

zero impact  
reuse  
resources  
reduce  
conserve  
waste  
natural  
recycle

Overview:

# Connecticut Solid Waste Management Plan



# State Solid Waste Management Plan Goals

Significantly reduce amount of solid waste requiring disposal through increased source reduction, reuse, recycling, composting

Manage the solid waste that requires disposal in an efficient, equitable and environmentally protective manner, consistent with the statutory solid waste hierarchy.

Adopt stable, long-term funding mechanisms

- that provide sufficient revenue for state, regional, and local programs
- while providing incentives for increased waste reduction and diversion.

# Plan Objectives

- Source Reduction
- Recycling and Composting
- Solid Waste Disposal
- Special Waste
- Education and Outreach
- Program Planning, Evaluation, and Measurement
- Permitting and Enforcement
- Funding



# Vision

**Transform system to one based on resource management**

Product Stewardship

Responsibility for the production, use and end-of-life management and materials in the state

Shift to recognizing the value of raw materials (i.e., not “waste”)

Systems approach, aim to waste nothing (zero waste principles)



Waste we currently reuse, recycle, and compost



Waste we will recover through improved sustainable materials management



# Target for Reducing CT MSW Generation & Disposal

- Reduce MSW per person - from 0.8 T/p/y to 0.6 T/p/y
  - *Would result in no need for increased disposal capacity*
  - **We can do even better**
  - We can cut in half the amount disposed



# MSW Recycling Strategies Examples



- **Programs & Infrastructure**
  - *source separated organics*

- **Additional Mandatory Recyclables**
  - *plastic bottles 1 & 2; magazines*

- **Bottle Bill Expansion**
  - *Water bottles*

- **Increase Deposit**
  - *10 cents*

- **Infrastructure for Small Businesses and Multi-Family Housing Recycling**

# Example Strategies for MSW Recycling/Composting (cont'd)

- Designate a state recycling coordinator
- Identify funding for municipal, regional, state, programs
- Increase recycling enforcement
- Create incentives for increased diversion from disposal – including unit-based pricing [pay-as-you-go/throw PAYT]



# Example Strategies for Disposal

- Minimize need for new disposal capacity through increased diversion from disposal
- Process C&D waste to maximize recovery of reusable and recyclable materials
- Monitor new technology opportunities
- Enhance local public participation in permit process for new capacity

# Resource Recovery Facility (RRF) Ash Residue

- The six MSW RRFs in the State generate approximately 551,000 tons per year of ash residue (based on amount generated FY2000-FY2004).
- One landfill in the State is permitted to accept and dispose of ash residue.
  - The Wheelabrator ash landfill (privately owned) in Putnam is estimated to approach capacity in the next 10-15 years (based on a number of assumptions detailed in the plan)

# Managing C&D Waste/Oversized MSW

- Revise categories and definitions of solid waste
- Provide incentives for decreasing the amount of C&D waste/oversized MSW disposed
  - including the adoption of building and demolition techniques that produce less waste
- Promote markets and recycling for C&D waste
  - including separation at site of generation
- Promote C&D VRFs that dispose less and are more effective at recycling and recovering waste

# Selected Strategies for Special Wastes

*work in progress*

- ✓ Enact legislation that requires recycling of electronic wastes based on a producer responsibility model.
- Increase the recycling, composting and beneficial use of land clearing debris
- Develop appropriate beneficial use programs for contaminated soils and other special wastes.

# Selected Strategies for Program Planning, Evaluation & Measurement

- ✓ Reduce municipal and solid waste facility reporting burden, while still collecting critical solid waste data
- ✓ Establish a Standing Solid Waste Advisory Committee
  - Update State Solid Waste Plan more frequently
  - Update solid waste statutes and regulations
- ✓ Provide a mechanism for municipalities and regions to share recycling and solid waste information.
- ✓ Conduct a waste disposal characterization study

# Permitting and Enforcement Strategies

*work in progress*

- High priority permitting
  - Recycling, Composting & Beneficial Use
- Develop model permits, fact sheets, outreach
- Establish streamlined method of regulating waste haulers
- Compliance assistance and outreach
- Targeted enforcement
- Encourage enforcement by municipalities

# Potential Funding Sources Identified in the Plan



- Capture some or all of the unclaimed bottle deposits
- Expand the Solid Waste Assessment to all solid waste, **including all MSW, C&D debris, and oversized MSW, that is not recycled**
- Increase the Solid Waste Assessment beyond the present \$1.50 per ton; bring in line with other states
- Direct enforcement penalties to a special account for distribution to municipalities and regional authorities aimed at recycling; and
- Bond funds for infrastructure to support demonstration projects and/or development of publicly controlled recycling facilities.

# Public vs Private

## Control of In-state Disposal Capacity

- Bonds that financed the construction of the RRFs will be paid off over the next 10-15 years and contracts for disposal at the RRFs will expire over that same time.
  - This could result in a major shift in control of the majority of the MSW disposal capacity in the State from public to private entities.



The CRRA Hartford ash landfill closed in October 2008 – now the only in-state disposal capacity for RRF ash residue is privately held.

# Update “Designated” Recyclables

## Current Mandatory recyclables

- Glass & Metal Food and Beverage Containers
- Corrugated Cardboard
- Newspaper
- Scrap Metal
- Ni-Cd Rechargeable Batteries  
(from consumer products)
- Waste Oil
- Storage Batteries (from vehicles)
- Leaves (must be composted)
- Grass Clippings (banned from disposal)
- Covered electronic devices (banned from disposal *Jan 2011*)



## Regulations updated effective July 1, 2012

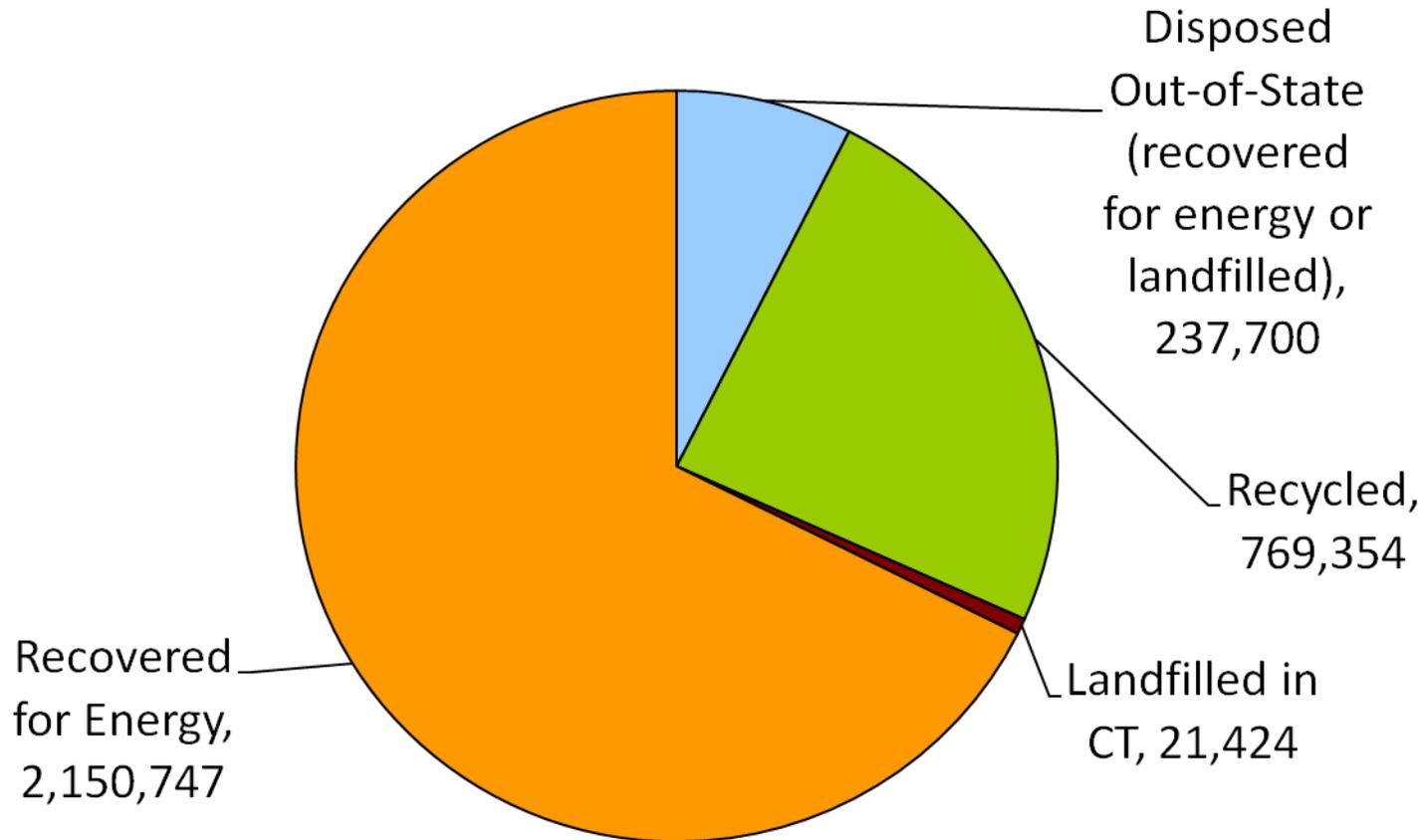
- Plastic Containers  
(PET #1 and HDPE #2)
- Boxboard
- Magazines
- White & Colored Office Paper (*for residents*)

# Where Does Our Trash Go?

92% Recycled or Recovered for Energy,

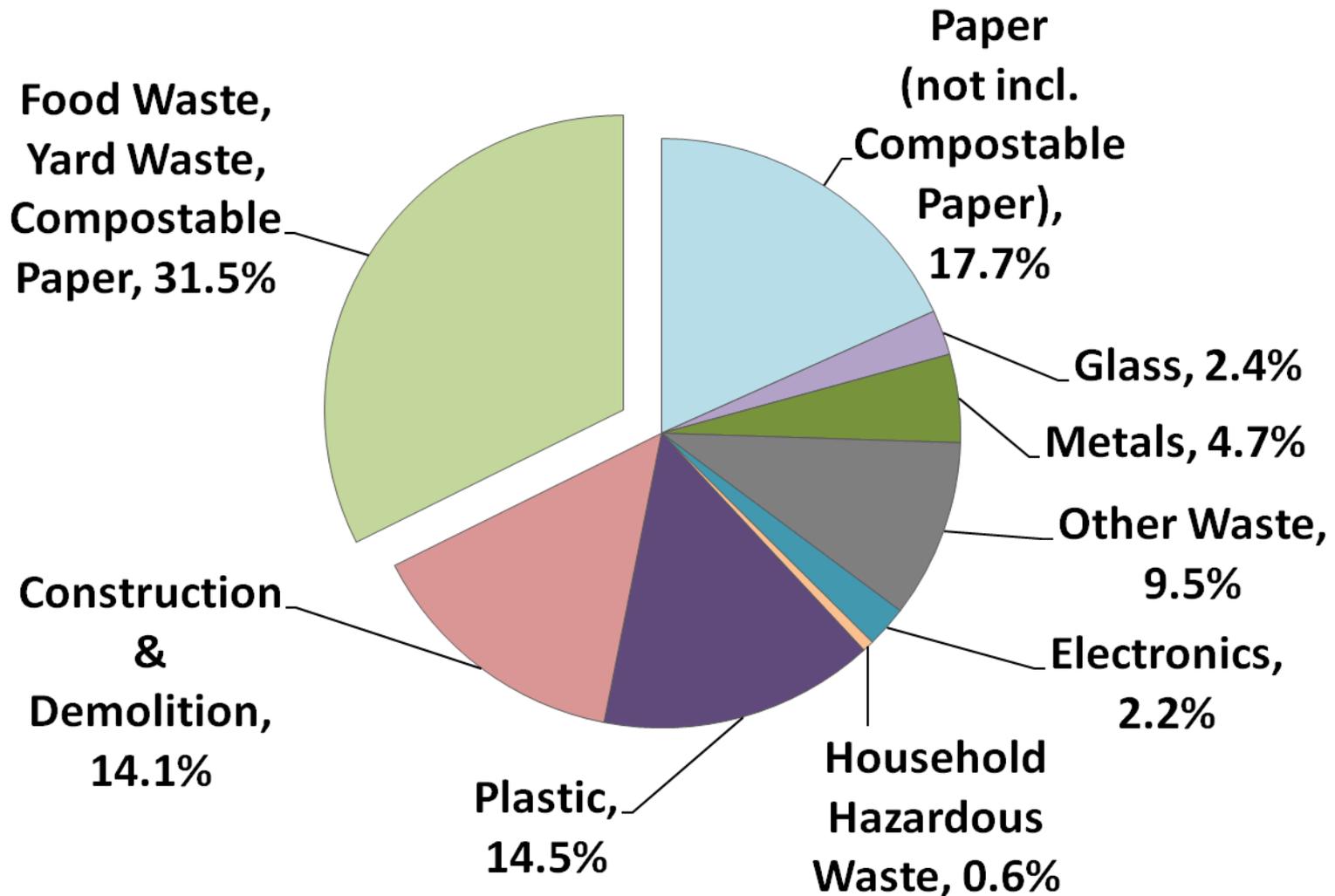
<8% Landfilled

Tons CT MSW Reported Disposed & Recycled (FY2010)



# What's Still in the Trash?

CT Statewide Overall MSW Disposal Composition (2009)



# CT's Solid Waste Management Plan: Sustainable Materials Management

Apply **Product stewardship** principles and life cycle analysis

(example laws and regulations: E-waste recycling, paint)

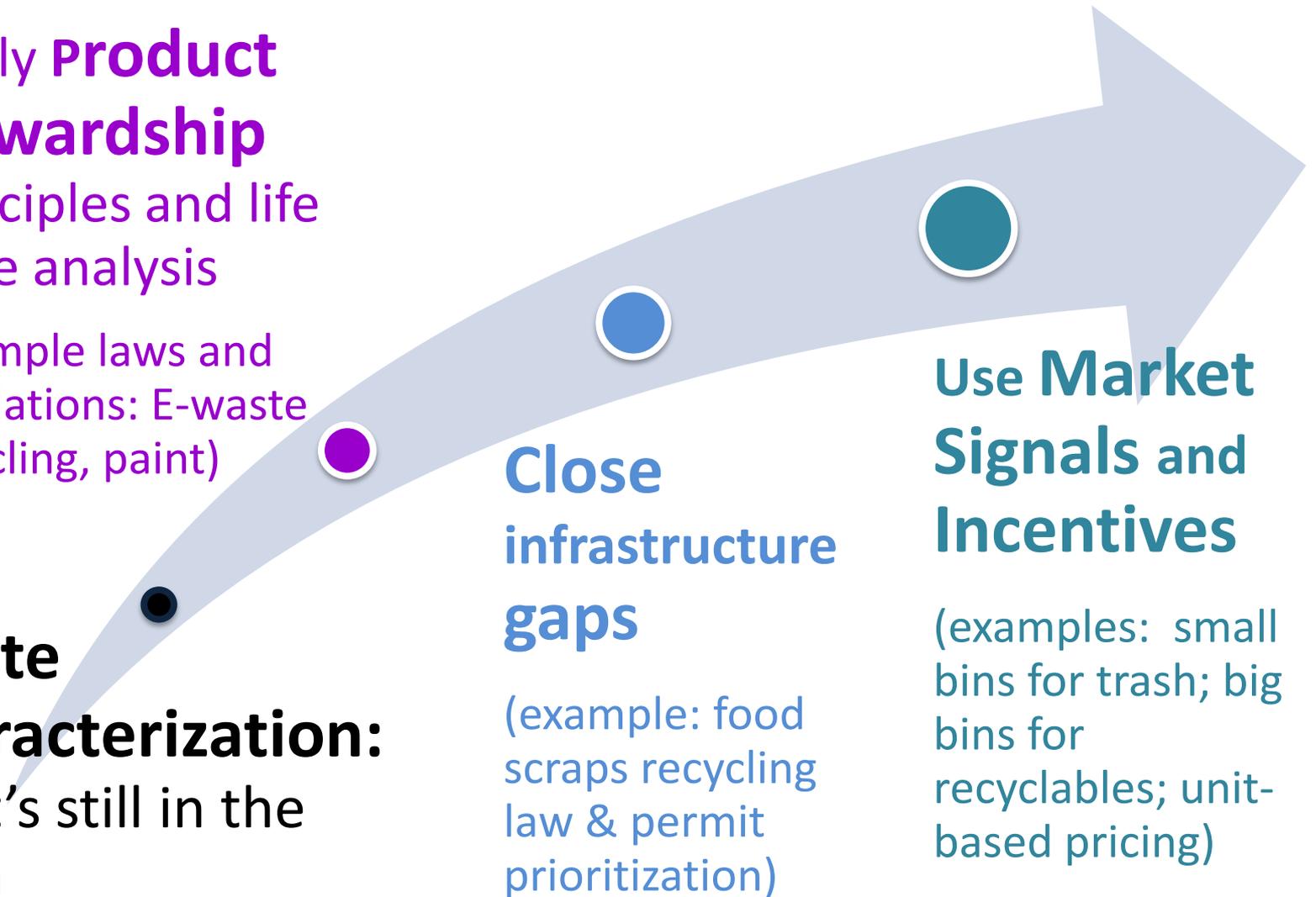
**Waste Characterization:**  
what's still in the trash

**Close infrastructure gaps**

(example: food scraps recycling law & permit prioritization)

**Use Market Signals and Incentives**

(examples: small bins for trash; big bins for recyclables; unit-based pricing)



# Sustainable Materials Management implementation examples

- Product Stewardship (e-waste, paint, (mattresses))
- Close infrastructure gaps (e.g., PA 11-217)
- Waste-Based Business Initiative: *Recycling Means Business*
- Ensure financial signals to Save Money And Reduce Trash (SMART Unit-Based Pricing)
- Buy-Recycled (state contracts, specifications)
- Equitable collection of recyclables (e.g., PA 10-87)
- CT Material Trader (materials exchange)

# Going forward

1. Modernize policies to better recover the value of materials
2. Ensure we manage non-recycled waste sustainably
3. Establish stable, cost effective funding mechanisms

# Where's the Data?

- [State-wide Waste Composition and Characterization Study](#)
- [Municipal Solid Waste Management Services in CT \(LPRI Study, 2010\)](#)
- [Solid Waste and Recycling Data](#)  
How Much Waste Do We Dispose and Recycle? Where Does It All Go?
- CT Solid Waste Management Plan  
[www.ct.gov/deep/swmp](http://www.ct.gov/deep/swmp)