



Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

CT's Commercial Organics Recycling Law

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CT DEEP Source Reduction & Recycling Program

A&WMA-NES Fall 2015 Conference

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Connecticut Department of Energy and Environmental Protection

Laying the Groundwork for Organics

- Strategies for handling organics
 - [Statewide Solid Waste Management Plan](#)
 - [Solid Waste Advisory Subcommittee on Organics](#)
 - Prioritize organics permit applications
- What is still in the trash?
 - [Statewide SW Composition & Characterization Study](#)
- Where are the food residual generators?
 - [Food Residuals Mapping Project](#)
- PA 11-217 as amended by PA 13-285 [CGS 22a-226e]
 - [Organics Recycling Law](#)



Why Focus on Organics?

Compostable Materials By Weight Overall Statewide Disposed

Source: CT Statewide Solid Waste Composition and
Characterization Study Final Report 2009 – Table 6

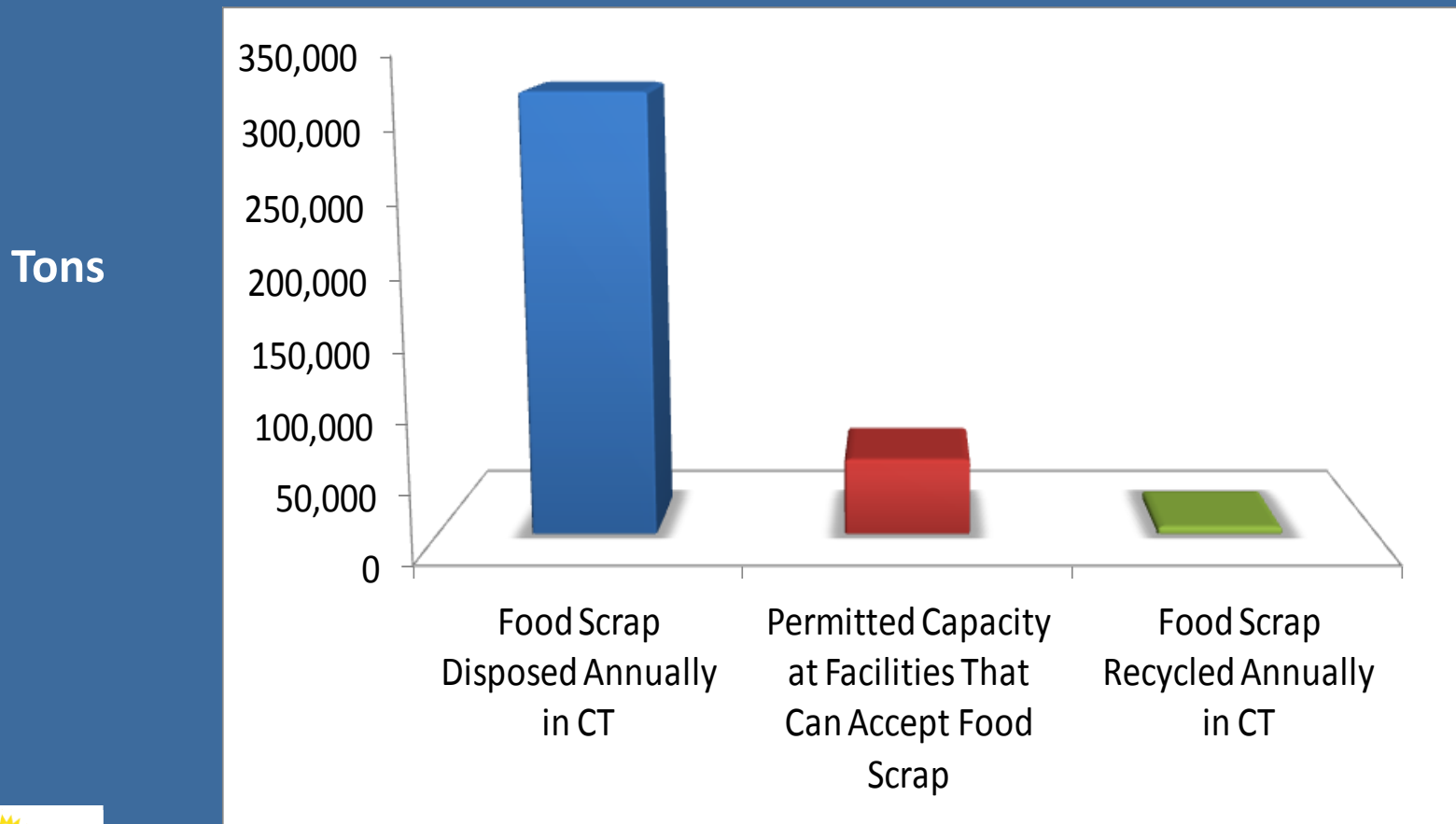
Material	Est. Percent	Est. Tons
Food Waste	13.5%	321,481
Compostable Paper	8.2%	195,185
Leaves & Grass	7.2%	172,408
Prunings & Trimmings	2.2%	51,550
Branches & Stumps	0.4%	10,149
Total	31.5%	750,773



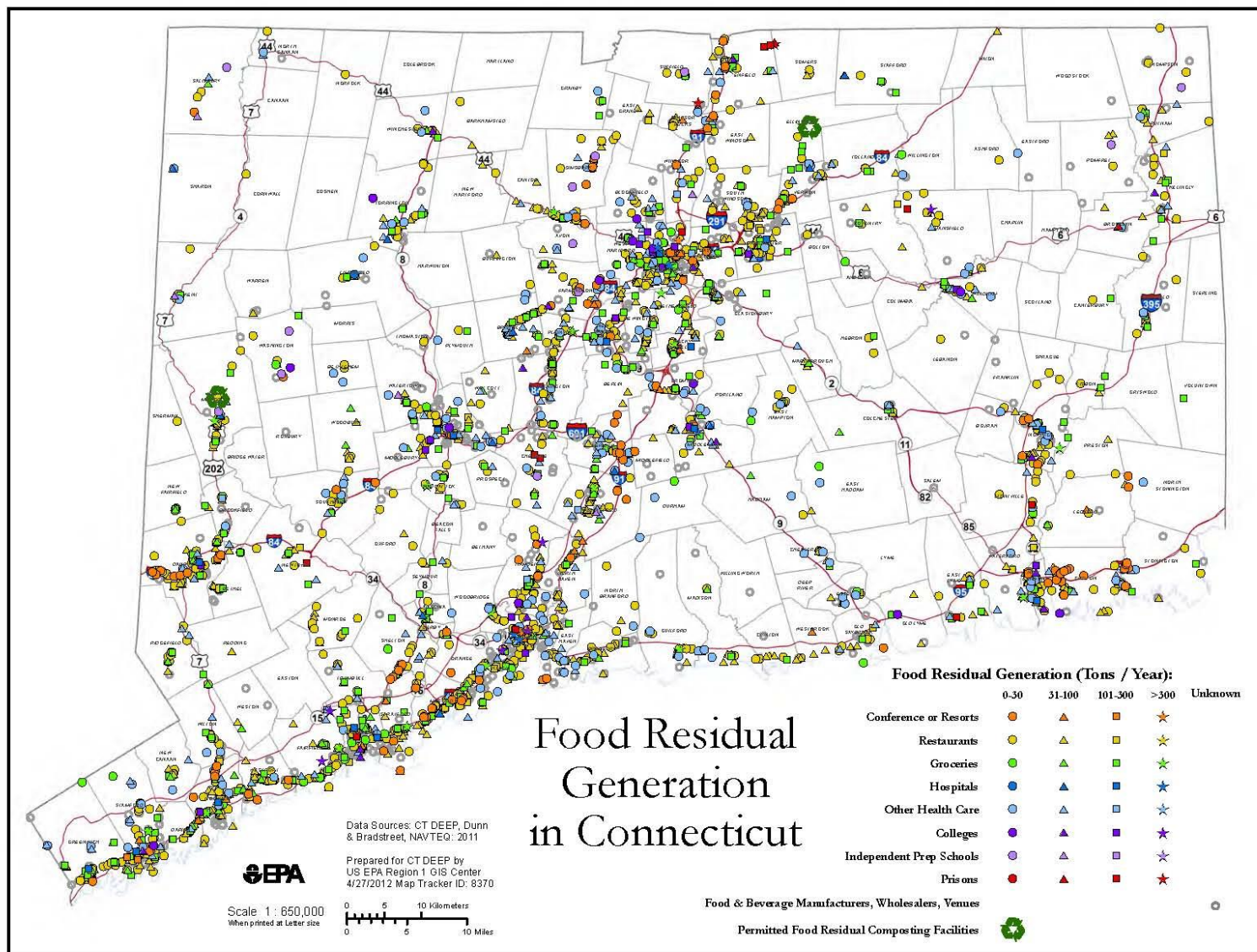
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Need to Fill Infrastructure Gap

Food scrap processing capacity is currently inadequate.



Food Residuals Mapping Project



Purpose of Organics Recycling Law

- Incentivize developers to locate in CT so that recycling options are more available
- Get a valuable resource out of the trash and into local commerce as products and clean energy
- Move food scrap up the solid waste management hierarchy to a higher value use
- Lower tipping fees for businesses
- Promote clean energy (Anaerobic Digestion)
- Encourage economic development



Path of Commercial Organics Recycling Law

- First submitted to legislature in 2010, but failed
- Tried again in 2011, and P.A. 11-217 passed
 - Support from CT Food Assoc., CRRRA, CT Clean Energy Fund
 - Landmark legislation - CT was first to pass statewide mandate
- Amended in 2013, Sec. 4 of P.A. 13-285 removed ambiguity (codified in CGS 22a-226e)
 - Set specific implementation start date (Jan 1, 2014)
 - Clarified that any authorized site can be used, not just ones within 20 mi.
 - Reduced SSOM generation threshold to half on Jan 1, 2020



Organics Recycling Law Summary

- Applies to food wholesalers, distributors, manufacturers, processors, supermarkets, resorts & conference centers that:
- Generate an average projected volume of 104 tons/yr of source separated organics, and are
- Within 20 miles of a SSOM processing facility.
- Must source separate and ensure recycling at any authorized facility that has available capacity and can accept food scrap.



Organics Recycling Law Summary (cont'd)

- Generation volume threshold reduces to **52 tons/yr in 2020**
- On-site composting counts as compliance
- Any permitted facility that receives SSOM must report to DEEP a summary of tipping fees charged.
- Smaller generators will benefit due to creation of more options to recycle SSOM



Definition of SSOM & Composting Facility

“Source-Separated Organic Material” means organic material, including, but not limited to, food scraps, food processing residue and soiled or unrecyclable paper that has been separated at the point or source of generation from nonorganic material." [CGS 22a-207\(29\)](#)

“Composting Facility” means land, appurtenances, structures or equipment where organic materials originating from another process or location that have been separated at the point or source of generation from nonorganic material are recovered using a process of accelerated biological decomposition of organic material under controlled aerobic or anaerobic conditions. [CGS 22a-207\(28\)](#)



Supporting Implementation

- Prioritizing permit applications for AD and other food scrap recycling facilities
- Getting the word out to generators
 - Presentations, Articles, Newsletters, Web pages, Case Studies
- Enforcement
 - Information letter to potential generators about law
 - Support to processing facilities who identify non-compliers
 - Identify deficiencies in food scrap recycling during other routine DEEP inspections and follow up with technical assistance.
 - Notice of non-compliance, notice of violation, administrative order, legal action as last resort if needed.

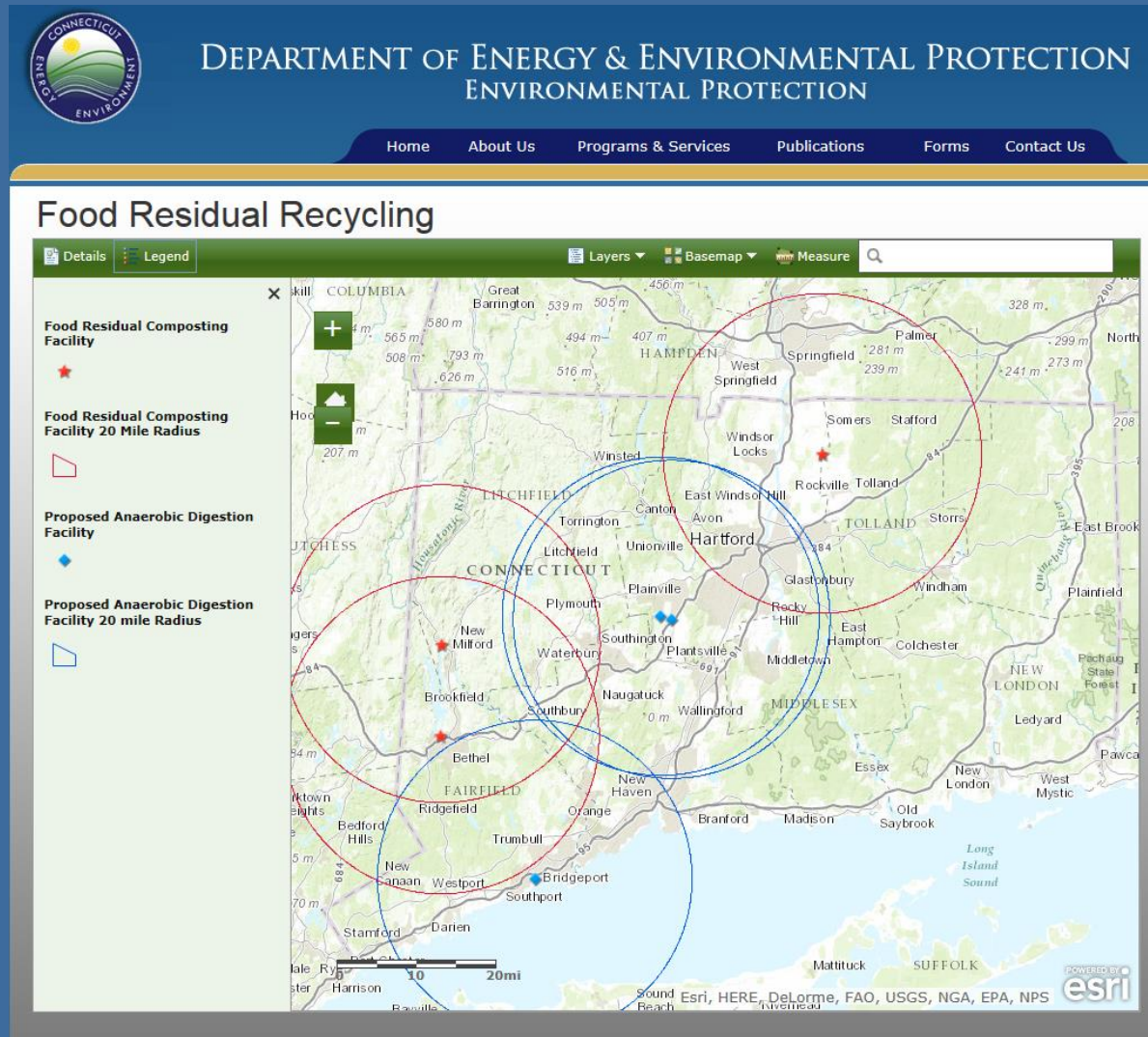


Progress in Infrastructure Development

- Three composting facilities currently permitted to take food scrap
- Four applications received by DEEP for Anaerobic Digestion (AD) of food residuals, one SW permit issued
- Another AD proponent has been in discussions with CT Green bank, but has not yet submitted permit application
- [Interactive GIS Map](#) of large scale food residual generators and processing facilities
- Permitted composting and pending AD [facilities list](#)



Interactive GIS Map



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Proposed AD Projects in CT (as of Oct 2015)

Facility (town)	Project Details	Notes
Bridgeport Bioenergy (Bridgeport)	Wet technology 730 TPD (2 lines, 1 for biosolids) 1.6 MW	First project in state to receive SW permit from DEEP
Quantum Biopower (Southington)	Wet technology 144 TPD 1.1 MW	Permit application currently being reviewed at DEEP
Turning Earth (Southington)	Dry technology 326 TPD 1.6 MW	Permit application currently being reviewed at DEEP
Citywide Energy (North Haven)	Wet technology 400 TPD 2.5 MW and/or nat gas generation	Permit application recently submitted to DEEP
New Meadow Power and Earth (Milford)	Wet technology 200-255 TPD 3 MW	Proponents working with CT Green Bank, have not yet submitted permit application to DEEP



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Progress in Other Organics Recycling Efforts

- CT Green Bank [RFP for AD](#)
- Town of Bridgewater doing a residential curbside collection [pilot](#) - hauled to commercial composter
- Expanded [organics web pages](#), including pages on CT's [Commercial Organics Recycling Law](#) and food waste [reduction & recovery](#)
- DEEP Leading by example - joined [US Food Waste Challenge](#) (on-site [office composting](#))



Anaerobic Digester Pilot Program



- **Public Act 11-80 Created Legislation for 3-Year AD Pilot Program (July 1, 2011)**
- **Program Funding - \$6M (\$2M/Yr.)**
 - Programs launched by Connecticut Green Bank (formerly CEFIA) in March 2012
 - Original program closed Feb. 27, 2015 - recent legislation passed July 1, 2016 extends program 2 additional years
 - Legislation allows for up to 5 total projects, up to 3 MW in generation capacity
 - Projects eligible for up to \$450/kW (grant, loan or PPA)
 - Projects requesting loans from the Green Bank have a higher probability of being selected
- **Pilot Program Update**
 - To date: \$14M in public loans have been approved from the Green Bank for 4 projects, totaling 7.2 MW of new generation capacity to be installed
 - \$74M in total project capital cost – attracted \$60M in private capital to state
 - Program supports states new recycling legislation for recycling of organic materials



Next Steps

- Developing more detailed outreach & technical assistance plan, including:
 - field visits to potential generators
 - more focus on potential generators within 20 miles of an expected composting facility
- Discussing how to incentivize more small- and mid-scale composting
 - less regulation?
 - coordination with CT Dept of Agriculture
- Establish grant program to incentivize diversion initiatives



Contact

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www.ct.gov/deep/composting

www.ct.gov/deep/recycle



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