



University of South Carolina

EcoRep
Recycling
Conference
2012

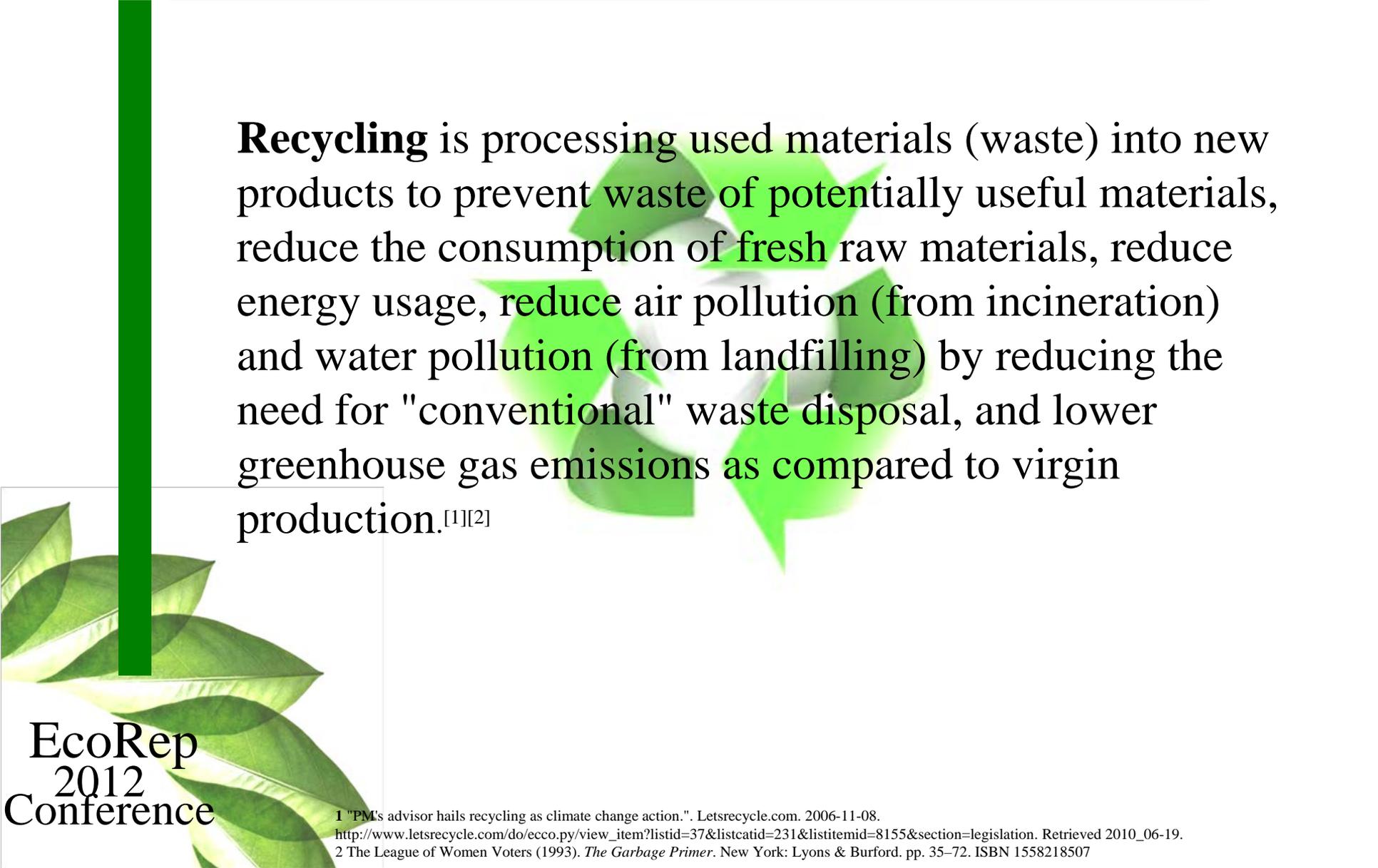
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- Typically Recycled items
- Non-typical/Universal/Specially Handled
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 - Examples of each
- What/how much recyclable material can be produced – event examples
- Progress and revenue produced by effective recycling programs
- How to get the point across and drive action
- WM Green Campus Programs
- WM Internship Programs



What is Recycling?

Recycling is processing used materials (waste) into new products to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage, reduce air pollution (from incineration) and water pollution (from landfilling) by reducing the need for "conventional" waste disposal, and lower greenhouse gas emissions as compared to virgin production.^{[1][2]}



¹ "PM's advisor hails recycling as climate change action.". Letsrecycle.com. 2006-11-08.

http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=231&listitemid=8155§ion=legislation. Retrieved 2010_06-19.

² The League of Women Voters (1993). *The Garbage Primer*. New York: Lyons & Burford. pp. 35–72. ISBN 1558218507

What Items are Typically Recycled?



Paper

All colors, paper bags, folders, Post-It™ Notes, newspapers, chipboard, etc.

no rubber bands or paper clips



Magazines & All Books

Including telephone & hard back books.



Cardboard

Including greasy pizza boxes.

no food



All Metals & Aerosol Cans

Cans, foil, pie plates, metal pieces, empty, non-hazardous aerosol cans.

no liquids or food residue



All Plastic

Bottles, cups, lids, utensils, empty bags, shrink wrap, freezer bags, etc.

#1-7 or unnumbered.

no other recyclables inside bags



Paper Cups, Cartons, & Drinks Boxes

no styrofoam or liquids



All Empty Glass

Remove lids from glass & recycle both separately.

no liquids



Miscellaneous

Corrugated plastic signs (election signs) & banners - separate metal stakes/ringlets & recycle both.

Universal/Special Handling

Universal Waste - includes batteries, pesticides, mercury containing equipment, and bulbs/lamps



Batteries



Cell Phones



Appliances



CDs/Cases



Packing Supplies



Light Bulbs



Lab Supplies



Toner



Construction



Pallets



Scrap Metal

University Waste Streams/Locations



[Click Here for Details](#)

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Adobe Acrobat
Document

Typical Types of Recycling/Processes

- Dual Stream
- Single Stream
- Construction & Demolition (C&D)
- Non-Standard/Specially Handled Products
- Organics/Composting
- Medical/Chemical/Hazardous Waste



Dual Stream Collection

Dual-stream or multi-stream recycling collection programs require participants to place each recyclable material in the appropriate collection bin when they first discard the item

- Separate containers collect **glass, metal, plastic, newsprint, and magazines** etc.
- Recovered paper can be collected separately by grade (e.g., white office paper, newspapers, magazines, and corrugated cardboard boxes) or more commonly, collected as mixed paper separated from other recyclable materials
- If different grades of paper are co-mingled, they are sorted at a central point, such as a Materials Recovery Facility (MRF).
- If paper is separated at the source, the different grades of paper can be marketed separately for the highest return.

Benefits of dual or multi stream (sorted) collection include:

- Lower levels of contamination at the source
- Higher quality materials
- Materials are more valuable and may result in higher financial returns
- Lower costs to process the recovered paper



Single Stream Collection

Single Stream Recycling- The haulers transport the mixed recyclables to a recycling center that utilizes “single-stream sorting.” This is a process that uses automated systems, complemented by manual labor, to separate various types of paper from recyclable containers.

The end result: separate bales of paper, cans, and plastic items, each weighing hundreds of pounds. Increases recyclable materials collected by up to 30%, reducing MSW.

[Click Here for Details](#)



Construction & Demolition

- Most common **Construction & Demolition (C&D)** materials are recyclable such as cardboard, concrete, tile, lumber, metals, masonry, plastic, carpet, sheet rock and insulation.
- For some C&D materials, products can be turned into new resources for example, clean wood can become mulch or biomass fuel. Crushed concrete can become gravel or dry aggregate for new concrete.

Benefits

- Ensures you have a documented plan in place to achieve valuable LEED (Leadership in Energy and Environmental Design) points.
- Allows an opportunity to partner with building owners and shows customers and the community that you are actively taking steps to manage the environmental footprint we all leave behind especially when you increase your recycling rates.



Non-Standard Recyclables/Programs

- Spent fluorescent lamps and bulbs
- Dry cell batteries, rechargeable batteries, and batteries from small electronic devices
- Electrical and medical mercury-containing equipment and devices like thermostats
- Lighting ballasts and capacitors
- Electronics, computers, CRTs, and TVs
- Inkjet and toner printer cartridges

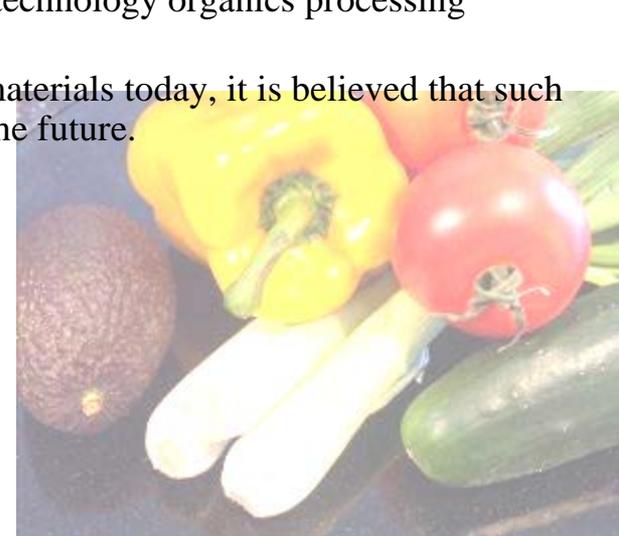
Benefits

- Recycling your universal waste ensures you are in compliance with state and federal regulations
- Applicable Certification Certificates are provided and stored



Organics - Composting

- **Organic Waste** consists of pre and post consumer food scraps and food soiled paper generated by students and food vendors to yard clippings from campus grounds and compostable debris from agriculture students.
- **Composting** is the biodegradation of organic matter, such as yard and food waste. **Compost** is defined as the mixture of decaying organic matter, as from food, leaves and manure. The resulting product is used to improve soil structure and provide nutrients to the soil. Compost can also help to reduce the need for water, fertilizers, and pesticides, making it an attractive product for farmers, public agencies, commercial landscapers, nurseries, and gardeners.
- In recent years, University interest in on-site composting has skyrocketed as a way to reduce waste disposal costs and reap the environmental benefits of landfill diversion.
- Universities value the opportunity to close the loop between food waste diversion, campus farms, experiential learning and utilizing food grown back in the dining halls.
- Some companies' organics strategy is to find the highest beneficial use for the materials managed. Long term, that likely means leveraging organic material into green energy, or potentially converting the material into fuels or chemicals. To that end, Waste Management is building proprietary capacity in these future technologies, including several investments in high-technology organics processing companies.
- While composting is the most common way to process organic materials today, it is believed that such new technologies will make the most out of organic material in the future.



3-R's Reduce, Reuse, Recycle

- **Why Reduce, Reuse & Recycle?**
 - **REDUCE:** 250 Million Tons of Municipal Garbage Created in the U.S.
 - **REUSE:** One Ceramic Coffee Mug Saves Enough Energy to Produce 500 Paper Cups
 - **RECYCLE:** 85 Million Tons of Materials Diverted from Landfills and Incinerators



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Reduce

Waste reduction means cutting down on the amount of waste, or cutting the toxicity of waste **BEFORE** it is generated. Each year approximately 250 million tons of municipal solid waste (garbage) is generated in the United States and this equates to an average of 4.4 pounds of garbage each day per person (Source: EPA). Therefore, the number one consumer behavioral change necessary to save natural resources, save money, and lessen landfill disposal is to **Reduce**.

Here are some ways you can reduce your consumption:

- Source reduction - designing products to reduce the amount of waste that will later need to be thrown away and also to make the resulting waste less toxic
- Set your printer to "double-sided." By printing front-to-back, you'll significantly reduce the amount of paper you're using
- Change page margins to .5". By trimming the margins, you'll increase the amount of information that will fit on one page, reducing the likelihood of printing extra pages
- Save information and documents electronically rather than printing out a hard copy
- Use e-mail, voice-mail and social networking bulletin boards to circulate messages and information
- Use non disposable napkins, water bottles and travel mugs



Reuse

Reuse is accomplished when a product is used more than once for any one purpose.

Ways to Reuse:

- Purchase supplies that contain 20%-30% or more post-consumer content
- Purchase refillable pens and pencils
- Reuse office furniture and supplies, such as envelopes and file folders
- Donate, repair or sell items to reduce waste



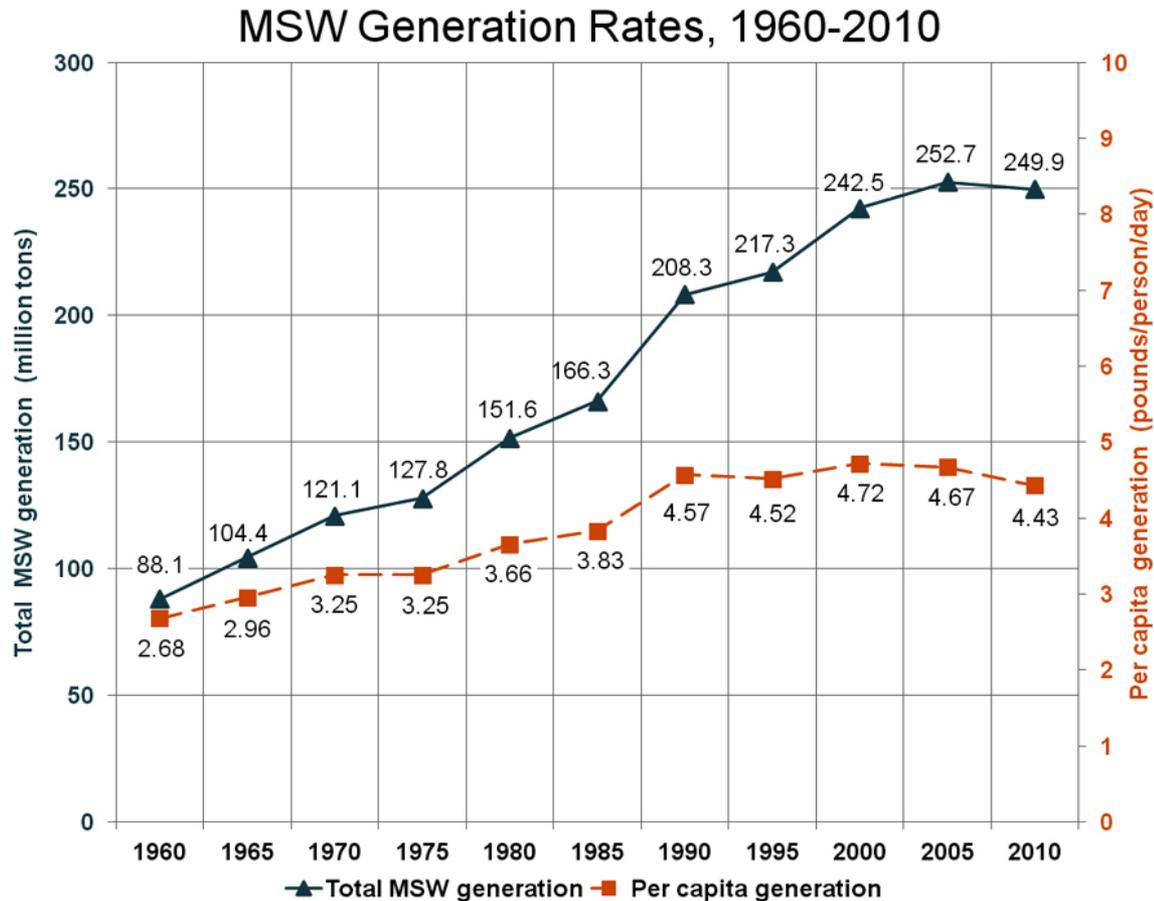
Recycle

Recycling plastics and other materials such as paper, and aluminum, create new products such as:

- Aluminum cans, car bumpers, nails
- Newspapers, cereal boxes, paper towels, copy paper, egg cartons
- Insulation, packing material, wrapping paper
- Carpeting, motor oil, trash bags
- Fleece jackets, carpeting, detergent bottles, lumber for outdoor decking
- Glass containers

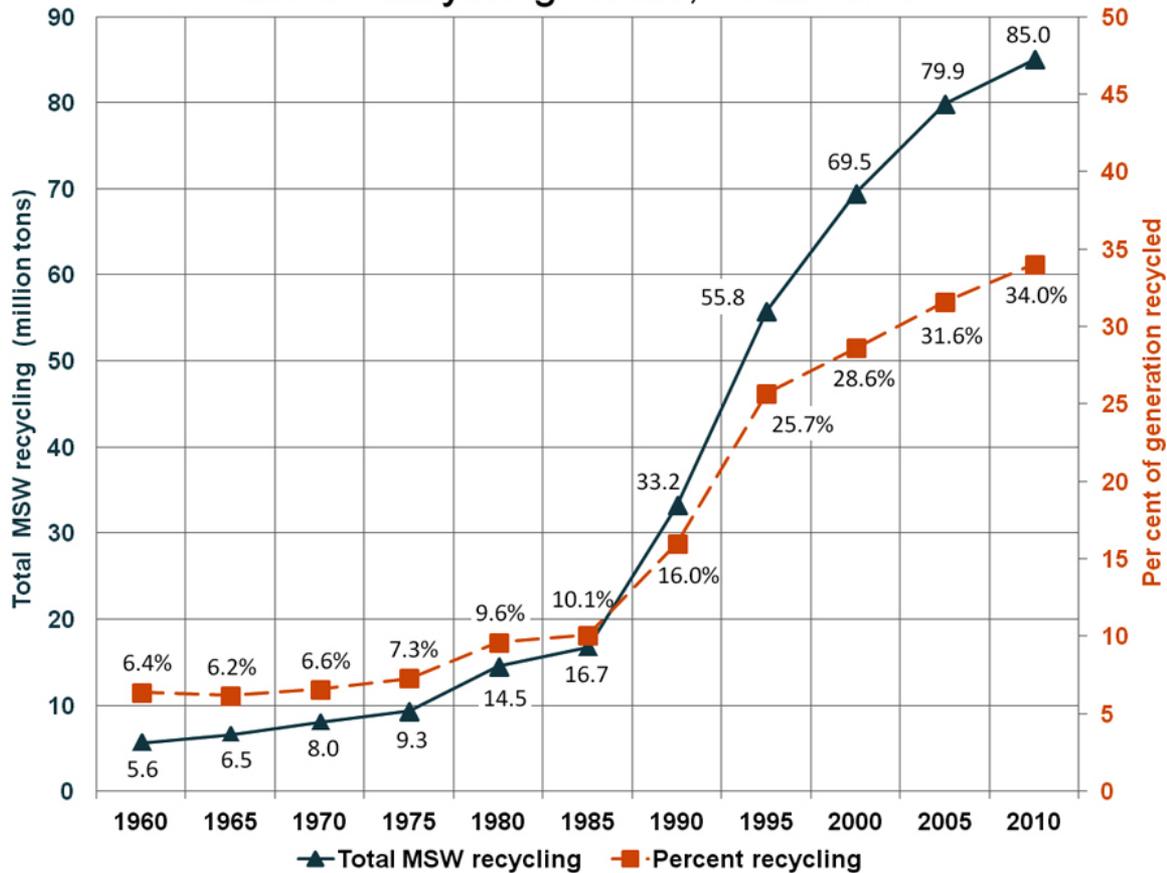


Market Trend – Total Waste

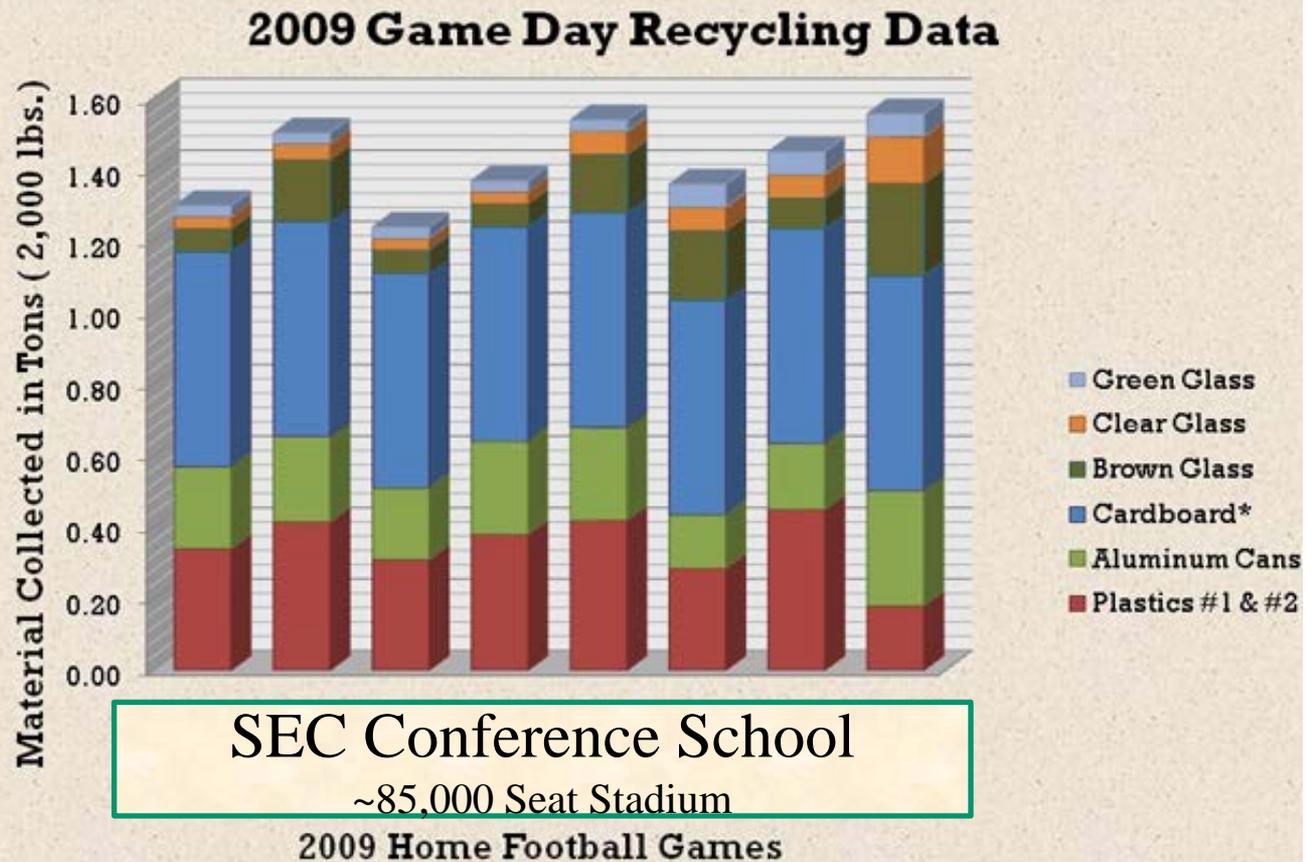


Market Trend - Recycling

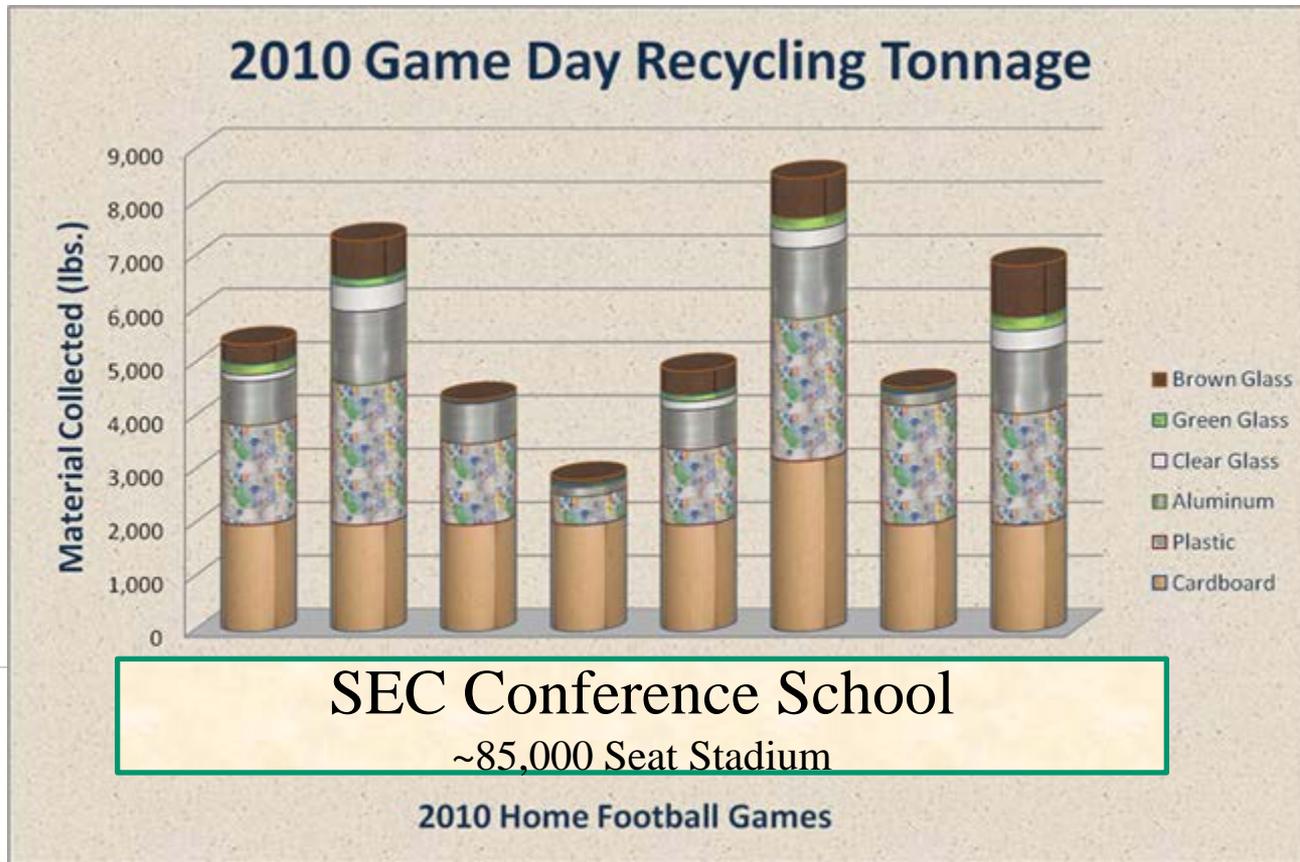
MSW Recycling Rates, 1960-2010



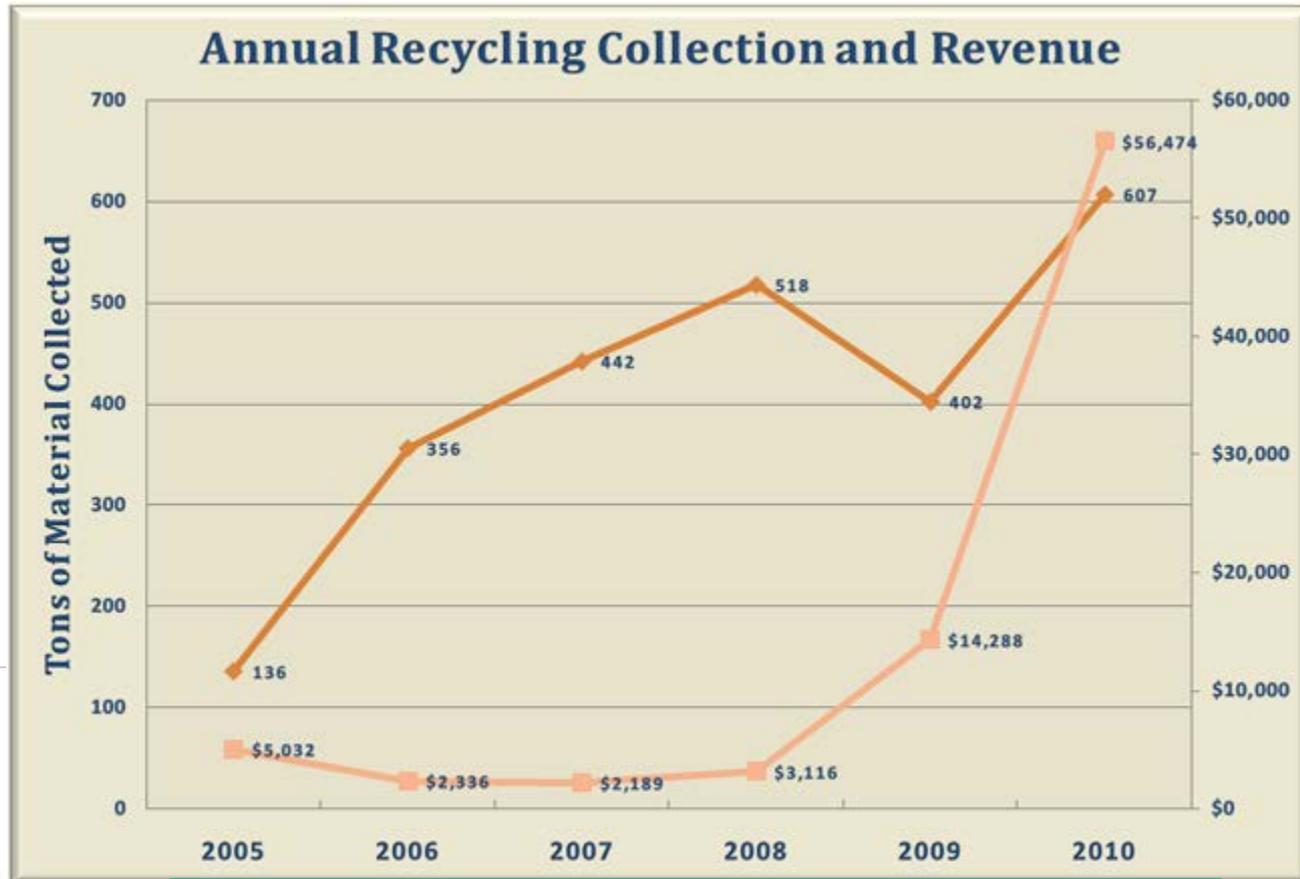
Production of Recyclables



Production of Recyclables



Amount of Recycling/Revenue



SEC Conference School

~25,000 Students

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Driving Success

- Correct Programs
 - What's currently in place?
 - Who's involved?
 - How can we improve?
- Proper Equipment
 - Current infrastructure
 - Permanent
 - Temporary (events/programs)
 - Opportunity for improvement
 - Single Stream vs. Dual Stream
 - Compactors



Driving Success

- **Awareness/Education**
 - Signs
 - Emails
 - Recycling/Sustainability Forums
 - Social Media
 - Banners/Posters/Scoreboards
- **Volunteers**
- **Consistency**
 - Breeds a 'way of life'
 - Changes conventional culture



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Driving Success

- **Competitions** – intra/inter-school and conference
 - i.e - **Recycle Mania**
 - Per Capita Classic
 - Waste Minimization
 - Grand Champion
 - Gorilla Prize
 - Targeted Materials
 - **Needed to compete**
 - Strategizing for the competitions
 - Developing best practices to incorporate
 - Deciding upon container locations/sizes
 - Developing a promotions plan to encourage student involvement
 - Creating a theme for the event (verbiage, logos, symbols, etc)
 - Advertising through media outlets (school newspaper, bulletins, email, university website, organization websites, etc.)
 - Measuring during the competition
 - Collect, track, and analyze data and measurements during the completion of events



Waste Management Green Campus Solutions

WM-powered sustainability strategies and solutions for every phase of “greening”— from university-wide zero-waste programs to simple ideas for reducing waste



Sustainability Audits and Solutions

Energy, water and carbon assessments

Waste minimization/zero-waste plans

LEED® guidance

Green procurement



Recycling Programs

Recycling kiosks

Single- and/or dual-stream programs

Food & Organics recycling

Specialty recycling for electronics, bulbs, batteries and more

GreenTracker™ return-by-mail recycling kits



Comprehensive Waste Programs

Campus-wide waste-stream management

Waste reduction

Solar-Powered Trash Compactors

Sharps collection and MedWaste service

WM Internship Programs

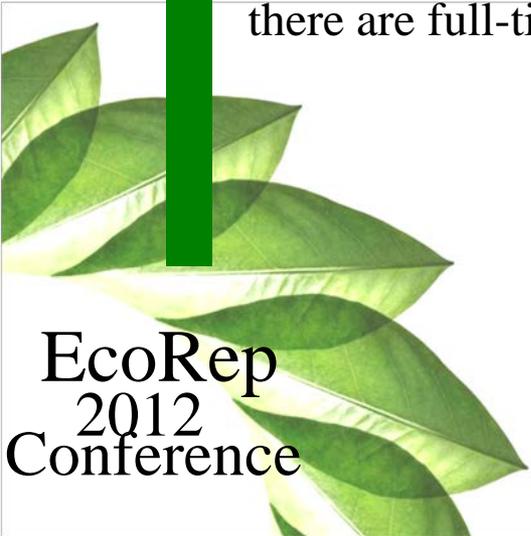
Benefits of an Internship at Waste Management

- Network with professionals who share your interests
- Get hands on experience where you need it most
- Emerge with the tools you need to jump start your career

Every Internship is Unique

WM gives every intern a major project and guidance from experts to ensure the successful completion of the project. WM couples day-to-day work with field trips, executive learning roundtables, and knowledge sharing seminars.

After completing an internship, participants remain part of the WM family. They are able to add real-world experience to their resumes and their supervisors regularly provide positive recommendations to future employers. Sometimes there are full-time job opportunities at WM for former interns.



WM Internship Programs

- **Information Technology:** team using skills in integration analysis, data mapping, and process documentation.
- **Brand & Marketing:** general marketing skills required to hone talents in graphic design, writing/editing of web and sales collateral, and branding architecture.
- **Corporate Law:** geared toward first year law students seeking experience in a corporate legal department; provide support to Labor/Employment and Environmental, Health & Safety practice areas.
- **Learning Organizational Development (Waste Management University):** work with Learning and Development team to hone skills around Learning Management Systems; includes technical aspects and ability to help create new learning strategies.
- **Social Media Strategist (MBA Only):** will assist in defining and executing social media campaigns and act as primary representative in networking communities; create and manage publication of content.
- **Talent Acquisition:** provide support to Talent team including interview scheduling, sourcing & information gathering, populating applicant tracking systems, and even travel to recruiting events.
- **Sustainability Solutions:** gain experience in growing field of sustainability consulting by learning and applying principles of the field and participating in both customer related projects and internal solutions development.

WM Internship Programs

Requirements: In order to intern at Waste Management, it is essential that all of our interns have the following statistics and attributes:

Minimum 60 hours of course work

3.25 GPA

For MBA internships: must be enrolled in an MBA program related to the field in which you are applying

Team collaboration, problem solving skills, aptitude for time management

Undergraduate Areas of Study: This is not exclusive! But our most successful interns have completed coursework in at least one of the following areas:

- Business Administration
- Accounting/Finance
- Marketing/Communications
- Human Resources/Organizational Behavior
- Economics/Statistics
- Computer Science & Mathematics
- Engineering
- Writing Intensive Majors (Humanities, Liberal Arts, etc)

WM Internship Programs

Questions?

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