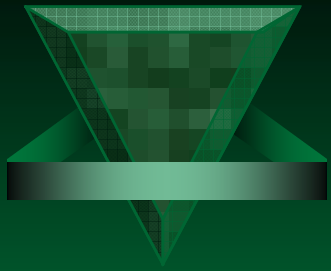


Best Waste Management Practices for Hotels: How to Reduce Costs and Benefit the Environment

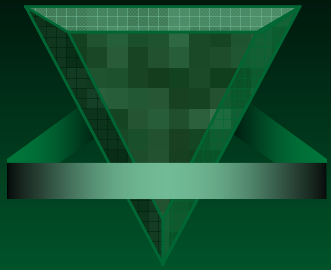


Presenter

✓ Dan Ruben

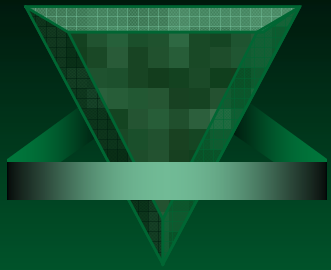
Executive Director, Boston Green Tourism





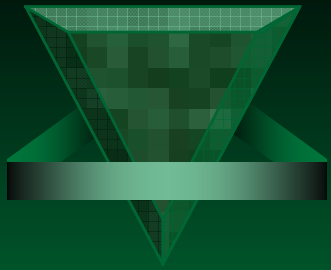
My Premise

- ✔ Most or all Boston hotels have waste management programs
- ✔ Many are mediocre and miss opportunities to reduce costs and benefit the environment.
- ✔ Hotels will benefit by examining and improving their programs.



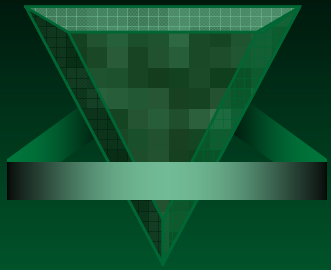
Benefits of a Great Waste Management Program

- ✓ Cost reduction: less purchasing, lower waste disposal bills
- ✓ Recycling is noticed by customers more than any other green initiative
- ✓ Score points on some RFP's
- ✓ Score points on certifications such as TripAdvisor and Green Key
- ✓ Comply with MA waste bans; see www.recyclingworksma.com/waste-bans-and-compliance/
- ✓ Help the environment
- ✓ Help the local economy



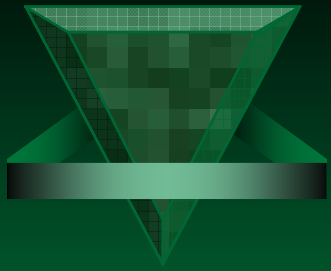
How to Organize Your Waste Management Program, 1

- ✔ Follow the “3 R’s” in priority order: reduce, reuse, recycle. The biggest gains come from waste reduction.
- ✔ Audit waste stream: type and amount of waste/department and opportunities for improvement



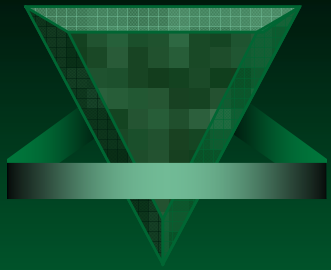
How to Organize Your Waste Management Program, 2

- ✔ Ask managers and staff how to reduce waste
- ✔ Set policies with goals, accountability and a training plan
- ✔ Keep monthly statistics on trash and recycling: bills, # of pickups and weight
- ✔ Identify the companies who will take your materials for reuse and recycling based on price, convenience, etc.



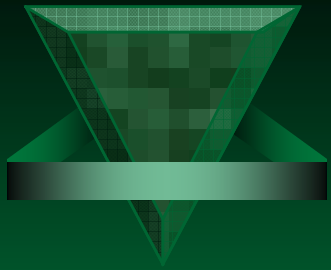
How to Organize Your Waste Management Program, 3

- ✓ Gain staff cooperation (1)
 - Training
 - Hold staff accountable; put recycling in their job description, labor contract
 - Staff commitment letter
 - Staff field trips to recycling plants and the organizations that reuse the hotel's products



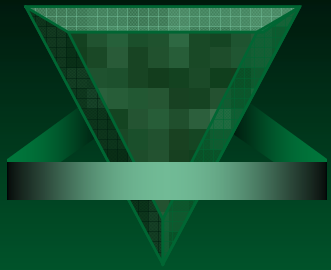
How to Organize Your Waste Management Program, 4

- ✓ Gain staff cooperation (2)
 - Have reusable goods go to countries where staff lived—and tell them with pictures or reports
 - Make a plan for non-English speakers, including pictures on bins
 - Recognition and incentives for staff or departments that excel; make program fun and positive



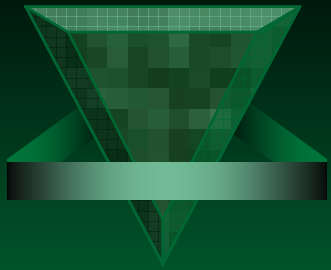
Reduce, 1

- ✔ Refillable amenity dispensers can replace soap, lotion, shampoo and conditioner bottles.
- ✔ Highly concentrated cleaning supplies.
- ✔ Switch from incandescent to fluorescent lights—they last 5x longer, or LED bulbs—they last 25x longer.
- ✔ Switch to low pressure drop high efficiency filters for air handler and PTAC units, because they last five times as long



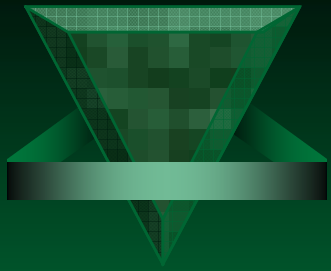
Reduce, 2

- ✓ ↓ food waste: use a system to track it—to diagnose issues and raise staff awareness. Can ↓ pre-consumer food waste by 50%, ↓ annual food budget 2% - 6% and ↓ waste disposal costs. See : www.leanpath.com and www.epa.gov/epawaste/conserves/pubs/food-waste-log.pdf
- ✓ Restaurants: washable table linens or no table linens, washable dinnerware, reusable coffee filters, condiments in bulk dispensers
- ✓ Bottled water: eliminate it by using filtered water instead; install bottle filling spout on water fountains and use the hotel's own bottles



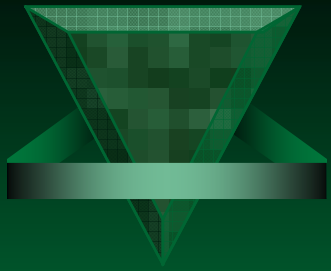
Reduce, 3

- ✔ Use carpet squares so you can replace just the areas that are stained or worn
- ✔ Modular mattresses allow hotels to replace just the mattress tops
- ✔ Eliminate unrequested newspapers
- ✔ Copy paper: require documents to be double-sided; use a smaller font and margins
- ✔ Paperless check-in and check-out
- ✔ Convert to paperless, mobile-based tracking systems in Maintenance and Housekeeping
- ✔ Ask hotel suppliers to reduce excess packaging
- ✔ Permanent mugs for staff



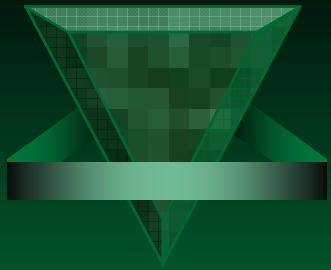
Reuse, 1

- Donate linens, blankets, towels, toiletries (soap, shampoo, conditioner, lotion), old uniforms to shelters, relief agencies
- Donate re-servable food to hunger relief agencies. Give pig farmers food that agencies won't take.



Reuse, 2

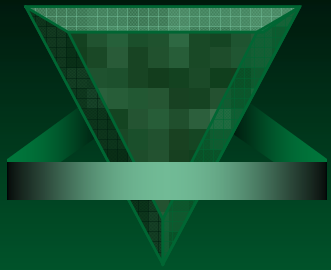
- Furniture
 - Refinish it: www.nationwide-ffe.com/index.html, www.therefinishingtouch.com/ or www.remanufacturinganddesigngroup.com/
 - Donate it to relief agencies
- Mattresses: renew them
- Pillows: restore them at a fraction of the price of new purchases. See Pillow-Vac at www.harrispillow.com/.



Reuse, 3

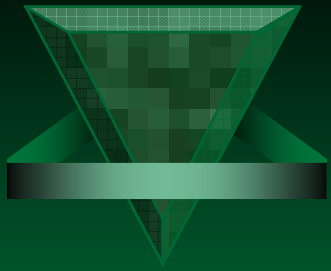
✓ Construction & Demolition Materials

- There are markets for ~20 commodities; >80% reuse/recycling rate possible; plan carefully and specify reuse / recycling in contract
- Before project begins: furniture, casework, carpeting, ceiling tiles, lighting (bulbs, ballasts, fixtures), wiring and cable, HVAC equipment, bathroom fixtures
- Before demolition: wood, windows, doors, porcelain fixtures, partitions
- After demolition: asphalt, brick, concrete, wood, metals, glass, roofing, mixed debris



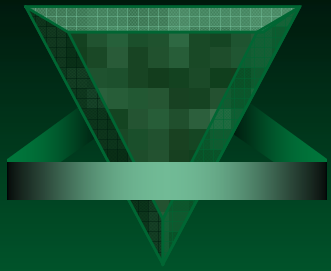
Reuse, 4

- ✔ Toner cartridges: ship to re-manufacturers. Close loop by buying remanufactured toner cartridges--at a fraction of original price.
- ✔ Cell phones can go to armed forces
- ✔ Reuse garbage can liners that are still clean
- ✔ Pallets: make vendors take them back



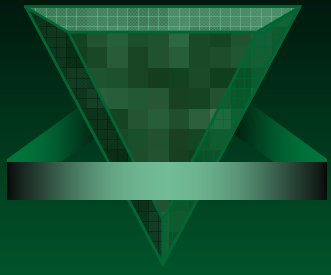
Reuse, 5

- ✓ Torn towels use as cleaning rags
- ✓ Replace plastic dry cleaning bags with reusable canvas bags
- ✓ Use a material exchange to get rid of unwanted items; here's a list of material exchanges in the northeast:
www.nerc.org/documents/material_exchanges_in_the_northeast.html



Recycle, 1

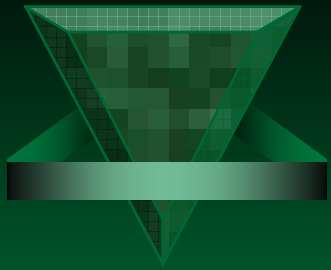
- ✓ Keys to a great recycling program:
 - Have a champion
 - Frequent audits and reports; ask haulers if they would help
 - Monthly statistics
 - Champion or green team takes action when audits and reports fall below your targets
 - Keep staff involved and accountable; get management support
 - Put recycling bins next to every trash container; they should look different than the trash containers and be clearly marked
 - Coordinate with hauler



Recycle, 2

✓ Working with haulers:

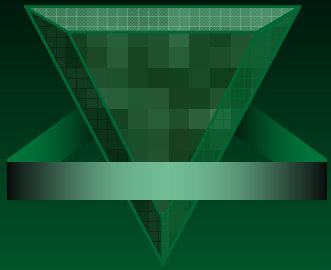
- Find a hauler for any commodity: www.recyclingworksma.com/, <http://earth911.com/>.
- Haulers can identify best equipment, staff ed materials, collection schedules and whether balers and compactors make sense; or whether you should convert a trash compactor to recycling.
- Should hotel buy a baler? Talk to hauler; consider better prices for baled cardboard (for example) vs. capital expense, cost of electric line to baler, space available, labor, etc.
- Single stream is easier, saves space, less training. However, consider segregating easily separable materials like cardboard, if you get a better price for it.



Recycle, 3

✓ Hauling Contracts

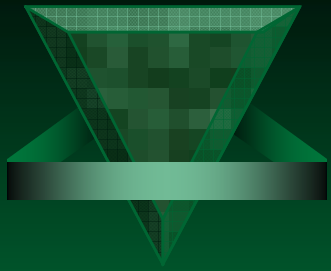
- review them to maximize savings.
- to cut bill, you might have to reduce size of trash containers or frequency of collection.
- eliminate volume requirements that discourage recycling.
- consider bidding trash and recycling separately.
- More advice: www.p2pays.org/ref/03/02098.pdf.



Recycle, 4

✓ Periodic Audits

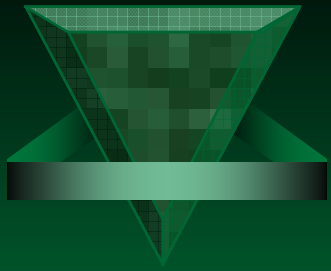
- Check departmental wastebaskets, recycling bins, dumpsters at end of each shift. Are daily items being recycled: cardboard, paper, plastic containers, metal, glass?
- Clear plastic trash bags make audits easier to do.
- Take pictures to communicate your findings to department heads and staff



Recycle, 5

✓ Recycling bins

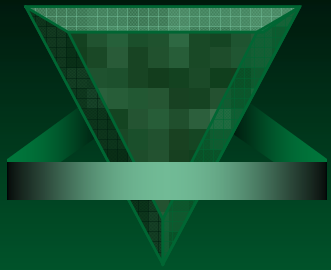
- Attractive bins available from T2 Site Amenities, JRS Amenities, Erwyn, Fibrex Group, etc.



Recycle, 6

✓ Everyday Items

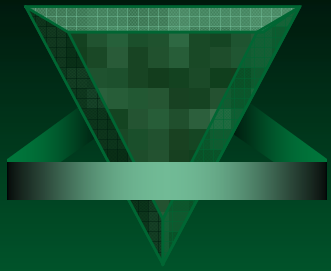
- Cardboard
- Bottles and cans
- Other recyclable plastic
- Other metal
- Other glass
- Paper



Recycle, 7

✓ Food waste

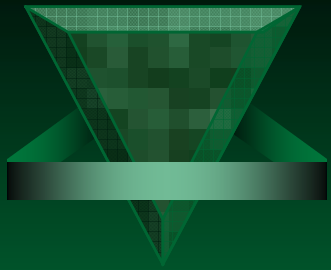
- Find haulers that take food waste, yard waste, waxed cardboard to composting facilities; or food waste to pig farmers
- Or, consider on-site dehydrating machines, bio-digesters or pulpers that reduce the weight of discarded food waste
- Recycle used fryer oil. It can be made into bio-diesel or burned to make electricity; filter used fryer oil to use it longer



Recycle, 8

▼ Electronics

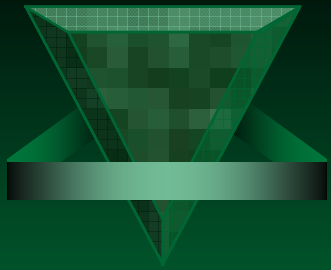
- Electronics recyclers take computers, televisions, cell phones, pagers, copiers, printers, faxes, stereos, etc.
- See www.mass.gov/dep/recycle/reduce/electron.htm, <http://earth911.com/>, and www.epa.gov/osw/consERVE/materials/ecycling/faq.htm



Recycle, 9

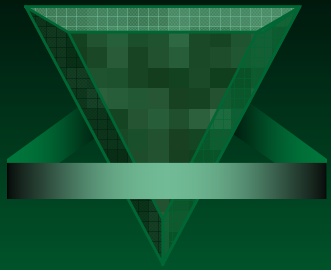
✓ Other recyclable items:

- Mattresses: www.greenlodgingnews.com/biggest-barrier-mattress-recycling--not-knowing-it
- Fluorescent bulbs: www.epa.gov/epawaste/hazard/wastetypes/universal/lamps/faqs.htm
- Batteries: <http://earth911.com/recycling/hazardous/single-use-batteries/>
- Soap and shampoo: www.globalsoap.org/ or www.cleantheworld.org
- Used soil, plants, landscaper products



Purchase Recycled-Content Products, 1

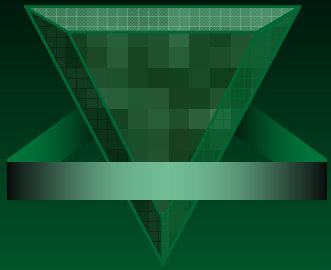
- ✔ Paper: office paper (30% recycled paper performs as well as virgin), toilet and facial tissue, napkins, menu paper, cardboard.
- ✔ Toner cartridges
- ✔ Glass: bottles, jars, floor tiles
- ✔ Carpet
- ✔ Trash can liners



Purchase Recycled-Content Products, 2

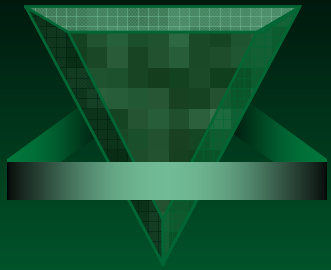
- ✓ Trash cans
- ✓ Plastic lumber
- ✓ Computers with recycled material and other green attributes: www.epeat.net/
- ✓ Recycled-content "to-go" containers in restaurants

EPP resource: www.epa.gov/epp/



Resources

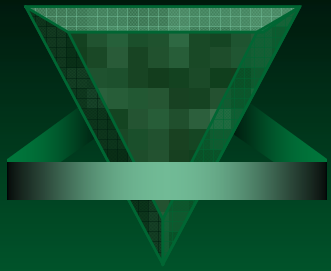
- ✓ Recycling Guidebook for the Hospitality and Restaurant Industry, Metropolitan Washington Council of Governments, Department of Environmental Programs, www.p2pays.org/ref/05/04032.pdf
- ✓ EPA WasteWise Program: www.epa.gov/epawaste/conserve/smm/wastewise/index.htm
- ✓ RecyclingWorks Massachusetts: www.recyclingworksma.com/



Conclusion

Great waste management programs require leadership and attention to detail. They also cut costs considerably and benefit the environment and our community.

Questions? Comments?



Contact Information

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