



Sustainability and Cost-Saving Projects October 2011

- **Energy Efficiency Projects**

- **Energy Recommissioning:** Facilities Services recommissioned Olin-Rice Science Center, the largest energy user on campus. The lights and vent hoods were placed on occupancy sensors to ensure that the building is only heating or cooling spaces when needed. The electric motors in the heating, cooling, and ventilation (HVAC) system have also been changed to more efficient variable speed drives. These adjustments save the college over \$50,000 in energy costs annually.
- **Xcel Rebates:** Because of its recommissioning and energy efficiency work, Macalester College has received over \$826,096 in rebates from Xcel Energy since 1994.
- **Clean Energy Revolving Fund (CERF):** In place from 2007-2009, CERF has invested in several campus energy and water efficiency projects. The group's work includes insulating student apartments, installing low-flow fixtures, purchasing ENERGY STAR appliances, and installing efficient light bulbs. CERF projects are estimated to save \$46,231, as well as 2,166,705 lbs of CO_{2e} and 260,000 gallons of water annually. CERF was merged with the Technology, Equipment and Maintenance Sustainability Fund in 2009.
- **Kagin Commons Coffee Urns:** In the summer of 2009, Facilities staff researched how long coffee urns needed to heat up and asked Bon Appétit to turn on coffee urns only an hour before an event instead of keeping them on continually. The result is estimated to be \$2500 in annual cost savings.

- **Recycled Products**

- **Paper Products:** Macalester College switched from using regular sanitary paper and paper towels to using comparable Green Seal certified products. Green Seal is a non-profit organization that develops standards and certifies products to ensure that purchases are as environmentally friendly as possible. By switching to the Green Seal products, Macalester College reduced its negative environmental impact and now saves \$24,795 annually.
- **100% Recycled Letterhead,** Since September, 2008, switching to recycled letterhead is estimated to have saved 102 trees, 8,934 lbs CO₂ (the greenhouse gas emissions equivalent of driving two cars for nearly a year), 37,083 gallons of waste water, and 4,762 pounds of solid waste. In addition, the letterhead paper turned out to be cheaper than the original non-recycled paper. The cards and envelopes are slightly more expensive; overall the change will have a minute financial impact on the budget.

- **Recycling Rebates:** Information Technology Services returns printers to Hewitt Packard for recycling and receives a rebate for each of the printers returned. Since 2007, these rebates total \$44,832.
- **Waste Reduction**
 - **Pig Food Waste Recycling Program,** As of February 9, 2009, food waste from Café Mac is picked up by Barthold Farms, cooked in a special truck, and transformed into feed for free range pigs. Making pig food out of Café Mac food waste reduced waste hauling fees and keeps organic waste out of a landfill or incinerator. The program is expected to save money though reducing waste hauling fees, which will at least pay for the program. So far, the program has cut trash by 50%.
- **Electronic Media**
 - **E-billing:** The Student Accounts Office switched from paper bills to a new eBilling process in the summer of 2008. Moving to eBills reduced paper needed for bills and envelopes and saved the cost of postage. The switch saves \$11,220 annually. Student Accounts utilized the technology that was already available and increased its customer service as well as saved money.
 - **Greening Reunion:** As part of a Greening Reunion project, the alumni office avoided mailing 9318 postcards by sending emails, which saved over \$1000 in mailing costs and reduced paper use.

Estimated Cost Savings as of October, 2011: \$ 1,377,346

Project	Date completed	Sustainability Cost Savings Projects		Oct-11	Total Savings
		Annual savings \$	Time Since Started years	One Time Savings	
Olin Rice Energy	Dec-06	50,000	5		\$ 250,000
Xcel Rebates	1994 through Jan 2011			826,096	\$ 826,096
CERF		46,231	2.5		\$ 115,578
Paper products	2007	24,795	4		\$ 99,180
Ebilling	summer 2008	11,220	3		\$ 33,660
Reunion email	summer 2008	1,000	3		\$ 3,000
Kagin coffee	summer 2009	2,500	2		\$ 5,000
HP printer rebates	2007-2011			44,832	\$ 44,832
TOTAL					\$ 1,377,346

Please send additions or corrections to Suzanne Savanick Hansen (shansen2@macalester.edu).