Yale University Compostable Waste Collection

Training for Building Occupants & **Custodial Staff**



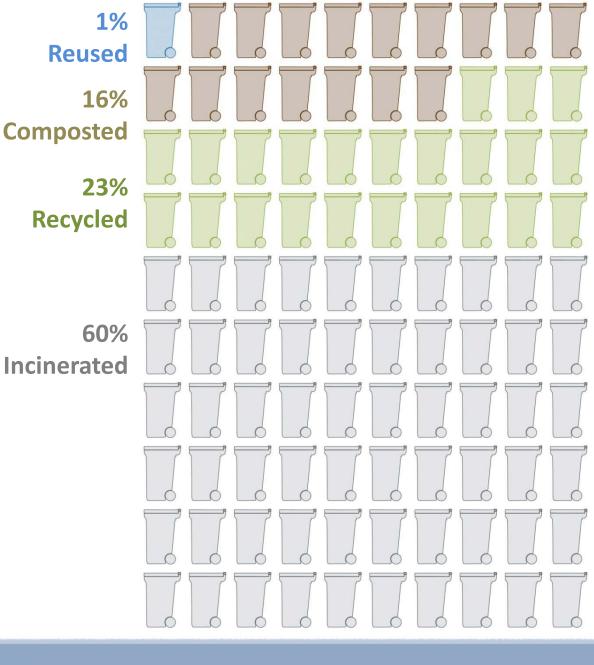
Waste Diversion at Yale

Yale Sustainability Strategic Plan 2013-2016 Goal:

Achieve a 50% waste diversion rate by June 2016 via reuse, recycling, and/or composting strategies.

In FY 2013:

- 40% was diverted.
- 16% was composted.



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Spring 2014 Pilot Project (Phase 1)

In Spring 2014, a pilot project was implemented to identify:

- Container sizes and types
- Signage and labels
- Training for building occupants
- Training for custodial staff
- Challenges
- Opportunities for improvement
- Approaches for scale-up across campus



Weekly feedback forms were sent to building POCs.

Spring 2014 Pilot Project (Phase 1)

Staff Kitchens + Break Rooms

- ✓ Statistics (24 Hillhouse Ave.)
- ✓ Rudd Center (309 Edwards St.)
- ✓ Lab of Epidemiology and Public Health (60 College St.)
- ✓ Yale Dining (246 Church St., 4th floor)
- ✓ Yale Health (55 Lock St.)
- ✓ YSM Dean's Office (333 Cedar Street, SHM C-203)
- ✓ YSM Vascular Biology & Stem Cell (10 Amistad St.)

Dining Preparation Kitchens

- √ 110 Wall St. (Bass Library Thain Café)
- ✓ 219 Prospect St. (Kline Biology Tower)



Compostable Waste Collection Pilot: Key Results

Bins

• Office spaces: Bins emptied twice per week

Kitchen cafes: Bins emptied daily

Bags

Generally sturdy

Break if contents are sharp, hot, or too heavy

Waste

- Little to no contamination
- Minor questions on compostable items

Feedback

- Feedback forms sent to participants (building and custodial staff)
- Pilot working "well," "really well," "very well," "quite well," "great," "excellent."

Compostable Waste Collection: Recommendations for Scale-Up

Plan:

Develop detailed workplan

Prepare:

Prep all bins, signs, totes, bags

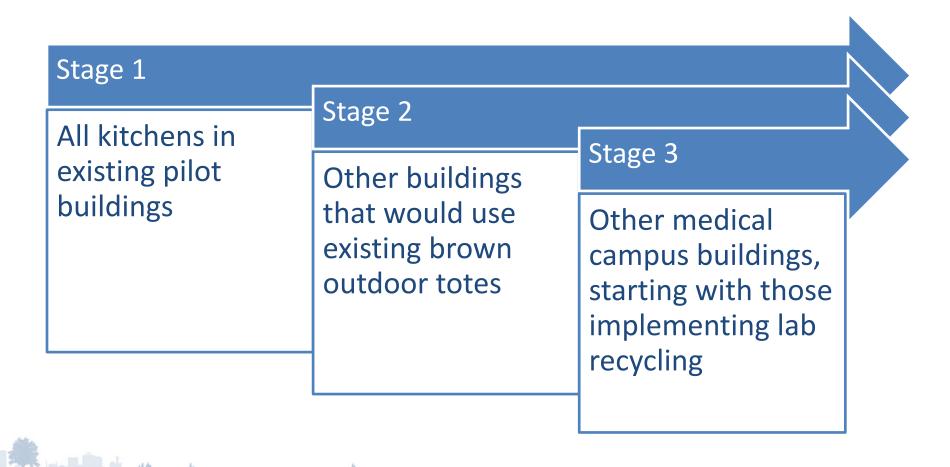
Launch:

Launch & train by building/zone





Compostable Waste Collection: Recommendations for Scale-Up



How will building occupants dispose of food waste?



Small: 1.5 gallons (office spaces)



Large: 23 gallons (office spaces with events, café prep kitchens)

Labels for office kitchens with countertop bins:



YES

bread cheese pasta yogurt rice eggs egg shells beans grains meat seafood

fruits vegetables bones

NO

plastic Styrofoam glass metal excessive liquids K-cups

coffee filters

tea bags

coffee grounds

paper towels napkins

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English + Chinese version



YES

可转化堆肥项目

bread 面包 pasta 面条 rice 米饭 beans 豆类 grains 谷类 fruits 水果 vegetables 蔬菜 bones 骨头

cheese 奶酪 yogurt 酸奶 eggs 蛋类 egg shells 蛋壳 meat肉类 seafood 海鮮

coffee filters 咖啡过滤纸 coffee grounds 咖啡渣 tea bags 茶袋/茶叶 paper towels 纸巾

napkins 餐巾

NO

不可转化堆肥项目

plastic 塑料 K-cups 咖啡盒 glass 玻璃

metal 金属 Styrofoam 发泡胶 excessive liquids

残余汤水饮料

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Labels for dining prep kitchens w/ large bins:



FOOD WASTE & COMPOSTABLES

YES

bread cheese
pastries yogurt
pasta eggs
rice egg shel
beans meat
grains poultry
fruits seafood

cheese coffee grounds
yogurt coffee filters
eggs tea bags
egg shells paper towels
meat napkins
poultry

compostable cups, cutlery, & plates

NO

plastic glass/metal

vegetables

gloves Styrofoam

bones

plastic wrap excessive liquids

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Where will custodial staff take food waste?

- Brown totes in outdoor waste collection sites.
- Food waste will be picked up on a regular schedule.





Outdoor 64 gallon totes for food waste and compostable waste

Where does it go next?

Yale Facilities takes it to a compost facility in New Milford, CT.





What happens at the compost facility?

 At the facility, food waste turns into compost through traditional windrow composting.







How is the compost used?

• Some compost is returned to Yale and used to improve the soil on campus and at the Yale Farm. In 2013, Yale used 45 cubic yards of compost from the New Milford composting facility.





Acceptable: food waste & food-soiled paper

- bread, pastries, pasta, rice, beans, and other grains
- cheese, eggs, and egg shells
- meat, poultry, seafood, bones
- fruits and vegetables

- coffee grounds, coffee filters, and tea bags
- paper towels and napkins
- pizza boxes and cardboard food containers



Acceptable: compostable products

- compostable plates
- compostable cups
- compostable cutlery



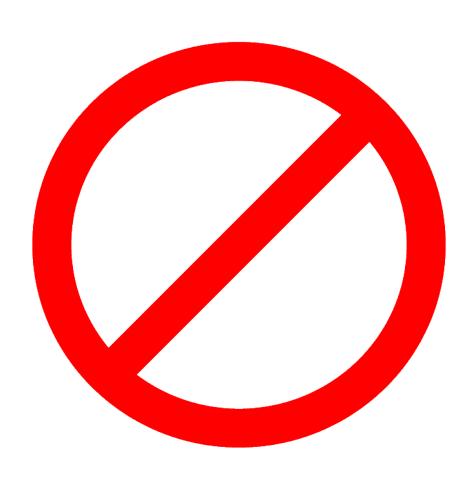
Office spaces should plan on regular food waste collection.

For events with large quantities of food waste and compostable waste, plan ahead and request pickup through a Facilities Work Request or through the caterer.



Not Acceptable

- No glass
- No plastic (no plastic wrap)
- No metal
- No Styrofoam
- No excessive liquids / hot liquids
- No waxy paper
- No gloves (plastic, latex, etc)





Summary: The Overall Cycle



FAQ: What's my role?

 Building occupants are important for ensuring that waste is properly separated in containers for food waste, recycling, and trash.

 Custodial staff are critical to ensuring correct compostable liners are used and the food waste is taken to the correct toter.

FAQ: Will the bin smell?

- The bins allow air flow which prevents build up of liquids, so food waste remains drier, breaking down with less mess and odor.
- Food waste is already being collected in the trash, so the compostable waste should not smell more than normal trash.
- In the pilot project, we asked participants "Have you noticed an odor? If so, how does it compare to the typical trash odor?"
 Respondents answered "no," "no observable odor," "not really, normal compared to trash," "only when you open the container," "yes, but comparable to the single stream recycling and trash odor," and "no, even when the bin is full of many different foods."

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FAQ: Who do I contact with questions or suggestions?

- Your building / department's Sustainability Leader
- Your Facilities Superintendent
- Office of Sustainability:
 Amber Garrard (amber.garrard@yale.edu)
- Facilities Waste Management:
 Bob Ferretti (<u>robert.ferretti@yale.edu</u>)

