

Campus Conservation Nationals 2015 Case Study

Pima Community College Tucson, AZ



1. SCHOOL DEMOGRAPHICS

2-year institution, approximately 50,000 students

2. AUTHOR AFFILIATION

David Davis, Energy Resource Manager

3. COMPETITION TYPE & DATES

Our competition was for both electricity and water and was held

April 6th – 24th. The time period was chosen to give the college a full competition period without any interruptions for spring break and enough time on the front end to plan the competition and get everything in place for our first year.

4. OVERVIEW

Our college is unique in that it is made up of six geographically separated campuses. The greatest benefit in participating in the competition was expanding awareness of conservation issues and awareness of organizational interest and support of conservation efforts. This is not only true of student awareness, but also awareness among college staff.

5. GOALS

This was our first year in the competition so no real goals were set other than gaining awareness of the competition process.

6. RESULTS

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| Overall % reduction (electricity): 4.69% | Average CCN % reduction (electricity): 2.9% |
| Electricity saved (kWh): 66,255 | |
| Equivalent savings: \$7,950 | |
| Equivalent lbs CO2: 80,765 | |
| Overall % reduction (water): 15.07% | Average CCN reduction (water): 1.8% |
| Water saved (gallons): 249,656 | |
| Equivalent savings: \$2,527 | |

7. GROUP COMPETITION

Competition name: N/A

Participating schools: N/A

8. PLANNING

Competition Organizing Team

Facilities Ops. & Const. Director and Program Assistant – Team Leaders

Faculty Team – Competition Organizers and Support

Student Life Coordinator – Awareness and Promotion

Students Clubs – Awareness and Promotion

Campus Facilities Teams – Meter reads and real time campus adjustments

Members volunteered (facilities teams were assigned by their supervisors). Meetings were held every two weeks starting in January. Next year we will start getting the word out to campus administrators sooner, probably around February for an April competition.

Key Supporters

Facility Technicians were critical in both performing required meter reads, and in instituting energy and water savings. Most savings can be attributed to technical staff.

Timeline

The Competition Organizing Team was formed in January. We followed the timeline provided CCN pretty closely, just with a later start.

Funding

The Facilities Operations & Construction budget was used for promotional posters and awards. \$100 donations of prizes were supplied by two local groups – Tucson Electric Power and ASHRAE Tucson Chapter

Resources

Competition planning guide

BuildingOS

Logo packages

9. OUTCOMES & ACCOMPLISHMENTS - OVERALL

The competition established an excellent benchmark for the school and really opened the door to start talking about conservation on new levels. Now the college knows what is possible and how beneficial our conservation efforts can be when we support those efforts and make them sustainable.

10. OUTCOMES & ACCOMPLISHMENTS – STUDENT LEADERSHIP

“I would say the most valuable knowledge that I gained through this competition is just how much the staff and faculty care about our community, their students, and Pima Community College. It was a true blessing to see teachers, students, advisors, various faculty, as well as the wonderful maintenance staff all working together to not only participate in this competition, but to make a difference in our schools future. As students we voiced our concerns and observations and the wonderful maintenance crew actually listened to us and made changes accordingly. On the flip side we became aware of how hard everyone works on campus. In addition we became aware of the astronomical bills that we create every month in water and electricity, and this in turn made me extra cautious of choices that I made in water and electric use on campus as well as at home and work. You can still find me on campus walking down the hallways turning off lights of unused classrooms, and playfully harassing people to take the stairs instead of the elevator, and although it did not factor into the competition I still encourage people to use the recycle bin and often pull recyclables out of the trash and toss them into the adjoining recycle bin. Every person’s small efforts add to the collective whole. I am very proud that I had the opportunity to be part of this competition on so many different levels. I am very proud that we worked so hard together and that we did so amazingly well in the competition. Nothing like a competition to help make changes in the world. I look forward to placing even higher in the competition next year, as well as helping Pima Community College save some money, and to also make a difference in the environment in my community.”

- Student co-founder of Pima’s Sustainability Club

11. OUTCOMES & ACCOMPLISHMENTS - MARKETING, EDUCATION, & BEHAVIOR CHANGE

Implementation & Outcomes

Our kickoff event, hosted at our Downtown campus, had the largest draw. Local businesses and clubs were invited to participate and the college had food trucks available. Student Clubs signed up staff and students and directed them to the dashboard page to pledge commitments online or on large poster boards.

Prizes were awarded (solar backpacks and solar chargers) to students who volunteered hours to help raise awareness.

We hosted an award ceremony at the end of the competition (two weeks after) to give out the student prizes and certificates for the campus leaders (local competition on reduction – campus vs. campus). We awarded a large copper dragon (crafted by

students in our welding technology class) to the campus president with the highest overall reduction.

Effectiveness

Because all of our campuses are commuter campuses, students have very little opportunity to reduce resource use. We have no residential facilities that would allow students to manage their environment. Most savings came from central plant operational adjustments. That being said, there was an effort to improve awareness of larger conservation topics. An effort was made to have students conserve beyond their time on campus.

12. CHALLENGES

A major challenge could have been the weather. This year we were lucky that weather did not become more demanding during the course of the competition. It might be expected that in future years we may have more resources used during the reduction than were consumed during benchmarking.

13. WISDOM & GUIDANCE

Involve facility technicians in the competition. They are key to being able to adjust and optimize facility operation.

14. CONTACT

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**Open to being contacted by other schools for questions and further information*

15. SUSTAINABILITY AT PIMA COMMUNITY COLLEGE

There are a large number of groups interested in resource conservation, but they don't necessarily all have the same interests; and may not even be aware of each other's efforts. We are working toward a more sustainable way of running an organization from many different angles. This includes planning, purchasing, reduction strategy, and how college departments interact with student and community groups involved in sustainability - a work in progress.

16. POSTERS, PHOTOS & VIDEOS

