



2023 Campus Race to Zero Waste Case Study Kent State University

Contact info:

Leah Graham

Outreach/Recycling Coordinator
Office of Sustainability
Kent State University
lgraha13@kent.edu
330.672.8023

Melanie Knowles

Sustainability Manager
Office of Sustainability
Kent State University
mknowle1@kent.edu
330.672.8039

Kristin Burney

Senior Manager
University Culinary Services
Kent State University
ksheers@kent.edu

Laura Roach

Associate Director, Operations
University Culinary Services
Kent State University
lroach1@kent.edu

Focus of Case study:

Kent State University conserves resources and saves money implementing a reusable to-go container program, avoiding the generation and disposal of 60,000 containers in one year.

Detailed description of campaign or effort:

The [United Nations Sustainable Development Goal 12](#), responsible consumption and production, states “unsustainable patterns of consumption and production are the root cause of triple planetary crisis: climate change, biodiversity loss, and pollution.” [According to the E.P.A.](#), “packaging and containers account for a significant portion (23 percent) of the municipal solid waste stream in the United States, equal to about 39 million tons per year.” There are many environmental benefits by reducing packaging including the reduction of: natural resources, transportation energy and emissions, and landfill emissions.

Kent State University is committed to sustainability and continues to make advances towards reducing our carbon footprint. For example, the university recently implemented a reusable to-go container program at two dining locations, Eastway and the Design Innovation Hub, in an effort to reduce materials and greenhouse gas emissions, to conserve natural resources, and to save money. In fact, over the course of the 2022-2023 academic year, the university avoided disposing of over 60,000 containers by switching to the reusable to-go versions. In the year

that preceded this program, Kent State had purchased 215,800 disposable containers for the two dining locations at a cost of \$56,625.20. Then, in 2022, the university spent about \$100,000 to purchase 8,325 PlanetOZZI O2GO reusable to-go containers and to install three return systems, two return systems at Eastway Dining Hall and one return system at Design Innovation Dining Hall. Reusable container use spiked in 2022-2023 academic year. Disposable to-go container use in two dining locations dropped by 97% compared to the previous year when only disposable to-go containers were used. It is estimated that the return on investment will be two years; after which, the university will avoid spending about \$50,000 a year on disposable containers at these two locations. Not only is Kent State University making strides towards environmental conservation through these efforts, the institution is also saving money.

Planning steps & timeline to implement:

- **July 2021** Kent State University Culinary Services is established
 - Associate Director of Operations position
 - Culinary Services Purchasing and Sustainability Manager position
- **2021-2022** Culinary Services Purchasing and Sustainability Manager monthly meetings with Office of Sustainability
- **2021-2022** Reusable to-go container programs investigated
- **Summer 2022** Kent State University purchased 8,325 OZZI O2GO containers at the start of the program. It is difficult to say how many are in rotation. After one academic year August 2022-May 2023 about half of those containers are still in storage. The cost of the program from PlanetOZZI was close to \$100,000.
 - The dining halls maintain the cleanliness and sanitation of the Ozzi return units. The company itself handles all technical issues that might happen with the machine (box bar code scanning, coin return etc). The return units are monitored by the company and any technical issues will alert directly to them so that they can handle issues in a timely manner.
- **Summer 2022** PlanetOZZI O2GO return systems installed
- **August 2022** PlanetOZZI O2GO program rolled out in two dining locations, Eastway and Design Innovation Hub at Kent State University Kent Campus.
- **2022 & 2023** Website updates and news articles published
- **August 2024** It is estimated that our ROI (~\$100,000) will be completed spending about \$56,000 per year on disposable containers before PlanetOZZI O2GO containers were used.

Resources and stakeholders involved:

Kent State University Department of Culinary Services and the Office of Sustainability supported implementing a reusable to-go container system.

In 2022, Kent State University Department of Culinary Services spent about \$100,000 to purchase 8,325 PlanetOZZI O2GO reusable to-go containers and to install three return systems, two Ozzi return systems at Eastway and one Ozzi return system at Design Innovation Hub. It is estimated that the return on investment will be two years; after which, the university will avoid spending about \$50,000 a year on disposable containers at these two locations.

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The Office of Sustainability promoted the reusable to-go containers through outreach channels such as websites, newsletters, social media, and tabling at events.

Department and Staff Support

- University Culinary Services- Associate Director, Operations; Senior Manager; Culinary Services Purchasing and Sustainability Manager
- Office of Sustainability- Sustainability Manager, Outreach/Recycling Coordinator
- Vendor: PlanetOZZI O2GO containers and return systems

Dining Halls

- Eastway Dining Hall, located in a Residence Hall
 - Spring semester 2023 Eastway served 273,000 meals
- Design Innovation Hub Dining Hall located in an Academic Building
 - Spring semester 2023 DI HUB served 128,000 meals

Describe the Results of this campaign component:

- **General results:**

Kent State University launched PlanetOZZI's reusable containers in August 2022. Information attracted the attention of Kent Wired, an independent news website of the Kent Stater and TV2, which did a story on Kent State's new reusable OZZI containers. Information was shared on websites, social media, and newsletters. PlanetOZZI's O2GO reusable containers provide a closed-loop system that reduces carbon footprint and water usage. Once a user receives their first container they do not need to purchase another container. Users fill up their containers with food and take it to go. When they want to fill it up again they return their used container to either machine at Eastway and DI Hub dining halls. Food is dumped out and the OZZI system machines reads the barcode on the containers and then prompts users to hit a button to get a coin in exchange. When a user has a coin they can take it to the desk attendant to receive a new container.

- **Specific measurable impact:**

Disposable to-go container use in two dining locations dropped by 97% compared to the previous year when disposable to-go containers were used.

Over the course of the 2022-2023 academic year, the university avoided disposing of about 60,000 containers by switching to the reusable to-go versions. In the year that preceded this program, Kent State had purchased 215,800 disposable containers for the two dining locations at a cost of \$56,625.20. Then, in 2022, the university spent about \$100,000 to purchase 8,325 PlanetOZZI O2GO reusable to-go containers and to install three return

systems. It is estimated that the return on investment will be two years; after which, the university will avoid spending about \$50,000 a year on disposable containers at these two locations.

August 2021 - May 2022 (before reusable to-go container program implemented)		
Location	Cost of disposable containers	Number of disposable containers purchased
DI DINING	\$18,299.80	66,900
EASTWAY DINING	\$37,725.40	148,900
TOTAL	\$56,025.20	215,800

August 2022 - May 2023 (after reusable to-go container program implemented)		
	Cost of disposable containers	Number of disposable containers purchased
DI DINING	\$1,050.97	3000
EASTWAY DINING	\$1,224.16	3600
TOTAL	\$2,275.13	6,600

August 2022 – May 2023		
	Cost of PlanetOZZI system and O2GO containers	Number of OZZI O2GO containers collected
DI DINING	~\$100,000 for 8,325 OZZI O2GO containers and system between two dining locations (DI Dining & Eastway Dining). About half of containers are still in storage after 1 academic year.	16,478
EASTWAY DINING		46,703
TOTAL	~ \$100,000	63,181

What would you do differently in the future?

We would not do anything differently in the future. The program ran smoothly and Kent State avoided the generation and disposal of over 60,000 to-go containers in one academic year.

What advice would you give to another college that wanted to do a similar effort?

We think critical to the success of this program is that students with dining plans are automatically enrolled, and that a fee is charged for disposable carry out containers. Also, there was considerable outreach about the program at the beginning of the year. Staff and student employees tabled at meal times for the first week, explaining the program.

Start off small, and campuses can expand efforts in the future at more dining locations.

Photos and Graphics:



Kent State University Eastway Dining Hall utilizes PlanetOZZI O2GO containers and container return systems.
Photo by Leah Graham



Kent State University Eastway Dining Hall utilizes PlanetOZZI O2GO containers and container return systems.
Photo by Leah Graham



Kent State University Eastway Dining Hall utilizes PlanetOZZI O2GO containers and container return systems. Empty O2GO containers can be returned to the PlanetOZZI system. PlanetOZZI system machines read the barcode on the containers and then prompts users to hit a button to get a coin in exchange. When a user has a coin they can take it to the desk attendant to receive a new container. Photo by Leah Graham



Kent State University Design Innovation Dining Hall utilizes PlanetOZZI O2GO containers and a container return system. Photo by Leah Graham

News Articles

kent.edu/hr/faculty-staff-news/news/culinary-services-introduces-new-plans-and-programs



Kent / Faculty/Staff News Now / Culinary Services Introduces New Plans And Programs

CULINARY SERVICES INTRODUCES NEW PLANS AND PROGRAMS



Culinary Services boasts a new meal plan for faculty and staff, as well as a variety of new initiatives and locations. Details are below.

The FAST Plan - for faculty and staff

New this fall, we are introducing the faculty/staff meal plan. **The FAST Plan** can be used at all culinary locations, it never expires and is easily accessible via your FLASHcard ID. To learn more, and to sign up via payroll deduction, [click here](#).

OZZI Program

In an important commitment to [sustainability](#) – we will no *longer* provide disposable to-go containers at DI and Eastway Dining. Instead, meal plan holders who want to take a meal to go will be issued an OZZI reusable to-go container. **Faculty/staff who sign up for [The FAST Plan](#) now through Sept. 9, will receive a free OZZI container (\$7 value).**

Rathskeller is back!

“Culinary Services Introduces New Plans and Programs” Kent State University HR Faculty/Staff news screenshot
<https://www.kent.edu/hr/faculty-staff-news/news/culinary-services-introduces-new-plans-and-programs>



Anthony Scilla, Assistant Photo Editor
January 25, 2023

In the fall, Kent State Culinary Services brought the PlanetOZZI system to campus, a reusable container system in the dining halls that promotes environmental friendliness.

The system has been successful so far, according to Casey Crane, assistant director of sustainability and purchasing for Kent State Culinary Services. She saw the system being used by other universities and knew it would be a great addition to campus.

PlanetOZZI's reusable containers provide a closed-loop system that reduces a carbon footprint and water usage, as written on the company's website. The system is considered to be "closed-loop" because once a user receives their first container, they do not need to purchase another.

"What you do at the beginning of the school year is pick up your first container and you go to the cashier at either of our all-you-care-to-eat dining facilities," Crane said. "You tell them you have a meal plan and that you'd like to pick up your first OZZI container."

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Once a student has their initial container, they can fill it up with their food and take it to go. When they want to fill it up again, they can simply return their used container to the machine.

This system is available at the Eastway and DI Hub dining halls.

"You certainly don't have to wash the container because we do all of that," Crane said. "So you dump out the food, you bring it back to one of the dining halls and you put the container into one of the large black OZZI system machines. You put the barcode up, and the machine reads the barcode to check in that container, and then it prompts you to hit a button to get a little coin in exchange."

When a user has their coin, they can take it to the desk attendant to receive a new container.

Kent State also has its Grind2Energy initiative.

Sommer Dunlevy, the assistant director of marketing for Culinary Services, said the university has struggled in the past to find a compostable vendor for food waste, which is what Grind2Energy targets.

"We've talked to several companies," Dunlevy said, "but either there's a concern that we have more volume than they can handle or we're so far away from their compost piles that it's not really a net positive when it comes to sustainability."

The system shreds organic food waste, which is then moved into a large container and transported off campus.

"It only takes organic food matters, so it doesn't allow for paper substrates, which is why we can't put compostable disposables into it," Crane said. "But if it's food-organic matter, basically you run it through this large garbage disposal, grind it up into this pulp and put it into a pneumatic tube that is then squeezed out into a giant tank that is bigger than my office."

After it leaves campus, the waste is taken to an anaerobic digester at a water treatment plant, providing energy to the water plant. It is used as fertilizer afterward.

Anthony Scilla is assistant photo editor. Contact him at ascilla@kent.edu.

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"Culinary Services Implements Systems to Reduce Carbon Footprint" by Anthony Scilla in Kent Wired screenshot <https://kentwired.com/90451/latest-updates/culinary-services-implements-systems-to-reduce-carbon-footprint/>

University Culinary Services

[Locations & Menus](#) [Meal Plans](#) [Wellness](#) [Community & Events](#) [Sustainability](#) [Hours](#) [Catering](#)

Sustainability

[To-Go Program](#)

[Grind2Energy](#)

TO-GO PROGRAM

[Kent](#) / [University Culinary Services](#) / [Sustainability](#) / [To-Go Program](#)

Kent State University has implemented the O2GO by OZZI reusable food container program for Dining Hall to-go meals. This program allows KSU students, faculty & staff to use reusable food containers while reducing our contributions to the landfill and lowering the carbon impact of dining on the Kent State Campus. We are excited to offer this option to support Kent State University's commitment to sustainability and a more sustainable food system. Disposable to-go options will be available for a \$0.99 charge.

The containers are part of the program life cycle; **therefore, all containers need to be returned and not permanently kept.**

First Container Pick-up:

- Students should redeem your first container for the program from the cashier at Eastway or DI Dining Halls **between August 15th and September 9th.**
- Employees will receive a token from the FLASHcard office when they sign up for their meal plan.
- Your FLASHcard will be used to track if you are eligible to redeem a reusable container or if you have already checked your allotted container out.

Return user:

- 1 Deposit the used container in the OZZI machine to receive a new OZZI token. For sanitation purposes, please remove all food waste and return the container within 1-2 days, you do not have to wash the container – we do that dirty work for you!
- 2 After swiping in for your meal at Eastway or DI Dining Halls, please hand your OZZI token to the cashier to receive a container. **(You may not sit and dine prior to filling the container.)**
- 3 Hang on to the OZZI token until the next time you need to exchange it for a new clean container.
- 4 Students: Prior to leaving the University for the current academic year, please return the OZZI token to the cashier at the Eastway or DI Dining halls.
- 5 Faculty & Staff: Return the OZZI token and/or any containers when you leave for the semester or retire from the University.

FREQUENTLY ASKED QUESTIONS

- + What size are the O2GO containers?

- + How do I receive my complimentary token?

- + Where do I exchange my token for an O2GO reusable container?

- + Do I have to use an O2GO reusable container?

- + Where do I return my container?

- + Can I keep my container?

- + How do the containers get cleaned?

- + Can I reuse my container without returning it and/or having it cleaned?

- + What if I lose my token?

- + Are O2GO containers microwave safe?

Kent State University Culinary Services To-Go Program website screenshot
<https://www.kent.edu/dining/go-program>

SUSTAINABILITY INITIATIVES FROM DINING SERVICES

- Responsible Sourcing: we purchase local, seasonal and responsibly raised, grown and sourced products whenever possible.
- KSU enters into partnership with Humane Society to increase plant-based options year-over-year for the next 3 years
- [DI-Hub Grind2Energy Anaerobic Digester](#)
- [Eastway Grind2Energy Anaerobic Digester](#)
- [OZZI O2GO container program](#)
- [Reusable bottles](#)
- \$0.99 refills on coffee and tea when you use a reusable mug or tumbler
- Chinaware available

LEARN MORE ABOUT SUSTAINABILITY IN DINING

Kent State University Sustainability Food Initiatives website screenshot

<https://www.kent.edu/sustainability/food>

Social Media

<https://linktr.ee/KSUculinary1>

<https://www.instagram.com/ksudining>

<https://twitter.com/ksudining>

<https://twitter.com/KentStateSusty>

The image is a screenshot of a social media post from the account 'ksudining'. At the top, there is a black header with the 'KENT STATE' logo and the username 'ksudining'. The main content of the post features a graphic with the text 'Way to go. Kent State!' in a purple script font, followed by '2,346 O2GO Collected So Far This Year' in a sans-serif font. Below this is an illustration of a woman standing next to an OZZI O2GO machine. The machine has text that reads 'Thank You for Being the OZZI Reusable!', 'Changing the World from Disposable to Reusable One Meal at a Time!', and 'www.planetozzi.com'. To the right of the woman, there is a large blue text block that says 'ON AVERAGE, 25X LESS WATER USED WITH THE OZZI SYSTEM' above an illustration of a water tap with a globe as the basin. At the bottom of the post, there is a black interaction bar with icons for heart, comment, share, and bookmark. Below the icons, it says 'Liked by wildblue.asiankitchen and others'. The main text of the post reads: 'ksudining Don't forget meal plan holders to grab your first OZZI O2GO reusable container for FREE by Friday, September 9th to avoid the \$7 opt-in fee. Your first container can be picked up from the Cashier at either Eastway or DI Dining halls. Join your community in making an impact today! We are off to a great start, but we go even further together! View all 2 comments'.

ksudining

Way to go.
Kent State!

2,346 O2GO Collected So Far This Year

ON AVERAGE,
25X LESS WATER
USED WITH THE
OZZI SYSTEM

Liked by wildblue.asiankitchen and others

ksudining Don't forget meal plan holders to grab your first OZZI O2GO reusable container for FREE by Friday, September 9th to avoid the \$7 opt-in fee.

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Join your community in making an impact today!
We are off to a great start, but we go even further together!

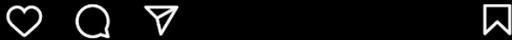
View all 2 comments

Impressive Numbers, Kent State

23,072
O2GO Collected
This Year



*Reusables Help Decrease
Your Carbon Footprint!*



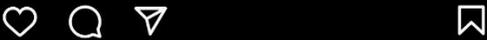
Liked by **sophiacazzolli** and others

ksudining Making changes one step at a time!! KSU dining has collected 23,072 Ozzi to-go containers so far this year!! Keep up the fantastic work, students.

View 1 comment

30,854 O2GO CONTAINERS COLLECTED
SO FAR THIS YEAR AT KENT STATE

= LESS WASTE
+ LESS TRASH
HAULING FEES



Liked by **melicartin** and others

ksudining This year you've proven it IS easy being green. Each return helps us minimize disposables in landfills, and with over 30k @planetozzi containers returned this year, we're taking significant steps toward a more sustainable campus!

View all 2 comments