

## Plastic waste reduction strategies CASE STUDY BIG 10

## Office of Business Partnerships

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### IU teams up with Coca-Cola Consolidated to prevent unrecycled plastic waste

Impact Stories

November 30, 2022

IU students and community members recently came together and collected more than 1,600 pounds of recyclables as part of a partnership with Coca-Cola Consolidated, aiming to lower the amount of unrecycled plastic waste.

Following the IU versus University of Michigan football game on Oct. 8, a group of students and community members collected plastic and aluminum waste for two hours. The collected bottles and cans were inserted into The Roadie, created by Revolution at Closed Loop Partners, a mobile, on-site sorting system easily transported around the country to high traffic areas – sporting events, concerts, outdoor venues – to cut transportation costs of recycling centers.

Coca-Cola Consolidated partnered with the IU Office of Business Partnerships, IU Athletics and IU Sustainability to bring The Roadie to the IU Bloomington campus. IU Memorial Stadium has the capacity to seat over 52,000 fans and after the game is over, the leftover waste is substantial.

"We are grateful for the collaboration between IU Sustainability, IU Athletics, Facilities, and Coca-Cola Consolidated to assess the amount of recyclable product produced at a single football game and to glean greater insight into IU's sustainability efforts," said Val Gill, associate vice president of business partnerships at IU.

In total, the group collected 1,625 lbs. of waste which included 14,040 polyethylene terephthalate bottles and 21,049 aluminum cans. The Roadie sorted and consolidated the collected debris and ended with 991 lbs. of recyclable material which was directly transported to a recycling center.

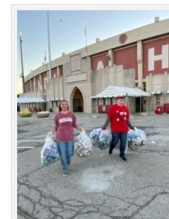
Part of Coca-Cola Consolidated's mission is for their product packaging to be 100 percent recyclable material. Polyethylene terephthalate (PET) is a clear, strong, lightweight plastic created to be recyclable, versatile and was created to be reused. Plastic from the collected bottles is sent back to Coca-Cola Consolidated to be upcycled into new bottles.

"Coca-Cola Consolidated invests in collaborations with partners like Indiana University as part of our Refresh Recycle Renew sustainability initiative," said Todd Marty, senior director of sustainability at Coca-Cola Consolidated. "We're committed to developing industry-leading solutions for recycling, like the Roadie, ensuring that our bottles and cans are made into new packaging."

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#### About the IU Office of Business Partnerships

The IU Office of Business Partnerships is the front door for industry partners seeking to cultivate strategic relationships with IU faculty, researchers, and students. Collaborating with industry leaders and entrepreneurs around the world, we build meaningful, sustainable, and mutually beneficial partnerships in support of our



Hoosier fans help in collecting recyclables.



The collected bottles and cans sorted by The Roadie.

#### Reducing waste through Green Event Certification

From small departmental meetings to large-scale campus community gatherings, IU hosts hundreds of events throughout the year. Implementing green practices at these events, no matter the size, can help reduce our waste, conserve resources, and set an example across campus by engaging the community to sustain IU. Click below to access the Green Events Checklist and resource guide.



[Learn More](#)

#### How Can YOU Sustain IU?



Refuse, Reduce, Reuse, Recycle



Carry your own water bottle (and other reusable)



Shop used/secondhand; give items a second life!



Compost organic waste

#### Event advertising and stationary:

- All unavoidable printing is double-sided
- Recycling bins made available for the disposal of all paper materials
- Reusable dry-erase boards, blackboards, or electronic projectors are used as opposed to paper materials
- Paper printed on 100% post-consumer recycled paper

#### Event Venue, Décor, Giveaways

- Any prizes or giveaways will be sustainable and useful, or no giveaways are provided

[Event planning](#)

[Green certified events](#)

[IU\\_coca\\_cola](#)



## MSU REUSABLES PROGRAM

MSU now offers a reusable container option for mobile ordering at Holden Dining Hall and Holmes Dining Hall! When placing an order, a student can choose to have their meal in a reusable container. In addition, with the Fill it Forward app, participants can see the environmental impact of their actions.

### Follow these steps to sign up for the program:

1. Download the free Fill it Forward app on your phone.
2. See a team member at Holden or Holmes to pick up a Fill it Forward Start Card to be added to the MSU group. See the image at the right for a Start Card example.
3. Use the Fill it Forward app to scan the QR code on the Start Card and enter the 4-digit registration code on the card. You'll see a blue check mark if you're successful in joining the group (this is a one-time step).
4. Scan the return card QR code to ensure you build credit. Our Culinary Services team has this code near the pickup area and can assist you (this is a one-time step).



### Follow these steps after you've signed up:

1. Next time you place a mobile order in the Transact Mobile Ordering app, select 'Container Choice' near the bottom of the checkout screen and choose 'Reusable Container.'
2. When you pick up your meal, you will scan the order QR code in the Transact app, as you normally would for an order pickup.
3. After receiving your order, use the Fill it Forward app to scan the QR code on your reusable container. You've now checked out the container and are ready to go!
4. To return your container, visit the tray return area in Holden Dining Hall or Holmes Dining Hall. Scan the QR code on the return sign/poster **AND** scan the QR code on your container. Place the container on the conveyer and our team will clean and sanitize it. See the image at the right for an example of the container tag/QR code.



## Game Day Recycling

Be a part of Notre Dame's efforts to #GoIrish #BeGreen!

### Stadium Recycling

Look for GREEN barrels Labeled "Recycle".

- Inside The Stadium: only plastic bottles should be placed in GREEN recycling barrels.
- Outside The Stadium (at the gates as you enter), please drop your empty bottles and cans in the GREEN recycling barrels prior to entering The Stadium.
- Everything else - trash - goes in the BLACK barrels marked "Landfill".



### Tailgate Recycling

The tradition of tailgating at Notre Dame has become as popular and as important as attending the game itself with many fans considering tailgating the ultimate game day experience.

**Recycle your bottles and cans by placing them in one of the clear bags that is provided at the entrance to the lots. Only include:**

- empty plastic, glass, and aluminum bottles,
- empty aluminum and steel cans,

**Everything else is considered trash and should be placed in the black bag provided to you.** You may also use your own black bags. Anything not in a clear bag is considered trash.

Prior to kickoff, Leave both bags behind your vehicle and they will be picked up during the game. It is helpful to leave the clear bag untied so staff can easily remove the materials.

THANK YOU!

# PENN STATE UNIVERSITY

## Living in a material world

One student's quest to reduce his plastic waste.

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## Plastic Recycling at Penn State University

Penn State University is home to nearly 76,000 undergraduate students among 20 different campuses. The largest and most notable campus is located in University Park, PA, with over 40,000 undergraduates. Penn State's University Park campus generates nearly 18,000 tons of solid waste each year, only 58% of which was recycled [3].

Penn State's Office of Physical Plant (OPP) collects seven types of recyclable material: paper, plastic, miscellaneous plastics, metal, glass, old corrugated containers (OCC), and compost. The recovery rate for plastics is about 75% and 50% for miscellaneous plastics [3]. The recovery rate measures how much material is recycled rather than discarded as refuse and this metric is dependent upon two key factors:

1. The volume of people recycling material
2. The extent to which these materials are being properly recycled.

When materials are not recycled properly, the purity rate decreases and Penn State incurs contamination fees from the Centre County Recycling and Refuse Authority (CCRRA). The purity rate for plastics ranges from 60 to 80 percent, while only 40 to 70 percent for miscellaneous plastics [3].



[PENN website](#)

# Solutions to Plastic Recycling Problems

## Standardize and correct recycling signs

The Sustainability Institute is responsible for publishing the recycling signs. They should have done their due diligence to ensure that the signage does not contradict the rules of the CCRRA. Furthermore, signage among and within buildings should be consistent. The Sustainability Institute needs to coordinate with OPP and the CCRRA and create new recycling signage that is in accordance with CCRRA requirements.

## Add recycling bins in the dormitories

Plastics have the highest generation yet the lowest recovery in the dorms, presumably because recycling in the dorms is highly inconvenient for students. With most recycling bins in the dorms located only in the basement or outdoors, students are unaware the bins are even there or unwilling to travel lengths just to recycle. Recycling needs to be convenient and therefore collection bins must be widely available. There should be at least one plastic recycling bin on each floor in every dorm on campus.

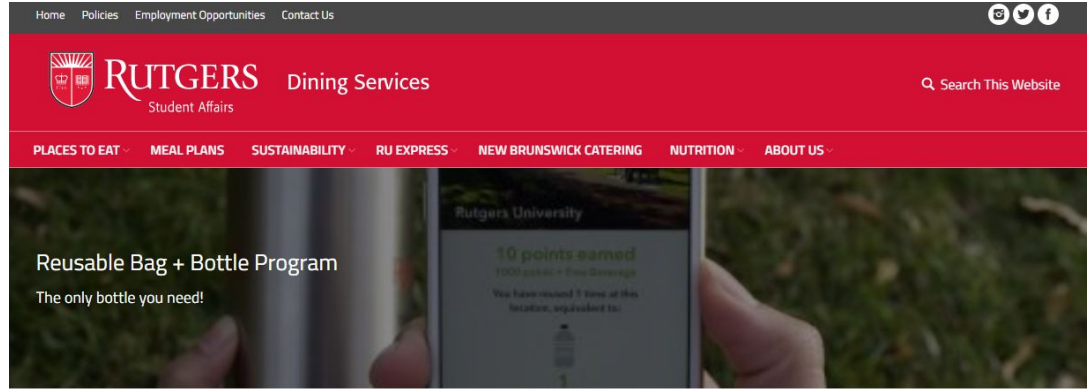
## Ban single-use plastics and Styrofoam

In all five dining halls on campus, single-use plastic bags and plastic utensils are widely available and free. Reusable, metal utensils are also offered, which are collected and rewashed by dining staff. Penn State could remove all single-use plastic utensils and only provide the metal utensils. Furthermore, the University could stop purchasing and distributing plastic bags, replacing them with reusable bags for purchase.

Students can dine-in or take-out food in the dining hall. When students dine-in, they are given ceramic plates and bowls for food. When students choose take-out, they are given a Styrofoam food container. Students have the option to use a plastic, reusable food container but they have to make a special request to the dining staff. Penn State could eliminate all Styrofoam food containers and only give students the plastic container.



[Solutions](#)



The Reusable Bag + Bottle Program is a student driven initiative as a way to reduce waste by eliminating the plastic bag, cup, lid and straw from the takeout process.

+ What is the Reusable Bag + Bottle Program?

- How do I get a bag and a bottle?

If you are a student with a meal plan, reusable bags and bottles will be distributed during your first takeout meal in one of the four dining halls (Brower Commons, Busch Dining Hall, Livingston Dining Commons & Neilson Dining Hall). ONE bag and bottle will be given per student.

+ What happens if I lose my bag or bottle?

+ Can I use a different bag or bottle at takeout?

+ What happens with a guest or double swipe?

+ Do I have to use the provided bottle or bag?

+ Who do I contact with any additional questions?

## [Reusable bottle program](#)

## Planning a Zero Waste Event? We're Here to Help!

The UMN Twin Cities Recycling Program supports zero waste events by providing extra organics and recycling bins, coordinating waste disposal, and advising on waste-related decision making. To utilize the Recycling Program's resources at your zero waste event, fill out the Zero Waste Event [Request Form](#). If you aren't sure how to get started planning your zero waste event send us an email at [recycle@umn.edu](mailto:recycle@umn.edu).



[Zero Waste Event](#)

Here's how it works:

1. Pick up a barcode sticker from our office at events or through a request form and stick it on any reusable cup, bottle or mug, or scan the bottle you received at Welcome Week
2. Download the free [Fill it Forward app](#)
3. Every time you refill your bottle or mug on campus, you scan the barcode on the sticker or bottle through the app
4. Win prizes! For every 1000 points earned, you'll be entered to win prize drawings
5. Give back! Each scan helps pay for a clean water project in various countries all around the globe

**CHOOSE REUSE & WIN**

1. Download the **Fill it Forward app**

2. **SCAN your REUSABLE WATER BOTTLE** when you refill

3. Earn points toward rewards  
Reduce plastic waste  
Support clean water projects around the globe for communities in need

As always, we are hopeful that students, staff, and faculty choose to reuse and win!

[REUSABLE water bottle](#)