



US EPA

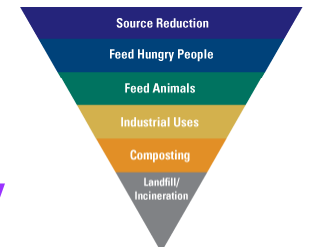
Sustainable Food Management

“Feed People Not Landfills”

May 2nd 2012



www.epa.gov/foodrecovery



What is “waste”?

“to fail or neglect to use; squander”

Business 101:

Waste = Inefficiency



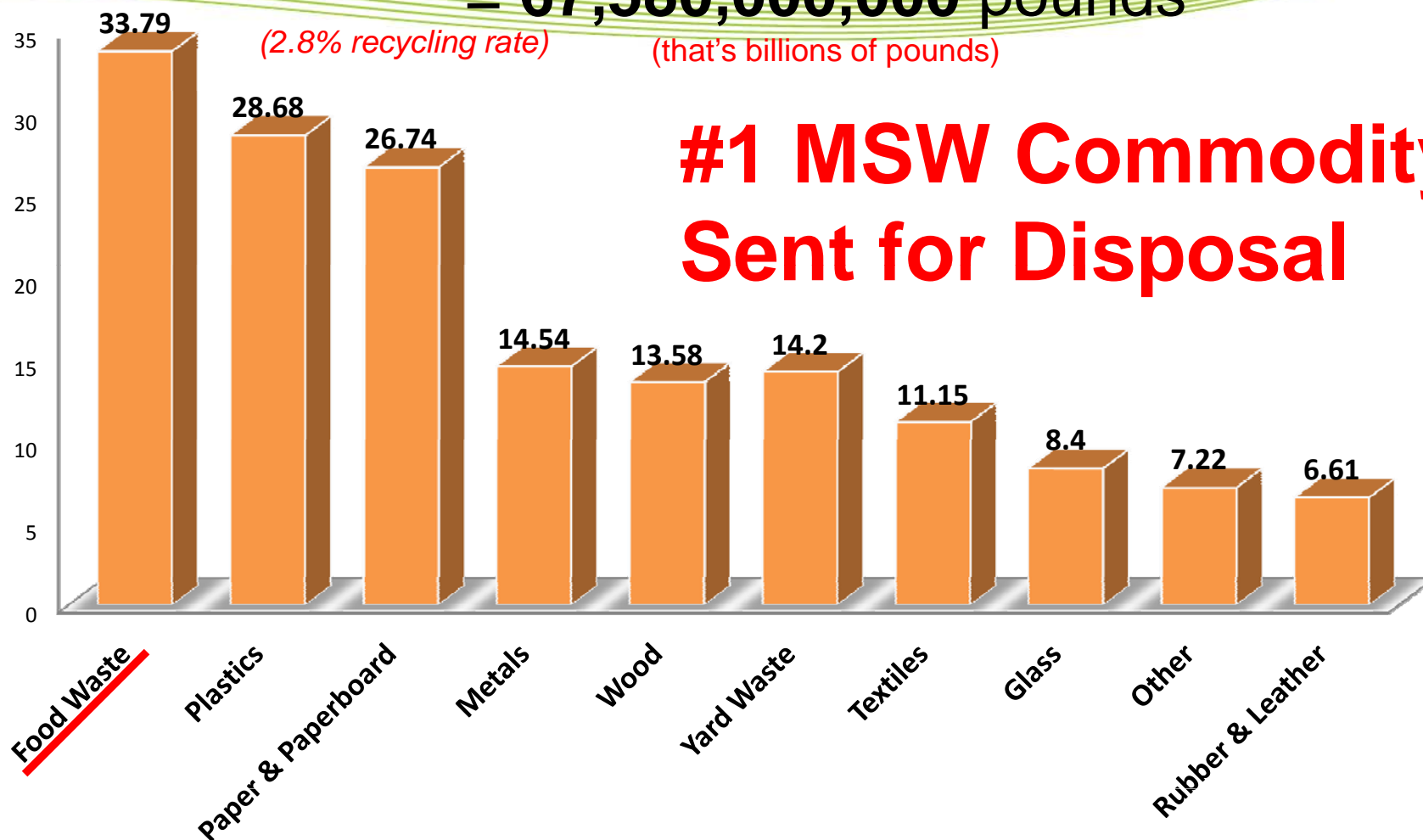
33.79 Million Tons Disposed

= 67,580,000,000 pounds

(2.8% recycling rate)

(that's billions of pounds)

#1 MSW Commodity Sent for Disposal



The Food Waste Problem

**Americans
waste
enough food
to fill the
Rose Bowl
every day.**
(Bloom 2007)



Where does it all go?

.....to a landfill
(a.k.a the dump)



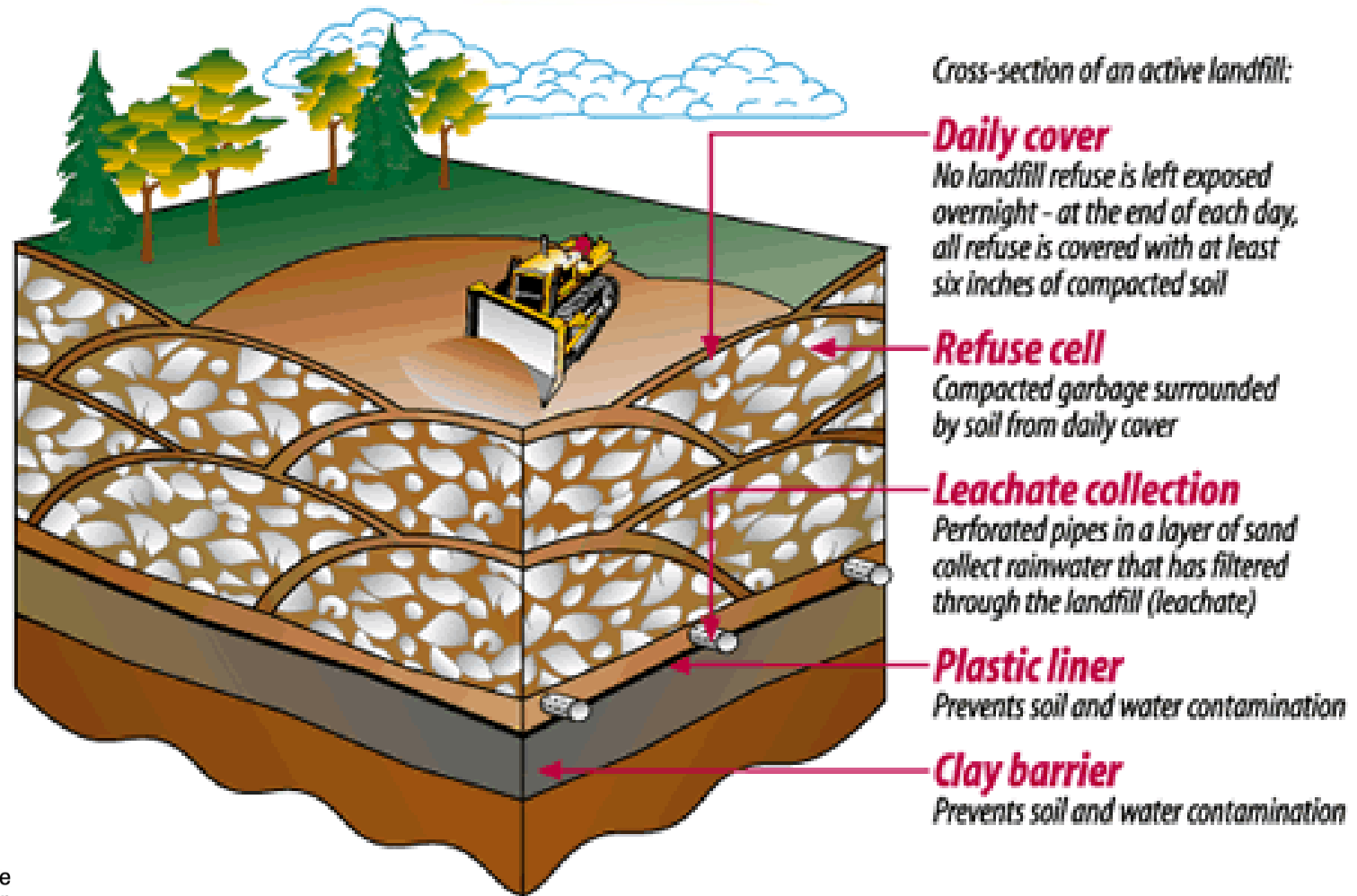
And this is a landfill



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It doesn't go away ...it's neatly and safely stored in the ground



Forever – there is no “*away*”

(even for “biodegradables & compostables”)



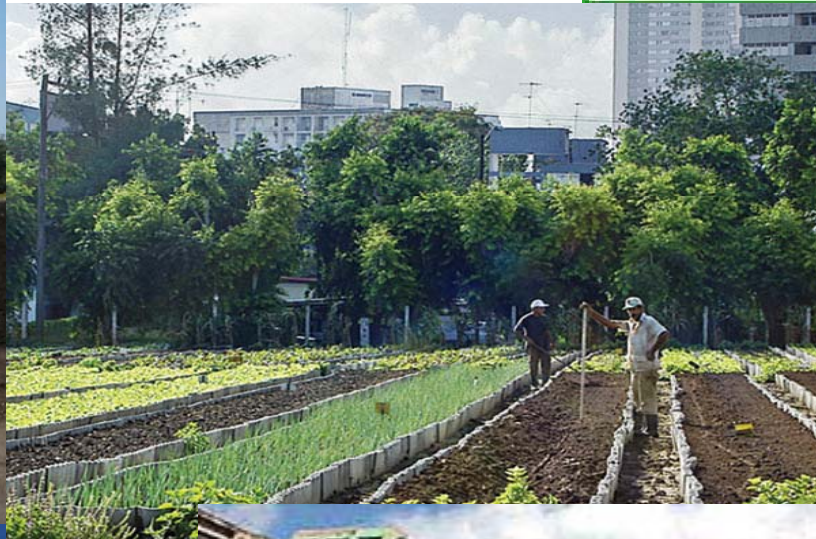
- * Landfills are the 2nd largest source of Methane
21+ times more potent carbon dioxide
- * Generating Methane gas for decades
... and food waste is a major cause of landfill Methane

HUGE wasted resource

- *Even a small percentage recovered could feed millions!*
- Let's first **Feed People – Not Landfills**



Then feed the soil



Which in Turn - Feeds People

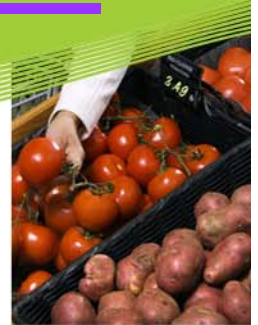
Model for Sustainability

Balancing **Profits, Planet, People**

Save **Money** - Labor, Products, Waste disposal costs

Protect **Natural Resources**

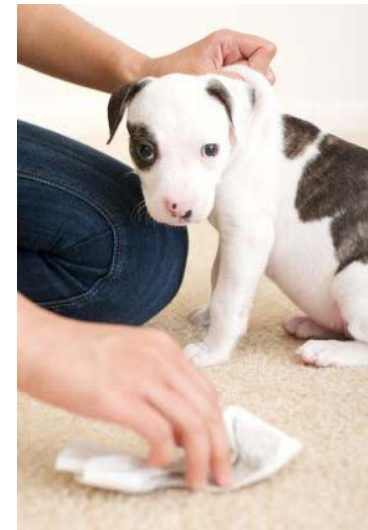
Help **People**



Sustainable Food Management

- Instead of constantly trying to manage this fast growing waste stream ...

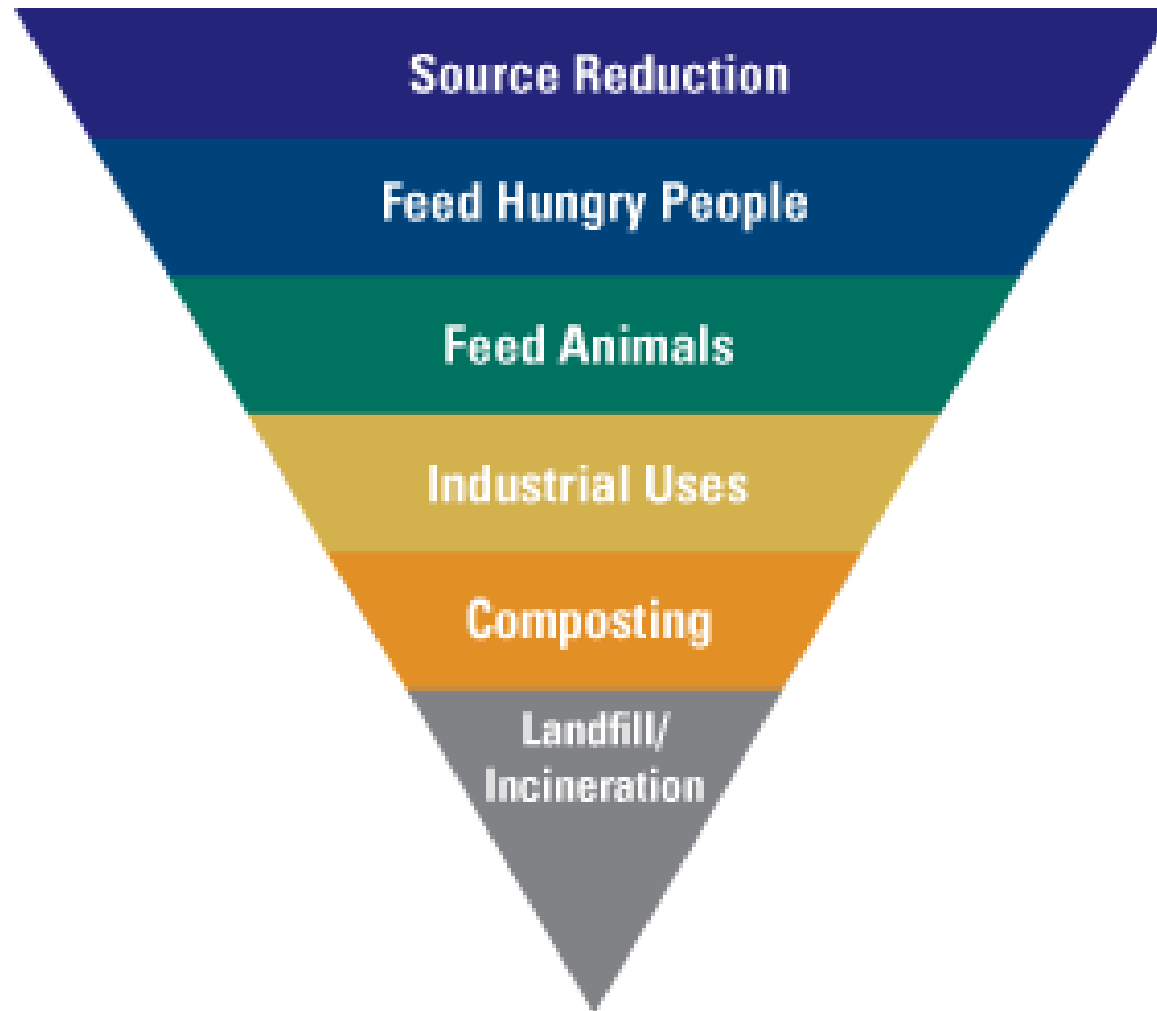
let's reduce it FIRST

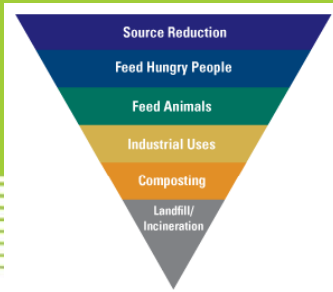


- **How?** follow the

Food Recovery Hierarchy

Food Recovery Hierarchy





Feed People:

Families / Customers & Those in Need

- **Step #1: Source Reduction** - reducing waste at the “source”
 - Reducing over-buying & processing wastes
 - Reducing over preps & plate waste
- **Step #2: Feed Hungry People**
 - Donating wholesome food, supplies and prepared foods to food banks, rescues, pantries, and kitchens

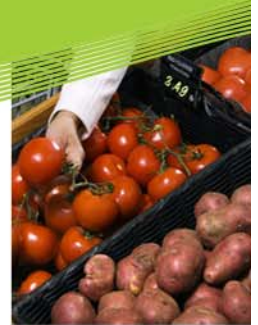
Source Reduction

“Back of the house”

- **Sodexo**
 - 8 college campuses **cut kitchen waste by about one third**, simply by tracking and monitoring food waste
(2010 pilot)

“Front of the house”

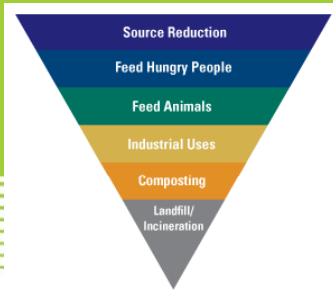
- **Virginia Tech**
 - **Trayless dining resulted in 38 % less food waste**
 - 2008 **Aramark** study on 25 campuses showed **25-30% less wasted food from trayless dining**



Donations Make a Difference!

- **Walmart**
 - 2010: donated **256 million pounds** (**128,000 tons**) of food to hunger relief organizations.* The equivalent of **197 million meals**
 - By 2013, the company expects to donate more than **1.1 billion pounds** of food.
 - **1.1 B lbs = 550,000 tons**
- **Rock and Wrap It Up**
 - For 2010-11 season, **NHL Clubs** provided **160,000 meals** while keeping more than **105 tons of food waste from landfills.**
- **Forgotten Harvest**
 - 2010 rescued & distributed nearly **19.4M lbs (9,700 tons)**
 - 2011 on track to rescue **25M lbs (12,500 tons)**





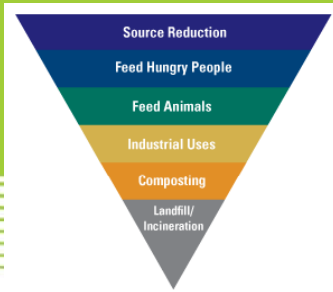
Making the Most of Your Resources

- **Step #3: Feed Animals**

- Local farmers or zoos use food scraps as animal feed; food scraps processed into animal feed

- **Step #4: Industrial Uses**

- Fat, oil and grease (FOG) can be converted into soaps, cosmetics, and biodiesel fuel; anaerobic digestion of food waste for energy production w/ residuals then being composted



Making the Most of Your Resources

- **Step #5: Composting**
 - Composting on-site or sending to off-site composting operation
- **Step #6: Landfill/Incineration**
 - **Last resort** is disposal
 - includes anaerobic digesters where the digestate (residual) is landfilled or WTE where the ash is landfilled

The Future?

- **Connecticut** - Starting Oct 2011
- Passed a law that requires companies to compost if they produce more than **104 tons** year of food waste & soiled unrecyclable paper. Applies to:
 - Commercial food wholesalers or distributors
 - Industrial food manufacturers or processors
 - Supermarkets
 - Resorts & conference centers

EPA Tools & Resources:

Waste Audit Sheets, Calculators, Guides...

Waste Logbook - Facility: _____

Date: _____ Weather: _____

Notes/Special Events Today: _____

Time	Recorded By	Food Type	Loss Reason	# of Portions	# of Quarts PICK ONE	# of Pounds

Microsoft Excel - foodcost.xls [Read-Only]

Food Waste Management Inputs	
1	Food Waste Management Inputs
2	
3	Source Reduction
4	What type of facility are you? Grocery Store
6	How many pounds of non-perishable food waste do you generate per week? 0
7	What percentage of non-perishable food waste are you willing to source reduce? 0%
8	How many pounds of pre-consumer prepared/whole food waste do you generate per week? 0
9	What percentage of pre-consumer prepared/whole food waste are you willing to source reduce? 0%
10	How many pounds of pre-consumer trim waste do you generate per week? 0
11	What percentage of pre-consumer trim waste are you willing to source reduce? 0%
12	How many pounds of post-consumer plate waste do you generate per week? 0
13	What percentage of post-consumer plate waste are you willing to source reduce? 0%
4	How much yellow grease do you generate per week? 0
5	What is your average purchasing cost per pound for non-perishables? \$0.00
3	What is your average purchasing cost per pound for pre-consumer prepared/whole foods? \$0.00
7	What is your average purchasing cost per pound for foods that comprise trim and plate waste? \$0.00
3	Non-Perishable Food
4	Does your facility have access to a local food bank that will accept non-perishable foods? No
2	Pre-Consumer Prepared/Whole Foods, Trim Waste, and Plate Waste
3	Food Rescue
4	Does your facility have access to a local food rescue service that accepts prepared meals? No

Notes and Instructions
Choose the facility type that best fits the description of your business.

Food Waste Definitions:
- **Non-perishable food waste** - surplus food that does not require refrigeration. Non-perishable food waste includes surplus cooked foods and prepared meals.
- **Pre-consumer prepared/whole food waste** - surplus cooked foods and prepared meals.
- **Pre-consumer trim waste** - food waste generated during food preparation, such as trim and plate waste.
- **Post-consumer plate waste** - food that is plated, but not eaten by the consumer.

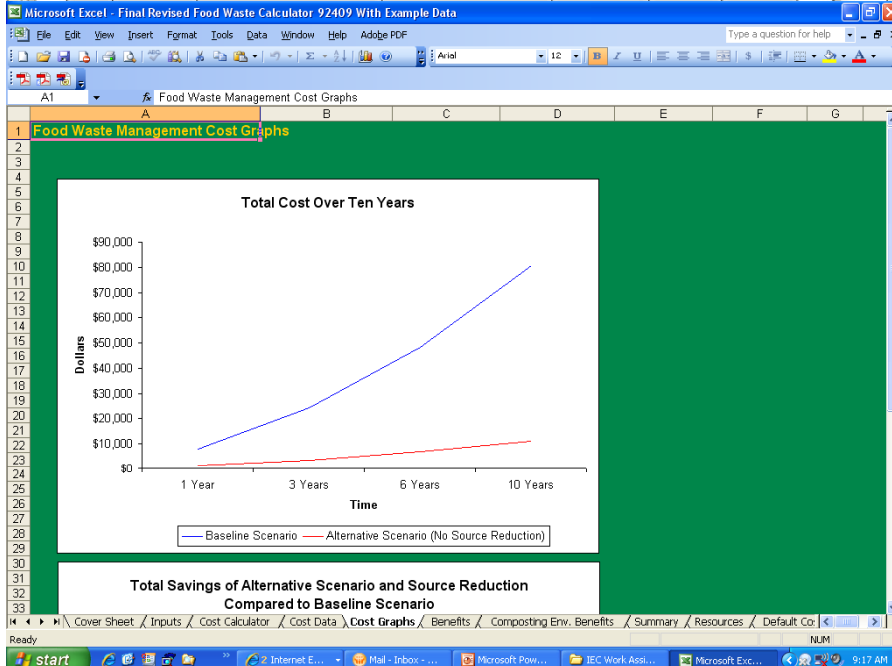
If you are having trouble determining the quantity of food waste your facility generates, click on this cell to go directly to the Cost Data tab for suggested rates by facility type.

Source Reduction and Food Waste Tracking:
Source reduction, the practice of reducing the overall volume of food waste, generate subsequent waste hauling fees. Many institutions have succeeded at source reduction in cafeterias, and using a la carte menus. To achieve source reduction, many facilities use paper tracking is simple and inexpensive, but may be time consuming and less accurate. Paper tracking is typically more effective at targeting wasteful practices. A typical facility typically result in source reduction of 3% or more. **The costs of food tracking calculator; however, facilities looking to achieve cost savings from source reduction.** Enter your source reduction goals for each food waste category in the table and Food Waste Tracking on the Resource tab, or click this cell.

Purchasing costs per pound by food category may vary greatly depending on the size of your facility. For more information, see Food Rescue on the Resources tab or click this cell.

To locate a local food bank near you, visit <http://feedingamerica.org/foodbank-lookup>.

Food rescue, also called food recovery, is the practice of safely retrieving edible food that would otherwise be discarded. For more information, see Food Rescue on the Resources tab or click this cell.



www.epa.gov/foodrecovery

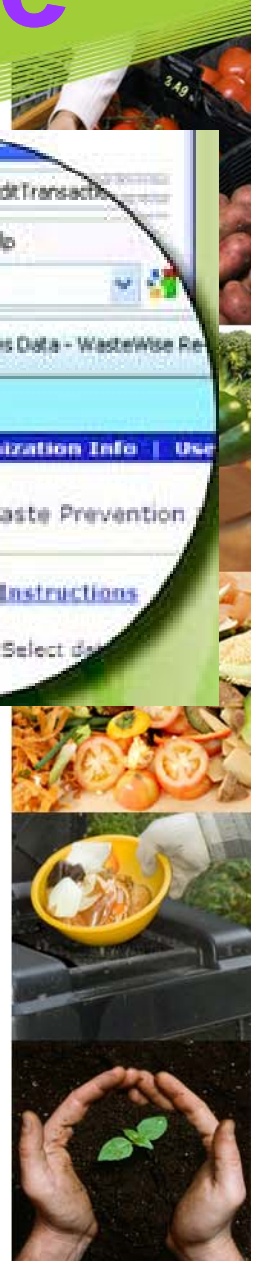
Re-TRAC thru WasteWise

What WasteWise Re-TRAC does:

- Compiles and analyzes your waste management data and maintains historical files.
- **Submits your annual data to the Food Recovery Challenge with just a click.**
- Generates instant reports on program performance and trends, and calculates GHG emission reductions associated with your activities.
- **Provides your official EPA Climate Profile report on an annual basis.**



"The new Re-TRAC system is beyond fabulous. It really improves the data entering experience. Thank you, thank you, thank you!!!!" - Mariah Titlow Tinger, Senior Environmental Program Coordinator, Genzyme Corporation



We Need Champions Join Us!

- **Food Waste: Huge Problem & Opportunity**
- Take the **Food Recovery Challenge** and together – *let's take a bite out of food waste!*
- Participating organizations can receive **national recognition** for their outstanding Challenge achievements & leadership

www.epa.gov/foodrecoverychallenge



Food Recovery Challenge

Four Easy Steps!

- 1. Assess It!** Conduct baseline food waste assessment w/in first 60 days of joining
- 2. Commit to It!** Set a three year goal to increase food reduction/diversion by 5% in the first year.
- 3. Do It!** Undertake food waste reduction and recovery activities to meet your goals!
- 4. Track It!** Report annually using ReTRAC

What We Can Do For You...

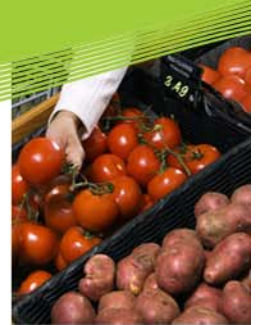
Recognition

- Website
 - Tools & Resources
- Awards
- Case Studies



What You Can Do ...

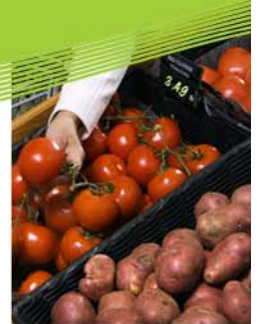
- ❖ Reduce your costs
- ❖ Improve your image
- ❖ Feed your communities
- ❖ Protect your environment



We Need Champions - *Join Us!*

To Do List:

- Join Us at:
www.epa.gov/foodrecoverychallenge
- **Do a Waste Audit – *Know What You Throw***
(free tools on Food Recovery & WasteWise web pages)
- **Contact Your Local Food Bank & Rescues**
- **Find a Local Composter** (www.FindAComposter.com)
- **Modify Your Service Contracts**



Thank You

Questions?

For more info ...

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www.epa.gov/foodrecoverychallenge

