
Student Sustainability Advisory Council

Fall 2017 Recommendations Report



PennState

Food and Waste

Subcommittee Statement:

It is clear that there is an issue with waste management initiatives on campus. Even more so, student engagement centered around waste management programs proves to be a much larger concern. Therefore, it is imperative that an emphasis on peer leadership programs offered through Penn State that intend to inform a broader range of students must be administered. As leadership is one of the three pillars of the Penn State Sustainability Strategic Plan, the following suggested peer led programs have the potential to be a solution for the waste management issue on campus as they serve to facilitate the students' voice, thus encouraging more involvement regarding reducing campus-wide waste.

Our first solution proposed to solve student engagement around campus waste reduction is to implement an Environmental Ambassadors Summer Program offered through the Sustainability Institute in which high school juniors and seniors will come to University Park for one week and learn about sustainability at PSU. This program includes students meeting with participating faculty and working on a sustainability-issue-focused project. Benefits of this program include credit and internship opportunities, acting as a recruiting tool, and furthering PSU's strategic plan to "generate, integrate, apply, and disseminate knowledge that is valuable to society [by] create[ing] stewards for our planet's resources". Supporters of this proposal include Michelle Amateau, former professor in Women Studies and founder of Women for Environmental Justice, and Doug Goodstein, Associate Director of Student Engagement.

The next proposed solution is to create a commonwealth sustainability summit that will gather commonwealth campuses together to discuss the status and improvements needed to the current structure of sustainability on the campus. This will create a greater network of leaders and provide a stronger connection amongst campuses. Current initiatives already in place through the Sustainability Institute to target this issue are the Regional Roadshow as well as the Waste Task Force proposed by the Sustainable Operations Council. We fully support the Regional Roadshow intended to familiarize the campus with Dr. Shrivastava as well as educate commonwealth campuses on sustainable programs at University Park. We feel that there should be a student representative on the Waste Task Force committee that will be created by January 1, 2018, and intends to analyze the life cycle of waste policies, infrastructure, consumption patterns, purchasing decisions and accounting practices at University Park. These initiatives help to answer the question of "How should the University enhance Penn Staters' sustainability literacy, ensuring sustainable consumption and production patterns?" (Sustainable Development Goals 12). Supporters of this proposal include Lydia Vandenberg, Associate Director of Employee Engagement and Education at the Sustainability Institute.

Furthermore, we have witnessed excessive waste coming from plastic bag use around the campus. A simple solution we've proposed to campus dining is to train cashiers not to mention bags. We've seen that if a person is not asked whether or not they want a bag they are more likely not ask for or even miss having a bag. However, we feel this solution will not engage the students on a topic that should follow them past their time here at Penn State. By including students in the quest to make Penn State bag free we help to raise awareness and a sustainable mindset within students. Our recommendation is to create a competition for students to create an economical and environmentally friendly alternative to plastic bags. This competition would provide incentive and leadership opportunity for students while encouraging entrepreneurship within Penn State students.

We hope to further the collaboration of Eco Reps with the Energy Ambassadors. Energy Ambassadors, as discussed in the Community Development presentation, are students that lead tours of unique places on campus, to give students a greater feel and appreciation for Penn State's physical infrastructure. These students would hopefully aid in the tours of the power plant, composting facility, and Morningstar Solar home. Because Eco Reps are a student outreach group that engage with students in dorms as well as dining halls, we believe it would be beneficial to offer the same training that the ambassadors are getting to the Eco Reps. This initiative will promote cohesion between different sustainability groups on campus and ultimately unite environmental outreach groups. The initiative will also foster a group of more informed students on the wholistic infrastructure

of Penn State. With an increased number of students understanding more about composting and energy usage, we hope that students will be more proactive in adopting sustainable behaviors that last throughout their lifetime.

Though we've provided numerous recommendations, there are multiple programs already coming into fruition we hoped to mention. Lisa Wandel and Jim Meineke's proposal to begin the "Why Waste" campaign is not only an important educational tool for students but an integral part of furthering our subcommittee's mission. Through posters, videos, and other educational means the program will reshape student's behavior when disposing and taking food to lessen the overall amount of food waste that is generated. If a student for example is taught to be more mindful when taking food from a buffet they will hopefully take smaller portions so as to not end out with leftovers in the garbage/compost. As a smaller addition to the program we believe it would be beneficial if composting bins were clear so students can distinguish them from others with ease while the inner bag lining will shield the contents from view.

Continuing with supporting other programs, Lisa Wandel has also proposed a restructuring to the Food Recovery Network that should revive what is a formidable way to utilize food leftovers from the dining commons. After contacting multiple local homeless and child shelters, there is a network of staff forming who are willing to drive on campus after the lunch period to pick up these leftovers. This program will not only reduce the amount of waste generated on campus but will also provide local State College residents in need with free meals thus furthering our University's local outreach and philanthropic nature.

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Energy

Energy Dashboard:

An energy dashboard coupled with an energy kiosk in the HUB. An energy dashboard is a tool that collects data from each metered building on campus and automatically stores the data, organizes it, and analyzes it. As recognized by OPP, an energy dashboard could substantially improve our energy consumption habits. A flexible interface on the dashboard would allow the data and analytics to be accessed on multiple mediums, such as online by faculty at the Office of Physical Plant or various facility managers. In addition, it could be displayed on a touch-screen kiosk in the HUB to gain attention among students (ideally on the blank wall to the left after ascending the stairs from the bookstore). Student awareness and help is vital to our mission to save energy on campus and make the world a more sustainable environment. The kiosk and the ability to use the dashboard in the classroom setting will raise student awareness and increase student engagement in regards to our sustainable efforts. Meanwhile, the dashboard itself, mostly software driven (not hardware) will help Penn State identify possible improvements to our energy consumption. The sophisticated visual presentation of data on the dashboard will encourage faculty and students alike to reach new heights in energy conservation, helping Penn State become a sustainable leader. The dashboard and kiosk together create an opportunity that is financially, educationally, and socially advantageous for our campus.

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Carbon Incentive:

Several universities - including Vassar, Princeton, Yale, and Swarthmore - have implemented a self-imposed carbon ‘tax’. This serves as an incentive for energy efficient projects that reduce the amount of carbon dioxide emitted by universities and includes “green savings” on project budgets – multiplying the amount of CO2 reduction by a set carbon tax amount. Matt Leah from OPP strongly supports the implementation of this carbon incentive as it would greatly assist the Energy Savings Program that he manages. Steve Oskin, Mike Prinkey, and Laura Miller, all from OPP, also support the implementation of a self-imposed carbon ‘tax’ at Penn State. We recommend that Penn State forms a team of faculty, staff, students, and other leaders to work out the details in the potential implementation of this tax. In addition, we recommend that Penn State leadership supports the inclusion of carbon savings on OPP project budgets.

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Biomass Recommendation:

A sustainably managed biomass cogeneration plant can be an effective tool for lowering emission of greenhouse gas and decreasing dependence on fossil fuels. Besides providing both utility scale electricity and thermal energy, biomass generation can provide power during an outage since it only relies on a stockpile of biomass. In order for a biomass system to be considered carbon neutral, the material must be replanted, or it must come from a source in which the material degrades and thus releases carbon regardless. Given Penn State’s interest in biomass, as evidenced by OPP’s September 2017 East Campus Master Plan Request for Proposal, it is a reasonable time to discuss potential implementation strategy. From the experience of the University of Iowa, a “Biomass Project Team”, assembled from interested faculty, staff, students and potentially business representatives, can create a sustainability index to evaluate biomass operations and ensure sustainable operation. A project team can also lead biomass outreach initiatives to present an analysis of biomass to Pennsylvania stakeholders, such as farmers, landowners, ecologists, and politicians, invoking Penn State’s responsibilities as a land grant institution. Penn State Students and researchers can also benefit from having an on-site biomass generator from the ability to perform experiments and conduct research. The SSAC recommends that Penn State allocates funds for a biomass project in the 2024-2028 Capital Plan, presuming support from both the Project Team and the design team performing the feasibility study.

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Community Development

NSO Sustainability Component:

New Student Orientation teaches students and parents to Penn State's culture. By including a sustainability component in NSO the university can introduce these individuals to the many different sustainable projects across the university. This past summer, with the help of NSO Director Dan Murphy, Associate Director Katie Motycki, and Senior Director of Union and Student Activities Mary Edington, the SSAC implemented three new initiatives: sustainability signs, O-team modeling behavior, and recycling videos. In order to improve upon these initiatives, the SSAC is committed to developing a more permanent component for NSO. Thus, we are asking for continued influential and financial support as we complete our task.

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Energy Ambassadors:

In previous semesters, the SSAC has made recommendations regarding the creation of an energy ambassadors program, which would be a student-run organization run out of OPP and the Sustainability Institute. This organization was expected to give tours to interested parties of the steam plant, the Morningstar Home, and other sustainable organizations on the Penn State campus. However, one aspect of the program that was missing was a component where students can go into classrooms and educate young students about different sustainable organizations, practices, and infrastructure that existed on campus. This recommendation primarily requests support for an organization, run out of the Sustainability Institute and in collaboration with Peter Buckland, for students who are passionate about education and sustainability. This organization will help students gain skills in public speaking and facilitation, with a focus on the environment and sustainability.

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Environmental Justice Initiatives:

Penn State can better advocate for diversity and inclusion by implementing environmental justice programming into their curriculum and by providing beneficial donation resources to students. To further these initiatives at Penn State, the University could develop a plan to measure students based on their cultural competency, knowledge of sustainability, and overall experiences that foster the efforts that align with Penn State's strategic plan. These results can lead to the recognition of programs that promote these skills and point to areas of student education that could be improved. Furthermore, a great way to facilitate experiences that diversify the sustainability conversation is to invite and fund speakers to come educate students throughout the fall and spring semester about past and current environmental justice news. To continue the support for these events, we plan to work alongside the Paul Robeson Cultural Center, Eco Action, and the Multicultural Resource Center for advertisements. In addition, equipping students with reliable resources on how they can support these issues throughout the school year would be a way to empower them and get them more actively involved with the local and global community. Our recommendations continue to stress the connection between environmental and social justice, and offer a method for examining students based on their proficiency/awareness of these concepts and a way to apply them in the future.

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