



**Department of
Environmental
Conservation**

2016 Local Leaders Conference

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Blue Mountain Lake, New York

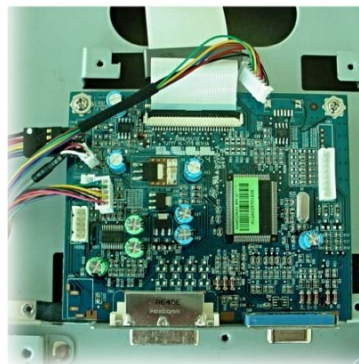


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NYS Electronic Equipment Recycling and Reuse Act

Achievements and Challenges

April 28, 2016



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Topics

- ☐ What is Product Stewardship
- ☐ NYS's Stewardship Laws
- ☐ E-waste Law Update



What is Product Stewardship?

- ❑ Product stewardship is a concept that ensures that all those involved in the lifecycle of a product, share responsibility for reducing the health and environmental impacts that result from the production, use and end-of-life management of the product.
- ❑ Manufacturers bear primary financial responsibility.

Critical Elements of Product Stewardship Programs

- ❑ **Goal:** Ensure Product Stewardship programs improve level of service and environmental performance by including:
 - ✓ Performance Standards
 - ✓ Convenience Standards
 - ✓ Environmental Standards



Current NYS Product Stewardship Laws

- ☐ Electronic Equipment Recycling and Reuse Act
- ☐ Rechargeable Battery Act
- ☐ Mercury Thermostat Collection Act



Background

- NYS Electronic Equipment Recycling and Reuse Act – passed 5/28/2010
- Progressive State E-waste Law
- Broad range of covered electronic equipment
- Broad range of consumers
- Comprehensive convenience standards & performance goals & environmental standards



Goals and Objectives of the Act

- Waste stream diversion & resource conservation
- Shift to shared responsibility
- Increase e-waste recycling & reuse
- Develop & implement a streamlined e-waste management program
- Enhance recycling/reuse infrastructure

Covered Electronic Equipment

- **Computers**
(including laptops, desktops, tablets and e-readers)
- **Computer Peripherals**
 - Monitors
 - Electronic Keyboards
 - Electronic Mice or Similar Pointing Devices
 - Facsimile Machines
 - Document Scanners
 - Printers
- **Televisions**
- **Small Electronic Equipment**
 - VCRs
 - Digital Video Recorders
 - Portable Digital Music Players
 - DVD Players
 - Digital Converter Boxes
 - Cable or Satellite Receivers (including digital media receivers)
 - Electronic or Video Game Consoles
- **Small Scale Servers**

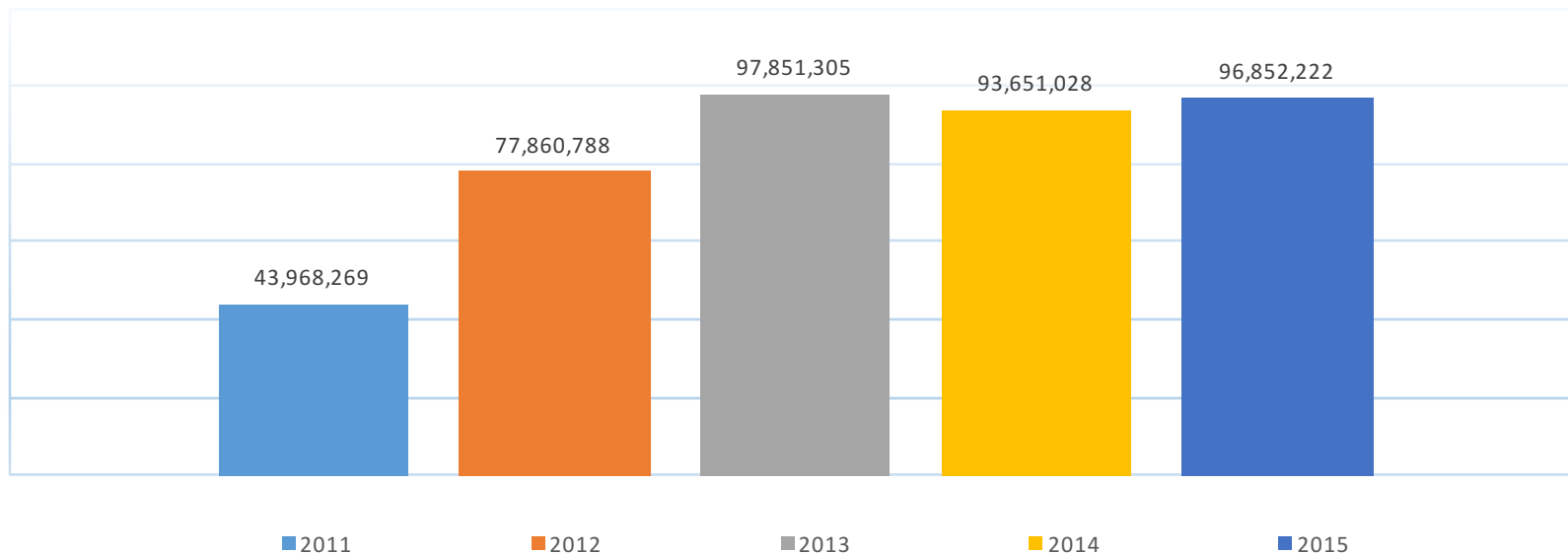


Stakeholders

- Manufacturers
- Collective Organizations
- Recycling Facilities
- Consolidation Facilities
- Collection Sites (private and municipal)
- Retailers
- Waste Haulers/Transporters
- Waste Management Facilities
- Consumers
- NYSDEC



Statewide Recycling & Reuse Goal in Lbs. 2011-2015



Program Performance (2011-2014)

Statewide Goal vs. Reported Collection



Recycling Surcharges (2012 - 2014)

Recycling Surcharges			
Program Year	<u>2012</u>	<u>2013</u>	<u>2014</u>
Manufacturers	10	9	9
Pounds under-collected	90,512	466,461	503,482
Surcharges issued	\$ 41,922.30	\$ 176,536.50	\$232,833.70
Surcharges paid	\$ 41,922.30	\$ 176,536.50	\$228,981.70

Program Achievements

- Recycling rate increases in each program year:
 - 2011 – 2.3 lbs. per capita
 - 2012 – 4 lbs. per capita
 - 2013 – 5 lbs. per capita
 - 2014 – 4.9 lbs. per capita
- Total collected from 2011-2014: over **318,500,000 lbs.**
- Enhanced recycling/reuse infrastructure throughout the state



Program Challenges

- Manufacturer/Collective Program Compliance
- Cathode Ray Tube (CRT) Management
- DEC Implementation



Manufacturer/Collective Program Compliance

Acceptance Program Shortfalls:

- Only meet minimal convenience requirements
- Continuous brand/one-for-one collection
- Program partnerships, contracts and agreements
- Annual report non-submittal and incompleteness
- Timely updating of critical program and contact information



CRT Glass Management

- Inadequate capacity to process discarded CRTs – large backlog
- 2013 North America in 2013 processing capacity of 128,000 tons/year compared to a needed capacity of as much as 390,000 tons/year.
- Due to the lack of processing capability and increased costs for proper CRT management, stockpiles of CRTs are being created.
- Potential new CRT processors – Texas, New York, and Virginia



DEC Implementation Challenges

- Unregistered manufacturers & other entities
- Data gathering, entry & verification
- Out-of-state entity tracking
- Timely acceptance standard distribution
- Compliance efforts



Improving Overall Compliance

Department steps to improve compliance:

- **Manufacturers:**
 - Detailed letter sent to all 100+ manufacturers and collectives providing program compliance guidance and a list of common shortfalls (February 6, 2015)
 - Revised annual reports to include updated program details (March 1, 2015)
 - Notice of Violations (NOVs) sent to 32 manufacturers for annual report non-submittal (April 12, 2016)
 - NOVs for inadequate acceptance programs and incomplete reports will be sent to manufacturers (May-July 2016)
- **Recyclers:**
 - NOVs sent to 19 recyclers for annual report non-submittal (April 25, 2016)



Looking Forward

- Potential Legislative Revisions to Law
- Regulation development
- New on-line data management system
- Facility inspections
- Compliance & enforcement
- Continued education & outreach





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Increasing Food Donation and Food Scrap Recycling in New York State

Organics Generated Municipally

Organics make up about 30% of materials generated in a municipality.

18% Food Scraps

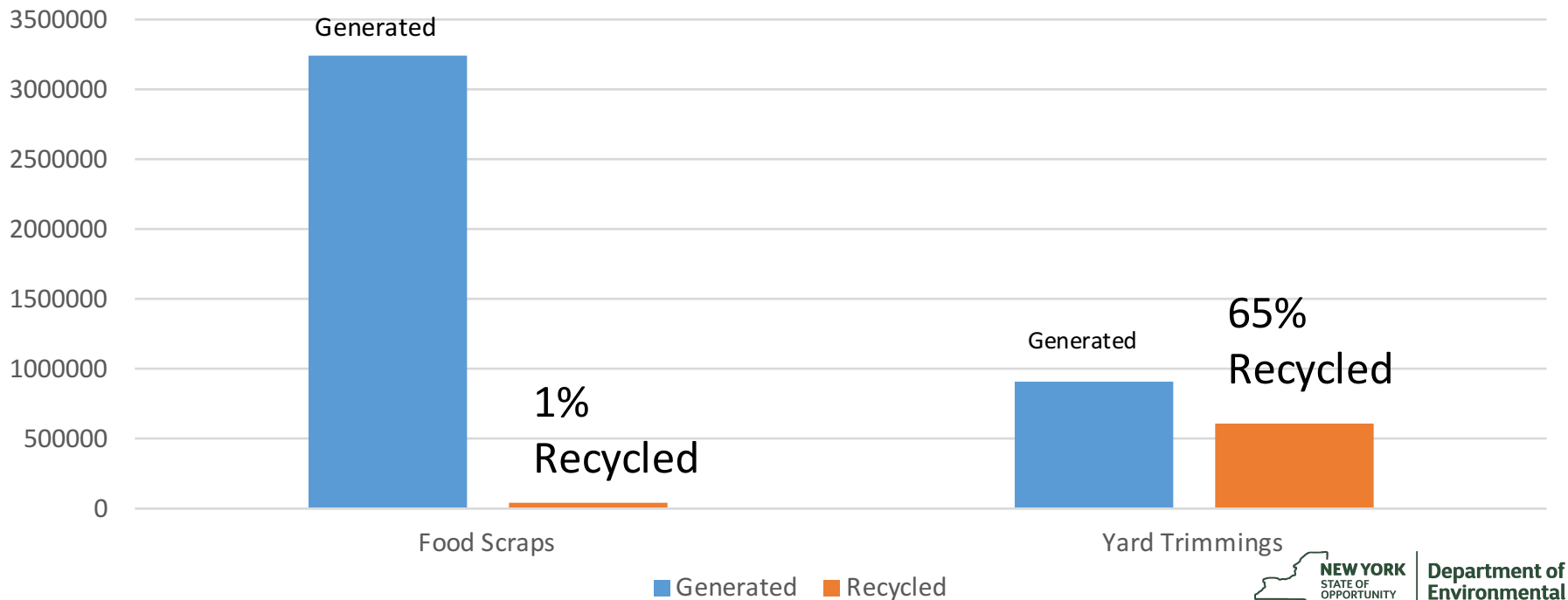
5% Yard Trimmings

7% Soiled Paper

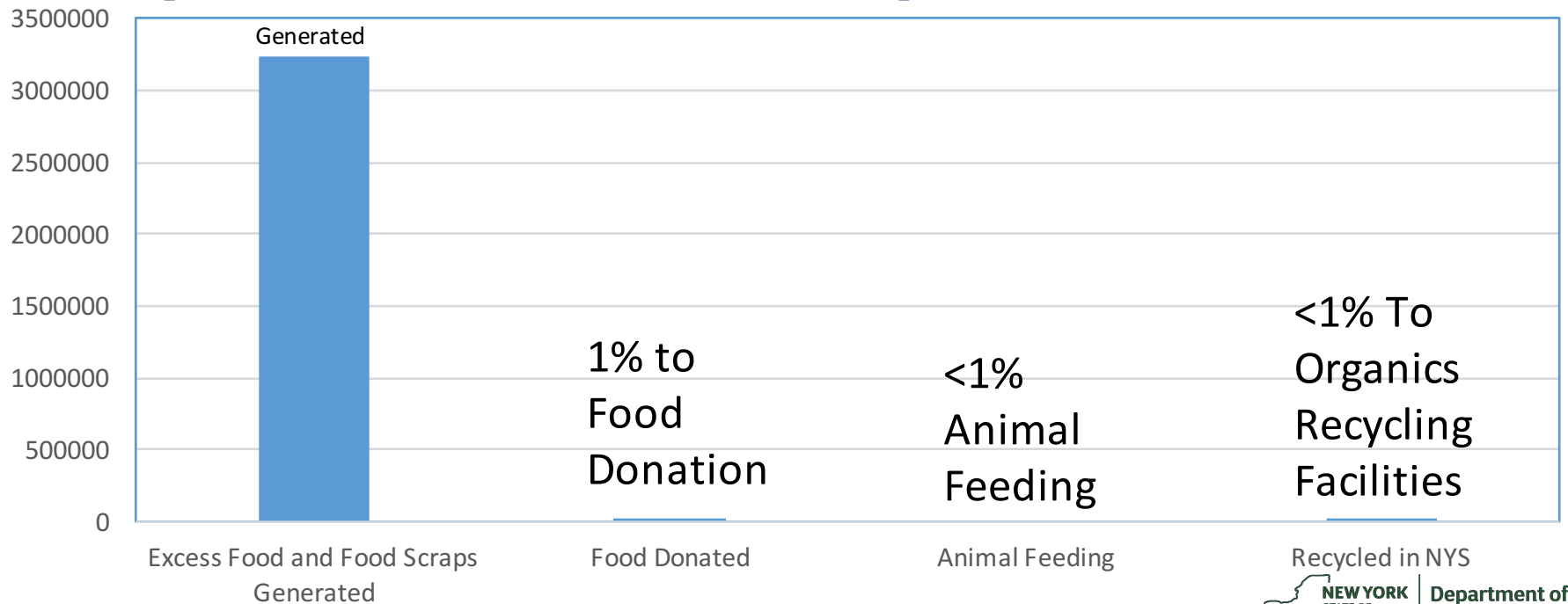


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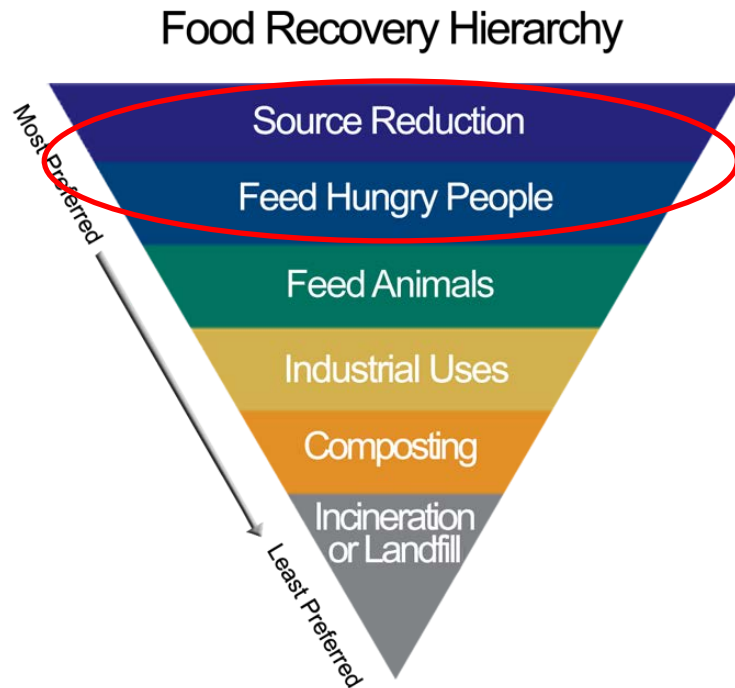
Organics Generated and Percent Recycled



Less than 3% of Excess Food and Food Scraps Diverted from Disposal Within NYS



At the Top



Excess Food and Food Scraps

- Excess Food – edible food that is not sold or used by the generator
- Food Scraps – inedible food, trimmings from the preparation of food, food-soiled paper, paper products, and edible food that is not donated.



How Much Food Are We Talking About

- NRDC estimates that 40 percent of food in the United States goes uneaten.
- More than 20 pounds of food per person per month.



Where is the Lost Food Generated?

- Farming
- Post-harvest and Packing
- Processing
- Distribution
- Retail
- Food Service
- Households



In New York State

- Supermarkets, restaurants, colleges, and hospitals generate 388,000 tons of excess food and food scraps each year.
- If 5% percent of the excess food was donated to food banks and food pantries, they would see an increase of 20% of food available.



Recent State-Wide Initiatives

Food Scraps Generation Forum

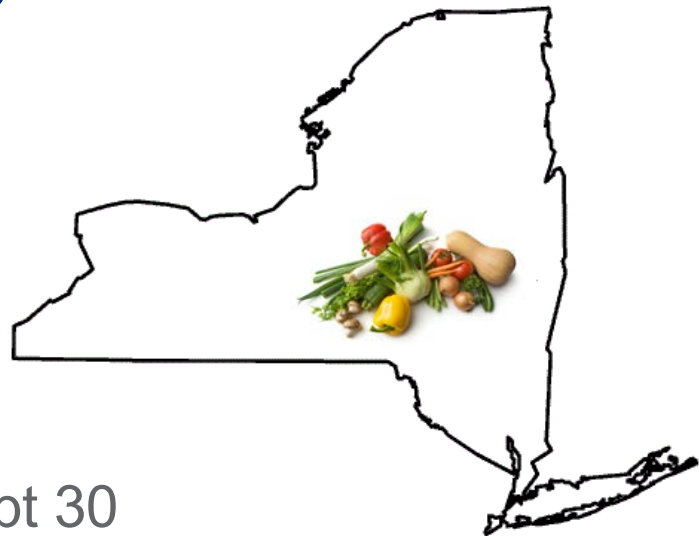
June 15-16, 2015, Albany

Capital for A Day 2015

1. Finger Lakes - July 9 2. Central NY - Sept 30

NYSAR3 2016 Food Recovery Campaign

November 4, 2015 – Workshop and Kick-off Meeting



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Challenges to Food Donation

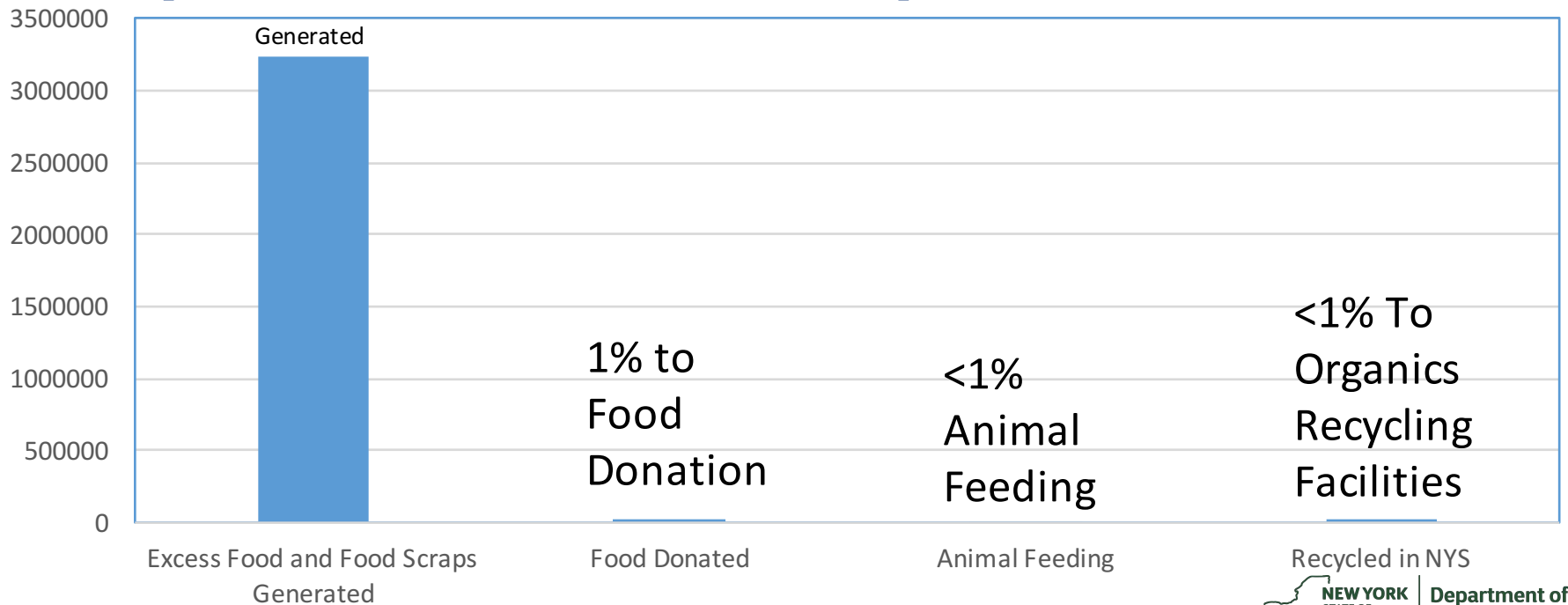
- Lack of space in grocery stores (especially urban areas) to store food to donate
- Lack of cold storage and trucks
- Food banks are focusing on better nutrition – not as interested to take cookies and cakes

Solutions for Food Donation

- Help Food Banks/pantries/food rescue orgs to provide information to reduce liability concerns.
- Provide funds to assist food banks with cold storage
- Continue and expand current outreach efforts promoting food donation.

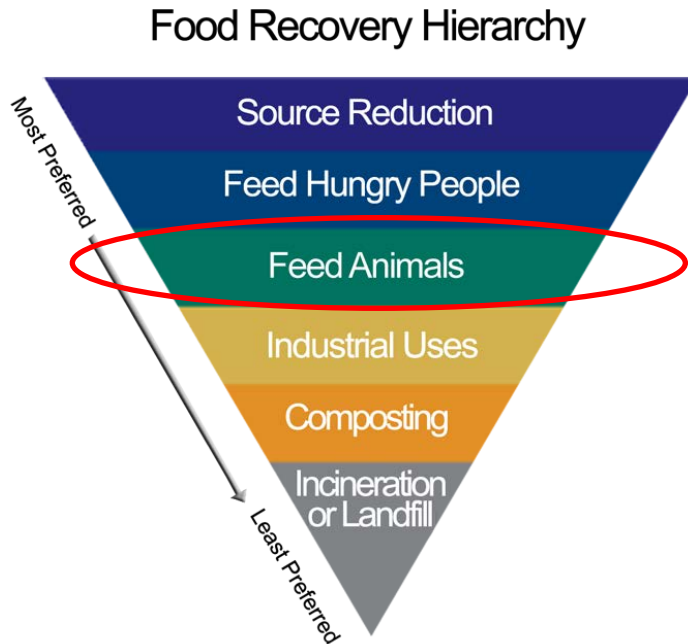


Less than 3% of Excess Food and Food Scraps Diverted from Disposal Within NYS



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Animal Feeding

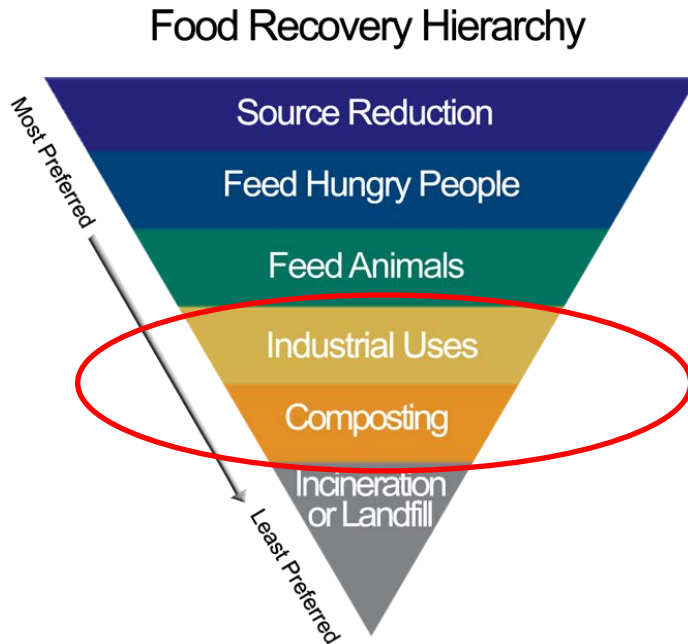


Solutions for Animal Feeding

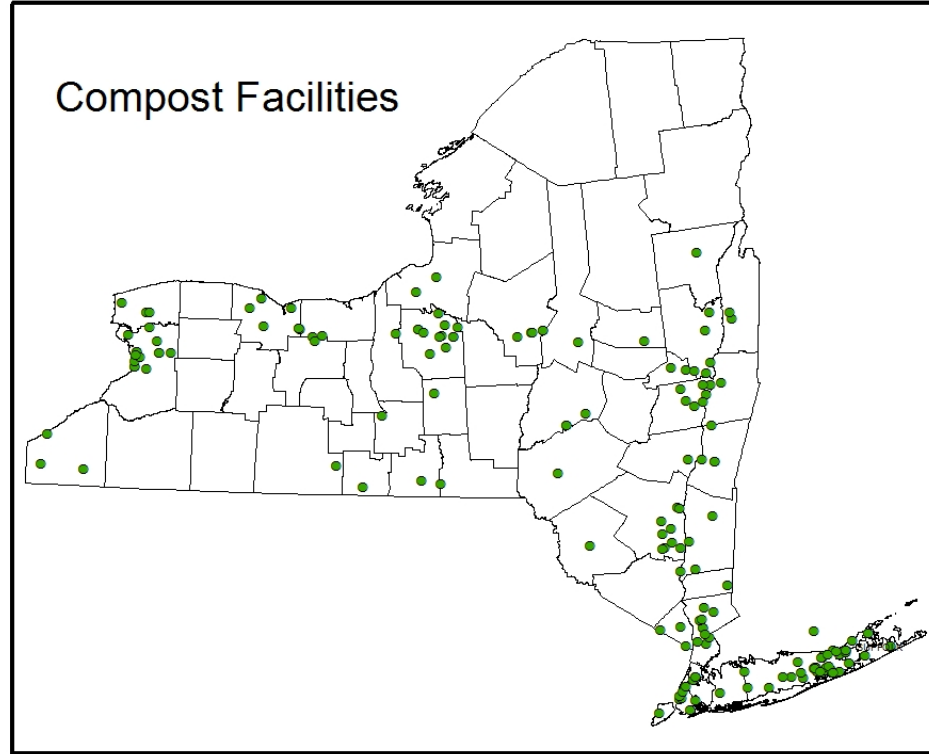


- Develop guidance on what foods can be fed to animals under State and federal regulations/clarify the requirements for stakeholders.

Recycling Food Scraps: Anaerobic Digestion and Composting



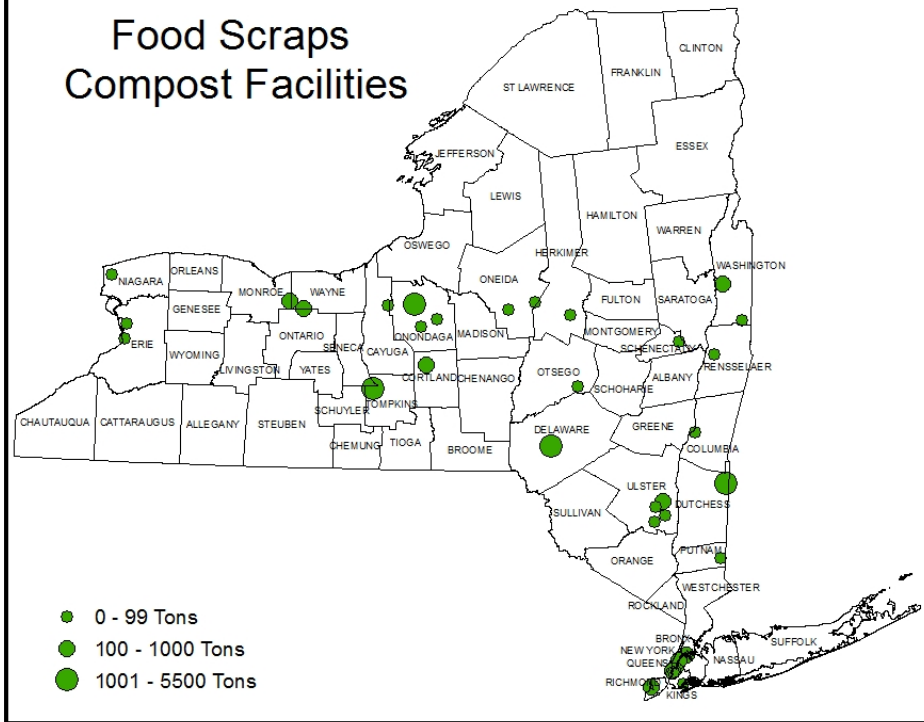
Compost Facilities



170 regulated facilities
accepting yard
trimmings or food
scraps



Food Scraps Compost Facilities



36 regulated facilities
can accept food scraps

The top four accept
over 75% of the total



The Good and Bad News

Facilities that accept food scraps



Haulers that transport food scraps to compost facilities



Capacity of food scrap recycling facilities - *small*

Anaerobic Digestion Facilities

Few accept food scraps, more are looking into it

More are taking food processing waste (industrial)

WWTPs are a possibility if not at capacity



On-Site Composting

Great way to process materials

Almost 6,000 tons of food scraps are diverted through NYS State Correctional Facilities



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Community Composting



Solutions for Food Scrap Recycling

- Pursue revisions to solid waste regulations (Part 360) and SEQR that will help ease the permitting of facilities.
- Continue and expand current outreach efforts promoting benefits of organics diversion and recycling.
- Provide funding.
- Legislation to require large generators to recycle if facilities are available.



Capital For A Day Outputs

- Provide NYSERDA funding for installing and operating Anaerobic Digester Gas (ADG)-to-Electricity Systems.
- Promote construction of ADs at landfills and WWTPs by proposing and implementing changes to SEQR regulations to streamline environmental review of these facilities.
- Create a partnership between DEC, NYSERDA, Empire State Development and the NYS Pollution Prevention Institute (P2I) to improve energy efficiency and reduce food waste of large generators by offering audits and capital for improvements



Capital For A Day Outputs Continued

- Provide funding for agricultural waste collection programs in Madison County and surrounding counties to increase recycling and provide cost savings for farmers and municipalities.
- Establish a P2I project to analyze the waste streams of large food scrap generators, identify opportunities for diversion and the potential financial impacts.



State Funding

- \$ 500,000 to P2I
- \$ 20+ million for ADs (NYSERDA)
- \$ 200,000 to Cornell for expanded compost use
- \$ 150,000 to Central New York for expanded farm recycling
- ESD funding for infrastructure?
- Focused recycling grants from DEC – new Part 360



Legislative Initiative

“Governor will work with the legislature in 2016 to pass a bill requiring large generators of food waste to donate edible food and compost or recycle what is not donated”.





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Comprehensive Revisions to 6NYCRR Part 360 Solid Waste Management Facilities Regulations

Timeline

- Draft regulations posted on DEC website on February 26
- State Register and ENB publication on March 16
- Public hearings in June (Long Island 6/2, Albany 6/6, Rochester 6/7)
- Public information and targeted stakeholder meetings (dates and locations to be determined)
- Public comment period ends July 15
- Final regulations by the end of 2016



Part 360 Revised Series Structure

- Part 360 General Requirements
- Part 361 Material Recovery Facilities
- Part 362 Combustion, Thermal Treatment, Transfer, and Collection Facilities
- Part 363 Landfills
- Part 364 Waste Transporters
- Part 365 Biohazard Waste Management Facilities
- Part 366 Local Solid Waste Management Planning
- Part 369 State Assistance Projects



Rulemaking Objectives

- Update technical standards to be reflective of current knowledge and practice and address issues that have emerged since the last comprehensive revision to the regulations in 1993
- Streamline the regulations by elimination of duplication and clarification of regulatory criteria
- Reduce regulatory requirements where possible without sacrificing environmental protections



Areas of Strong Public Interest

- Mulch processing facilities
- C&D debris management
- Radiation detectors
- BUD criteria for oil and gas brine road application

Mulch processing facilities

- New subpart 361-4 for wood debris/yard trimmings processing facilities that produce mulch or other beneficial wood products (previously exempt)
- Adds restrictions on pile size and storage time for fire, odor and dust controls
- Adds requirements for runoff controls to protect groundwater
- Facilities in suburban and urban areas that process large amounts of tree debris are likely to be affected
- May increase the cost for affected processors due to the need for additional land

Fixed Radiation Detectors

- To prevent disposal of radioactive waste, fixed radiation detectors will be required for following facilities that handle MSW:
 - landfills
 - combustion facilities
 - composting facilities
 - processing facilities
 - transfer facilities that send waste out of state
- Operating requirements added including daily background radiation reading, acceptance thresholds, weekly field checks, annual detector calibration, staff training, and documentation requirements
- Purchase cost \$5000-\$7000/unit
Maintenance cost including calibration \$2000-\$3000 annually



C&D Debris Management

- Expanded use of tracking forms for C&D debris transport
- Identifies acceptable uses for various C&D debris streams
- Lowers threshold of C&D debris disposal volume for registration requirement
- New provision for enclosure of mixed C&D debris processing facilities
- Requires permit rather than registration for C&D Debris Processing Facilities that receive 250 tons/day or greater of concrete, asphalt, rock, brick and soil (CARBS)



Beneficial Use Determinations (BUDs) for Oil and Gas Brine

- Specific provisions added for use of oil and gas brine for road application (HVHF brine is excluded)
- Includes specific application criteria and maximum pollutant limits
- Should result in a better understanding of the requirements by the regulated community and public

Thank You

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