



**Earlham College
Richmond, Indiana
Environmental Education and Outreach**

SCHOOL

Earlham College, private, 4-year, 1200 students, Richmond, Indiana.

ABSTRACT

Earlham Energy Wars was an electricity-saving dorm competition created as part of Campus Conservation Nationals. The competition was unique at Earlham in its use of computer science students building the technology infrastructure to monitor dorms throughout the fall in conjunction with the campus electricians and facilities officers. The competition pitted four dorms against each other in a Star Wars themed energy saving battle over the course of three weeks. The entire competition ran on a budget of approximately \$1000 and involved a team of student leaders, a captain for each dorm, a campus wide kick-off party, and the reward of a burrito from a locally owned restaurant for participants in the winning dorm. This was the first year of the competition, and the total campus savings came in at 3272 kWh, with the winning dorm saving 21.2% against their baseline.

GOALS AND OUTCOMES

Goals

The project aimed to measurably reduce residential electricity use through social psychology methods of peer competition. Quantifiable goals were to participate in the competition with as many students making online commitments as possible. In the next 2-3 years we would like to see all campus residence halls participating in the competition and savings of more than double the electricity saved in the competition's initial year.

Accomplishments and Outcomes

The competition resulted in savings of 3272 kWh or \$229. In addition, 500 online commitments were made, however individuals made multiple commitments so the number of participants was much smaller.

This was Earlham's first energy reduction competition targeted at residence halls. The competition proved that this type of campaign can deliver measurable results, and with stronger preparation and student buy-in earlier on (through earlier recruitment of captains, leaders, and more decentralized responsibilities) the competition will grow and result in greater savings in the future.

Challenges and Responses

Major challenges included infrastructure glitches and technology challenges in using student built energy monitoring capabilities. This resulted in a scramble to secure the dorms that could compete and thus a lack of preparation by some participating dorms. The project also encountered a slowing of momentum as the three weeks passed, which could be altered by placing the competition earlier in the year, instead of right before the summer vacation. In the future, the coordination between computer

science students, facilities, and sustainability staff will be improved through earlier planning, more structured meetings, and clearer collaborative goals.

Campus Climate Action: Your School's Carbon Footprint

The project focused on conserving electricity usage, which in Indiana means reducing dependence on coal. This reduces CO2 emissions from the coal fired power plants that supply our electricity, thus reducing our carbon footprint.

Commentary and Reflection

This first year of the competition was completely student planned and implemented. It was a huge learning experience and was made possible by having the support structure of the Campus Conservation Nationals competition to rely on. We are excited to build from here in the future!

ENGAGEMENT AND SUPPORT

Leaders and Supporters

The project was completed by the Center for Environmental Action's student sustainability intern (a 10 hour per week position) in conjunction with a group of 4 student leaders and 6 dorm captains. The competition was supported by the office of residence life, the computer science department, the facilities department, and the Center for Environmental Action, as well as the office of the president.

Funding and Resources

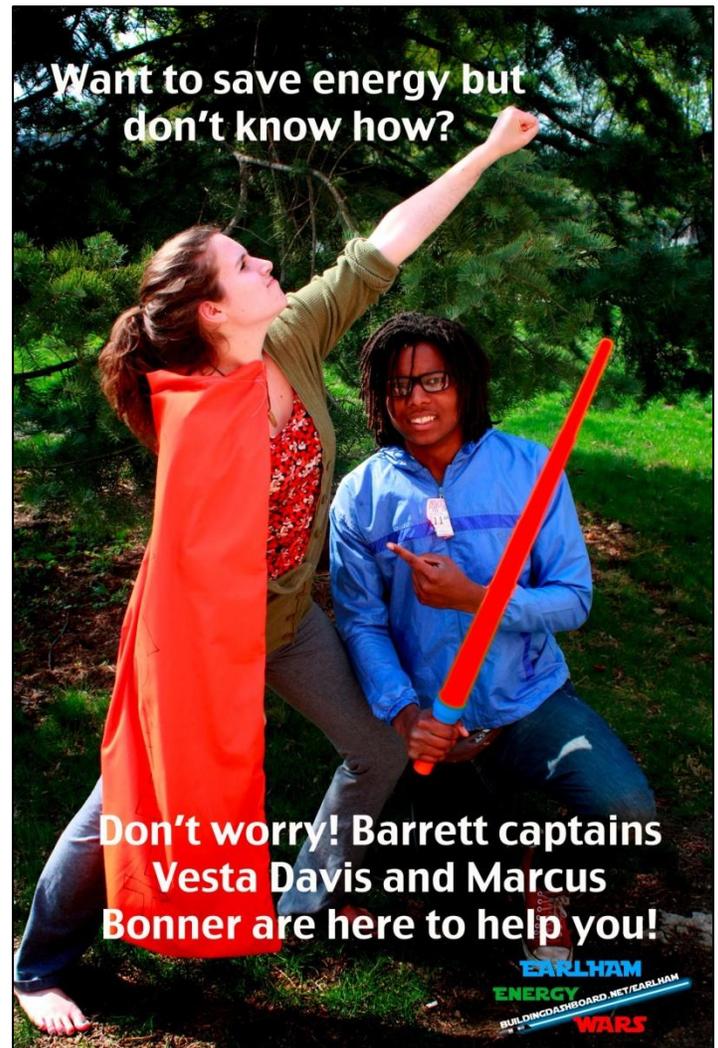
The project was budgeted at \$1475, which was funded entirely through a Student Action Research Grant from the Center for Environmental Action. The actual expenses of the project were slightly less than budgeted.

Education and Community Outreach

The competition was promoted through a picture campaign of professors engaging in energy saving practices, through an all campus study break/kick-off party, through a large banner hung in the dining hall daily that was changed to promote the daily winning dorm, through social media campaigns, and through flyer. The reward for the competition was arranged with a local business to provide support for local businesses. In future years we would like to have the competition covered by the local paper.

National Wildlife Federation's Campus Ecology Program

This competition was part of Campus Conservation Nationals.



CONTACT INFORMATION

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MORE ABOUT YOUR SCHOOL

Campus Sustainability History

In the same year as creating this competition, the college also engaged in a comprehensive sustainability planning process, began its Center for Environmental Action, held a Climate Action Carnival, began a speaker and film series on sustainability, and increased coordination between sustainability related organizations and employees on campus. The Center for Environmental Action can be found online at: www.earlham.edu/center-environmental-action, on Facebook, and on Twitter at [@EC_Sustainability](https://twitter.com/EC_Sustainability).

Image Credit: Rachel Warriner '14