

Better Economics, Better Environment

Report of the Modernizing Recycling Working Group

Presentation to the Solid Waste Management Advisory Committee
January 22, 2013

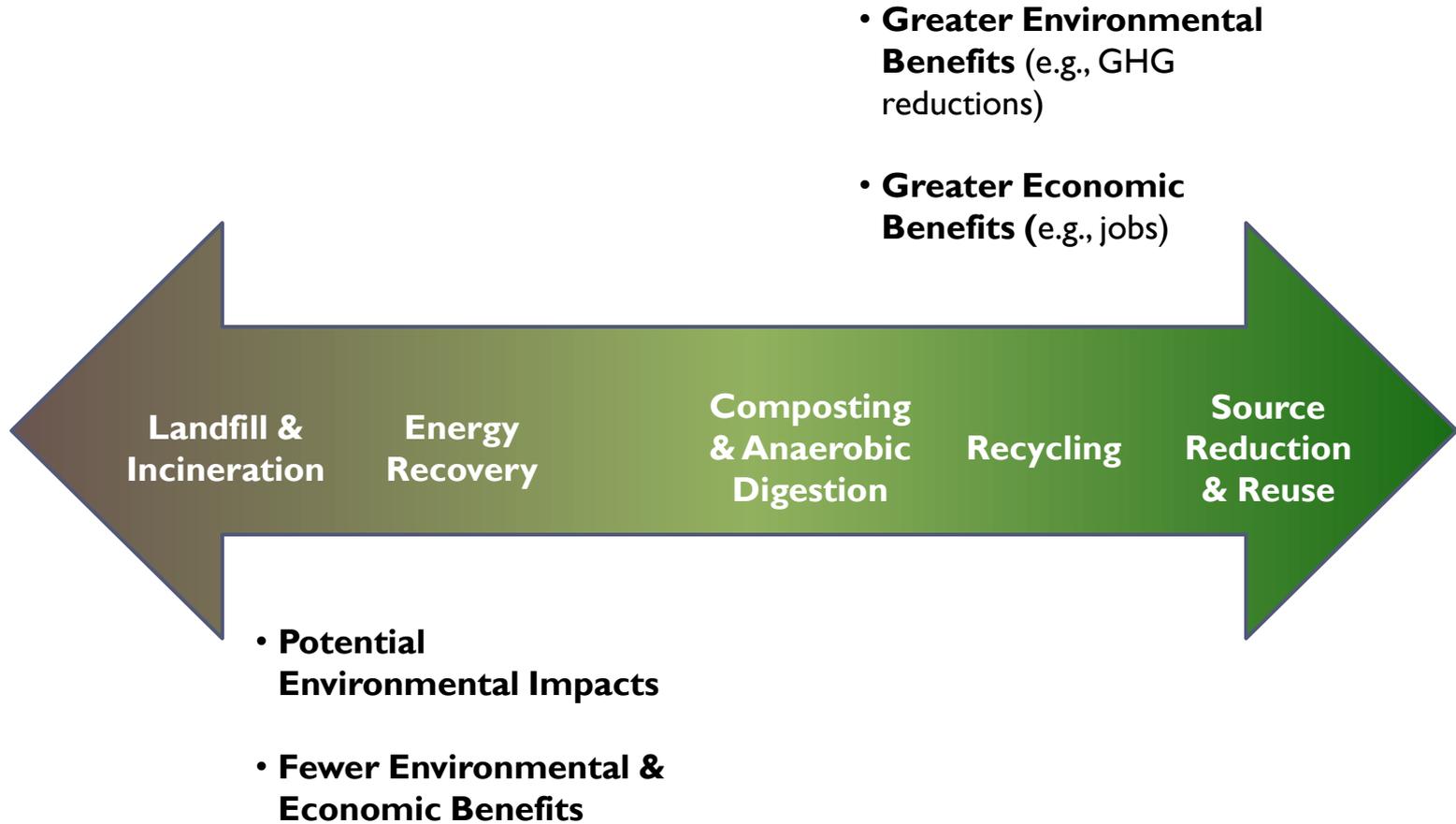
Governor's Working Group objectives

1. Modernize the state's solid waste and materials management policies to recover more value from discards and step up our efforts to reduce, reuse, and recycle.
2. Ensure we manage non-recycled waste sustainably to protect the environment, achieve economic sustainability, and control energy costs. Currently 92% of Connecticut's solid waste is either recycled or recovered for energy value, though greater energy efficiencies and cost savings can be achieved through increased source reduction and recycling.
3. Establish stable, cost effective funding mechanisms to provide sustainable materials management that encourages collaboration between municipalities, regional authorities, state agencies, and public/private partnerships.

CT supports a sustainable materials management approach

1. Promote an environmentally beneficial infrastructure that balances the need for both stability and responsiveness under market conditions
2. Foster economic development and job creation
3. Reduce economic, operational, and administrative burdens on municipalities
4. Redefine the role of the Connecticut Resources Recovery Authority and the role and value of multiple Regional Solid Waste Authorities

With increased source reduction, reuse, and recycling comes greater environmental and economic benefits

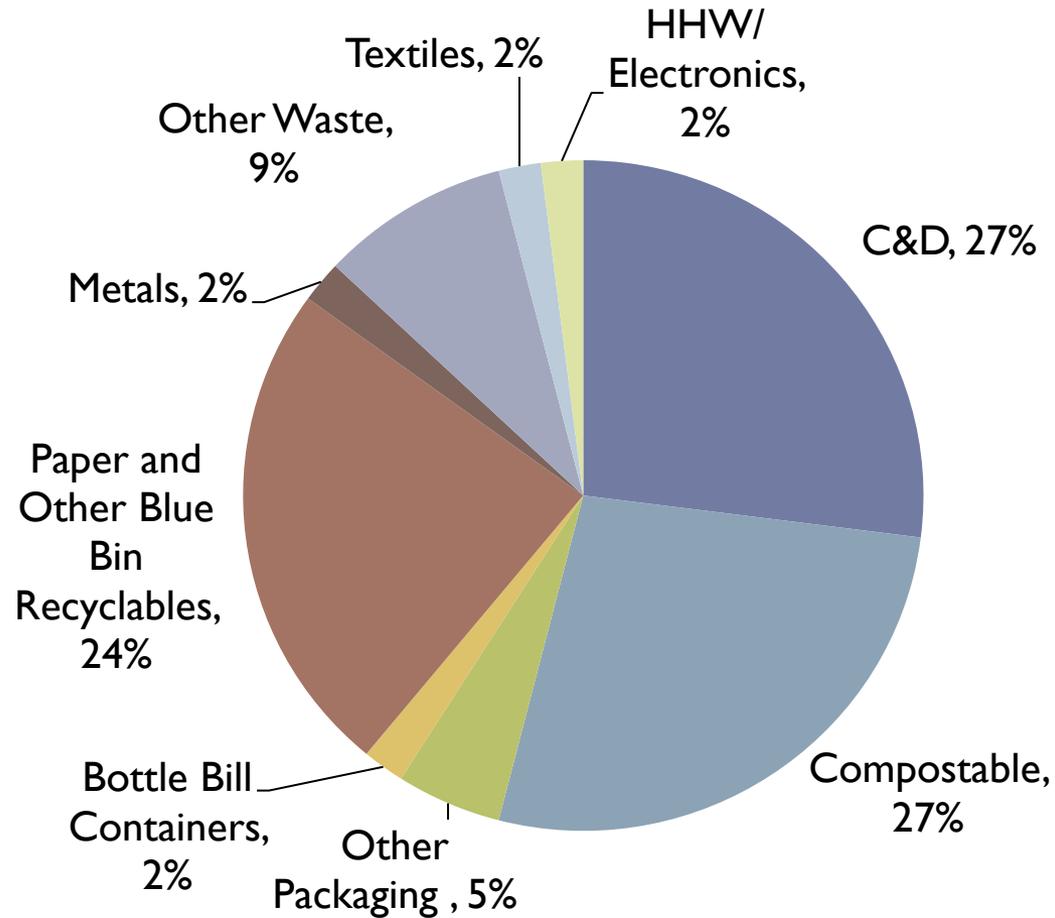


Sustainable materials management: recycling reduces GHG emissions



By increasing the amount of the material recycled or reused, fewer resources are used and less material is sent to landfills (or incinerated). This results in fewer GHG emissions.

Immediate opportunities for increased materials recovery in CT

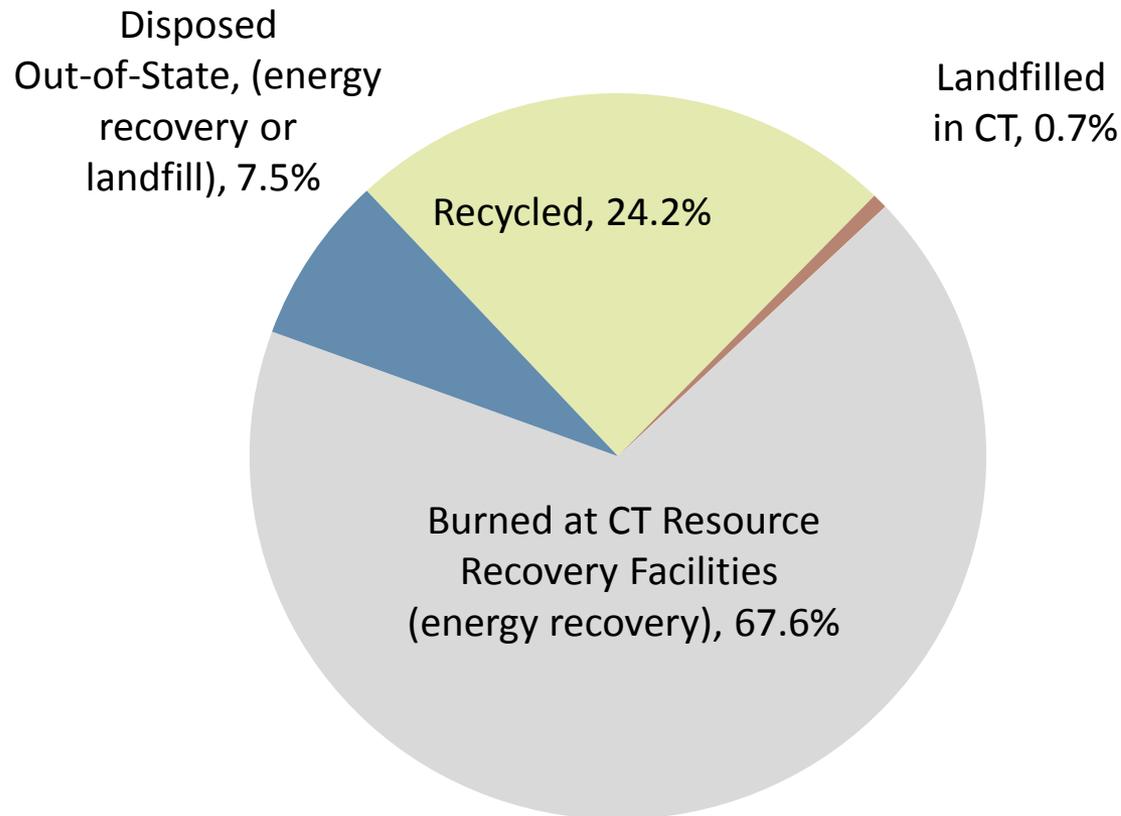


DSM Environmental Services Inc., 2012

Short-term actionable items

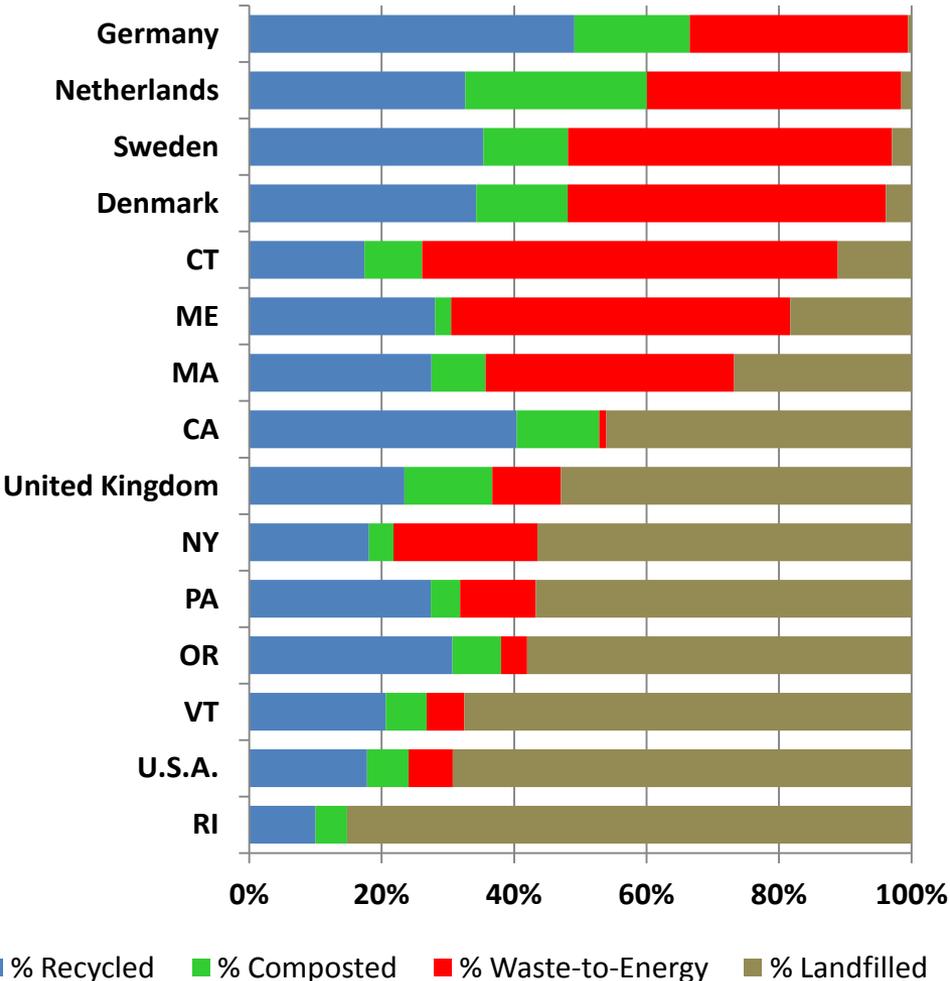
- ▶ Hold “Recycling Means Business Day” at the Legislature to highlight the economic impact of the reuse and recycling industries.
- ▶ Support product stewardship mattress recycling legislation.
- ▶ DEEP, in conjunction with DECD and CT Innovations, form a recycling market development council.
- ▶ Issue directive to state agencies to “buy better,” building on existing preferable procurement practices to stimulate market demand for recycled-content, reusable and recyclable products.
- ▶ Shift to web-based data system.

CT municipal solid waste reported disposed and recycled (tons)



CT DEEP, FY2010

Currently a leader, CT can still increase recycling and composting

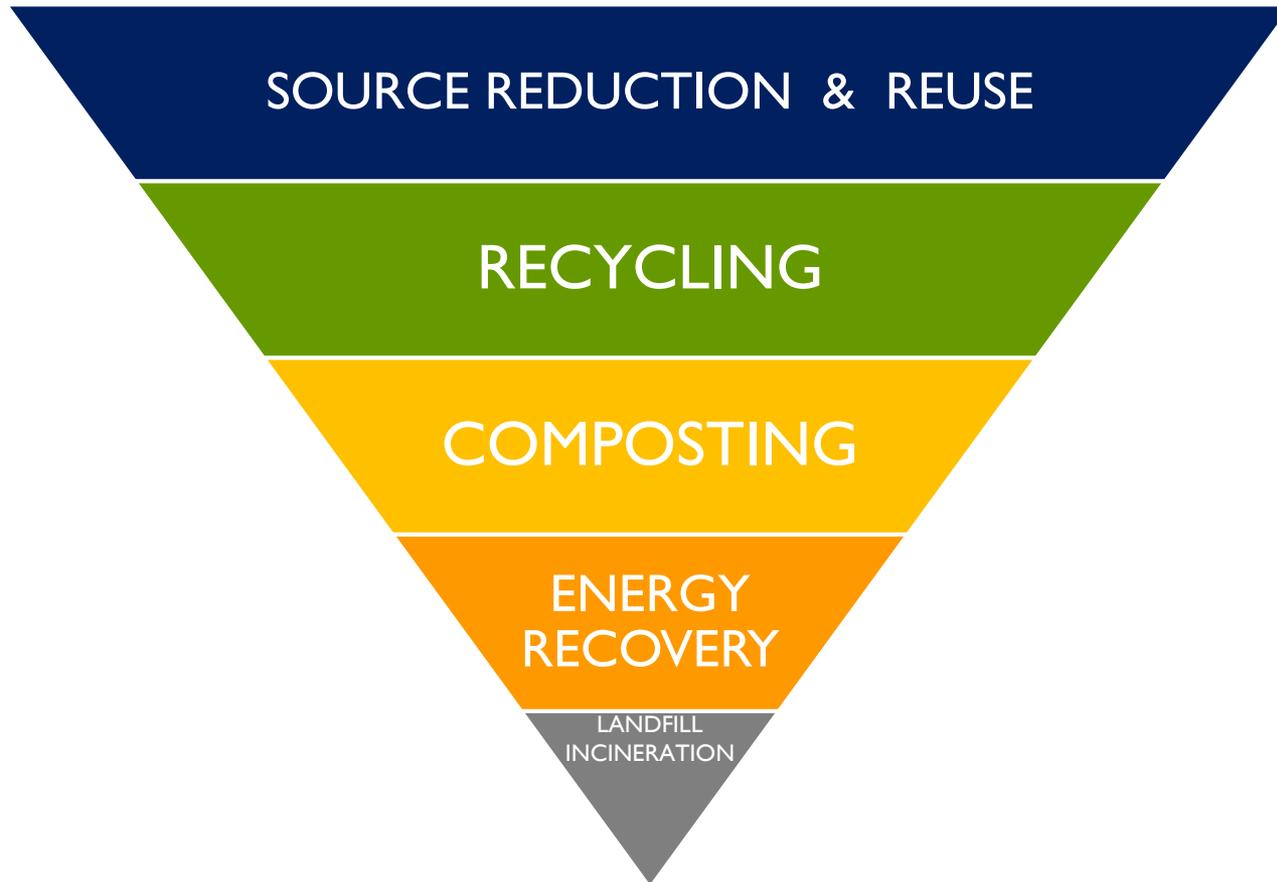


Sustainable Waste Management Ladder
(ranked by total % recycled, composted or sent to WTE facilities)

2008 data from Earth Eng. Center, Columbia University



Working Group recommendations reflect a commitment to the materials management hierarchy



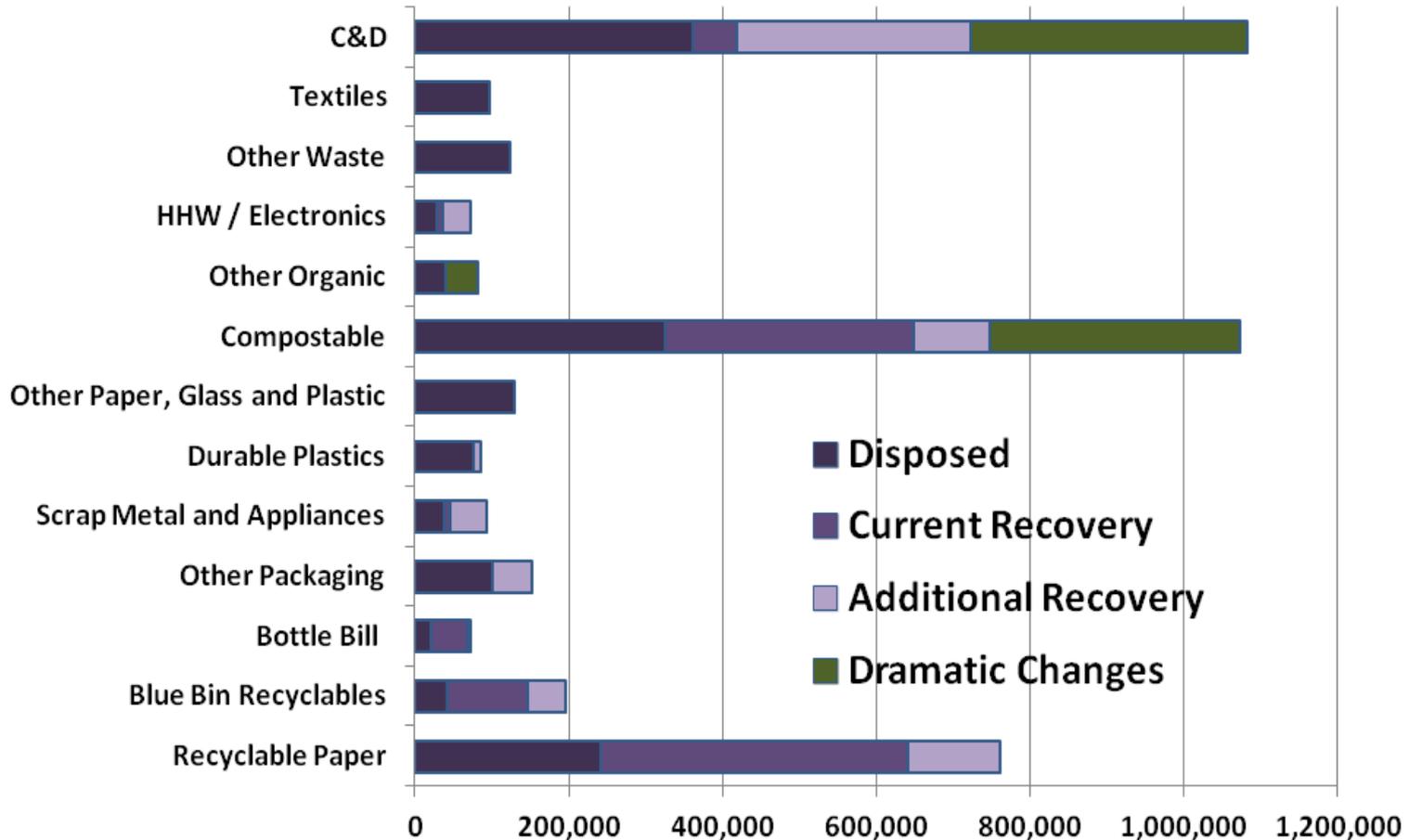
State Solid Waste Management Plan, 2006



Recommendations to promote environmentally beneficial infrastructure

- ▶ Incentivize and/or finance organics composting and/or anaerobic digestion facilities.
- ▶ Expand capacity and performance of construction and demolition (C&D) recycling facilities.
- ▶ Clarify reuse and recycling opportunities for difficult waste streams (e.g., issue regulations that streamline beneficial use) as well as repurpose landfills for those materials for which reuse and recycling are not possible.
- ▶ Assure the sustainability of the state's waste-to-energy infrastructure to manage non-recyclable wastes, while continuing to prioritize source reduction, reuse and recycling.

With dramatic changes we could optimize reuse and recycling to reach about 60% recovery



DSM Environmental Services Inc., 2012

Recommendations to foster economic development and job creation

- ▶ Promote Product Stewardship principles to ensure shared responsibility for products throughout their lifecycle.
- ▶ Align economic development incentives with opportunities for recycling-based businesses.
- ▶ Create a new Infrastructure Development Bank or expand existing funding mechanism (e.g., Clean Energy Finance and Investment Authority) to assist in financing new recovery businesses.
- ▶ Improve procurement practices to increase demand for materials – have the state lead by example.

Recycling contributes to the economy



- ▶ Roughly **3,000 jobs** in the recycling supply chain and another **2,100 indirect and induced jobs** currently contribute **\$240 million in payroll** and **\$60 million in tax revenue** to the CT economy.

	Employment (jobs)	Payroll (\$1,000's)	Business Taxes (\$1,000's)
<i>Direct Impacts</i>			
<i>Direct Impacts</i>			
Collection	1,268	\$54,892	
Processing/Wholesaling	1,429	\$67,998	
Composting	257	\$9,658	
<i>Subtotal, Direct:</i>	2,955	\$132,548	\$43,380
<i>Indirect Impacts</i>	796	\$44,300	\$4,950
<i>Induced Impacts</i>	1,372	\$61,800	\$12,110
<i>Total Direct, Indirect and Induced Impacts:</i>	5,122	\$238,648	\$60,440

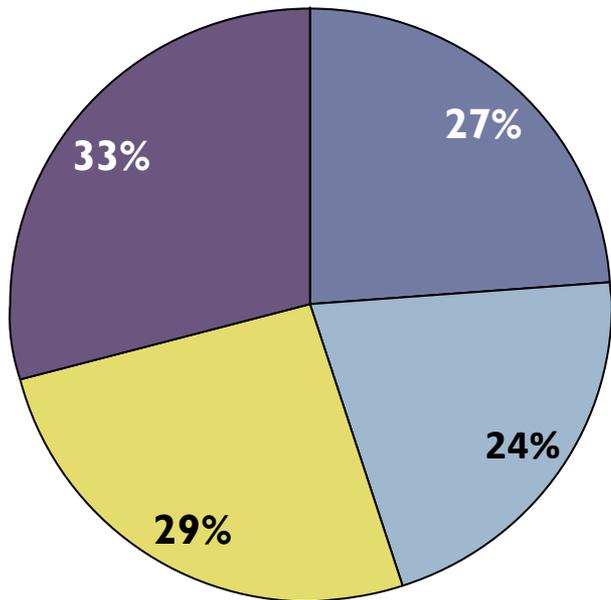
CT Economic Resource Center and
DSM Environmental Services Inc., 2012

Recommendations to reduce burdens on municipalities

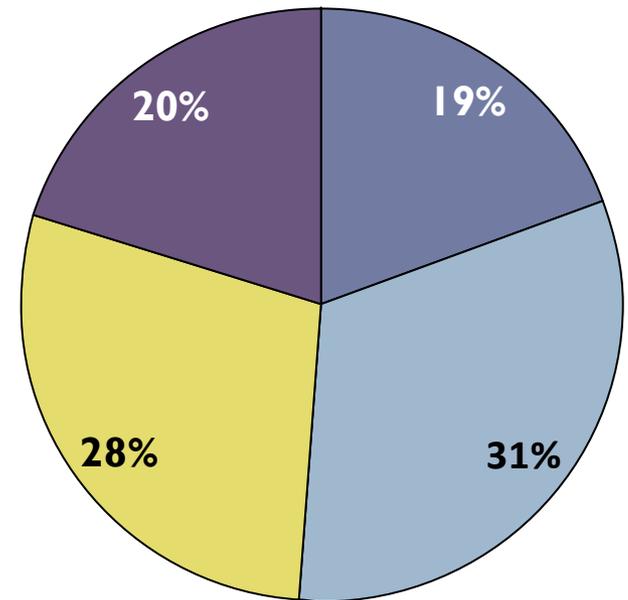
- ▶ Develop a statewide recycling education and enforcement campaign.
- ▶ Implement transparent pricing/billing for disposal through unit-based pricing to de-couple solid waste management costs from property taxes and to empower recycling with the rewards of thrifty behavior (saving money) resulting in reduced waste generation by at least 40%.
- ▶ Simplify and improve data reporting requirements to reduce the reporting burden on municipalities and make clear what materials are available for reuse in the marketplace or as feedstock to make a product.

Current residential collection services illustrates fragmentation and different needs at the municipal level

MSW Collection



Recycling Collection



- Municipal Crews
- Municipal Contract
- Self Haul Option
- Subscription Option

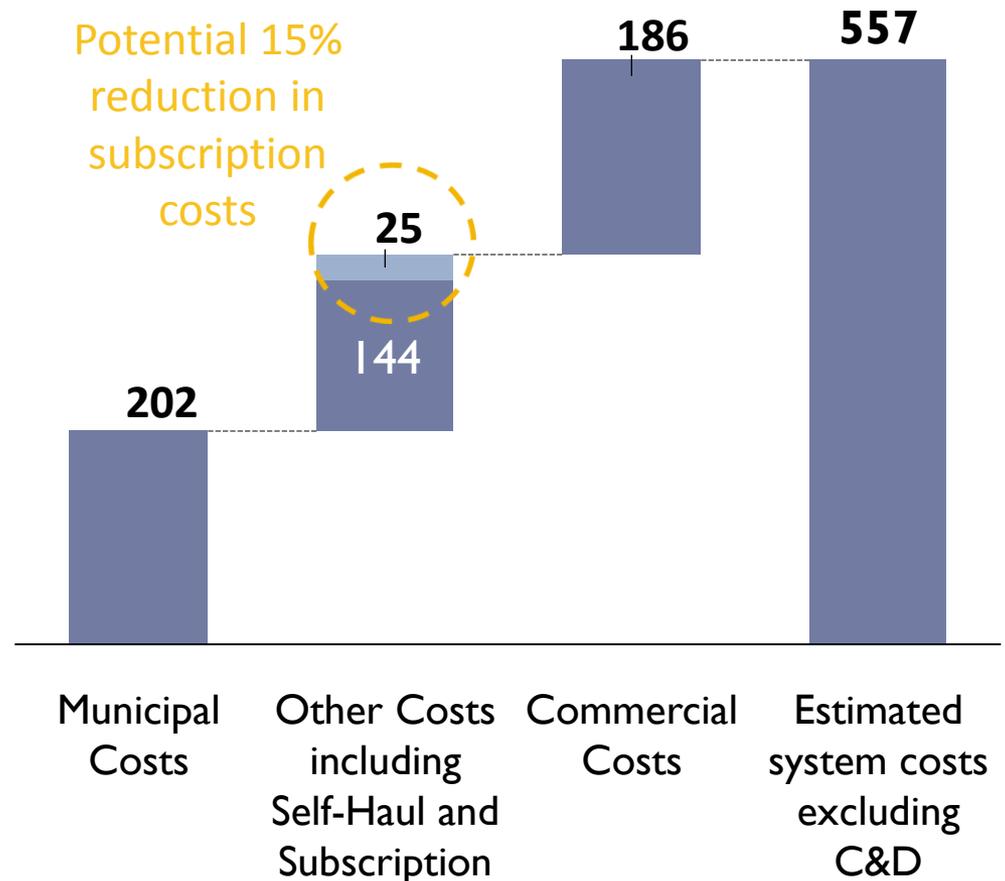
Fragmentation reflects inefficiency in solid waste collection

DSM Environmental Services Inc., 2012

Costs of existing system are higher than they need to be

- ▶ Roughly 30 percent of CT households receive subscription collection which means multiple haulers are traveling the same collection routes
- ▶ Managing collection and routes could reduce costs by roughly \$25 million state-wide

Estimated CT annual waste and recycling costs (\$ Million)



DSM Environmental Services Inc., 2012

Recommendations to redefine role of CRRA

- ▶ Develop a transition plan with advisory input from affected towns to evaluate the functions of CRRA and manage this changed role, with consideration of the operational requirements of the recycling facilities, regional transfer stations, closed and closing landfills, and other functional roles.

Proposed roles and responsibilities in for CT's solid waste management system

Role	DEEP	CRRA or Regional	Infrastructure Bank	Other
Financing		X	X	Private Sector
Planning, System Architecture	Primary	Secondary		
Education	X	X		
Regulation: Permitting	X			
Regulation: Inspection & Enforcement	Primary	Secondary (regional)		Secondary (municipalities)
Collector/Hauler: Registration		X		DMV?
Product Stewardship	X			
Services Delivery/ Operations; Cooperative Purchasing		Primary		Secondary (Municipalities and Private Sector)

Brown – proposed eliminating responsibilities

