

# Campus Energy Solutions: Innovations and Results from a Collaborative Program

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## Introduction

This poster describes a collaborative University campus office sustainability program targeting 74 employees in two University departments that share a floor. During the 2008-2009 academic year, representatives from both departments led a “Be Green” program to motivate the adoption of energy and waste reducing behavior and policies. This poster focuses on the energy piece of the program.

## Methods

We conducted an equipment inventory, individually metered a sample of workstations’ (~1/3) computers and computer peripherals, metered a portion (~1/4) of the floor’s plug loads from the circuit box, administered online surveys (81% response rate), and conducted focus groups (34% of employees) to characterize baseline office electricity use and policies and to identify staff priorities.

Energy saving information and encouragement were provided to staff via “green bag” lunch programs with expert speakers and Q&A, a bulletin board, electronic newsletters, signs in the office, prizes, and with encouragement from supervisors. Feedback from lunch programs, surveys, and focus groups was used in conjunction with baseline information to guide the format and content of “Be Green Action Menus” which encouraged each employee to try and evaluate a handful of short term energy and waste saving actions. Surveys asked employees to evaluate the program and weigh in on consensus based long-term actions. At the final lunch, students presented energy savings and feedback from surveys and action cards, discussed lessons learned, and issued targeted role-based recommendations to executive, administrative, IT, and general office staff, as well as recommending appointing a “sustainability coordinator” akin to a department safety coordinator.

## Results

Approximately ¼ of the floor’s circuits were metered before the program began and during the “Action Menu” period. Overall, the sampled area reduced nighttime and weekend energy use by 33%. Daytime use dropped by 18%, although that may have been partially because of a seasonal reduction in space heater use. Typical weekly energy use dropped 22%. Survey responses indicate that prompts around the office were most helpful in reminding participants to try actions. Plugging electronics into a power strip and turning it off at night was the most frequently tried action, followed by several waste actions, then changing computer settings. Office staff rated the energy saving actions as relatively easier to try than transportation and waste actions. Barriers identified by participants include a need for technical support to change computer settings and the purchase of power strip extension switches that could be placed on a desktop rather than under a desk. Participants highlighted the importance of personal interaction, the actions of peers, targeted information, and feedback on floor performance.