageous to the GEF and Oberlin College based on the best value combination of (a) evaluated qualitative merit, and (b) evaluated price (cost) based on evaluation of proposed labor hour rates of the offers submitted.

This solicitation is based on the premise that, if all offers are of approximately equal qualitative merit, the award will made to the offeror with the lowest evaluated price (cost). However, GEF will consider awarding to an offeror with a higher evaluated price (cost) if the offer demonstrates the difference in price (cost) is commensurate with higher qualitative merit. Conversely, GEF will consider awarding to an offeror with a lower evaluated qualitative merit if the price (cost) differential between it and other offers warrant such a decision.

Review Criteria & Project Selection

The following criteria will be applied to proposals that are received by the proposal due date:
- Is a clear statement of purpose and the identification of the targeted sustainability challenge provided?
- Does the project clearly articulate how environmental quality and economic well-being for current and future generations of the College will be addressed?
- Is the proposed project aligned with Oberlin College’s principles (attached)?
- Will the project have lasting impacts that will advance sustainability now and in the future?
- Does the proposed project include participation from students with diverse backgrounds and disciplines?
Will the project impact students, faculty, staff, and community members beyond the immediate proposed team members?

Are advisors to the team identified with appropriate expertise to support student leaders?

Proposals will be reviewed by the Green EDGE Fund Board who will make recommendations for priority ranking to the Oberlin College Vice President of Finance. An offer will be awarded based on priority ranking and availability of funds.

**Qualitative Merit**

The qualitative merit criteria establish what GEF considers the technical factors valuable in an offer. These qualitative merit criteria are performance-based and permit selection of a higher priced offer that provides higher qualitative merit.

The following qualitative merit criteria will be used by evaluators to determine the technical value of the offer in meeting the objectives of the solicitation.

Each qualitative merit criteria and its assigned weight are provided below.

### 6.1 Technical Capabilities

#### Technical Approach

Describe the ability, experience, and availability of existing personnel and how they relate to the skill sets detailed in the Statement of Work.

Provide two (2) resumes of existing personnel for each Level (1-3) for both Project Managers and Project Control Engineers. Do not include social security on resume.

Describe the specific approach and technical capability to recruit people to meet the requirements detailed in the Statement of Work.

Provide two (2) recent staffing examples. Each example must include the following information:

- Level of expertise of personnel provided.
- Fully burdened hourly rates for personnel provided.
- Brief description of the work effort that was required and how the personnel applied their skills.

#### Understanding the Requirement

Demonstrate, in a narrative description, your overall understanding of how your corporate/company mission relates to GEF’s requirements.

### 6.2 Project Management

#### Management Approach

Provide a detailed discussion of your approach to the management of Offeror’s personnel that will be working at Oberlin College, as well as techniques that demonstrate how the work requirements are proposed to be met. Also, demonstrate how your organization is prepared to respond promptly to problems or issues which may occur under this subcontract.

#### Staffing Plan

Describe the proposed staffing plan, including the average amount of time it will take to provide the personal which meet the requirements specified in the Statement of Work. Explain how labor resources are identified and provide information on recruiting efforts and turnover rates, as well as the estimated timeframe required for completing drug tests, reference checks, and background checks.
Transition Plan
Provide a detailed discussion of your approach to ensure continuity of project management services currently in progress at Oberlin College. Explain the methods you will employ to retain incumbent, Subcontractor project managers or assign personnel with the similar skills, experience, institutional knowledge and capabilities to guarantee existing projects are not disrupted during the change in Subcontractor. Describe any previous transitions efforts you have engaged in and the methods used to ensure continuity of services following a turnover.

6.3 Corporate Experience
Describe prior corporate experience that demonstrates the Offeror’s ability to provide personnel to perform duties similar to those required in the Statement of Work.

Demonstrate previous corporate experience in Project Management and Project Controls.

6.4 Past Performance
Provide a list of current and pat contracts awarded for the same or similar services required for this solicitation. Please provide the name of the organization/company, point of contact (including phone number and email address), contract title, dollar value, dates, and a brief description of how the referenced contracts relates to these requirements. Provide three (3) past/current contracts, or if the previous contracts are not available, provide an explanation. If no past performance information is available, the Offeror will be given neural (may be evaluated favorably or unfavorably) value for this criteria. By providing these references, the Offeror authorizes GEF and Oberlin College to contact them.

Include in the examples of past performance, in a technical support services context, discussion on the following:

- Experience in project management/project controls
- Experience with a design-build construction strategy

Pricing-Labor Rate Proposal
Provide three (3) separate levels of fully burdened hourly rate ranges for Project Managers and three (3) separate levels of fully burdened hourly rate ranges for Project control Engineers for both College-onside support and College-offsite support.

Price (Cost) Evaluation for Best Value Selection
After evaluation of the qualitative merit criteria, the following price (cost) evaluation will be used to determine the best value of the offer in meeting the objectives of the solicitation.

The combined qualitative merit value will be considered substantially more important than the price (cost), as represented by the Labor Rate Proposal.

Evaluation Process

Proposal Preparation Information
The proposal shall be submitted in accordance with the instructions below:

- Formatting instructions
  - A page is defined as one side of an 8.5" x 11" sheet of paper.
  - 12-point font and 1-inch margins on all sides.
Copies may be either single- or double-sided.

**Title Page (1 page):**
- The proposal must include a title page, including the RFP title and RFP number, name of your organization, and primary contact (with postal and delivery address, telephone and fax numbers, and email address). The title should be succinct and capture the essence of your offer.

**Statement of Purpose/Cover Letter (1 page):** Submit a summary cover letter with your offer which includes:
  - A summary statement indicating acceptance of the Statement of Work or any change with the reason(s).
  - A summary of deviations/exceptions (if any) to the sample subcontract schedule and/or the standard terms and conditions and/or the intellectual property terms and conditions in the appendices. The offeror will explain any exceptions (including deviations and conditional assumptions) taken with respect to the subcontract schedule and/or terms and conditions. Any exceptions must contain sufficient amplification and justification to permit evaluation. Such exceptions will not, of themselves, automatically cause an offer to be termed unacceptable. A large number of exceptions or one or more significant exceptions not providing any obvious benefit to the College may, however, result in rejection of such offer as unacceptable.
  - Describe key processes and engagement methods you will use to complete the project among your team and College.
  - Describe how the outcomes of the project will be accessed and communicated to the College community.

**Technical Proposal (not to exceed 12 pages):** In an original and five (5) copies directed toward meeting the requirements of GEF’S Statement of Work and qualitative merit criteria (see above). The technical proposal shall be organized in the following sections:

- **Project Objectives**
  - Define goal of the project
  - State the specific objectives for the project and how they will be pursued
  - Key metrics

- **Merit Criteria Discussion (see scoring rubric)**
  - Purpose
  - Sustainability
  - Approach
  - Lasting Impact
  - Advisory needs
  - Team diversity
  - Broad impact

- **Project Plan and Timeline**
- **Budget Description/Justification**
- **Letters of support**
- **Executive Summary**
  - background and overview of Offeror’s organization

- **Technical Capabilities**
  - Technical Approach (with staffing examples)
  - Understanding the Requirement

- **Management**
  - Management Approach
  - Staffing Plan
  - Transition Plan

- **Corporate Experience**

- **Past Performance**
The total technical proposal shall not exceed twelve (12) pages, excluding personnel resumes.

- **Labor-Rate Proposal:** A completed original and five (5) copies of the “Labor Rate Proposal” form. An individual offeror’s price (cost) proposal standard format can be used if the data included is substantially the same as the NREL form. The price (cost) proposal should include support documentation for all categories of the proposed price (cost). The price (cost) proposal should separate price (cost) for lower-tier subcontract(s) price (cost).
- Unless otherwise indicated in the proposal, the offeror’s proposal must be valid for a minimum of 90 days from the date of the offer. A longer period may be specified in the offeror’s proposal.
- Please include any government schedules or pricing agreements that may apply.
- Submit one original completed “Representations and Certifications for Subcontracts/Purchase Orders” form with your offer.
- Submit one original of either the “Organization Conflicts of Interest Representation Statement” OR the “Organizational Conflicts of Interest Disclosure Statement,” as applicable, with your offer.
- Mail paper copies of your proposal to the ___’s address identified above. Offeror shall provide an electronic copy of their proposal (both technical and pricing) as follows:
  - PDF

**SOLICITATION PROVISIONS**

Late submissions, modifications and withdrawals of offers

Restrictions on disclosure and use of data

General access

[INSERT RUBRIC HERE?]