

Recycling Integrity:

Truths, Myths &

Emerging Technologies



IMPACT

Elemental Impact

A National Non-Profit in collaboration with the National Restaurant Association

Mission:

To return the environment's resources to their natural, balanced state through collaborative, action-oriented projects





Initiatives

Zero Waste Zones

POWER – Perishable Organic Waste to Energy Recycling

Sustainable Food Court Initiative



Zero Waste Zones

- Atlanta's response to losing a 2008 convention as client perceived another city as "greener"
- Launched in February, 2009 in an acclaimed press conference led by the Acting Regional EPA Director
- Four additional zones launched in Atlanta
- Ready for national expansion



Zero Waste Zones

Criteria:

- Spent grease collected for production of biofuel
- Common recycling practices in place
- Excess food meeting the Good Samaritan Donation Act donated
- Other excess food and kitchen scraps collected for composting or other approved organics solutions



Zero Waste Zones

Media LOVES the ZWZ:

- ZWZ is a WIN story to tell
- 2009 media amazing: CNN, NY Times, Earth911.com
- 2011 Media momentum building Fortune.com





FORTUNE CON The New York Times

Expect the World®





Mission:

To explore and evaluate the highest good collection, recycling and use of perishable organics and make recommendations for deployment of economically viable projects within a defined geographic region area.



POWER

Next Meeting:

The Current Scenario: Successes & Challenges

The U.S. Composting Council Annual Conference

January 17 – 20, 2012

Austin, TX





Sustainable Food Court Initiative

Mission:

To bring zero waste initiatives to food courts and develop industry, sustainable best practices for Back-of-the-House and Front-of-the-House operations

Co-Chairs: Chris Moyer, NRA Conserve Program Director & Doug Kunnemann, NatureWorks

SFCI Team: National industry experts in packaging, organics management, foodservice industry



SFCI Pilot Project

Hartsfield-Jackson International Airport

- Six month project designed to bring organics collection to front and back-of-the-house concession operations
- Project stages to simplify process
- Collaborative effort with City of Atlanta, Dept of Aviation, Concessionaires and SFCI Team
- GOAL: Develop a viable game plan to implement organics collection throughout the airport



SFCI Pilot Project

Hartsfield-Jackson International Airport

Concessionaire shall use compostable serviceware along with consumer facing packaging and source separate all food service wastes for direct transport to off airport composting facilities.".

Provision in new airport concessions RFP



Zero Waste

Is Zero Waste Possible?

- Best efforts average around 85% diversion rate
- Final ZWZ Stage requires a waste audit to determine profile of remaining "trash"



Trash Profile

What is landfill destined?

- Vinyl kitchen gloves
- Caps & lids to recyclable containers
- Transport packaging: polystyrene & plastic film
- Broken plates/dishes
- Kitchen plastic wrap & foil



Tips to Increase Recycling

An Integrated Approach to Sustainability

- Custodial staff is key to successful recycling programs
 - Consider reorganizing labor so one person is responsible for recycling separation
 - ➤ Train, Train & Train
 - > Develop incentives or rewards



Tips to Increase Recycling

An Integrated Approach to Sustainability

- Top Management buy-in is critical
 - Educate managers on recycling & contamination
 - ➤ Encourage managers to lift recycling container lids and look for contamination
 - Explore local recycling companies who will pay for clean, separated material



Recycling Destination

Single-Stream Recycling:

- Materials Recovery Facilities (MRF)
 separate material to sell as a raw material
- MRF for SS cost 5 times more than for comingled
- Most large waste haulers only offer SS recycling option



Single-Stream

GOAL: Increase recycling participation

FOCUS: Diversion from the dumpster

RESULT: Increased recycling rates with a decrease in tonnage recycled

Collection is not recycling. A product is not recycled until it is made into another product.



Single-Stream

Container Recycling Institute issued:

Understanding Economic and Environmental Impacts of Single-Stream Recycling

For the highlights & to download 30-page report, visit ZWZ Blog post, <u>Single-Stream Recycling Controversy</u>



IMPORTANT FACT:

Contaminated material is landfill destined, whether placed in a dumpster, a blue recycling bin or green organics bin



What is a food court's biggest contamination challenge?



Answer:

Melted Ice (water) from fountain beverages



The Glass Dilemma:

- Compactors & packer trucks crush glass into shards that contaminate paper & plastic
- Glass causes expensive equipment repairs & maintenance



Glass Uses

GLASS RECYCLING: ALWAYS #1 CHOICE



Glass Uses

Where Glass Recycling is not an option:

- Fiberglass
- Secondary Uses:
 - Roadwork
 - Construction fill
 - Sandblasting
 - Interior Products (countertops, flooring, tiles)



Maintain maximum value of recyclable material (i.e. contaminant-free) with the least energy expended (electric, transportation, labor + other)



Zero Waste Zones:

- Provides a network of engaged foodservice operators to pioneer new recycling systems
- Creates route density with the Zones



Zero Waste Zones:

- Start with the large operators (conference centers, hotels) who provide the volume to make the economics work
- Fill-in with the other ZWZ
 Participants within the route



Source-Separation:

- Cardboard + Paper
- Film Plastic
- Glass
- Other Plastic + Metals



Challenges | Concerns:

- Local markets for material
- Carbon footprint of separated collection



Challenges | Concerns:

- Economics creating a model that makes good business sense for the operator, collector & recycler
- Industry standards each market varies so difficult to create a template



What Can You Do?

- Understand your current trash inventory
- Visit the MRF or other recycling material destination – understand contamination & how to eliminate it in your operation



What Can You Do?

- Collaborate with other operators to develop a recycling system that makes sense for your locale
- Start with the easy, high-value items currently in single-stream

Journey

Remember Recycling Integrity is a Journey
Take baby steps
Celebrate success!



Elemental IMPACT

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