



**OFFICE OF THE PRESIDENT
SA SUSTAINABILITY COORDINATOR**

Walk for Dark

Thursday, April 9th – Friday April 10th

Synopsis:

The “Walk for Dark” is program organized and administrated by the Projects and Services Committee of the Student’s Association. The purpose of the “Walk for Dark” is to make the University of Rochester’s campus more sustainable by reducing energy that is lost to lighting academic buildings at night. In order to achieve this, volunteer students surveyed academic buildings on campus at three different times at night.

Methodology:

Volunteer students from the Student’s Association, Grassroots, and Engineers for a Sustainable World were assigned a shift. The three shifts that were performed were at 10:00 PM on Thursday, April 9th, 12:00 AM on Friday, April 10th, and 2:00 AM on Friday, April 10th. Each shift had five groups made up of two people. Each group was assigned an area of campus and surveyed the buildings in that area. The assignments were given using a map of campus, with the assigned areas and buildings for each group were highlighted. Volunteers then recorded the side of the building, the floor, and the number of lights on. This data was collected and tabulated, then analyzed to find patterns and consistent areas the need improvement.

Results:

The following table summarizes the results of the survey for each building. The numbers indicated the number of lights on during the shift.

	10:00 PM	12:00 AM	2:00 AM	Total
Lattimore	19	14	22	55
Morey	20	10	7	37
Dewey/Carol G. Simon	23	28	9	60
Baush and Lomb	9	27	24	60
Hoyt	All	All	All	All
Hopeman	9	4	6	19
Gleason/Schlegel	39	39	21	99
Wallis	11	34	29	74
Goergen	13	11	34	58
Computer Studies	12	7	9	28
Hutchison	13	9	31	53
Hylan	17	8	29	54
Harkness	9	18	--	27
Gavett	41	21	--	62
Meliora	0	6	0	6

Although there are clear outliers, these outliers are reasonable because each area was covered by a different pair of students, and groups had different interpretations of the instructions. Despite these outliers, there are several clear patterns that arose from the study. The following sections discuss major issues and trends that can be resolved.

Stairway and Hallway Lights

The student volunteers frequently commented on stairway and hallway lights. All the stairway and hallway lights were on, presumably for a specific reason. However, the energy used to power these lights could be reduced if the lights were dimmer or every other light was lit. Also, if this lighting is not necessary, then it should not be used at all. The lighting should be put on a sensor so that it only comes on when necessary. The stairway and hallway issues should be addressed because if they are fixed, then it will have the greatest impact on reducing energy and the cost associated with it.

Simon Graduate School of Business Buildings

Another pattern that was clear from the research is that the buildings in the Simon Graduate School of Business have much room for improvement. In all three shifts, every light in the basement of Schlegel/Gleason was on. In addition to the hallway and stairway lights, there were frequently classroom and office lights that were left on for the night. Although it is possible that people working late into the night were using some of these lights, it is highly improbable that roughly forty lights were being used for these reasons given that most of the Simon students return to their homes at night and that most people sleep at night. Gleason, Schlegel, and Wallis Hall should all be targeted for improvement. Staff and students should be notified and reminded to turn off the lights to reduce wasted energy. This report should be communicated to staff and students, because there is clear evidence from the research that Gleason, Schlegel, and Wallis buildings are in need of drastic improvement. The Simon School is a clear weakness in the sustainability on campus.

Unintentional Lights

There were many instances of lights unintentionally left on in majority of the buildings. Meliora Hall seemed to have less lights on than most of the other academic buildings, however, this could be attributed to the structure of the Meliora. The survey was taken by looking through windows from the outside, and much of the Meliora is underground, so any lights left on at night underground would not be counted. The other academic buildings should be continually reminded to turn off the lights until there is a clear improvement. Student volunteers commented that several lights seemed to have been left on all night seemingly unintentionally. In many reports, groups could see into the room and could see that the rooms were unoccupied. In one group's report, they specifically mentioned a desk lamp and a light left on at 12:00 PM with no one in the room. When the next shift was asked to follow up on this at 2:00 AM, they reported that the light was still on. If staff and students were reminded of the importance of turning off lights to reduce energy, then there may not be so many lights accidentally left on for the entirety of the night. Possible solutions include featuring reminders in newsletters or emails, or holding contests between academic buildings to see which can reduce their energy usage by the

largest percentage. If these solutions do not work, then sensors should control the lighting in every room.

Other Buildings

Other comments that groups recorded during the Walk for Dark included comments about buildings that were not being surveyed. One group attended every shift and covered the same area each time. They noted that the lights in Strong Auditorium and Todd Union were left on during each shift. If there is no specific reason for these lights to be on, then they should be turned off at night. Lights in Danforth and Douglass dining halls and the Meliora restaurant were left on for the entirety of the night as well. These dining centers are not open from 10 PM to 2 AM, so the lights should be off or controlled by a sensor. Groups reported that lights were on in Spurrier and Sage, and that this was actually a recurring issue that they had noticed on previous nights. Lights were on all the libraries, specifically Carlson and Rush Rhees libraries, and although the libraries were open, groups reported that lights were on in the stacks and in individual rooms in the libraries. The stacks and the rooms should have sensors so that when they are not in use, the lights are off.

Potential Solutions:

The research demonstrates that many lights are not being turned off at night, wasting valuable resources. In order to improve the sustainability of this campus, it is recommended that action be taken to solve this problem. Awareness will play a vital role in solving the problem; if staff and students are aware of the impact of leaving lights on, they are more likely to change their habits. Emails, newsletters, and other forms of advertising are all possible ways to increase awareness. Contests involving academic buildings are also a possible solution as long as there are appropriate incentives (e.g. using some of the money saved by turning off the lights for something that staff in the building want). Another potential solution to the problem is using sensors. Although sensors are currently used in many of the buildings, what is now in place is not effective enough. Whether it is better sensors, more sensors, better upkeep of sensors, or a combination of these reasons, the use of sensors should be investigated and issues with sensors should be solved. There are other solutions to these problems, but these are the solutions that groups suggested.

Future Programs:

If it is useful, more “Walk for Dark” programs can be conducted in order to test if there is improvement. The future “Walk for Dark” programs should have a more uniform way of recording the data collected to minimize confusion and make the results more accurate and meaningful. Other improvements that should be included in the “Walk for Dark” program are clearer instructions regarding hallway and stairway lights. These improvements should lead to better results and more precise research. Please feel free to contact Megan DeWitt (megan.dewitt@rochester.edu) for help in planning future programs.