

Northeast Anaerobic Digestion Accelerator



**We help people and businesses save
energy and reduce waste**

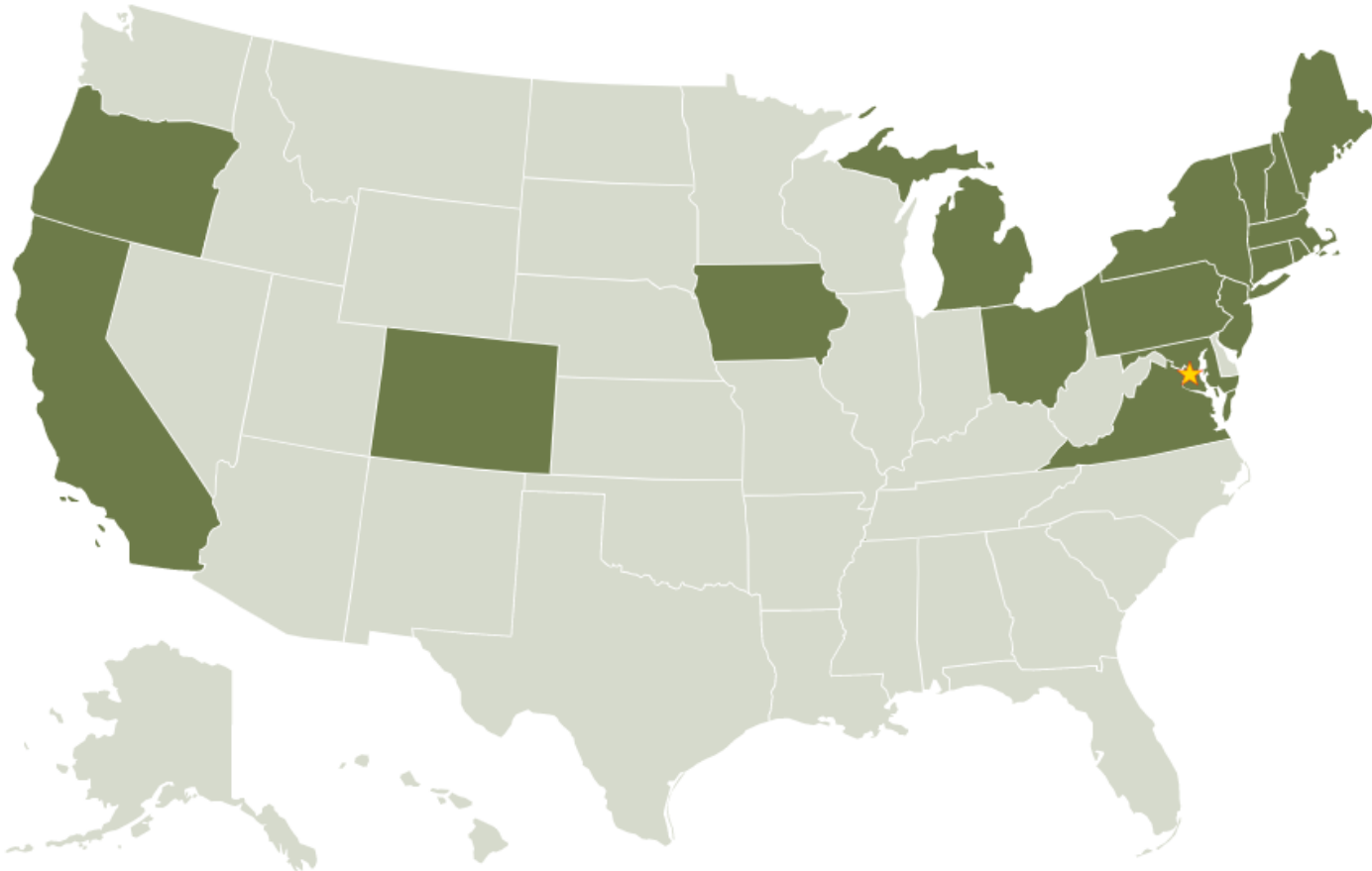


Center for EcoTechnology Partners



Do You Need Assistance With Wasted Food?

We can help! Select your state below to begin.

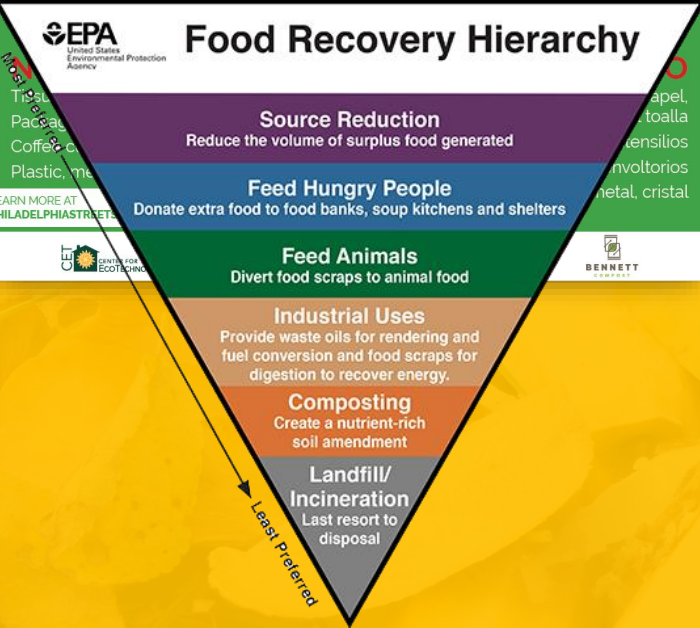


- CALIFORNIA
- COLORADO
- CONNECTICUT
- IOWA
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- MARYLAND
- MASSACHUSETTS
- MICHIGAN
- NEW HAMPSHIRE
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- NEW YORK
- OHIO
- OREGON
- PENNSYLVANIA
- RHODE ISLAND
- VERMONT
- MARYLAND

FOOD SCRAPS
RESTOS DE ALIMENTOS

ALL FOOD SCRAPS
Fruit & vegetable peels
Dairy, eggs, grains, bread
Meat, fish, poultry
Bones, shells

TODOS LOS RESTOS DE ALIMENTOS
Pieles de frutass y vegetales
Lácteos, huevos, granos, pan
Carne, pescado, aves

Technical Assistance

Throwing Away Food and Money

How Feeding the Connecticut Community Feeds Your Bottom Line



In 2019 U.S. businesses generated approximately 50 million tons of surplus food – the equivalent to 80 billion meals, representing a \$244 billion loss across the foodservice, retail, manufacturing and farm sectors (ReFED). Food makes up 10% of the waste stream.

A grocery store with a weekly compactor pick-up could save over \$4,900 in disposal costs, donate over 81,000 meals, and realize a tax deduction of over \$325,000.* Here's how:

The Importance of Food Donation in Rhode Island



CET CENTER FOR EcoTECHNOLOGY

RHODE ISLAND DEPARTMENT OF HEALTH



Content Development



Capacity Building

Meeting You Where You Are:

Evaluate existing waste streams

Identify opportunities to prevent, recover, and divert waste

Create customized waste bin signage

Conduct cost analysis

No-Cost Waste Assistance



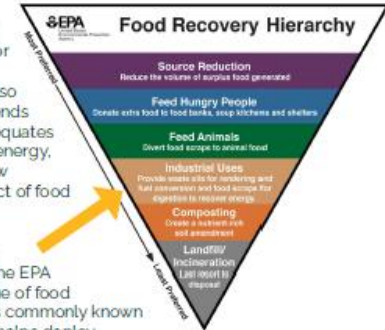
Sustainability in Healthcare: Connecticut Valley Hospital



Anaerobic Digestion Fact Sheet

Wasted food is a problem.

According to the U.S. Department of Agriculture, 30-40% of the food in America is wasted. In 2018 alone, over 100 million tons of food waste was generated and less than 4% of that waste was diverted from landfills and incinerators for composting. Wasted food also represents a significant misallocation of resources. When we waste food, we are also wasting agricultural resources. For instance, wasted food ends up consuming nearly a quarter of our water supply which equates to about \$172 billion in wasted water. Add to this the time, energy, fossil fuels, chemicals, and other resources needed to grow and produce our food and the true scale of the large impact of food waste becomes clearer.



The EPA Food Recovery Hierarchy is a great tool to utilize when considering wasted food solutions. All solutions on the EPA Food Recovery Hierarchy are helpful in addressing the issue of food waste. Anaerobic Digestion (AD) is a technology that is less commonly known than some of the others, and is often misunderstood. CET helps deploy solutions at all levels of the hierarchy and presents this fact sheet to help people better understand the benefits of anaerobic digestion.

Did you know that the scraps left on your plate can become fuel?

Anaerobic Digestion is 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 very large, sealed container called a digester. The process both creates fertilizer from the waste inside the digester that can be used for farming, and generates biogas composed mostly of methane. This biogas can then be combusted to generate electricity and heat, or it can be processed into renewable natural gas and transportation fuels.



Quantum Biopower, an anaerobic digestion facility in Southington, Connecticut, shared this useful graphic demonstrating how these facilities work.



Food Waste Separation for Anaerobic Digestion Processing

This food waste separation guidance document is part of a series aimed at helping commercial food service providers – e.g., restaurants, hotels, corporate cafeterias, and schools – reduce the volume of organic waste disposed by their operations.

There are several options for diverting food waste – including prevention, donation, animal feed, composting, and anaerobic digestion (AD). All of these strategies are more effective when generators have systems in place for separating out organic material from waste.

Prevention should always be the top priority but the most successful diversion programs employ strategies across the EPA Food Recovery Hierarchy. This document provides specific guidance for source separating food scraps for AD. See the other tip sheets in this series for guidance on [preventing](#) and [donating](#) surplus food.



Kitchen Separation

Recommended practices for source separation, including signage and bin placement



Hauler Collection Frequencies

Guidance for working with your hauler including contracting, container options, pickup frequencies



Outdoor Storage Practices

Guidelines for proper storage, from cleanliness to container maintenance

Northeast Anaerobic Digester Accelerator — Food Waste Digestion Insights

The Center for EcoTech (CET) Northeast Anaerobic Digester Accelerator (NADA) is supported by EPA's Funding to Support Anaerobic Digestion in Communities. The NADA project includes development of resources and training for source separation and diversion of commercial and institutional food waste to digesters in the Northeast. Among the resources created were a guidance outlining source separation practices to implement food waste to anaerobic digestion (AD), and this overview, Food Waste Digestion Insights, which

The Center for EcoTechnology's (CET) Northeast Anaerobic Digester Accelerator (NADA) is a two-year project supported by EPA's Funding to Support Anaerobic Digestion in Communities.



fundamentals, and provides examples of service providers — haulers and food waste preprocessing and digester facilities in the Northeast.

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wastedfood.cetonline.org/wp-content/uploads/2022/09/WFS-Insights-on-AD-Tech.pdf

Fundamentals of

AD — the process of biologically managing organic waste to generate electricity or a soil amendment.

AD is commonly used for managing food and grease (FOG), meat and bone, and grease. It is also used to manage source separated food waste in combination with livestock manure. The use of existing infrastructure and a significant amount of the digester's capacity.

Examples of these types of facilities have been developed to enable generation of revenues from tipping fees and operating costs relative to

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Hauler Working Groups

Hauler
Networking

Scaling Up

Identifying
Partner
Processors

Education
And
Re-education

Thank you!

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