

How the University of New Haven Reduced Food Waste and Expenses





The University of New Haven is a private university in West Haven, Connecticut. The campus has 48 buildings to support a quickly growing population of over 6,000 students, including 14 residence halls and a two-story dining hall. The West Haven campus spreads across 82 acres atop a hill overlooking the New Haven skyline with views of Long Island Sound. This residential campus is conveniently located a mile north of Interstate 95 between Boston and New York City.

The University has a robust set of programs in place to reduce the amount of wasted food. It currently donates surplus edible food, composts food waste, and engages students and staff in the program by providing handson education and coordinating interactive events. Thanks to the campus's sustainability efforts, including food donation and source separation of food scraps for composting, the University is saving over \$10,000 per year. While it had excellent foundations for material management on campus, the University contacted the Center for EcoTechnology (CET) for support with food waste, recycling, and trash collections and communication.



At a Glance

- The University outlined goals to increase efficiencies of materials management already in place across its 82-acre campus.
- The institution has a well-established recycling and reuse program that oversees the donation and recycling of materials like mattresses, electronics, and furniture.
- After identifying areas on campus to improve food waste management, recycling, and trash collection, the University created strategies for increasing efficiency and awareness for cleaner waste streams.
- Savings from food donation and food scraps composting of \$10,000 per year.

Estimated Annual Metrics

1,804 tons of total materials generated

- 1,494 tons to disposal
- 167.7 tons of mixed recycling
- 148 tons of bulky waste
- 25 tons of food waste diverted
- 6.65 tons of hazardous waste
- 0.93 tons of electronic waste
- 0.68 tons of food donated

Dining Services

Since 2002, the University has grown from 1,800 undergraduates to over 6,000 and expanded its building footprint from 780,000 sq ft. to 1.5 million sq ft. to accommodate them. The waste generated from this growth was analyzed and reduced by Laura Miller from the Office of Facilities, Chef Peter Morelli, Juan Dominguez and Linda Clarke from Sodexo, and Lori Martin from Haven's Harvest. The team began by evaluating the University's existing programs through a waste map that traced all the waste streams on campus. These maps identified areas of high traffic and contamination in campus recycling streams. By adding new recycling and trash receptacles, the University was able to decrease the pedestrian congestion in front of buildings and improve the consistency of its recycling streams.

In addition to participating in RecycleMania every spring since 2019, the University hosts periodic "Weigh Your Waste" events which serve as an opportunity to educate the student body and lay the groundwork for reducing waste on campus. This event is a tangible and fun way to enlighten students on what they, as consumers, are wasting. Within the cafeteria, an educational station is set up where students can choose to weigh, then compost their food scraps. This experience helps raise awareness around wasted food as students can see what and how much plate waste is created. The University aims to "focus on education not shame" and foster an environment where students can reflect and learn through this initiative.

The school's partner, <u>Blue Earth Compost</u>, provides collections of pre-and post-consumer food scraps from dining halls all over campus on a twice-weekly basis. Blue Earth Compost then brings the material to Quantum Biopower, an anaerobic digester. In just over three years, the University has diverted over **400,000 pounds** of food scraps for anaerobic digestion.

The University also works with Haven's Harvest for its food donation efforts and has helped support the local community and redirect surplus edible food through this partnership. In addition

Anaerobic Digestion - a process by which organic matter, such as animal waste or wasted food, is broken down by bacteria in the absence of oxygen. This is usually done in a container called a digester. The process creates digestate that can be separated into liquid and solid components that can be beneficially used as liquid fertilizer and solid soil amendment or further composted, as well as biogas.

to strengthening community ties, donating food has also provided financial benefits as the University has reduced the weight in their dumpsters and ultimately reduced the costs for disposal. The University contributes roughly 825 pounds of food per semester through these efforts. Paired with the institution's food scrap diversion efforts, this equates to an estimated disposal cost avoidance of \$10,000 each year. Food is heavy, and in a cafeteria, wasted food is a significant portion of the contents of a dumpster. Therefore, diverting organic material (which includes paper products and wasted food) has a positive impact on businesses like the University and is a financial win, too. While some surplus is still inevitable, the University has identified opportunities to cut back where necessary and to continue to reduce the amount of wasted food.

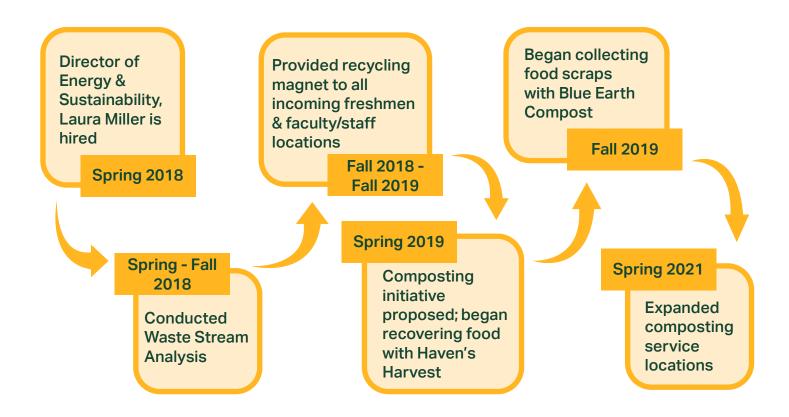
CET Assistance Overview

Thanks to the support of the Connecticut Department of Energy and Environmental Protection (CT DEEP), CET provides free consulting services to Connecticut businesses and institutions. This assistance includes identifying waste prevention and reuse strategies, expanding and extending recycling collection efforts, and diversion of food scraps.

CET provided the University of New Haven with customized signage for its trash, recycling, and composting bins throughout campus in English and Spanish. These signs will be used to label bins in both the dining areas for students and the kitchen for dining staff. In addition, improved signage at major waste collection stations will increase efficiency and decrease contamination in the University's streams.

CET also provided suggestions to help the University communicate with students about the existing programs to spread awareness about their work. By sharing pictures of clean bins on the school's social media accounts, the University can teach students and staff about proper sorting and thus reduce contamination. Social media promotion can also give students an up-close look at the bins and know what to look for when they arrive on campus. CET waste consultants also suggested that the University promote its waste programs nationally by signing up for the Food Recovery Network. Through this student-led network, the institution receives recognition for its food donation program and shares its support on social media.

Additionally, the University was advised to improve its move-in/move-out diversion program by partnering with the non-profit organization, <u>Grad Bag</u>. Grad Bag helps facilitate the collection and reuse of dorm items during move-outs. Lightly used dorm room essentials, including linens, pillows, rugs, storage containers, and hangers, are then redistributed to students in need in the West Haven area and incoming University students.



CET's Resources for Connecticut

- Source Reduction Made Easy
- Donating Surplus Food at K-12 Schools
- Food Rescue Made Easy
- Best Practices for Source Separating Food Scraps

Additional Food Rescue & Recycling Organizations

- College and University Recycling Coalition (CURC)
- Food Rescue US
- Race to Zero Waste Challenge



Why Wasted Food Matters

Food makes up over 20% of all waste disposed of in Connecticut and represents the single most significant opportunity for diverting waste from disposal. As a result, the state is working on expanding organics collection and processing infrastructure. Since 2015, CET has helped bolster activity by working with commercial businesses and institutions to implement strategies to reduce wasted food. This work is possible thanks to strong partnerships with CT DEEP, other government agencies, non-profits, sponsors like the US EPA, and the food rescue organizations, haulers, and processors that bring the marketplace to life.



CET has helped many businesses and institutions in Connecticut learn more about food recovery and wasted food diversion opportunities. When it comes to preventing and diverting a wide range of materials from disposal, we can offer no-cost support! We help a range of businesses and institutions, from those just getting started to those who want to take their existing efforts to the next level.

- Consult with an expert at no cost to you
- Receive customized recommendations
- · Implement solutions with continued free support

Whether you're looking to reduce wasted food or just your waste in general, we can help.

To learn more or get started, contact our hotline at 888-410-3827 or email ReduceWasteCT@cetonline.org.



