

Dear President Skorton,

I write on behalf of the Student Assembly Environmental Committee and the Graduate and Professional Student Assembly Ad-hoc Sustainability Committee. I was recently proud to hear that all university bodies have supported the Cornell Climate Action Plan, indicating that the university is committed to becoming a carbon-neutral institution over the coming decades. I was also happy to hear your recent presentation to the GPSA on the methods by which the administration of the university will deal with the financial situation over the coming years. You invited the student body to contact you with suggestions. Here is our suggestion.

Many students have noted that there is excessive lighting in buildings at night, despite the fact that the buildings are almost empty of people. Over the course of a week, we worked to turn off unnecessary lights in Rockefeller Hall. We documented the lights which were turned off, and calculated the savings from our efforts. On average, we turned off 260 lights across twelve rooms each night. Extrapolating from our data, we calculated that almost \$300 a month in savings could be made from turning off lights in unused classrooms and bathrooms after 10 pm each night in Rockefeller Hall alone. This corresponds to a metric tonne of carbon dioxide emissions. The potential savings from buildings across campus easily exceeds \$60,000 per annum.

Solid data for our efforts is available in the form of the utilities bill for Rockefeller Hall for the month of September. Ignoring the anomalous data point of 2006, our efforts helped contribute to decreasing the energy usage in Rockefeller Hall by 5% compared to the previous four years, which amounts to savings of \$300 for the month. If data for 2006 is also included, the reduction is 12.5%, with savings of \$800 for the month.

We have also increased our investigation of unnecessary lighting at night to more buildings. Choosing the Friday night before Fall Break, we went through the Arts quad, Rockefeller Hall and Space Sciences, turning off unnecessary lights. Turning off more than 600 lights, we estimate that we saved approximately \$3/hour. For lights that were likely to run over the entirety of Fall Break, this corresponds to some \$400 for just a handful of buildings. Furthermore, recently, we have found that not only are lights being left on, but windows have been left open while heat is still flowing into classrooms. The inefficiency of such negligence is obvious.

A tangible, but difficult to evaluate, benefit to having lights turned off is the increased lifetime of those lights. There is the obvious financial benefit from not having to purchase new lights so often, as well as the environmental savings from less waste, particularly of the mercury involved in fluorescent light bulbs.

There are potential savings, both financial and environmental, by ensuring that unnecessary lights are turned off. While the best solution would be to educate everybody to take responsibility for rooms which they have used, this is a long term goal and is not going to solve the issue now. Another suggestion which has been made is installing motion/sound sensors in classrooms and hallways. While we believe that this idea will have long term benefits, we also understand that it will be expensive to purchase and install, and that a large scale implementation is unlikely to happen given the current financial situation. William Joyce, from Utilities and

Energy Management, has informed us that motion sensor lighting is only cost effective in large open areas, and has furthermore indicated that the installation of motion sensors has been suspended pending further funding.

We have been in touch with Environmental Compliance and Sustainability (ECoS) and Utilities and Energy Management. Both departments have been supportive of our efforts, but have indicated that they do not have the funds to implement anything. While we would like to continue our efforts, we are unable to maintain a voluntary workforce, and we do not have the scope to service more than a small number of buildings on campus.

Our suggestion is threefold, and extends beyond the lights which we were able to turn off.

Firstly, to investigate employing undergraduate students, perhaps as part of a work-study scheme, to turn lights off in buildings after 10 pm. While it is unfeasible to employ staff to undertake this task late at night, there are a lot of undergraduate students on campus after 10 pm, and many students I have talked to have expressed an interest in turning lights off for a job. Our efforts indicate that one student can easily cover the Arts quad in an hour, with a building such as Rockefeller Hall taking some ten minutes to cover. While this would require the university to employ students, the potential savings far outweigh the costs.

Secondly, to work with Campus Security to find a happy intermediary regarding hall lighting. While we understand that lights in hallways are left on as a security concern, we find this measure excessive. In a lot of hallways, light switches that turn off every second light are left on at night. After turning them off we still find sufficient lighting. In addition to classroom and bathroom lights, hall lights may be partially turned off by student employees in the first part of our suggestion.

Thirdly, to determine which buildings have unnecessary lighting at night when the buildings are inaccessible, and to work to reduce those incidences. Examples of these include Olin Library and Law Library, which have been described as looking like "Las Vegas" even though there is nobody inside the buildings. A further example is the outdoor lighting used to decorate the facades of a number of buildings on campus. While the buildings can look beautiful while lit up at night, it is wasteful and unnecessary for these lights to be on throughout the entire night.

Many people I have spoken to have indicated surprise that the departments who may be able to do something about this have expressed a lack of funds. We hope that you will be able to at least set up a pilot program to deal with this issue. We are interested in working with the administration on this, and look forward to your response.

Thank you,

Jolyon Bloomfield
Graduate Student, Physics
Student Assembly Environmental Committee
GPSA Ad-hoc Sustainability Committee