

CMMS

PRIORITIZING WASTE REDUCTION & INFRASTRUCTURE DEVELOPMENT

CHRIS NELSON
JENNIFER WEYMOUTH
DEPARTMENT OF ENERGY AND
ENVIRONMENTAL PROTECTION
09.27.16





THE PATH TO CURRENT STATE

2006 Solid Waste Management Plan, plus recommendations from:

- 2010 LPRI report [Municipal Solid Waste Management Services in Connecticut](#)
- [Governor's Modernizing Recycling Working Group](#)
- [Resources Recovery Task Force](#)
- [Public Act 14-94](#)
- Public input opportunities as CMMS was being compiled, including [Hearing Officer's Report](#)



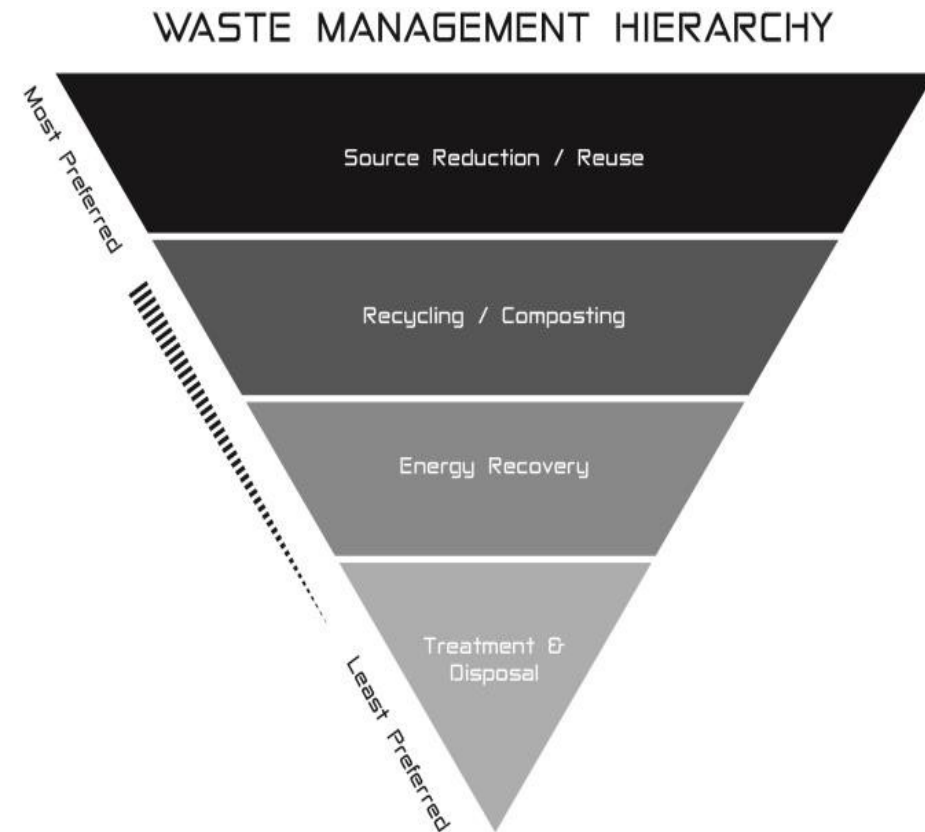
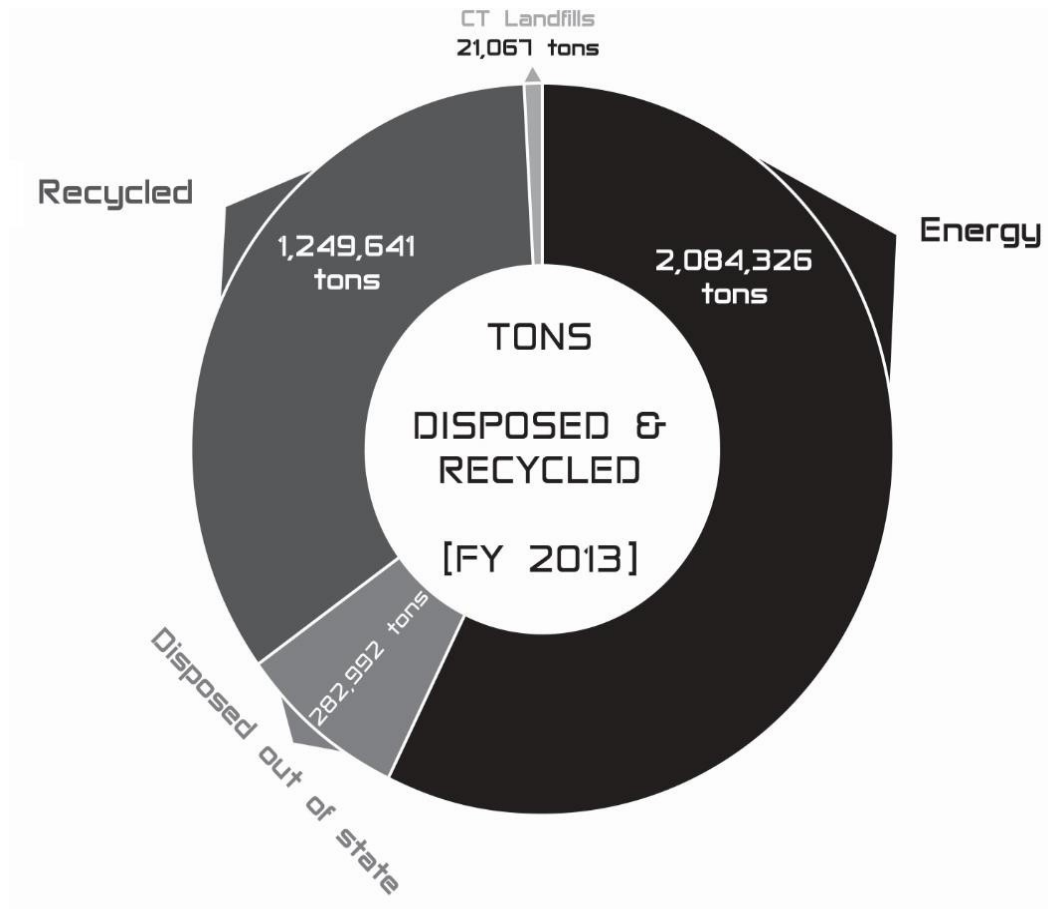
SHARED RESPONSIBILITY

To make progress toward the 60% diversion goal, CMMS calls for contributions from across the materials management spectrum, including from:

- **Product manufacturers**
- **Consumers/residents**
- **Haulers/collectors**
- **Facilities/processors**
- **State and local governments**



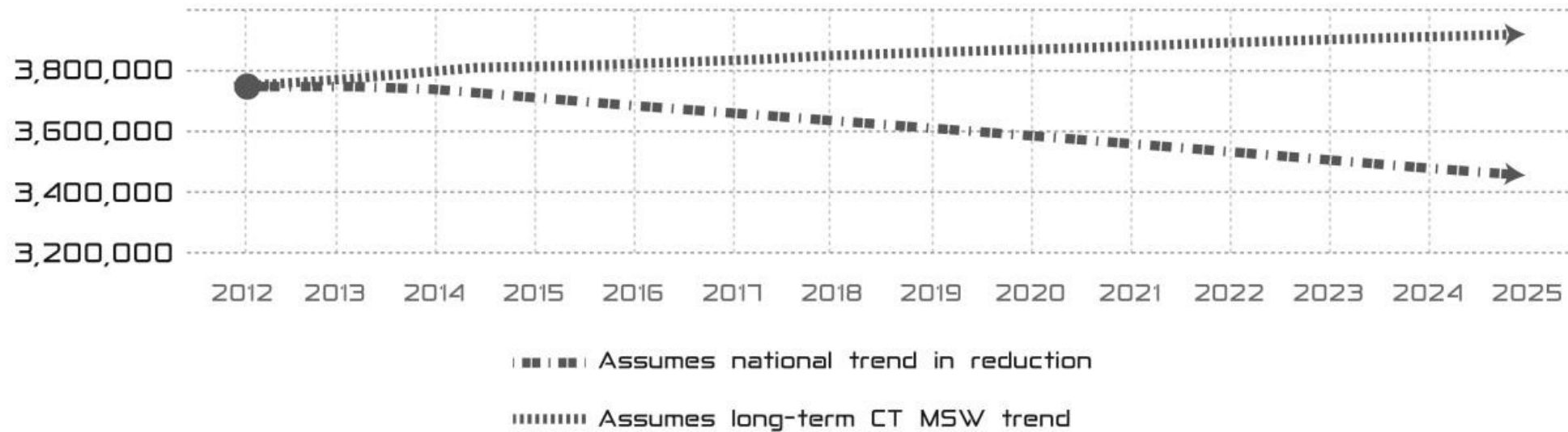
MSW DESTINATIONS AND HIERARCHY





MSW FORECASTS

TWO SCENARIOS FOR MSW GENERATION [TONS PER YEAR]





INFRASTRUCTURE: GOOD NEWS & BAD NEWS

Good News

- Single-Stream Recyclables (BCP) – Sufficient MRF infrastructure and widespread curbside collection
- Organics – Promising progress on AD development, home composting

Bad News

- MSW – Current capacity shortfall, forecasted to grow
- Bulky Waste / C&D – Overly reliant on out-of-state landfills



CT HAS SHORTFALL IN DISPOSAL CAPACITY

2.3 Million TPY MSW to Dispose

-2 Million TPY WtE Capacity

300,000 tons MSW must go out-of-state



FURTHER REDUCTION IN WTE CAPACITY BY 2024



State's largest WtE Facility in Hartford to downsize or close – Loss of 200,000 to 750,000 TPY.
Total capacity gap by 2024 – Conservatively 500,000 TPY



DIMINISHED CAPACITY DRIVES COSTS

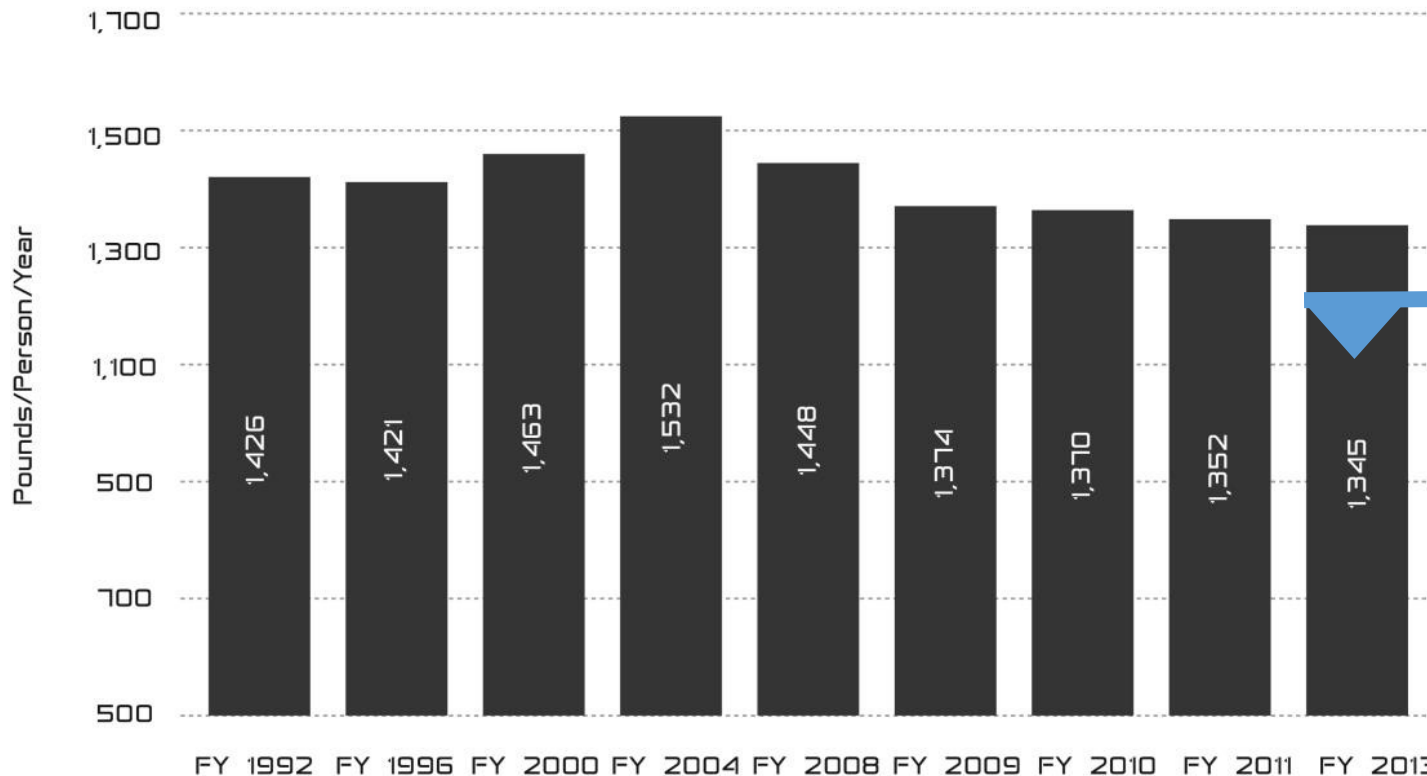
By 2024, over 500,000 tons will need to be sent out-of-state. Landfilling, including costs of transportation, ranges from \$80-\$100/ton, compared with \$60 for WtE. Therefore, assuming a conservative average cost of \$80/ton for landfilling, this adds \$10 million to the overall cost of disposal.

When capacity is insufficient, state WtE facilities charge more for disposal. We have witnessed WtE costs spike from \$60 to \$100 on a short term basis as the result of facility outages. Assuming a prolonged shortfall in capacity will result in a \$10/ton average increase in the cost of disposal at RRFs adds another \$15 million to the total cost, for a total of \$25 million per year in higher costs for disposal.



WASTE REDUCTION IS THE PREFERRED SOLUTION

CT MSW REPORTED DISPOSED [POUNDS/PERSON/YEAR]



CT must either:

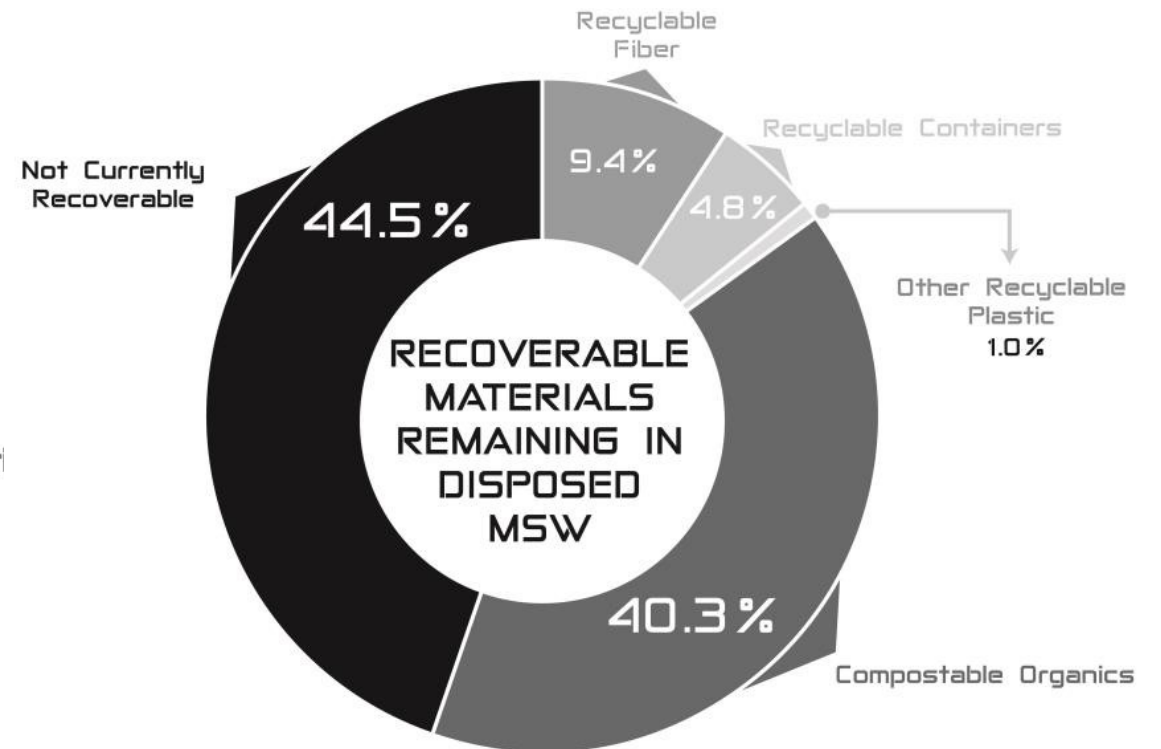
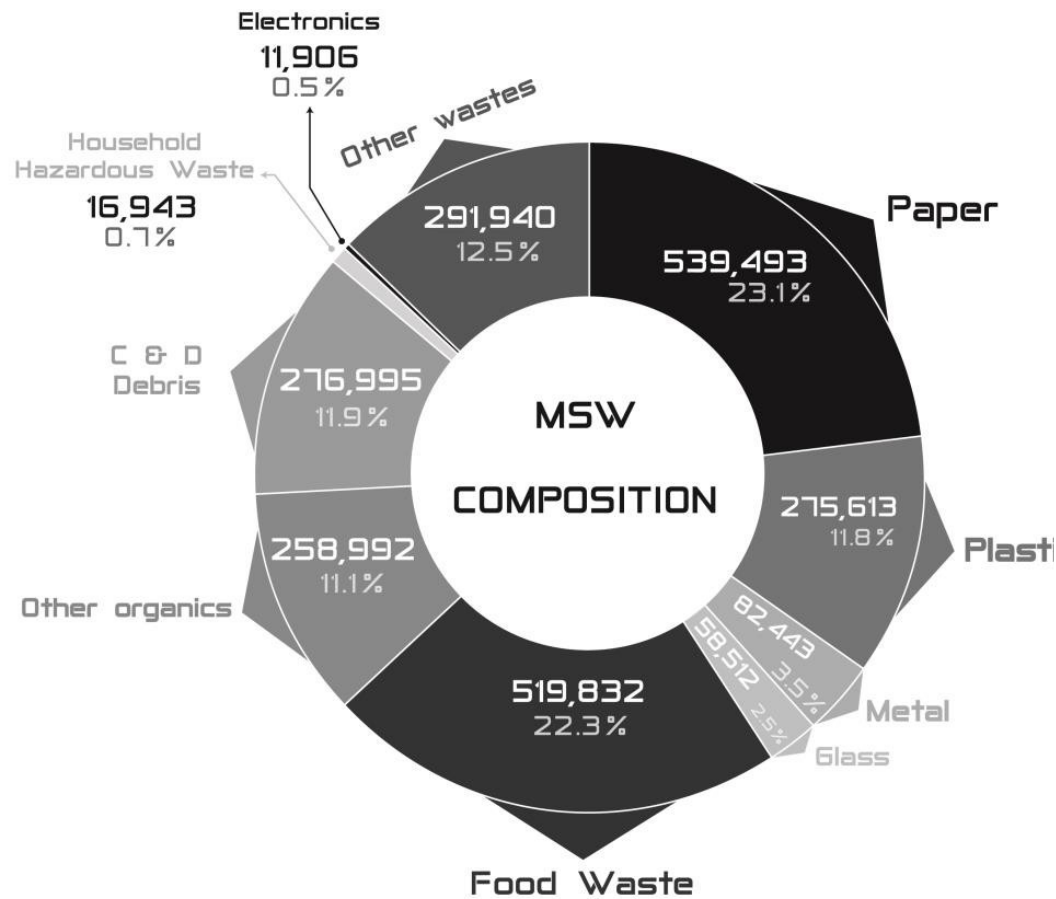
Build at least 500,000 TPY of new disposal capacity (est. \$500m investment) by 2024

AND/OR...

Cut disposal by a minimum of 10% and increase recycling rate from 35% to 45%

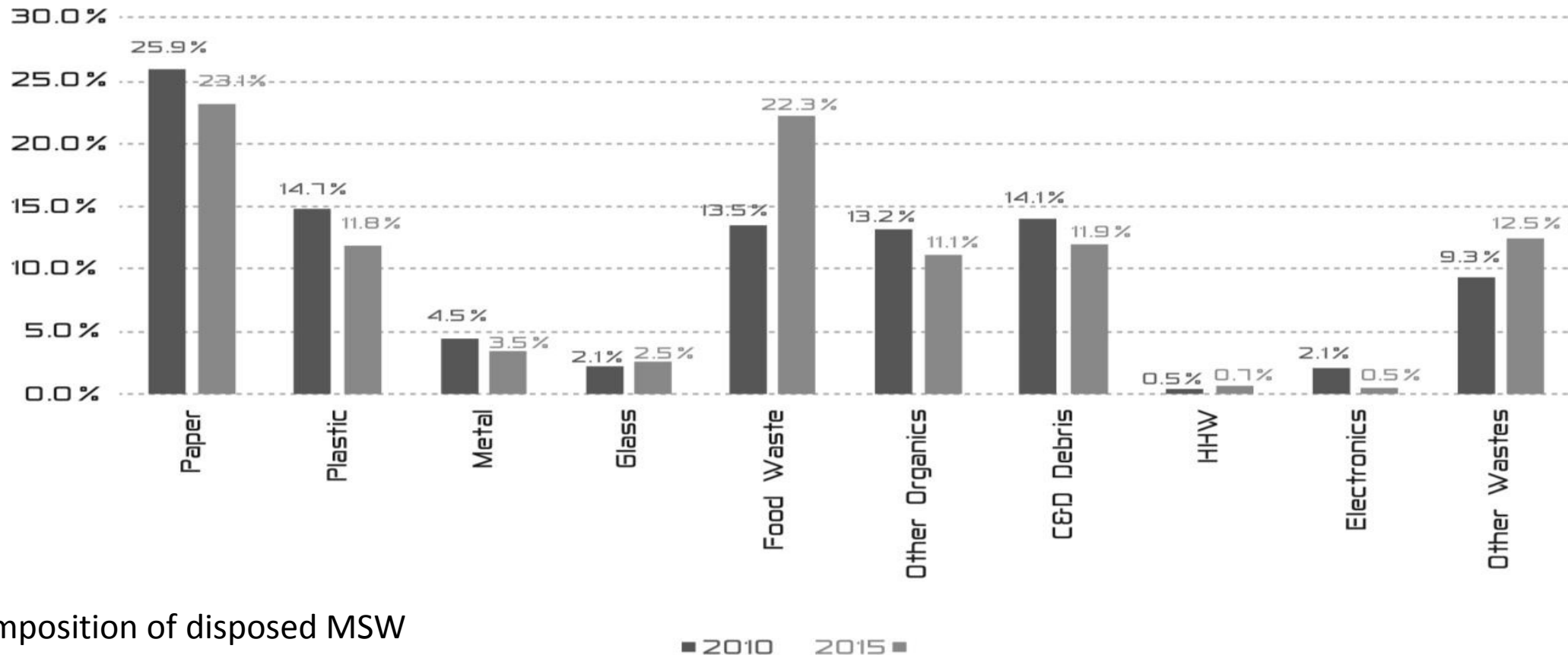


INCREASING RECYCLING





INCREASING RECYCLING: PROGRESS!



Composition of disposed MSW
2010 vs 2015



THREE GOALS OF THE CMMS

How will we meet the goal of 60 percent diversion by 2024?

- Connecticut must improve the performance of municipal recycling systems, **reduce waste**, and increase compliance with mandatory recycling provisions.
- Connecticut must ensure the investment and regulatory climate to promote development and improvement of recycling, conversion, and disposal infrastructure.
- Corporations that design, produce, and market products must share responsibility for stewarding those materials in an environmentally sustainable manner.



INFRASTRUCTURE

How will we meet the goal of 60 percent diversion by 2024?

- Connecticut must ensure the investment and regulatory climate to promote development and improvement of recycling, conversion, and disposal infrastructure.
 - Streamlining permitting, Determination Of Need process
 - Explore mixed waste recovery systems
 - Provide assistance in siting
 - Develop new state office / agency for material management infrastructure development (or via MIRA)



PRODUCT STEWARDSHIP

How will we meet the goal of 60 percent diversion by 2024?

- Corporations that design, produce, and market products must share responsibility for stewarding those materials in an environmentally sustainable manner.
 - Develop Extender Producer Responsibility (EPR) “Framework” via legislation
 - Explore regional approaches
 - Revise priority list of products
 - Explore EPR for packaging / curbside recyclables



MUNICIPAL RECYCLING SYSTEMS

How will Connecticut meet the goal of 60 percent diversion by 2024?

Connecticut must improve the performance of municipal recycling systems, **reduce waste**, and increase compliance with mandatory recycling provisions.

All municipalities and the State will be accountable.



WORKING WITH MUNICIPALITIES TO ACHIEVE 60% BY 2024

By December 2017, municipalities will:

- Ensure that all residents, institutions, and businesses have access to recycling for all designated materials ([CGS Sec. 22a-241j](#))
- Designate a municipal or regional recycling agent ([CGS Sec. 22a-220\(i\)](#))
- Report on their recycling programs to DEEP ([CGS Sec. 22a-220\(h\)](#))
- Register private collectors that operate within the municipality ([CGS Sec. 22a-22a\(d\)\(1\)](#))
- Provide collection of recyclables alongside trash in public spaces ([CGS Sec. 22a-241k](#))



WORKING WITH MUNICIPALITIES TO ACHIEVE 60% BY 2024

By December 2018, municipalities will:

- Develop a plan or program for residential and commercial recycling outreach and enforcement of local ordinances and update ordinances ([CGS Sec. 22a-220\(f\)](#), [CGS Sec 22a-241b](#) and [RCSA 22a-241b](#))
- Implement an initiative to reduce disposed waste by 10% from 2014 baseline year, this may include PAYT (consistent with goal established in [CGS Sec. 22a-220\(f\)](#) and CMMS)
- Ensure sufficient opportunity to recycle at the rate materials are generated ([CGS Sec. 22a-220\(f\)](#))



WORKING WITH MUNICIPALITIES TO ACHIEVE 60% BY 2024

As continued support to municipalities, the State will:

- Increase education and outreach to residents and businesses through the RecycleCT Foundation
- Increase enforcement activities to support municipalities and improve multi-tenant housing and hauler recycling compliance
- Provide technical assistance and grants for waste reduction initiatives



ADDITIONAL CMMS OBJECTIVES

Objective 1.3: Improve the quality and availability of data and metrics used to evaluate performance of recycling programs:

- Ensure accurate reporting by solid waste facilities of town of origin of waste (CGS Sec. 22a-220(b))
- Collect data on residentially generated and commercially generated materials
- Enhanced reporting by collectors to include information useful to municipalities in estimating or verifying total tonnages of disposed and recycled materials

State will – streamline reporting, publish annual materials management scorecard, increase data availability



ADDITIONAL CMMS OBJECTIVES

Objective 1.4: Accelerate progress on organics reduction and diversion for composting, recycling, and energy recovery.

Objective 1.5: Promote source separation and best management practices of recyclable construction & demolition (C&D) and oversized MSW materials.

Objective 1.6: Improve collection and processing systems for “single stream” recyclables.



Questions on the CMMS?

Next up – Kevin Barrett to provide overview of WEED’s Recycling Enforcement Initiative (REI)...