




**CELEBRATING
50 YEARS
1971-2021**

Waste Not - The Circular Economy
Reuse, Recycle, Reduce and Recover

*New York State Association of Conservation Commissions
Conference on the Environment
October 23, 2021*




**Today's
Presenters**



Jennifer Porter
GBB Vice President

*SWANA / CRRRA Certified Practitioner
in Zero Waste Principles and Practices*

I am passionate about working with communities now to advance a sustainable future for waste prevention, reuse and recycling. We have an urgent need to implement regenerative, circular solutions for ourselves and future generations.



Theresa Evans
GBB Senior Consultant

*Former Recycling Specialist II
OCRRA, Syracuse, NY*

I am driven to engage clients in sustainable materials management, to the benefit of local economies and the environment. Through collaboration and creativity, I look forward to accelerating waste reduction and recycling goals.

Today's Agenda

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Reuse, Recycle, Reduce and Recover

Introduction  5 minutes

Sustainable Materials Management  5 minutes

Engaging in SMM: Case Studies

- Tusten HORSE
- OCRRA School Composting & Glass Recycling

Questions & Answers  20 minutes


 20 minutes

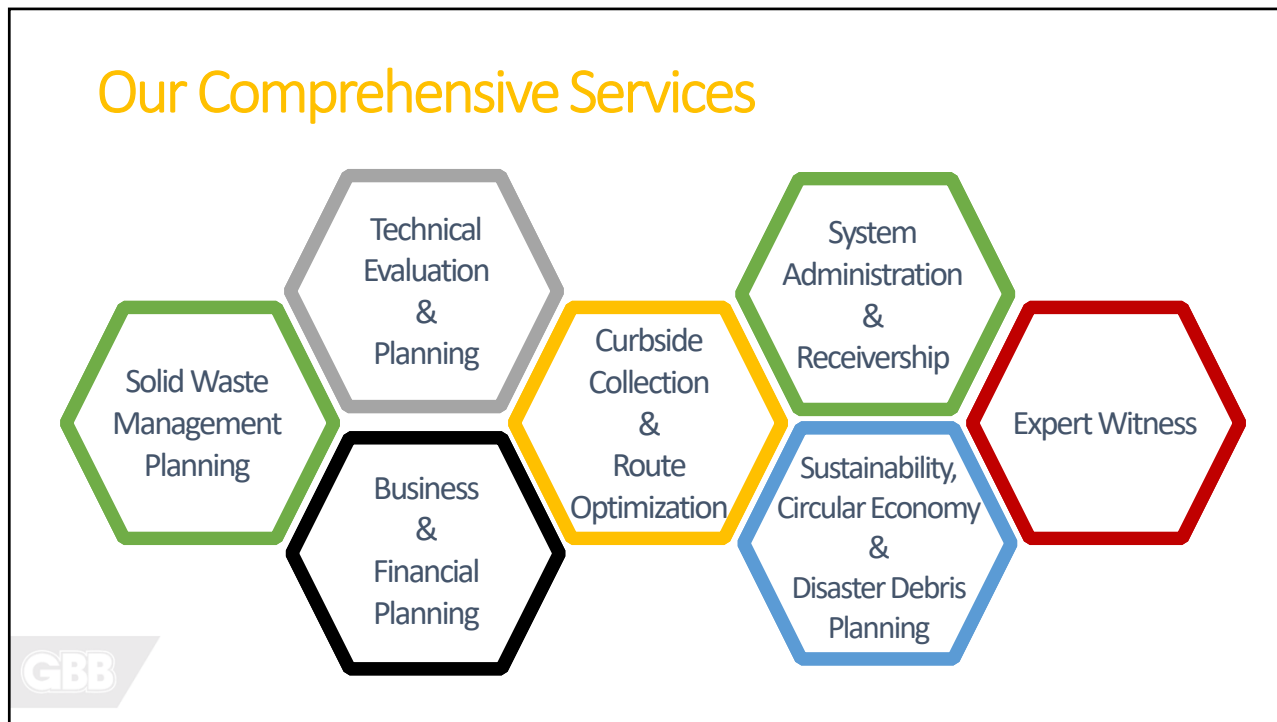
Our Story

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GBB is an international solid waste management consulting firm that helps public- and private-sector organizations craft practical, customized and technically sound solutions for complex solid waste management challenges.

Since 1980, GBB has been a trusted resource at the forefront of the industry, creating success stories that integrate smart planning with effective management of solid waste services. Our staff enables our clients to do more with less.





Sustainability & Organics Management

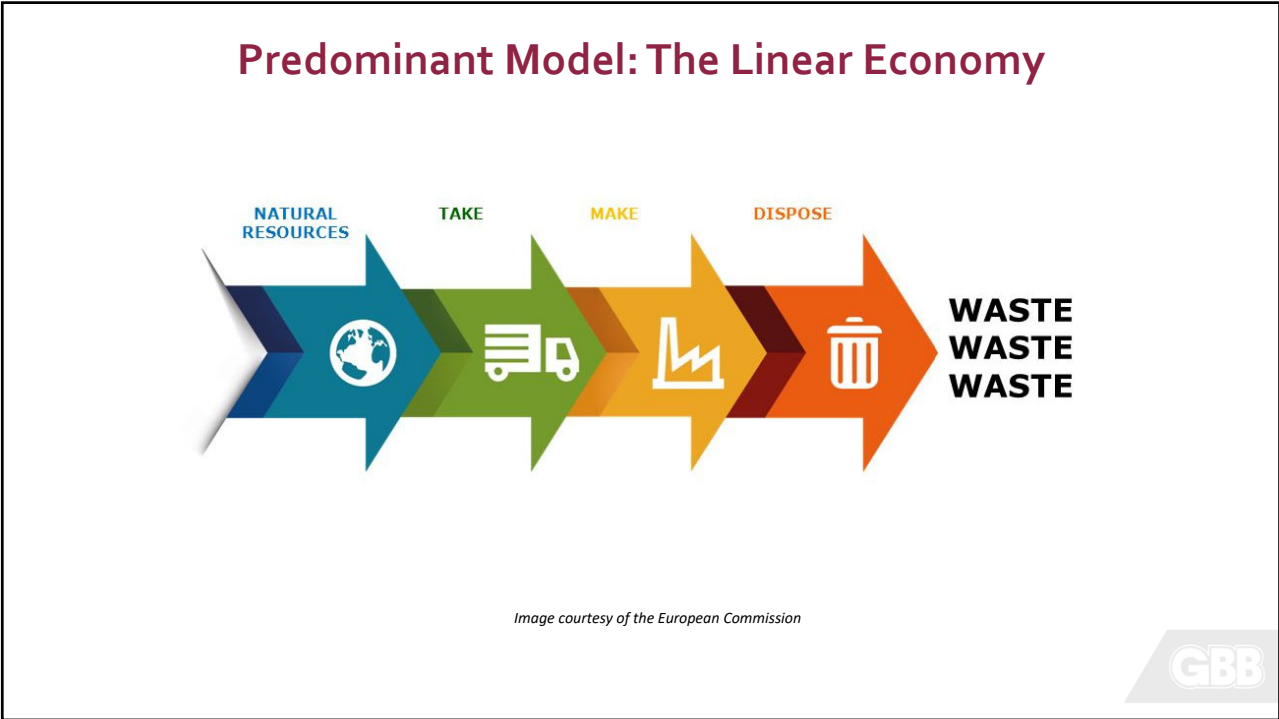
- Sustainable Materials Management Planning
- Sustainable Project/Business Development
- Circular Economy Development
- Zero Waste Certification Assistance
- Zero Waste Planning & Strategy
- Eco-Industrial Park Planning & Implementation
- High-Level Lifecycle Impact Analyses
- Disaster Debris Management Planning

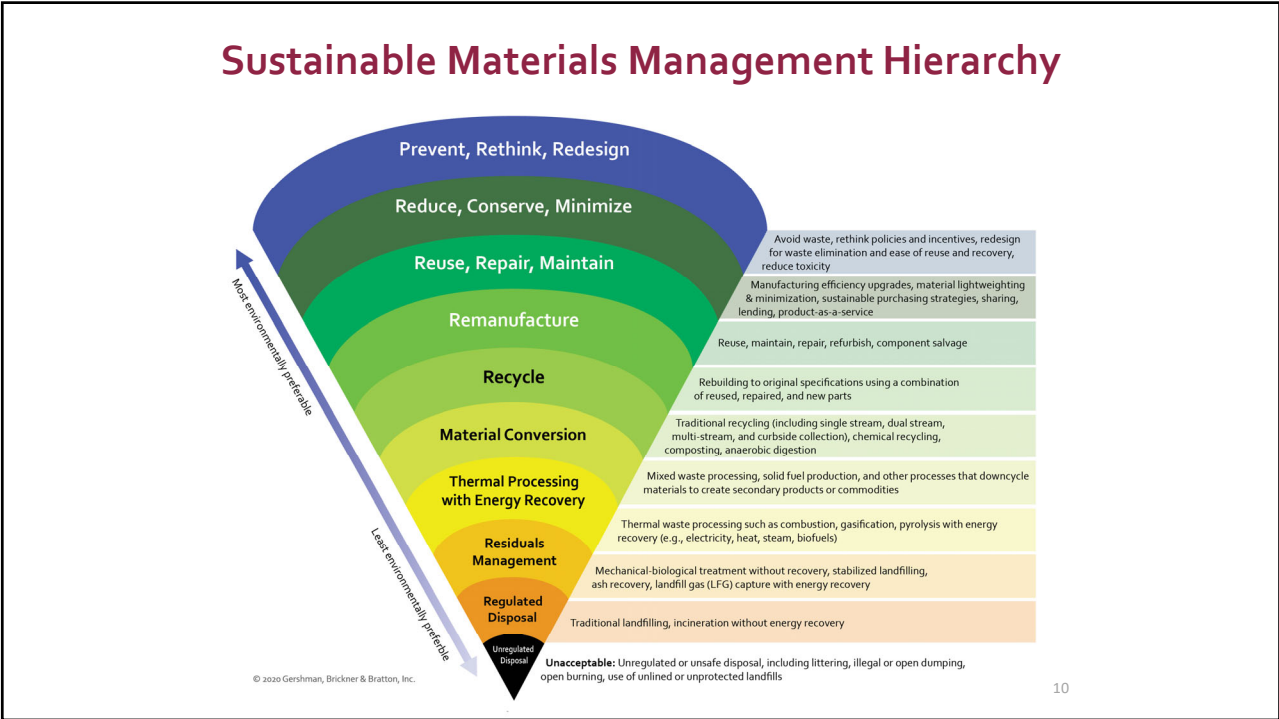
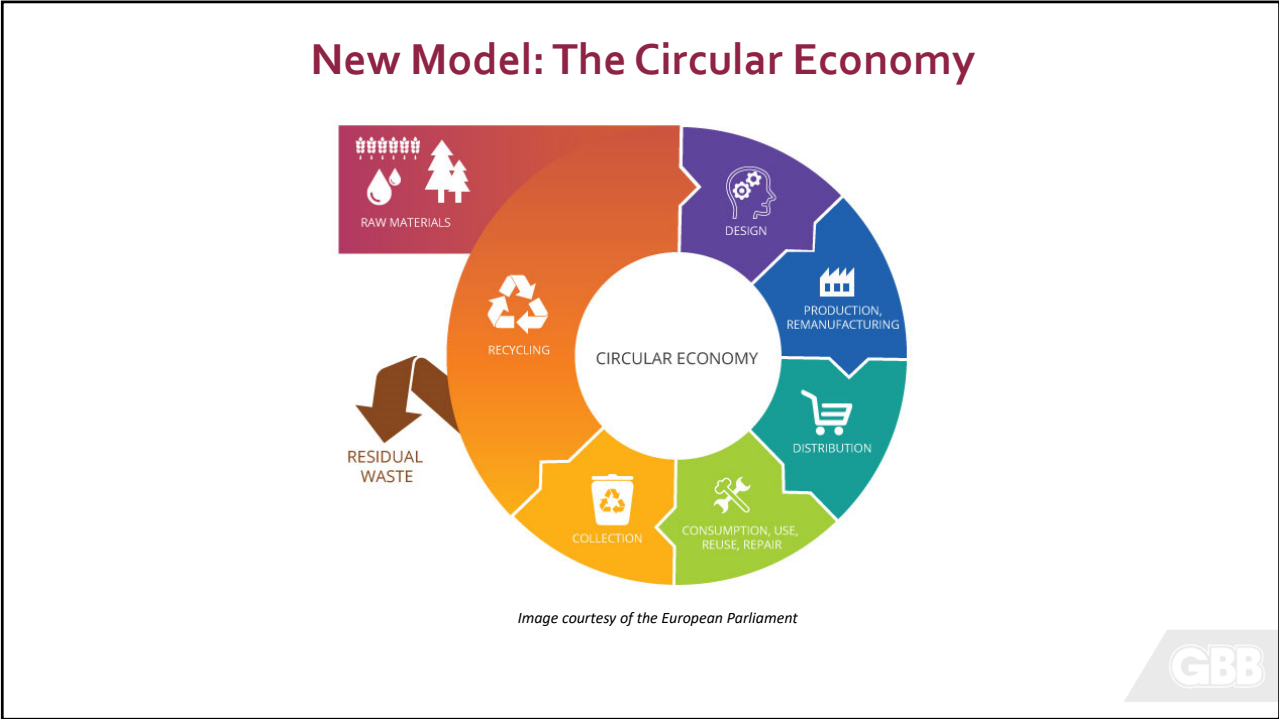
The three pillars of sustainability

A photograph showing four GBB consultants (Danielle Moyer, Ricky Phillips, Jennifer Porter, and Theresa Evans) sitting around a table in a meeting room. A large banner in the background reads "Koffman SOUTHERN TIER INCUBATOR".

Danielle Moyer (GBB Consultant I), Ricky Phillips (GBB Consultant II), Jennifer Porter (GBB Vice President) and Theresa Evans (GBB Senior Consultant) at the Koffman Southern Tier Incubator, powered by Binghamton University, getting ready to meet a group of professors and students of the Sustainable Communities and Environmental Science programs!

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Solid Waste Management Industry Overview

Services Provided by MSW Industry:

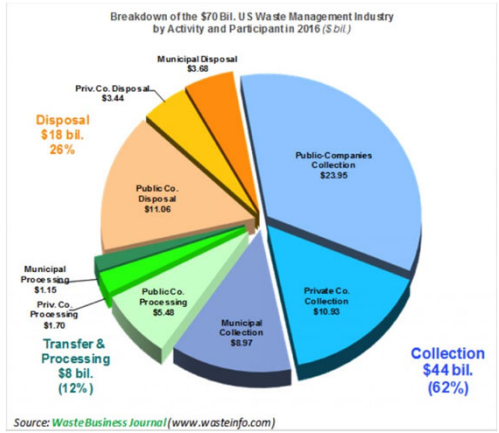
- **Collection:** \$44bn revenues
- **Processing:** \$8bn revenues
- **Disposal:** \$21bn revenues¹

MSW Operator Types:

- Publicly traded waste companies,
- Small-Medium privately held firms,
- Local municipalities and waste authorities

Waste Types:

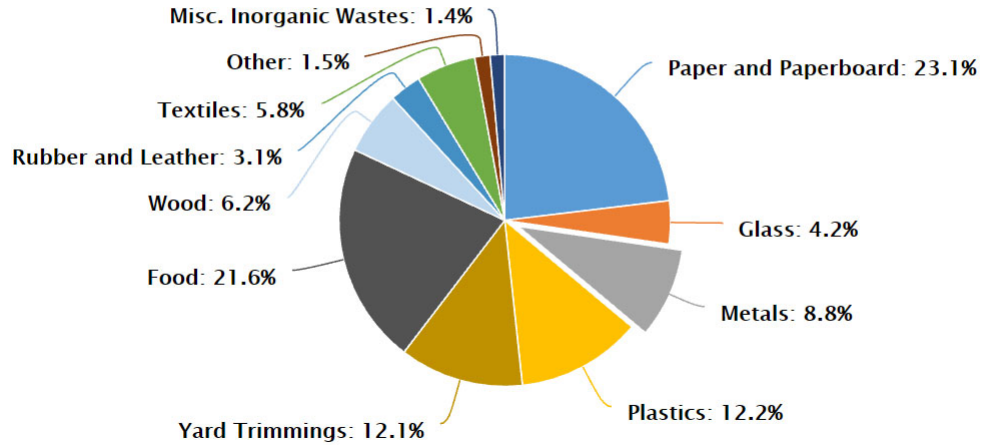
- Liquid
- Solid
- Organic
- Recyclable
- Hazardous



Notes: 1. Landfilling: \$18bn. Waste to Energy: \$3bn, including incineration and digestion
 Source: Breakdown of the \$70 Billion US Waste Management Industry by Activity and Participant in 2016 (2016). Waste Business Journal. Retrieved from www.wasteinfo.com

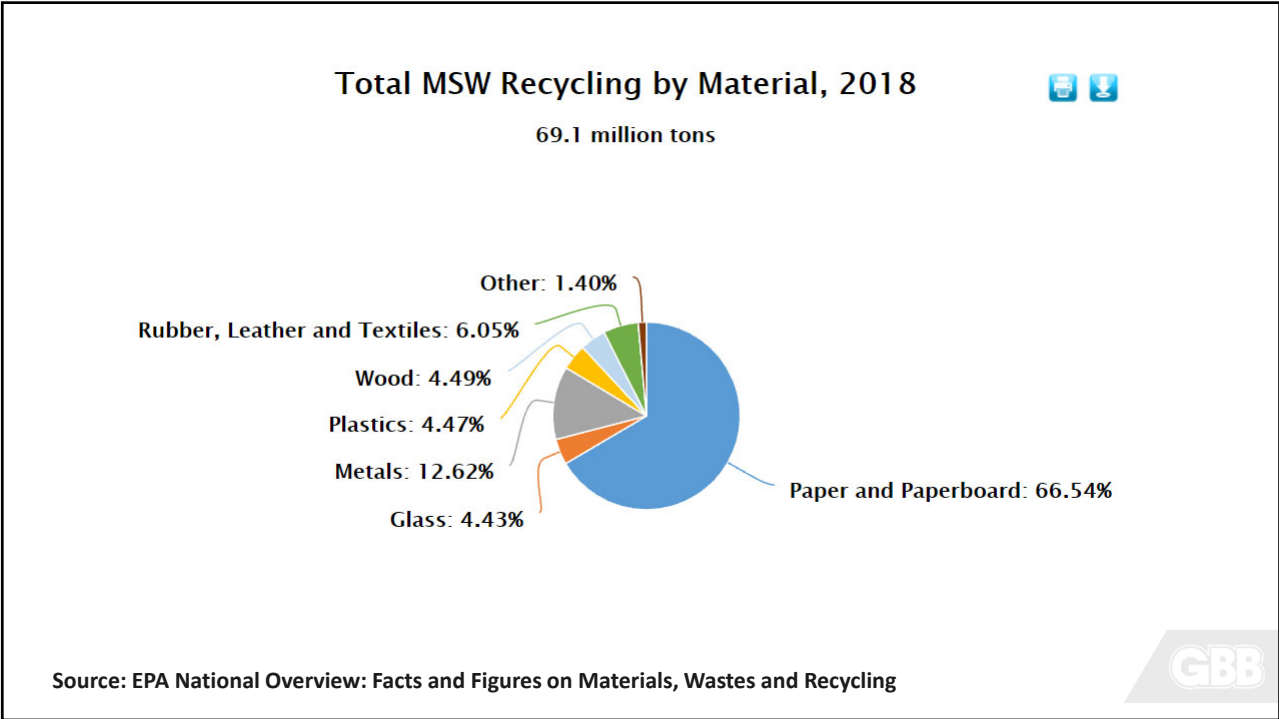
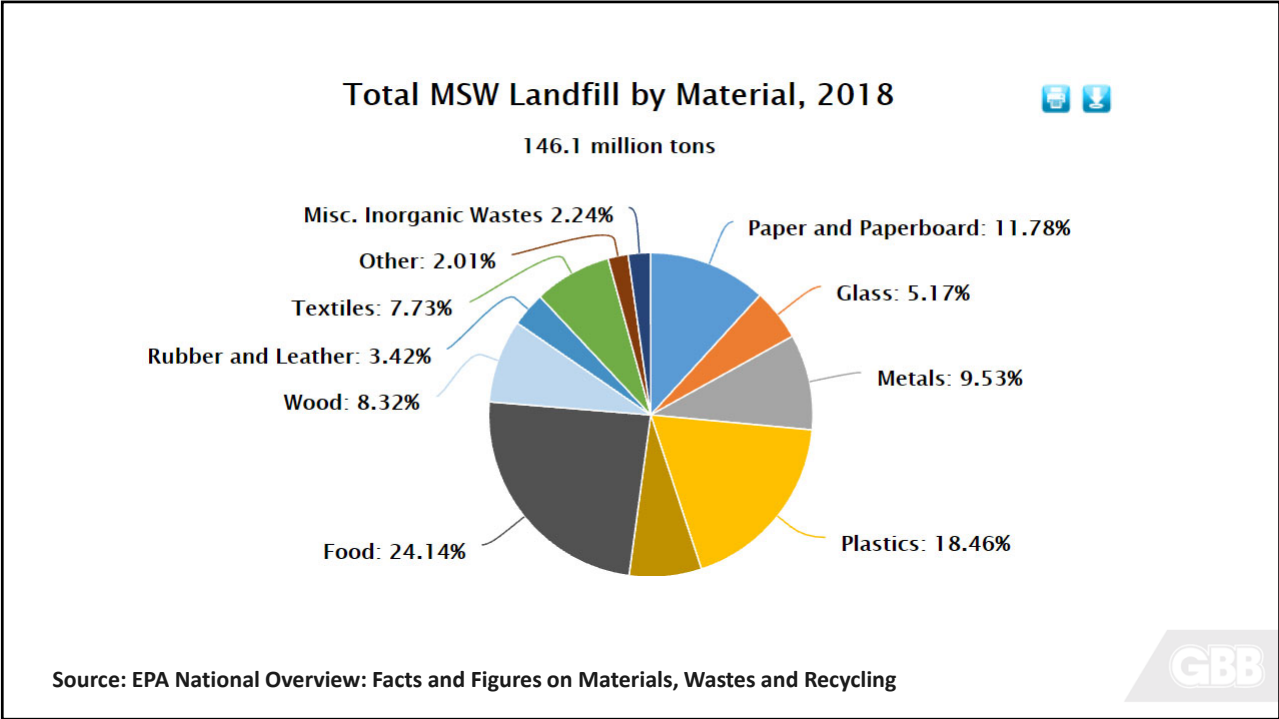
Total MSW Generated by Material, 2018

292.4 million tons



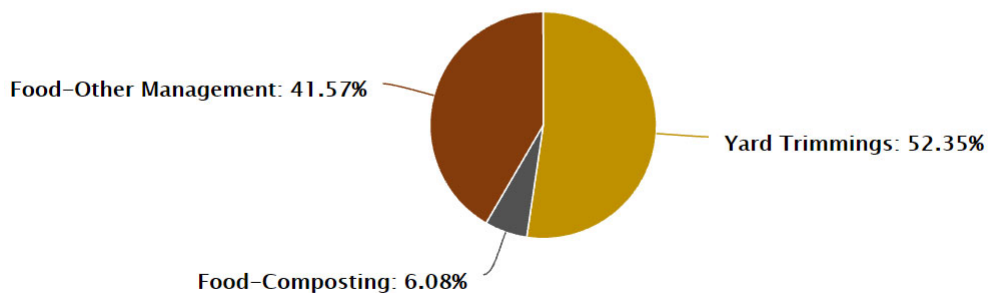
Source: EPA National Overview: Facts and Figures on Materials, Wastes and Recycling





Total MSW Composting and Other Food Management by Material, 2018

42.6 million tons



Source: EPA National Overview: Facts and Figures on Materials, Wastes and Recycling



NYS Food Donation and Food Scraps Recycling Law

- Effective January 2022, businesses that generate at least 104 tons of food waste per year, (calculated as annual avg of 2 tons wasted food/week), must donate excess edible food, and recycle all remaining food scraps.
- In New York State, food makes up 18% of all waste, about 3.9 million tons of wasted food from NY ends up in landfills each year.
- The law applies to large generators of food scraps such as restaurants, grocery stores, hotels & motels, colleges & universities, shopping malls and event centers in NYS, that are located within 25 miles of an organic recycler.
 - This law does not apply to NYC, as the City has already had commercial organics laws in place since 2012.





Town of Tusten Energy Committee

Includes Narrowsburg: Unique hamlet along the Upper Delaware River in the Sullivan County Catskills

- *The TEC appointed in 2011 to make sustainable changes to the beautiful Town of Tusten.*
 - Certified the 19th town in NYS a Climate Smart Community
- Stood behind Town of Tusten law banning fracking.
- Energy audits
- "TUSTEN RECYCLES" canvas bags
- Public space recycling stickers
- LED Streetlights
- Trex soft plastic collection – more than one ton collected = 5 benches!
- Tusten HORSE

GBB

Town of Tusten, NY

HORSE Microdigester, Model AD25 + Food Rescue Program

Funded by 2018 DEC Municipal Food Scraps Reduction, Food Donation and Food Scraps Recycling Programs

HORSE: High Solids Organic waste Recycling System with Electrical output

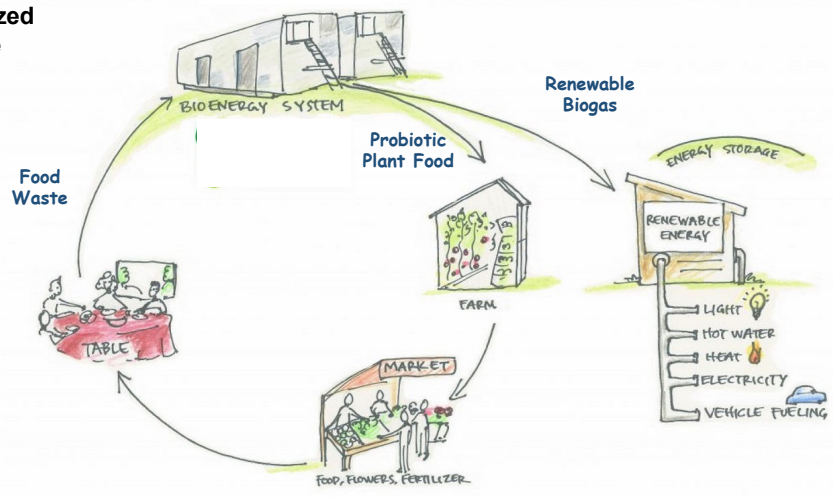
Reviewed Options with CET

- Objectives
 - Increase food rescue and food donation for the food insecure
 - Install HORSE Microdigester, Model AD25
 - Increase food waste diversion from businesses and residents
 - Train the Tusten Energy Committee for Year 2 + project maintenance



Opportunity

Local & Decentralized
Waste to Resource
Economy





Products



HORSE

25 to 175 tons/year food waste
 (135 to 960 lbs/day)



NAUTILUS

185 to 925 tons/year food waste
 (1,000 to 5,000 lbs/day)

IMPACT BIOENERGY BIOENERGY SYSTEM

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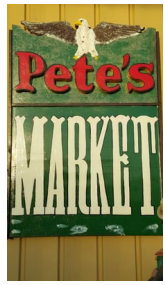


Steps Ahead

1. Ramp up of food waste drop offs
2. Probiotic plant food marketing
3. Higher Ed/Community interest
 - a. RIT case study underway
 - b. SUNY Sullivan operating partnership
 - c. NYS and PA towns planning visits



Blue Fox
MOTEL



Cafeteria Composting in Onondaga County, NY

Benefits to launching a compost program in school:

- Waste Reduction - decreases trash volumes.
- Cost Savings - lowers costs to dispose of food waste through lower tip fees at compost sites.
- Education - teaches the next generation the value and ease of composting and environmental stewardship.
- Compost – produces beneficial, nutrient-rich compost that can be used in gardens, parks, and landscape projects throughout the community.



Close the Loop: Use Compost

Benefits of Compost:

- Adds nutrients to the soil, so plants grow better,
- Retains moisture, so you don't have to water as much,
- Suppresses the spread of plant disease, so your garden stays healthy,
- Reduces the need for chemicals and pesticides, which keeps pollutants out of our water supply.



Close the Loop: End Food Waste

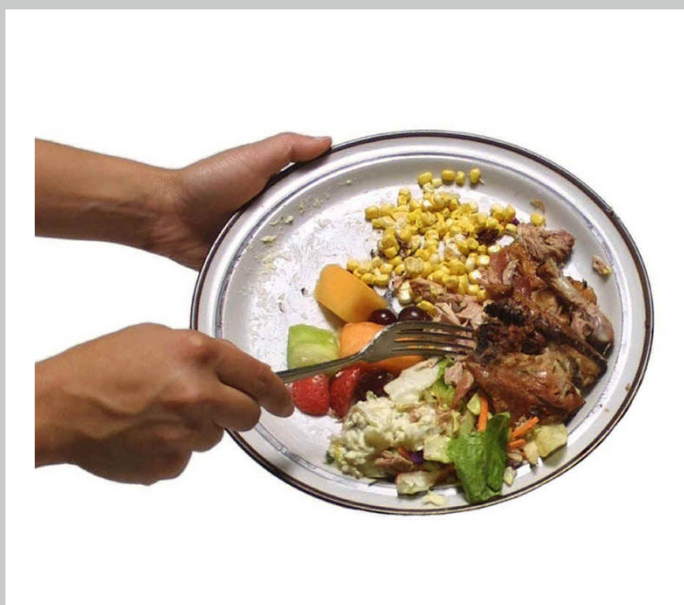
40% of all U.S. Food is Wasted (USDA).

To address this:

- Buy just what you need,
- Understand food date labels,
- Use all parts of each ingredient, and store food properly for reuse.

Public Outreach:

Go to where the consumer is – grocery stores, farmers markets, restaurants, institutions to deliver helpful information on how to end food waste.



GLASS RECYCLING: A NEW WAY!

May 25, 2021 Uncategorized

Connect with
OCRRA

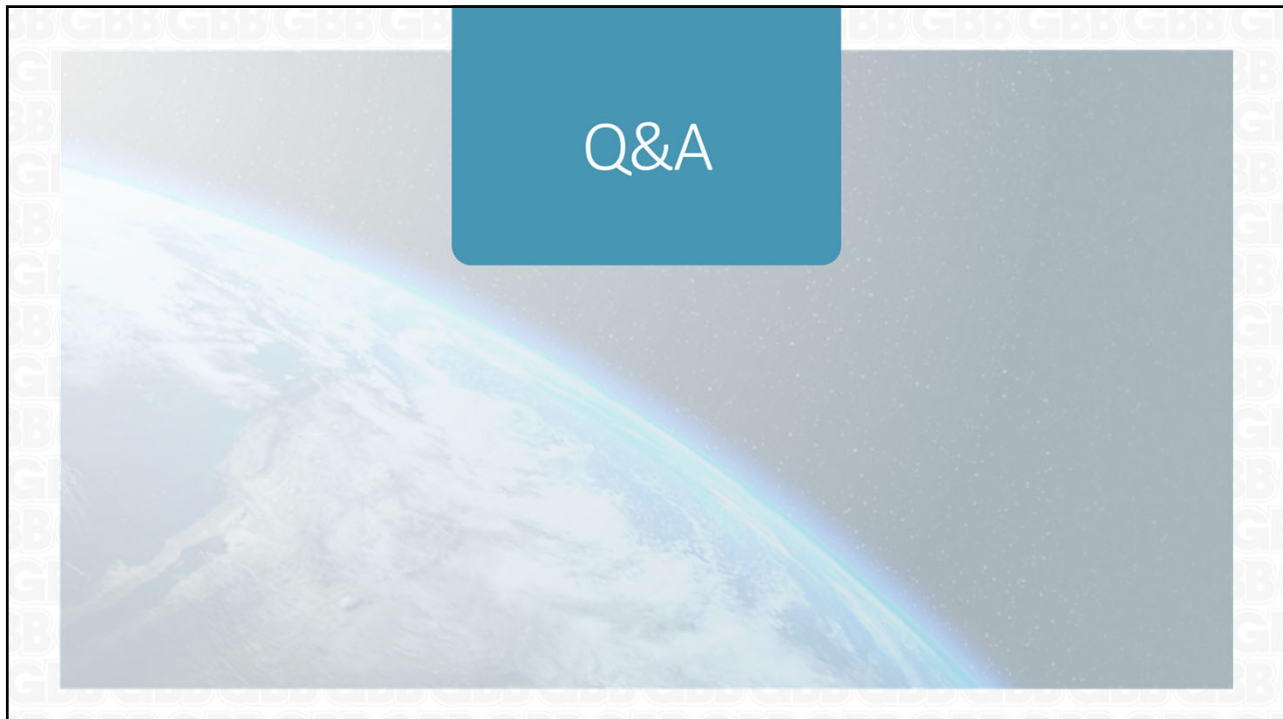


Did you know, glass that goes in your blue bin doesn't get turned into new bottles?! It breaks and gets mixed with bits of metal, paper and plastic making it difficult and expensive to recycle. The broken glass also contaminates other recyclables. Instead, glass placed in the blue bin gets reused in landfills to make roads and cover waste. But now, you can ensure your old glass **beverage** bottles get turned into new bottles over and over again!

OCRRA is partnering with a number of **local bottle redemption centers** to accept the following types of non-deposit glass beverage bottles:

- Wine bottles
- Liquor bottles
- All non-deposit glass beverage bottles (iced coffee, tea, etc.)

While you won't get five cents back for these items, you can feel good knowing they WILL get turned into new bottles again because this glass remains clean and can easily be sorted by color!



Thank You!

Contact Us



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