

Environmental Best Management Practices for Small Businesses

Introduction

An environmental best management practice (BMP) is an action or combination of actions implemented to reduce the environmental impacts of business operations. There are two types of pollution prevention: source reduction and recycling. Source reduction reduces or eliminates the generation of waste. Recycling takes used materials, modifies their form, and makes them available for future reuse. The BMPs provided in the fact sheets listed below are a combination of source reduction and recycling strategies, which provide economic as well as environmental and safety benefits.

Each BMP fact sheet focuses on a particular sector, and draws information from several sources, which are listed in the endnotes section of each fact sheet. The BMPs listed in each fact sheet may be used as a guide for your business. Depending on your business' individual needs and technical and financial capacities, the BMPs may require modification. When adapting a BMP to your business, it may be necessary to contact your local regulatory agency to determine permit requirements. It is important to note that the BMPs listed in these fact sheets are intended as a starting point for your business' environmental management plan, and are not all-inclusive. Further information is available through links at the end of each fact sheet. For additional information about regional specific BMPs, or BMPs not covered in these fact sheets, contact your local authorities and regulating agencies. It is not expected that each BMP will work in all situations; each small business must factor in their own needs, resources, and capacities to find the ones that work best for them.

The fact sheets are intended to work in conjunction with the Environmental Protection Agency's *Practical Guide to Environmental Management for Small Business* and its companion book, *Documenting Your Environmental Management Plan*. For copies of these guides, please refer to the links provided on this website.

Each fact sheet is divided into five sections:

- 1) **Sector Introduction:** Provides basic background information on environmental impacts associated with the sector.
- 2) **Best Management Practices:** Divided into two or more subsections. Each subsection consists of a paragraph describing a particular environmental impact, followed by a list of BMPs which address the problem.
- 3) **Investments in Technology:** Supplies additional information on technologies mentioned in the BMPs or provides information on new technologies to consider when making your choice of BMPs to use. Information about returns on investment is provided where possible, but the true payback period will vary greatly, dependent upon your situation. To determine if a particular technology is right for your operations contact a local vendor for more information.
- 4) **Case Study:** Demonstrates the effectiveness of a BMP used in a business.
- 5) **Other Sources:** Provides links to BMP information listed in the fact sheet. Also provides additional resources available to small businesses.



Best Management Practice

Hotel

Sector Introduction

Hotels vary in size, from having several guestrooms to having hundreds. The recommended environmental best management practices (BMPs) presented in this fact sheet are useful for any size hotel. These recommendations can benefit both the environment and your business. By promoting your environmental image to consumers, your business can set itself apart from other hotels. Conference and convention planners have picked hotels based on their environmental performance, and many travelers support “green” businesses.

The BMPs listed in this fact sheet are a starting point for your business. Additional sources of BMPs for a wider range of activities can be found using the links in the “Other Sources” section.

Best Management Practices

Water Use

A primary environmental concern for hotels is the significant amount of water used in their operation. On average, a hotel can use over 200 gallons of water a day for each occupied room. Water usage can be either by guests or hotel staff (i.e., washing linens).

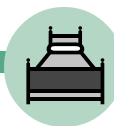
- Repair leaking water fixtures immediately.¹
- Install strainers or traps to prevent food from entering garbage disposals. Garbage disposals use a significant amount of water and should be used as little as possible.⁶
- Give guests the option to reuse their towels and linens. Inform guests about the procedures for requesting fresh towels and linens. This will not only save water, but will save labor, detergent, and energy. Towels and linens will not have to be replaced in each room everyday, dried after washing, or folded.⁴
- Install toilet tank fill diverters in older toilets. Some can save approximately 3/4 of a gallon of water per flush.³
- Operate clothes and dish washers only with full loads, and with the coolest water reasonable to perform the job. Many washers use the same amount of water whether they are partially full or completely full. For clothes washers, hot water only needs to be used on heavily stained laundry. Using warm water will reduce the amount of energy used to heat the water and cool the laundry room.¹
- Install occupancy or motion sensors on sinks or similar devices throughout the property to prevent guests from wasting water and energy.⁵

- Plant ground cover that requires minimum amounts of water. Water outdoor vegetation only during the morning or evening to reduce evaporation.⁴

Solid Waste

Another concern for hotel operations is management of solid waste. A typical guestroom can generate up to 28 pounds of waste in one day, depending on the number of occupants in one room. The average waste generation per room is two pounds on non-checkout days. Up to 80 percent of the items that are thrown away are recyclable, such as aluminum cans, plastic bottles, glass, white office paper, and newspaper.

- Distribute newspapers in central locations (i.e., lobby or restaurant) to reduce the amount of newspaper waste generated, or allow guests to request that a newspaper be delivered to their door.⁴
- Place recycling bins in guest rooms or in hallways near vending machines. Explain clearly to guests what can be recycled in these bins. Place a trash can next to the recycling bin to reduce contamination. Another option is to request that guests place recyclables on the bathroom counter or dressers for housekeeping to pick up.⁴
- Save partial rolls of toilet paper or facial tissues from guest rooms for use in employee areas. Consider using double roll toilet paper.⁴
- Have shower caps, shoe shining rags, sewing kits, etc. available upon request. Do not put these items in every room.⁴
- Consider refillable dispensers for amenities such as



soap, shampoo, conditioner, and lotion where local health restrictions allow.⁴

- Reuse linens and towels which are damaged or heavily soiled as chefs' scarves and aprons or cleaning rags. Also, your business could donate old linens and towels to veterinarian's offices or homeless shelters instead of disposing of them via the landfill.⁴
- Donate items to charity that still have some use left, i.e., partially used shampoo, conditioner, soap, furniture, linens, blankets, china, food, sheets, lamps, mattresses, pillows, and lost-and-found items.⁴
- Work with your supplier to reduce and reuse their packaging. Purchase in bulk when appropriate.⁴

Energy Usage

Energy use is another area where hotels have an environmental impact, as well as opportunities for improvements that result in cost savings. Hotel operations are energy intensive. Guests control heating and cooling systems, lights, and water usage, and have no incentive to minimize the use of these resources. When rooms are unoccupied, lights, televisions, and air conditioning are often left on.

- Instruct housekeeping to turn off heating and cooling systems, lights, televisions, and water in unoccupied rooms.¹
- Place signs in rooms asking guest to turn off lights and televisions when leaving the room.³
- Keep draperies closed to reduce heat loss during the winter and heat gain during the summer.¹
- Use compact fluorescent lamps instead of incandescent lamps in rooms. Low-wattage lamps can be used in exit signs instead of incandescent lamps.⁵
- Close a wing or floor of the hotel during low occupancy times, so it does not have to be lit, heated (or cooled), or cleaned.²
- Unplug room refrigerators if the room will not be occupied for a period of time.¹
- Use office equipment that is Energy Star® rated. Use the 'sleep' function on appliances when they are not in use. Equip rooms with Energy Star® heating and cooling units, televisions, and VCRs.¹
- Install occupancy sensors in conference rooms,

meeting rooms, and offices. Guestrooms can also have occupancy sensors installed to control lighting and temperature. Timers can also be installed on lights (i.e., outdoor lighting).⁶

- Create an operation and maintenance plan for equipment to ensure that it is kept in optimum working condition. This affects both water and energy use.¹
- Contact the local energy service company to see if Energy Savings Performance Contracts are available. Often, they will conduct an audit and incur the cost of upgrades in exchange for a portion of energy savings.¹

General

- Educate staff on the hotel's environmental commitment. Front desk and housekeeping staff should be able to answer questions received by guests. During an employee's orientation, present the environmental procedures and guidelines to ensure that staff are aware of them.⁷
- Inform guests of your hotel's environmental commitment and the ways they can help you reach your goals. Place a sign or poster at the front desk or a card or placard in their room. It can also be posted on the hotel's website.⁴
- Purchase recycled content products when possible.⁴
- Consider using environmentally preferable products, such as non-phosphate, nontoxic, biodegradable detergents and cleaners.⁶
- Purchase products locally to increase transportation energy efficiency⁸



Investments in Technology

- Alternative energy sources, such as passive solar, photovoltaic, and wind energy systems are available to supply energy needs or supplement traditional energy sources.⁷

CASE STUDY The Williams Inn

Carl Faulkner, owner of The Williams Inn in Williamstown, became interested in emerging energy-efficient technologies. He contacted his electric utility, Massachusetts Electric, and requested an energy audit. The utility company sent a lighting contractor to look into the installation of a new, more efficient, lighting system that would work well with the Inn's requirements.

Once committed, Faulkner applied for rebates from his utility company. As a result, the cost of his project dropped to \$830 and the payback occurred in only one month.

Cost—\$830

Waste reduction— 64,177 kWh/year

Savings—\$5,776/year

Payback period—One month

Source: U.S. EPA Energy Star® for Lodging Website, http://www.energystar.gov/index.cfm?sb_lodging.sb_lodging

Other Sources of Information

- ¹ U.S. EPA, *Energy Star for Lodging*, http://www.energystar.gov/index.cfm?c=sb_lodging.sb_lodging
- ² New Hampshire Environmental Services, Waste Management Division, *Staying Green: A Guide to Waste Management for the Lodging Industry in New Hampshire*, <http://www.des.state.nh.us/SWTAS/greenlodging/guide.pdf>
- ³ Green Hotels Association, www.greenhotels.com
- ⁴ University of Missouri, *Pollution Solutions: Waste Reduction Assistance for business, Hotels/Motels*, <http://outreach.missouri.edu/polsol/hotel.htm>
- ⁵ Green Hotels in the Green Mountain State, <http://www.vtgreenhotels.org/index.htm>
- ⁶ Green Seal, *Greening the Lodging Industry*, <http://www.greenseal.org/greeninglodge.htm>
- ⁷ Florida Department of Environmental Protection, *Waste Reduction in Hotels and Motels, A Guide for the Lodging Industry in Florida*, http://www.dep.state.fl.us/waste/quick_topics/publications/documents/hotels.pdf