

Wasted Food Solutions: Rhode Island Spotlights to Inspire



Businesses and institutions across the state are seeking strategies to reduce food waste in response to a variety of factors – **sustainability goals, educational opportunities, increasing efficiency**, and **honing operations to maximize ever narrowing profit margins**. In Rhode Island, food accounts for 35% of all waste landfilled. While specific initiatives are unique to each operation, the strategies to adopt food waste prevention, donation, and recycling can be applied at locations across the state. Rhode Island Department of Environmental Management (RI DEM), other government agencies, non-profits, and sponsors like the U.S. EPA, have partnered with the Center for EcoTechnology (CET) since 2016 to support businesses and institutions in reducing wasted food.

Birchwood Middle School

With 395 students in grades 6 through 8, [Birchwood Middle School](#) (Birchwood) is located in North Providence, Rhode Island. In partnership with Jim Corwin, Co-Director at [Rhode Island Schools Recycling Club](#), Birchwood has implemented an array of successful sustainability initiatives. The school's "**Get Food Smart, RI**" project-based learning program, which is coordinated by STEAM teacher Katie Bowers, has been a key component of these efforts, engaging students in 20 classes across all grades at Birchwood. Also contributing to success is the full support of the school's administration for these efforts. "Get Food Smart, RI" was established with funding from RI DEM through an EPA Healthy Communities Grant.

Birchwood's food scraps collection program **engages student leaders** to monitor the sorting station, ensuring that the compost and recycling streams are not contaminated. The leaders help their peers follow the flow of the sorting station to set aside unopened items for donation, empty out their unfinished beverages, recycle milk cartons, remove trash items so that they collect uncontaminated food scraps, and stack their empty trays. A rotating system for student monitors keeps the student body and staff engaged and **excited to learn about sustainability** and the importance of reducing wasted food. Recently, Birchwood constructed a greenhouse for their school vegetable garden and included a "How to Compost" workshop to integrate the food scraps collection initiative with the STEAM curriculum. With technical assistance from CET, Birchwood estimated the food waste produced by the school (8 tons annually) and realized that was too much to handle on-site. To help the school process more material, it was decided that kitchen fruit and veggie scraps would be composted on-site and a hauler, [Bootstrap Compost](#), would be hired to pick up the cafeteria scraps.

Bootstrap Compost is another key player in making this possible. With an interest in serving schools in Providence, the hauler has collaborated with Birchwood to work with the community and expand collection routes. Through this partnership, Bootstrap has provided hands-on training and assemblies to Birchwood to ensure students and faculty are all given the tools they need to run a **successful composting system**. Bootstrap also provides residential pickup and encourages the students to take home what they learn. Looking ahead, Bootstrap will print bookmarks with images of food items that can be composted to support this effort. Through these collective efforts, the school recently diverted its first ton of food scraps from the trash.



Midtown Oyster Bar

Located in Newport, Rhode Island, [Midtown Oyster Bar](#), and its sister restaurant [Surf Club](#), have collaborated with CET to support the business's interest in sustainable initiatives. With initiatives already in place to plan menus that incorporate excess ingredients and to donate surplus edible food, the business looked to an opportunity to explore opportunities to separate food scraps for **beneficial use**.

To develop a plan for establishing a food scraps recycling initiative, the business met virtually with a CET representative to conduct a virtual site visit. Through this process, in addition to setting up a collection process in the kitchen, the team identified a strategy for moving food scraps the long distance to the business's waste handling area. Leveraging the existing infrastructure of moving trash bags by golf cart, staff now also haul food scraps in compostable bags to the organics carts, using this same system.

Over time, the business owners noticed contamination in its established food scraps recycling program. Common contaminants include produce stickers, gloves, and plastic.

As with any new program, staff training evolves over time, and **frequent refreshers** are required. To support this effort, CET created **dual language posters** for the business in English and Spanish. In addition to serving as a training tool, these signs can be used as labels for bins to clearly indicate the types of material that can be included.

Through these efforts, the restaurant has partnered with The Compost Plant to collect all food waste, including shells, from operations. In one year, Midtown Oyster Bar has composted 34 tons of food scraps.



TRASH BASURA	
When in doubt, throw it out! It's better than contaminating the recycling bin.	¡Cuando hay dudas, deséchelo! Es mejor que contaminación el reciclaje.
Plastic bags, cling wrap, gloves Lids, utensils, straws Liquids, food-soiled materials Hot coffee cups, Styrofoam™ Chip bags and candy wrappers Tissues	Bolsas de plástico, plástico adherente, guantes Las tapas, utensilios, sorbetos Líquidos, materiales manchados por alimentos Taza de café caliente, Styrofoam™ Bolsas de papitas y envoltorios de caramelos Pañuelos de papel
NO Cardboard, paper Empty bottles and cans	NO Cartón, papel de oficina Botellas y latas vacías
 	

Image courtesy of [midtownoyster.com](#)

Atlantic Capes Fisheries

Since 2019, CET has partnered with [Atlantic Capes Fisheries, Inc.](#) (ACF), a fully integrated seafood company, to **support their sustainability goals for responsibly handling a renewable resource**. The business currently diverts inedible or undesirable parts of fish to an anaerobic digester to create energy and fertilizer. In 2021 alone, The Compost Plant hauled 720 tons of this material for organics recycling from ACF. While this opportunity has contributed to the operation's sustainability goals, the business continues to seek new strategies to divert an even larger portion of its waste stream: clamshells.

Due to the significant volume of material generated, ACF and many other businesses across New England are faced with the challenge of handling clam shells. Following a site visit in 2019, CET has worked to identify outlets for diverting clam shells from the trash. Potential outlets for this material include dog food, fertilizer, replacement for limestone in cement, reef and oyster bed rejuvenation, and experimental uses, such as inclusion in cosmetics. Despite extensive research, the team is still working to identify potential outlets for a sizable portion of the material generated.

Several challenges in **repurposing this material** that have been identified are not unique to ACF. This volume of clamshells to be handled fluctuates with the demand for seafood. In 2021, it is estimated that this one location generated over 7,000 tons of clamshells. While they have worked with a local compost facility to process this material, the shells are incredibly sharp. After staff received feedback from barefoot local gardeners using their finished product who did not want to buy compost

with sharp shells, they stopped accepting this item. Another key challenge is that shells need to be pre-processed to remove clam residuals, and while they have already been crushed, there is not enough space for the additional step of curing them in the sun, which takes 90 days at a minimum.

In 2021, CET and ACF identified an area landscaper who could take a load of shells for use in driveways. As the fishery produces significantly more volume than the landscaper needs, ACF is still seeking other alternatives for handling this material, which is expensive to dispose of. General Manager Chris Shriver notes, **“Why fill up a landfill if there is actually a good use for this?”** explaining that there is a missed business opportunity for this material. An entrepreneur could identify a strategy for curing and collaborate with multiple sites to accept clam shells since they are unlikely to find a sole source to handle this waste stream. CET has done extensive research with restoration projects, compost sites, startup companies, landscapers, cement manufactures and more, and will continue to support opportunities to help address this challenge that many seafood processors are facing in Rhode Island.



Diego's Middletown

[Diego's Middletown](#) offers fresh Mexican food and craft cocktails seven days a week. Over time, the business has implemented a variety of strategies to prevent food waste, donate surplus edible food, and recycle the remaining food scraps. Through this process, the restaurant has established a culture that understands that **waste has a cost**, which often can be avoided. These strategies have helped the restaurant hone operations while focusing on core business needs.

To prevent food waste, Diego's staff **cooks from scratch**, and has identified strategies to cross-utilize ingredients, repurposing vegetable scraps into new menu items. For example, all usable vegetables are repurposed into their pickled veggie mix. Bones, and excess scraps are often turned into stocks. The business also **cooks food to order**, reducing surplus prepared items at the end of the day. A focus on portion control ensures that customers get just the right amount of what they ordered, without extra waste. During the COVID-19 shutdowns, when it was difficult to accurately project customer demand and the associated quantities of food to order, Diego's built a relationship with the [MLK Community Center](#) to donate surplus edible food. The business also offered surplus meals to staff to avoid food waste.

Currently the business separates food scraps from the trash, for collection by The Compost Plant. This partnership was established via the **Healthy Soils Healthy Seas Rhode Island Project**. To make this effort successful, CET has provided support for staff training. Education is offered to help employees understand what materials can be included in the food waste collection bins, recycling receptacles, or trash cans. As the program grows, Diego's plans to incorporate English and Spanish waste bin signage into their training program to support training for seasonal staff, offering a quick reference point to clearly indicate the type of bin and acceptable items.



Image courtesy of diegosmiddletown.com



Barrington Farm School

The [Barrington Farm School](#) is a nonprofit educational community farm located on 3 acres in the middle of Barrington, Rhode Island. With a farm stand on-site, the organization grows and sells its own produce with the support of volunteers and community groups. About 30 percent of their produce is donated to the local food pantry, [Tap-In](#). The farm school also composts food scraps on-site, picking-up vegetative waste from the Barrington School District, as well as acting as a drop spot for residents in the community.

Recently, the nonprofit received a grant to fund an electric bicycle and trailer that can serve as a collection vehicle to help expand their approximately 3 ton per month composting operation. Along with this adjustment, the farm school will also add a drop spot to collect food scraps for composting at a new location in the community. In anticipation of growth, the community farm contacted CET for support with the development of their **master operational plan**, including design for scaling up processing, and creation of educational resources for community members.

Currently, the nonprofit's compost site is maintained by

eight dedicated volunteers, with support from local students and community groups. Food scraps are combined with leaves from local landscapers to form piles that are managed by hand. Recommendations were provided by **CET's Compost Site Technical Assistance** consultant to increase handling efficiencies when building compost piles, which will support the operation as it accepts more food scraps.

In addition to compost piles, the organization also composts food scraps through **vermicomposting**, which relies on worms to process food scraps into a dense, nutrient rich soil amendment. From that, the community organization produces liquid fertilizer or worm tea, which is sold by the gallon jug in the farm store. Creating compost on-site has allowed the farm to eliminate the need to buy fertilizer altogether. With support from CET, the Barrington Farm School anticipates small operational efficiencies that will support their process as they incrementally expand the operation.



The Compost Plant

The [Healthy Soils Healthy Seas Rhode Island](#) project promotes environmentally responsible behavior, with a focus on composting. As a commercial service provider for this project, [The Compost Plant](#) collects food scraps from many haulers across the state, including three of the five businesses spotlighted in this document. As many organics haulers have recognized over time, The Compost Plant understands the role that customer education plays in fostering successful partnerships for reducing contamination and promoting recycling. In addition to offering education, this operation has also partnered with CET to provide added support to their customers.



Image courtesy of compostplant.com

The Center for EcoTechnology (CET) helps people and businesses save energy and reduce waste. CET acts as a catalyst to accelerate the development of a vibrant marketplace to divert wasted food from the commercial and institutional sectors. We have been a leader in the wasted food reduction and diversion movement for more than 20 years, implementing some of the first wasted food composting programs in the country, and contributing to effective public policy.

Feeling moved to act? Contact CET's Wasted Food Solutions hotline to access free virtual or on-site technical assistance.

(888) 813-8552 | wastedfood@cetonline.org | wastedfood.cetonline.org

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