Student Association
Climate Action Report
Student Association Climate Action Report

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Introduction

Every day we are changing the face of the planet. Ecosystems are being destroyed, species face extinction, and people around the world are beginning to feel the effects of global climate change. Meanwhile the world’s citizens use more and more of the earth’s increasingly scarce resources. One needs only to look around to realize that our current way of life cannot continue indefinitely. Should we refuse to change the way we think and act, we will forever alter the state of plant, animal, and human life on this earth. In short, our way of life is unsustainable.

Some of the most profound effects of our careless lifestyles come in the form of climate change. Decades of research by scientists around the world confirm that the earth is warming at an alarming rate, largely due to humanity’s unprecedented emission of greenhouse gases into the atmosphere.

The Crisis and Opportunity of Climate Change

The basic science of climate change is easy enough to understand. The earth is surrounded by an atmosphere, which allows for the existence of life as we know it. This atmosphere is composed primarily of nitrogen and oxygen, but it also contains a number of greenhouse gases. These gases are so named because they have the ability to trap and reflect the sun’s heat inside the atmosphere, warming the earth by the process known as the greenhouse effect.

The greenhouse effect allows for the existence of human life; without greenhouse gases, the earth’s average temperature would be about -18° C, or about 0° F. However, since the Industrial Revolution, human activity has placed tremendous amounts of greenhouse gases into the atmosphere, amplifying the greenhouse effect and raising the earth’s temperature (see graph at right). This, along with other related phenomena, is what we refer to as climate change.

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Scientists identify six main families of pollutants (mostly greenhouse gases) responsible for climate change: carbon dioxide, methane, black carbon (soot), halocarbons, carbon monoxide and volatile organic compounds, and nitrous oxide. Of these, carbon dioxide is considered the most important source of anthropogenic climate change. It is the gas primarily released from burning fossil fuels. Furthermore, deforestation, often a concern in developing nations, removes trees and other plants that would otherwise absorb CO₂. Carbon dioxide levels have increased by more than 35% since pre-industrial times. Shown here is the Keeling curve, which displays the concentration of atmospheric CO₂ measured at Mauna Loa Observatory over the past 60 years.

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Entire books have been written on the expected effects of climate change. There is not enough space in this document to do justice to each of these issues, or even to identify them all. Below I’ve listed some of the more worrisome consequences of this crisis:

- Significant loss of coastal wetlands.
- Coral bleaching and the death of our ocean’s coral reefs.
- Inhibited growth of shell-forming organisms and coral due to ocean acidification.
- Decreasing availability of freshwater in South and South-East Asia.
- Decreasing food supply due to crop damage, soil erosion, heat stress, and insect outbreaks.
- Increasing risk of extinction for more than a quarter of the world’s species.
- Increased invasion by non-native species.
- Destabilization of developing countries as a result of limited resources.
- Increased risk of wildfires, hurricanes, and floods.
- More deaths in the developing world from heat waves and droughts.
- Reduced water resources, making some areas uninhabitable by humans.
- Desertification in Africa and other areas.
- Increasing malnutrition and hunger.
- Increasing economic costs from natural disasters.
- An increase in the number of refugees due to more frequent flooding and natural disasters.\(^6\)

As humans, we often like to believe that we are somehow separate from nature, that we can use the environment for our purposes without seriously affecting our livelihood. Climate change is challenging that notion in powerful ways. We are now forced to realize that we cannot separate environmental well-being from human well-being. This is at the same time an environmental crisis, an economic crisis, a human health crisis, and a social justice crisis. By addressing climate change, we address some of the world’s largest problems. By ignoring the realities of climate change, we ignore many of the world’s largest problems.

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\(^7\) Suliman, Mohamed. “Civil War in Sudan: The Impact of Ecological Degradation”.
http://www.africa.upenn.edu/Articles_Gen/cvlw_env_sdn.html
Climate change presents humankind with an enormous crisis, perhaps the greatest of our generation. But it also offers us tremendous opportunity – to end our nation’s dependence on oil and other fossil fuels; to provide cleaner air, water, and soil for ourselves and our children; to support a more just allocation of resources among the earth’s people; and to preserve the natural treasures of this world.

There are no insurmountable barriers preventing us from addressing the issue of climate change. We have the resources at our disposal to reverse our climate’s trajectory before we arrive at major ecological tipping points. The only major missing ingredient is willpower. With collective determination, humankind can - and consistently does - tackle the most serious problems of the age.

Confronting climate change largely falls upon our generation, today’s college students. We are old enough to understand the real problems we face and what we can do to solve them. We are young enough to understand that, if not abated, climate change will grossly affect our livelihoods as adults. We cannot simply “pass on” this problem to the next generation, as ecological tipping points will likely have been met by the time they have a chance to respond. “Those of us alive today are the first generation to know that we live in the Age of Global Warming. We may also be the last generation to have any chance of doing something about it. Our forebears had the excuse of ignorance. Our descendants will have the excuse of helplessness. We have no excuse.”

This document is not aimed at solving climate change on a global scale. It is, however, written with the intent of raising awareness of our actions as individuals and their contribution to global phenomena. We have the opportunity to act locally, bringing real change to the places we work, live, and study.

President Mohamed Nasheed of Maldives held an underwater cabinet meeting in October 2009 to draw attention to climate change. This Pacific island nation could become entirely submerged as a result of rising sea levels.

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Carbon Footprints and Climate Neutrality

As was stated earlier, greenhouse gas emissions are the primary cause of climate change. Virtually every activity in which we partake in the developed world results in some level of greenhouse gas emissions, because virtually everything we have comes from, or is transported by, fossil fuels.

If I think back to the beginning of my day, I find that almost everything I’ve done has had some impact on the climate. I woke up this morning to an alarm, a device which runs on electricity. I turned on the bathroom light, which also uses electricity, and began brushing my teeth. My toothbrush contains plastic, which is a petroleum product, and my toothpaste was more than likely shipped a remarkable distance with the help of fossil fuels. I open the shower curtain, which is an even nastier petroleum product, and I turn on the water that was heated to my liking. I put on an undershirt, tee-shirt, pants, and shoes, all of which contain some type of fabric and were produced in Honduras, Indonesia, Bangladesh, and China, respectively. I walk to campus from my dorm – I did avoid using a car – but I got there via asphalt, which is, you guessed it, petroleum-based. I grab a newspaper, which is made of trees and is housed in a large container made of metal and glass. And this is all before breakfast.

Sustainability

Listen to any almost any speech on the environment, and the term “sustainability” is bound to come up. Even so, many people are unsure what sustainability actually means. In a survey handed out by SA earlier this year, only 21% of UB students said they were “very familiar” with the term.

Simply put, sustainability is the ability to sustain. Products and processes are sustainable if they can be produced or repeated over and over without further depleting society’s limited resources.

Sustainability is not easy. True sustainability cannot be achieved with the help of anything nonrenewable, because these resources will eventually run out, no matter how quickly or slowly they are consumed. A car that gets 300 miles to the gallon is not sustainable as long as it’s still consuming gasoline.

Sustainability also expands to the realm of social justice. For something to be sustainable, it must sustain natural systems as well as human systems by providing for a just allocation of resources. A factory may be sustainable in terms of the environment, but if its workers don’t earn a high enough wage to support the cost of living, or if working conditions pose a threat to human health, then the factory cannot be sustainable in the fullest sense.

As David Owen writes in his book Green Metropolis, “One of the most abused words in the English language in recent years, without a doubt, has been ‘sustainable’.” Companies of every kind have attempted to brand their products and their operations as such, often in disregard for the weight of the term. Real sustainability is very rarely achieved, and it is better thought of as a direction than a destination point. Becoming more sustainable is easy. Becoming sustainable is extremely difficult.

Sustainability is a lofty goal, but it’s one for which we should constantly aim. The only things that we can use now, with the assurance that they will be available for generations, are those that are truly sustainable.
Everything mentioned in the last paragraph has a number attached to it – the amount of greenhouse gas that was put in the air to make that part of my day possible. If I were to add up all of the emissions that resulted from everything I do today, I would come up with a total amount of greenhouse gas that I’m responsible for producing. This is my carbon footprint.

When we use the term “carbon footprint”, we are referring not just to carbon dioxide, but to all other greenhouse gases, including methane, halocarbons, nitrous oxide, and others. To further complicate things, not all greenhouse gases have an equal impact on climate change. Methane, for example, is 23 times as potent as carbon dioxide, which means that one ton of methane has the same greenhouse effect as eight tons of carbon dioxide.\textsuperscript{11} For the sake of simplicity, all greenhouse gases are converted to CO\textsubscript{2}-equivalents, so one ton of methane emissions is equal to 23 tons of CO\textsubscript{2}-equivalents. When all greenhouse gases are converted to CO\textsubscript{2}-equivalents, they’re added together to form one number – the carbon footprint.

So what is an acceptable carbon footprint? How much greenhouse gas can I put out every year without exacerbating the effects of global warming? People, households, and organizations aim for climate neutrality, or carbon neutrality. This means a carbon footprint of zero – no net contribution to greenhouse gas emissions.

Climate neutrality may seem impossible. When I went through my day, every activity had some footprint associated with it. Even if I were to take every conceivable action to reduce my carbon footprint, there would still be some left. To compensate for this, individuals and groups can purchase carbon offsets, which are certificates that fund programs to take carbon dioxide out of the atmosphere. For example, I can buy carbon offsets that go towards tree-planting initiative, which subtracts from my carbon footprint. With the proper number of offsets, my net effect on the climate is zero, and I achieve climate neutrality.

The University at Buffalo aims to be climate neutral by 2030. This past year, the Student Association pledged climate neutrality for SA’s operations by 2020, and this document is the first step taken towards that effort. This report assesses SA’s Carbon Footprint. The follow-up to this, SA’s Climate Action Plan, will outline a plan for SA to become climate neutral by the year 2020.

Confronting Climate Change at UB

UB has a long history of addressing environmental concerns on campus and in the Buffalo community. For decades, the university has been reducing energy consumption by making buildings and operations more efficient. In 2002, the University at Buffalo ceased generating electricity from on-campus coal-burning plants. In 2006, solar panels were added to the roof of Norton Hall, providing clean, renewable energy for the building. As of this year, students, faculty, and staff can participate in a car sharing program, reducing the number of personal vehicles on campus.

One of the most important events in UB’s move towards sustainability came in March 2007, when President Simpson signed the American Colleges and Universities Presidents Climate Commitment. By signing the ACUPCC, President Simpson pledged for UB to become climate neutral. Over the next two and a half years, UB measured its carbon footprint and held forums for members of the community to voice their ideas for sustainability on campus. These efforts culminated in the University’s Climate Action Plan, released in August 2009, which outlines a plan for UB’s climate neutrality by 2030. The entire plan can be found at http://www.buffalo.edu/ub2020/environmentalstewardship/files/UB_CAP_FINAL_September15.pdf

Since the release of the Climate Action Plan, several groups on campus have been working towards its implementation. The primary body responsible for overseeing the Plan is the Environmental Stewardship Committee. This group, composed of UB administration, faculty, and staff, has six working subcommittees that oversee specific aspects of climate neutrality. These six areas are energy; transportation; outreach; information technology; materials; and research, teaching, and service.

UB held Sustainability Forums where students, faculty, and staff gave input for UB’s Climate Action Plan.

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Outside of the ESC, many other groups work to steer the university towards sustainability. UB Green functions as the campus’s sustainability office, and is involved in numerous projects to promote both awareness and sustainability. The Student Association recently created an Environmental Department, which is responsible for educating students on environmental issues, representing student concerns about the environment, and working to lessen SA’s environmental impact. Two SA clubs – Environmental Network and Engineers for a Sustainable World – are also highly involved in sustainability. In addition, a number of entities not directly related to campus sustainability have made a point of helping to reduce the university’s carbon footprint. Notably, the Wellness Center and Campus Dining and Shops have taken great strides in supporting the environment.

**Addressing SA’s Environmental Impact**

As of December 2010, 676 colleges and universities have signed the ACUPCC. One may wonder why so many institutions of higher education have become so interested in climate neutrality.

The simple answer to that question is that colleges around the country understand the importance of addressing this issue. Universities are often home to researchers who study climate change and its far-reaching effects. Students, staff, faculty, and upper administration have seen the science and are convinced of the urgent message it sends.

But there is also a deeper answer. Each year millions of students attend colleges around the country. To these students, college is a transformative time. While at school young adults decide on and pursue a major and often a specific career. They make lifelong friends. During their stay they become immersed in a culture. That culture can be one of waste and environmental disregard, or it can be a culture of conservation and sustainability.

A student who attends a college that does not make a point of addressing climate change may leave that institution without any appreciation for the environment. She may continue the rest of her life under the assumption that environmental issues have little importance.

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Alternatively, a student may attend a college where sustainability is a central focus. She may go through her general education courses and hear climate change addressed time and again. She may learn that her institution has a Climate Action Plan, and that the school is constantly reducing its reliance on fossil fuels and its contribution to environmental detriment. She may spend her four years making habits of reducing consumption, saving energy, and utilizing public transportation. That student will likely leave the campus with a firm understanding of sustainability and a willingness to work towards it in her everyday life.

Which kind of college is the University at Buffalo? Are our students leaving with an appreciation for the environment and a sense of responsibility for the health of our planet? Institutionally, our school has taken important steps in the direction of sustainability, which are outlined above. But how much is the message getting through to students?

We surveyed students at the end of October 2010 to assess their attitudes, knowledge, and behavior towards the environment. We found that most students thought the environment was an important issue. Many students seemed unaware of campus environmental groups, suggesting that more promotion of these groups is essential. Despite their limited knowledge of environmental groups, students tended to have a favorable impression of them. However, students were only somewhat familiar with the concept of sustainability, and more than 25% knew nothing about UB’s Climate Action Plan. On the student awareness end, we have some work to do.

Students responded on a scale of 1 to 7, with 1 meaning “not important” or “not at all”, and 7 meaning “very important” or “almost everything”. 
Antoine Thompson, the New York State Senator who represents parts of Erie and Niagara counties, said “Every major act of social change has involved students.” This is certainly true of our world’s transition to climate neutrality. Today’s undergraduates will be tomorrow’s professionals. Those who attend UB now will go on to become scientists, entrepreneurs, teachers, and doctors. If sustainability is to take hold in the United States and abroad, that movement will have to start here.

That is one of the main reasons for the creation of this document, and for the Student Association’s pledge of climate neutrality by 2020. SA’s Climate Action Plan will not rival the breadth of UB’s Plan, but it is guaranteed to affect students on a personal level. The Student Association encompasses all undergraduates at UB, and therefore has over 18,000 members. Thousands of people attend Spring Fests, Fall Fests, and other SA events every year. Many are involved in the more than 100 clubs that make up SA’s six Club Councils. The Undergraduate Student Association has a unique position to influence student attitudes and behavior with regard to the environment. By reforming its own operations, SA can help to induce a culture change towards sustainability at UB. This, above all, is why reaching climate neutrality is critically important.
SA’s Carbon Footprint

The Student Association, as the undergraduate student government, is responsible for a number of activities, events, and operations meant to enhance students’ experiences at UB. The main areas for which there are significant carbon footprints, and which have been evaluated in this report, are:

- Fall Fest, Spring Fest, and Backyard Bash
- Spirit Week and Homecoming Carnival
- Comedy Series
- Film Series
- Winter and Spring Galas
- UB Trippin’
- SA Elections
- Offices and Staff Operations
- Club Events and Operations

Of course, this list does not include everything that SA does. Many of SA’s activities are one-time events or have environmental impacts that are difficult to measure. This list, however, accounts for the Student Association’s central operations.

Methods and Limitations

The data contained in this report were derived primarily from interviews with SA staff and club executive boards. The many people interviewed are listed in the acknowledgements section, and this report owes each of these people gratitude for their contributions. Aside from speaking to individuals involved in SA, a number of findings in this report come from direct measurement (e.g. reviewing SA van usage reports and measuring waste in offices).

The data were compiled using the Clean Air-Cool Planet calculator. This is a free Microsoft Excel spreadsheet template which allows colleges and universities to compute their carbon footprint by giving a series of inputs. All reported greenhouse gas emissions in this report are taken from the calculator.¹

There are several limitations to the data collected in this report. This report attempts to quantify information wherever possible. However, there are many instances where the carbon footprint of a particular event could not be calculated with any kind of certainty.

In several cases, particular aspects of SA’s operations have footprints that are difficult to quantify. For example, many clubs hold events which produce waste. However, clubs are so diverse and hold so many

¹For more information on Clean Air-Cool Planet and the calculator, visit http://www.cleanair-coolplanet.org/
different kinds of events that calculating an accurate amount of waste produced by these events would be difficult.

In other cases, SA partners with on- and off-campus groups to hold events which have a carbon footprint. In these cases, the question arises as to who is responsible for that footprint. For example, SA advertizes for spring break, but all arrangements for the trip are handled by an outside company. One could argue that the emissions from sending students on spring break are SA’s responsibility, because they advertize for the event. One could also argue that these emissions are not SA’s responsibility, because the trip is arranged through another entity, and students would likely go on spring break whether SA advertized or not.

In still other cases, SA’s operations have an intangible environmental impact. For example, establishing a strong recycling program inside SA’s offices might persuade staff to recycle more often when they are outside SA offices. Similarly a weak office recycling program might discourage recycling.

In each of these cases, issues have been addressed without attaching quantitative data to them. Many times in this report, I will mention an environmental concern for which I have no quantifiable data. It is important to note that immeasurable is not the same as insignificant in these situations. SA must address its entire carbon footprint, quantifiable or not. By doing so, it can inspire change in entities outside its direct sphere of influence.

Another notable limitation to this report is its lack of a time dimension. While UB’s Climate Action Report compiled data from several years, establishing a baseline and accounting for notable patterns, this report does not. Much of the quantifiable information that I’ve computed is not based on previous years’ records, making it difficult, if not impossible, to measure SA’s footprint in years past.

Despite these limitations, this report should provide a solid and accurate account of SA’s operations and their environmental impacts. In future years I hope that follow-up reports to this will be written, and that the authors of those reports will succeed in some of the areas where I have fallen short.

**Overview**

As of December 2010, SA’s annual quantifiable carbon footprint was **192.6 Metric Tons CO₂-equivalents**. To put that in perspective, the entire university’s total carbon footprint in 2007 was 156,000 Metric Tons.²

To add specificity and organization to greenhouse gas inventories, carbon footprints are typically broken down into three scopes. According to the ACUPCC, Scope 1, “refers to direct GHG emissions occurring from sources that are owned or controlled by

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the institution”. SA’s Scope 1 emissions are those from SA vans, as well as from generators used to power Spring and Fall Fests.

Scope 2, “refers to indirect emissions generated in the production of electricity consumed by the institution”. Any time SA uses electricity which it does not directly produce, it adds to Scope 2 emissions.

Scope 3, “refers to all other indirect emissions – those that are a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution”. This is a sort of catch-all category for all emissions that don’t fall under the first two scopes. For example, the paper SA uses in its promotions has a carbon footprint (from deforestation, transportation of lumber, production of paper, etc.). UB is not physically cutting down trees, nor is it using its own power to produce paper, but it is still using paper, so SA is responsible for the emissions coming from that process. Scope 3 emissions are the most difficult to measure, but they often represent a sizeable portion of an institution’s overall footprint.

SA’s emissions from each of the three scopes are as follows:

- **Scope 1** 63.9 MT CO₂-e
- **Scope 2** 18.5 MT CO₂-e
- **Scope 3** 110.2 MT CO₂-e

Furthermore, these scopes can be broken down into different emissions categories. In Scope 1, SA’s emissions fall into two categories:

- **Transportation by SA Vans** 63.1 MT CO₂-e
- **On-site power generation during events** 0.8 MT CO₂-e

All of SA’s Scope 2 emissions in this report come from one source – electricity use by SA, which is responsible for 18.5 MT CO₂-e yearly.

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The following Scope 3 emissions sources have also been included in this inventory:

- **Paper use** 7.3 MT CO₂-e
- **Solid waste** 0.1 MT CO₂-e
- **Travel**, which can be further expanded into 3 areas:
  - **Staff air travel for SA purposes** 16.4 MT CO₂-e
  - **Staff automobile travel for SA purposes** 11.2 MT CO₂-e
  - **Students commuting to SA events** 73.5 MT CO₂-e
- **Items purchased** by SA and by clubs, which are not quantified in this report but still represent a significant source of emissions.

### Emissions by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Emissions (MT CO₂-e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation (SA Vans)</td>
<td>33%</td>
</tr>
<tr>
<td>Commuting to events</td>
<td>38%</td>
</tr>
<tr>
<td>Electricity</td>
<td>10%</td>
</tr>
<tr>
<td>Air Travel</td>
<td>8%</td>
</tr>
<tr>
<td>Automobile Travel</td>
<td>6%</td>
</tr>
<tr>
<td>Paper</td>
<td>4%</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>0%</td>
</tr>
<tr>
<td>On-site generation</td>
<td>0%</td>
</tr>
</tbody>
</table>

By combining the seven emissions sources above with the list of SA events and operations at the beginning of this chapter, one can construct a grid which organizes all greenhouse gas emissions in this report, shown on the opposite page.
<table>
<thead>
<tr>
<th>Event</th>
<th>Scope 1</th>
<th>Scope 2</th>
<th>Scope 3</th>
<th>Purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fests and Backyard Bash</td>
<td>Transportation</td>
<td>On-site generation</td>
<td>Paper</td>
<td>Solid Waste</td>
</tr>
<tr>
<td></td>
<td>Transporting equipment</td>
<td>Generators used to power concerts</td>
<td>Promotion of Fests</td>
<td>Waste produced and recycling at event</td>
</tr>
<tr>
<td>Spirit Week</td>
<td>Transportation</td>
<td>Generators used during carnival</td>
<td>Promotion of Spirit Week</td>
<td>Waste produced and recycling at event</td>
</tr>
<tr>
<td>Comedy Series</td>
<td>Transporting equipment</td>
<td>Powering lights and sound</td>
<td>Promotion of Comedy Series</td>
<td>Waste produced and recycling at event</td>
</tr>
<tr>
<td>Film Series</td>
<td>Transporting equipment</td>
<td>Powering movies</td>
<td>Promotion of Film Series</td>
<td>Waste produced and recycling at event</td>
</tr>
<tr>
<td>Galas</td>
<td></td>
<td>Electricity used at Convention Center</td>
<td>Promotion of Galas</td>
<td>Waste produced and recycling at event</td>
</tr>
<tr>
<td>UB Trippin’</td>
<td></td>
<td></td>
<td>Promotion of UB Trippin’ Events</td>
<td></td>
</tr>
<tr>
<td>SA Elections</td>
<td></td>
<td></td>
<td>Advertising by candidates</td>
<td>Waste from campaign materials</td>
</tr>
<tr>
<td>Offices and Staff Operations</td>
<td></td>
<td>Electricity used in offices</td>
<td>All office paper use</td>
<td>All office waste</td>
</tr>
<tr>
<td>Club Events and Operations</td>
<td></td>
<td>Electricity at all club events</td>
<td>All club promotions and day-to-day paper use</td>
<td>Waste produced during club events</td>
</tr>
</tbody>
</table>
Each cell in this grid has been arranged into groups with other cells, and each of these groups has a section dedicated to it in the following pages. These sections will offer a more detailed view of SA’s carbon footprint in specific areas.

<table>
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<th>Scope 2</th>
<th>Scope 3</th>
</tr>
</thead>
<tbody>
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<td><strong>On-site generation</strong></td>
<td><strong>Electricity</strong></td>
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<tr>
<td>Fests and Backyard Bash</td>
<td>Section A</td>
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<td>Spirit Week</td>
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<td>Comedy Series</td>
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<td>Film Series</td>
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<tr>
<td>Club Events and Operations</td>
<td>Section I</td>
<td>Section I</td>
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</table>
A: Producing SA’s Largest Events

The Student Association is perhaps best known for producing Fall Fest and Spring Fest. These two concerts draw in thousands of students every year and together make up about 15% of SA’s yearly budget.

SA also works with the Athletics Department to host the Backyard Bash, an event that promotes UB’s sports teams and a concert that this year featured Kid Cudi. Two other major Entertainment events include Spirit Week and the Comedy Series, both of which are popular events for undergraduates.

Of course, these large events have a significant environmental impact. One of the most obvious sources of emissions for Fall Fest, Spring Fest, and the Backyard Bash is the power required for sound and lights. When these concerts are held outdoors, the required electricity comes entirely from diesel generators. Indoor events run on both generators and electricity from Alumni Arena.

Spirit Week is a set of events held in the fall and arranged primarily by SA’s Entertainment Department. During the week, festivities take place in and around the Student Union. This location gives the event a relatively low carbon impact, as there is no additional need for lights, and students need not commute to and from events. Spirit Week ends with the Homecoming Carnival, where carnival rides and games are provided for students. During this event, rides and lights are powered by generators, much like at the Fests and at Backyard Bash. The company hired to put the Carnival together is from the Western New York area, saving transportation costs and reducing SA’s carbon footprint.

Entertainment staff also makes use of SA vans and rented vehicles for these events. SA Vans will be discussed in more detail in Section I, but for now it’s important to note the role of transportation in production. Supplies and equipment need to be transported for these events. In addition, musicians for the Fests and Bash and comedians for the Comedy Series need to be transported to UB’s North Campus. These performers often fly to Buffalo, and SA is responsible for transporting them from their hotels to campus. While the carbon footprint of this transportation has not been quantified, it deserves mention in discussion of SA’s environmental impact.

Together, Fall Fest, Spring Fest, the Backyard Bash, Spirit Week, and the Comedy Series are SA’s best-known events. Making these events climate neutral over time, and advertizing them as such, will enhance the Student Association’s image as a green organization and draw attention to our commitment to sustainability.
Section A dealt with the production of Spring Fest and Fall Fest, SA’s two big-name events. However, the Student Association has much more to offer in terms of entertainment. The ongoing Film Series features current movies in the Student Union theatre, and offers more than thirty titles throughout the year. SA has also hosted Lewis Black, Dane Cook, and Louis CK, among many others, as part of the Comedy Series.

These two series have some slightly different environmental concerns than do SA’s large concerts. Instead of being held outdoors or in Alumni Arena, the Film Series takes place in the theatre of the Student Union, and the Comedy series is held in the Center for the Arts. No generators are used for these events. Instead, these productions rely on the equipment already available in those areas.

In these cases, the electricity needed to power these events adds to SA’s Scope 2 emissions, not Scope 1 as is the case with other events. While this may seem to be a superficial distinction, it outlines important differences in how SA must go about making these events climate neutral. During Spring Fest, Fall Fest, the Backyard Bash, and the Spirit Week Carnival, SA is physically producing electricity. A possible solution may include phasing in more efficient generators or ones that rely on alternative forms of energy. By contrast, SA has little direct influence over how energy is produced at the Film Series and Comedy series. Solutions for climate neutrality at these events will require more work with UB Facilities and those that manage the Student Union and the CFA.

Another point that deserves mention deals with SA’s outdoor movies. While the Student Association primarily shows movies inside the Union, it has also featured outdoor movies in the special events field. These films require not only a projector but also a large inflatable screen and sound equipment. In these cases, SA vans are also used to transport equipment. An outdoor movie is not nearly as extensive a production as Fall Fest or Spring Fest, but many of the environmental issues are the same for these events. How we address the impact of our outdoor movies will likely be closely related to how we reach climate neutrality at SA’s larger outdoor events.
C: Waste at SA events

This year’s Backyard Bash was certainly a success. Kid Cudi was popular with students, and the show drew crowds from outside the UB community. However, one element of the event – waste management – turned into an embarrassment for SA.

Event organizers had placed about a dozen garbage bins in and around the concert area. Despite the large number of attendees who brought water bottles to the event, no recycling bins were provided. To add to the problem, attendees unable to see the performance overturned garbage cans and stood on top of them to get a better view. The rest of the crowd had no place to throw away their trash. Before the concert began, people started to throw water bottles at each other. At one point, the audience needed to be asked to stop throwing bottles. At the end of the concert, none of the trash had been thrown away, and thousands of water bottles lay on the ground at Coventry Loop. Custodial staff spent hours cleaning up the mess, finishing early the next morning. None of the bottles were recycled. The next day, an administrator informed us of the incident.

This was a problem for a number of reasons. From an environmental perspective, none of the plastic was recycled, as it should have been. So much as the thought of recycling was not present, as no bins were provided. This was also a problem for SA’s reputation. As a student government, the Student Association is responsible for negotiating with University administration on matters important to students. SA can’t do that effectively if it doesn’t have good standing with the University. The administration contacted SA about the incident the next day. That means that UB’s administration had already heard about the incident, and already knew who was responsible. And so this nuisance to the University had the Student Association’s name written all over it.

Waste may seem like a small issue in the bigger picture of SA’s environmental impact, but as we learned from the story above, it is important. The most obvious thing SA can do, whenever hosting an event, is to ensure that recycling will be present. This happens sometimes, but it needs to happen all the time.

SA also needs to investigate the types of waste being created at events, with food waste as the largest focus. While no food is served at Fests and at other large events, SA does offer food at places like the Film Series and the Fall Carnival, and at many smaller events. Any time food is served, it comes with some type of packaging. SA should investigate how much packaging it consumes, and should begin to use reusable and compostable items instead of the throwaway packaging that has become the norm.

The problem at this year’s Backyard Bash is one that SA should never recreate. By devoting some attention, before each event, to the issues of waste management, the Student Association can bring its events that much closer to sustainability.
D: Winter and Spring Galas

At the end of each semester, SA hosts a Gala. This is a time for students to enjoy the end of their classes with friends with dinner and dancing.

The carbon footprint of Galas has not been quantified in this report. However, as SA events, the Galas need to be addressed in an environmental context.

The first issue is electricity. The Buffalo Convention Center, where Galas are held, uses electricity to host these events. This includes lights in the ballroom and lobby, sound equipment for music, and various other sources of electricity.

The second environmental concern at Galas is waste. As dinner is served, significant food waste is produced. Other waste comes from the use of disposable cups to serve beverages to attendees. At this year’s Winter Gala, drinks were served in Greenware® cups (100% corn-based cups that are compostable). However, technology like Greenware® is only sustainable if it is properly composted, which may not be the case at the Convention Center.

Galas are events of a different type than the Backyard Bash or the Film Series. Because Winter and Spring Galas take place at a location not owned by the University at Buffalo, successfully greening these events requires a different type of planning. Instead of working solely within SA or within the University, SA must work closely with the locales where it chooses to have these events. Often, simply beginning conversations with those who operate places like the Convention Center can have an impact. By creating a dialogue with its business partners, SA can begin to reshape the way people outside of UB think about the environment.

Galas are just one of many opportunities SA gives students to relax and enjoy themselves. They are also an opportunity for creating a sustainable culture within and around UB. We should always keep in mind events like these as we aim for climate neutrality within SA.
E: Getting There and Back

Every event that SA holds outside of normal school hours will have commuters. This is an important part of SA’s Scope 3 emissions. In fact, student commuting accounts for more of SA’s measured carbon footprint than any other single category.

There are several factors which influence the carbon footprint from commuting. All of the following factors are at least partially under SA’s control.

- **Location of the event.** Obviously, the farther the event is from UB’s two campuses, the more students will drive to the event.
- **Day and time of the event.** An event held during a weekday will have few, if any commuters, as all attendees will already be on campus for the day. An event on Saturday night, on the other hand, will add more to SA’s footprint.
- **Popularity of event.** Simply enough, the more students that attend an event, the more students that will drive.
- **Number of people per car.** The more carpooling, the fewer total miles traveled by cars, and the smaller total environmental impact. Events where students are likely to drink will probably see increased carpooling, as students will often ride with a designated driver, incentivizing carpooling. An event – such as a movie – with a definite start and end time will also increase carpooling, as it will allow students to better coordinate their plans.
- **Availability and convenience of parking.** Any event with convenient parking arrangements will increase the number of student drivers. When parking becomes inconvenient, students will be more likely to carpool or seek alternative modes of transportation.
- **Availability and convenience of alternative modes of transit.** For example, SA offers buses from each of the major living areas to and from Winter and Spring Galas. This greatly reduces the number of people driving. Furthermore, SA can provide buses that have a lighter impact (like compressed natural gas vehicles), further reducing its footprint.

SA can exploit these factors to decrease the number of cars at its events. For example, giving perks to those who carpool and adding costs to those who do not will help lessen the number of students driving alone. Funding buses to take students to events will also decrease SA’s carbon impact. By making smart choices about how we organize events and by giving students the proper incentives to seek low-carbon transit, we can help decrease the amount of gasoline used to get students to and from events.

Commuting to SA events is responsible for 980 gallons of gas every year. Here’s the breakdown by event:

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film Series</td>
<td>374</td>
</tr>
<tr>
<td>Fests and Bash</td>
<td>260</td>
</tr>
<tr>
<td>Galas</td>
<td>246</td>
</tr>
<tr>
<td>Comedy Series</td>
<td>100</td>
</tr>
</tbody>
</table>
UB Trippin’ is a new event this semester, run by SA’s Student Affairs Department. Its goal is to bring students out into the Buffalo area and to show them what Buffalo has to offer. So far this year, students have traveled to Final Fear, Cirque du Soleil, and the Albright Knox Art Gallery, to name a few. Next semester, SA plans to send students to even more events in the city of Buffalo.

The Fests, the Backyard Bash, the Film Series, the Comedy Series, and the Galas are events where the location is a secondary issue, so to speak. Students go to attend events, and an event’s location is just one aspect of the larger event. For UB Trippin’, on the other hand, the event is all about location. For this reason, the environmental impact of UB Trippin’ is found almost entirely in transporting students from UB to specific destinations.

Right now, SA takes students by rented school bus. This may currently be the best mode of transportation, environmentally speaking. By renting a large bus, SA keeps students from driving their own cars to events. UB Trippin’ is expected to use 103 gallons of gasoline this year. By comparison, if every student drove to every event, two people to a car, this event would use 375 gallons yearly.

Another environmental issue with this event is intangible but deserves discussion: the destination of these trips, and how, if at all, they relate to the environment. UB Trippin’ is designed to introduce students to the city of Buffalo. This is important because many students are not from the area, and many would not otherwise venture outside of Amherst. However, the organizers of this event should keep in mind the number of possible “environmental” destinations for UB Trippin’. The city has much to offer in the form of parks and wilderness areas. There are also many places where the people of Buffalo are working to green the city. These include places like Buffalo ReUse, Buffalo Blue Bike, and others.

These types of locations should be considered when planning UB Trippin’. With a greater appreciation for the environment, and with a firsthand view of what Buffalonians are doing to protect it, students will be more willing to embrace a sustainable culture at UB and in their own lives.
G: Electing SA's Leaders

Nineteen SA officials are elected by the undergraduate student body: the president, vice president, treasurer, four SUNY delegates, six on-campus senators, and six off-campus senators. To elect candidates to these positions, SA holds major elections twice yearly. In the fall, all Senate candidates are elected over the course of three days. In the late spring, the student body elects the executive board and the SUNY delegates for the upcoming year. The spring elections are more involved and more contentious, and, unsurprisingly, they also have the greatest impact on the environment.

The three environmental issues with elections are paper usage, waste and purchasing. In the spring elections, each party is given a sum of money, which it uses to buy promotional items during the campaign. One of the biggest costs for parties is the purchase of “glossy” flyers, shown at right. These are handy promotional items; they can be handed out to students in the Union or placed in lecture halls. They also constitute a tremendous use of paper and an incredible amount of waste.

In last year’s main elections, the two parties ordered an estimated 20,000 glossy flyers, in addition to 16,000 quarters printed on normal printing paper. The Senate elections are much less promotions-heavy; in a typical election, a total of 4,000 quarters are printed. This together makes up 40,000 quarters used over the course of two three-day events.

To add to the problem, many of these quarters are not recycled. Glossy flyers are typically used in two ways during elections; they are given to students, and they are put in large lecture halls. Of the quarters handed out to students, many are simply placed in students’ pockets, or thrown in the trash, or thrown on the ground almost immediately. Granted, some of these quarters are probably recycled, but the average annoyed student may be unlikely to recycle after being harassed for three days in the Union. Flyers in lecture halls don’t have much of a better chance. Often, these quarters are thrown on the ground, on seats, or on the floor over the course of the day. When the custodial staff comes by after classes, they may also be unwilling to sort through the mess that’s been made by elections.

The other major environmental concern of elections is purchasing. Major parties buy merchandise, in addition to flyers, to promote their candidates. This includes mostly t-shirts, but it can also include a wide range of promotional items. The emissions created by elections purchasing are not measured in this report, but they are something to keep in mind as SA seeks climate neutrality.

Elections are an important part of SA’s operations. They give the students the chance to dictate what they want to see from their student government. Unfortunately, elections are also a large source of paper consumption and waste. SA must find ways to keep elections as an important part of a democratic student government while working to reduce the carbon footprint of these events.
H: The SA Offices

A substantial portion of SA’s carbon footprint is the result of the day-to-day activities required to keep the organization running. These emissions include office electricity consumption, office paper use, office waste, and staff travel to conferences.

The graph above shows the energy consumption of the central SA offices over the course of a week. During the work day, our offices use between 9 and 10 kilowatts of electricity. At night and over the weekends, that number drops off, but not by much; in the middle of the night, the SA offices are still using between 7 and 8 kilowatts, though hardly anyone is there. These numbers can add up over time. Over the course of the school year, SA offices use 38.6 megawatts every year, costing the University more than $4,600. Of that, only 34.5% is used between 9:00 and 6:00 Monday through Friday. The other 65.5%, totaling more than 25 megawatts and more than $3,000, is spent on nights and weekends. And these findings don’t include any club offices. Our largest source of electricity consumption, by far, is computing. Computers and monitors make up more than half of energy output in SA offices, and most of that consumption comes during nights and weekends.

In terms of electricity, SA could seriously reduce its carbon footprint through simple behavior modification. If everyone put their computers and monitors on sleep mode every night, instead of leaving them on, SA would save more than 14 megawatts and $1,700 yearly.
Paper is another major source of SA’s environmental footprint. We print 65,000 pieces of paper per year, and that number does not include paper used for promotions. SA has made the important step of reusing CIT paper for much of its advertising, but most of the paper used for day-to-day office use is still printed on first-use paper. SA should also begin purchasing 100% recycled paper, as opposed to the 30% recycled it currently buys. The cost difference between these two is small, and the quality is identical, yet this small change would be a positive step towards climate neutrality.

SA should also consider making more things available digitally, both online and through the Shares drive. The Communications Department now allows its promotions files to be filled out online, which cuts down on its paper use. Other departments would be wise to follow this example.

As in any office, those in the SA offices throw a lot of things away. This waste does not always originate in our offices, but it does end there, making waste an important issue in SA’s climate neutrality. This year, we will produce 860 pounds of solid waste. Our offices have a 60% recycling rate, meaning that three-fifths of our potential waste is diverted through recycling. While this is roughly double the rate for the university as a whole, SA can still improve. One of the easiest ways for us to do so is to make our recycling program simpler and easier. Many desks have only a single blue bin. This is supposed to be used for paper recycling, but it’s normally used as a general trash bin, reducing our recycling rate. In the future, SA can also lobby for more recyclable and compostable packaging with our suppliers and with other UB groups. With cooperation from CDS, SA can coordinate increased composting around UB with a new composting program within our offices.

The last major emissions source of this kind is staff travel. UB sends SUNY Delegates across New York to lobby for UB at a state-wide level. Other departments, like Environmental and Entertainment, send staff on conferences to increase their knowledge and to allow them to network with others. These trips, taken with personal vehicles, represent a small but important part of SA’s overall footprint.

One of the best places for SA to start its journey towards climate neutrality is inside its own offices. Many of the actions required will be internal ones, and these changes will spur a culture of sustainability within the staff, making further reform much easier.
I: Clubs and Councils

More than 100 clubs receive funding from the Student Association. Clubs vary greatly in their membership, in their level of activity, and in the nature of their events. Because of this wide diversity, club emissions are very difficult to quantify with any certainty. Much of this section is, therefore, purely quantitative.

Despite the difficulty in measurement, clubs constitute a very large portion of SA’s total carbon footprint. Moreover, addressing this aspect of our footprint will likely have the largest impact on a sustainable culture among UB students. Many students take an active role in a number of SA clubs. When these students begin thinking of ways to green their organizations, they’re likely to carry over that kind of thinking into their personal lives. For this reason, SA should make a point of encouraging clubs to seek sustainability in all aspects of their operations.

All clubs have meetings, both for their executive boards and for their general body. With a few exceptions, these meetings typically have a light carbon footprint. Still, SA should encourage clubs to reduce their paper use and make recycling available at their meetings.

Many SA clubs also hold events outside of their regular meetings. These can range from tabling in the Student Union to hosting a movie night to holding a large banquet at a nearby hotel. Like any SA event, these events contribute to greenhouse gas emissions through electricity use, paper use, waste, and commuting. While every event is different, clubs can make an effort to reduce their environmental impact by holding events closer to campus, using less packaging and paper, and ensuring access to recycling bins.

In addition, clubs often send their members to conferences, tournaments, and other events both near UB’s campuses and outside the Buffalo area. The most direct way that this affects SA’s footprint is through transportation. The Student Association provides vans for this purpose, and over the course of a...
year, SA vans travel more than 120,000 miles, consuming more than 7,000 gallons of gasoline. Clubs also travel to these events with their personal vehicles, further contributing to SA’s environmental impact.

Clubs hold meetings and events on an individual basis, but they also operate on a council-wide basis. Clubs are organized into 6 councils, and these councils hold events, which include Engineering Week, International Fiesta, and the POC Soirée, among others. These council-wide events are typically larger in scope than club-specific events, but the environmental concerns are very similar. Council Coordinators should look to reduce the environmental impact of these events by reducing energy consumption, waste levels, and personal commuting.

Club councils have an important role to play in making club activities more sustainable. Coordinators, who are very familiar with their respective clubs, can assist clubs in looking for ways to green their operations. Furthermore, councils that actively work to reduce the environmental impact of their events may be better able to inspire clubs to do the same.

Because of the many differences between clubs, there is no one-size-fits-all solution to climate neutrality in this area. Successfully bringing club operations towards sustainability will require close work with individual clubs. Though this may be one of the most difficult aspects of SA’s footprint to change, it is certainly one of the most worthwhile. By working with clubs to reach climate neutrality, we can have a serious effect on the knowledge, attitude, and behavior of undergraduates towards the environment.
J: Promoting SA

Every event that SA holds is promoted in some way. Promotions are, to a certain extent, essential to the success of the Student Association. Without any communication to students about what SA is doing, events would be sparsely attended and most undergraduates would fail to see what their student government has to offer.

There are many ways to advertize, and some methods have a heavier carbon footprint than others. At the very lowest end of impact is chalking. This is simply using chalkboards in lecture halls and classrooms to promote SA. Digital promotion has the second lowest level of impact. The Student Association can use its website (www.sa.buffalo.edu) as well as facebook and UBmail to promote its events. Computers require electricity, but digital promotion has a relatively light footprint. Most of SA’s promotions, however, use paper. This includes large banners, flyers, and quarters. Our paper isn’t our largest source of emissions, but it is one of our most visible. Students would be hard-pressed to go a week without seeing some form of SA advertizing on paper. While this means that many students are seeing what SA has to offer, it also means that students are seeing SA’s incredible paper use on a regular basis.

Over the course of a year, all this paper adds up. If all the paper SA uses annually for promotions were rolled and cut into 8½” x 11” sheets of paper, and the sheets were placed end-to-end, the line would stretch 27.7 miles. On a positive note, the Communications Department has begun reusing CIT paper for much of its promotions, drastically saving on costs and on environmental footprint. Because of this, about 15 miles of our 28-mile line would be made of reused paper. Still, that leaves 13 miles of first-use paper, and this doesn’t take into account the toner used to print on every sheet.

SA can take steps to reduce the amount of paper it uses to promote without losing its ability to communicate with students. The Student Association can start by increasing the amount of printing done on CIT paper, thus reducing the amount printed on first-use paper. SA should take more advantage of carbon-light advertizing by making better use of its website, chalking more often, and printing banners in lieu of flyers.

We should also reduce, and eventually eliminate, our use of quarters. Quarters are small pieces of paper (one-quarter the size of letter-sized paper) that are handed out to students and put in lecture halls. They pose a number of problems. Quarters in lecture halls typically only stay there for one or two days, reducing their effectiveness. When handed out to students, they are often ignored. Quarters are often left on the floor, and are not often recycled. In addition, they are symbolic of waste and annoyance to students, many of whom tune out the constant presence of quarters in large lecture halls. They are also a nuisance to custodians, who have to clean up quarters off the floor at the end of each day. Ending our use of quarters would represent progress on a number of levels.

SA should also work with clubs to reduce their paper use in promotions. By encouraging clubs to seek more environmentally friendly ways to advertize, we help reduce SA’s carbon footprint and send a strong message to students.
K: Purchasing

Over the course of the year, the Student Association spends its more than 4 million dollars in a number of ways. The Entertainment Department buys popcorn and related supplies for the Film Series and other events. The Environmental Department buys t-shirts and water bottles to be given away freely at the end of the year. Office Staff buy printer cartridges, staples, and numerous other office supplies. And SA’s clubs buy several items for their events and their members.

Every purchase SA makes has a carbon footprint attached to it. The impact of our purchases is not measured here, but it does constitute an important part of our total environmental impact. To monitor every single transaction SA makes and assess its footprint would be hopelessly difficult and time-consuming. Instead, SA can adopt a number of policies that will reduce its environmental impact through purchasing.

We can begin by examining our biggest purchases — those that cost the most money and those that we buy in large quantities. For example, SA could begin by researching ink cartridges. Because of the quantity of printing we do as an organization, as discussed previously, we buy a number of ink cartridges throughout the year. SA should look into these products, examine their environmental impact, and make a habit of buying cartridges that are most friendly to the environment. By doing this with just a few items each year, we can make significant change in our carbon footprint.

We also need to consider our suppliers. SA has purchasing contracts with many businesses. Some companies, such as Staples and Wegmans, we buy from regularly. The Student Association should choose its primary suppliers carefully, examining their track record on sustainability. Staples, for example, was recently ranked the 23rd greenest company in the U.S. by Newsweek. When choosing national suppliers, SA should select those with a proven dedication to the environment. When working with smaller companies, SA should discuss its environmental concerns and work to ensure these companies seek to operate sustainably.

These kinds of practices can have a ripple effect outside of UB; when businesses see their customers demand sustainability, they will be likely to examine their own carbon footprints.

The Student Association also needs to communicate its purchasing goals with clubs. Clubs make up a sizeable portion of the budget, and they make up a sizeable portion of all SA purchases. For us to truly reach climate neutrality in our purchasing, we’ll need to work closely with all clubs.

Eventually, SA can work to make sure its purchasing is in line with its overarching goal of climate neutrality. In addition, seeking green practices in this area is one of the many ways that SA can encourage a culture of sustainability beyond the University at Buffalo.

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1 “Green Rankings: U.S. Companies”. Newsweek. 18 October 2010. 
http://www.newsweek.com/2010/10/18/green-rankings-us-companies.html#
The Way Forward

This document is not the end, but rather the beginning of an ongoing discussion about SA’s climate neutrality. We are taking the first steps on the way to no net greenhouse gas emissions by 2020.

We started this journey in the spring of 2010, when the executive board worked towards a campaign promise of writing a Climate Action Plan for SA this school year. They took the first steps by creating a Climate Neutrality Director in SA’s Environmental Department. This position, which I’m honored to fill, is responsible for writing SA’s Climate Action Plan.

This document is surveying the land, so to speak, in preparation for the Plan. We now know SA’s carbon footprint. We know our main sources of emissions. We have documented the areas where improvements are being made. We have made clear the areas that most need work. We can see that part of our journey will be easy, while other parts will be difficult. We have an idea of our starting point. Now we must chart our path to the end.

In very rough terms, organizations reach climate neutrality through two steps. First, the organization does everything it can to reduce its carbon footprint as much as possible. If SA takes the appropriate steps over the coming years, it can get most of the way there, but there will still be some areas where becoming climate neutral will be impossible or, at the very least, cost-prohibitive. The second step, then, is to offset any remaining carbon emissions (see “Carbon Footprints and Climate Neutrality” in the Introduction). Offsetting is usually more costly than reducing emissions, which is why all other actions must be taken to reduce our emissions first.

In the coming months, we’ll gather suggestions and ideas for making SA climate neutral. We’ll weigh our options, and in doing so plan out each part of our route. This will culminate in the Climate Action Plan, to be released in the spring of 2011, which will outline our path to climate neutrality by 2020.

Still, the Climate Action Plan will only put us at the beginning of our 10-year journey. The Climate Action Plan is only a plan; we will need to put it into action.
Reaching climate neutrality will require many different kinds of solutions. We cannot be limited to behavioral changes, or to structural changes, or to cheap fixes, or to expensive projects. We cannot stop our mission at the walls of 350 Student Union. For us to become climate neutral, we’ll need to change the way we organize. We’ll need to modify the way we think and the way we act. We’ll need to integrate the concept of sustainability into every step we take as an organization.

Importantly, we’ll need to take action outside of SA. At times the boundaries between the Student Association and the rest of UB will be unclear. But we cannot be afraid to step over those boundaries, and to encourage sustainability beyond ourselves.

An excellent example of this came this past summer. SA purchased thousands of reusable water bottles, and has been handing them out to students over the course of this year. I’ve seen these bottles everywhere I go on campus. Calculating the number of plastic water bottles we’re saving, the amount of oil we’re not using, and the amount of waste we’re preventing would be extraordinarily difficult. One might argue that buying these water bottles is not the responsibility of the Student Association. I would say otherwise. One of our primary goals, in achieving climate neutrality, is to build a culture of sustainability, inside and outside UB. Only when the Student Association, the University at Buffalo, and Western New York are dedicated to the environment can we make real progress.

An important part of this transition to a culture of sustainability is communicating our goals and celebrating our successes. We, as an organization, need to make clear to students, faculty, staff, and community members our intentions for climate neutrality, and the steps we’re taking to reduce our footprint. SA can serve as an example and inspiration for others to follow in this way.

The Student Association is a dynamic organization, being directed by an ever-changing group and taking part in new activities all the time. As the situation around us changes, we will have to change our approach. We won’t have the luxury of laying out a plan and watching it be delivered verbatim, piece by piece. Over time, SA will change, UB will change, and our strategies will need to change as well.
There will be many unexpected twists and turns. There are many things about which we are not certain. But we can be certain of a few things.

We are certain that humans are degrading the environment by spurring global climate change.

We are certain that, if left unabated, climate change will threaten life as we know it.

We are certain that the world’s supply of oil can only decrease, and that we will one day need to learn to live without it.

We are certain that we cannot use the earth’s resources forever without replenishing them.

Also:

We are certain that people, organizations, universities, and nations can achieve climate neutrality, given the proper opportunity and willpower.

We are certain that sustainability is the only way to create lasting ecological and human systems, and is a worthwhile long-term goal for any entity.

Many have come before us, heralding the message and working towards the goal of sustainability. Many will come after us, picking up where we left off. We cannot change the past, nor can we anticipate the future. We can, however, take our place in the journey to climate neutrality. We must now plan our route to sustainability. Now is the time for us to find creative approaches to problems. Now is the time for us to make difficult decisions. Now is the time for us to investigate solutions.

Let’s begin.