

Dear President Skorton,

I write on behalf of the SA Environmental Committee and the GPSA Ad-hoc Sustainability Committee. I was recently proud to hear that the university has committed to climate neutrality over the coming decades, with all university bodies supporting the Cornell Climate Action Plan. I was also heartened to hear your recent presentation to the GPSA on the methods by which the university will deal with its financial situation over the coming years. At the end of your presentation, you invited students to propose their suggestions to you. Here is our suggestion.

Students have raised concerns that many buildings on campus are excessively lit at night. Over the course of a week, we worked to turn off unnecessary lights in Rockefeller Hall. We documented what lights we turned off, and calculated the energy savings from our efforts. On average, we turned off some 260 lights across twelve rooms each night. Extrapolating from our data, we estimate that almost \$300 a month could be saved by 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. Extrapolating our data to the entire campus, we estimate that the potential savings from turning off unnecessary (or excessive) lights across campus at night could easily exceed \$60,000 per annum.

Solid data for our efforts is available in the utilities bill for Rockefeller Hall. For the month of September, electricity usage was decreased by 5% this year compared to the same month over the previous four years, corresponding to savings of \$300 for the month (this ignores the anomalous data point of 2006; including this data, the decrease is 12.5%, with savings of \$800). While other factors influence this figure, we are confident that these savings are largely attributable to our efforts.

We have also extended our investigation to other buildings on campus. On the Friday night of Fall Break, we turned off as many unnecessary lights as we could across the Arts quad, Rockefeller Hall, and the Space Sciences Building. We documented that over 600 lights were turned off, corresponding to approximately \$3/hour. For lights which were likely to run over the entirety of Fall Break, this corresponds to \$400 for just a handful of buildings over the long weekend.

A further benefit of turning off lights comes with the increased lifetime of those light bulbs. There is an obvious financial benefit from not having to purchase lights so often, as well as the environmental benefit of producing less waste. This is especially pertinent for fluorescent light bulbs, which contain mercury. With the onset of the cold weather, we have also found that not only are lights left on in classrooms, but windows have been left open. The inefficiency of such negligence is obvious.

There are potential savings, both financial and environmental, by ensuring that unnecessary lights are turned off. While the best solution is ultimately education, this is a long term goal and will not solve this issue now. Another possible solution is the installation of motion/occupancy sensors in classrooms and hallways. While we believe that this solution will have long term benefits, we understand that it would be expensive to purchase and install, and that a large scale implementation is unlikely to happen given the current financial situation. William Joyce of Utilities and Energy Management has informed us that motion sensor lighting is only cost effective in large areas. He has furthermore indicated that the installation of motion sensors across campus 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 what we have so far been able to do.

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

Secondly, to work with Campus Security to find a happy intermediary regarding lighting in public areas. While we understand that lights in hallways are left on as a security measure, we believe that often this use of lighting is excessive. Many hallways have light switches which turn off every second light, but these are almost always left on at night. We find that there is sufficiently lighting even after turning them off. In addition to classroom and bathroom lights, hall lights may also be turned off by student employees.

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

Many people I have spoken to have indicated surprise that the departments who may be able to investigate these issues have expressed a lack of funds. To address this, the Student Assembly and the Graduate and Professional Student Assembly have proposed the creation of a task force, whose purpose will be to investigate and create a plan for a student led initiative to implement some of the suggestions outlined in this letter. This task force will be jointly run by the SA Environmental Committee and the GPSA Sustainability Committee. We hope to capitalise on the recent University Assembly resolution to create a “Small Energy Project Fund” in order to help fund this effort.

We are excited to be involved with this project, and are eager to work with the administration to bring some of these ideas to fruition. We look forward to your response.

Thank you,

Jolyon Bloomfield

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