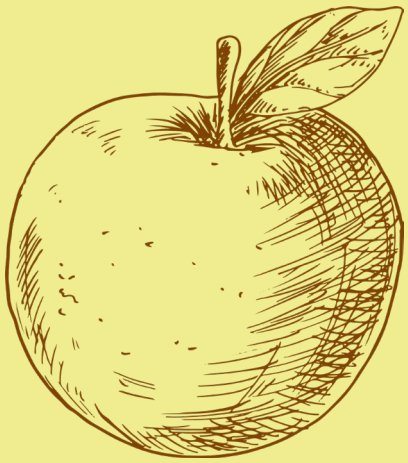
CET

Food for Thought: **Choosing Between Feeding Animals, Anaerobic Digestion, & Composting in Connecticut**

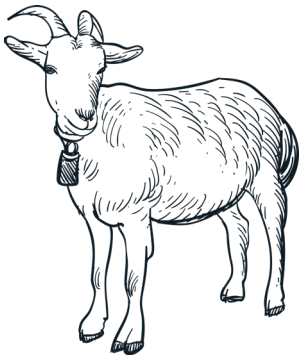


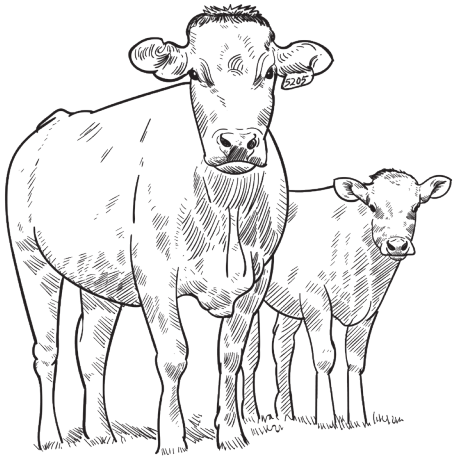
The Connecticut Commercial Organics Recycling Law, effective January 1, 2022, requires that commercial generators generating greater than 26 tons of food waste per year separate and divert this material from disposal. The law applies to commercial food wholesalers and distributors, industrial food manufacturers and processors, grocery stores and supermarkets, and resorts or conference centers in Connecticut located within 20 miles of an authorized organics recycling facility. This also includes generators within proximity to out-of-state organics recycling facilities.

The material you collect depends on where your food waste goes.

Where your food scraps are processed impacts what you can/cannot put in your food scraps bin. It is important to work with your waste hauler and the compost, anaerobic digestion (AD), or animal feed facility receiving the material to ensure that you are properly separating materials to meet that operation's specifications or permitting. For instance, food scraps sent to animal feed operations do not accept compostable serviceware because animals can't eat it! For specific guidance on source separation of food scraps, visit this resource. Use the following table as a guide, but always check with the receiving facility.

Facility Type	Materials Typically Accepted
Animal Feed	Vegetable, fruit scraps, & bakery goods Sometimes: Meat
Anaerobic Digestion	All types of pre- & post-consumer food waste, beverages, food processing waste, fats, oils, & greases Sometimes: Packaged food waste & paper napkins
Commercial and Community Compost (Industrial Applications)	Vegetable & fruit scraps, grains, bread, meat, dairy, eggshells, coffee filters, & paper napkins Sometimes: Cardboard & compostable serviceware





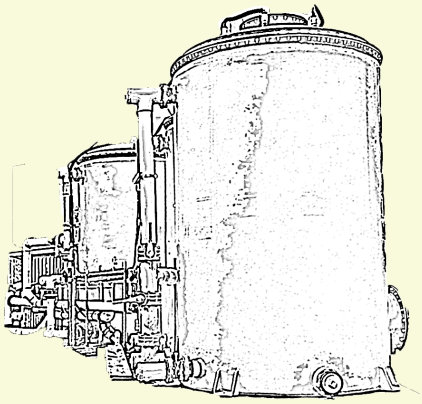
Animal Feed

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

Benefits	Considerations
• Can create mutually beneficial partnerships between food waste generators and livestock farmers. • Reduces the negative environmental impacts of disposed food. • Can save livestock farmers money on feed costs. • In some cases, it is less expensive for businesses to send their food scraps to feed livestock than to haul this material to a trash facility.	• Animal feed sites have varying requirements for the food materials they can accept depending on the animals they have and the scale of the operation. For example, a farmer may only want produce scraps to feed their cows or chickens. • In Connecticut, there are requirements for heat-treating animal-derived waste before feeding it to animals. Harvard Food Law and Policy Clinic developed a state-specific fact sheet outlining the legal considerations for feeding food scraps to animals in Connecticut. • Animal feed operations without de-packaging capabilities often have a very low tolerance for contamination by non-food materials.

Anaerobic Digestion

Anaerobic digesters are large, sealed vessels where microorganisms break down organic material, such as food waste, in the absence of oxygen. This process creates biogas and digestate. The resulting biogas, which is primarily composed of methane, is typically captured to generate electricity or used as a renewable natural gas and transportation fuel. Digestate, a nutrient-rich, sludge-like substance, can be separated into solid and liquid soil amendments for use on agricultural land. You may have heard anaerobic digestion called "Cow Power." That's because most of the anaerobic digestors in the United States are located at livestock or dairy farms that primarily use them to process manure, but there are increasingly more stand-alone digesters as well that process food waste.

Benefits	Considerations
• Generates electricity for on-farm or local use as a source of renewable energy, by capturing methane which would have otherwise been released in a landfill (EPA). • Many facilities can accept packaged food waste, as they commonly have de-packaging equipment that can separate packaging materials and other contaminants from the organic food or liquid waste. • AD facilities with depackaging infrastructure may accept food waste streams that experience light contamination, for instance, the contamination that front-of-house food scrap collection programs are more prone to than back-of-house collections. • Produces a nutrient-rich material that can be used for agricultural applications. • Can co-process or co-digest materials, such as food waste with animal manure. • Provides an opportunity for diversified farm revenue (EPA). • Can be a source of economic growth in rural areas (EPA).	• Typically accept food waste, liquids, food processing waste, fats, oils, greases, and manure. • AD facilities cannot accept materials commonly found in the food waste stream: glass and foam/polystyrene. • AD facilities typically do not accept compostable plastics or paper/paper products. • Some AD facilities have special requirements for accepting material. For example, some facilities only accept food scraps in a pulped form, called slurry. To accommodate this, some businesses process their food waste in an on-site system, producing a slurry. Haulers collect the resulting pulped slurry material from their system's tank and transport it to an AD facility. 

Composting

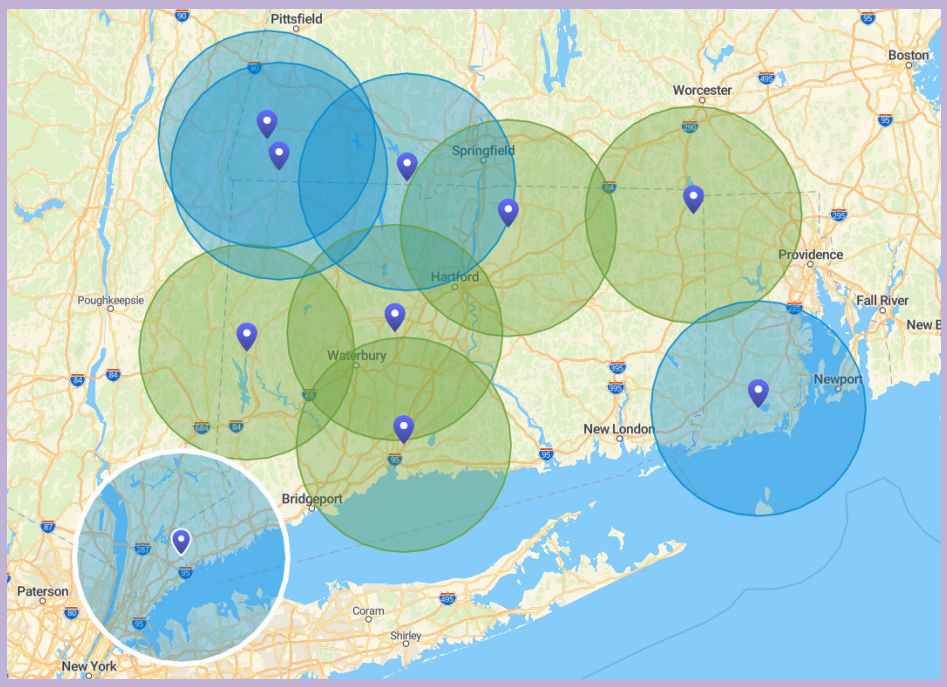
Composting is the natural decomposition process of organic material by beneficial micro- and macro-organisms. Typical compost components include **greens**, or nitrogen-rich materials, such as vegetable and fruit scraps, garden and yard materials, fresh grass clippings, and manure; and **browns**, or carbon-rich materials, such as dry leaves, wood chips, sawdust, paper, cardboard, bread, pasta, and rice. Compost sites are typically found on farms and at municipal leaf and yard waste facilities, but there are standalone operations as well, including small community compost sites and large commercial compost operations. Material is typically transported to sites by food scraps haulers, who collect the feedstock from compactors, dumpsters, and carts at businesses and institutions. Depending on the compost operation, it can take a few weeks to a year to create a finished product, a nutrient-rich soil amendment. This product can be sold by compost operators to individuals, businesses, or municipalities.

Benefits	Considerations
• Reduces greenhouse gas emissions that come with disposing of food waste in a landfill. • Reduces the need for chemical fertilizers (EPA). • When added to soil, the compost product can boost nutrients and help retain moisture, in addition to preventing plant diseases and pests. • 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. • Produces a value-added soil amendment that can be sold in the local community.	• Depending on the composting system used, some processors will accept BPI-certified compostable serviceware and/or waxed cardboard with food waste. Always check with your hauler or food scraps processor before investing in compostable food serviceware or other products. • Commercial compost sites typically have a low tolerance for contamination if there is no depackaging infrastructure to pre-sort material. Examples of contamination include glass, plastic, textiles, metal, and other objects that don't decompose entirely during the composting process.

Are you within 20 miles of a processor?

The following map highlights organics recyclers in Connecticut with a 20-mile radius around each facility. Some notes on the map:

- Sites within CT are in GREEN
- Sites outside of CT are in BLUE
- Organics processing sites include:
  - ▷ Permitted sites in CT
  - ▷ Sites within 20 miles of CT in MA, NY, and RI. Please see a complete list here.
  - ▷ Even if you are beyond the mandatory 20 mile radius, we can help you determine where your food waste could be processed.



Feeding People

If you have quantities of edible surplus food, such as leftovers from a large event, consider exploring donation options first. Learn more about donating food in Connecticut.

Looking for additional support? CET can provide assistance to Connecticut-based businesses to support food waste diversion programs and more. Contact us at 888-410-3827 or ReduceWasteCT@cetonline.org to get started or visit our website to learn more.

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