Melissa Shanks Sales Manager Peachtree Inn 1187 Princess St Kingston, ON, K7M-3E1



January 25, 2012

Dear Melissa,

Green Key Global thanks the **Peachtree Inn** for your participation in the **Green Key Eco-Rating Program** and is pleased to recognize your accomplishments in environmental management and corporate social responsibility. Congratulations on achieving the following rating:

3 GREEN KEYS

A hotel that has made significant advances towards protecting the environment. Strong environmental programs which identify impact and the implementation of best management practices, training programs, and engineering solutions, have benefited the environment and the local community.

Enclosed with this letter is your hotel's Green Key Performance Report. This detailed report highlights your current achievements, provides some general tips and outlines specific recommendations on how to improve your rating and capitalize on additional fiscal, environmental and social opportunities. We are also pleased to present you with an official Green Key Plaque that can be proudly displayed to guests and employees. Your plaque will be sent via post within 10 - 15 business days.

If we can be of any additional assistance, or if you would like to discuss the report in more detail, please feel free to contact us directly. We look forward to working with you on this Green initiative and will continue to update you on new program developments, trends and opportunities throughout the year. Congratulations again on your impressive **3 Green Keys** rating!

Sincerely,

The Team at Green Key Global

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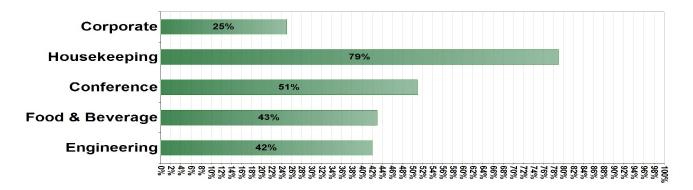
Executive Summary



Peachtree Inn was evaluated by **Green Key Global** and, based on the results of the Green Key Self-Assessment, has been awarded an overall score of **42.39%** and the following Green Key Rating:

3 Green Keys: A hotel that has made significant advances towards protecting the environment. Strong environmental programs which identify impact and the implementation of best management practices, training programs, and engineering solutions, have benefited the environment and the local community.

The following chart summarizes the scoring for the departments which were evaluated through the Green Key Self-Assessment:



The Green Key Self-Assessment consists of a broad matrix of questions related to the following areas of sustainable hotel operations:

- Energy conservation
- Water conservation
- Solid waste management
- Hazardous waste management
- Indoor air quality

- Community outreach
- Building infrastructure
- Land use
- Environmental management

Each question has been designated a specific value based on the environmental and social impacts of a particular action and its associated impact on guests, employees, management and the local community.

Our assessment confirms that the Peachtree Inn has undertaken many beneficial initiatives, but revealed opportunities to further improve performance and significantly increase cost savings. This document contains a comprehensive list of the hotel's current strengths and specific recommendations for future environmental, social, and economic improvements.

Corporate Environmental Management

The Corporate Environmental Management section of the Green Key Self-Assessment has been designed to evaluate your property's policies and procedures as they relate to sustainable hotel operations. This includes any action plans that have been developed and their impact on management, employees, guests, and the local community.

Peachtree Inn has received a score of 25.31% based on the information submitted in the Corporate Environmental Management section of the Green Key Self-Assessment.

Highlights & Accomplishments

Peachtree Inn is recognized for having the following sustainable practices in place:

- The hotel has a written IT policy that addresses computer use, turning off monitors, use of power bars, etc.
- There is a written plan in place to minimize guest and employee exposure to volatile organic compounds (e.g. paints, cleaning products, textiles, carpets, etc.).
- Environmental practices are audited (by Corporate or a third party) at least once a year.
- The following communications strategies regarding environmental initiatives and practices for guests are in place:
 - ✓ Environmental awards and plaques are posted in public areas
 - ✓ Guests are given the tools, and encouraged to participate in the hotel's environmental programs (e.g. in-room recycling, light/appliance switch-off, linen/towel reuse programs, etc.)
- The following paper conservation initiatives in offices/administration areas are in place:
 - ✓ Telephone scratch pads are made from used paper
 - ✓ Double-sided printing on photocopiers and printers whenever possible
 - ✓ Reusable inter-office envelopes
 - ✓ Unsolicited faxes, magazines etc. are contacted for removal from mailing lists
 - ✓ Office paper products purchased with a minimum of 30% post consumer recycled content
- The hotel participates in the following associations, networks, or other affiliations that provide information regarding environmental practices, products, and/or services relating to the lodging industry:
 - ✓ Other local/community association (Notes Eco Stay)

Corporate Environmental Management

- The hotel sponsors, celebrates, or participates in the following local, national, and/or international environmental events:
 - ✓ Community/park clean-ups
 - ✓ Earth Day
- The following materials/supplies that no longer meet guest standards are collected and donated to local charitable organizations on a regular basis:
 - ✓ Linens/towels
 - ✓ Mattresses/furniture
 - ✓ Electronics (TVs, printers, fridges, etc.)
- A charitable fund has been established to provide regular financial support to various environmental organizations and environment-themed community events.
- The hotel offers employee engagement initiatives such as lighting switch-off programs, awareness initiatives, etc.
- The hotel provides facilities/resources to encourage employees to favor sustainable transportation (e.g. bike storage and change rooms, subsidized public transit passes, shuttle buses, parking for low emissions vehicles, etc.).

Points of Interest & Recommendations

Peachtree Inn has shown initiative and dedication to the environment through its Corporate Sustainability and Environmental Management policies and practices. In order to maintain current standards, or to identify areas for improvement, it is recommended that management review their policies and corporate activities at least once every 6-12 months. The following points are provided as tools of reference to assist you in maintaining your property's current performance and to help you to improve overall in this category.

Develop Sustainable Policies

A broad, facility-wide policy framework that addresses the purpose, intent, and targeted results of environmental initiatives being contemplated and/or undertaken should lie at the heart of any environmental performance improvement strategy. This type of policy articulates a common purpose to staff, and focuses and co-ordinates efforts in different departments/areas. A formal policy can also help present commitments to guests and potential clients, suppliers, senior corporate officials, potential lenders, regulators, and the

Corporate Environmental Management

general public.

The environmental policy is the hotel's "environmental vision" for the facility and outlines hotel officials' goals to improve and maintain the facility's environmental performance. It serves as a declaration of principles to be followed when dealing with environmental issues and helps guide and channel hotel planning and operations. These policy commitments may include:

- A commitment to ongoing, continuous improvement
- Energy conservation and efficient use
- · Greenhouse gas reduction
- Water conservation and efficient use
- Waste management and resource use reduction, reuse, and recycling
- Reduction in, and proper use and handling of, hazardous and toxic substances
- "Eco-purchasing" (i.e. factoring environmental considerations into purchasing decisions/strategies. For example, committing to buying green certified/eco-labeled products such as linens, furniture and electronics)
- · Training, education and employee engagement
- Community involvement and support
- Environmental awareness, education, and training for employees (and guests)
- Any other significant, pertinent environmental issues

With these policies, it is important to secure senior level "buy-in" to environmental performance. While enthusiasm and participation (and possibly even "championing") from all levels is required, senior level acceptance is essential.

Develop an Effective Action Plan

Besides having a policy in place, complementary written action plans outlining implementation strategies, approaches, and time lines (i.e. how policy objectives will be accomplished and by when) should be developed. These action plans should go beyond identifying planned activities and include achievement targets to gauge the initiative's effectiveness and success. The plans will support requests for operational and capital budget expenditure.

Having targets will help determine the need for modifications and/or supplemental measures in specific areas, and/or identify where efforts should be shifted to other areas. Assuming that commitment to environmental performance improvements translates into an ongoing process rather than a single campaign, action plans should be reviewed, revised, and updated on a routine (i.e. scheduled) basis. Periodically, share progress with all employees and quests.

From an external credibility perspective, the following parameters are most highly valued:

Quantified performance indicators



- Quantified performance targets
- Ongoing measurement and monitoring of performance
- Third party verification of results

Establish Policies Around Equipment and Chemical Use/Disposal

Establishing a written policy governing the appropriate use/disposal of equipment and/or chemicals will inform staff of the hotel's commitment to minimizing the environmental impact of these products. Examples of specific policies that may be established include:

Hazardous waste handling/disposal policy

Hazardous Waste: Hazardous materials or waste can often be identified by certain characteristics that they possess such as being corrosive, flammable, reactive and/or toxic. There is an internationally-harmonized system for classifying and labeling chemicals called the Globally Harmonized System (GHS). The GHS addresses the classification of chemicals according to their hazards and specifies how chemical information should be communicated through labels and safety data sheets. Many countries are beginning the task of harmonizing existing hazardous materials regulations with the GHS.

The Canadian Workplace Hazardous Materials Information Sheets (WHMIS) is an example of country-specific legislation that will be harmonized with the GHS. WHMIS provides that workers must be informed about the hazards in the workplace and receive appropriate training to enable them to work safely. To accomplish this, WHMIS requires all suppliers (manufacturers, importers, packagers and processors) to label and prepare Material Safety Data Sheets (MSDSs) for products they make, import, package, or process that meet the hazard criteria set out in *Hazardous Products Act*.

Hoteliers that buy hazardous products must make sure that these products are correctly labeled and that MSDSs are available. <u>Employers must set up worker education programs that instruct workers about the contents and significance of labels and MSDSs, how to work safely with hazardous materials (use and disposal), and confirmation that the procedures are being followed.</u>

Establish a Formal Procedure for Dealing with Environmental Complaints

Having a formal procedure in place to deal with environmental complaints is important to ensure guest satisfaction and can help identify weaknesses in your environmental performance. Even if your Engineering Department abides by a strict schedule of preventative maintenance, your guests and employees can also identify weaknesses. Having procedures in place to communicate and remedy poor air quality, leaking faucets and storage tanks, equipment left on, odor, faulty HVAC, etc. can help improve efficiencies and reduce liabilities.



Elect a Green Team to Coordinate Initiatives

To gain and maintain momentum when implementing environmental performance improvement initiatives, an individual/individuals must be assigned responsibility to direct and coordinate efforts. In a small organization, this responsibility may be added to a key official's existing responsibilities. For larger operations, appointing an "environmental coordinator/manager" may be desirable and can provide clear accountability within the corporate structure and demonstrate corporate commitment to the process. In either case, the individual(s) must give the task highest priority. If the official is personally committed to the cause, his/her "championing" will encourage strong efforts and aggressive targets.

Another option is to establish a committee/team of representatives from multiple departments as well as management. This allows suggestions and opinions to be shared among a select group of colleagues with different areas of experience and expertise. Through a committee process, the degree of innovation and practicality is increased, but direct and personal accountability levels are diminished.

Ideally, a combination of these two options provides the most effective and strongest direction and coordination.

To ensure a high level of success, roles, responsibilities and performance targets need to be established for either the individual or the committee. There should also be written mandate, signed by a senior officer, that establishes accountability.

Implement Staff Training and/or Instruction

To ensure a successful environmental program, your staff must fully understand its purpose and expected outcomes, and their specific roles and responsibilities.

To be most effective, training and instruction should be provided on a regular and ongoing basis. Key procedures (e.g. efficient operation of the HVAC system, recycling program steps, water conservation and compliance with regulatory requirements) should be routinely reviewed and appropriate enhancements and/or variations presented and discussed. These regular environmental management-training sessions can help boost morale and facilitate continuous improvement. There are four stages in training people to become environmentally aware:

- Understanding the issue/problem
- Relating cause and effect
- Changing old habits and developing new ones
- Passing the message along to others

Consider the following;



- Hold yearly training sessions for staff during special events (i.e. Earth Day)
- Provide information to all new employees during the orientation process
- Provide ongoing training and follow-up through the hotel's Environmental Committee / Co-ordinator

Once staff members receive training on appropriate environmental behaviors and solutions, these issues must be continually reinforced so they are not forgotten. Behaviors and best practices that meet the facility's intended goals should be recognized and rewarded so others will emulate them. Awarding an "Environmental Employee of the Month" or other service/leadership awards are an excellent way to celebrate successes and share best practices on a regular basis. Providing employees with the education and tools to implement similar programs in their own homes is the next step to reinforcing appropriate behaviors. Organizing "friendly competitions" among departments to stimulate compliance with guidelines reinforces that this is a team effort.

Communicate Your Policies to Suppliers

Communicating your facility's environmental goals and objectives to suppliers is one of the most cost effective and powerful tools for bringing about positive change for your bottom line and beyond. Your primary concern should be eliminating excess packaging coming into your hotel that you must pay to dispose of. Although some packaging is always necessary, ensuring that materials are recyclable through your waste management system will reduce disposal costs. As a hotelier, you can greatly influence your suppliers' behavior by requesting information about their environmental policies and products and making them aware of your desire to support businesses with strong environmental ethics through a letter or memo. Progressive companies also score their top suppliers according to their environmental performance by administering a vendor evaluation survey.

Communicate your Achievements to Guests

A 2010 sustainability research study of travel executives' interest in green hospitality by MindClick SGM, revealed that:

- 72% of respondents who consider themselves to be green travel buyers have implemented or are in the process of implementing policies/programs/scorecards requiring green/sustainability information from travel suppliers.
- A majority of respondents (79%) indicated that they would prefer to do business with a hotel that had green operating supplies and equipment (OS & E) and furniture, fixtures and equipment (FF & E) initiatives in place over a hotel that held a green certification and offered select environmental initiatives but did not target sustainability in its supply chain.

These results confirm that there is no doubt the environment has become a major concern in our international community. More and more companies are changing their operational procedures and adopting policies and procedures in order to limit their impact



on the environment. For many organizations, these policies include business travel. As a result, the demand for green hotels is growing. Although prospective guests may not always use environmental performance as the first criteria when choosing accommodations, your efforts can help increase guest appreciation and loyalty. By giving your guests the tools and information they need (upon check in, in-room directory, etc.), often you'll find they will voluntarily participate in these programs. Soliciting their feedback can also help improve existing performance.

Conserve Paper in Offices

According to the US EPA, each ton of paper that is recycled saves 17 trees, 7000 gallons/26,499 liters of water and 60 lbs/27 kg of air pollution. However, the key for so-called "paperless offices" is to reduce the amount of paper being generated so that it doesn't need to be recycled in the first place. Some simple initiatives to conserve paper include:

- Documents and reports received are saved electronically (PDF) as opposed to printed and saved in binder
- Guest folios are emailed, as opposed to printed
- Stick-on labels or half-sheets for fax covers
- Faxes are received electronically
- An electronic bulletin board posts general staff announcements, memos, etc.
- Shredded paper used to package shipments and/or original shipping materials reused

Participate in "Green Hotel" Associations

A variety of national and international associations, networks, and services have been created to provide useful information on sustainable hotel operations. These organizations provide a great deal of useful information and services, and many government organizations provide tools and incentives to reduce energy consumption in alignment with national greenhouse gas targets. The ENERGY STAR program, for example, is an international symbol that identifies many energy efficient products in Canada, the United States and other countries. The ENERGY STAR initiative helps purchasers make informed decisions about energy-efficient products, promoting practices that are both cost effective and environmentally responsible. Other examples include EnerGuide equipment ratings and the European Union Energy Label. The "Tools" link on the Green Key website provides additional information.

Participate in Community Events

Looking beyond the walls of your hotel and into the local community is an important step towards true corporate social responsibility. Sponsoring and participating in various community events (tree plantings, clean-up days, etc.) demonstrates a connection with



the community and can boost employee morale.

Earth Hour: Started in Sydney, Australia in 2007, Earth Hour has quickly become the largest environmental movement in history. Held at the end of March each year, Earth Hour encourages homes and businesses to turn off their lights and appliances for one hour in a symbolic gesture to take a stand against climate change. For the first time in 2011, Earth Hour asked people to go "beyond the hour" by implementing conservation behaviors in their everyday lives. Hotels are encouraged to publicize their participation in Earth Hour through lobby and elevator posters and through the media. Visit wwf.panda.org/how_you_can_help/campaign/earth_hour.

Participate in Community Outreach Programs

In addition to environmental initiatives conducted for the operation's benefit, there are a number of external community programs that can be mutually beneficial. For example:

Supporting your colleagues to volunteer their time towards various charitable causes - especially during work hours - creates a sense of empowerment and pride in the organization for which they work.

Report Externally on Green Efforts

Environmentally progressive companies typically disclose publicly the details of their green programs, targets and achievements. Examples include the publication of a sustainability (CSR) report, including sustainability information in an Annual Report, or responding to the Carbon Disclosure Project, an independent not-for-profit organization that holds the world's largest database of corporate climate change information.



The Housekeeping section of the Green Key Self-Assessment has been designed to identify departmental operations and the associated environmental impacts related to solid and hazardous waste management, energy conservation, purchasing policies and water conservation. This includes potential effects on guests, employees and the local community and opportunities to enhance performance through education and awareness.

Peachtree Inn has received a score of 79.12% based on the information submitted in the Housekeeping section of the Green Key Self-Assessment.

Highlights & Accomplishments

Peachtree Inn is recognized for having the following sustainable practices in place:

- There is a formal program in place which allows guests to opt out of housekeeping (i.e.: reuse linens and/or towels).
- Standard set-points are used for all guestroom thermostats and communicated to Housekeeping staff.
- Light fixtures are regularly cleaned and maintained (scheduled for cleaning) to provide maximum performance.
- Housekeeping staff are trained to use natural light when cleaning guestrooms and to close blinds and drapes when leaving unoccupied rooms.
- Housekeepers are trained to ensure windows and external doors are closed when heating or cooling systems are in use.
- Housekeepers are trained to check that lights, radios, and televisions are turned off in unoccupied rooms.
- Guest refrigerators and mini-bars are maintained as follows:
 - ✓ Checked for leaks in the door seals
 - ✓ Maintained by dusting the refrigeration coils
 - ✓ Defrosted and/or self defrosting
- Toilet paper rolls are used to the end and/or unused rolls are collected for reuse in staff and/or public washrooms, donated or given to staff.
- In-room recycling options (for metal, glass, paper and plastic) and instructions are made available to guests.



- ✓ Recycling bins are available in all guestrooms and all bins are clearly labelled.
- Guestroom amenities are:
 - ✓ Cruelty free / not tested on animals
 - ✓ Biodegradable
 - ✓ Packaging is recyclable or biodegradable
- Environmentally friendly alternatives to pesticides/insecticides are used in guest rooms.
- Pesticides/insecticides are only applied by trained/licensed staff or licensed contractors.
- There is a policy and procedure in place concerning the handling and disposal of cleaning supplies and medical waste such as cleaning chemicals, needles, medications etc.).
- Housekeeping staff are trained to minimize water use when cleaning (e.g. avoid running the tap/shower, limit number of toilet flushes, etc.).
- Housekeepers are trained to report faulty equipment (e.g. windows that don't close, broken lights, running toilets, dripping faucets, leaking equipment, etc.) to the Maintenance department.
- Synthetic/artificial perfumes and air fresheners are not used in hallways, guestrooms and public areas.
- Housekeeping staff are provided with energy-efficient cleaning equipment (e.g. vacuums, steam cleaners) and trained to select "right-sized" equipment to minimize resource use.
- When using on-site laundry/dry cleaning facilities, the environmental impacts (e.g. selecting energy and water-efficient equipment, cleaning in cold water, minimizing detergent and chemical use, etc.) are considered in the laundry operations.
- The hotel has a policy to consolidate occupied guestrooms and close floors when occupancy permits (e.g. low occupancy periods).



Points of Interest & Recommendations

Peachtree Inn has shown a dedication to the environment through some of its Housekeeping policies and practices. The following points are provided as tools of reference to assist you in maintaining your property's current performance and to help you improve overall in this category.

Install Motion Sensors or Timers in Housekeeping Closets

Housekeeping is a busy department, and it is not always easy to remember to shut off lights in closets when arms are full of sheets and pillows. Installing motion detectors or timers on light switches saves energy and ensures that lights are not left on.

Donate Used Soaps and Amenities

Many soaps and shampoos contain disinfectants and phosphates (that can cause excess nutrient loading) and contaminate our environment. Without a proper policy to dispose of these materials, it is not unusual for a large hotel to dispose of hundreds of these amenities every day. This is not only harmful to the environment, but can be costly in terms of waste disposal. A solution is to collect and donate these amenities to local homeless shelters, missions, and/or women's shelters. Why throw them away when someone else can reuse them? Call your local United Way office and ask about local shelters and programs that might be interested in taking your amenities. But first, check the regulations of your "Good Samaritans Act" to ensure you are protected in the event of any legal action.

Replace Pressurized Aerosols with Hand Pump Dispensers

The 1987 Montreal Protocol - an international treaty to protect the earth's ozone layer - banned the use of ozone-depleting CFCs (Chlorofluorocarbons) as a pressurizing agent in aerosol cans, with the exception of some medical devices. These have been replaced with HCFCs (Hydrochlorofluorocarbons). While HCFCs are 95 percent less ozone depleting, they still impose environmental challenges. Aerosol cans are not recyclable and can add to your disposal fees. A cost effective option is to switch to pump-spray dispensers; these can be refilled from bulk and reused for years, reducing costs and the amount of waste going to landfills.

Phase-out of Chemical Cleaners

Harsh chemical cleaners are not only a concern for the environment, but are also a health & safety issue for the employees who work with these substances on a regular basis. As more and more people are diagnosed with "environmental sensitivities" or allergies and asthma associated with the hundreds of chemicals we are exposed to on a daily basis, this



issue has also become a growing concern for guests.

Because of these concerns, the market for more environmentally friendly cleaners is expanding. Non-toxic and biodegradable alternatives using "old fashioned" substances such as vinegar, natural enzymes, and citrus extracts are gaining popularity. Check with your supplier to see if they offer more environmentally friendly alternatives, or simply go on-line to find the products to meet your needs.

Report Environmental Impacts and Potential Improvements

Having a procedure in place to deal with environmental complaints is not only important to ensure guest and employee satisfaction, but can also identify weaknesses in your environmental performance. Even if your Engineering Department abides by a strict schedule of preventative maintenance, your guests and employees may also identify weaknesses. Having procedures in place to communicate and remedy poor air quality, leaking faucets, faulty HVAC, etc. can help improve efficiencies and reduce liabilities.

Conference & Meeting Services

The Conference & Meeting Services section of the Green Key Self-Assessment has been designed to identify departmental operations and the associated environmental impacts related to solid and hazardous waste management, energy conservation, purchasing policies and water conservation. This includes potential effects on guests, employees and the local community and opportunities to enhance performance through education and awareness.

Peachtree Inn has received a score of 51.16% based on the information submitted in the Conference & Meeting Services section of the Green Key Self-Assessment.

Highlights & Accomplishments

Peachtree Inn is recognized for having the following sustainable practices in place:

- The HVAC system in the meeting and conference area is controlled by:
 - ✓ Programmable thermostat(s) set to function schedules
- The hotel reduces energy demand from lighting in conference/meeting rooms through:
 - ✓ Specific staff asked to turn lights on and off in a timely manner
 - ✓ Dimmer controls in meeting rooms
- Different functions are deliberately scheduled to take place in rooms served by the same HVAC systems so as to maximize space heating and cooling efficiency.
- Draperies and shades are kept closed in unoccupied function rooms.
- Information is provided to meeting planners and guests on environmentally-preferred choices relating to the meeting or event (e.g. public transportation, local food choices, no water bottles, reusable name tags, etc.).
- All meeting rooms are equipped with recycling bins that accept, at a minimum, paper, plastic, metal and aluminum.
- Food scraps from conference and meetings services are diverted from the regular waste stream and composted.
- The following items are purchased with a minimum of 50% recycled content:
 - √ Folios/bags
 - ✓ Napkins
 - ✓ Stationery (pens, pads, flipcharts, etc.)

Conference & Meeting Services

- Other waste management practices that are in place include:
 - ✓ Conference schedules, menus, contracts, etc. communicated via e-mail or CD to clients
 - ✓ Reusable linen napkins
 - ✓ Plastic water bottles and aluminum cans are eliminated by using water coolers/pitchers and/or fountain pop
 - ✓ Water-based markers and pens are provided instead of permanent ink markers

Points of Interest & Recommendations

Peachtree Inn has shown a dedication to the environment through some of its Conference & Meeting Department policies and practices. The following points are provided as tools of reference to assist you in maintaining your property's current performance and to help you improve overall in this category.

Reduce Energy Demand

The easiest and cheapest way to save money on your energy bills is to simply shut off equipment when it is not needed. Lighting is the second largest consumer of energy in a hotel (after HVAC) so it is a great place to start, especially in meeting rooms and convention areas where there can be thousands of light bulbs in each room. Where applicable, the following may significantly reduce consumption;

- Install a computerized property management system that can be programmed to automatically shut off lights and equipment in unoccupied rooms. For smaller hotels, this may not be an economic option.
- Designate a staff member to turn lights and equipment on/off in a timely manner.
 Training your employees and offering incentives to shut off lights is also a cost effective alternative. Spending a few dollars to create energy awareness posters and stickers can reinforce the message.
- Install motion detectors and/or timers on light switches to control lighting in occupied rooms.
- Install dimmer switches to control the brightness of lights. This saves energy by regulating the amount of current flowing through the circuit.

Install Ceiling Fans

Ceiling fans can help move air, which increases people's (perceived) comfort and helps mix the air within an area. Fans can be quite energy-efficient and use considerably less energy than large air conditioning systems. Ceiling fans may not replace the air conditioning system, but they are a cost effective complement to central air-conditioning



Conference & Meeting Services

systems.

Communicate Internal Environmental Policies, Programs and Features to Meeting Planners and Guests

Communicate your hotel's environmental efforts to meeting planners and guests as a means to educate them and publicize your commitment and achievements. Through website content, brochures and presentations, for example, you can highlight the hotel's resource saving programs, green building certifications, performance indicators, targets and key successes. This in turn builds your hotel's reputation as an environmentally progressive facility and may encourage repeat business from like-minded clientele. Communications of this sort should be provided to all meeting planners and guests; not just the ones that request this information.

Establish a Materials Take-Back Policy for Meeting Planners

Creating a policy that requires event planners to remove any leftover signage, banners, give-aways and other materials will enable the hotel to minimize any additional waste entering the waste stream following events and conferences. Clearly communicating this policy up front will educate planners and may serve to discourage them from producing excess marketing materials that may not be needed.

Eliminate Individual Servings

Purchasing in bulk is not only more cost effective, but also reduces excess packaging and waste going to landfills or dumps. Offering servings in reusable containers (such as attractive sugar dishes, milk jugs, or serving bowls) also improves the presentation. A good place to start is the staff cafeteria, by eliminating individual servings of cereal, sugars, creamers, butter, condiments, etc.

Educate Guests about Local Ecosystems, Culture and Heritage

Although your guests may not always use your facility's environmental performance as the first criteria when choosing a conference or meeting venue, your efforts to promote green choices can help increase guest awareness, appreciation, and loyalty. By giving your guests the tools and information they need, you will often find they will voluntarily participate in environmental programs or activities. Through marketing materials, websites, presentations or in meeting/conference negotiations, educate attendees and organizers about local ecosystems, culture, hiking trails, heritage sites, parks, and native species. Encourage them to experience nature and the local community as an extension of your hotel's environmental efforts.

Food & Beverage Services

The Food & Beverage Services section of the Green Key Self-Assessment has been designed to identify departmental operations and the associated environmental and social impacts related to solid and hazardous waste management, energy conservation, purchasing policies and water conservation. This includes potential effects on guests, employees and the local community and opportunities to enhance performance through education and awareness.

Peachtree Inn has received a score of 43.32% based on the information submitted in the Food & Beverage Services section of the Green Key Self-Assessment.

Highlights & Accomplishments

Peachtree Inn is recognized for having the following sustainable practices in place:

- There are flexible light switching arrangements (i.e. sectional controls) in seating areas and restaurant seating is done section by section.
- There are flexible light switching arrangements (i.e. sectional controls) in seating areas and restaurant seating is done section by section.
- The following procedures for kitchen appliances/equipment are used:
 - ✓ Appliances/equipment are regularly cleaned and serviced (including air filters, air ducts, fans and burners)
 - ✓ A regular schedule of equipment turn on/off has been established
 - ✓ Higher energy efficiency appliances (i.e. Energy Star/Energuide certified) and/or equipment have been purchased during the past 12 months
- Freezer/refrigeration motors, thermometers, and other equipment is regularly checked, serviced, and defrosted.
- Tap water consumption levels are reduced through:
 - ✓ Use of flow controllers (i.e. tap aerators)
 - ✓ Awareness program/training session
- Between 50-75% of products are purchased in bulk (where appropriate) to reduce cost, packaging, and waste disposal fees.
- The following recycled paper (minimum 50%) products are used in the kitchen, restaurant, and/or lounges:
 - ✓ Napkins



- ✓ Paper towels
- The following non-paper products with recycled content (minimum 50%) are used:
 - ✓ Other (Notes We Use Glass And Sliverware)
- The following individual servings have been replaced by bulk food items served in reusable containers:
 - ✓ Single sugar packages
 - ✓ Individual creamers
 - ✓ Cereals
 - ✓ Individual jams
 - ✓ Wrapped butter pats
- Surplus food items (i.e. buffet/coffee break leftovers) are:
 - ✓ Provided to staff for consumption
 - ✓ Donated to charitable agencies/food banks/farmers to use as animal feed, etc.
- Untouched food items (i.e. unopened and not likely to be used for guest consumption)
 are collected and donated to food banks and other charitable organizations on a
 regular basis (if permitted by local regulation).
- Organic wastes are separated from the regular waste stream and composted internally or externally.
- The hotel consistently provides food that comes from locally grown (i.e. 400 miles/644 kms or less) or organically produced sources.
- Between 50-75% of product packaging is recycled.
- Between 50-99% of pressurised aerosols have been replaced with reusable hand pump dispensers.
- Chemical insecticides are not used in restaurant and food service areas.
- Chemical rodenticides are not used in restaurant and food service areas.
- Pesticides are only applied by trained/licensed staff or licensed contractors.



Points of Interest & Recommendations

Peachtree Inn has shown a dedication to the environment through some of its Food & Beverage Department policies and practices. The following points are provided as tools of reference to assist you in maintaining your property's current performance and to help you improve overall in this category.

Install Ceiling Fans (where applicable)

Ceiling fans move air, increasing individuals' (perceived) comfort and mix the air within an area. These fans can be quite energy-efficient and use considerably less energy than large air conditioning systems. While ceiling fans may not replace the air conditioning system, they can cost-effectively compliment central air-conditioning systems.

Maintain Kitchen Appliances and Equipment

Implementing a regularly scheduled preventative maintenance program ensures kitchen equipment is in good working condition and can greatly improve your operation's efficiency. Purchasing high efficiency equipment, or having the appropriate controls and training in place to ensure existing equipment is being used efficiently reduces energy bills.

The following are a few options to reduce environmental impacts and improve efficiencies:

- Install timers on hood fans, exhaust systems, and/or hood lights
- Ensure fans are sized to meet code requirements (i.e. not oversized) and regularly cleaned
- Install heat exchange systems to capture heat and exhausted air
- Purchase dishwashers with built-in hot water boosters
- Ensure dishwashers are always filled to capacity
- Flush hot water tanks at least every six months
- Minimize/optimize pre-heating periods for cooking equipment
- Use control technologies to maintain a correct gas / air ratio in gas stoves
- When feasible, cook foods in smaller or more efficient ovens instead of conventional ovens

Minimize Energy Loss on Walk-In Freezers and Loading Docks

Every time walk-in freezer and/or refrigeration unit doors are opened, cold air escapes and more energy is required to cool them down to the desired temperatures. Consequently, it is a good idea to minimize the amount of time doors are left open. Having freezer doors swing closed automatically or installing vinyl curtains or air blowers on refrigerated loading docks can reduce cold air loss, while installing a buzzer can alert



staff when a freezer/fridge door is not closed properly.

Eliminate Defrosting Under Running Water

In a busy kitchen environment, water conservation may not always be the highest priority, especially during a culinary emergency. Certain items must be defrosted on short notice, and a stream of running water seems to be the unfortunate choice for some chefs. However, can you imagine the amount of water and energy that is wasted by a free-flowing faucet over a period of one, five, or 10 minutes? If this is a daily exercise, the environmental and financial impacts can be enormous. Staff should be made aware of the options, such as planning ahead and defrosting slowly in the fridge or microwave. Employee training and awareness are key in this area.

Purchase in Bulk

Purchasing in bulk is not only more cost effective, but also reduces excess packaging and waste going to landfills or dumps - waste you pay again to dispose of. Offering servings in reusable containers (such as attractive sugar dishes, milk jugs, or serving bowls) also improves the presentation. A good place to start is the staff cafeteria, by eliminating individual servings of cereal, sugars, creamers, butter, condiments etc.

Purchase Recycled Paper Products

Recycling is only viable when there is a market for the recycled materials. By buying products with post-consumer recycled content, in conjunction with recycling your own used materials, you are supporting the market for recycled fibers as well as reducing your operation's environmental impact.

It is common sense that purchasing recycled rather than virgin paper products is better for the environment. Recycling:

- Helps preserve forests by reducing demand for wood
- Conserves resources and generates less pollution during manufacturing, because the fibers have already been processed
- Reduces solid waste by diverting usable paper from the waste stream

Scientific research supports the benefits of recycled paper, and government agencies, corporations, and many other large purchasers have adopted policies mandating its use. You can be assured that you are doing the right thing for the environment by buying recycled paper. Whenever possible, choose paper made with a minimum of 50 percent post-consumer recycled fiber.

Consider the following:



- Menus
- Drink coasters
- Waiter scratch pads
- Cash register tape
- Bills and receipts
- Memos/office paper

Purchase Products Containing Recycled Materials

A wide variety of products containing recycled materials can be purchased for restaurants and food service departments - everything from carpets to storage containers. These products are usually cost competitive with those containing virgin materials, although their production is often better for the environment because it uses less energy, generates less waste, and discharges fewer hazardous chemicals.

Purchase and Promote Local Organic Produce

Laboratory studies have shown that pesticides can cause health problems such as birth defects, nerve damage, cancer, and others that might occur over a long period of time, depending on exposure. As a result, the growth and demand for organic product is skyrocketing.

Many people believe that organic produce is simply grown without the use of chemical pesticides and fertilizers. In fact, the process is more complicated. Certified organic agricultural systems promote environmentally, socially, and economically sound food and fiber production. Although cost and quality of organic produce can sometimes be a barrier, hoteliers can play a significant role in supporting the industry by purchasing organic products from local suppliers and promoting them on guest menus.

Grow Organic Produce On-site

Many resorts have the luxury of growing their produce on-site in gardens and pastures. This significantly reduces the amount of pollution associated with transportation, and ensures safe production without the need for chemical fertilizers, pesticides, hormones, etc.

More and more city centre hotels are also producing their own organic herbs on rooftop gardens. These "green roofs" help reduce urban air pollution, beautify our cities, and, depending on the garden's size, can improve the building's energy efficiency. The growing popularity of green roofs and organic produce has also been useful PR tool in generated media attention for those hoteliers with well-established gardens.

Implement a "Return to Sender" Program



Depending on its type, packaging can potentially be returned, reused, recycled or ultimately discarded. At a minimum, it is important to communicate your environmental objectives to your suppliers to reduce the costly disposal of unwanted (and unrecyclable) materials such as Styrofoam and waxed cardboard. Many hoteliers request that their suppliers purchase reusable totes and containers for daily deliveries such as pastries, breads etc. If packaging cannot be returned for reuse, ensure that it can at least be recycled by your hotel to reduce waste disposal fees.

Properly Dispose of Cooking Oils and Grease

In many cases, there are municipal guidelines regulating the amount of oils and grease that can be discharged into the sewer system. In most cases, edible grease (from deep fryers) can be recycled and used as a protein additive for animal feed. Currently, the revenue from recycled grease is cost-neutral as there is usually a charge for picking up the waste oils. Grease traps should be treated regularly with a biodegradable trap cleaner to remove build-up of food wastes.

Properly Dispose of Equipment Containing CFCs

The Montreal Protocol, an international treaty to protect the Earth's ozone layer, banned the production of two refrigerants (known as CFCs) commonly used in commercial refrigeration equipment (R-12 and R-502) that cause ozone depletion. Fortunately, alternatives are now widely available to replace these ozone-depleting refrigerants.

If you haven't already done so, next time you have your refrigeration equipment serviced, consider switching to one of the alternative refrigerants now widely available for use in existing equipment. Drafting a plan for CFC phase-out with timelines can assist your hotel in transitioning to less harmful refrigerants.

GREEN KEY Eco-Rating Program

Engineering & Maintenance

The Engineering & Maintenance section of the Green Key Self-Assessment has been designed to identify departmental operations and associated environmental impacts related to solid and hazardous waste management, energy conservation, purchasing policies and water conservation. This includes potential effects on guests, employees and the local community and opportunities to enhance performance through education and awareness.

Peachtree Inn has received a score of 42.06% based on the information submitted in the Engineering & Maintenance section of the Green Key Self-Assessment.

Highlights & Accomplishments

Peachtree Inn is recognized for having the following sustainable practices in place:

- Performance audits have been carried out in the past three years to identify opportunities for improvements relating to:
 - ✓ Waste streams
- Building re-commissioning has been undertaken in the past 3 years to improve the operation and maintenance of buildings systems (e.g. mechanical equipment, lighting & building control systems).
- With respect to the hotel's monitoring of greenhouse gas (GHG) emissions, the following apply:
 - ✓ Scope 3 GHGs are measured (e.g. business travel, employee commuting, emissions from waste, etc.)
- Annual use and (purchase) costs of the following energy utilities are being tracked:
 - ✓ Electricity
 - ✓ Natural gas
 - ✓ Propane
- Annual use and (purchase) costs of the following water utilities are being tracked:
 - ✓ Water
 - ✓ Sewer discharges
- Water consumption is sub-metered in various hotel areas (Food and Beverage areas, guest rooms, fitness facility, landscaping/groundskeeping, etc.).

Engineering & Maintenance

- There is a regularly scheduled (i.e. at least once a year) preventative maintenance program in place that ensures routine maintenance and adjustments are made to the following:
 - ✓ Heating and cooling systems
 - ✓ Ventilation systems
 - ✓ Plumbing (toilets, faucets)
 - ✓ Lighting upgrades
- Rather than running HVAC (Heating, Ventilation, and Air Conditioning) systems continuously, the following practices/modifications have been made to improve energy efficiency:
 - ✓ Scheduled checks by trained personnel
- The following insulation measures have been taken:
 - ✓ All doors and windows are properly weather stripped and/or caulked
 - ✓ Entry doors are revolving or kept closed
 - ✓ Air ducts are sealed and insulated
- The following features have been installed on windows to reduce solar energy gains:
 - ✓ Blinds or curtains
- Water heaters and boilers are newer, high-efficiency models (e.g., indirect gas-fired), or have insulating blankets or jackets if they are older.
- The following automatic controls are used in irrigation to avoid over-watering:
 - ✓ Weather/moisture/rain sensors
- Organic rather than chemical fertilizers are used on hotel grounds.
- Native plants and trees (drought tolerant) are preferred when selecting vegetation for exterior landscaping.
- Between 50-75% of light fixtures have been modified or replaced with high-efficiency technology (e.g. compact fluorescent, light-emitting diodes [LED] and/or high intensity) in the guest rooms.
- Between 50-75% of light fixtures have been modified or replaced with high-efficiency technology (e.g. compact fluorescent, light-emitting diodes [LED] and/or high intensity) in public areas (lobby, hallways, pre-conference/meeting rooms,



restaurants, etc.).

- Between 50-75% of light fixtures have been modified or replaced with high-efficiency technology (e.g. compact fluorescent, light-emitting diodes [LED] and/or high intensity) in the back of house areas (offices, kitchens, stairwells, hallways, staff areas, etc.).
- Between 50-90% of lighting in the general areas uses higher energy efficiency equipment (e.g. ballasts, dimmers, motion/sensor controls).
- The following are used for outdoor lighting (building exterior, signage, parking garage, and/or security lighting):
 - ✓ Energy efficient light bulbs (e.g. fluorescent, high-pressure sodium, or metal halide lamps)
 - ✓ Timers
- Energy efficiency is taken into consideration when purchasing new appliances and equipment (e.g. Energy Star certified, EnerGuide ratings, EU Energy Label, etc.).
- Greater than 75% of guestrooms have been equipped with low-flow showerheads.
- Between 50-75% of guestrooms have been equipped with tap aerators.
- Greater than 75% of guestrooms have been equipped with low flow toilets (1.1-1.6 gallons/4-6 liters per flush), dual-flush toilets (0.8-1.6 gallons/3-6 liters per flush), toilet dams, or tank fill diverters.
- The following water conserving equipment has been installed in public washrooms:
 - ✓ Tap aerators
 - ✓ Low-flow toilets
- Heating systems and/or laundry steam traps are installed and maintained to reduce condensation losses.
- A hotel recycling program is in place that includes:
 - ✓ Aluminum
 - ✓ Cardboard
 - ✓ Clear glass
 - ✓ Colored glass
 - ✓ Newspaper
 - ✓ Office paper



- ✓ Plastics
- Rechargeable batteries are used and collected for special disposal and/or recycling.
- Discarded furniture and equipment is diverted from general waste streams through:
 - ✓ Donated to local charities
- Between 50-75% of chemicals such as detergents, cleaners, pesticides have been replaced with eco-labeled or environmentally preferable alternatives.
- Locations where hazardous chemicals are stored are:
 - ✓ Clearly marked
- Between 50-75% of paints are water based instead of oil based.
- The hotel is designated as a 100% non-smoking environment.
- The building holds a third-party environmental certification. (Notes Eco Stay)
- Potable water is not used for grounds cleaning.

Points of Interest & Recommendations

Peachtree Inn has shown a dedication to the environment through some of its Engineering & Maintenance Department policies and practices. The following points are provided as tools of reference to assist you in maintaining your property's current performance and to help you improve overall in this category.

Conduct Regular Performance Audits

Hotel facilities consume large amounts of energy and water and produce large amounts of waste. Environmental audits are systematic studies to establish the quantity and cost of each facility input (energy and water) or output (waste) over a given period of time. By establishing where energy and water is being used, the levels of waste being generated, and the relevant costs, auditing results can provide managers and operators with information to assist in decision-making. Specifically, general audits help identify and prioritize areas for more detailed investigation and can justify investments in energy and water use efficiency measures and/or waste reduction programs. By establishing a baseline of performance, audits are also useful for measuring the success of future programs and raising the awareness of all staff as to relative performance. Audits should

Engineering & Maintenance

be carried out at least once every three years by a certified professional.

Measure, Monitor and Report on Greenhouse Gases (GHGs)

Progressive companies are responding to climate change by measuring and reporting on their GHGs. GHGs should be measured on at least an annual basis and tracked against improvement targets. Once direct emissions (classified as scope 1 and 2 emissions by the Greenhouse Gas Protocol, the most widely used international accounting tool for quantifying GHGs), are being measured and managed, companies can progress to tracking their emissions from indirect ("scope 3") sources such as waste, water, commuting and supply chain. Finally, GHGs can be reported externally through the development of a sustainability report, on websites and in marketing materials, and/or through a response to the Carbon Disclosure Project.

Expand the Tracking of Annual Use and Cost of Utilities

Whatever the size of the facility, the consumption and cost of energy and water and waste disposal can have a significant impact on the bottom line, and the environment. As such, tracking the cost and consumption of utilities (including waste disposal) should be standard practice for all hoteliers. Tracking consumption is of primary importance, as the cost of utilities can fluctuate over time, however, a combination of the two is ideal.

Where applicable, consider tracking the following:

- Electricity
- Natural gas
- Propane
- Gasoline
- Diesel Fuel
- Steam
- Wood
- Water
- Sewer discharges
- Recyclables
- Solid waste disposal
- Organics disposal
- Hazardous waste disposal

Install Sub-Meters

Traditional building utility meters provide a single measurement representing the total amount of each utility (e.g. energy or water) used in the hotel. However, traditional meters do not show which areas or systems are the highest consumers. Sub-metering can pinpoint specific systems, areas and times of day with high utility consumption. Having



this information easily accessible means hotel operators can make informed decisions about energy and water management. Sub-meters will typically be installed by certified professionals.

In a hotel, typical areas for sub-meters include: guest rooms, kitchen/restaurants, fitness facilities, and common areas.

Have a Plan in Place to Deal with Indoor Air Quality (IAQ)

There are many indoor air quality issues that occur in hotels, resulting from things such as the use of cleaning products, scents, and insufficient ventilation. For many people, air fresheners and perfumes can trigger allergic reactions and asthmatic attacks as well as being detrimental to people with chemical sensitivities. In addition, there may be pesticides used in guest rooms or on plants in indoor atriums and VOCs (Volatile Organic Compounds) such as formaldehyde off gassing from and furniture made from particleboard and pressed wood products. Carpets and drapes can also serve as sinks for these chemicals as well as dust, absorbing them and later releasing them.

Health problems caused by mould and mildew can be acute (headache, irritated eyes, nose and throat), which occur immediately or within a few days of exposure. Health problems may also be chronic, which are long-term health effects (e.g. allergic respiratory diseases) that might not occur immediately. These diseases may permanently worsen the health of persons affected even after they have been removed from exposure.

Having a plan in place to deal with IAQ issues is not only important for maintaining the physical structure of your building, but also for protecting the health and safety of your employees and ensuring the satisfaction of your guests. Hoteliers can measure indoor air quality once or twice per year by doing "spot checks" in various areas using a meter to read the levels of Volatile Organic Compounds, CO2, particulate matter and other contaminants.

Reduce Demand for HVAC Systems

A building's heating, ventilation, and air conditioning (HVAC) system consists of many inter-related electrical and mechanical pieces of equipment working together to control temperature, humidity, and ventilation. The best and usually least expensive way to save energy with respect to HVAC systems is to reduce the demand.

One key way to reduce demand (e.g. ventilation fans being operated continuously in low use areas) and related energy consumption is to employ adjustable speed drives to match equipment motor output as required.

A second means of reducing unnecessary HVAC use is to install energy management control systems (EMCS) on the equipment. These systems can automatically turn off equipment during "low demand" periods, and/or cycle equipment on and off to save



energy while maintaining comfort levels. Examples are heat-sensing thermostats in storage and equipment rooms to turn fans on and off, carbon monoxide sensors in parking garages to control exhaust fans, timers on boilers and chillers, etc.

Incorporate Advanced Building Technologies

Energy consumption is one of the major expenses for the average hotel and a variety of emerging technologies may be suitable options for reducing operating costs and environment impacts. These may include waste-heat recovery, "free cooling", cogeneration, building automation and others. Where appropriate, these new technologies should be explored, including the variety of financial incentives that may be available (e.g. Natural Resources Canada, Office of Energy Efficiency, U.S. Department of Energy, UK Department of Energy and Climate Change, etc.) for feasibility studies and energy efficient upgrades.

Incorporate "Green Roof" Technologies/High Albedo Materials

Green roof development involves the creation of "contained" green space on top of a human-made structure. In a hotel setting, this may take the form of a rooftop herb garden, garden terrace or other natural setting. This green space could be below, at or above grade, but in all cases the plants are not planted in the ground. A green roof system is an extension of the existing roof, which may involve a special waterproof and root repellent membrane, a drainage system, filter cloth, a lightweight growing medium and plants.

High albedo - i.e. very reflective - materials lower the absorption of solar energy into a building and therefore decrease heat transfer. Depending on the size of the green/high albedo roof, the benefits may include increased insulation (noise and heating/cooling), improved air quality, durability of the roof, and aesthetics. In many urban hotels, this new technology has also been extremely useful in generating increased media coverage and PR opportunities.

Use On-Site or Local Renewable Energy Sources

More and more businesses are using renewable energy sources such as wind and solar power for applications ranging from heating water to providing a more reliable, clean power source. Harnessing these power sources on-site also provides a business with "power security", enabling a facility to continue operating even when utility power is disrupted. Compared to the decreasing cost of renewable energy technologies and the increasing cost of public utilities, on-site power generation is becoming an attractive option for more and more hoteliers.

Purchase Certified "Green Power"



To gain reputational advantages, hotels can also source certified green-energy from utility providers. "Green power" or "green energy" can be loosely defined as energy from renewable or sustainable sources. These renewable energies provide an almost limitless supply of power and include sources such as wind power, solar energy, biomass energy, run-of river (river currents) and small-scale hydropower. Electricity created using renewable energy produces minimal environmental impacts in comparison to conventional forms of electricity produced from coal or nuclear generating facilities.

Many countries and power companies have created green power certification and accreditation programs to help ensure that customers get what they pay for when choosing green power. Although usually more expensive than traditional energy, hoteliers that have signed on to green energy have typically seen additional benefits in marketing and PR opportunities. The increased cost can typically be offset through reduction initiatives to render it cost-neutral.

Insulate Windows from Solar Heating

Installing awnings, blinds or curtains over large areas of glass is a simple way to shade interior rooms from the heat of the sun's rays. If you would prefer to keep windows open, another option is to install windows with a spectrally selective coating which blocks the infrared portion of sunlight while admitting the visible portion. Since the infrared portion of sunlight is the main cause of solar heating, blocking it out allows the sun to shine in your windows without causing the facility to heat up. This is also an attractive option for protecting materials such as carpet, fabrics, paper, artwork, paints, and wood that may fade when in direct contact with the sun's harmful UV rays.

Phase-Out Gasoline Lawn Mowing Equipment

Gasoline-powered lawnmowers produce hydrocarbons (a major component of smog), particulate matter (which damages respiratory systems), carbon monoxide (a poisonous gas) and carbon dioxide (a greenhouse gas that contributes to global warming). According to the US Environmental Protection Agency, the average gasoline mower emits in one hour of operation the same amount of hydrocarbons that a 1992 Ford Explorer emits over 50 miles!

Electric mowers produce essentially no pollution from exhaust emissions or through fuel evaporation. Electric mowers also produce significantly less noise, which is a nice benefit for guests.

Better yet, for less significant landscaping needs, is manual equipment such as push mowers and rakes!

Use Non-Potable Water for Irrigation

Non-potable water is unfit for humans to drink but can be used for a variety of other



purposes, including irrigation. Rain water and gently used water from hotel processes can be used for watering lawns, plants and shrubs in an effort to conserve potable water. Capturing rain water in a rain barrel is an inexpensive way to use non-potable water for watering flowerbeds or indoor plants. A grey water recovery system is a more advanced technology that captures non-potable water for alternative uses.

Ensure the Efficient Use of Elevators and Escalators

According to the Kone elevator corporation, energy consumption accounts for more than 80 percent of the total environmental impact of elevators and escalators. Energy is consumed in transporting people and goods, by lighting, and by the equipment's drives and controls. Although new technologies are being developed to make elevators and escalators more energy efficient, a simple solution for existing equipment is to remove it from service during periods of low-occupancy.

Install High Efficiency Light Bulbs and Systems

In recent years, regular incandescent light bulbs are being replaced with a variety of energy efficient alternatives. Compact fluorescent lights (CFLs), high intensity discharge (HID) lamps and light emitting diodes (LED) have all been designed with functionality and energy efficiency in mind.

Compact fluorescent lamps (CFLs) are the most significant lighting advancement developed for hotels in recent years. They combine the efficiency of fluorescent lighting with the convenience and popularity of incandescent fixtures. CFLs can replace incandescents that are roughly 3 to 4 times their wattage, saving up to 75% of the initial lighting energy. Although CFLs cost more than comparable incandescent bulbs (\$1-\$2 for a standard CFL versus \$0.50 for a standard incandescent), they can last up to 10 times longer and produce less heat, potentially yielding additional maintenance and cooling savings.

The biggest light-source breakthrough for remote-source lighting could come from the evolution of light-emitting diodes (LEDs). Market-ready LED products can offer efficiencies in the range of 40 to 80 lumens per watt, with LED products in development achieving efficiencies over 150 lumens per watt. This performance is far better than an incandescent lamp and better than most HID lighting systems, but still short of fluorescent lights. Due to the long life of LEDs (50,000 to 100,000 hrs), lifecycle savings can be dramatic. Over a 10-year period, energy costs and maintenance requirements for an incandescent EXIT sign could run about \$250, depending on local conditions, whereas a comparable LED unit with a 10-year life would incur overall costs of about \$45.

Install Water Saving Devices in Guestrooms

Around the world, water tables are falling, underground aquifers are being depleted, lakes are shrinking and wetlands are drying up. At the same time, 97% of the world's water is



salty or otherwise undrinkable. Another 2% is locked in glaciers and ice caps. That leaves 1% for all human needs, including agriculture, manufacturing, community and personal use.

Tap aerators break up the solid flow of water, effectively adding air to the water flow and hence less water is passed out of the tap each second. They come in a number of sizes and flow rates, cost relatively little and can be easily installed on to existing taps.

Install Water Conserving Devices in Public Washrooms

A variety of new technologies can be installed in public washrooms to control water consumption. Tap aerators, flow timers, and low flow toilets are all common options in high traffic public washrooms. Another option which is growing in popularity is photoelectric cell control systems which can be installed on faucets, toilets and urinals to automatically control flushing times, flow rates and ensure that taps are not left running.

Consider Grey Water Recovery and Reuse

There are many options available for hotel(s) wastewater treatment and grey-water recycling systems. Technologies exist to reuse wastewater for non-potable purposes and have been used for over 25 years. Given the high water and sewer costs in certain areas, these recycling systems can also be cost-effective. Wastewater treatment and reuse for irrigation and cooling tower purposes are the most common options, however, economics, owner preferences, water availability, purified wastewater disposal issues, climate/soils and land use are the major issues that drive a decision for a particular site.

Engage Your Employees and Suppliers in an Expanded Recycling Program

Through recycling, hoteliers are reducing energy and water usage, reducing pollution, improving air and water quality and strengthening the local economy. Recycling also helps to preserve landfill space and save natural resources for future generations. Based on the fact that the average hotel guest produces approximately 2 lbs. (1 kg) of waste per night, recycling programs can also have significant economic benefits in terms of reduced waste disposal fees. Where facilities exist, it is usually far cheaper to divert recyclable materials from landfill where they can be reused in the manufacture of new products. The key is to involve your employees in the process and give them the tools and training they need to participate. They are probably already voluntarily recycling at home and would be proud to do the same at work.

Check with your current waste hauler to determine what kind of recycling programs are available in your location. In most cases, they should be able to advise you on the type of recycling that is cost effective for your property and assist in the procurement of recycling bins, employee training, measuring performance and much more.



Also work with your suppliers to eliminate or reuse packaging. Consider the following;

- Office paper
- Newspaper
- Mixed paper
- Cardboard
- Colored glass
- Clear glass
- Aluminum
- Mixed metals
- Plastics
- Electronics
- Pallets
- Furniture/mattresses
- Toner cartridges
- Motor oil
- Fluorescent light bulbs
- Batteries
- Kitchen grease
- Construction/renovation waste

Calculate and Track Waste Diversion

One of the most common metrics being tracked by companies across diverse industries is waste diversion, i.e. the amount of waste being sent to recycling or composting facilities, as opposed to landfill sites. Since you cannot manage what you do not measure, understanding the quantity and composition of the hotel's waste and tracking this over time allows hoteliers to observe trends, implement reduction and diversion strategies and educate employees and guests about waste efforts at the hotel. With a targeted approach and persistence, hotels can strive for 80% or higher waste diversion rates lowering the waste management cost.

Purchase / Rent a Waste Compactor

Waste compactors offer many hidden financial and environmental benefits. First, volume reduction of trash and recyclables reduces handling, storage, and disposal costs thereby requiring fewer dumpsters, containers, and pick-ups by the waste hauler. Second, compactors greatly improve recycling capabilities of cardboard, paper, plastic, aluminum, and tin. Third, they help promote a more secure and sanitized work environment.

From an ecological perspective, compacting waste directly at the source where it is generated means fewer trips to the landfills and less fuel consumption and emissions from waste hauling trucks.



Ensure the Safe Storage of Hazardous Materials

The average hotel uses a wide variety of hazardous substances that must be safely stored in order to ensure a clean environment and the safety of staff. These items may include batteries, carpet cleaners, cooling tower and chilled water chemicals, flammable sterno gels, freon products, metal polishes, oil based paints, pool chemicals and many more. If these products cannot be phased out with environmentally friendly alternatives, ensuring that storage areas are <u>clearly marked</u>, <u>equipped with spill containment measures and regularly checked for safety and leakage problems</u> is a step in the right direction.

Use Low Volatile Organic Compound Products (VOCs)

VOCs are chemicals used to manufacture and prepare many building materials, interior furnishings, textiles, office equipment, cleaners, personal care supplies, and pesticides.

"Volatile" is a term meaning that these chemicals evaporate, or get into the air easily at room temperature. Studies have found that concentrations of VOCs may be ten to thousands of times higher in enclosed areas with poor ventilation (such as guestrooms) and may cause irritations such as headaches, eye, nose and throat irritation, and dizziness. At high concentrations, some VOCs are toxic.

"Organic" is another chemical term meaning that these types of chemicals contain carbon. Since carbon burns, many of these chemicals, including organic solvents, are flammable. Common VOCs in hotels include formaldehyde, chloride, butoxyethanol, isopentane, limonene, toluene, vinyl chloride etc. and can be found in cleaning supplies and products such as paints, carpets, textiles, furniture made from compressed particleboard and many other items.

Ensuring that you have a written plan in place to avoid the purchase of products that release VOCs is an important first step to improving indoor air quality and protecting employees and guests.

Establish a Policy for Green Materials Selection in Construction and Renovations

Where possible, hotels should strive to select green materials for construction and renovation projects. Such materials may be reclaimed, recycled, reused, local, or otherwise environmentally-preferred. Establishing a policy to encourage selection of these materials when undertaking construction or renovations provides guidance for hoteliers as to which materials to consider.

Replace Windows With High-Efficiency Models

When replacing windows, select high-efficiency models such as low-e, argon filled, and/or Energy Star/ EU Energy Label rated. Windows have a large impact on energy use, as



leaky or inefficient windows adds to energy consumption and can interfere with the ability for the building's HVAC system to maintain acceptable interior comfort and air quality. Moreover, water leakage and increased condensation may also occur, which can damage interior finishes and negatively impact your guests' experience. While window replacements can be expensive, installing energy-efficient models can contribute to energy savings and has a potential 10-20 year payback period, depending on the original window type. Depending on the type of window, you may be able to retrofit these elements to achieve similar effects. This type of work typically has a medium payback period (10-15 years).

Measure the Savings From Capital Investments

Measuring energy and water savings and waste reductions that result from capital investments in these areas enables the hotel to account for improvements from new equipment or technologies. It is useful to note the decreased consumption or waste production attributable to capital investments, as this provides proof of the value of such investments and can make a strong "business case" for additional equipment upgrades.