



# How to increase your bottom line by going green

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## Introduction

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Tourism is recognized as one of the world's largest industries and continues to expand at a rapid rate (UNWTO 2006). Over 922 million people travelled in 2008 and it is estimated international tourism will increase to 1.1 billion by 2020 (UNWTO 2008). Tourism is also a profitable economic endeavor, making it an economically enticing industry and a form of development for many countries around the world. However, the benefits of tourism are often accompanied by many negative environmental and social impacts. These include:

- revenue leakage from the community,
- air noise and water pollution,
- degradation and depletion of natural resources,
- biodiversity loss,
- labor issues,
- encroachment and overbuilding

(Theobald 1998; Bohdanowicz 2005; Dodds 2005; Graci 2009).

The hotel industry forms a large part of the tourism industry and if not managed properly, it has the potential to be detrimental to the social and natural environments within which it functions. Hotels are also resource intensive and in order to reduce their impact, it is imperative to go "green!"

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Many greening initiatives are not expensive to implement and provide substantial benefits to the business!

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This guide is written to help you learn about the many benefits which can be harnessed from being green, as well as provide you with a step-by-step guide and best practice examples on operating your property in the most sustainable way possible.



## Environmental impact of hotels

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Individually, hotels do not have a significant negative impact on the environment. Collectively however, they can be very wasteful and consume huge amount of resources. It has been estimated that seventy-five percent of hotels' environmental impacts can be directly related to excessive consumption (Bohdanowicz, 2006). This is wasteful in terms of resources and it creates unnecessary operational costs.

The three key areas of environmental impact are energy, water, and waste.

**Energy** - Excessive energy use is extremely costly and with minor adjustments, it can lead to massive cost savings. According to Gössling et. al. (2005), "the average energy consumption per bed per night in hotels might be in the order of 130 Megajoules. Hotels generally use more energy per visitor than local residents, as they have energy intense facilities, such as bars, restaurants, and pools, and have more spacious rooms" (Gössling et. al. 2005:6). Studies have determined that a hotel emits an average 20.6 kg of carbon dioxide per night (Gössling et al., 2005).

**Waste** - A study conducted by Bohdanowicz (2005) also identified that hotels are not only resource intensive and that waste generation is one of the most visible effects on the environment. One estimate identified "that an average hotel produces in excess of one kilogram of

waste per guest per day" (Bohdanowicz 2005:190). Approximately 30 percent of waste in hotels can be diverted through reuse and recycling.

**Water** - Tourists and residents alike require a clean and dependable supply of water for survival including drinking, cooking and cleansing. However, water is integral to the amenities usually expected by tourists, such as swimming pools, landscaped gardens, and golf courses. Water also supports industries such as agriculture that support the tourism industry (Pigram, 1995). Thus, tourists demand more water than local residents on a per capita basis (Essex, Kent & Newnham, 2004). It has been estimated by Salen (1995) that 15,000 cubic meters of water would typically supply 100 rural farmers for three years and 100 urban families for two years, yet only supply 100 luxury hotel guests for less than two months (Holden, 2000). In dryer regions, tourists' water consumption can amount to 440 liters a day per tourist, which is almost double the average amount of water used by residents in Spain (UNEP, 2008).

In destinations that do not have the required infrastructure and systems to manage these impacts, severe degradation of the environment can occur. To further demonstrate the environmental impacts of hotels, Appendix one identifies the main environmental impacts from hotel services and development.



## Why go green? The business case for sustainability

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Several studies have indicated that economic benefits can be gained in hotels through implementing environmental and social initiatives; many with little or no capital. In addition to cost benefits, there are also benefits to choosing an environmentally sustainable strategy. These include:

- Gaining competitive advantage by being a leader in the sector;
- Customer loyalty;
- Employee retention;
- Awards and recognition;
- Regulatory compliance;
- Risk management;
- Increased brand value.

But most of all, because it's the **right thing to do!**

The hotel industry has been pursuing green practices since the 1990s due to fluctuating economic levels and a strong focus on customer service (Claver-Cortes et al., 2007).

There are many green practices that hotels can implement as preventative measures to save unnecessary costs. Examples of these practices are:

- Pollution prevention such as waste discharge into waterways;
- Energy consumption;
- Recycling;

Other popular cost cutting measures for the short-, mid- and long-term include:

- Use of compact fluorescent lights – saves energy.
- Reuse of linens – saves water, detergent, energy and greenhouse gases.
- Low-flow shower systems – saves water and energy.
- Local products – save transportation costs.
- Installation of green roofs – saves energy.
- Installation of solar heaters or other renewable energy source – saves energy.

The ultimate result of these actions is a win-win situation; to reduce hotel operational costs and harmful environmental impacts (Claver-Cortes et al., 2007).

Reports by hundreds of businesses around the world illustrate that by implementing appropriate management processes they have:

- Reduced energy and water consumption costs by more than 20 percent.
- Solid waste and waste water disposal costs by more than 15 percent.
- Improved the quality of the environment in which they operate.
- Improved staff motivation and community relations (Travel Life, 2008).

The following illustrates in more detail the benefits of going green!



## Why go green? The business case for sustainability

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### **Benefit: cost savings**

Brebbia and Pineda (2004) claim that financial savings are one of the most significant factors that influence the implementation of environmental initiatives in a hotel. This is especially evident for hotel businesses that operate in a highly competitive market and where the cost of energy, water and waste disposal are high. Hotel operators that can maximize their efficiency and reduce waste will be more cost-effective than their competitors. For example, a hotel can reduce its energy consumption by 20-40% without adversely affecting performance.

Hotels also use large amounts of energy to keep guests cool in hot temperatures, and equally large amounts of energy to keep them warm during the winter.

In some destinations, hotels place an additional, sometimes unsustainable demand on local water resources and generate large quantities of food and packaging waste.

Some examples of environmental initiatives and cost savings include:

***Holiday Inn on King in Toronto*** reports saving Cdn \$14,852 per year through the installation of low flow showerheads and faucet aerators (Graci 2002).

***The Fairmont Royal York in Toronto*** invested Cdn \$25,000 in an energy conservation program to replace leaky steam traps and fix leaks, which resulted in an annual savings of over Cdn \$200,000 (Graci 2002).

### ***The Comfort Inn and Suites in Red***

***Deer, Alberta*** has implemented a roof-based solar energy system to reduce large energy costs. The system heats and cools the hotel and converts waste energy from the hotel's other systems. The installation of the solar energy system cost the hotel owner USD \$1.4 million however the hotel can last up to 14 days without sun and the system will have enough energy stored to heat and cool the property. Maintenance of the system is also minimal resulting in an extremely cost efficient energy system (Green Lodging News 2008).

***The Holiday Inn in North Vancouver, British Columbia*** has saved approximately USD \$16,000 annually and reduced 28 percent of its energy consumption through installing an in-room energy management system. The system features occupancy sensors that automatically monitor and adjust individual room temperatures. The system was able to ensure a return on investment within 14 months (Green Lodging News 2008).

Despite the setup costs and the possible lengthy return on investment associated with environmental initiatives, the economic benefits usually outweigh the cost of implementation. Starting with projects that are less capital intensive – such as retrofitting light bulbs, energy metering, and training staff to be conscious of energy use – can lead to substantial cost savings.

### **Benefit: competitive advantage**

Green programs can provide a competitive advantage to leaders as long as green



## Why go green? The business case for sustainability

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activities continue to be voluntary. Over time, however, green practices in the hospitality industry will become a baseline requirement, particularly as the cost of non-renewable energy continues to rise, regulatory pressure increases, and consumers become more demanding. Therefore, hotels with business models that revolve around green practices will have the strongest opportunity to achieve a competitive advantage by being ahead of the emerging sustainability curve.

New brands including Starwood Capital's "1" Hotel and Residences, Starwood Hotel and Resorts Element and Hyatt's Andaz, which feature LEED certified buildings as part of their brand standards, offer a variety of green products, such as green spas and restaurants. These are anticipated to test consumers' appetite for a greener hotel industry.

There is also a competitive advantage for being recognized for your green efforts. The Fairmont has received many awards relating to their green practices, such as the 2008 Environmental Leadership Award from the Professional Convention Management Association and the 2008 Green Leadership Award from Hotelier Magazine (Fairmont, 2008). Awards and recognition spread the news of the hotel's efforts and attracts new clientele, such as corporations that need to conduct business with socially responsible companies.

### **Benefit: employee retention**

Employees are identified as one of the greatest benefits of going green. Employees, like hotel guests, are

increasingly sophisticated and "tuned" into current thinking in society and are far more likely to identify with an employer whose principles and practices are aligned with their values.

Environmental programs have proved to be an effective means of generating enthusiasm and motivating staff to work as a team to achieve a common purpose. Many hotel companies use environmental programs as a staff incentive – the financial savings earned are translated into cash or other rewards such as in-house events or trips.

Employee turnover rate in the hotel sector is relatively high therefore increasing the retention rate will also save the business money in training of new staff.

### **Benefit: customer loyalty**

Over the past 25 years there has been a shift in the expectations and demands of consumers. The typical hotel guest of today is more sophisticated and to varying degrees is likely to be concerned about environmental issues such as recycling bottles, cans and paper at home as well as making greener lifestyle choices, such as organic food or fuel-efficient vehicles.

Many guests however, make their decision to stay at a hotel facility based on location, amenities, and service. The implementation of environmental initiatives may play a smaller role in a guest's choice of a property. The influence from customers however occurs when their level of awareness increases and they come to expect environmental practices such as recycling.



## Why go green? The business case for sustainability

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Despite first-time guests basing their decisions on location, amenities and service, customer loyalty may increase once they have experienced a hotel which has demonstrated a level of environmental commitment.

### **Benefit: regulatory compliance**

Hotels must anticipate future regulatory changes and implement initiatives to mitigate the possible costly effects of emerging regulation. Savvy businesses are aware that regulations do not have to be a negative restraint on their daily operations – in fact, they can offer opportunities to gain an advantage over competitors. Some environmental regulations are good for economic competition as they stimulate innovation that can offset the cost of compliance.

By implementing measures in the face of societal and regulatory pressures, unexpected, but substantial cost savings as well as potential new areas of profit may be found.

The hotel industry worldwide is increasingly being regulated for:

- Waste
- Water
- Greenhouse gas emissions
- Energy use.

Being aware of pending rule changes will allow you to adopt measures in advance, and avoid potentially higher future costs which may be associated with compliance.

### **Benefit: risk management**

Risk minimization is now viewed as increasingly intertwined with good corporate social responsibility and governance. Managing risk is as much about minimizing the potential damage from decisions and actions taken from within a company as it is about managing external exposure.

Traditionally, a hotel's risk management strategy has been focused on health and safety concerns around food and water, pest infestation, fire or water damage, outbreaks of disease, and guest security and safety. In recent years however, environmental and social issues are emerging as a key risk issue for the lodging sector.

Environmental risks include:

- Water and land contamination.
- Air and noise pollution.
- Supply chain environmental practices.
- Waste management.

Environmental risks also have an impact on the cost of capital for businesses of various types and sizes, and may affect the value of a company over the long term. In addition, the investment community is increasingly regarding excellence in environmental management and performance as an indication of the quality and aptitude of management in general. Some insurance companies and lenders are beginning to selectively adjust their rates based on environmental criteria stipulated by ethical funds.



## Why go green? The business case for sustainability

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Companies that integrate the environment into their business decisions and reduce their environmental risk and potential liabilities are in a better position to secure investment and reduce their financial and reputational market exposure (Graci and Dodds, 2009).

### **Benefit: 'cause it's the right thing to do!**

Beyond regulation and compliance, many environmental and social initiatives are voluntary. Whether driven by cost savings or a principled strategy, the hotel industry is recognizing the environment, the community and their human capital as a valuable resource to be protected. Long-term business sustainability will depend on this.

Many hotels have implemented social initiatives and corporate social responsibility (CSR) into their regular day-to-day practices. Corporate social responsibility in the hotel industry ideally exists in human resources management, the local community, and through promoting and practicing environmental initiatives (Bohdanowicz & Zientara, 2008) and is heavily influenced by internal and external forces. CSR has been widely expanding throughout the hotel industry, mainly to prove that corporate unethical behavior is no longer a problem. Thus, hotels are embarking on being ethical through social initiatives by protecting and supporting communities, their human resources, and by implementing environmental initiatives (Bohdanowicz & Zientara, 2008). Many international and local hotels are becoming involved in corporate social

responsibility in order to extend their brand knowledge to different types of audiences, to gain employee retention and improved competitive advantage (Bohdanowicz & Zientara, 2008), and lastly because it is “the right thing to do”.

Sixty-five percent of the top 100 companies in the world employ some sort of corporate social responsibility statement featured on their websites (Holcomb et al., 2007). Several multinational companies have gained a very negative brand reputation based on their past unethical practices.

Larger companies have been criticized as being the main culprit in releasing excess greenhouse emissions, climate change, environmental devastation, and unfair treatment of employees. Due to such criticisms and negative publicity, many businesses have increased the focus on corporate social responsibility.



## How to get started – tools for success

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It is evident that there are a number of benefits to going green, many of which increase your bottom line as well as your brand value.

The questions remain then, how to get started? and what are the tools to success?

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There are eight key components to establishing a program to effectively green your hotel:

1. Identify a green coordinator/champion.
  2. Set a baseline to focus your efforts and measure future success.
  3. Engage your staff.
  4. Set an action plan.
  5. Elect a Green Team to run the program in-house.
  6. Write an Environmental Policy Statement.
  7. Train employees.
  8. Benchmark your efforts.
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### **1. Identify a green coordinator/champion**

In order for any environmental program to be successful, the first step is nominating someone in the organization as being responsible for it.

Some potential choices for this role would be the general manager or other senior management or executive staff within the business.

In addition to the green coordinator, the hotel must also have an environmental coordinator to facilitate carrying out the program's implementation.

The environmental coordinator would primarily be responsible for:

- Organizing the Green Team.
- Coordinating environmental audits for water, waste, energy, carbon emissions and purchasing.
- Monitoring of performance against established goals.

The environmental coordinator is crucial to the success of the program as they will assume the role of program manager, information gatherer, communicator, motivator and ambassador to guests and clients (Fairmont, 2002).

Six Senses Hotels and Resorts operating out of Thailand, dedicates three people, a Social and Environment coordinator, an engineer and an environmental analyst to administer sustainable policies. At the property level, each



## How to get started – tools for success

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resort has a full-time Social and Environment coordinator to lead the property's sustainability initiatives (Ernst and Young, 2008).

### 2. Setting a baseline – departmental audits

Departmental audits are essential to determining where you should focus your efforts. To set future goals, it is imperative to have a clear understanding of the hotel's current position in terms of resource use by department. Therefore, it is essential to audit how much energy and water is consumed, as well as how much and what type of waste is generated. All operations generate green house gases (GHG), and as carbon emissions are increasingly being used as a measure of efficiency, this could be incorporated as an indicator in your audits. It can be built as part of your environmental audits or conducted separately as a GHG inventory report done by a carbon management firm.

Measurement and benchmarking is crucial to the success of an environmental program. You must to know what you use and produce before you can reduce it!

Departments that need to be audited are:

- Engineering
- Laundry
- General management
- Grounds and recreation
- Housekeeping
- Purchasing
- Kitchen and food and beverage outlets
- Front desk

It is also good practice to ensure that the measurements are tracked against the established goals on a regular basis by each department and there is a central tracking system which consolidates all the data for analysis.

Annual reports indicating the baseline and progress made towards achieving your goals will communicate your efforts to internal and external stakeholders and keep the departments on track.

### 3. Determining staff support

Without the support of the employees, an environmental program will rarely succeed. It is imperative to engage and consult with employees before starting and during the development and implementation phase of an environmental program. Employees also have a better understanding of the areas where savings can occur and of small improvements that have the potential to make a big difference.

With advice from your employees, you will get a better understanding of both the environmental issues within your property and of your employee's concerns, interest and passions. As an example, in some areas waste management might be a common concern, whereas in other locations, water conservation and air quality may be an issue.

Begin with an ideas campaign, and get employees excited about being able to provide suggestions for the environmental program. It will also help if you can give incentives for the best ideas related to reducing the hotel's overall environmental impact.



## How to get started – tools for success

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Consulting your employees is a great starting point for your environmental program and gives employees a sense of empowerment and ownership. It will make them proud to work at your hotel.

### 4. Setting an action plan

In order to achieve results, goals should be set on an annual basis. Using the audit as a baseline, the goals should be attainable and measurable.

For example, a goal such as “*Reduce energy consumption where possible*” is a great idea, but much too vague to be practical. A clearer and more suitable action plan would be to “*Replace all incandescent light bulbs with compact fluorescents wherever possible*” or to create “*a policy that all housekeeping staff keep all window drapes closed and lights turned off when a room is not in use*”. This can then be translated into meaningful and measurable goals, such as percentage reduction in a year, and also how much money that reduction has saved.

Specific and attainable action plans are much easier to monitor in terms of project completion and cost savings.

In order to get you on track with the action plan:

- Choose goals in the first year that are easily attainable. An example is setting all printers to double-sided printing.
- Keep track of all the cost savings measures. It will be easier to justify bigger expenses in energy conservation.

By phasing in an environmental program and choosing easily attainable goals with quick wins which have a major impact, it is easier to keep on track and find the money to invest in bigger projects. Seeing results should increase senior management support and generate employee enthusiasm.

### 5. Electing a green committee or team

Once the support and enthusiasm of the employees is gained and an action plan identified, it is imperative to assemble a team to run the new environmental program in-house.

Establishing an environmental committee or “Green Team” is essential to the success of an environmental program. It is also just as important to find a group of enthusiastic employees who are passionate about environmental issues. Finding a Green Champion from senior management is necessary for the Green Team’s success.

Some considerations when selecting a Green Team are:

- Technical expertise in areas such as operations, engineering and purchasing.
- Departmental representation such as front desk, food and beverage, housekeeping
- Keep groups to a manageable size to ensure easier decision-making.
- Involve marketing and sales as they may have useful external intelligence about consumers and competitors.
- Communication skills are invaluable and the people you select should be comfortable dealing with senior management and employees alike, as well as with external stakeholders.



## How to get started – tools for success

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Members of the Green Team should exhibit qualities such as:

- Have an interest in environmental matters.
- Be enthusiastic, motivated and passionate.
- Able to commit a certain amount of time.

### **6. Write an environmental policy statement**

An environmental policy statement should be written to communicate both internally and externally.

A well written policy statement needs to express the following:

- Environmental goals that the facility will undertake (for example, committing to reduce 20% of waste by X year).
- The way in which the organization aims to treat the people it employs (for example, through upholding equal opportunities and other fundamental human rights).
- The way in which it aims to integrate into the community in which it is based and co-operate on any significant local issues that impact the business.

Policy statements should be communicated where possible:

- Employee manuals
- At the back of the house
- On the website
- In guest information packs

A sample environmental policy statement you can use for your hotel can be found in Appendix two.

### **7. Incorporating your environmental program into employee training**

In order for an environmental program to be successful, the goals and objectives should be incorporated into employee training.

Employees should be made aware of the policies and initiatives, as well as the goals and objectives of the environmental program. This information should be included in training documentation, in orientation packages for new employees, as well as other staff training methods, with the aim to integrate these policies into the organization. Posters, general staff emails and other less formal means are also a great way to make employees aware of the environmental program initiatives.

Policies work best when staff members understand their responsibilities in achieving the policy objectives.

### **8. Benchmarking and regular progress reports**

Benchmarking progress on a regular basis is vital in achieving the goal of being a responsible business.

Regular progress reports should be made on the monitoring and measurement of the goals in the environmental program. Progress of how the goals are being achieved should also be communicated to all stakeholders and placed on the website (if appropriate). For larger businesses a sustainability report or integrating a section on environment/social responsibility in the annual report would be an effective means to communicate results.

Benchmarking and annual reports would enable building on good results by setting targets for further achievement.



## Best practices

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Several hotels around the world have implemented creative cost saving initiatives to reduce their impact on the environment. The following are best practice examples from various hotels of differing sizes, ownership and location.

### A. Energy

Tracking utility bills can help properties monitor the effectiveness of their energy conservation initiatives. By installing energy-efficient technologies such as appliances, lighting and heating/cooling systems, hotels can produce cost savings on their monthly utilities bills.

For example, the Fairmont Dallas has installed tinted windows and digital thermostats in their guest rooms to reduce the consumption of energy resulting in \$50,000 savings in electricity costs annually (Fairmont, 2008).

The Otani in Japan installed a new air conditioning and kitchen system, through which it achieved a 14% savings in energy and a 30% carbon emissions reduction. (Ernst and Young, 2008).

The Willard Intercontinental located in Washington D.C. is now running on 100% wind energy power resulting in a 12% decline in energy consumption over the past five years (Willard InterContinental Hotel Washington D.C., 2009). The hotel also offers hybrid cars to their guests.

### B. Water

Around the globe, water tables are falling, underground aquifers are being depleted,

lakes are shrinking and wetlands are drying up. Water conservation is necessary in all areas of the world. It is estimated that up to 50% of the water that families used could be saved by implementing simple conservation methods. The savings in energy and sewage treatment costs would all add up. Several hotels have implemented water saving initiatives.

For example, the Willard Intercontinental in Washington D.C. has implemented water-free urinals resulting in savings of 95,000 gallons of water in 2005 (Willard InterContinental Hotel Washington D.C., 2009). Environmentally friendly solutions are also used in the laundry which results in saving tons of chemicals from entering the water system.

The Fairmont Royal York in Toronto saves 476,000 liters of water per day by having an installed water softener that reduces water use for laundry. Previously, the ice machines and freezer units at the Fairmont Palliser in Calgary, Alberta would discharge the water used to cool the compressors. This water is now redirected, reducing the hotels water consumption by 30 percent. The heat energy from these units is also reclaimed to heat the domestic hot water and pool water (Graci and Dodds, 2009).

The Otani in Japan constructed a water recycling plant, which produces 1,000 tons of recycled water daily from kitchen sewage to be utilized in gardens or staff lavatories (Ernst and Young, 2008).

The first eco-friendly resort, the Maho Bay Camp in St. John was opened in 1976



## Best practices

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and utilizes low flush composting toilets, spring action faucets and showers, rain water catchments and solar heated water to conserve natural resources and minimize the footprint that the hotel and visitors leave on the island (Ernst and Young, 2008).

### C. Waste

The hotel industry can reduce the amount of waste produced by implementing and following a waste management system that is modeled around the concepts of reduce, reuse and recycle (Greenhotelier, 2004). Approximately 54 percent of a hotel's solid waste can either be recycled or reused (Alexander 2002). A study by Bohdanowicz (2005) identified that "a large proportion (50-60 percent) of the waste materials in an accommodation facility can be recycled or reused".

For example, it has been discovered that the average quantity of unsorted waste materials for Radisson SAS hotels was reported as 3.1 kilograms per guest night in 2002. On the other hand, Scandic Hotels, which has an extensive waste management program, reported an average of 0.515 kilograms of unsorted waste per guest per night" (Bohdanowicz 2005:190).

The Westin San Francisco Airport Hotel introduced a recycling program that promotes the recycling of 22 tons of materials and a savings of \$6000 annually (Alexander 2002).

Forty six percent of a hotel's solid waste is food waste (Alexander, 2002). Since all food waste can be composted, hotels are increasingly recognizing that composting

is a better alternative to dumping food waste, as composted waste can be used as organic fertilizers (Alexander 2002).

The Willard Intercontinental in Washington D.C. has recycled a total of 191 tons in 2008. Landfill wastes (non-recyclables) have decreased from 1029 tons in 2005, to 635 tons in 2008, which is a 38% reduction. In 2005, they were able to compost one ton. By 2008, the composting increased to 37 tons with a 33% increase over 2007 (Willard InterContinental Hotel Washington D.C., 2009). These practices have been very successful for the hotel and have been justified by their future cost reductions and increasing occupancy rates. The hotel in return has received numerous rewards such as the Mayor's Environmental Award in 2009 and Business of the Year 2009 award for such efforts (Willard InterContinental Hotel Washington D.C., 2009).

Waste can also be used creatively in the building process, given to the local community for use in their buildings, or used as an attraction such as at the Maho Bay Camp in St. John which has a Trash to Treasures Art Center that recycles the resort's waste materials into craft items (Ernst and Young, 2008).

### D. Green meetings

As more and more corporations are including a commitment to the environment as part of their mission statement, the demand for conference facilities that also reflect this commitment is growing. In many cases, the mandate given to the meeting planner is to plan and promote a conference that uses



## Best practices

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suppliers who have an environmental policy, and whose products and services offer the best environmental specification or the least harmful environmental option.

Several hotels are now offering meeting and conference options that focus on greening all aspects of the conference; from zero waste and carbon offsetting options, to greening services such as compostable and recyclable products. The latter include things like stationary; disposal free food and beverage service using reusable products such as china and linen napkins, focusing on eco-tours of the hotel and surrounding areas, and locally sourced, organic cuisine.

There are a number of options to ensure that meetings are green and the Fairmont Eco-Meet program was one of the first and the most successful green meetings program for a hotel chain. Other hotels that hold corporate conferences and events are also focusing on greening their meetings as this is increasingly being required from their corporate clients (Fairmont, 2002).

### E. Green building practices

Green building practices are increasingly being used in new and retrofitted developments, mainly for energy and water efficiency and to reduce hazardous waste.

For example, the Orchid Hotel located in Mumbai, India, is a prime example of a “green” hotel that attracts up-scale clientele and provides state-of-the-art technology and luxury in an “environmental friendly context” (Jones, 2002). The hotel is made of re-usable wall panels made from fertilizer

waste and environmentally friendly cement called “Portland Pozzolana Cement” and “autoclaved aerated concrete” to deplete the topsoil and provide thermal insulation, which both use a large percentage of fly ash (Jones, 2002). In terms of architecture, The Orchid Hotel has positioned some of their rooms to avoid facing external cements to prevent heat load, constructed ceilings to invite natural light into the building, in addition to a rooftop swimming pool to protect the building from heat. The hotel has also taken into consideration energy-savings and reducing their air pollution by installing a compact fluorescent light systems to reduce energy, wireless key card readers to turn off unnecessary lighting and CFC-free (chlorofluorocarbons) refrigerators. The hotel has also installed a modified tank to their air conditioners in order to store energy during off-peak hours and reduce overall use of energy, as well as installed scrubbers in their chimneys to reduce the fumes released in the air. With the hotel being situated in a large city, it is an exceptional example of how a city hotel can successfully go green using the ‘reduce, reuse, recycle’ method (Jones, 2002).

Six Senses Hotels and Resorts use materials from renewable sources, such as wood, adobe, mud and thatch. One prominent example of green construction is the Six Senses Hua Hin Spa, Thailand, which is made of clay-like mud, straw and rice husks. They are also launching a new brand that will be carbon positive and LEED Gold Standard certified. It also plans of making its company’s flagship resort, Soneva Fushi, a zero-carbon emitting resort by 2010 (Ernst and Young, 2008).



## Best practices

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The Kingfisher Bay Resort located on Fraser Island in Australia was opened in 1992 and built to the highest environmental design and sustainability standards. Buildings carefully constructed around trees were designed to be energy efficient and are restricted to two levels to promote environmental harmony.

It is also important to design the hotel with the community and its culture in mind. The Al Maha Desert Resort and Spa pioneered environmentally friendly lodging in the Middle East. The resort is located within the 225 square kilometers of the Dubai Desert Conservation Reserve and was awarded by National Geographic as one of the world's best ecotourism models. It was constructed to represent a traditional Bedouin camp and embraces the indigenous culture, wildlife, desert habitat and environment of the region (Ernst and Young, 2008).

Even using only environmentally sensitive paints and building materials will significantly reduce the impact on the environment. Initiatives such as green roofs and using natural materials also significantly reduce building and energy costs.

### F. Purchasing

Hotels have the ability to buy in bulk and to influence the supplier to provide less packaging and use more environmentally friendly materials.

Many countries such as Austria and Finland require suppliers to take back and reuse or recycle their packaging waste. A hotel can help reduce hazardous waste generation by making an effort to

only purchase environmentally-friendly products. Purchasing locally all items and services, will also reduce the impact on the environment and benefit the community. Hotels can purchase and use biodegradable cleaning products, and purchase certified organic produce and products.

In Indonesia, the independently owned Damai Lovina Villas in Bali, has effectively reduced cost by decreasing waste and energy usage. The resort partners with a local research center that provides the resort with environmentally safe agricultural and household products. The resort's restaurant sources 80% of its ingredients from its own organic garden and local farms. By practicing sustainable farming, such as using permaculture to reduce water consumption and increasing crop health, and composting in lieu of using chemical fertilizers, the farm was able to reduce crop production costs by 90% and increase crop production by 20% (Ernst and Young, 2008).

Buying locally is crucial in enabling local communities to benefit from tourism, so it is important to use local suppliers, where possible for commodities such as for food, furniture, uniforms etc. Buying from local suppliers helps enable the money spent to stay within the area. Local industries also often use traditional techniques and methods, which are unique to the area. Tourism support for these local industries helps these cultures and traditions to be protected and passed on to future generations.

The Holiday Inn in Sanya, China, uses local bakers and launderers in order to increase



## Best practices

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the benefit to the community and reduce the impact on the environment (Graci, 2009).

### **G. Promoting the local economy**

Hotels should actively support initiatives for community development in their area. They are in an ideal position to be able to consult with the local community and identify their needs and concerns and then work with them to enable them to benefit from tourism. There are many means to do this such as through education, health, sanitation, employment, supporting local charities, purchasing from local suppliers, working with communities and offering new opportunities for local small entrepreneurs.

### **H. Employee engagement**

As discussed, employee involvement is necessary for the success of the environmental program. Employee engagement through educational opportunities, site visits, competitions, newsletters, and other means, encourages staff to become involved in a hotel's environmental program.

Some best practices include the Walt Disney Parks and Resorts that promotes environmental education and communication between staff and guests. The Willard InterContinental in Washington, D.C. engages in social improvement efforts, such as employee volunteering and supplier diversity programs (Willard InterContinental Hotel Washington D.C., 2009).

It is important that all staff members are being treated well, paid a fair wage, and have decent working conditions. Most countries

have well-defined legislation; however, there are many hotels in countries around the world that do not pay staff even a minimum wage.

It is also important that local residents are employed in both operational and managerial roles and given access to training as necessary. Child labor laws must also be followed.

Motivated staff members tend to deliver improved guest services and good working practices help to recruit and retain high quality people. Appropriate and thorough education and training of staff is essential for improving a company's overall sustainability performance. Staff members need to be trained on both skills related to their role as well as being taught how they can help improve the sustainability of the destination and the business. For example, if staff encourage clients to use local services such as local guides and restaurants, the economic benefits generated from tourism will be spread throughout the local community and clients will get to experience the local culture.

### **I. Social responsibility**

Social responsibility, such as becoming involved in your local community or the community at large, benefits the organization in a number of ways.

The Accor group of hotels has an Earth Guest Policy which focuses on the local development, child protection, fight against epidemics, and food elements of social responsibility.



## Best practices

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The Sofitel Hotel, one of the brands of the Accor group, located in Cambodia gives aid in local farming by providing agricultural training. The hotel brand has also raised awareness of the implications of the child sex trade by having campaigns aimed at both their guests and employees (Accor, 2010).

Fairmont Hotels and Resorts are equally involved in providing social initiatives as well as environmental initiatives. The company has projects in local community areas in which their hotels and resorts are located, relating to education, poverty, and donating to charities (Fairmont, 2008).

The Banyan Tree Hotels and Resorts based in Singapore, considers corporate social responsibility a core part of its business. The company has developed environmental programs in the Maldives and Seychelles for marine conservation, in Phuket for gibbon rehabilitation, and in Bangkok for elephant protection. The company also created community outreach programs, such as programs for dengue eradication on the Bintan Island in Indonesia. In addition, the company supports indigenous artistry through Banyan Tree Gallery, its retail arm that markets local arts and crafts at Banyan Tree hotels. To continuously improve the company's performance it publishes an annual sustainability report (Ernst and Young, 2008)

The Six Senses Resort based in Thailand has implemented the company's Dragonfly Habitat Project, which was suggested by an employee to use a traditional approach to deal with controlling mosquito populations.

Six Senses also contributes 0.5% of its revenues to its Social and Environmental Responsibility Fund of which 60% is spent locally by the company for sustainability projects (Ernst and Young, 2008).

### J. Conservation

As many tourists travel to experience the natural habitats within which the hotel operates, it is imperative that hotels focus on conserving the resources that sustain them. By the year 2025, the Earth could lose as many as one-fifth of all species known to exist today. Several hotels have been doing their part to conserve the natural environment and protect species.

The El Nido Resort in Palawan, Philippines, actively protects Palawan's giant clam gardens and supports the reintroduction of endangered cockatoos (Ernst and Young, 2008).

Loreto Bay, in Baja California, is a sustainable community emphasizing green building practices, community initiatives and a dedicated nature preserve that covers over 4,800 acres (Ernst and Young, 2008).

The Morgan's Rock Hacienda and Ecolodge in Nicaragua, is part of a 2,500 acre tree farming and restoration project and is surrounded by 2,000 acres of private nature reserve. (Ernst and Young, 2008).

Fiji's Turtle Island Resort has helped to restore the island's ecological diversity by planting 500,000 native trees and maintaining a four-acre organic farm, which provides the island with fruits and vegetables (Ernst and Young, 2008).



## Best practices

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Hilton Hotels Corporation has pledged to protect 1.4 million acres of endangered rainforest.

These hotels have put conservation on the priority list and have actively contributed to its protection.

### **K. Customer education**

Tourists are often unaware of the impacts they have while they are on holiday and so it is important to help them understand how they can minimize this. There are many ways to do this for example by providing information on the website, public areas of the hotel, and in guest rooms.

Hotels should foster the development of green tourism and promote its benefits to its guests.

### **The hospitality industry future**

In the 2010, *Hospitality 2015 Game Changers* paper, the consulting firm Deloitte states that hotels must develop an environmentally responsible brand and embed a 360-degree view of sustainability within the business model. Price, quality, brand and convenience will continue to drive consumer spending, but sustainability will increasingly be part of the decision-making process.

Deloitte also estimates that by 2015, sustainability will become a business imperative, requiring companies to educate their organization on the changing consumer and regulatory environment and to derive strategies to maximize their market position (Deloitte 2010).



## Appendix one: the environmental impacts of a hotel

Service/activity	Description	Main environmental impacts
Administration	Hotel management Reception of clients	Energy, water and materials (mainly paper) Generation of waste and hazardous waste (toner cartridges)
Technical services	Equipment for producing hot water and heating Air conditioning Lighting Swimming pools Green areas Mice and insect extermination Repairs and maintenance	Energy and water consumption Consumption and generation of a wide range of hazardous products Air and soil emissions Generation of waste water Pesticides use
Restaurant/bar	Breakfast, lunch, dinner Beverages and snacks	Energy, water and raw materials consumption Packaging waste Organic waste



## Appendix one: the environmental impacts of a hotel

Service/activity	Description	Main environmental impacts
Kitchen	Food conservation	Consumption of energy and water
	Food preparation	Packaging waste
	Dish washing	Oil waste Organic waste Generation of odors
Room use	Use by guests	Energy, water and raw materials consumption
	Products for guests' use	Use of hazardous products
	Housekeeping	Generation of waste packaging Generation of waste water
Laundry	Washing and ironing of guest clothes	Consumption of energy and water
	Washing and ironing of hotel linens	Use of hazardous cleaning products Generation of waste water

(Graci, 2009)



## Appendix two: sample environmental policy statement

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At X, we operate to high standards of performance and advocate socially and environmentally sustainable business practices. Our aim is to bring a positive benefit to the societies in which we operate through high quality services, economic growth, environmental protection, community involvement and employment. In order to adhere to these principles, we endeavor to:

- Set sound environmental and social objectives and targets, and integrate a process of review and reporting.
- Comply with all applicable environmental laws, statutes and regulations.
- Continuously improve environmental performance and reduce environmental impact of our activities.
- Create environmental awareness among our employees, customers, suppliers and the community.

Add in specific goals for waste, water, energy, conservation, community involvement, purchasing.

### Online audit

Click [here](#) to create your own sustainability and environmental policy statement, to share with your guests and employees.



## Appendix three: self-audit checklist

Organization, Reporting and Management	Yes	No	Measure	Comment
Do you have a written policy document?				
Are one or more individuals within the business designated with responsibility for managing environmental issues?				
Are regular (at least annual) progress reports made on environmental issues?				
Is the business currently a member or a participant in an environmental forum (e.g. green business club or waste minimization club)?				
Have planning procedures as specified in your country been followed for any new developments undertaken either in the last five years or planned to take place in the next two years?				
Do you publish regular progress reports (at least annual) on environmental issues, employee relations and the way the business integrates into the community?				



## Appendix three: self-audit checklist

Energy Management	Yes	No	Measure	Comment
Is the business actively engaged in achieving a reduction in energy consumption and costs?				
In energy efficient lighting installed in at least 50% of areas AND is it effective?				
Is there evidence of (or a policy of purchasing) low energy equipment such as large electrical machinery (fridges, microwaves, cookers, etc.)?				
Has a member of staff been designated to monitor performance continually and set realistic targets based on the results?				
Have meters been installed in all departments to help with the monitoring of the energy use?				
Has an initial assessment been undertaken and short term wins been identified? E.g. changing to energy efficient light bulbs, motion detectors etc?				
Are measures in place to ensure that the hotels energy supply does not impact on the energy for the local residents?				
Are flow restrictors or controllers used to limit the output of inefficient showerheads and taps?				
Are housekeepers trained to identify common maintenance problems such as toilet leaks etc?				
Do you have an energy management system installed to turn lights and air conditioning off in empty guest rooms?				
Do you have a towel reuse/bed linen changing program?				
Are bicycles available for guests to use to move around both the resort and the local area?				
Do you include in your policy to design energy efficiency into all new construction and refurbishing projects?				
Do the regulations in your country specify that you must buy all of your energy from a specific energy supplier (for example, a Government owned energy generation company)?				
Are renewable sources of energy captured on site and used (e.g. the sun, wind, bio gas or other non fossil fuel source)?				
Is laundry washed in cold water as much as possible?				
Is renewable energy purchased for use on site?				



## Appendix three: self-audit checklist

Water Management	Yes	No	Measure	Comment
Is the business actively engaged in achieving a reduction in water consumption (also reduces cost)				
Are water saving devices fitted to reduce water consumptions. These devices may include any or all of the following: flow restrictors, aerators, percussion taps or limiters on water pipes?				
Is grey water recycled and treated appropriately before use?				
Are energy saving taps (e.g. mixer or temperature controlled) fitted to ensure water is delivered at the temperature it is required?				
Are low flush WCs fitted or water saving devices installed in WCs				
Do irrigation systems for the hotel grounds and gardens use treated water?				
Do irrigation systems for the hotel grounds and gardens have timing devices fitted to minimize operating times or have a procedure to follow for manual watering?				
Has an initial assessment been undertaken so that the main areas of water consumption can be identified an action plan for savings can be created?				
Has a member of staff been designated to monitor performance continually and set realistic targets based on the results?				
Has the property been checked for leaks?				
Have short term wins been identified e.g. leaks from cisterns, taps and pipes blocked, reducing wasting, sensors and low flow devices fitted?				
Is equipment serviced regularly to ensure it is functioning efficiently?				
Do you have any technologies installed to reduce water use through recycling e.g.. Is rainwater or grey water captured and reused for gardening, washing, floors, flushing toilets etc.?				
Has the supply system been checked to ensure it does not conflict with use for locals?				
Are employees trained about water saving practices?				
Are employees trained to be able to detect and repair leaking showers, toilets etc.				



## Appendix three: self-audit checklist

Have water reducing policies been implemented e.g. not hosing surfaces to clean them and not watering gardens in the day?				
Are drought resistant native plant species chosen for landscaping?				
Is the use of chemicals that end up in wastewater such as detergent or bleach minimized wherever possible?				
Is wastewater treated before it is let back into the environment?				
<b>Waste</b>	<b>Yes</b>	<b>No</b>	<b>Measure</b>	<b>Comment</b>
Is the business compliant with national waste regulations?				
Has an audit been conducted to identify waste created e.g. paper, plastic, aluminum, glass etc. and to see which departments are responsible for the waste and how it is currently disposed of?				
Are procedures now in place to reduce or reuse the waste where possible e.g. providing the relevant recycling bins in each department, buying in bulk, buying products with less packaging?				
Have waste reduction targets been implemented?				
Are recyclable items such as cardboard, plastic, glass, metals, food waste etc. collected separately?				
Is organic waste composted?				
Have disposable items been replaced with reusable ones e.g. refillable soap and shampoo containers, cloth laundry bags, rechargeable batteries etc.?				
Do you avoid using single use condiments, jam, butter etc?				
Do you give back packaging to suppliers?				
Do you donate reusable items such as furniture or food to charities or employees?				
Do you have a hazardous waste policy to dispose safely of hazardous materials such as batteries and paint?				
Have you implemented a battery recycling program for employees and guests?				
Have you provided the employees reusable mugs and eliminated their use of disposable cups.				
Are waste bins provided for guests around the hotel or resort?				



## Appendix three: self-audit checklist

Purchasing	Yes	No	Measure	Comment
Did you develop a written purchasing policy to try as much as possible to purchase local and organic or biodegradable products?				
Is there a procedure in place to monitor annually how the purchasing policy is being turned into practice				
Are products sourced from local suppliers wherever possible?				
Do you list the use of organic/local and fair trade ingredients on restaurant menus?				
If a produce cannot be sourced locally then does it come from a fair trade supplier instead?				
Does your hotel place an emphasis on purchasing products that are certified for their environmental quality?				
Does your hotel choose to work with suppliers who have a code of practice setting out minimum standards and/or an environmental policy?				
Are products brought in bulk to minimize packaging?				
Does the hotel take an active role in influencing and working with suppliers to identify locally produced, fair trade and environmentally friendly products?				
Are products brought in bulk to minimize packaging?				
Do you purchase cleaning materials with low environmental impact?				
Is purchasing discussed with other hoteliers to investigate the potential for joint purchasing?				
Community Support	Yes	No	Measure	Comment
What ways has the hotel identified that the local community can benefit from the business?				
Does the hotel support and actively contribute to any local community development projects?				
Does the hotel support and actively contribute to any conservation or cultural heritage projects through financial or in kind supports?				
Do they provide any support for schools?				
Do they showcase local artwork or handicrafts?				



## Appendix three: self-audit checklist

Are employees encouraged to volunteer in the local community?				
Is the hotel working together with government officials/other hotels/tourism businesses to improve environmental standards in the local area?				
Does the hotel work with the local community to promote environmental education?				
Are events such as beach clean ups etc. organized for staff and communities to get involved with?				
Does the hotel's overall business practice respect the surrounding local culture and heritage?				
<b>Customer Education</b>	<b>Yes</b>	<b>No</b>	<b>Measure</b>	<b>Comment</b>
Are guests encouraged to buy products that are made locally?				
Are guests provided guidance on environmental protection in the destination (e.g. protecting turtle nesting sites, the importance of not wearing sunscreen near coral reefs)?				
Is there a list showing guests what products and souvenirs to avoid buying?				
Is information provided to guests regarding the areas culture and religious characteristics?				
Are guests provided with information about how to reuse, recycle and reduce during their stay?				
Does your hotel provide information and encourage guests to follow energy saving practices e.g. switching off lights, air conditioning, washing towels etc.?				
Are guests given information and tips for water saving e.g. turning off taps when brushing teeth etc.				
Do they educate guests about how they can make a positive contribution to local biodiversity conservation efforts?				
Are environmental aims communicated to guests along with advice to help them reduce their environmental impact and support local conservation and community development projects?				
Are guests encouraged to explore the destination beyond the boundaries of the property?				
<b>Employee Training</b>	<b>Yes</b>	<b>No</b>	<b>Measure</b>	<b>Comment</b>
Do you include environmental aspects into employee training such as how to reduce energy, water and waste?				
Do you have an employee ideas campaign to solicit ideas about how to reduce the hotel's environmental impact?				



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