

Zero Waste Progress Report



2014 A Charleston Affair, 94.7% Diversion Rate

Prepared by:
The College of Charleston
Office of Sustainability

What is Zero Waste?

Zero Waste is a goal set by the College of Charleston, hereafter referred to as “The College,” to eliminate the concept of waste from our processes on campus. Instead of thinking of used items as garbage, we must begin to think of the items that enter and leave campus as materials and resources that can and should be reused. To achieve our goal, we must begin to move towards waste averse cyclical processes that close production loops and replenish themselves indefinitely.

Our collective consumption habits up to this point have created a waste crisis. In South Carolina alone, we each generate an average of five pounds of waste every single day (DHEC, 2014). During the College’s 2015 Fiscal Year (July 2014 to June 2015), it disposed of more than twelve hundred tons of materials (CofC, 2015). Disposing of these materials irresponsibly is not only economically expensive but also environmentally and socially problematic.

By sourcing and disposing of our goods more responsibly, we can:

- Create a more holistic and mindful community
- Extend the life of our local landfills
- Eliminate unnecessary costs
- Generate new sources of revenue

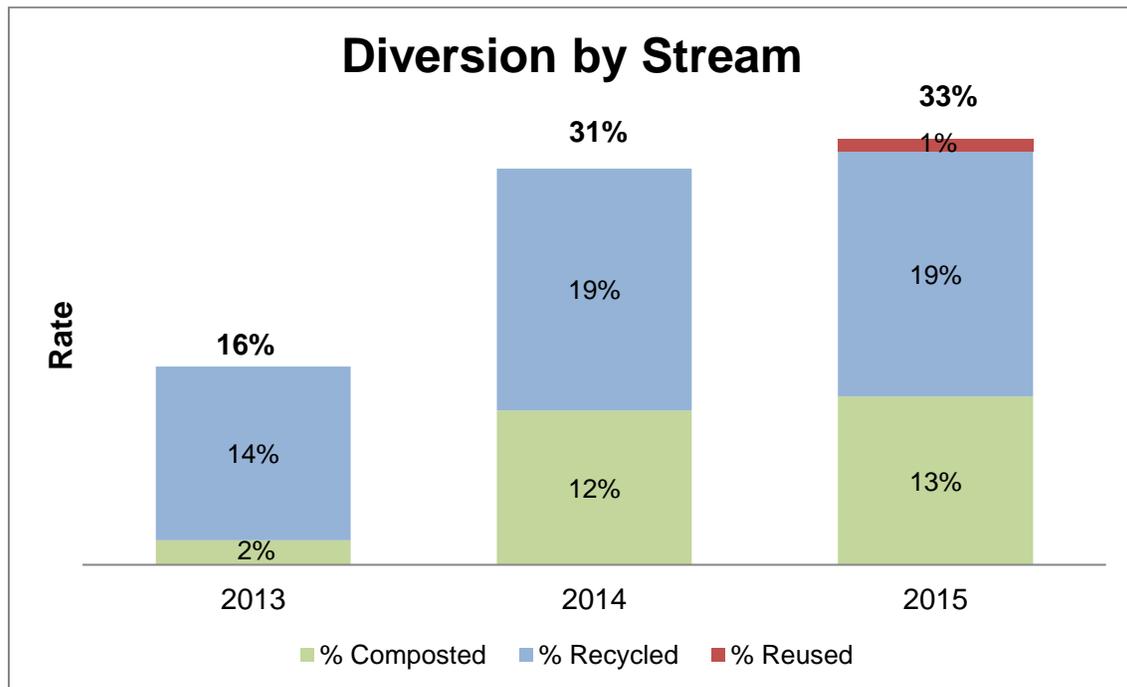
The College of Charleston’s Goal is to be a Zero Waste Institution by 2025.

As defined by the [Association for the Advancement of Sustainability in Higher Education](#), “Zero Waste” means that more than 90% of all materials leaving campus are reused, recycled, or composted.

Visit us at: <http://zerowaste.cofc.edu/>

Where Are We Now?

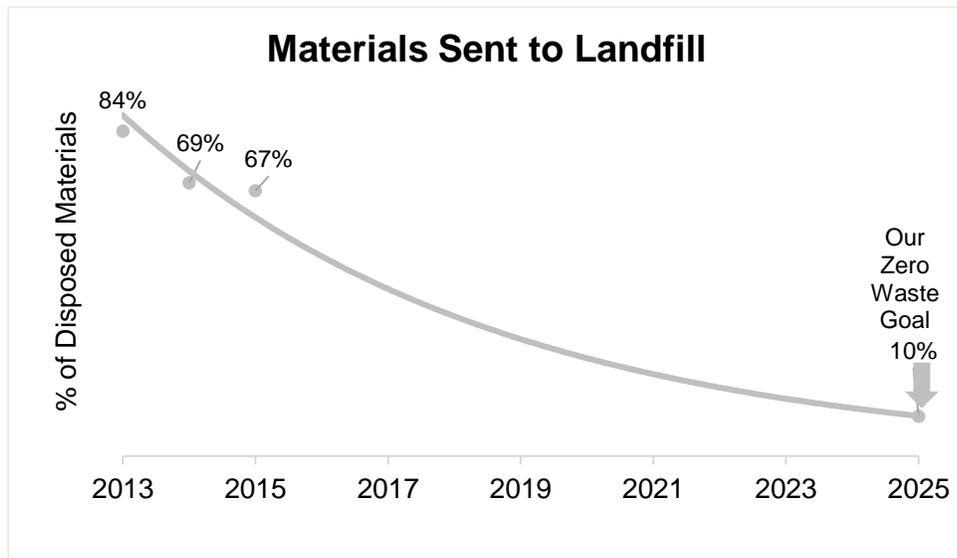
The Office of Sustainability began detailed material tracking in 2013. Since that time, the College has doubled its diversion rate. This is largely due to the initiation of a composting program and improved recycling practices. In 2015, the College generated 1,288 tons of waste. Of this, 13% was composted, 19% was recycled, 1% was reused, and 68% was sent to the landfill. In total, 33% of our waste was diverted from the landfill.



While the College has made significant strides in diverting waste from the landfill in recent years, attaining our Zero Waste goal will require: increased participation in composting and recycling, reduction in the amount of non-recyclable waste produced, and a critical reexamination of our current procurement and sourcing behaviors. By increasing our diversion rate by at least six percent each year, we will be able to achieve our Zero Waste goal by 2025.

Landfill

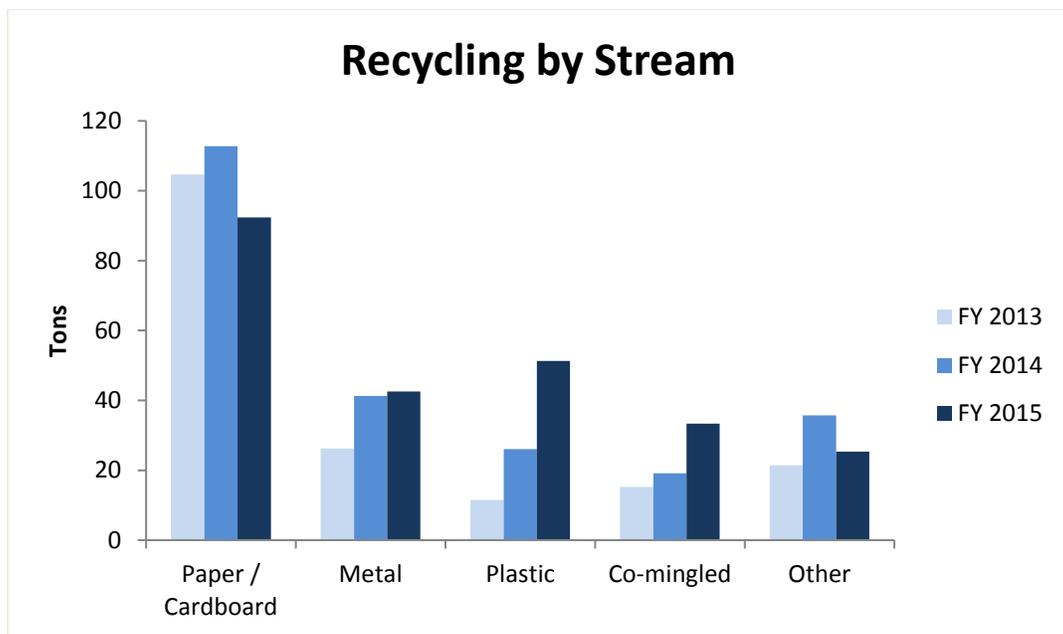
Every year, twenty to thirty dumpsters are placed around the College. Collectively, they are picked up several thousand times every year at a cost of over \$30,000. In 2015 alone, nearly 850 tons, or 1.7 million pounds, of landfilled materials left the campus. Fortunately, increased participation and improved recycling strategies have helped the College reduce the amount of waste sent to the landfill each year.



As shown above, the percentage of waste sent to the landfill has decreased from 84% in the year 2013 to 67% in 2015. By decreasing the amount of waste sent to the landfill, the College can allocate less funding towards waste disposal thus demonstrating more responsible environmental and fiscal stewardship.

Recycling

The College's recycling data begins in the year 2013, in which nearly 200 tons of waste were recycled. By 2015, the recycling rate had increased by 36%. The College collects comingled recycling campus-wide, as well as specialty recycling at select locations. Recycling participation has increased in recent years as a result of the standardization of recycling bins across campus. Unlike landfill waste, which is costly to dispose of, the College is paid for its used metal, steel, cardboard, and plastic recyclables. This opportunity to bring further revenue to the College serves as an additional incentive to increase recycling efforts.

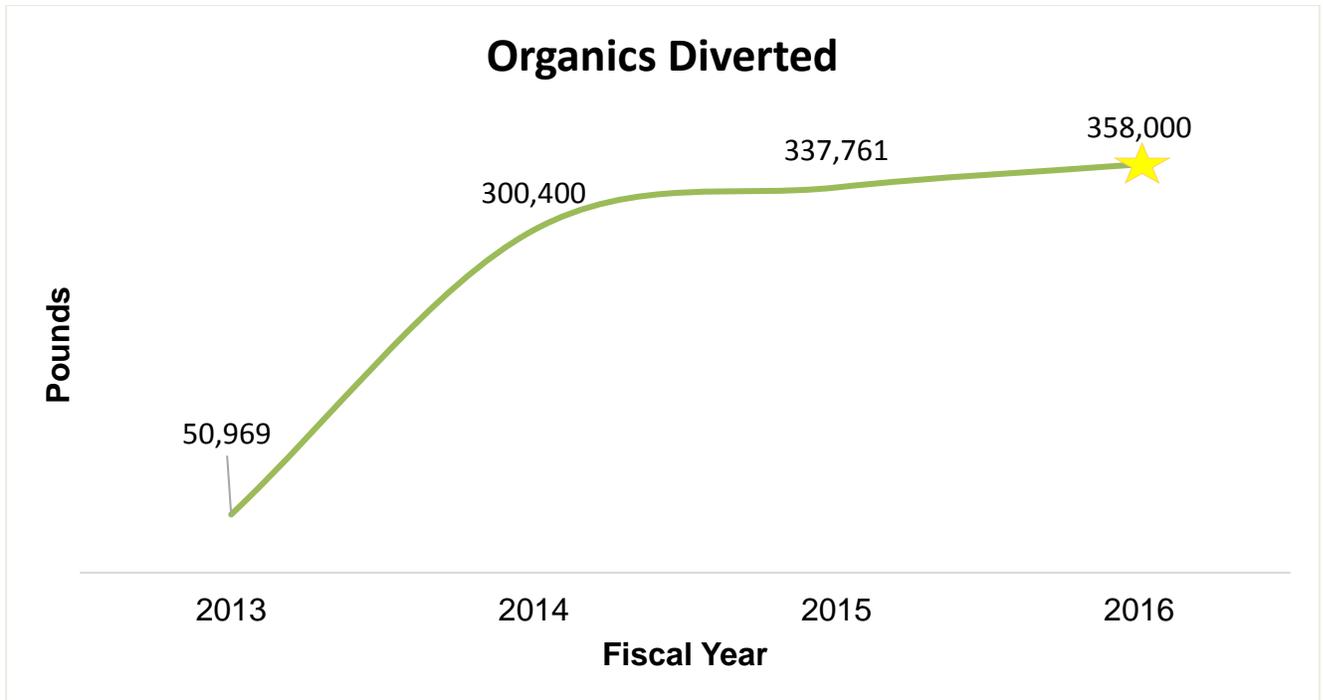


"Other" includes: cooking oil, batteries, printer cartridges, e-waste, light bulbs

Total CofC Recycling By Year (Tons)	
2013	179
2014	235
2015	245

Composting

The College began sending food waste to the nearby [Bees Ferry Compost Facility](#) in the summer of 2012. Full-scale implementation began that fall and since then, we have seen increases in the amount composted each year. This trend is expected to continue in the future with current projections estimating an FY2016 total of about 358,000 pounds.

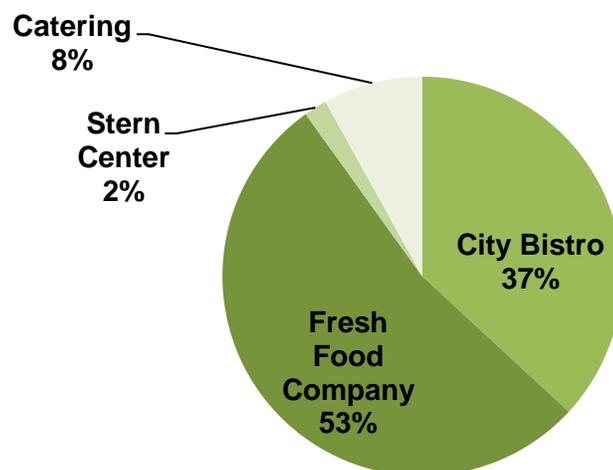


Where Does Food Waste Come

From?

The vast majority of The College's food waste comes from one of its four main dining facilities. However, due to growing demand for Zero-Waste events around campus, we expect to see future increases in non-dining hall sources as well as yard waste from the Grounds Department.

Food Waste by Location



Initiatives & Programs

Bin Standardization:

Beginning in the summer of 2014, the Office of Sustainability, in partnership with the Physical Plant, began the process of standardizing resource collection stations around campus. Previously, there were about 500 randomly positioned containers around campus. Standardization, along with increased signage, has dramatically reduced cross-stream contamination and made collection less time consuming for College staff.



Previous Bin System



New Bin System



New Ergo Bin system at:

Harbor Walk
Addelstone Library
The Education Building
North Campus
12 Bull Street

Zero Waste Events:

The College's Office of Sustainability hosted its first Zero Waste Event, A Charleston Affair, in May 2014. This successful event, with annual attendance of several thousand, led to the development of a permanent project devoted to hosting events and advising Campus groups on how to host their very own Zero Waste events. As of the Spring 2016 semester, about 30 interns have worked on our Zero Waste team. Collectively they have successfully hosted nearly 40 events with more on the way.



Annual Zero-Waste Events:

College Events	Other Events
A Charleston Affair	Phi Mu Oyster Roast
Back to School Staff & Faculty Picnic	Greenbag Lunch Series
Fall Family Weekend Brunch	World Cultures Fair

The Zero Waste Corps:

Increasing campus demand for Zero-Waste events has required the Office of Sustainability to find new ways to recruit people to help facilitate events. Beginning in the Fall 2015 semester, we sought out, organized, and trained a team of volunteers to do just that. These dedicated individuals attend periodic training events, aid more senior members with events, and eventually lead events themselves. This “on-call” structure allows us to rapidly respond to fluctuating levels of demand and involve those that may not have the time to commit to regular work hours.



Max-R Bins:

In the spring of 2014, the Office of Sustainability installed several indoor Max-R bins to collect and recycle specialty waste. This waste includes printer cartridges, batteries, and small electronics. Currently collection bins, like the one pictured right, are located at:

Building	Address
The Lightsey Center Lobby	160 Calhoun St.
The Education Center	25 St. Philip St.
School of Science and Math Building	202 Calhoun St.
Maybank Hall	169 Calhoun St.
Addlestone Library	205 Calhoun St.
Grice Marine Lab	205 Fort Johnson Rd.
Stern Student Center	71 George St.
BellSouth Building, 5 th Floor	81 Saint Philp St.



In the fall of 2014, we installed three bins outside of City Bistro, one of the College’s main dining halls. These three-bin containers collect materials to be recycled, composted, and landfilled. While these bins have decreased the amount of materials being landfilled near the dining hall, challenges persist. Rates of cross-stream contamination remain relatively high but the Office is making efforts to educate users.



Campus Building Recycling Guides are available on our website at:

<http://zerowaste.cofc.edu/campus-recycling-guides/building-guides/index.php>

Sources:

AASHE

DHEC S.C. Solid Waste Management Annual Report, (2014)

DHEC S.C. Solid Waste Management Annual Report, (2015)

College of Charleston Comprehensive Annual Financial Report for FY 2014

Charleston County Recycling Center

RecycleMania Competition Division

We Would Like to Thank:

All of our amazing past, present, and future students

Aramark Dining Services at the College of Charleston

CofC Business Affairs and especially Ms. Jennifer Stevens

CofC Physical Plant

[Food Waste Disposal](#) and Wayne Koeckeritz

Ms. Ashlyn Hochschild

Ms. Genna Degroot

[Post Landfill Action Network](#)