Best Waste Management Practices for Hotels: How to Reduce Costs and Benefit the Environment
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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
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.
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
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](http://www.leanpath.com) and [www.epa.gov/epawaste/conserve/pubs/food-waste-log.pdf](http://www.epa.gov/epawaste/conserve/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
  - 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](http://www.nerc.org/documents/material_exchanges_in_the_northeast.html)
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:
  – 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.
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.
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
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.
Recycle, 9

✔ Other recyclable items:

– Mattresses: [www.greenlodgingnews.com/biggest-barrier-mattress-recycling--not-knowing-it](http://www.greenlodgingnews.com/biggest-barrier-mattress-recycling--not-knowing-it)


– 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


✔ 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?
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