

To: Dr. Christine Grogan
From: Tori Foster, Penn State Student
Date: March 3, 2016
Subject: Proposal: Add Outdoor Recycling Bins to Our Recycling Program

The purpose of this proposal is to seek clearance to further explore for Project 5 the topic of outdoor recycling. On Penn State's University Park campus, recycling bins for many types of recyclable material can be found inside—in residential halls, dining commons, and other campus buildings. However, the problem is that they cannot be found outside on campus grounds. This proposal will provide information about Penn State's current recycling program, a possible solution, a research plan, a weekly schedule, and my qualifications to address this problem.

Problem: Lack of Outdoor Campus Recycling Bins

The Pennsylvania State University provides recycling bins in residential halls, dining commons, and other campus buildings for faculty, staff, students, and visitors to separate recyclable materials that include mixed paper and newspaper, plastic bottles and film, miscellaneous plastic, glass, metal, and compostable material. Some examples of these recyclables include the following:

- Magazines, computer paper, paperboard boxes
- Water and soda bottles, grocery bags
- Yogurt containers, plastic take-out containers
- Aluminum foil, aerosol spray cans
- Food waste, paper towels, and tissues

On November 11, 2008, Policy AD34 University Recycling Program went into effect. The purpose of this policy is for the university to commit to sustainability and conserving environmental resources. The policy states that all faculty, staff, students, and visitors are to participate in the Recycling Program by separating recyclables. Some of the objectives of this policy include improving the efforts of recycling and reuse of University-generated waste, acknowledging recycling and reuse as the primary way to dispose of waste, and promoting reduction of University-generated waste by recycling, reusing, composting, and green purchasing (*Policy AD34 University Recycling Program*).

Since then, Penn State has developed and implemented a respectable recycling and waste management system. For example, in 2014, Penn State's main campus produced about 14 thousand tons of waste. With the recycling program and waste management, the university was able to redirect 100 different types and about 8 thousand tons of waste from landfills, which is about 56% of our waste. When we factor in university composting, an additional 4 thousand tons or 30% of our waste was diverted (*Recycling and Composting*). In total, 86% of our waste was redirected. Although this is a big achievement for Penn State, I believe there is still room for improvement.

In 2014, Penn State implemented a closed loop waste program called Möbius with the slogan, "Penn State Waste Management...with a twist. Every residence hall. Every building. Everywhere. Everyone" (*Recycling and Composting*).

However, Penn State has missed the mark on the everywhere part. The University Park campus lacks outdoor recycling bins. Many students, faculty, and visitors who are walking around campus

have nowhere to recycle their waste outdoors. In most cases, people throw the recyclable materials away in outdoor trash cans instead of walking into a building to recycle it properly. This poses a major problem in the recycling and waste management program. The university is missing out on the opportunity to increase the amount of waste that can be redirected because, as research shows, about 70% of waste that is thrown away in outdoor trash cans, can be recycled (*Recycling and Waste Management Overview*.)

Penn State is also missing out on the opportunity to save money. It costs the university \$70 per ton to have waste transported to landfills and either \$5 or \$20 per ton, depending on how the waste is delivered, to have it transported to the local recycling authorities (*Residence Hall Recycling Information*).

Another opportunity lost is marketable advertisement. Having properly labeled recycling bins outside around campus can advertise Penn State's respectable and award-winning recycling and waste management program and that we are... serious about our commitment to sustainability.

For these reasons, I propose that the university install outdoor duo waste and recycling bins, similar to those found at Penn State Altoona, in place of every trash can on campus.

Research Plan

1. The first part of my research plan will be to conduct online secondary research. During this part of my research, I plan to use resources provided to me by Penn State. I will be using Penn State's sustainability website and search tool at psu.edu to find Penn State published articles and reports as a starting point. I will be looking to answer questions such as:
 - How many trash cans are on campus?
 - How much will implementation cost?
 - How much could we save in the long run?
 - What type of outdoor bins would be ideal?
 - Will labor costs increase or decrease?
 - How much waste could this potentially divert from landfills?
2. The second part of my research plan will include contacting Dr. Lisa A. Emili, the sustainability coordinator at Penn State Altoona. The Altoona campus has outdoor duo waste and recycling bins at several different locations. I plan to ask Dr. Emili questions pertaining to the following:
 - What was the cost of each outdoor recycling bin?
 - How much did it cost to install the bins on campus?
 - Was there a positive or negative response from students and faculty?
 - Who was involved in the implementation?
 - Or any other questions I feel I need to ask after conducting my secondary research.
3. The next part of my research includes locating University Park personnel who can answer my questions and help gather the necessary information needed for such a solution. I plan to start this part of my research plan by taking a closer look at the Sustainability Institute and Office of Physical Plant. Once I have located the right people to contact, I plan to ask them any questions that I might not have found answers to during my online secondary research.

4. The last part of my research plan will be to conduct primary research by surveying current students to see how interested they are and how likely it would be for them to use the outdoor recycling bins. Some of the questions that may make their way onto the survey include:
 - Are you aware of the recycling program on campus?
 - Do you recycle?
 - If there were recycling bins outside, would you use them?

Schedule

I have created a tentative weekly schedule to ensure I can complete the project on time.

Week 1: March 14 – 20

- Create a list of questions that need to be answered to write a report and presentation and to implement my solution
- Find answers to my questions through Penn State websites or other online resources
- Make a list of questions and contact Dr. Emili

Week 2: March 21 – 27

- Find University Park personnel to contact
- Compile any unanswered questions along with new ones and contact the appropriate faculty members

Week 3: March 28 – April 1

- Create a survey with Google Forms for students to fill out via social media and email
- Analyze information found and create original documents as necessary
- Start designing the report

Week 4: April 4 – 10

- Draft report
- Conduct any other necessary research

Week 5: April 11 – 17

- Complete report
- Revise report
- Turn in report

Week 6: April 18 – 24

- Prepare presentation slides
- Practice presentation
- Present presentation

Qualifications

I am a Management Information Systems major, and one of the main focuses of this major includes data analysis. Most of my major courses involve analyzing data using analytical tools and techniques. I received full credit on a project that involved analyzing data for fast growing private companies, producing original documents and a presentation of concluded results, and researching possible explanations for results found. These analytical skills that I have gained and continue to develop through my major courses will help me produce a proper report for this solution.

Before attending Penn State, my family and I participated in our local recycling program for many years. At a young age, I was taught that we can help make our environment cleaner by recycling what we can. I also have been a resident on campus for three years now. With recycling bins and informative posters readily available in residential halls, I have been able to transition from recycling at home to at school quite easily.

Because I am someone who recycles and realizes that recycling is highly encouraged in residential halls and dining commons, I personally have had problems with not being able to recycle my materials outdoors around campus and have felt guilty throwing away my bottles or containers in outside trash cans. Many times I have grabbed something to eat on my way to class or finished a snack or drink while walking around campus. It really is undesirable to hold onto trash until you arrive at a building to properly dispose of it. The one question that always comes to mind when I face this issue is, why is there nowhere for people to recycle outside?

Authorization

Through this proposal, I have brought to your attention that the lack of outdoor recycling bins poses a problem in the current recycling and waste management program at University Park. The goal of the solution is to increase the number of waste redirected from landfills, further our commitment to sustainability, decrease costs, and seize the opportunity to market recycling. I have provided a detailed schedule that shows that this project can be completed within the time frame. With my personal interest in recycling and analytical skills gained through my major, I am perfect for working on a project such as this. I formally ask for your permission to move forward and help Penn State sustain our environment.

If you have any questions, please contact me at 555-555-5555 or at xxxxxxx@psu.edu. Thank you for your time and consideration.

References

Policy AD34 University Recycling Program. Penn State Administrative. Retrieved Feb. 2016, from <https://guru.psu.edu/policies/AD34.html>

Recycling and Composting. Sustainability Institute. Retrieved Feb. 2016, from <http://www.sustainability.psu.edu/recycling-and-composting>

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