Recycling Integrity:
Truths, Myths &
Emerging Technologies
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

• Media Loves ZWZ: CNN Story, Front-Page NY Times story among press

• 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
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.
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
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
Is Zero Waste Possible?

- Best efforts average around 85% diversion rate
- Final ZWZ Stage requires a waste audit to determine profile of remaining “trash”
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
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 co-mingled
- Most large waste haulers only offer SS recycling option
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.*
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, *Single-Stream Recycling Controversy*
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?
Contamination

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 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)
Recycling Goal

Zero Waste Zones:

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

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
Recycling Goal

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