

The Green Initiative Fund (TGIF) University of California, Berkeley Annual Report 2007-2008

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Introduction to TGIF

The basics

The Green Initiative Fund (TGIF) is a grant-making fund for sustainability projects on UC Berkeley's campus. Students, faculty, and staff are eligible to submit project proposals. Projects will be selected for funding by an annually appointed Grant Making Committee consisting of students, faculty, and staff, in which students have the majority vote.

TGIF is funded by a \$5 per semester student fee, beginning in fall 2007 and existing for 10 years. The fee referendum was approved by the student body during the April 2007 ASUC elections. It received final approval by the Chancellor and Regents during summer 2007.

TGIF's operation is governed by a detailed set of bylaws which describe the structure of the Grant Making Committee, the operation of the Fund, the criteria used for evaluating grant proposals, conflict of interest provisions, and other relevant rules. Administratively, TGIF operates under the ASUC-Auxiliary.

For a full copy of the bylaws and more information about the governance of TGIF, visit http://tgif.berkeley.edu/.

Criteria for grants

In order to ensure the best use of students' money, TGIF uses a variety of criteria for evaluating grant proposals. These include:

• Projects must directly address environmental sustainability on UC Berkeley's campus, or

in the capacity that on-campus activities influence sustainability off campus. All proposed projects must have a clearly defined, measurable outcome.

- TGIF funding will not support projects already mandated by law or UC Berkeley policy directive (e.g., standards for new building construction), since UC Berkeley is already obliged to allocate funds for such projects. TGIF will fund projects which go above and beyond minimum requirements and those projects that are unable to gain funding from other sources.
- All projects shall have a mechanism for evaluation and follow-up after funding has been dispersed. At a minimum, a project plan must include a report made to the Grant Making Committee after successful (or unsuccessful) implementation. If a project is expected to have on-going benefits such as annual cost savings, the project plan must include a mechanism for tracking, recording, and reporting these benefits back to the Grant Making Committee.
- Preference will be given to projects that demonstrate the greatest reduction in UC Berkeley's negative environmental impacts for the least cost.
- TGIF prefers projects with a strong student participation component
- TGIF encourages projects that generate cost savings that can pay back into the Fund, increasing its size and effectiveness. For example, a TGIF grant to save energy by installing more efficient lighting in a building would save the University money on its electricity bill, creating the potential for some of this money to be returned to TGIF.

How TGIF fits into campus greening

TGIF's primary goal is to fund large, expensive, infrastructure-improving projects on campus such as building retrofits, landscape protection, etc. There are other environmentally-related grant programs on campus, but most of these lack the funds for such large projects. Conversely, the University itself has some money for larger sustainability work (often via green building efforts in the Facilities division), but these efforts are not under student control. TGIF provides money to implement large sustainability projects beyond what the University is already doing, and places this money under student control.

The 2006-2007 TGIF campaign

TGIF was created via a student fee referendum on the ballot during UC Berkeley's 2007 ASUC elections. By voting yes on the referendum, Berkeley's students created TGIF's \$5 per semester student fee and created the charter by which TGIF operates.

The TGIF campaign was created and run by a group of undergraduate and graduate students at Berkeley. Much of the inspiration and ideas for the Fund's structure was taken from The Green

Initiative Fund at UC Santa Barbara, which had been created by a student referendum the previous year. TGIF's core campaign team consisted of about 15 students, who worked tirelessly in fall 2006 and spring 2007 to finalize TGIF's design and determine the best way to pitch it to Berkeley's student body. During the two "campaign" weeks immediately before the ASUC elections, the campaign team organized its 30+ additional volunteers for tabling activities on Sproul Plaza, spoke to student groups on campus, publicized itself via email, and debated critics. The TGIF campaign's \$3,000 budget was funded via a generous grant from Tom Kalil and individual contributions from passionate students.



The campaign team's hard work paid off - UC Berkeley's TGIF referendum succeeded, winning 69% of the student vote.

TGIF's 2007-2008 Grant Making Committee

Voting Members

Christina Oatfield – Associated Students of University of California representative
John Stanley – TGIF Chair, Graduate Assembly representative
Kelley Payne – Chancellor's Advisory Committee on Sustainability representative
Ed Arens - Faculty representative
Judy Chess – Facilities Services representative
Fahmida Ahmed - Administration representative
Morgan Wallace – TGIF co-chair, At-large student representative

Non-Voting Members

Kristina Punwani – Committee on Student Fees representative

2007-08 Highlights

The 2007-08 academic year was the first year of operation for TGIF. The first grant-making committee was appointed and met through the year to execute all aspects of TGIF. Much of the success of the grant-making committee was in establishing the infrastructure and processes of TGIF. The ASUC-Auxiliary agreed to house TGIF within its department, providing a home base for the financial administration and organizational knowledge.

The grant-making committee also organized a large publicity campaign to increase knowledge about TGIF and to solicit applications. Information was spread through class announcements, email lists, the launch of the website http://tgif.berkeley.edu, and three informational sessions with attendance totaling thirty people. The response to these efforts was great, with 28 grant applications submitted with a total fund request of \$1.2 million; in comparison, UCSB's TGIF

received 18 applications totaling \$490,000 in its first year of operation¹.

At the end of the year, the grant-making committee received an award from the Chancellor's Advisory Committee on Sustainability recognizing their incredible efforts to promote sustainability within the Berkeley community.

2008-09 Goals

For the second year, the main goals will be to increase campus outreach and awareness of TGIF and continue to improve upon the infrastructure and processes that were established. The committee will also consider moving up the grant application process to earlier in the school year to avoid the time crunch that accompanies the end of the school year.

 $^{^1 \ \, \}text{From UC Santa Barbara's TGIF page, available at <http://sustainability.ucsb.edu/tgif/06-07/index.php>.}$

Grants awarded for the 2007-2008 academic year

Anthony Hall Window Replacement and LEED-EB Certification (ASUC Auxiliary) \$10,000 awarded by TGIF

Project Leads: Bradley M. Froehle, Environmental Sustainability Chair, Graduate Assembly

Alberto M. Ortega Hinojosa, External Affairs Chief of Staff, Graduate

Assembly

Project Description: The Graduate Assembly Environmental Sustainability Committee aims to begin the process of having Anthony Hall LEED-Existing Building (LEED-EB) certified to increase energy efficiency and water usage. Due to the fact that Anthony Hall is a fees-funded unit, it is not eligible for deferred maintenance or other programs already in place at UC-Berkeley for increasing building efficiency. The TGIF grant will fund a professional assessment of the building to advise on the LEED process and will fund three main areas of improvement:

- Lighting replacements, including new light fixtures and proximity detectors
- Plumbing replacements, including low-flush toilets and sink aerators
- Outreach materials to educate students on green building standards

Campus Benefit: Due to the fact that Anthony Hall is in a visible location, a large percent of the campus community can learn about green building practices used in the LEED-EB certification. To measure the impact of the project, energy consumption will be measured pre- and post-renovation.

Building Sustainability at Cal (Vice Chancellor of Facilities Services) \$25,000 awarded by TGIF

Project Leads: Laura Moreno, Co-Chair, Chancellor's Advisory Council on Sustainability

Irene Seliverstov, Student

Project Description: Building Sustainability at Cal trains students to reduce the environmental footprint of buildings through two service learning classes and internships for students in each of the target buildings. Projects in nine campus buildings will educate building inhabitants and identify structural/operational changes that can be made to each building. More frequent building audits will also be made to help identify and push for more innovative and cost-effective technology.

Campus Benefit: This program will target electricity, water, carbon emissions, and waste reduction as the main measures of success. In addition to consumption data comparison, building occupant surveys will be conducted to determine the effect of educational outreach.

Earthweek (ASUC Sustainability Team) \$10,000 awarded by TGIF

Project Leads: Katherine Brittain, Project Coordinator, Earthweek

Jonah Lipsitt, Grant Coordinator, Earthweek

Project Description: Earthweek is a gathering of environmentally conscious individuals and organizations interested in educating the campus community about and encouraging environmentalism. Events planned for the week include resource fairs with organizations from across the Bay area, film screenings, sustainability workshops, and speaker panels. Organizers hope to showcase the university's efforts in leading the environmental movement and reestablish UCB as an important center for sustainability. TGIF funding for Earthweek will be spent over five years (\$2,000 per year) from 2009-2014.

Campus Benefit: Earthweek will bring together both grassroots activists and student groups with more formal institutions such as UCB departments and professors to appeal to a wider audience. By creating a space where the entire spectrum of environmentalism is displayed, organizers hope to reach and impact the campus community and encourage sustainable behavior among the entire student body. Post-event surveys will measure how many attendees felt a positive impact by attending Earthweek and what behaviors they plan on changing in their daily lives.

Healthy You for a Healthy Universe: Drinking Tap Water to Sustain Health and the Planet (University Health Services) \$5,000 awarded by TGIF

Project Leads: Cathy Kodama, Heath Promotion Manager, University Health Services

Trish Ratto, Health*Matters Manager, University Health Services

Project Description: Cal Dining, Recreational Sports, and University Health Services are collaborating on this campaign to encourage the campus community to drink tap water over bottled water, soda, and energy drinks. The campaign strategy is to build awareness through an information campaign, improving campus fountains and installing new refill water stations, and distributing free reusable water bottles. Students can take a pledge and learn more at http://uhs.berkeley.edu/tapwater/.

Campus Benefit: By encouraging the use of reusable water bottles, the campus waste stream and consumption of one-time use plastic bottles can be reduced dramatically. The goal is to reduce the sale of plastic bottles by 25%. By cutting down on unhealthy bottled drinks like soda, students save money and avoid the associated health risks like obesity related to these drinks. Pre- and post-campaign purchasing records, studies on student behavior, and tracking tap facilities will be used to evaluate the goals of this campaign.

Lower Sproul Eco-Charrette (Capital Projects)

\$4,000 awarded by TGIF

Project Leads: Dan Work, Representative to the Lower Sproul Plaza Redevelopment

Program Committee, Graduate Assembly

Beth Piatnitza, Associate Director, Physical and Environmental Planning

Project Description: The Lower Sproul Plaza Master Plan and Feasibility Study plans to incorporate an eco-charette, a collaborative brainstorming workshop held to identify strategies and goals for building green buildings, early in the design phase of the project. The eco-charette will provide a forum for collaboration and relationship building among the team in addition to building a set of sustainability standards for the master plan. Developing sustainability measures early in the planning phase will allow more substantial changes in construction and operation of the Lower Sproul Plaza.

Campus Benefit: The eco-charrette will provide an opportunity for interested parties to reshape the development of Lower Sproul into a more environmentally friendly center for student life. The eco-charrette will be measured by conducting comparisons between current consumption data with future consumption data after implementation.

Strawberry Creek Native Plant Nursery and Garden (Engineers for a Sustainable World – Berkeley) \$12,865 awarded by TGIF

Project Leads: Sintana Vergara, Vice President, ESW-Berkeley

Tim Pine, Environmental Compliance Specialist, Environment, Health and

Safety

Project Description: The Strawberry Creek Native Plant Nursery and Garden will be built between Giannini Hall and Wellman court to preserve the biodiversity of the region and provide a site to learn about the environment. The construction and monitoring of the gardening will be overseen by a student intern for the first year and volunteers will help to build and maintain the garden. This garden goes beyond the current restoration efforts of the university by building a new source of native plants for planting.

Campus Benefit: The project will benefit the university community by beautifying the campus, increasing biodiversity, providing environmental services, and developing a site for environmental education. The number of species planted, area converted and creek runoff are some of the indicators that will be measured through the project and displayed on signage to measure the efforts of the garden.

Student Internships for Jump-Starting the Office of Sustainability (Office of Sustainability) \$15,000 awarded by TGIF

Project Leads: Lisa McNeilly, Director, Office of Sustainability

Merrian Fuller, Graduate Student

Lila Mauro, Business Service Director Office of Procurement Services

Project Description: The Office of Sustainability, launched in January 2008, is funding three Sustainability Associate student intern positions to bolster its goal of implementing various sustainability activities on campus. The Sustainability Associates will support the Office of Sustainability on three projects: the Campus Forum for Sustainability, Sustainability Research and Assessment, and the Green Purchasing Action Plan.

Campus Benefit: One of the benefits of each of the projects supported by the student interns will help develop the Office of Sustainability in the first year of operation. In addition, the Sustainability Research and Assessment and the Campus Forum for Sustainability are expected to increase the efficiency of the sustainability stakeholders on campus and the visibility of their efforts. The Green Purchasing Action Plan will work with Procurement Services to increase the amount of recycled content goods purchased and used on campus, thereby reducing carbon emissions associated with purchasing.

University Hall: Going Green! LEED (Office of Environment, Health and Safety) \$10,000 awarded by TGIF

Project Leads: Rebecca Anderson, Environmental Specialist; Environment, Health and

Safety

Ian Baldridge, Radiation Safety Technician, Environment, Health and Safety

Project Description: The occupants of University Hall have teamed up to green the building with the end goal of LEED-Existing Building certification. The TGIF grant will fund energy efficiency retrofits in the building (replacing old appliances with energy efficient models like Energy Star). The Go Green! Team strives to surpass the university green building standards by proactively replacing older equipment instead of only purchasing Energy Star product for new purchases.

Campus Benefit: By updating the appliances, the energy consumption and carbon footprint of University Hall will be greatly reduced. Cost analysis of current versus new appliances place the savings at approximately \$700 per year in electricity. University Hall will also serve as a model green building for UCB and will provide a unique environment for students to apply sustainable practices to a real-life situation.

UC Berkeley Campus Dashboard (Berkeley Institute of the Environment) \$76,750 awarded by TGIF

Project Leads: Sam Borgeson, Masters Student

Omar Khan, PhD Student

Project Description: The Campus Dashboard will be a centralized database that gathers resource consumption data for the UCB campus community to easily access. The dashboard project hopes to accelerate the process of light retrofits and monitoring currently undertaken by UCB by installing meters and making the information more visible and accessible. By supplying consumption information, the Campus Dashboard will set a baseline for measuring impact after implementation to facilitate better comparison of data and support tracking of project impacts. Energy Dashboard kiosks will be installed on various university buildings to better measure energy consumption and increase the amount of information provided.

The final piece of the project will be a study of how the feedback consumption data will change the behavior of the campus community. A campus competition will be held to reward creative uses of the data, and two winners will be given prize money to fund their proposed project. By holding a competition, the project leaders aim to raise awareness of the dashboard and spur more people to develop new ideas for using the information.

Campus Benefit: The project goal is to create a tool that other projects can use to quantify their resource savings. However, studies on the effects of feedback change on energy consumption estimate 5-10% reduction in usage of resources. To test the effect of the dashboard to encourage behavior change, buildings with energy reduction efforts will be compared with buildings that do not have such programs.

Complete list of TGIF project applications for 2007-2008

ID #	Application name	Sustainability issue addressed	TGIF grant request
1	Apartment Energy Scorecards	Online tools, measuring and comparing students' energy use in their residence	\$10,800
2	Healthy You for a Healthy Universe	Promote tap water with public information campaign and distribute free bottles	\$20,000
3	On-Campus 3rd Generation Solar Panel Pilot Project	Install cutting edge solar technology that saves energy and money.	\$90,000
4	Cal Farmers	Create a model of small scale sustainable food production for the campus community	\$61,350
5	Durant Hall Renovation LEED documentation	Pay for the time and personnel necessary to register and certify Durant Hall for LEED (USGBC)	\$60,000
6	Anthony Hall Window Replacement and LEED-EB Certification	Improve energy efficiency of Anthony Hall while also beginning to get it LEED-EB certified	\$94,665
7	Building Sustainability at Cal	Trains students to reduce environmental footprint in service learning classes and internships	\$45,400
8	Resource Green Roof Classroom Initiative (RGRCI) for Wurster Hall	Installing a green roof on College of Environmental Design	\$91,000
9	Strawberry Creek Native Plant Nursery and Garden	Creating a native plant nursery and garden between Giannini Hall and Wellman Court	\$12,865
10	LEEDing Boalt towards a Greener Future	Ensure that new Boalt building is LEED Gold instead of the Campus required Silver	\$75,000
11	Berkeley Green Campus Program	Variety of student projects, changing behavior and implementation of energy efficient products	\$26,400
12	Sustainable Sanitation at Wurster Hall	Install meters throughout Wurster, giving vital baseline data in order to change the plumbing and launch a public outreach campaign about water usage	\$62,500

ID #	Application name	Sustainability issue addressed	TGIF grant request
13	Earthweek	Fund Earthweek (a weeklong gathering of environmentally conscious individuals and organizations) for 5 years	\$10,000
14	Student Internship for Jump- Starting the Office of Sustainability	Create this office that will champion and implement various sustainability activities on campus	\$25,000
15	ASUC Water Fountain Replacement Project	Improve campus tap water and encourage drinking this water over the alternative of carbon-intensive bottled water	\$50,900
16	Berkeley Rideshare Project	Provide web-based dynamic ridesharing service	\$35,000
17	Green Awakening	Meant to accelerate the acculturation of students, staff and faculty to acting "green"	\$54,750
18	Fostering Agroecological Literacy within the UC Berkeley Campus Community	To promote awareness of food system in bay area and rest of the world	\$44,440
19	UC Berkeley Campus Dashboard	Will develop a centralized database and website that aggregates resource consumption data for UCB campus	\$76,750
20	Use it or Lose it: Groundwater Capture and Use	Using acclaimed water to fill the campus' irrigation needs	\$71,450
21	University Hall: Going Green! LEED	Make University Hall LEED certified	\$20,000
22	Low Flow Toilet Technology: A pilot study to determine feasibility	A pilot studty to examine the feasibility of using dual-flush and low flow toilets instead of the high-flow variety, currently in use	\$11,200
23	Business Review at Berkeley	To maintain circulation of 5,000 copies of the periodical (printed on recycled paper) every month and encourage sustainability	\$1,070
24	Lower Sproul Plaza Redevelopment Eco-Charette	Incorporate an Eco-charrette into the Lower Sproul Plaza Master Plan & Feasibility Study	\$8,000
25	University Hall Green Roof Project	Create a green roof on University Hall; this is In concert with the Go Green! Initiative to make University Hall the first highly rated LEED- EBOM certified building on Campus	\$75,000

ID #	Application name	Sustainability issue addressed	TGIF grant request
26	University Hall North Well Landscaping Project	Improve the environmental landscaping; this is In concert with the Go Green! Initiative to make University Hall the first highly rated LEED-EBOM certified building on Campus	\$45,000
27	Heliostat Passive Solar Mirror System	Illuminating building exteriors and interiors using experimental sun tracking mirror technology called heliostats: improves LEED status	\$10,100
28	Recycle / Reuse Bags for Cal Day 2008	Reusable bags to reduce waste from disposable plastic bags at Cal Day	\$20,000
	TOTAL GRANTS REQUEST		\$1,208,640

The Green Initiative Fund Budget 2007-2008

Updated October 28th, 2008

<u>Income</u>

Total Income	\$ 277,364.21
Carry-forward from previous year	\$ -
Gross Revenue from student fees	\$ 277,364.21

Expenses

Total Expenses	\$	277,364.21
Total Estimated Rollover	\$	88,709.21
Grants awarded	\$	168,615.00
Grant Coordinator Salary and benefits Office Expenses (supplies, phone, etc.)	\$ \$	15,000.00 5,040.00
Non-grant expenses	\$	20,040.00