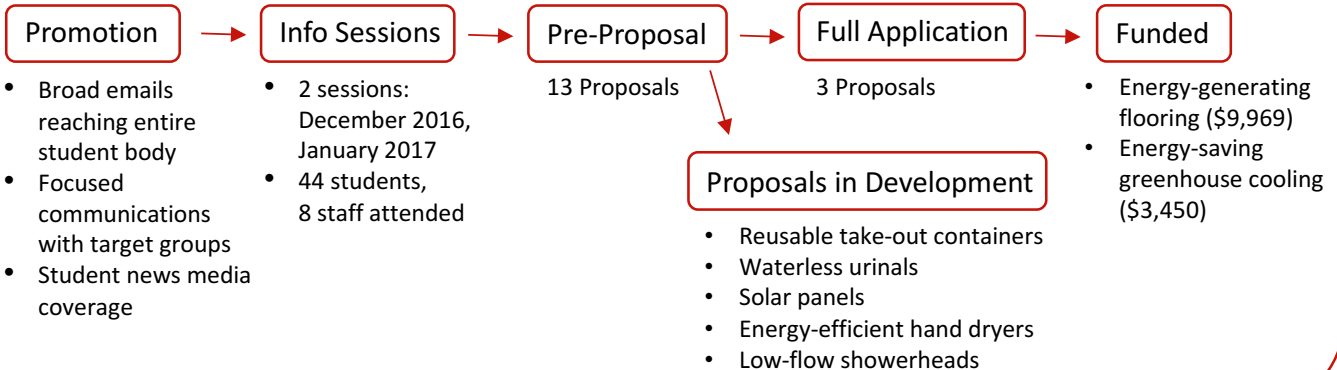


UW–Madison Green Fund

Progress Report 2016-2017 Academic Year | April 25, 2017

The UW–Madison Green Fund supports student-initiated projects that reduce the environmental footprint and operating costs of on-campus facilities in the areas of 1) solid waste, 2) energy, and 3) water conservation. The following report summarizes progress during the 2016-2017 academic year, the first Green Fund grant cycle administered by the UW–Madison Office of Sustainability (OS).

Green Fund Summary 2016-2017



The Green Fund awarded \$13,419 to two projects during the 2016-2017 academic year.

Five additional projects are in development. This will provide a strong applicant pool for the 2017-2018 Green Fund.

Green Fund staff created a process by which UW–Madison can support student-initiated infrastructure projects.

The Green Fund team developed application materials and review processes to identify proposals with the greatest expected environmental and economic impact. Proposals are reviewed by students appointed by the ASM Sustainability Committee, faculty members, OS staff, and facilities staff. Feedback solicited from all applicants, information session attendees, and Review Committee members will inform process improvements for the coming Green Fund cycle.

The Green Fund process facilitates collaboration between students and staff for mutual gain.

The proposal development process requires communication between students and staff to ensure projects are useful and feasible for campus. Students bring new ideas and energy, and staff provide grounding in the logistics of implementation. This is an important learning opportunity for students and builds ownership by the host facility. Further, facilitated proposal development diffuses knowledge among existing and potential applicants and fosters a high-quality pool of applicants for subsequent grant cycles.

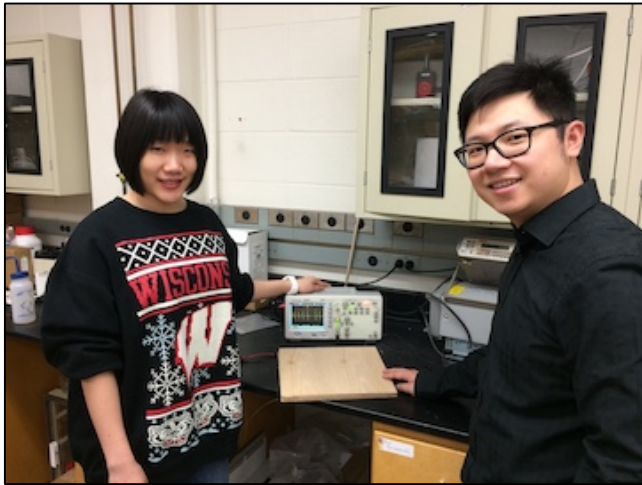
Green Fund staff identified a system for tracking impact of funded projects.

The Green Revolving Investment Tracking System (GRITS), an online tool used by more than 300 institutions, will allow staff to track the progress of Green Fund projects at UW–Madison and peer institutions.

For more information, please visit sustainability.wisc.edu/greenfund or contact Cathy Middlecamp: cmiddle@wisc.edu or Rob Lamppa: robert.lamppa@wisc.edu
Interim Co-directors | Office of Sustainability



Office of Sustainability
UNIVERSITY OF WISCONSIN-MADISON



Energy-Generating Flooring

Engineering graduate students Chunhua Yao and Quan Chen will install energy-generating flooring in a checkout line in one of the dining centers. This technology, developed through their PhD research, harnesses the kinetic energy of people's footsteps as a renewable energy source.

UW Physical Plant and Housing Dining staff will work with the students to design and install the pilot system. A screen connected to the flooring system will educate students about the technology and the Green Fund as they wait in the checkout line.

If deployed on a larger scale, the students' calculations show that a single jump by all spectators in Camp Randall could power six seconds of the energy needs of the high-intensity stadium lighting.



Energy-Efficient Greenhouse Cooling System

Residents of Leopold Hall will work with UW Housing and Physical Plant staff to integrate an energy-efficient evaporative cooling system into their rooftop greenhouse. This will improve the space's usability as a learning and working environment for students.

The variable speed half-horsepower motor of the system will reduce the need for the current two-horsepower venting fans. Greenhouse manager Tom Bryan calculates reduced energy use by 37,500 kWh, utility costs by \$1,448, and CO₂ emissions by 21.6 metric tons over the 20-year lifespan of the system.

The GreenHouse Residential Learning Community in Leopold Hall will also integrate data collection and analysis on the impact of the cooling system into its curriculum.

Synergies with Dane County

The Green Fund positions UW–Madison for collaboration with the sustainability efforts of Dane County. In 2012, the county committed to reducing and eventually eliminating dependency on fossil fuels and harmful chemicals by its departments. The 2016 Dane County Sustainable Operations Plan lays out goals, objectives, and strategies in the areas of climate change, transportation, water, waste, facilities, purchasing, education, and employee experience.

Dane County conducted an assessment of solid waste systems in all county-owned facilities in 2016. This led to all facilities receiving updated recycling bins that reflect advances in recycling technology, improved signage, and information sessions for employees.

Since 2012, Dane County has operated the SMART fund, a \$2 million allotment for county departments with a similar mission to that of the Green Fund. The parallel effort at UW–Madison creates opportunities for building synergy.

Organizational Infrastructure Established 2016-2017

Forms & Guidelines

- Application guide
- Budget worksheet
- Impact calculator
- Letter of support from host facility
- Review Committee rules and evaluation rubric

Evaluation

- Feedback surveys for:
- Info session attendees
 - Applicants
 - Review Committee members

Communications

- Website and Facebook
- Promotional flyer & email
- Info session presentation

Project Tracking

- Green Revolving Investment Tracking Tool (GRITS)
- Hour meters for energy use measurement

