



Ulster County 2021 Climate Smart Communities Recertification Documentation

PE5 Action: Organic Waste Program for Government Buildings

2 POINTS DOCUMENTED

Background: Ulster County is implementing a food waste diversion program at the Ulster County Law Enforcement Center (UCLEC), installing a Ecovim Eco-66 food dehydrating/compost machine in August 2019. UCLEC represents 32.5% of all County facilities with conditioned space, by gross floor area (GFA). The dehydrator handles all kitchen and food scraps for the County Jail (which has a capacity of 426 inmates). The finished product is self-hauled to the Ulster County Resource Recovery Agency for onsite composting.

In 2019 the dehydrator produced 2.25 tons of finished product. As the dehydrator achieves an 83-93% reduction in waste, by weight, this represents over 9.5 tons of food waste diverted from the waste stream. This diversion results in a significant amount of avoided greenhouse gas emissions, which were previously associated with the transporting and landfilling of this organic waste (which would otherwise have been transported to the Seneca Meadows landfill for disposal).

Documentation:

- Eco-66™ Spec Sheet & User Manual
- Pictures of installed dehydrator and finish product
- Tables:
 - Ulster County facilities with conditioned space & GFAs
 - Summary showing UCLEC is 32.5% of County GFA
- Ulster County 2020 Annual Waste and Recycling Report data



The *Ecovim Eco-66* is a unique waste management system that can process waste for medium size foodservice operations up to large institutions or facilities. The *Ecovim* system dehydrates compostable waste using an energy efficient and automated control process. The *Eco-66* is easy to maintain, requires no fresh water connection or venting. Agitators will stir the waste heated by the unit's decomposting chamber to kill any bacteria and reduce the waste matter up to 93%, producing a dry, light and odor free material that may be used as soil amendment.

STANDARD FEATURES

- 304 stainless steel construction with polished exterior
- Mechanical agitation
- Sealed input and output doors
- Agitator stops when door is open
- Agitator auto reverse when a jam occurs
- Stand alone, portable design
- 66 lb. input capacity
- 9 hour treatment time
- 1.8 kwh power consumption
- One touch fully automatic control
- Condensate drain line provided

VOLTAGE OPTION

- 208V 60 Hz 20A - Minimum
- 220V 60 Hz 20A - Required

BENEFITS

- 83% to 93% waste reduction
- No emzymes or additives required
- Low labor cost, one person operation
- Low maintenance
- No fresh water connection needed
- Uses condensers to control humidity
- Recycles heat energy
- Process food waste



3161326
Conforms to UL STD. 430



Attestation of Conformity
No. N9 12 04 67922 003

FOR MORE INFORMATION
CONTACT

INTEGRATED VETERANS SERVICES
WWW.IVSGOGREEN.COM
505.244.8778 EXT. 101

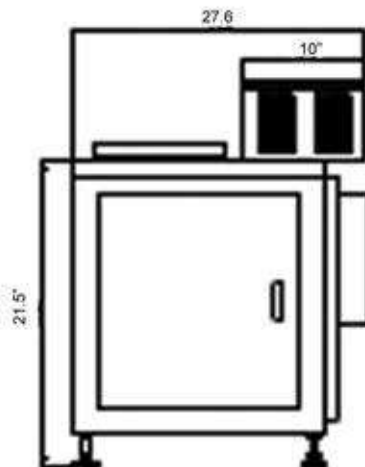
Eco-66

Voltage	208/220
Amp's	20
Hz	60

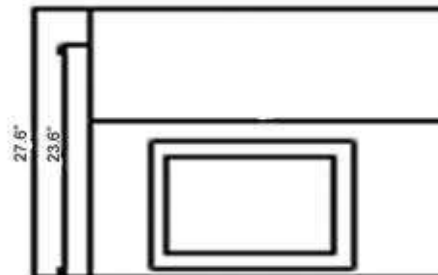


SINGLE-PHASE

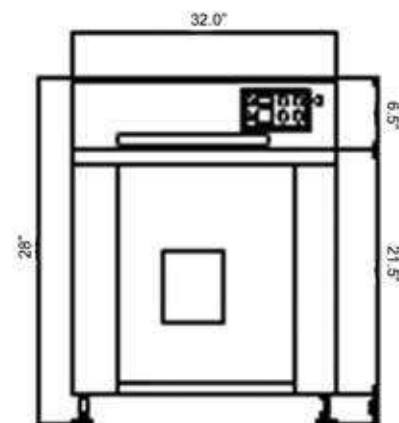
SIDE



TOP



FRONT



Eco-66 Specifications

Processing Methods	Multi-stage indirect heat and dry dehydration process
Design Type	Stand-alone, portable design 304 stainless steel construction
Input Capacity (lbs.)	Up to 66 lbs.
Average Reduction Rate	83% to 93%
Treatment Time	9h
Power (Electricity)	Single-phase, 20 Amp * AC 208/220v * 60 Hz
Power Consumption	1.8 kwh
Dimension (W x D x H)	32.0 x 27.6 x 28.0
Safety Features	The internal agitator automatically stops when the input door is opened
Heating Method	Indirect multi-step heat and air recirculation
Automated Control	One touch smart control panel
Treatable Items	Food waste
Warranty	1 year full manufacturer's warranty on parts and labor



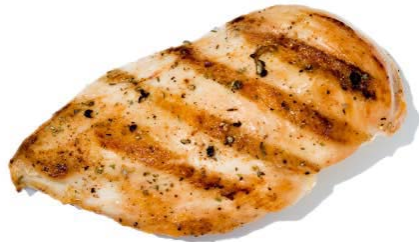
Eco-66™ User Manual
A FOOD DEHYDRATING/COMPOST MACHINE

What cannot be put into the Eco™?



What can be put into the Eco™?

Produce/Fruits, Cooked Meat,
Chicken & Fish are OK



SUPPLIES YOU WILL NEED TO GET STARTED

1. A trash can with lid and food scraper



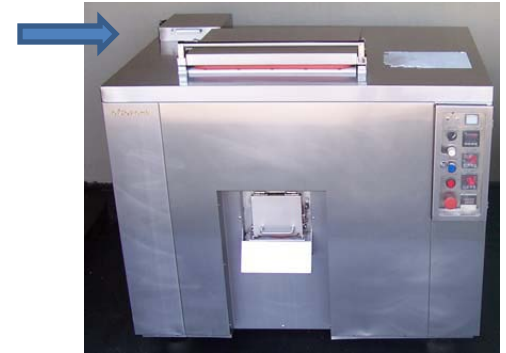
2. 1or 2 plastic bins to capture the finished product from machine



Getting Started

1. Filter is located on the top left corner of Eco TM

1



2. Lift open cover, unscrew lid and set aside

2



3. Remove filter and rinse with water if necessary or at least every 3 days

3



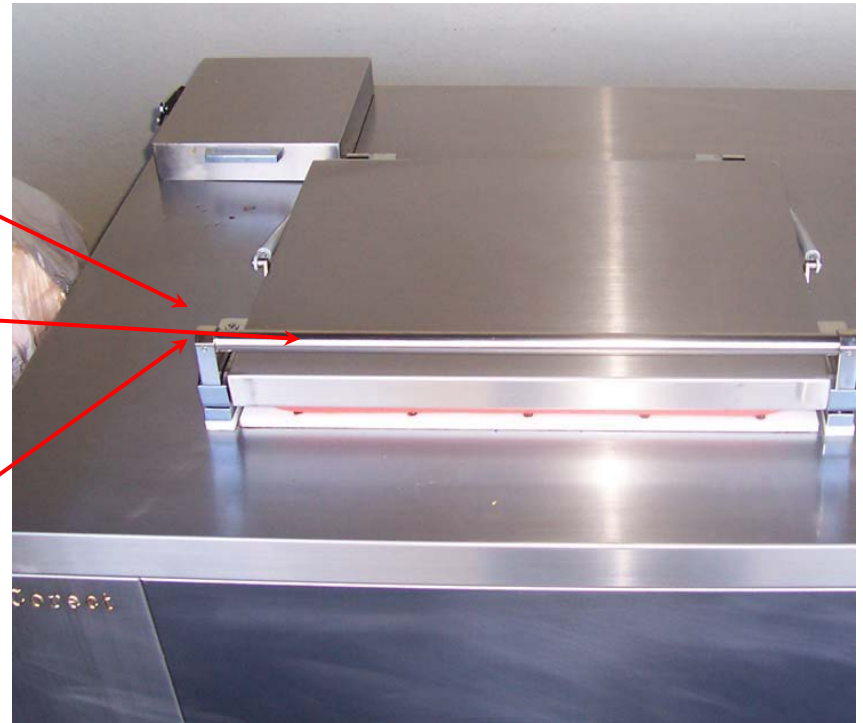
ADDING FOOD WASTE

Unlock top door ¹

Open Lid

Insert food

Lock top door



Starting the Eco 66

Use black knob to turn
on power

1

Push Start button.

2



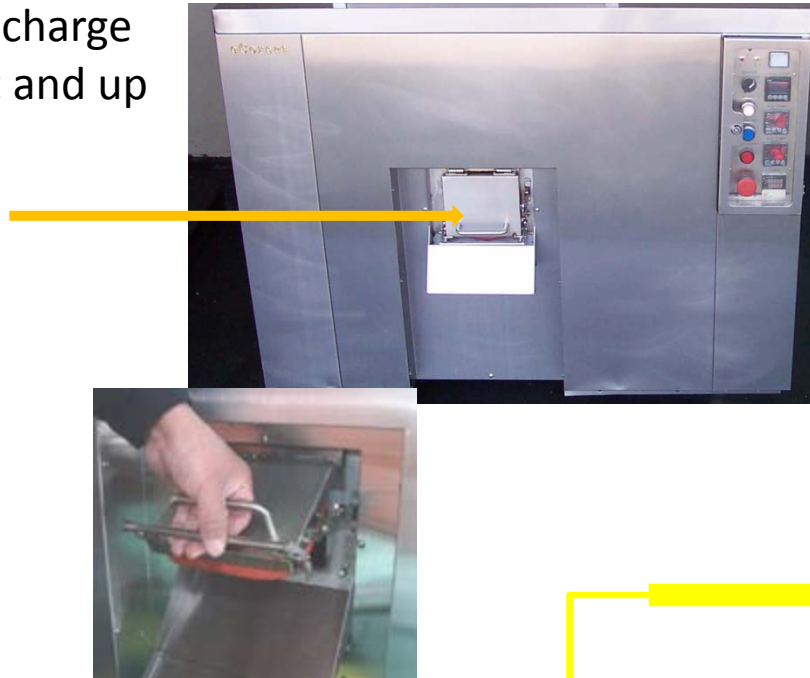
Let it Run

- Lock the glass door on the Control Panel
- Make sure plastic bin is under opening to catch debris
- Let machine process for 18 hours and empty bin into normal trash



To Empty

Open the lower discharge door by pulling out and up on the handle

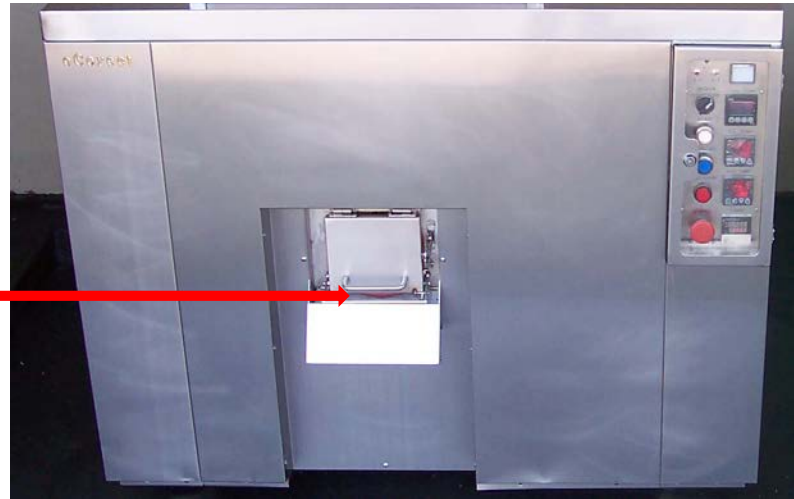


Press the discharge button



When Empty

Close the discharge door and
Make sure that the latch closes
And locks the door shut



Then unlock the top input lid, fill the machine and start the cycle again

Before you call for help

Before calling for help please make sure you
Write down the upper and lower settings for the
displays as seen on the right.

Tank Temp

Oil Temp

Air Temp

Timer Is on lower panel

IS the E-1 or E-2 Light on?



Installation Do's & Don'ts

This unit while outside, is protected
From the elements and has access
Rear panel electrical



Don't

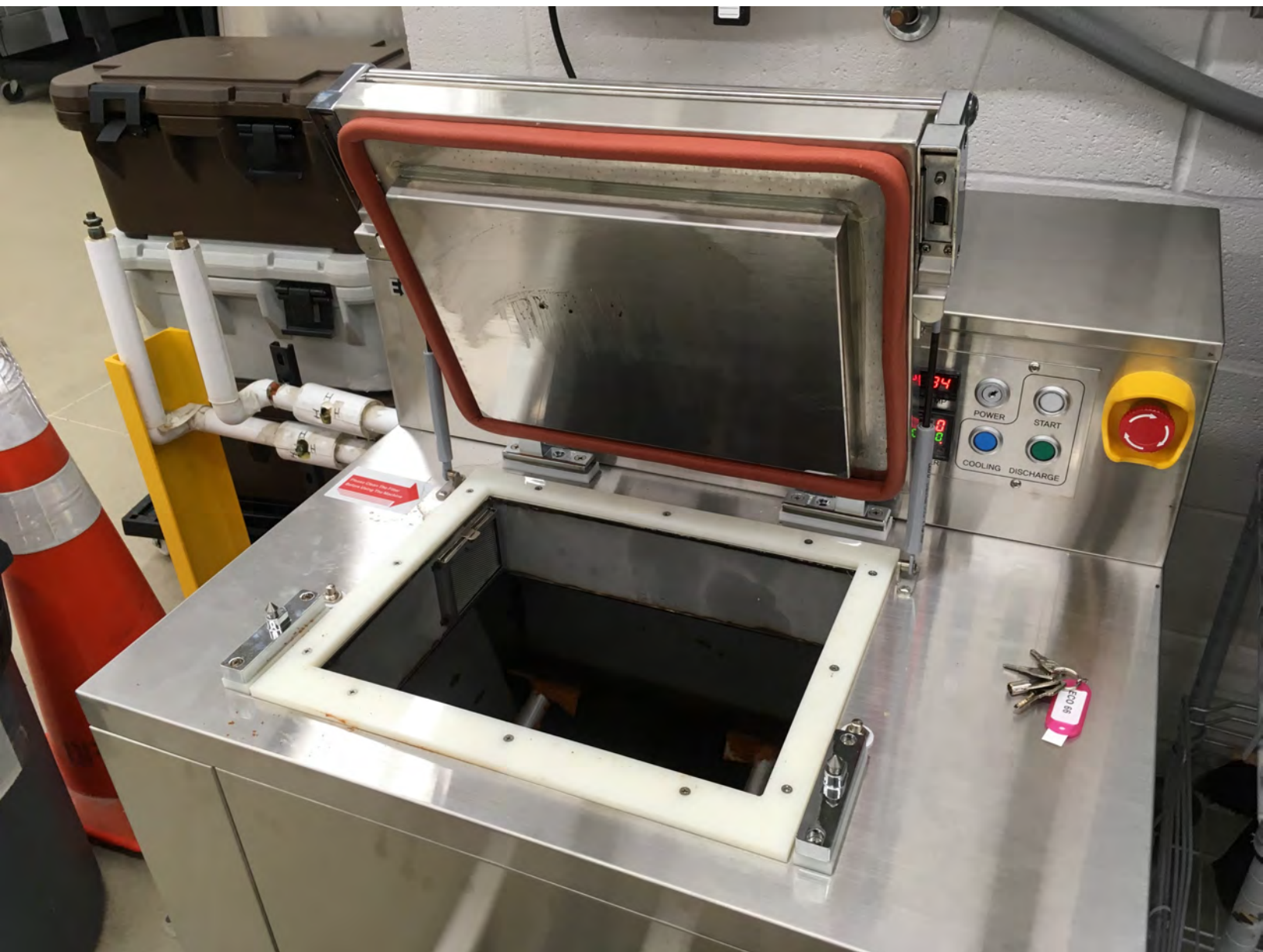
The unit below is exposed to the elements
And the one on the right cannot be serviced
Because the access door, on right, is blocked.



The End

- 95% of issues are operator problems
 - Accidentally changed values on controllers
 - Emergency stop button depressed
 - Electrical fuse blown
- Make sure you get name and address of location, contact, etc. and settings of all front panel controller displays.











Property Name	Property GFA - Self-Reported (ft²)	Address 1	City	Organic Waste Recovery Program?
Accord Substation - Office	1,343	456 Granite Road	Rochester	N
Boiceville Garage and Office	5,506	8 Cabin Hill Road	Olive	N
Carr Building	5,438	1 Pearl Street	Kingston	N
Community Corrections	7,700	63 Golden Hill Drive	Kingston	N
Department of the Environment	4,229	17 Pearl Street	Kingston	N
DSS	74,000	1 Development Court	Kingston	N
Emergency Management	3,537	238 Golden Hill Dr	Kingston	N
Family Court	43,977	1 Development Court	Kingston	N
Golden Hill Office Building	39,600	239 Golden Hill Drive	Kingston	N
Heavy Vehicle Maintenance	35,000	Shamrock Lane	Kingston	N
Highway Substation - New Paltz	13,697	246 Libertyville Road	New Paltz	N
Highway Substation - Plattekill	2,265	227 Fosler Road	Plattekill	N
Highway Substation - Saugerties	3,552	344 Harry Wells Road	Saugerties	N
Highway Substation - Shawangunk	4,433	40 King's Lane	Shawangunk	N
Hutton Building	3,386	234 Golden Hill Lane	Kingston	N
Information Services	13,174	25 South Manor Avenue	Kingston	N
Old Jail Storage Garage	5,000	63 Golden Hill Drive	Kingston	N
Old Ulster County Jail	53,391	63 Golden Hill Drive	Kingston	N
Persen House	6,405	74 John Street	Kingston	N
Probation Campus	17,594	733 Broadway	Kingston	N
Public Safety Training Center	6,804	250 Ulster Landing Road	Kingston	N
Public Works Building	10,740	313 Shamrock Lane	Kingston	N
Shandaken Garage	3,020	7336 State Rt. 28	Shandaken	N
Sheriff's Substation - Warwarsing	1,534	155 Airport Road	Ellenville	N
Sojourner Truth Ulster Landing Park	3,198	916 Ulster Landing Road	Saugerties	N
Sundown Garage & Office	3,040	30 Greenville Road	Denning	N
Trudy Resnick Farber	20,732	50 Center Street	Ellenville	N
UCAT	23,413	1 Danny Circle	Kingston	N
Ulster County Courthouse	43,650	285 Wall Street	Kingston	N
Ulster County Law Enforcement Center	277,000	380 Boulevard	Kingston	Y
Ulster County Office Building	62,396	244 Fair Street	Kingston	N
Ulster County Pool	7,126	241 Libertyville Road	New Paltz	N
Ulster County Records Center	22,550	300 Foxhall Avenue	Kingston	N
Ulster Heights Substation Garage & Office	2,146	229 Ulster Heights Road	Wawarsing	N
Van Dale Garage - Fabrication Shop	15,146	316 Van Dale Road	West Hurley	N
Veterans Transitional Housing Facility	6,656	67 Wurts St	Kingston	N
Total	852,378			

	Column Labels		
	N	Y	Grand Total
Sum of Property GFA - Self-Reported (ft²)	575,378	277,000	852,378

	Column Labels		
	N	Y	Grand Total
Sum of Property GFA - Self-Reported (ft²)	67.5%	32.5%	100.0%

Ulster County 2020 Annual Waste & Recycling Report

Mangement Category	Waste Material	Tons	NOTES
Disposal (landfilled)	Garbage (MSW)	129.44	Delivered directly to UCCRA
Disposal (landfilled)	C&D	46.66	Delivered directly to UCCRA
Regulated Recyclables	Mixed Paper	52.86	Welsh Sanitation
Regulated Recyclables	Corrugated Cardboard	9.75	Delivered directly to UCCRA
Regulated Recyclables	Dual Stream (Plastic, Glass, and Metal)	3.18	Welsh Sanitation
Misc. Recyclables	Electronics	7.7	IS
Misc. Recyclables	Tires	24.29	(Car & Light Truck + Large Truck/multi-ply)
Misc. Recyclables	Wood Pallets for *REUSE*	3.78	Clean, unbroken (291)
Hazardous Wastes	Fluorescent Lighting	0.43	4', 8', u-tube, CFL
Hazardous Wastes	Automotive Batteries	2.83	118 batteries @ .024 each
Hazardous Wastes	Motor Oil	4.16	1,040 gallons
Organics Recycling	UCLEC Food Waste Recycling Pilot Program	2.25	Dehydrator
C&D Recycling	Recycled Ashpalt	7,821	Used by DPW
Other	Oil Filters	0.9	Recycled, 6 55ga. Drums @ 300lbs ea.

PE5 Action: Organic Waste Program for Government Buildings

1 Points

2 Points

3 Points

A. Why is this action important?

Organic waste, such as food waste, becomes a source of methane production when disposed of in landfills. Methane is a short-lived but powerful greenhouse gas, so when it is important to either compost organic waste or send it to an anaerobic digester. Diverting this portion of the waste stream cuts back on tipping fees for local governments, reduces their contribution to greenhouse gas (GHG) emissions generated from waste, and establishes them as a leader in climate-smart materials management.

B. How to implement this action

Points for this Climate Smart Communities (CSC) action are tiered based the percentage of square footage in buildings owned or operated by the local government where organic waste collection is taking place. As a result, applicants may need to prepare a list of buildings owned or operated by the local government and the square footage of each building to establish a baseline.

Local governments can be implement this action through the following steps:

1. Research options for handling organic waste that best suit local circumstances. Options may include creating a composting operation on government property or contracting with a local company that will pick up and process the waste.
2. Identify locations throughout government buildings where organic waste is being generated; this is often in kitchens and cafeterias.
3. Procure collection bins for placement in these locations.
4. Identify a central location for collecting organic waste on government property. This site would be where government staff or contractors pick up the waste and transfer it to a composting or anaerobic digestion facility.
5. Educate employees about what can be composted and how. Provide instructional signs, including pictures of acceptable and not acceptable items next to collection bins.
6. Train custodial and maintenance staff on proper handling of collection bins, frequency of removal, and composting procedures.
7. If composting food waste onsite, follow the instructions for the appropriate method. Options include a composting mound, bin, can, or tumbler. Use the NYS DEC guide to composting, [Everything You Have Always Wanted to Know About Home Composting, But Were Afraid to Ask](#). Compost soil can be used for government property landscaping or provided to the community.

C. Time frame, project costs, and resource needs

Implementing this action will require research and planning, procurement of collection bins and other materials, and proper education of staff. Educating employees is often an ongoing effort for the first year or so, until it becomes standard practice.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. It will most likely be the responsibility of the facilities department in coordination with the waste or recycling division.

E. How to obtain points for this action

Points for this action are tiered based on the percentage of square footage in local government buildings where organic waste collection is taking place.

POSSIBLE POINTS	
Organic waste collection in 10-24% of government facilities, by square footage	1
Organic waste collection in 25-49% of government facilities, by square footage	2
Organic waste collection in 50-100% of government facilities, by square footage	3

F. What to submit

Provide information on the square footage of buildings where organic waste collection is taking place and baseline information on the total square footage of buildings owned or operated by the local government. Submit photos documenting the current presence of organic waste collection in government facilities

Provide information on ultimate disposal of the organic waste at a composting or anaerobic digestion facility. Educational materials and any communications to employees regarding composting should also be submitted.

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- [DEC Composting and Organics Recycling for Municipalities](#)
- [DEC Office Waste Reduction, Reuse, Recycling, Composting, and Buy Recycled Resource Book](#)
- [DEC Everything You Have Always Wanted to Know About Home Composting, But Were Afraid to Ask](#)
- [StopWaste - Reduce Food Waste](#)

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.