The issue of food waste is not a new topic among sustainability professionals, but it has just recently been gaining increased attention from government agencies, media and the general public. Stresses on food production systems due to multiple social, economic and environmental factors have revealed alarming statistics about the amount, causes and consequences of wasted food in the US and globally. This presentation will dive into the food waste problem and share information about the Food Waste Reduction Alliance, a unique industry collaboration working to address this problem.
What is Food Waste?

Any solid or liquid food substance, raw or cooked, which is discarded, or intended or required to be discarded.

Organic residue generated by the processing, handling, storage, sale, preparation, cooking, and serving of foods.
<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Social Impact</th>
<th>Environmental Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Growing, processing, and transporting food of which 25 – 40% is ultimately wasted</td>
<td>• 50 million Americans have food insecurity</td>
<td>• Energy, water, and land use associated with food production</td>
</tr>
<tr>
<td>• Disposal costs, retailer shrink, consumer out-of-pocket costs, etc.</td>
<td>• Enough nutritious calories are grown and produced in the US each year to feed every American</td>
<td>• GHG generation when food scraps degrade in landfills</td>
</tr>
</tbody>
</table>

- 50 million Americans have food insecurity

- Enough nutritious calories are grown and produced in the US each year to feed every American

- Energy, water, and land use associated with food production

- GHG generation when food scraps degrade in landfills
Macro Trends: Why is this Important Now?

• Global population is growing
• Global food insecurity is already a problem
• Growing middle class will increase demand for food
• Supply of and Access to food must improve
  • Increasing production is only part of the solution
  • We also need to reduce waste and losses
Food Waste Reduction Alliance

http://www.foodwastealliance.org/
Initially, the FWRA set two primary objectives: reduce food waste to landfills and increase food donation. As the Alliance has evolved, those objectives still ring true, although the objective to reduce food to landfills has expanded. Our current goals are to:

**GOAL #1:** Reduce the amount of food waste generated

**GOAL #2:** Increase the amount of safe, nutritious food donated to those in need

**GOAL #3:** Recycle unavoidable food waste, diverting it from landfills
INTRODUCTION TO THE FOOD WASTE CHALLENGE

BSR | FOOD WASTE STUDY—TIER 1 ASSESSMENT (GMA/FMI)

**Consumer 47%**
Plate Waste
Damage
Expired/Spoiled

**Foodservice 48%**
Plate Waste
Over Prep
Expired/Spoiled

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>34,740</td>
<td>Full-Service Restaurants: 15,851</td>
</tr>
<tr>
<td>Industrial</td>
<td>2,411</td>
<td>Quick-Service Restaurants: 10,780</td>
</tr>
<tr>
<td>Grocery Stores</td>
<td>1,864</td>
<td>Institutional: 8,000</td>
</tr>
</tbody>
</table>

www.FoodWasteAlliance.org
The following toolkit was developed to help guide companies through the basic steps in food waste reduction. Included are sections on how to get started, as well as suggestions for how to identify diverse solutions.

Executive Summary

Introduction to the Food Waste Challenge

Getting Started: Best Practices to Keep Food Out of Landfills

Solutions to Donation Barriers

Diversion Beyond Donation

Reducing Food Waste Generation

Acknowledgements
There are some tools you can leverage to get you started:

1. Conduct a Waste Characterization Audit
2. Establish Standard Operating Procedures
3. Develop and/or Strengthen Relationships
Barriers to Donation

The following table outlines the specific types of barriers that companies reportedly face. The most common barrier highlighted by each sector is bolded:

<table>
<thead>
<tr>
<th>TYPES OF BARRIERS</th>
<th>MANUFACTURING</th>
<th>RETAIL &amp; WHOLESALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation constraints</td>
<td>63%</td>
<td>42%</td>
</tr>
<tr>
<td>Liability concerns</td>
<td>50%</td>
<td>67%</td>
</tr>
<tr>
<td>Insufficient storage &amp; refrigeration at food banks</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Regulatory constraints</td>
<td>50%</td>
<td>17%</td>
</tr>
<tr>
<td>Insufficient on-site storage &amp; refrigeration</td>
<td>38%</td>
<td>33%</td>
</tr>
</tbody>
</table>
## Food Waste Reduction Alliance – 2014 Phase III Assessment

What are the significant barriers?

<table>
<thead>
<tr>
<th>Barriers to donating more unsaleable food:</th>
<th>Trend: Food Manufacturers</th>
<th>Trend: Grocery Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Transportation Constraints</td>
<td>🟠</td>
<td>🟠</td>
</tr>
<tr>
<td>• Liability Concerns</td>
<td>🟠</td>
<td>🟢</td>
</tr>
<tr>
<td>• Onsite Storage/Refrigeration</td>
<td>🟠</td>
<td>🟠</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barriers to recycling more food waste:</th>
<th>Trend: Food Manufacturers</th>
<th>Trend: Grocery Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Insufficient Recycling Options</td>
<td>🟢</td>
<td>🟠</td>
</tr>
<tr>
<td>• Transportation Constraints</td>
<td>🟢</td>
<td>🟢</td>
</tr>
<tr>
<td>• Liability Concerns</td>
<td>🟢</td>
<td>🟢</td>
</tr>
</tbody>
</table>
ConAgra Foods
We’re talking about you, the person who loves our food. We want nothing more than to make safe, delicious and nutritious foods while providing the information you need to make choices for a healthy lifestyle.

- Food Safety & Quality
- Health & Nutrition
- Consumer Communication

This includes employees, investors, suppliers and business partners, as well as the communities where we live and operate.

- Our people
- Our customer & suppliers
- Giving back to our communities
- Ending child hunger

It’s all about changing attitudes about WASTES:

- Wasted Energy
- Wasted Water
- Wasted Material Resources

Internally and in our supply chain to assure long term access to food

Access our 2013 Citizenship report at:
http://www.conagrafoodscitizenship.com/
Re-Direct Food Losses to Most Beneficial Use

ConAgra Foods Endorses the US EPA Food Waste Recovery Hierarchy

- Generated 100 MM Lbs. less waste from FY11 to FY12
- 87% of our organic By-products are diverted to local farms for animal feed
- Some materials are best suited for soil amendments via compost or direct land application
- Finding unique opportunities to segregate and donate semi-finished & bulk foods to Feeding America partners
- Nearly tripled the materials sent for energy recovery from FY11 to FY12 and doubled again in FY13
- Last resort is to destroy materials without any value recovered. In FY13, ConAgra Foods landfilled only 5% of organic wastes generated
During Slim Jim production, a small percentage of scrap, consisting of loop ends, mis-cuts and short sticks, is worked back into the product. The remainder used to go to landfill, but is now donated to a food rescue organization in Metro Detroit.
Make More Dough by Wasting Less

Council Bluffs, Iowa

235 tons of food waste eliminated annually

60% reduction in dough waste for the line

Proving what gets measured, gets managed, Council Bluffs created a standard process to measure the amount of dough wasted each day to identify and implement improvements.
Sustainability at Wegmans

Little steps – today, tomorrow, together.

Jason Wadsworth
Wegmans Sustainability Manager
Retail Chair, Food Waste Reduction Alliance
Who we are

• 85 store regional food market

• Located in the North East
  – Mid Atlantic
  – NY, PA, NJ, MD, VA, MA

• Large high volume stores
  (80-140k sq ft)

• 45,000 employees
Wegmans Food Waste Hierarchy

Source Reduction
Reduce the volume of food waste generated

Feed Hungry People
Donate 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 for disposal

Feed Hungry People
Donate 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 for disposal
“Keeps Fresh” Packaging

• Increased Shelf Life

• Portioning

• Open only what you need, freeze the rest
Cut Fruit
Cut Veggies

- Smart portions
- Utilize blemished or not so perfect produce
Prepared Foods

- Portions
- Re-heatable
- Donateable
What's ahead in 2015

• Renewed focus on reduction and donation

• Expanding diversion to 20 more stores
What Can EVERYONE Do About Food Waste?

95% of municipal food waste happens “at the FORK”

• Right size your portions in home and out - and eat your leftovers!
• Compost trimmings if you can
• Shop smart, especially for perishables, to avoid over-purchasing
• Embrace “ugly” produce! Fruits & vegetables don’t have to look perfect to taste great
• Rotate inventory in your fridge so you don’t leave things behind
• Follow storage instructions on packaging
• Be educated about date codes – use common sense about food safety vs. food quality
• Respect food, where it comes from and the effort it takes to get it to you
• Spread the word, let’s make ALL waste socially unacceptable!!

A video to leave you with
Questions?