

Food Waste & Diversion In New York State

June 18, 2019



NYSAC[®]
NEW YORK STATE
ASSOCIATION OF COUNTIES

Stephen Acquario

Executive Director



Hon. Mark Poloncarz

Erie County Executive





Department of
Environmental
Conservation

Increasing Food Donation and Food Scrap Recycling in New York State:

Title 22 Food Donation and Food Scraps Recycling

Sally Rowland, Ph.D., P.E.
Division of Materials Management
NYSDEC

New Title 22 of Article 27 of the ECL:
FOOD DONATION AND FOOD SCRAPS RECYCLING



- ✓ Definitions*
- ✓ Designated food scraps generator responsibilities*
- ✓ Transporter requirements*
- ✓ Transfer station or other intermediary responsibilities*

- √ Food scraps disposal prohibition*
- √ Department responsibilities*
- √ Regulations*
- √ Exclusions*
- √ Preemption and severability*

Definitions

Abbreviated and simplified for discussion:

1. Designated food scraps generator – generate 2 tons per week + (annual average) at a single location. For multiple small entities (mall or college campus) – depends on who contracts for waste management.



Examples of Calculators for Food Scraps Generation from Businesses:

P2I: www.rit.edu/affiliate/nysp2i/food-waste-estimator

RecyclingWorks Mass: www.recyclingworksma.com/food-waste-estimation-guide/

CalRecycle: www2.calrecycle.ca.gov/WasteCharacterization/BusinessGroupCalculator



EXAMPLE from RecyclingWorks Mass: RESTAURANTS

	Average Measurement		Material
Meals Served	0.5	lbs/meal	Food waste
Full-Time Employees	1,500	lbs/employee/year	Food waste
Disposed Waste [Full Service]	66	% of disposed waste by weight	Food waste
Disposed Waste [Fast Food]	51	% of disposed waste by weight	Food waste

For 2 tons per week food scraps:

8000 meals served per week

140 full-time employees

4 trash dumpsters filled per week (full service)

5 trash dumpsters filled per week (fast food)



EXAMPLE from RecyclingWorks Mass: HOSPITALS

	Average Measurement		Material
Meals Served	0.6	lbs/meal	Food waste
Food Served	30	% of food served by weight	Food waste
Beds ¹	3.42	lbs/bed/day	Food waste

For 2 tons per week:

6700 meals served per week

13,300 lbs of food served per week

168 beds



EXAMPLE from RecyclingWorks Mass: NURSING HOMES

	Average Measurement		Material
Meals Served	0.6	lbs/meal	Food waste
Food Served	20	% of food served by weight	Food waste
Beds ¹	1.8	lbs/bed/day	Food waste

For 2 tons per week:

6700 meals served per week
 20,000 lbs of food served per week
 318 beds



2. Food scraps – inedible food and food – contaminated papers, and edible food that is not donated. Excludes residential sources and recalled or seized food.



3. Organics recycler – rendering, animal feed producers, composting, digestion, fermentation, etc. Resultant material must be beneficially used.

4. Single location – contiguous property under common ownership.

Designated food scraps generator responsibilities

EFFECTIVE DATE: JANUARY 1, 2022

1. **ALL** generators must separate excess food for donation.
2. For generators within 25 miles of a viable recycler:
 - > separate remaining excess food and food scraps that can be recycled
 - > store properly on-site and train workers
 - > obtain an appropriate transporter, self-haul, or recycle on-site



DOES NOT APPLY: to generators serviced by a mixed waste recycler (Delaware Co, etc.)



Designated food scraps generator responsibilities



3. Annual reporting to DEC required – amount donated and recycled, transporter and recycler used

4. Temporary Waivers Available
 - > Prove undue hardship
 - > No longer than 1 year in duration, can be renewed

Transporter requirements

Any food scraps transporter must:

- > deliver the food scraps to a recycler or intermediary that will send to recycler
- > not deliver to combustion facility or landfill



Transfer station or other intermediary responsibilities

Must:

- Ensure food scraps are taken to an organics recycler



Food scraps disposal prohibition

Solid waste combustion facilities and landfills CAN NOT accept source-separated excess food and food scraps from designated generators.



Department responsibilities

1. Publish on the DEC website: the methodology the DEC will use to determine designated food scraps generators; the waiver process; procedures to minimize odors and vectors; lists of all generators, recyclers, and transporters.
2. By June 1, 2021 and annually after: assess the capacity of organics recyclers and notify designated generators if they must comply with the recycling mandate.
3. Development and distribution of education material for generators. Development and distribution of food scraps minimization to municipalities for their use.
4. Promulgate rules and regulations to implement.



Exclusions

Does not apply to:

1. Designated food scraps generators located in a city of 1 million + provided a local law is in place.
2. Hospitals, nursing homes, adult care facilities, elementary and secondary schools.





Department of Environmental Conservation

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**Department of
Environmental
Conservation**

NYSP21's Food Waste Resources for NYS and its Municipalities

Missy Hall

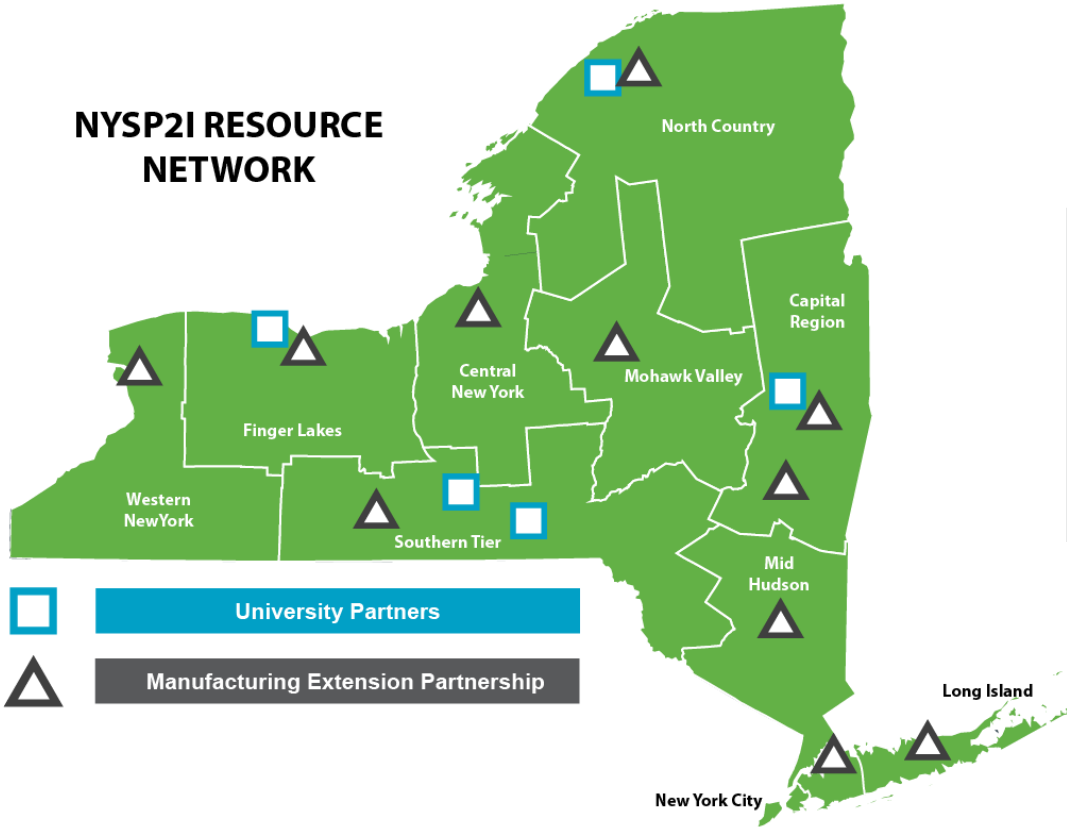
June 18, 2019



NYS Pollution Prevention Institute

- HQ at RIT
- Established in 2008
- \$3.9M in annual NYS funding administered through the NYS Department of Environmental Conservation
- Focus areas include:
 - Sustainable Manufacturing Assessments
 - Supply Chain Sustainability
 - Technology Commercialization
 - Food Waste Diversion
 - Outreach & Education
 - Research & Development
 - Emerging Contaminants

NYSP21 RESOURCE NETWORK



Department of Environmental Conservation



NEW YORK
Manufacturing Extension Partnership

Assistance for NYS Companies, Municipalities & Non-Profits

- **Must be NY-based**
- **Typical project cost range is \$15-\$50k**
- **NYSP2I funding offsets most of the project cost to the organization**
 - Expenses are non-capital expenses
 - RIT's engineering, technical and project management services
- **Post-project reporting**
- **Typical project takes about 2-6 months**



Available Resources

NYSP2I

RIT

NYSDEC

Technical Assistance

Online Resources

Community Grants Program

\$4 million in capital funding

Climate Smart Communities

Funding for donation and recycling costs

Resources are available for communities and businesses that municipalities oversee, as well as **municipalities** themselves

Available Resources

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Technical Assistance

Criteria: Business/organization is food-related and is seeking to improve food waste management practices

Typical projects involve one or more of the following:

- Quantify food waste
- Identify opportunities for waste prevention and diversion
- Assist in overcoming challenges associated with food waste management
- Training & education

Background

A municipality sought to reduce the amount of food waste going to landfill in their community by composting the waste from local businesses at their wastewater treatment plant.

Work Performed

Created an implementation plan for incorporating food waste into their sludge composting operation at their WWTP and assisted the municipality with a food waste composting trial

Results

The municipality has begun diverting approximately 2,000 lb. of food waste from landfill each month from three local businesses

Online Resources

(for businesses and institutions)



Purpose

Provide industry with actionable guides and tools for implementing and sustaining food recovery and diversion programs

Examples

- **Organic Resource Locator** – Interactive web-mapping tool that maps producers, processors, and users of food waste in NYS
- **Food waste calculator** – Estimator tool for calculating your waste using industry data
- **Food waste management step-by-step guide** – Guidance for reducing and diverting food waste

nysp2i.rit.edu/food

Online Resources

(for municipalities)



Purpose

Provide municipal governments and non-profits with tools and guides that assist with educating residents and starting food waste management programs.

Examples

- **Municipal Planning Guide** – Planning guide that walks through the most important steps when establishing a Food Waste Management Plan
- **Tips for Reducing Wasted Food at Home** – Customizable one-page cheat sheet for easy ways to prevent food waste at home

nysp2i.rit.edu/food

Food Waste Management Planning Guide

Step 1: Organizing
your Food Waste
Management Plan

*Organizing leadership
and gaining community
support*

Step 2: Defining
your Plan and
Establishing
Objectives

*Creating a strategy and
designing a pilot*

Step 3:
Implementing the
Plan

*Executing the Pilot and
Scaling Up*

Community Grants Program

Community organizations, academic institutions and municipalities that seek to improve health, the environment and the economy through pollution prevention are funded by NYSP2I.

- Over **100** community projects funded
- Over **\$1.5M** of funding provided to NYS communities
- [2019 Awardees](#)



Community Project Examples

Tompkins County Solid Waste Management

- To reduce and divert residential food waste from landfills by implementing a community-based social market and media campaign.

Hudson Valley Regional Council

- To educate and generate awareness of food waste through a large public event held in 2017 on the Walkway over the Hudson.

Radix Ecological Sustainability Center

- To reduce and divert food waste from landfills by expanding compost collection and the education system in the Albany, NY area.

Food Waste Reduction & Diversion Reimbursement Program



- Empire State Development selected RIT in 2018 to administer a grant program aimed at reducing food waste in landfills
- \$4M available over a 2-year period or until funding runs out
- Reimbursement up to 44% of eligible equipment expenses
- Eligible projects must divert food waste from landfills or incinerators



Eligible Applicants

- **Registered NYS for-profit or not for profit businesses or municipality**
 - Examples – Retail & Grocery Stores, Restaurants, Food Processors, Hotels, Schools/Universities, Sports Venues, Towns & Villages
 - **Generate 1 ton or more of food waste per week on average**
-

Next Steps

Contact:
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Program Coordinator

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585-475-5385
585-626-5758

<https://www.rit.edu/affiliate/nysp2i/food-reimbursement>

Resource Listing

- **NYSP2I Website:** <http://bit.ly/NYSP2IFood>
- **Organic Resource Locator:** <http://bit.ly/NYSP2IORLTool>
- **Food Waste Estimator:** <http://bit.ly/NYSP2IFoodWasteEstimator>
- **Food Waste Management Step-by-Step Guide:** <http://bit.ly/NYSP2IFoodSteps>
- **Municipal Planning Guide:** <http://bit.ly/NYSP2IMunicipalPlan>
- **Tips for Reducing Wasted Food at Home:** <http://bit.ly/NYSP2IFoodTips>
- **RIT Food Waste Grant Reimbursement Program:** <https://nysp2i.rit.edu/food-reimbursement>

Thank You

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RIT



Cornell CALS
College of Agriculture and Life Sciences



Rensselaer

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Food Waste Reduction, Reuse and Composting in Ulster County, NY

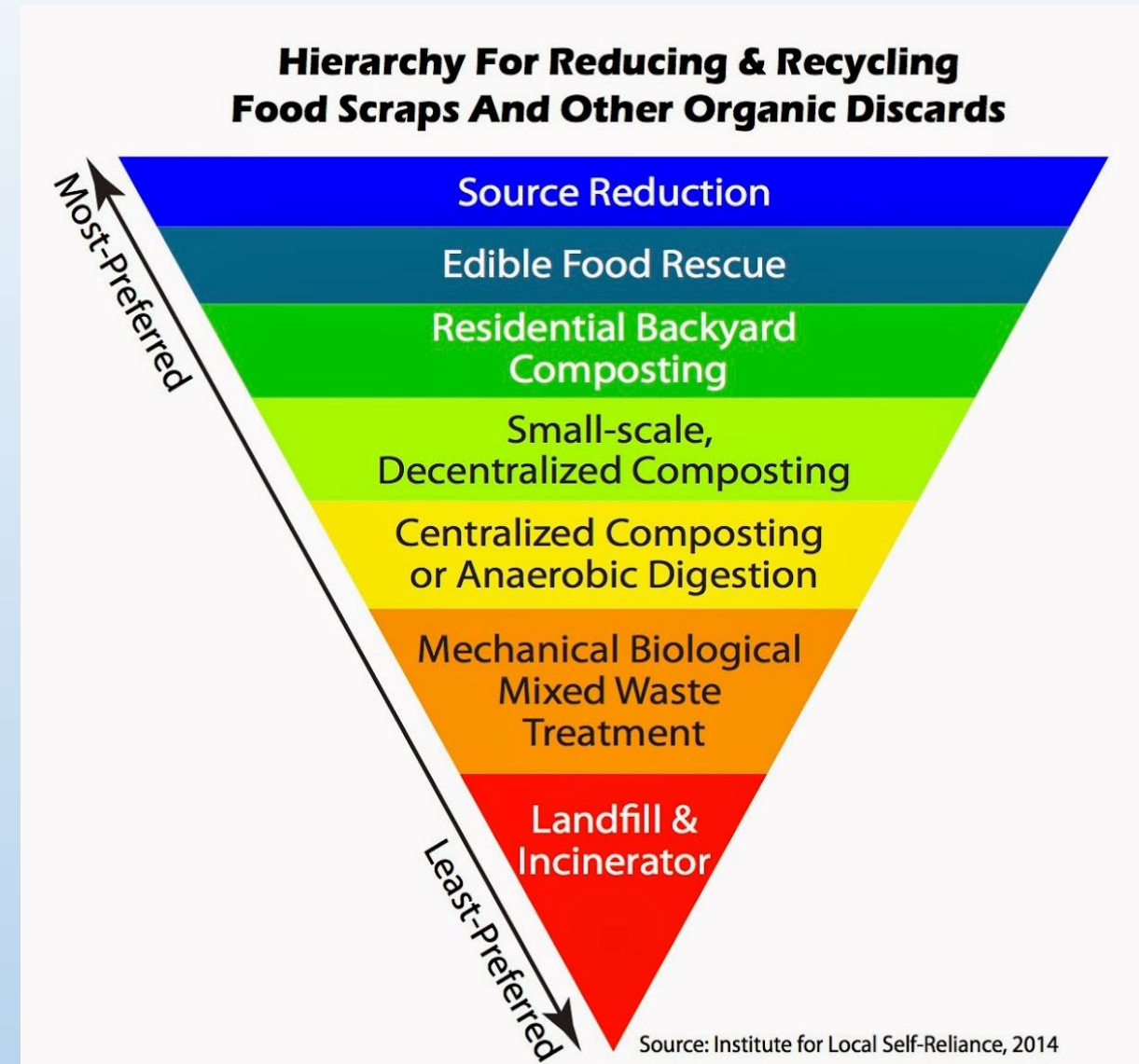
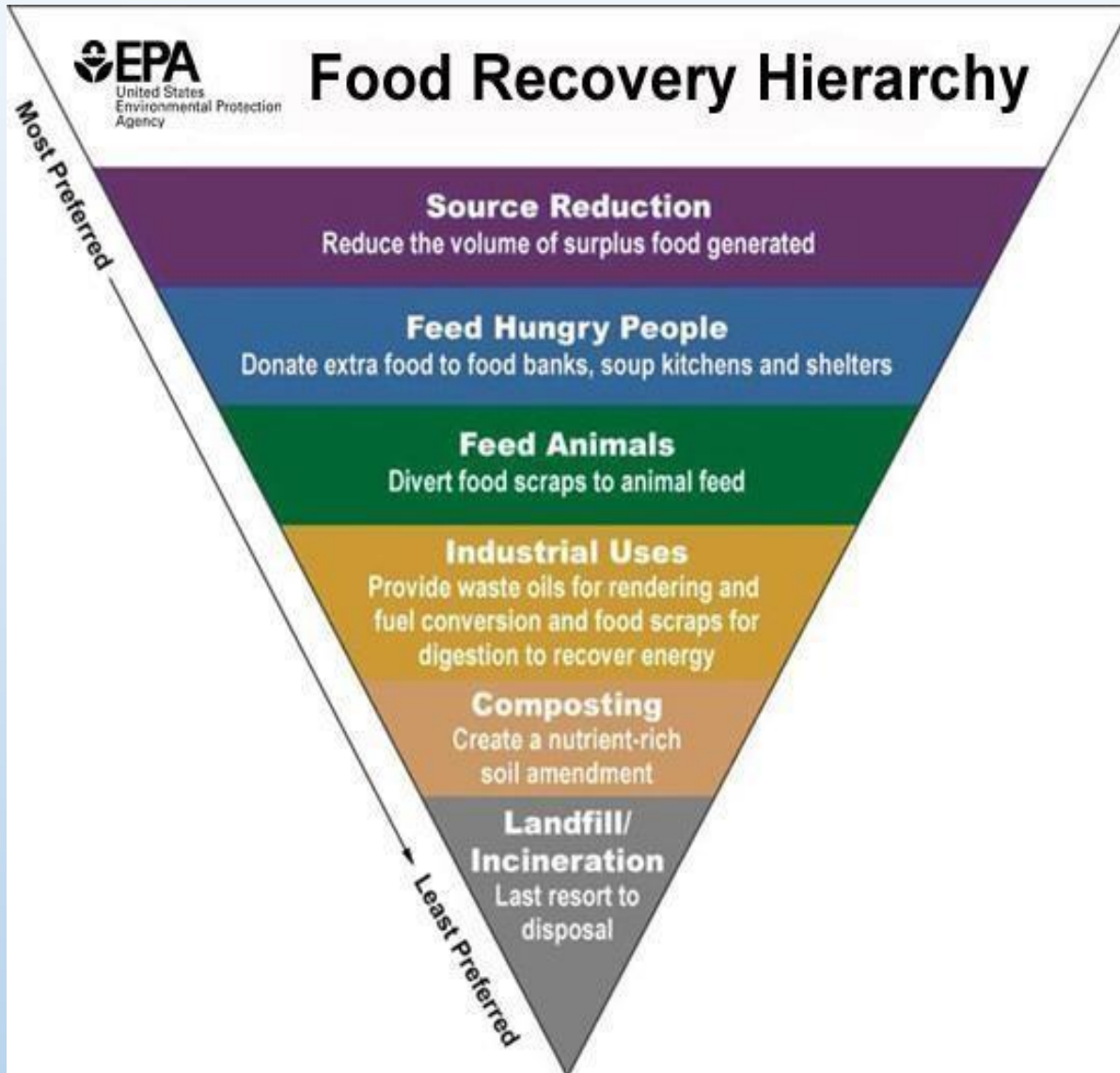


Manna Jo Greene, Ulster County Legislator, District 19

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Food Recovery Hierarchies



Food Waste Reduction & Reuse

- SUNY/New Paltz: **Chose to Reuse Green Box** and Food Waste Reduction and Composting Education Programs
- Food rescue programs for reuse by people and animals:



Food Reuse: Feeding Hungry People

Farm to Food Pantry Program

- Since inception in 2009, the RVGA Farm to Food Pantry program joined by Family of Woodstock and UlsterCorps volunteers has collected and distributed over 290,000 pounds of locally grown produce to those in need in our community.



FeedHV



- **Schedule a pick-up** through the ChowMatch app.
- **Provide information about the type of food** being donated and the logistics.
- **Get automatically matched with a recipient organization** through ChowMatch. When a match is confirmed, you will be notified by email.

Federal Laws Protect and Incentivize Businesses to Donate Food

Bill Emerson Good Samaritan Food Donation Act:

- provides liability protection to food donors. Under this Act, as long as the donor has not acted with negligence or intentional misconduct, the company is not liable for damage incurred as the result of illness.

Tax Deductions: Internal Revenue Code 170 (e)(3):

- provides enhanced tax deductions to businesses to encourage donations of fit and wholesome food to qualified nonprofit organizations serving the poor and needy.

Types of Composting

Organic, biodegradable waste is a significant part of the municipal solid waste (MSW) stream.

These materials include:

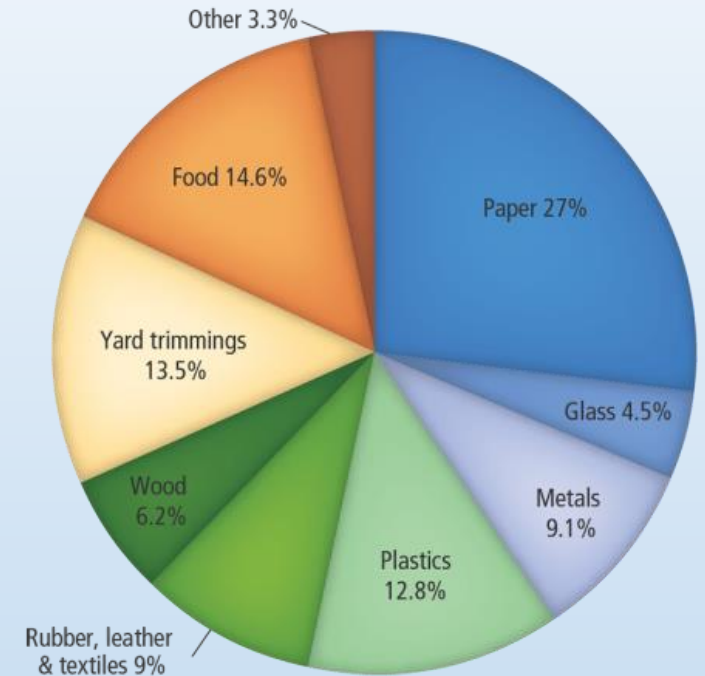
- Yard waste: leaves, grass, weeds, brush
- Food waste, including vegetable, fruit, fish, meat and bones.
- Animal Waste: manure, animal bedding
- Animal Carcasses: road kill
- Clean scrap dimensional lumber and gypsum board
- Paper
- Fur, leather, cotton, wool and linen fabric
- Oils and fats
- Sewage sludge

Backyard: By residents in a simple heap or in various containers

Commercial and Institutional Food Scrap Composting

- SUNY/New Paltz – via hauler to Greenway Environmental Services
- Mohonk Mountain House – on-site since 1992
- Frost Valley YMCA – on-site since 1990; compost used in greenhouses and gardens to grow food

Anaerobic Digestion: Hannaford Supermarkets in CT, MA, VT



Methods of Composting: Composting can be managed passively or actively, depending on the desired completion time and quality of product.

- **Passive Composting:** A simple compost heap or static pile works well if an appropriate ratio of carbon to nitrogen is provided as the pile is created. Layering food and yard waste is ideal. Passive piles may take longer to break down and may not reach temperatures needed to kill weed seeds and pathogenic organisms.
- **Active Composting:** Hot, aerobic composting is conducted at close to the ideal conditions of moisture, temperature and oxygen, allowing thermophilic bacteria to thrive. These aerobic bacteria break down material faster, producing less odor, fewer pathogens, and *less greenhouse gas* than cool, uncontrolled, or accidental anaerobic methods. Air is added by turning the compost or forcing air into the pile or vessel. Size ranges from backyard piles and bins to multiple-acre facilities.
- **Static Pile/Windrow:** A simple heap, which can be left in place or turned occasionally. Includes Ag Bags.
- **Aerated Windrow/Aerated Static Pile:** Aeration is provided by regular turning and/or forced air.
- **In Vessel:** Refers to composting that occurs inside a building, container or other vessel, and usually includes mechanically-assisted aeration and turning.
 - **Tunnel** – Tunnel composting systems are essentially aerated containers that have forced aeration through a floor plenum, internal air circulation and usually a biofilter. They are loaded from one end and operate in batch mode after the tunnel is fully loaded.
 - **In-Vessel Bays with Mechanical Agitation:** Agitated beds compost materials in “beds” contained by long channels with concrete walls. A turning machine, travelling on top of the beds, agitates and moves the materials forward. Forced aeration is provided through the floor of the channel; the top is open
 - **Rotating Drum:** Utilized as the first stage of composting for blending and size reduction, in tandem with other composting methods. Over a short retention time, composting is initiated, providing some degradation of feedstocks, including food waste or MSW mixed with sewage sludge (Delaware County).

Anaerobic Digestion: Under controlled anaerobic conditions, biodegradable materials can be digested in the absence of oxygen to create and capture methane gas for use as a fuel to generate electricity. Anaerobic conditions in landfills release methane, which can be captured, but rarely is.

UCRRA ORGANICS RECOVERY FACILITY: GROW ULSTER GREEN



Importance of Education to prevent contamination and encourage participation.



A poster titled "Ulster County Commercial Composting Guide". It lists acceptable items for composting: Food scraps and leftovers (meat, fish, dairy, fruit, vegetables, shells, bones, pasta, rice, eggshells, nutshells, bread, grains); Food-soiled paper (coffee grounds and filters, tea bags, waxed cardboard, folded paper bags, kitchen paper towels, paper napkins, paper egg cartons, uncoated paper plates - absolutely no plastic); Plants, flowers and approved compostable packaging (plants and flowers, landscape vegetation, holiday trees, untreated wood scraps); and BPI Certified compostable products with ASTM D6400 standard. It also lists items not accepted: glass, metals, coated paper or plastics (laminates, wrappers, bags, plastic trim, etc.), and a section for Garbage (plastic, metal, glass, etc.) and Recycling (paper, cardboard, plastic, etc.). The poster includes contact information for the Ulster County Resource Recovery Agency and the Ulster County Commercial Composting Guide is proudly funded by the NY State Department of Environmental Conservation.

- ✓ **Food scraps**
Meat, fish, fruit, vegetables, shells, bones, pasta, rice, bread, grains
- ✓ **Food-soiled paper**
Coffee filters, tea bags, clean paper napkins, paper egg cartons, etc.
- ✓ **Approved compostable packaging**
BPI Certified compostable products with ASTM D6400 standard
- ✓ **Brush, logs, branches, clean wood**

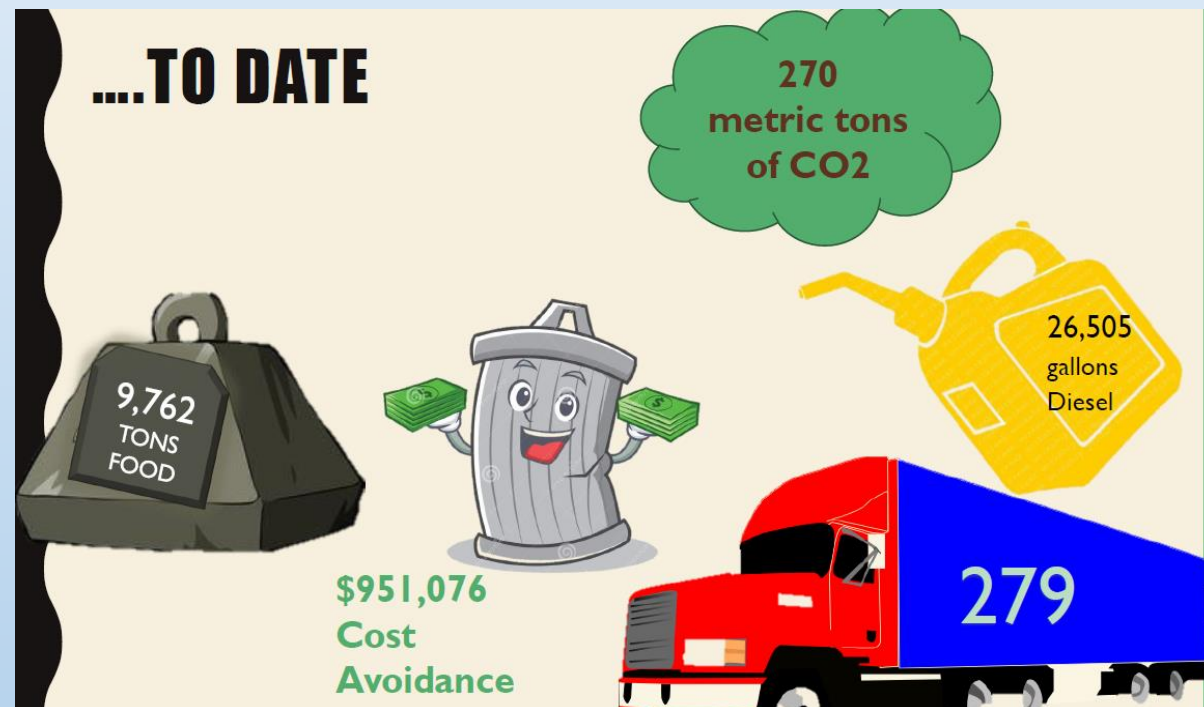
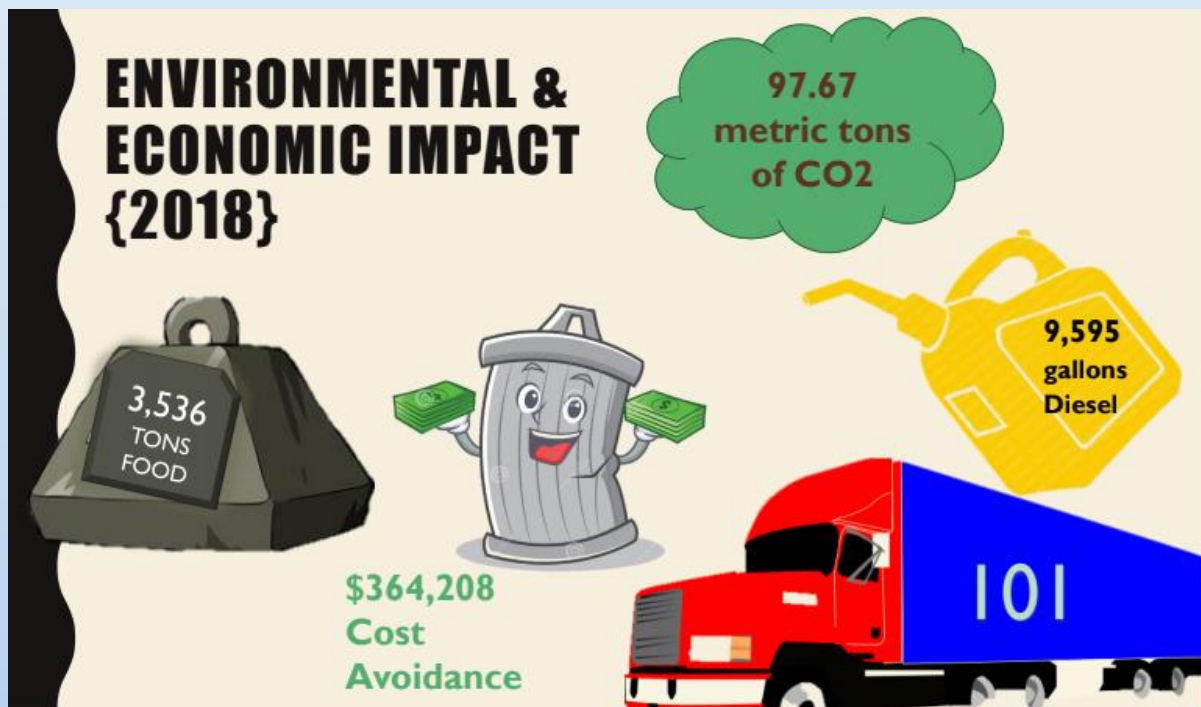




Interesting feedstock!



Results



Developing Ulster County's Law Mandating Food Scrap Composting By Large Generators

Multiple Stakeholders involved in the development of Ulster County's legislation

- Large Food Waste Generators
- Waste Haulers
- Food Waste Processors/Composting Facilities:
 - UCRRA - https://drive.google.com/file/d/1ok_2vKWtSF9PrSVM50di0U1cepHMXU2/view
 - Greenway Environmental Services
 - Community Compost Company
 - New Paltz Reuse, Recycling and Composting Center
- County Departments and Contractors:
 - Ulster County Department of the Environment – helped write grant proposals to secure funding
 - Ulster County Health Department – may have a role in receiving annual reports and enforcement -- TBD
- NYS Department of Environmental Conservation

Ad hoc working group held multiple Stakeholder Meetings to gather input – shared case studies where food waste diversion was working well.

Do we have adequate processing capacity handle food scraps generated under the proposed law?
Used P21 research to identify large generators: ~ 50 facilities generate > 1.0 tpw = total of 153 tpw;
~ 150 facilities generate > 0.5 tpw = another 46 tpw.

Ulster County Green Business Challenge: Food reuse or composting qualifies as a Climate Solution
<https://ulstercountyny.gov/environment/green-business-challenge>

Haulers

- Community Compost :
info@communitycompostco.com
- CRP Sanitation (Westchester):
OFFICE@crpsanitation.com
914-592-4129
- Food Scraps 360- FoodScraps360@gmail.com
- Marangi Disposal - info@marangidisposal.com
- Natural Upcycling: info@naturalupcycling.com
585- 584-3124
- Organix Recycling:
jtrelo@organixrecycling.com
(708) 326-3900 3 yard container
- Royal Carting- nunziatov@royalcarting.com
info@royalcarting.com
- Suburban Carting Company
(Putnam/Westchester):
<https://www.suburbancarting.com/composting-services/>
- Waste Management- WCurran@wm.com /
ddeangel@wm.com



COMMUNITY COMPOST COMPANY 1,018,500 lbs composted! **HUDSON SOIL CO.**

ABOUT ▾ SERVICES MEMBER SIGN IN **SIGN UP**

Food scrap recycling services & compost sales

- Hudson Valley
- Northern New Jersey

- ✓ Clean bucket every pick up
- ✓ Text and email reminders
- ✓ Request a service skip anytime
- ✓ Get soil back twice a year
- ✓ Take action against climate change



Comparison of Ulster County's Law Mandating Food Scrap Diversion By Large Generators to NY State Law

	<u>NY State</u>	<u>Ulster County</u>
Amount Generated	2.0 or more tons per week from 2022 on	2.0 or more tpw in 2020 1.0 – 1.9 tpw in 2021 0.75 – 0.9 tpw in 2022 0.50 – 0.7 tpw in 2023
Distance from Composting Facility or Digester	25 miles	Includes all of Ulster County -- regardless of distance
Exemptions	Exempts Schools and Health Care Facilities	Includes Schools and Health Care Facilities (they are not exempt)
Pre- vs. Post-Consumer	Doesn't distinguish	Business or institution can request a waiver for post-consumer food scraps, if they generate < 2.0 tpw
Education & Enforcement	NYS DEC and Ag & Markets	~ TBD ~

Contact Information



- Manna Jo Greene, Ulster County Legislator 845-687-9253 mannajo@aol.com
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recycling@townofnewpaltz.org
- Tim Rose, UCRRA Executive Director 845-336-0600 tros@ucrra.org www.ucrra.org
- Angelina Peone, UCRRA Recycling Coordinator 845-336-0600 apeo@ucrra.org
- Melinda France, UCRRA Recycling Educator 845-336-0600 mfra@ucrra.org
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- Margot Becker, UC Environmental Management Council 917-715-2697 margotrbecker@hotmail.com
- Shabazz Jackson & Josephine Papagni, Greenway Environmental Services 845-656-6071
greenway777@aol.com www.greenwayny.com/home.html
- Eileen Banyra, Community Compost Company 845-787-3478 info@communitycompostco.com
www.communitycompostco.com/

Thank you!

Oneida-Herkimer's Food²Energy Program



FOOD DIVERSION LEGISLATION

JUNE 18, 2019



William A. Rabbia, Executive Director
Oneida-Herkimer Solid Waste Authority
1600 Genesee St., Utica, NY 13502
Ph. (315)733-1224 E-mail: billr@ohswa.org
Authority website: www.ohswa.org

Food2Energy

- ▶ Authority Overview
- ▶ OCSD Opportunity/Co-Digestion
- ▶ How it Works: SSO to Digestion
- ▶ Timeline



OHSWA

FORMED: 1988

SERVES:
300,000 RESIDENTS

77 CITIES, TOWNS,
MUNICIPALITIES

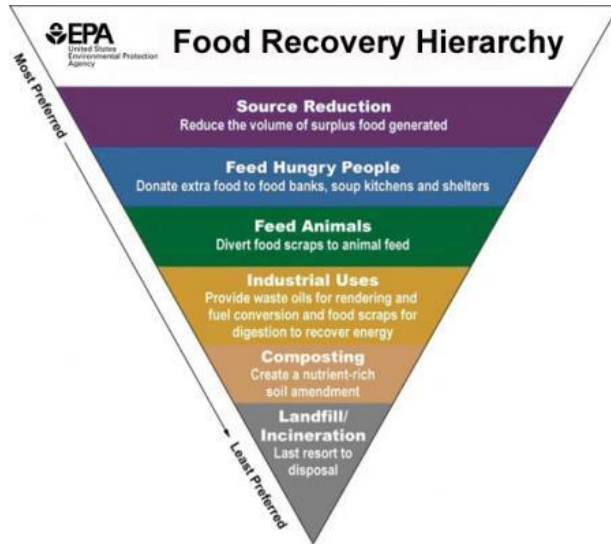


Preserving the environment through integrated recovery & disposal

Why Target Food Waste?

- ~ **23%** OF MSW IS FOOD WASTE
- SAVES LANDFILL **SPACE** (+1–7 YEARS)
- MORE **EFFICIENTLY** CAPTURE METHANE & CARBON DIOXIDE
- UNIQUE **OPPORTUNITY** (WWTP INSTALLING DIGESTERS NEXT DOOR)
- UPCOMING (2020) NYS FOOD WASTE **MANDATE** FOR LARGE GENERATORS (≥ 2 TONS/WEEK) VT, CT, MA, RI & NYC

NYS FOOD WASTE HIERARCHY



REDUCE WASTE

FEED PEOPLE

FEED ANIMALS

DIGESTION

COMPOSTING

LANDFILLING

OPPORTUNITY

WWTP Upgrades

2 New Anaerobic Digesters

- 1.2 million gallons each
- Co-digestion of SSO with biosolids increases biogas production and efficiency than if biosolids alone (totaling 55-70% methane)
- More efficient recovery than Regional Landfill GTE (49% methane and some escapes)



ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

51 Leland Ave, PO Box 442, Utica, NY 13503-0442

Anthony J. Piorie, Jr.
County Executive

Steven P. Devan, P. E.
Commissioner



Solids handling upgrades

Project

Solids Handling Upgrades

Date

Ongoing

Challenge

The Oneida County Water Pollution Control Plant (WPCP) receives flow from the City of Utica combined sewer system, as well as sanitary flow from several towns and villages within the County but outside the City of Utica. The City has prepared a long term control plan (LTCP) to mitigate their CSOs, and the County has entered into an order of consent with the New York State Department of Environmental Conservation to abate an SSO at their largest pump station. Due to CSO and SSO mitigation efforts, the WPCP is required to increase its peak flow capacity from 55 mgd to 111 mgd. Additionally, much of the solids handling facilities at the WPCP have reached the end of their useful service life and require replacement. The County is proceeding with solids handling upgrades at the WPCP to accommodate the new flows and loads, as well as replace aged equipment.

The WPCP utilizes two fluidized bed incinerators, each rated for approximately 1,800 dry pounds per day for ultimate sludge disposal. A critical component of the project was reviewing the existing incinerators for compliance with the recently issued

EPA Maximum Achievable Control Technology (MACT) standards, which are effective in March 2016.

Description

The existing solids handling facilities at the WPCP included circular gravity thickeners for co-thickening of primary and waste activated sludge, belt filter presses, and fluidized bed incinerators. Early in the project, stack testing of the existing incinerators was performed, and results indicated the incinerators would need improved particulate removal and mercury removal for compliance with the MACT standards. A net present worth of incinerator improvements for MACT compliance vs. a new anaerobic digestion process was performed and anaerobic digestion with combined heat and power generation was selected as the more cost-effective alternative. The County was interested in a sustainable approach, which would include accepting whey wastes from local yogurt processors and fat, oils, and grease from restaurants and the local food industry. However, construction of new digesters would not have been feasible prior to the March 2016 MACT deadline. The project proceeded with the new anaerobic digestion approach, but modifications to the existing incinerators were included to ensure compliance with new MACT standards beyond the construction of the new digesters.

The final design includes:

- Refurbishment of existing gravity thickeners, for primary sludge thickening only

SSO GENERATORS

- ▶ Targeting **large generators** of food waste (Hospitals – Rome, MVHS), Colleges (MVCC, HCCC, SUNY Poly, Hamilton College), large business offices (MetLife), Food Industry (Dino's, Hemstrought's, Your Bargain Grocer, HP Hood), Grocery Chains, and large restaurants.
- ▶ About 50% of O&H food waste is already diverted!
- ▶ Authority Facility was sized to handle **5,000 – 21,000** tons of food waste annually (our 2016 study projected a maximum of 23,000 tons of recoverable food waste in O-H)
- ▶ Residents will have the option to drop off bagged SSO to Utica EcoDrop for digestate.

EcoDrop



PROPOSED: 3 BIN SYSTEM

FOOD SCRAPS TO ENERGY

Now you can turn your food scraps into energy and keep them out of the Landfill!

Accepted Material

<ul style="list-style-type: none"> ✓ All Meat & Fish (including Bones) ✓ All Eggs ✓ All Fruits & Vegetables ✓ Canned Soups ✓ Bakery Waste ✓ Drinking Ice Creams (Ice Frost) ✓ Restaurant Food Scraps ✓ Cakes/Pies (Crusts & Pans Inclusive) ✓ Dairy Products ✓ Suet/Lard 	<ul style="list-style-type: none"> ✓ Liquids (Including Milk, Tuna & Juice) ✓ Perishable Food Items ✓ Food Processor Residue ✓ Coffee Filters ✓ Greasy Pizza Boxes & Paper Bags ✓ Paper/Cloth Napkins ✓ Paper Ice Cream Containers ✓ Drinking Paper/Cups ✓ Paper Napkins, Towels & Paper Handkerchiefs ✓ Paper Sandwich Bags & Containers
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For more information on Food2Energy, RecycleOne, Waste Disposal and Special Programs, visit www.ausa.org or call 818.733.1234



RECYCLEONE

All recyclable items - paper, plastic, metal, and glass - mix together in one bin for collection.

Accepted Material

<p>PAPER</p> <ul style="list-style-type: none"> ✓ Beverage Containers ✓ Newspapers ✓ Magazines ✓ Light Cardboard ✓ Paper Bags 	<p>PLASTIC</p> <ul style="list-style-type: none"> ✓ Plastic Bottle Caps & Containers ✓ Milk & Water Jugs ✓ Light Cardboard Cheese Containers 	<p>METAL</p> <ul style="list-style-type: none"> ✓ Small Cans ✓ Food Cans ✓ Aluminum Cans ✓ Metal Lids 	<p>GLASS</p> <ul style="list-style-type: none"> ✓ Glass Jars & Beer Containers ✓ Deposit Bottles ✓ Food & Beverage Containers
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For more information on Food2Energy, RecycleOne, Waste Disposal and Special Programs, visit www.ausa.org or call 818.733.1234



TO THE LANDFILL

All garbage should be placed here for disposal.

Accepted Material

<ul style="list-style-type: none"> ✓ Plastic Bags ✓ Plastic Food Packaging ✓ Food & Candy Wrappers ✓ Plastic Knives, Forks & Spoons 	<ul style="list-style-type: none"> ✓ Plastic Stems ✓ Styrofoam Containers ✓ Alcohol Bottles
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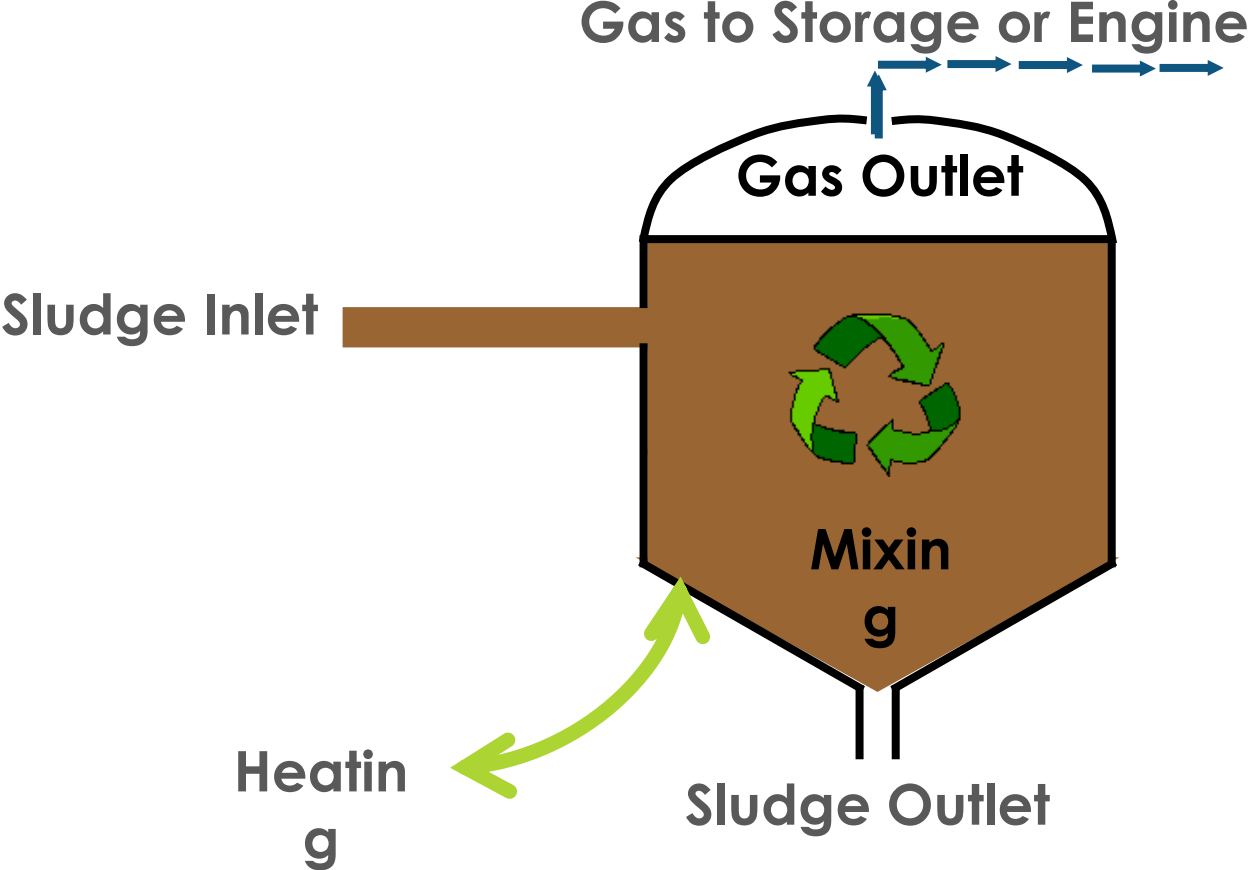
Organics Processing Facility

- ▶ Trucks will weigh in and out (charged \$40/ton)
- ▶ Authority can accept organics in clear bags, original packaging, or loose
- ▶ All material will go through the THOR Turbo de-packager, add effluent water as needed
- ▶ Trucked in tanker to WWTP





Simplified Digester



PROJECT TIMELINE

- ▶ 2016 – Feasibility Study (\$3.4 Million Dollar Project)
- ▶ 2017 – Grants/Permits Awarded (Climate Smart Communities Grant = \$1, 327,500; NYSDEC MWR&R Grant = \$276,407)
- ▶ 2018 - Construction Begins, Equipment Ordered
- ▶ 2018/2019 – Generator Outreach
- ▶ 2019 – Finish Construction, Open 2nd Quarter 2019
- ▶ Began Accepting SSO, May 6th

QUESTIONS?

Contact Information:

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Authority website: www.ohswa.org**



Thank You!



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