



SUSTAINABLE FOOD MANAGEMENT

Kim Charick

USEPA Region 4

Feed People Not Landfills



Sustainability

Sustainability is based on a simple and long-recognized factual premise: Everything that humans require for our *survival* and *well*being depends, directly or indirectly, on the natural environment. The environment provides the air we breathe, the water we drink, and the food we eat.



Materials Management: A Working Definition

"Materials management is an approach to using and reusing resources most efficiently and sustainably throughout their lifecycles. It seeks to minimize materials used and all associated environmental impacts."

From EPA, <u>Opportunities to Reduce Greenhouse Gas Emissions through</u>
 Materials and Land Management Practices (PDF) (98pp, 1.5MB)



Food Recovery

More food reaches landfills and incinerators than any other single material in municipal solid waste (MSW).

In 2012 alone, more than 36 million tons of food waste was generated, with only five percent diverted from landfills and incinerators for composting.



9 Billion People by 2050

How to Feed Our Growing Planet





Food waste impacts the Economy.

- Financially, wasted food costs America more than \$100 billion annually (Bloom, 2007)
 - Disposal costs of municipal waste management
 - Overpurchasing costs
 - Costs of lost energy in production, transportation, and packaging.
- Bottom Line: Reducing food waste makes good business sense.



Food waste impacts Society.

- **50** million Americans, or 14% of American households, were "food insecure" in 2009 (USDA).
- Food insecurity can increase the likelihood for an individual to have major health concerns.





Food waste impacts the Environment.

- Food that enters a landfill produces methane, a greenhouse gas with 21 times the warming potential of CO₂
- Food production impacts
 water quality, soil
 productivity, and contributes
 to about 13% of the nation's
 greenhouse gas emissions.





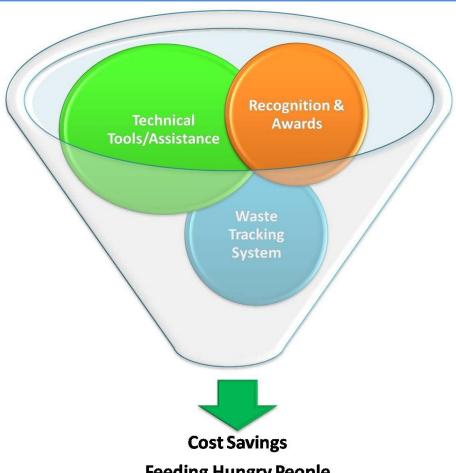


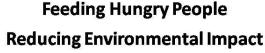
SUSTAINABLE FOOD WASTE MANAGEMENT THROUGH THE FOOD RECOVERY CHALLENGE

Feed People Not Landfills



One tool to reduce food waste is EPA's Food Recovery Challenge (FRC)







What We Can Do For You...

- EPA tools and technical assistance
 - WasteWise Tool for tracking waste
 - Personalized annual progress report with Climate Profile (coming soon)
 - Other EPA Tools
 - Food Waste Management Calculator
 - Food Waste Source Reduction Auditing Tool
 - Regular webinars on food waste related issues
 - Clearinghouse for case studies, tools, templates, and other outreach materials



Donation Success Story

- Rock and Wrap It Up (More information)
 - Collaborated with 150 bands, 200 schools, and universities, and 30 sports franchises
 - Collected more than 100 million pounds of food
 - As of March 1, 2011, NHL Clubs provided 120,000 meals keeping 160,000 pounds of food waste from landfill



Join Now!

And... take a bite out of food waste! http://www.epa.gov/foodrecoverychallenge

Four Easy Steps!

- Assess It! Conduct baseline food waste assessment
- 2. Plan It! Create a food waste reduction plan
- 3. Track It! Report annually using WasteWise tool
- 4. Do It! Undertake at least three food waste reduction and recovery activities!



Follow the Hierarchy



Food Recovery Hierarchy

www.epa.gov/foodscraps

Source Reduction

Reduce the volume of surplus food generated

Feed Hungry People

Donate extra food to food banks, soup kitchens and shelters

Feed Animals

Divert food scraps to animal feed

Industrial Uses

Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

Composting

Create a nutrient-rich soil amendment

Landfill/

Incineration

Last resort to disposal



Why Reduce Wasted Packaging?

Containers and Packaging alone contribute over 23% of the materials reaching landfills in the United States.



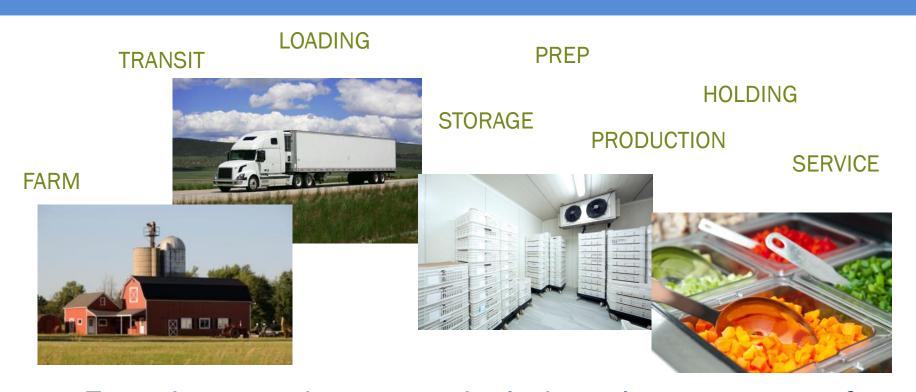
Why Reduce Wasted Packaging?

Packaging Reduction Strategies:

- 1. Source Reduction
- 2. Reuse; and
- 3. Recycling/Composting



Upstream: Invisible Resources



Every item we throw away includes a large amount of invisible embedded energy and other resources.



Scaling Up Composting in the Charlotte, NC Region

- Grant, partially funded by EPA R4:
 - Promote Food Waste and Compostable Packaging Recycling
 - Improve Infrastructure for waste diversion
 - Produce training and educational materials
 - Create a marketable product-finished compost



Scaling Up Composting in the Charlotte, NC Region

Grant team includes:

- GreenBlue,
 - SES Earth Farms
 - Elemental Impact,
 - Mecklenburg County, NC LUESA
 - NC-DENR,
 - University of North Carolina (UNC) Charlotte IDEAS Center,



Scaling Up Composting in the Charlotte, NC Region

Grant team includes:

- GreenBlue,
 - SES Earth Farms
 - Elemental Impact,
 - Mecklenburg County, NC LUESA
 - NC-DENR,
 - University of North Carolina (UNC) Charlotte IDEAS Center,



Questions

Kim Charick
US EPA Region 4
(404) 562-8477



Charick.Kim@epa.gov

http://www.epa.gov/foodrecoverychallenge

