Advancing Food Scraps Recycling in NYS: State Funding Programs for Community Initiatives

This webinar will start at 10:30 AM.

Office of Climate Change
February 6, 2019
Welcome!

Today’s webinar: Advancing Food Scraps Recycling

Connect to the audio with your phone:

1) Click on the “i” icon, upper left, for call-in details, and

2) Enter your unique attendee ID when prompted.
Today’s webinar topic: Advancing Food Scraps Recycling

Problems or technical questions?

*Use WebEx Chat*

Content questions for speakers?

*Use WebEx Q&A*
Agenda

• **Announcements** - Dazzle Ekblad, DEC

• **Presentation** – Advancing Food Scraps Recycling, with the following speakers:
  - Kristine Ellsworth, DEC
  - Andy Harlan, Rochester Institute of Technology

• **Q & A**
Funding Opportunities

- **Municipal Clean Vehicle (ZEV) Rebates** from DEC OCC
  - No match; up to $5,000 per vehicle purchased or leased (36 mo.s)
  - Deadline: **July 26, 2019**

- **NYSERDA Drive Clean Rebates**: up to $2k for plug-in hybrids or battery-powered cars

- **NYSERDA Charge Ready NY**: $4,000 per port to for qualified Level 2 EV charging equipment at locations that provide public charging, workplace charging, or charging at a multi-unit dwelling
Upcoming Events

- Feb. 27, NYSERDA Webinar: Two Key Resources: CEC & CSC
  - Crosswalk between CEC actions & CSC certification actions
  - Climate Action Planning Inst: GHG inventories & CAPs
- March 26-27, NYS Organics Summit, Fairport (near Rochester)
- April 28-30, NY Planning Federation Annual Conference, Bolton Landing
- June 19-21, At What Point Managed Retreat?, NYC
Get Help from Regional Coordinators

• Coordinators provide free consulting services to local governments participating in NYSERDA’s Clean Energy Communities Program
  • Approximately 50 hrs of free, on-demand technical assistance per municipality
  • Includes support for becoming a Certified Climate Smart Community
• Contact the coordinator in your region: https://www.nyserda.ny.gov/Contractors/Find-a-Contractor/Clean-Energy-Community-Coordinators
How are CSC & CEC related?

**Climate Smart Communities Certification**
- Comprehensive climate action program
- ~130 unique actions
- Improve score on CSC grant applications

**Clean Energy Communities (NYSERDA)**
- Focused on clean energy
- 10 high-impact actions
  - 1 of 10 is becoming a Certified CSC
- Complete 4 actions to access CEC grants

➢ Earn points toward CSC Certification by doing CEC actions
➢ Do both!
CSC Certification

• Online portal: https://climatesmart.ny.gov

• CSC Certification actions related to today’s webinar:

  ➢ PE5: Organic Waste Program for Gov’t Bldgs. (1-3 pts.)
  ➢ PE5: Compost Bins for Residents (2 pts.)
  ➢ PE5: Residential Organic Waste Program (2-22 pts.)
Food Scraps Recycling: Context & DEC Funding

Kristine Ellsworth
Advancing Food Scraps Recycling in NYS
State Funding for Community Initiatives

CLIMATE SMART COMMUNITIES WEBINAR
FEB. 6TH, 2019
KRISTINE ELLSWORTH

NEW YORK
STATE OF OPPORTUNITY
Department of Environmental Conservation
NRDC estimates that 40% of food in the United States goes uneaten.

30% of NYS municipal solid waste stream is comprised of organics, 18.5% of that is food waste!

NYS generates 3.2 million tons of food scraps annually!
Where does it come from?

Industrial
➢ Food processors (dairy, fruit and vegetable processors, breweries, and wine-making operations)

Institutional
➢ Schools, colleges, universities, correctional facilities, hospitals, nursing homes

Commercial
➢ Restaurants, groceries, fast food, retail establishments, hotels, hospitality, events centers

Residential
➢ Homes, apartments, etc.
Lost food is generated throughout the entire process...

➢ Farming
➢ Post-harvest and Packing
➢ Processing
➢ Distribution

➢ Retail
➢ Food Services
➢ Households
Less than 3% of excess food and food scraps diverted from disposal within NYS
Dominantly Linear System

FOOD WASTE --> LANDFILL
Food Waste in the Landfills

Most significant greenhouse gas produced from waste is methane.

Methane is released during the breakdown of organic matter in landfills.

Organic matter includes food waste.
Promotion of Circular Systems

Become a part of the system and help change the food cycle
Save the planet! – Feed People, Animals & Soils

Feed animals!

Save resources!
Water, gas, energy, labor, pesticides, land, fertilizers

Reduce methane in landfills!
Methane has 25 times the global warming potential than CO₂!

Feed people!
Improve access to fresh food

Return nutrients to soil!
Improve soil health, structure, and water retention properties and reduce the need for fertilizers and pesticides
Who are we?

NYS DEC Division of Materials Management – Organics Reduction and Recycling Section
Sally Rowland, Molly Baker, Kristine Ellsworth, Gary Feinland, Chris Glander

Vision: Substantially reduce the amount of wasted food and increase organics recycling of food scraps and other organic materials in NYS through outreach, education and the implementation of scientifically based regulations.

- Organics Recycling Facility regulatory oversight & technical assistance
- Organics Diversion Legislation
- Funding programs for Donation & Organics Recycling
- Outreach & Education
Feeding Animals

*As a waste diversion tactic

*Contamination issues
*Plate waste laws
*Beneficial Use Determination
Organics Recycling

FOOD WASTE

ANAEROBIC DIGESTION

COMPOSTING

LAND APPLICATION

LANDFILL
Materials Currently Recycled

- Yard Trimmings
- Animal Mortalities / Slaughter Waste
- Manure/Crop Residuals
- Food Scraps
- Mixed Solid Waste
- Biosolids
What is Composting?

• Aerobic decomposition of organic materials into a rich soil known as compost.

• Currently 50 regulated facilities accepting food scraps
What is Anaerobic Digestion?

• AD is a series of biological processes in which microorganisms break down biodegradable material in the absence of oxygen.

Biogas Systems
The Basics

1. organic material (e.g., animal waste, food waste, agricultural waste, wastewater sludge)
2. digestion tank
3a. biogas (for electricity, heating vehicles, pipelines)
3b. co-products (e.g., livestock bedding, compost, fertilizer, nutrients)
What is a land application facility?

A site where solid waste is applied to the soil surface or injected into the upper layer of the soil to **improve soil quality** or **provide plant nutrients**.

Examples:
- Food processing wastes
- Biosolids
- Septage
Part 360 Solid Waste Regulations

Part 361 Material Recovery Facilities:

➢ Subpart 361-1 Recyclables Handling and Recovery Facilities
➢ Subpart 361-2 Land Application and Associated Storage Facilities
➢ Subpart 361-3 Composting and Other Organics Processing Facilities
➢ Subpart 361-4 Wood Debris and Yard Trimmings Processing Facilities
➢ Subpart 361-5 Construction and Demolition Debris Processing Facilities
➢ Subpart 361-6 Waste Tire Handling and Recovery Facilities
➢ Subpart 361-7 Metal Processing and Vehicle Dismantling Facilities
➢ Subpart 361-8 Used Cooking Oil and Yellow Grease Processing Facilities
Feeding People

40% of food in the U.S. goes uneaten

YET,

1 in 7 New Yorkers are hungry

If 5% percent of the excess food was donated to food banks and food pantries, they would see an increase of 20%

America’s Food Waste Problem: The John Oliver Cheeseburger Commercial

If 5% percent of the excess food was donated to food banks and food pantries, they would see an increase of 20%
NYS Legal Fact Sheets

In partnership with the Harvard Food Law and Policy Clinic:

• Feeding Food Scraps to Animals
• Date Labeling Laws
• Food Donation Tax Incentives for Businesses
• Food Donation Liability Protections
Available Funding Opportunities

- Municipal Funding for Wasted Food, Food Donation and Food Scraps Recycling
- Municipal Waste Reduction & Recycling – Capital Projects
- Municipal Waste Reduction & Recycling - Recycling Coordination and Education Projects
- NYS P2I Community Grants Program
- NYS P2I Food Waste Reduction & Diversion Reimbursement Program
Available Funding Opportunities

Municipal Funding for Wasted Food, Food Donation and Food Scraps Recycling
Assist municipalities in initiating and expanding programs to reduce food, donate wholesome food and recycle food scraps.

- Outreach and Education – 80% reimbursement
- Equipment and Construction – 50% reimbursement
- Staff – 80% reimbursement

Total awards can range from $1,000 - $250,000

Competitive grants program with scoring criteria

Projects incur costs post contract start date

Q & A Period Ends February 22, 2019

Applications Due: March 1, 2019 3:00 PM

Submit questions to organicsgrants@dec.ny.gov

Available Funding Opportunities

- Municipal Waste Reduction & Recycling – Capital Projects
- Municipal Waste Reduction & Recycling - Recycling Coordination & Education Projects
Available Funding Opportunities

- Municipal Waste Reduction & Recycling – Capital Projects
Assist municipalities in expanding local waste reduction and recycling programs through the funding of capital investment in facilities and equipment.

Facilities and Equipment – 50% reimbursement
Maximum award amount: $2 million

Applications accepted on going basis

Waiting list for Grants Approval

More information:
https://www.dec.ny.gov/chemical/105603.html
DEC Municipal Waste Reduction and Recycling (MWRR) – Capital Projects

- Rockland County Solid Waste Management Authority: Food Rescue Distribution Centers
  - Fund three food distribution centers to distribute fresh produce and non-perishable items to smaller community located food pantries

- Town of Bethlehem Food Scraps Composting Facility
  - Expand pilot program to a more established composting program by purchase of aeration equipment and paving portion of composting facility for aerated composting system.
Available Funding Opportunities

Municipal Waste Reduction & Recycling - Recycling Coordination & Education Projects
DEC MWRR – Recycling Coordination and Education Projects

Assist municipalities in increasing public awareness and participation in waste reduction and recycling. This includes education on wasted food, composting, etc.

Recycling Coordination, Publications, Education and Outreach—50% reimbursement

Applications accepted
August, September, October of each year

Funded on annual basis

Available Funding Opportunities

NYS P2I Community Grants Program
News P2I
Community Grants Program

Assists NYS-based
- not-for-profit community organizations
- local government agencies
to fund community-focused pollution prevention projects.

Funding: $10,000 - $20,000
Grants are 1 Year in length

Proposals solicited each fall

More information:
https://www.rit.edu/affiliate/nysp2i/community-programs/community-grants
Tompkins County: Food Waste Prevention Campaign

• Creation and Screening of Smart Cooking: It Makes Cents Video
• Developed Save The Food Project Manual
• Created guidelines for developing and implementing a social media strategy to target food waste prevention
• Development of a ‘train the trainer’ manual that was distributed state-wide

Funded by P2I Community Grants Program
### Available Funding Opportunities

- NYS P2I Food Waste Reduction & Diversion Reimbursement Program
Provides reimbursements to NYS businesses, municipalities, and not-for-profits that general more than 1 ton per week of wasted food and food scraps in order to reduce or divert this material from landfill or incineration.

Equipment and Technologies – 44% reimbursement

Maximum Award Amount: $100,000

Applications accepted on going basis

More information: https://www.rit.edu/affiliate/nyp2i/food-reimbursement
Past Funding Opportunities

- Climate Smart Communities Grant Program

- DEC Funding for Emergency Food Relief Organizations ($800,000) – In application review process

- DEC Funding for Food Bank of Central New York ($75,000)

- DEC Funding for Food Bank Association of New York State ($800,000)

- ESD Funding for Food Bank Association of New York State ($2 million)
Past Funding Opportunities

• Climate Smart Communities Grant Program
  o Town of Greenburgh Food Scrap Recycling Drop-off Sites
  o City of Kingston Organic Waste Management Plan
  o Town of New Paltz Food Recovery Infrastructure Program
  o Sullivan County Composting Feasibility Study

For CSC grant program award descriptions visit: https://www.dec.ny.gov/energy/109181.html
Executive Budget: $2 million proposed in 19/20 NYS Executive Budget for municipalities and food banks to support donation and recycling of food scraps

Organics Diversion Legislation
Proposed Organics Diversion Legislation

17/18 & 18/19 NYS Executive Budget - Rejected

➢ “Designated food scraps generators” (≥2 tons/week) must donate excess food
➢ If a viable facility exists within 50/40 miles, the generator must recycle food scraps
Proposed Organics Diversion Legislation

NYS Assembly and Senate recently proposed legislation (A3672/S2995)

- “Designated food scraps generators” (≥2 tons/week) must donate excess food
- If a viable facility exists within 15 miles, the generator must recycle food scraps
Food Scraps Legislation across the U.S.

CT: Mandates generators >1 ton/wk with a facility located within 20 mi.

CA: $47.5M dedicated to organics infrastructure and healthy soils. Current entities generating >8 cy/week, aggressively lowering to >2 cy/wk in 2020.

VT: Began >104 tons/yr in 2014, now aggressively lowering until all generators required to divert by 2020.

NYC: Large generators with facility located within 100 mi,

MA: Mandates generators >52 tons/yr to divert (note: can donate below limit to avoid enforcement)

Hennepin County, MN: Large generators >1 ton trash/wk must divert by 2020. Cities must offer organics collection by 2022.

DSNY discretion.
Additional Resources

- 2019 Organics Summit: Growing Local Roots
- NYS Food System Sustainability Clearinghouse: Municipality Assistance
- Harvard Food Law and Policy Legal Fact Sheets
- Save the Food
- DECDelivers Solid Waste & Recycling Newsletter
Kristine Ellsworth
Environmental Engineer, NYS DEC
Organics Reduction and Recycling

518-402-8706
Kristine.Ellsworth@dec.ny.gov
Funding for Food Waste Diversion

Andy Harlan
Funding Opportunities for Food Waste Diversion Projects

Thursday, November 15th 2018 - 1:00 PM
Today’s Presenter

Andy Harlan – Program Coordinator
• Industrial Engineer
• 17+ years at Rochester Institute of Technology

Contact Info:
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585-475-5385
585-626-5758
Who we are – Rochester Institute of Technology (RIT)

- Located in Rochester, New York
- Golisano Institute for Sustainability focused on helping business and government with new technology and sustainability
- 10-year partnership with NYS Department of Environmental Conservation to assist NYS businesses and communities with pollution prevention
- Assisted over 70 food & beverage companies in NY to reduce waste, energy & water usage, and environmental footprint
About the Funding

- 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
Edible vs. Nonedible Excess Food

Most Preferred
- Source Reduction
- Feed Hungry People
- Feed Animals
- Industrial Uses
- Composting
- Landfill/Incineration

Least Preferred
Handling Food Waste Offsite
Commercially Available Technologies

Dehydration

Liquification

Composting [https://www.rit.edu/affiliate/nysp2i/food/site-pre-processing-solutions](https://www.rit.edu/affiliate/nysp2i/food/site-pre-processing-solutions)
What about municipalities?

- Enable collection and transfer of food waste from generator to hauler/processor

- Municipality alone must generate more than one ton of food waste per week, enable the processing of that food waste (e.g. compost site, AD), and then, if they want to, take in more food waste from the local area
How do you know you are eligible for this funding?

- Registered NYS Entity
- Generate 1 ton or more of food waste per week
- Currently send food waste to landfill or incineration
How does funding work?

• Submit completed application to RIT

• Application is reviewed – if approved, contract is sent to you

• Eligible equipment is purchased and installed

• Once fully functioning and the pre established food waste amount is diverted – RIT will reimburse up to 44% of purchase and implementation costs up to $100,000

• Non competitive – rolling application over 2 year period
Key Application Steps

1) Quantify food waste produced
   o Self Audit
   o Food Waste Estimator -
     https://www.rit.edu/affiliate/nysp2i/food/tools/food-waste-estimator
To get started, select a category
Multiple Locations across NYS

- 500 lbs.
- 500 lbs.
- 700 lbs.
- 300 lbs.
- 1 Ton
Key Application Steps

2) Determine how you will manage the food waste

Option 1: Separate from all food waste and haul off to a composter or digester site - [https://www.rit.edu/affiliate/nysp2i/food/nys-hauler-listing](https://www.rit.edu/affiliate/nysp2i/food/nys-hauler-listing)

Option 2: Manage food waste onsite through technologies - Selecting the right technologies to meet your needs [https://www.rit.edu/affiliate/nysp2i/food/grocery](https://www.rit.edu/affiliate/nysp2i/food/grocery)
Key Application Steps

3) Submit inquiry to receive application from Andy Harlan

http://www.rit.edu/affiliate/nysp2i/food-reimbursement
Application Review Process

• Submit completed applications to Andy Harlan

• Review of compliance with minimum requirements and eligibility

• Approximately 2 week review/approval process from date of complete application submission
Funding Selection Criteria

✓ Registered NYS company

✓ Generate 1 ton or more of food waste per week

✓ Currently sending food waste to a landfill or incinerator

✓ Obtained quotes for eligible equipment and any other peripheral items needed

✓ Project plan fully described with supporting documentation in the application
## Reimbursement Example

### Diversion Plan

- Purchase XYZ machine to process the food waste: $30,000
- Electrical Contractor: $1,000
- Plumber: $2,000

**Total Cost** $33,000

- Application approved
- Contract Signed
- Equipment purchased, installed and food waste diversion goals met
- **RIT sends reimbursement check for $14,520 (44% of $33,000)**
Important Post-Project Conditions

- Diversion numbers will need to be reported to RIT annually for a period of 3 years.
- Program can retroactively assist eligible project expenditures going back to June 1, 2017.
Thank You

Any Questions?

Andy Harlan - Program Coordinator

Contact Info:
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585-475-5385
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http://www.rit.edu/affiliate/nysp2i/food-reimbursement
OCC Contact Info

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- NYS Department of Environmental Conservation
- 625 Broadway
  Albany NY 12233-1030
- climatesmart@dec.ny.gov
- 518-402-8448

Webinar slides & recordings:
http://www.dec.ny.gov/energy/84359.html

CSC Certification Portal:
https://climatesmart.ny.gov

CSC Funding Programs:
http://www.dec.ny.gov/energy/109181.html
Questions from Participants (01:02:00)

Where are specific food waste centers in the Capital Region? This region is lacking in facilities. However, Natural Upcycling and FoodScraps360 are two local haulers both of which bring food scraps to Ulster County. NYS Food System Sustainability Clearinghouse provides a list of organics haulers across the state: https://www.rit.edu/affiliate/nysp2i/food/nys-hauler-listing

How does an aerobic-only compost facility participate in the systems described in this presentation? Composting facilities managed by a municipality is eligible to apply to the DEC Municipal Funding for Wasted Food, Food Donation and Food Scraps Recycling, see more information here: https://www.dec.ny.gov/chemical/114499.html Composting facilities managed by a municipality may also look for funding under the DEC Municipal Waste Reduction and Recycling – Capital Projects grant program, see more information here: https://www.dec.ny.gov/chemical/105603.html P2I program only assists facilities that are already generating more than 1 ton.

I thought that NYS is not providing funding for private businesses or haulers. Is this correct? NYS does not currently have any funding programs to fund private businesses or haulers. Private businesses looking for funding to manage wasted food and food scraps should look towards the NYS Pollution Prevention Institute (P2I) Food Waste Reduction & Diversion Reimbursement Grant Program: https://www.rit.edu/affiliate/nysp2i/food-reimbursement

Would leasing a machine be an eligible cost under the grant programs? P2I has not had this request but would reimburse the entity once a year for machinery. DEC grant programs cannot fund leased equipment.

Can you confirm the expected timeframe for release of the next round of the P21 Community Grants Program? Hopefully the next round would be released April-May timeframe. But after this next year, grants will be planned for the fall. Stay up to date here: https://www.rit.edu/affiliate/nysp2i/community-programs/community-grants
Will there be any additional funding available specifically for communities under the CEC Program after reaching more than 4 High Action Items? Refer to NYSERDA Clean Energy Coordinator for information on this.

Would a waste stream analysis be an eligible project if it was a part of a larger feasibility study? A waste stream analysis could be an eligible project under the 2018 Municipal Funding for Wasted Food, Food Donation and Food Scraps Recycling as long as it is part of a larger effort to manage wasted food. Please email organicsgrants@dec.ny.gov if you would like to provide further detail and eligibility of your project.

In regard to food waste, how is the 40% calculated? By weight? Or volume? The statistic came from the NRDC report found here: https://www.nrdc.org/resources/wasted-how-america-losing-40-percent-its-food-farm-fork-landfill

Can you give an example of a municipality itself generating waste v. local restaurants, etc.? Municipally owned and managed correctional facilities and office buildings are two examples. Local restaurants would include businesses like Chilis or Outback Steakhouse.

Would the following scenario be eligible for funding? Several municipalities with food scraps recycling and produce a combined 1 ton and seek funds to build a county composting facility. P2I would need additional information to determine eligibility. Municipalities can also apply to the DEC Funding for Wasted Food, Food Donation, and Food Scraps Recycling grant program (https://www.dec.ny.gov/chemical/114499.html) or MWRR Capital Projects Grant Program (https://www.dec.ny.gov/chemical/105603.html).

Is there a hauler that would serve Broome County? Not that Kristine Ellsworth was aware of, but if several business or organizations were to collectively make it known that services were needed, there would be more incentive for haulers to expand service to areas with greater route density. NYS Food System Sustainability Clearinghouse provides a list of organics haulers across the state: https://www.rit.edu/affiliate/nysp2i/food/nys-hauler-listing
Is a Consolidated Funding Application (CFA) required for the DEC program?

Would a municipality that generates more than 1 ton of food that would be hauled to a compost facility qualify for the RIT funding program?
P2I would fund parts of the project like the construction a retaining wall or a concrete pad or the purchase of bins and signage, 44% reimbursement upon completion including labor and materials.

Can a municipality with a DEC vermicomposting grant for capital construction apply for a grant to market higher value products during the operations phase to increase revenue?
Please contact [organicsgrants@dec.ny.gov](mailto:organicsgrants@dec.ny.gov) to further clarify your question.

In regard to scoring criteria, are some programs considered worthier than others based on GHG emissions, waste diversion or public outreach?
Yes, and the criteria can be found in the RFA on the NYSDEC website. [https://www.dec.ny.gov/chemical/114499.html](https://www.dec.ny.gov/chemical/114499.html)

Community education and outreach would help in product marketing. Could this be eligible as a task following the installation of a composting system?
Yes, if effectively justified in the application and targeted to food waste prevention or recycling awareness.

How do I find out about the EPA food waste program?
[https://www.epa.gov/sustainable-management-food](https://www.epa.gov/sustainable-management-food)