

Recycling Services Newsletter

IOWA STATE UNIVERSITY Facilities Planning and Management

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Facilities Planning and Management (FPM) Recycling Services is committed to establishing a sustainable campus through the reduction of waste produced, reusing materials as much as possible, as well as recycling materials into new products. Our focus is to continue promoting the three R's: Reduce, Reuse, and Recycle, which is vital in achieving an effective waste minimization/zero waste program. Taking a campus as large as Iowa State University on the path to becoming a zero waste campus is a challenge. By using the waste management hierarchy approach, our goal is to keep 85% of waste out of the landfill by 2025.



**GOVERNOR KIM REYNOLDS
(PICTURED WITH AYODEJI
OLUWALANA) OFFICIALLY
DECLARES NOVEMBER 15
IOWA RECYCLES DAY**

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CAMPUS COLLABORATION EFFORTS

CARDBOARD GIVEN NEW LIFE AS ANIMAL BEDDING

The ISU Beef Nutrition farm allowed for a collaborative effort which brought a solution to the enormous amount of cardboard generated on campus. A circular economy pilot project was developed. This project involved cardboard generated on campus being shredded and used as animal bedding at the ISU Beef Nutrition Farm. The shredding is later sent to the compost pile to breakdown and then eventually used for soil amendment.



SHREDDED BEDDING



CARDBOARD BEDDING

The initiative was piloted in August 2019 and completed in November 2019. Due to cardboard's higher absorbent characteristics and the warmth it provided for animals, shredded cardboard is better bedding material for the animals than the corn stalks being used. The campus currently generates nearly 100 tons of cardboard per month. With the successes recorded, it will significantly reduce cardboard recycling costs, potentially reduce the cost of bedding materials for the animal farms, and contribute to soil amendment efforts. In turn, it will be a high win for the attainment of our zero waste efforts on campus.

Thanks to the Iowa State University Procurement Services for being a strategic partner. They ensure that contracts departments sign with vendors are cost effective, sustainable, and align with our waste reduction and diversion efforts.

The project is expected to formally begin in fall 2020, making Iowa State the first university in the country to use its campus generated cardboard for animal bedding and compost.

DESIGN CLOSET

DESIGN CLOSET SUPPORTS ZERO WASTE EFFORTS

The College of Design is a major hotspot of waste generation on campus due to studio projects. At the end of spring 2019, the FPM recycling coordinator spoke with the executive cabinet of the College of Design to discuss how they can support recycling and the zero waste program. The department of Art and Visual Culture invited the recycling coordinator to its faculty and staff retreat at the beginning of fall 2019 to discuss tangible steps and actions the department, as a whole, can take to support zero waste efforts and also introduce to students.

At the beginning of the fall semester, a major initiative was taken to address waste issues within the college, the creation of a standard operating procedure by Jordan Brooks, Director of Equity, Inclusion, and Multicultural Student Success in the College of Design. These procedures detailed steps for marketing and collecting donations for new and gently used design materials that would be housed in The Design Closet.

The Design Closet is a designated room within the college. This room stores free new and gently used design materials from previous classes/semesters for use by students. Recycling Services provides bins for collecting materials and continues to do so.

To learn more about this project, contact Jordan Brooks, Director of Equity, Inclusion, and Multicultural Student Success, 205 Design, College of Design, 515-294-9555.



Photo credit: College of Design website

ZERO WASTE VOLUNTEER TEAM STARTS

Recycling Services officially started its zero waste volunteer team in November 2019. The zero waste team is a volunteer-based group comprised of faculty, staff, and students who are passionate about the university's zero waste efforts, recycling, and sustainability efforts. The team also serves as advocates across campus to engage peers and colleagues. Volunteers will help during athletic events to educate fans.

The team plays a crucial role in supporting the university's zero waste goal of achieving at least 85% diversion from the landfill by 2025. The team position is to generate awareness of waste reduction, encourage reuse of materials, and ensure items that can be recycled do not end up in the landfill.

To become a zero waste team member, please [visit the recycling services page](#) or email recycling@iastate.edu

OPTIMIZATION AND OPERATIONAL PROJECTS

LABORATORY WASTE AUDIT

Recycling Services partnered with the Crop Genome Informatics Laboratory (USDA) in fall 2019 to help reduce waste generation and improve waste diversion by conducting a five-week waste audit. This audit revealed vital information, showing the building was only diverting 23% from the landfill, which could potentially be higher.

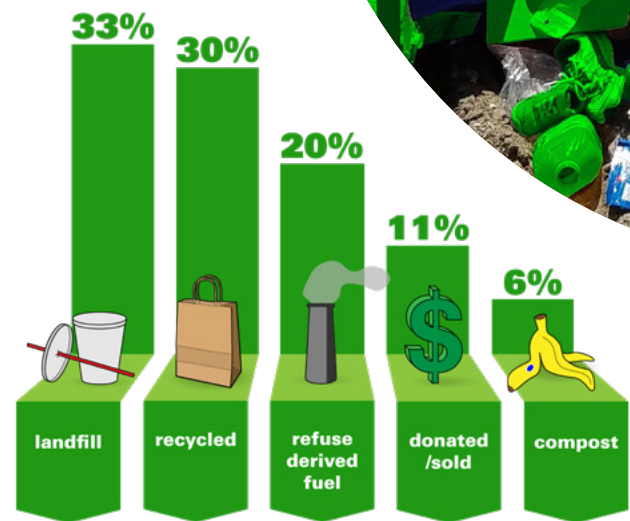
Steps that were taken after the audit include, ensuring there were no stand-alone trash bins. Instead, they were paired with recycling bins in offices and shared spaces with signage to explain what goes into each bin. Audit results were shared with building occupants, and they were encouraged to reduce waste.

CONTINUING THE FPM RECYCLING STUDY

A second pilot was introduced at FPM following a successful pilot study conducted fall 2018/ spring 2019. The office study centered on reducing waste generation and addressed feedback/concerns received from staff and other stakeholders. This pilot would aid in determining the best model that should be adopted in all campus offices. Although the results of these waste audits showed a tremendous increase in recycling rates, there was still room for improvement. A considerable amount of waste and, more importantly, recyclable materials were still found in trash bins.

FPM embarked on a new study in fall 2019, which was a departure from the current practice across campus. Custodians would service desk-side recycling bins every two weeks. Each staff-person would be responsible for emptying their desk-side trash bins, if they have one, or elect to use the communal trash bins. The purpose of this new approach was to rethink participants' waste map, encourage positive recycling behavior by making recycling just as easy and convenient as landfilling, and increase

LANDFILL AUDIT



recycling rates. The goal was to reduce waste from trash bin liners, which constituted a significant amount of total waste sent to the landfill. Plus, divert approximately 90% of the waste generated in offices, which is recyclable. Results showed a significant increase in recycling rates to over 85% in the General Services building. Recyclables were very clean and had little or no contamination. Similar studies will be conducted in other buildings in the coming months.

As follow up on participation in the study, in October, recycling was the topic of an FPM Forum, which highlighted "Recycling on Campus: the Journey So Far and Future Steps." This session recapped established partnerships and processes in promoting sustainable materials management and best practices to faculty, staff, and students. The forum served to educate how these efforts contribute to becoming a zero waste campus by 2025, including keeping at least 85% of waste generated on campus out of the landfill. This forum was strategic as FPM staff took part in the office space pilot study, which will be expanded to the rest of the campus soon.

CAMPUS ENGAGEMENT



SUSTAINABILITY AND RECYCLING FORUM

WASTE PERFORMANCE REPORT

Identifying ways the university can reduce waste on campus is critical to achieving a zero waste goal. Recycling Services regularly performs accurate tracking of the volume of waste produced, recycled, donated, composted, and landfilled to monitor progress. Including matching invoices received from service providers to ensure accuracy.

Recycling Coordinator, Ayodeji Oluwalana, worked with Procurement Services to establish processes for reviewing current departmental and unit contracts. This led to development, consolidation, and reviewing future contracts with sustainable vendors, cost-effective, and reduce waste on campus. Through this process, FPM has had an operational cost saving of over \$10,000, including a waste reduction in some departments.

In fiscal year 2019, Iowa State had a 67% diversion rate. 2,000 tons of garbage from Iowa State went to be landfilled, 1,230 tons burned for fuels at the City of Ames Resource Recovery Plant. 1,850 tons were recycled. 705 tons donated through ISU Surplus. And 355 tons composted at the ISU compost farm.

SUSTAINABILITY AND RECYCLING FORUM

Recycling Services partnered with the Student Government - Director of Sustainability, Office of Sustainability, and the student club - Engineers for a Sustainable World to host a recycling and sustainability forum. The event took place on September 25, 2019 in the Memorial Union. Panelists included: Ayodeji Oluwalana (Recycling Coordinator), Merry Rankin (Director of Sustainability), Izabel Wilde (Sustainability Director, Student Government) and Carissa Moyna (President and Compost Project Leader, Engineers for a Sustainable World). The session involved brief presentations from each of the panelists and a question and answer session. Due to the success of this event, the forum will be held annually.



**GOVERNOR REYNOLDS RECEIVES A
RECYCLING PIN FROM RECYCLING
COORDINATOR, AYODEJI
OLUWALANA**

AMERICA RECYCLES DAY/ IOWA RECYCLES DAY

Every November 15, the United States celebrates America Recycles Day, a national initiative of Keep America Beautiful which was first established by the National Recycling Coalition in 1997. It is the only dedicated, nationally recognized day to encourage all Americans to recycle and purchase recycled products.

Oluwalana joined the student government sustainability committee to celebrate with a tabling event at the Memorial Union. Governor of the State of Iowa, Kim Reynolds declared November 15 as Iowa Recycles Day. The proclamation, supported by the Iowa Recycling Association and Keep Iowa Beautiful, is a unique opportunity to renew the state's commitment to making environmentally conscious changes in our lives so that future generations can live a better, cleaner tomorrow. It is expected that the



**AMERICA RECYCLES
DAY TABLE EVENT**

proclamation will help the state strive to reduce waste, conserve resources, and meet and exceed obligations to our planet. Oluwalana was present for the proclamation signing ceremony at the state capitol.

HIXON-LIED IMPLEMENTS RECYCLING BINS

Recycling Coordinator, Ayodeji Oluwalana, joined the staff of the Hixon-Lied Student Success Center to discuss the university's recycling strategy and efforts, and formulate how building occupants can contribute to waste reduction. The building has implemented recycling bins and signage to support waste diversion and encourage recycling.

"No step is too small to help campus achieve the Zero Waste goal."

GREEN UMBRELLA

The Green Umbrella is a student organization that brings together different student sustainability organizations to make Iowa State students more aware of sustainable efforts on campus. In September, Oluwalana was able to present to Green Umbrella regarding zero waste goals and solicit for volunteers to be part of the zero waste volunteer team. We are thankful many members of the Green Umbrella organization form an integral group of students currently on the zero waste volunteer team.

GUEST LECTURES

Behavior modification is a crucial component to successful recycling and zero waste programs. Oluwalana has the opportunity to challenge students to consider how their behavior might encourage the generation of large amounts of waste in a guest lecture during a Design Studies 183 class in October. Students were asked how they might modify their behavior to reduce both consumption and production of materials in their various studio works. Introducing the concept of waste as a "wicked problem" was Oluwalana's key topic in the lecture. Key take-aways included explaining characteristics to help students understand how to recognize a wicked problem and address such problems. Also, how it impacts their lives in an immediate everyday way, especially as a student in the College of Design.

He highlighted that waste, as a wicked problem, could be solved with changes in individual behavior, which has a straight forward impact in the future.



GREEN UMBRELLA



DSN 183 GUEST LECTURE

Similarly, Oluwalana guest lectured for Environmental Science 202 to engage students regarding waste reduction, recycling, and the zero waste goal, including how students play a critical role in achieving this goal.



What is Zero waste?

It is a lifestyle, philosophy, movement, and solution to reduce consumption, minimize waste, and maximize recycling. It is a process aiming to eliminate rather than manage waste. Not only is zero waste about recycling and diversion from the landfill but it streamlines production and distribution systems to prevent waste from being produced in the first place.

Who is the Zero waste Team?

The zero waste team is a volunteer-based group put together by Facilities Planning and Management (FPM) Recycling Services comprised of faculty, staff, and students who are passionate about the university's zero waste efforts.

The team will serve as advocates for the zero waste program across campus to engage peers and colleagues in their respective departments and buildings. They will also volunteer during athletic events to educate fans.

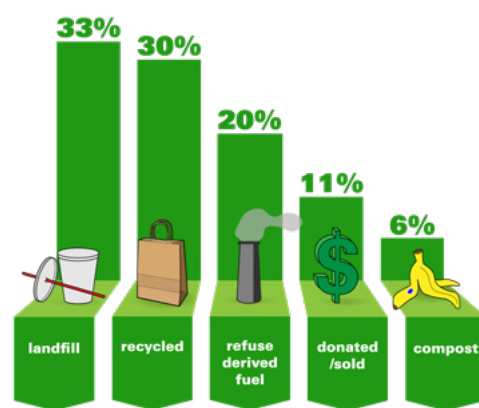
Why a Zero waste Team?

The zero waste team plays a key role in supporting the university's zero waste goal of achieving at least 85% diversion from the landfill by year 2025. The team position is to bring awareness to reduction of waste generation, encourage reuse of materials, and ensure materials that should be recycled do not end up in the landfill.

For more information about zero waste team members and their responsibilities [visit our recycling website](#).

Iowa State University is on a mission to become a zero waste campus by keeping at least 85% of its waste out of the landfill by 2025. Our approach in managing waste is the promotion of the Reduce, Reuse, Recycle model, which is vital in achieving our goal.

In the last fiscal year, campus generated 6,137 tons of waste out of which we diverted 4,112 tons (through recycling, materials donated/sold, composted, and refuse derived fuel) which amounted to 67% of waste diverted from the landfill.



Ayodeji Oluwalana

Recycling and Special Events Coordinator

recycling@iastate.edu

515-509-9785