Trinity College’s Energy Program Newsletter!

This past Fall Trinity College engaged a new partner, ARAMARK Higher Education, to develop and implement a program to improve energy efficiency on campus. The program will focus on energy consumption reduction strategies and will involve the entire campus community. Reducing energy consumption presents several major benefits to the College and our community.

- Significantly reduce our campus carbon footprint and our annual energy budget.
- Provide opportunities for students, faculty, and staff to learn about energy conservation and sustainability.
- Improve system reliability, efficiency, and comfort for students, faculty, and staff.

The goal of the energy program is to assist Trinity College in realizing these benefits. In this first edition energy program newsletter we will explore what has been completed and the activities that will occur over the next few months.

About Trinity’s Energy Management Team

Trinity’s energy program will be led by Dariusz Raczkowski, a member of the Trinity College facilities team. Dariusz will guide Trinity College in reducing its carbon footprint and improving comfort on campus by optimizing building systems and implementing energy conservation measures. Dariusz will be supported by ARAMARK's team of experts with experience in troubleshooting, maintaining, and optimizing energy-consuming systems.

What we have done so far . . .

Data Gathering

Since arriving on campus, the initial step in the energy program has been to gather and verify the existing energy consumption data from both the College and our utility providers. From this data, an energy baseline for the College and individual buildings was created and will be used when comparing Trinity against other colleges of similar size and geography. In December, a survey of campus buildings was conducted and a list of potential energy conservation measures was created. Surveying the campus buildings and systems helped to identify control changes, maintenance, repairs, and capital investment projects that will reduce energy consumption on campus.
The energy conservation measures identified from the survey will be reviewed and prioritized, and selected projects will be implemented over the next few years. The facilities department has already begun addressing deficiencies in how the building automation systems operate, which will positively affect issues regarding thermal comfort. There will be an ongoing effort by operations, our energy manager, and facilities technicians, to review the operating characteristics of the buildings, fix problems, and adjust them to optimum performance. The data gathered, as well as your input, will be invaluable in identifying areas of opportunity, evaluating corrective actions, and improving the performance and efficiency of our campus.

Winter Curtailment
Over the winter break a curtailment program was implemented in unoccupied buildings to reduce energy consumption, this included turning down temperatures and reducing fan speeds and pumps. In addition to saving energy, we identified a number of system repairs and enhancements that will lead to improved comfort and additional energy reductions.

A similar curtailment program will be implemented during the summer to reduce energy consumption in unoccupied or low occupancy buildings.

What we are working on . . .

Real-Time Data
One of the first energy projects that we are working on is the revitalization of the dorm wars. The existing electricity meters will be connected to a new web based monitoring system. This system will provide real-time electricity consumption information and will also provide automatic scoring for the dorm wars competitions. This site will become a focal point of Trinity’s energy program and is an excellent tool to learn more about energy consumption on campus. Everyone will be able to see and participate in the impact they have on building energy use. We expect to have the first phase of this program operational by the end of the spring semester. We’ll be sharing more information with you about this system in the near future.

Building Use Schedules
The energy team is also analyzing occupancy schedules for each building and is working with building occupants to best align the equipment operating schedules with user schedules to ensure equipment is running only when needed. Not only will this measure reduce energy consumption but it will also improve comfort throughout campus. Critical systems that are associated with life safety, security, and lab experiments will remain on 24/7 operation unless the user changes how a system or equipment is used and in that case should notify the Facilities Department of those changes. Building systems will also be scaled back or turned off when campus buildings are unoccupied during school breaks.

We’d like to thank the Trinity College Sustainability Committee and the Trinity Student Chapter of Energy Engineers for helping us better understand how Trinity College operates. If you are interested in learning more about the energy program or to become more involved please contact Dariusz Raczkowski at dariusz.raczkowski@trincoll.edu.

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