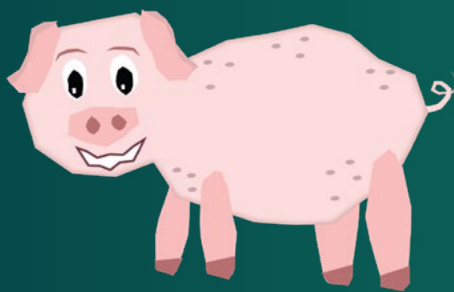


Food for Thought



CET

Choosing Between Feeding Animals, Composting, & Anaerobic Digestion for Rhode Island Businesses & Institutions



Your Guide to Food Scrap Hauling

With Rhode Island state enacting wasted food diversion mandates, businesses are exploring options for managing food scraps. We will walk through the various food scrap handling choices and help you understand which option is best for your business.



Table of Contents

Introduction

Your Guide to Food Scrap Hauling

Rhode Island Food Waste Law Overview

Every Peel Has Potential. Let's Break It Down!

Food Scraps Table

Where Your Food Scraps Are Processed Impacts What Goes in Your Food Scraps Bin

Animal Feed

Feeding Animals, Not Landfills

Composting

If You Can't Feed People or Animals, Feed the Soil!

Anaerobic Digestion

Turning Waste into Power

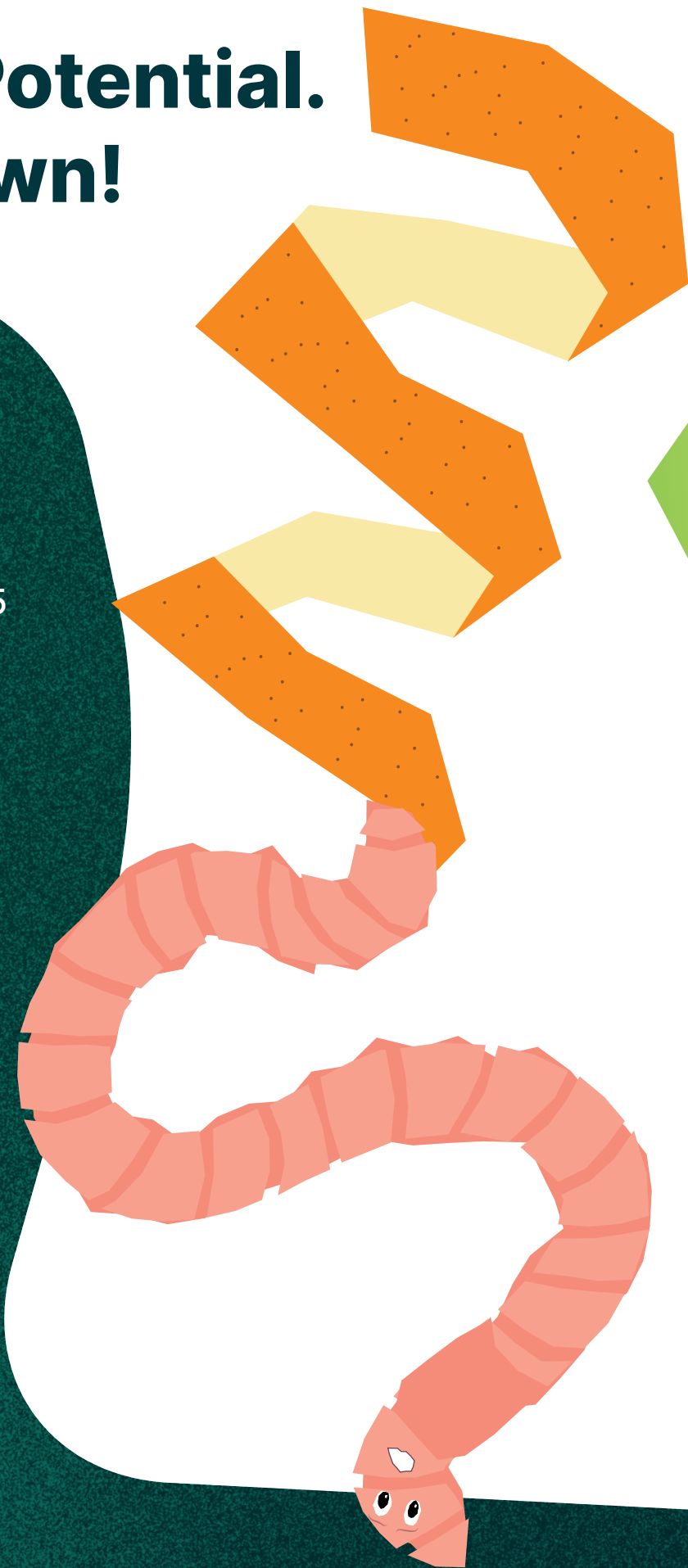
Additional Resources

Every Peel Has Potential. Let's Break it Down!

According to the [Rhode Island Food Policy Council \(RIFPC\)](#), a 2015 "Waste Characterization" study found that wasted food comprises the largest material type in Rhode Island's municipal waste stream at

**100,000 tons.
That's 200
million pounds!**

Of this, industrial, commercial, and institutional sources accounted for **39.4% (39,453 tons)**.



To combat this waste and extend the life of Rhode Islands only landfill, the state passed a [food waste ban](#) that went into effect in 2016.

Who is Affected?

Businesses with more than two tons of wasted food (roughly one nearly full 6-yard dumpster) per week.

Colleges & universities with more than one ton of wasted food (eight 64-gallon carts) per week.

K-12 schools with more than 0.6 tons of wasted food (four 64-gallon carts) per week.

Key Requirements

Recycle Food Scraps: Organic-waste materials generated by the entity must be recycled if the entity is within 15 miles of an authorized composting or anaerobic digestion facility with available capacity to accept such material.

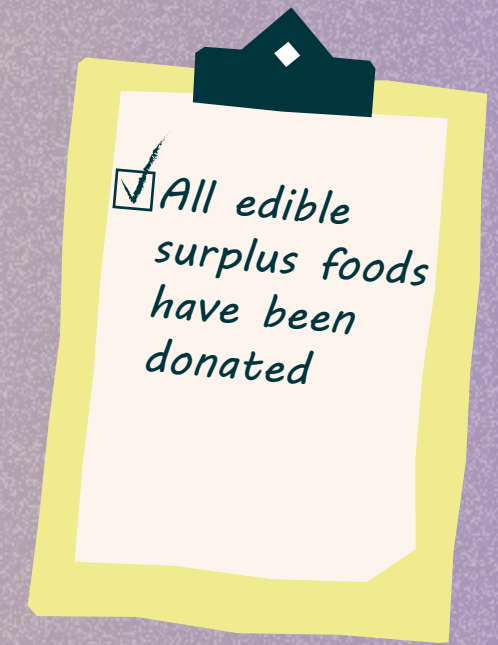
More information about the law can be found [here](#).

Take action now to keep wasted food out of the [Central Landfill](#) and support both your bottom line and your community!



Where Your Food Scraps Are Processed Impacts What Goes in Your Food Scraps Bin

Read on to determine which option best fits your needs, then explore our one-pagers for each part of the wasted food sector to guide your next steps.



Facility Type	Materials Typically* Accepted
Food Rescue Agencies**	Produce, baked goods, packaged items, perishables and nonperishables
Animal Feed	Vegetable and fruit scraps, bakery goods, grains, bread Sometimes: Meat, dairy, and animal byproducts if heat treated
Commercial Compost (Industrial Applications)	Vegetable and fruit scraps, grains, bread, meat, dairy, eggshells, coffee filters and paper napkins Sometimes: Cardboard and compostable serveware
Community Compost	Vegetable and fruit scraps, grains, bread, eggshells, coffee filters and paper napkins Sometimes: Cardboard and compostable serveware Does not accept: Meat and dairy unless otherwise specified
Anaerobic Digestion (including depackaging)	All types of pre- and post-consumer wasted food, beverages, packaged wasted food, food processing waste fats, oils, and greases

*Acceptance of materials may vary, so always confirm with the receiving facility.

**In general, entities that are already in the business of preparing and serving food for public consumption are already practicing the measures necessary to easily adopt safe food donation.

Feeding Animals, Not Landfills

Animal feed operations, or farms raising animals like pigs, chickens, goats, and cows, can use food that would have gone to waste to feed livestock (EPA). Food scraps suitable for animal feed can come from a range of sources, including unsold retail food and pre-consumer food scraps.

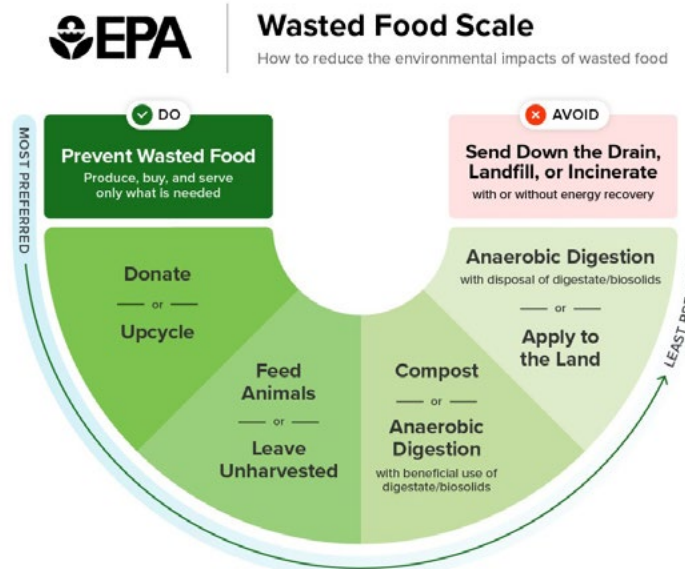


If You Can't Feed People or Animals, Feed the Soil!

Composting is the natural process by which plant-based organic material is decomposed by beneficial micro- and macro-organisms. Some commercial composting sites may also accept meat and dairy products. Composting operations are typically found on farms, municipal leaf and yard waste facilities, or as stand-alone operations. These can range from small community compost sites to large commercial operations.

Food scraps are generally transported to compost facilities by food scrap haulers, who collect feedstock from businesses and institutions. At the facility, it can take anywhere from a few months to a year to turn those scraps into a valuable finished product: a nutrient-rich soil amendment. This product can be sold to individuals, businesses, or municipalities.

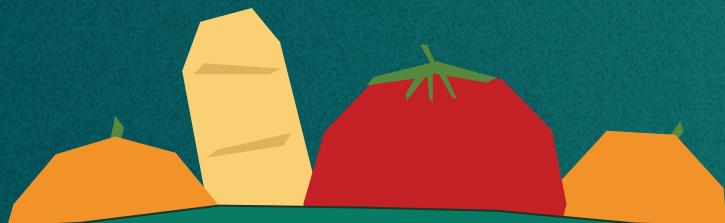
See the Additional Resources page for more information on where to find food scrap haulers.



Benefits

- Mutually beneficial partnerships between food businesses and livestock farmers.
- Reduces the negative environmental impacts of disposed food.
- Can save farmers money on feed cost.
- In some cases, it is less expensive for businesses to send their food scraps to feed livestock than to a trash facility.

Considerations



Varying requirements for the food materials farms can accept depending on the animals they have. Be sure to check with your local farm operator for what materials they accept.

Harvard Food Law and Policy Clinic developed a [state-specific fact sheet](#) outlining the legal considerations for feeding food scraps to animals in Rhode Island.

Animal feed operations without depackaging capabilities often have a very low tolerance for contamination by non-food materials.

Benefits

- Reduces greenhouse gas emissions that come with disposing of wasted food in a landfill.
- Produces a valuable soil amendment that can be sold throughout the local community.
- Compost can boost nutrients, help retain soil moisture, and prevent plant diseases and pests.
- Reduces the need for chemical fertilizers ([EPA](#)).
- Large-scale composting operations can generate strong community ties, as their maintenance and success often require participation and collaboration among many people, organizations, and/or businesses.

Considerations

- Depending on the composting system used, some processors will accept third party certified e.g., BPI or TUV compostable service ware and/or waxed cardboard with wasted food.
- Always check with your hauler or food scrap processor before investing in compostable service ware or other products.
- Commercial compost sites typically have a low tolerance for contamination.
- If there is no depackaging infrastructure, pre-sorting of material is required.
- Examples of contamination include glass, plastic, textiles, metal, and other objects that don't decompose during the composting process.

Turning Waste into Power

Anaerobic digesters (AD) are large, sealed vessels where microorganisms break down organic material, such as wasted food, in the absence of oxygen. This process produces two main byproducts: **biogas** to generate energy and **digestate** which is used as fertilizer.

Many people refer to anaerobic digestion as “Cow Power” because most anaerobic digesters in the United States are located at livestock or dairy farms, where they process manure. However, the number of stand-alone digesters processing wasted food is steadily increasing.

Benefits

Generates electricity from captured methane for on-farm or local use as a source of renewable energy ([EPA](#)).

Many facilities can accept packaged wasted food as they commonly have de-packaging equipment to accommodate this.

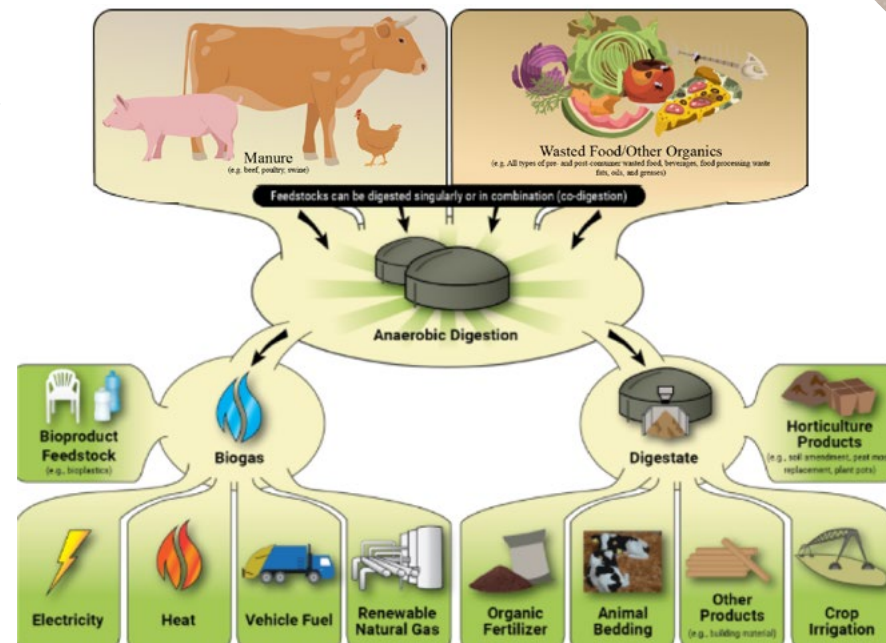
AD facilities with de-packaging systems may accept lightly contaminated food waste, such as front-of-house collections exposed to public use.

Produces nutrient-rich material that can be used for agricultural applications.

Provides an opportunity for diversified farm revenue ([EPA](#)).

Can be a source of economic growth in rural areas ([EPA](#)).

Depackager is a feed hopper equipped with augers that break open bags and size reduce feedstocks, which improves materials separation during de-packaging.



Considerations

Typically accept wasted food liquids, food processing waste, fats, oils, greases, and manure.

AD facilities cannot accept some materials commonly found in the wasted food stream including glass, please contact your local facility for more information on what is acceptable.

AD facilities typically do not process compostable plastics or paper products as these materials are removed by de-packaging.

Some AD facilities require food scraps in pulped form, known as slurry. Businesses can use on-site systems to process food waste into slurry, which haulers then collect and deliver to the AD facility.

Additional Resources

Food Scraps Haulers/Recyclers

- Find a food scraps recycler/hauling service for your organic material: [List of Food Scraps Recyclers](#), search for “Food Waste/Organics”
- If you are an organics recycler that is not listed that offers food scraps recycling services for large businesses, please [contact RIRRC](#).

Transfer Facilities

- [Solid Waste Management Facilities Map](#)



Looking for additional support? CET can provide no-cost assistance to Rhode Island-based businesses and institutions to support wasted food diversion programs and more.

This support includes onsite waste assessments with tailored waste reduction recommendations to integrate seamlessly into your existing operations, educational presentations, staff training, customized signage for your waste and recycling bins, and connection to resources and service providers.

Contact us at (866) 306-0911 or wastedfood@cetonline.org to get started. [Visit our website](#) to learn more.

