University of Massachusetts Amherst ScholarWorks@UMass Amherst

International CHRIE Conference-Refereed Track

2010 ICHRIE Conference

Jul 31st, 9:45 AM - 10:45 AM

Hotel Companies' Environmental Awareness & Commitment: A review of their web pages

Yuchin (Jerrie) Hsieh
University of North Carolina at Greensboro, y_hsieh@uncg.edu

Sang-Mi Jeon
Silla University, jeonsmi@webmail.silla.ac.kr

Hsieh, Yuchin (Jerrie) and Jeon, Sang-Mi, "Hotel Companies' Environmental Awareness & Commitment: A review of their web pages" (2010). International CHRIE Conference-Refereed Track. 13. https://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/13

This Conceptual Refereed Paper is brought to you for free and open access by the Hospitality & Tourism Management at ScholarWorks@UMass Amherst. It has been accepted for inclusion in International CHRIE Conference-Refereed Track by an authorized editor of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

Hotel Companies' Environmental Awareness & Commitment: A Review of Their Web Pages

Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment

Abstract

Because of today's complicated economic and political environment, businesses face increasing pressure

to follow environmentally conscious principles; the hospitality industry is no exception. The purpose of

this study is to increase our understanding of the extent to which pro-environmental policies are being

implemented in the hotel industry, identify the best of these practices as a reference for hotels that are

lagging behind in fulfilling their environmental responsibilities, and most of all to increase the

environmental awareness of hoteliers and encourage more research on the development of pro-

environmental practices in the hospitality industry. The results of the study and their implications are

1

discussed.

Keywords: environmental awareness, sustainable development

Hotel Companies' Environmental Awareness & Commitment: A Review of Their Web Pages

Introduction

The term "sustainable development" emerged after the United Nation's Stockholm Conference on the Human Environment in 1972. The 1987 Brundtland Report entitled "Our Common Future" highlighted concerns about the earth's ecological limits and the impact on the planet of non-stop economic development. The United Nation's 1992 Earth Summit in Rio de Janeiro introduced the concept of sustainable development into the public's consciousness. The purpose of sustainable development is to meet the needs of the present generation without compromising the ability to meet the needs of future generations. It consists of three core values: environmental protection, economic development, and social equity (Brundtland, 1987). In recent decades, the world has been paying increasing attention to the natural environment. Studies have underscored the emerging challenges caused by industrial production. Other challenges include the consequences of consuming nonrenewable resources, as well as the related environmental effects, such as rising ocean levels and desertification, caused by climate change. Sustainable development has also become a priority for many companies. Those that are concerned about sustainable development believe they have an economic responsibility to their customers, associates, partners, and shareholders. They believe these responsibilities will be better met if they operate in a way that respects human rights and is both socially equitable and environmentally sustainable. The increasing number of sustainable development issues creates risks and opportunities for the hotel industry for the following reasons:

1. According to the World Travel and Tourism Council ("World Citizens," 2008), the travel industry generated 238 million jobs and contributed 9.9% of the global gross domestic product in 2008. This production has had a considerable impact on economic, social, and environmental conditions worldwide.

https://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/13

- 2. Hotels, especially resort hotels, rely on the natural environment to attract tourists as a way to make

 Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment profits. The ecosystem is the lifeblood of the hotel business. Thus, the hotel industry has every reason to preserve the local environment and contribute to the local community.
- 3. The hotel industry plays a crucial role in sustainable development. The operations of a hotel require water, heating, cooling, lighting, a laundry system, and appliances. The results of this consumption have a significant impact on the environment. Therefore, attention must be paid to these factors if their impact on the planet is to be minimized.
- 4. More and more customers have sustainable-development-related expectations when travelling. A survey by Deloitte's Tourism, Hospitality, and Leisure research group found that 38% of the business travelers they interviewed had taken steps to determine whether a hotel was "green" (Deloitte Tourism, Hospitality, & Leisure, 2008). The hotel industry must grasp this trend if it wants to appeal to this market segment.
- 5. The benefits gained from implementing environmental initiatives have been well documented. An environment friendly hotel can gain competitive advantage and otherwise benefit from cutting costs, cultivating a positive image, increasing employee loyalty, and retaining customers.

Purpose of the study

Few studies have focused on understanding the extent of hotel companies' environmental commitment and their strategies to express this commitment. Almost all the hotel companies in the world have developed their own company websites as a marketing tool. They use these websites to provide information to their potential customers and stakeholders, and to develop their corporate image. We believe that hotel companies that aggressively pursue environmental protection should have their green commitment expressed on their web pages. In the present study, we review the websites of the top 50 hotel companies in the world to:

- 1. understand the extent of their involvement in environmental issues, as expressed on their

 International CHRIE Conference-Refereed Track, Event 13 [2010]

 websites; and
- 2. determine what actions they have taken to protect the environment and compare these with the actions taken by hotels that have not embraced green approaches.

Research Methods

Our sample consisted of the top 50 hotel companies as defined by the number of their franchises that were listed in *Hotels* ("Top 50," 2009). These 50 companies operate a total of 45,245 individual hotels worldwide. Two coders with hospitality and tourism management degrees performed a content analysis of the websites of the 50 companies. Using Ramos and Caeiro's (2010) conceptual framework, we identified four indicators or stages of sustainable development: planning and conceptualization, implementation, operation, and follow-up. Two coders independently reviewed the 50 hotel company's web pages to determine if any strategies were developed across the four stages. The coders also coded the companies' environmental-related practices into categories. According to Miles and Huberman (1994), the reliability of coding equals the number of agreements between coders divided by the number of agreements plus disagreements. Based on this criterion, the coding reliability was found to be an acceptable 95%. A group consensus procedure was employed to resolve inconsistencies.

Results

Of the 50 sampled hotel companies, 25 are based in North-America (22 in the US & 3 in Canada), 16 in Europe, 6 in Asia, 2 in Mexico, and 1 in Africa. Only 24 of the companies (48 %) posted information related to environmental issues on their public websites. Six had environment-related headings (i.e., "Environmental Awareness," "Sustainable Development," "Green Policy," "Wyndham Green," and the Welcom Environmental Chrome pages and 16 others incorporate environmentary

sustainable development as a second-level heading under the first-level heading (i.e., "About Us," "Corporate Information," or "Corporate Responsibility"). Two companies had no environment heading per se, but they included their environmental commitment or policy as part of their company's mission or vision statement.

Planning and Conceptualization

Several of the companies have established committees that are put in charge of their overall environmental protection plan. For example, Marriott has an executive-level Green Council that sets the company's global strategy. Accor has a Sustainable Development Department that assists in the implementation and monitoring of in-house sustainable development projects.

A mission statement is a short, formal written statement of the company's purpose. It serves as a guideline for the actions of the organization. We believe that a company's environmental or sustainable development statement or policy plays the same role of the mission statement in guiding the company's development with regard to environmental matters. Such statements also demonstrate the company's determination to embrace environmental protection. Of the 24 websites that addressed the environment, 14 included specific terms such as "environmental statement" or "environmental policy" or "environmental vision statement." The Wyndham Hotel Group's website had sections with the headings "Our Responsibility," "Our Green Policy Statement," "Our Strategy," "Our Objectives," and "Our Practices." The InterContinental (IHG) group displayed "IHG's Group Environmental Policy" on its website. The Hilton website also had statements reflecting sustainable development, environmental policy, goal achievement, and environmental commitment, as do those of Starwood, Hyatt, Fairmount Hotels, and Barcelo Hotels. Millennium's green policy was expressed in statements describing its short-term primary goals with regard to sustainable development. La Quinta had a green strategy statement on its website, and both Whitbraad and Scandic included environment policy statements. The websites of

Taj Hotels Resorts and Palaces had a vision statement about planet, and Sol Melia's website had a

International CHRIE Conference-Refereed Track, Event 13 [2010]

fundamental mission statement that included the environment. Finally a vision statement and related principles were principles were summarized in its Global Sustainability Policy.

Areas of Environmental Endeavor

The specific endeavors of companies that included on their website information about environmental or sustainable development fell into the following categories:

- 1. Energy efficiency
- 2. Water conservation
- 3. Waste management (recycling and reuse)
- 4. Carbon dioxide emission reduction
- 5. Bio-diversity protection & restoration of native eco-system
- 6. Noise pollution reduction
- 7. Green buildings
- 8. Ecological food
- 9. Green education or training for employees and customers
- 10. Partnerships
- 11. Sustainable procurement practices and the green supply chain
- 12. Improvement of air quality

Implementation

The Environmental and Sustainable Development Programs

Thirteen of the hotel companies had initiated environmental programs or policies to promote sustainable development. Examples included Wyndham Hotel Group's Wyndham Green, IHG's Green https://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/13 6
Engage, Accord's Earth Guest Policy, the Environmental Policy of Hilton, Hyatt, Carlson, and

Whitbread. Marriott's Reduce, Reuse, Recycle program, Red Roof Inn's Staying Red, Going Green Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment program, the Rezidor Hotel Group's Responsible Business program, the Taj Hotel Group's EARTH (Environment Awareness & Renewal at Taj Hotels) program, and the Fairmount Raffles Hotels International's Green Partnership, Eco-meet, Greening our Greens (golf), and REACH (Rendering, Encouragement, Assistance, Care and Hope) programs.

Operation

Energy Efficiency:

- (1) Operate as much as possible in daylight.
- (2) Use energy-efficient lighting (e.g., LEDs and compact fluorescent light bulbs).
- (3) Use the room key to control lighting.
- (4) Adopt automatic off switches for all non-essential lights.
- (5) Install occupancy lighting controls in hotel corridors.
- (6) Install a voltage optimization unit.
- (7) Install digitally programmable thermostats.
- (8) Purchase energy-efficient equipment. (e.g., condensing water heaters, dishwashers, and coffee machines).
- (9) Install time switches on vending machines.
- (10) Adopt half-hour metering equipment to measure and monitor energy consumption and the effects of the energy saving initiatives employed.
- (11) Use renewable energy.
- (12) Use alternate energy sources such as solar panels and wind power.

Water Conservation:

Published by ScholarWorks@UMass Amherst, 2010

(1) Install flow-flush or double-flush toilets.

- (2) Reduce toilet tank volume.
 - International CHRIE Conference-Refereed Track, Event 13 [2010]
- (3) Use waterless urinals
- (4) Use water saving showerheads, sink aerators, and diverter valves.
- (5) Apply xerogardening techniques for watering plants.
- (6) Install ozone laundry systems (water- and energy-efficient).
- (7) Adopt linen reuse programs.
- (8) Detect and repair drips and leaks in guests' rooms.
- (9) Convert salt-water pools to fresh water.

Waste Management (Recycling and Reuse):

- (1) Place recycling bins or other such receptacles throughout the property.
- (2) Use one-stream recycling bins.
- (3) Install cardboard compactors to reduce waste volume.
- (4) Sort waste.
- (5) Build water treatment plants to treat sewage water and grey water for reuse.
- (6) Place milk in jugs, sugar in shakers, and jam and butter in bowls (instead of using disposable packages).
- (7) Encourage guests to refill their bottles with tap water.
- (8) Donate leftover food to the needy.
- (9) Donate unused rolls of toilet paper to shelters.
- (10) Install Green Fuels Bio-Pods to convert used cooking oil to biodiesel fuel.
- (11) Use key cards made of 50% recycled material.
- (12) Use the green uniforms spun from plastic beverage bottles.

(1) Use fuel-efficient cars.

Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment

- (2) Purchase renewable energy.
- (3) Implement IT consolidation.
- (4) Plant trees.
- (5) Save the rain forests.

Protection & Restoration of Native Eco-systems through Bio-diversity:

- (1) Preserve the natural environment.
- (2) Plant trees.
- (3) Remove waste from rivers and beaches and restore mangrove swamps.
- (4) Protect turtles.
- (5) Protect coral reefs.
- (6) Preserve endangered species.
- (7) Preserve recreation destination (e.g., Wyndham's 7 Mile Beach in Australia)

Reduction of Noise Pollution:

- (1) Use absorbent coating on walls.
- (2) Use absorbent barriers outside industrial parks.
- (3) Install soundproof enclosures in the naves of buildings for maintenance personnel.
- (4) Employ procedures to reduce vibrations.

Green Buildings:

According to a report from the Berkeley Lab, a U.S. Department of Energy's national laboratory, buildings account for 40% of the world's CO² emissions and 40% of its energy consumption (Chen, 2009). Accor's International Construction and Renovation Rules were designed to add a sustainable development dimension to all its buildings.

(1) Comply with Leadership in Energy and Environmental Design (LEED) standards. Published by ScholarWorks@UMass Amherst, 2010

- (2) Construct eco rooms having, for example, local or eco-friendly furniture, eco-pillows,

 International CHRIE Conference-Refereed Track, Event 13 [2010]
 biodegradable laundry bags, environmentally-friendly fabrics, and bathroom dispensers.
- (3) Use natural materials for decoration.
- (4) Give priority to environmentally certified materials for building construction.
- (5) Install HVAC (Heating, Ventilation, and Air Conditioning) systems that are designed to be long-lasting and are simple to maintain.
- (6) Use VOC (Volatile Organic Compound) paint.
- (7) Purchase eco-friendly furniture (e.g., FSC-certified beds).

Ecological Food ("Green Cuisine"):

- (1) Serve organic or slow food.
- (2) Grow herbs in on-site gardens.
- (3) Eliminate all artificial trans fats from meal offerings.
- (4) Serve fair-trade (UTZ certified) coffee.
- (5) Serve organic or biodynamic wine.
- (6) Boycott jumbo prawns because their cultivation destroys ecosystems and hurts the economy.

 Green Education Training for Employees and Customers:
- (1) Disseminate information through sustainable development-awareness websites, posters, and brochures (e.g., Wyndham Green Brochure, Green Poster, Green Travel Tips You Can Use, and Eco Facts; the Earth Day Poster; environmental-awareness workshops for employees, owners, developers, and guests).
- (2) Provide environmental resources.

Partnerships:

Partnership is a strategy that several hotel companies have used to improve the results of their environmental efforts. The companies partnered with environmental-related organizations, such as the https://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/13

US Environmental Protection Agency (e.g., through its Energy Star program), the US Green Building

Council, the International Tourism Partnership, the American Resort Development Association, and the Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment International Union for Conservation of Nature, as well as with local communities. A specific example was the Scandic Hotel Group's partnership with The Natural Step, an international organization that helps companies develop effective sustainable development strategies.

Sustainable Procurement Practices and Green Supply Chain:

- (1) Purchase seasonal products and prepare local dishes.
- (2) Ask suppliers to provide life-cycle assessments of products and packaging with limited environmental impact and order those that meet the requirements.
- (3) Give priority to containers and packaging made of 100% recyclable glass and packaging made of biodegradable paper or cardboard.
- (4) Purchase eco-friendly materials such as non-toxic cleaning products and coreless toilet paper.
- (5) Purchase from suppliers with respect for mankind and nature.

Improvement of Air Quality:

- (1) Implement smoke-free policy in properties (e.g., Wyndham, Marriott Hotels & Resorts).
- (2) Favor clear air and allergy-friendly rooms.

Follow-up and Assessment

A good environmental management system should include a monitoring function to evaluate performance. The results of the evaluation can be used as feedback to facilitate future improvement. For example, Wyndham Hotel Group had a committee charged with supervising the implementation of sustainable development programs and measuring the results. Accor had established a Sustainable Development Department for the same purpose. Several hotel companies (e.g., Wyndham, IHG, Accor, Rezidor, and TUI) regularly published environmental performance reports that highlight their company's key environmental achievements.

Environmental Certifications

International CHRIE Conference-Refereed Track, Event 13 [2010]

Eleven of the 24 hotel companies with environmental-related web pages had environmentallycertified properties. Table 1 presents the major certifications these hotel companies have attained.

Table 1: Environmental Certifications

Name of Certification	Description of Certification
Green Globe	The most prestigious global certification for the travel, tourism, and hospitality industries.
ISO 4001	Conferred for environmental management.
LEED Certification	Based on The Leadership in Energy and Environmental Design's (LEED's) Green Building Rating System; developed by the U.S. Green Building Council, the rating system incorporates a set of standards for environmentally sustainable construction.
Energy Star Label	Energy Star is a US government-backed program that helps businesses and individuals protect the environment through state-of the-art energy efficiency programs.
Flower	Ecolabel conferred by the European Commission to companies outside Scandinavia.
Nordic Swan Eco-label	Conferred by the European Commission to companies in Scandinavia.
Österreichische Umweltzeichen	Ecolable conferred to companies in Austria.
The Green Tourism Business Scheme	The GTBS is the national sustainable tourism certification scheme for the UK.

In addition to obtaining environmental certification, some hotel companies signed an agreement to demonstrate their determination and commitment to the environment. A good example was the United Nation's Global Compact, which embodies 10 principles related to human rights, labor, and the environment. Environmentally sensitive hotel companies such as Accor, Sol Melia, and The Rezidor Hotel Group signed the Global Compact and had incorporated the 10 principles in their daily business https://scholarworks.umass.edu/refereed/CHRIE_2010/Saturday/13 operations. 12

Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment

Seven hotel companies (Wyndham, IHG, Accor, TUI AG, The Rezidor, Scandic, and Fairmount) received outstanding achievements awards for incorporating environmental sustainable development programs in their business operations.

Of the 50 largest hotel companies that we sampled, the TUI AG Hotel Group and Accord were the only two that are included in the Dow Jones Sustainability World Index. Established in 1999, it is the first global index to track the financial performance of the leading sustainable-development-sensitive companies in the world.

Conclusions and Implications

The 50 hotel companies sampled have 45,245 properties worldwide. The companies clearly have a major influence on handing down the environmental strategies to their affiliated hotels. However, the results of our study indicate that less than 50% of the sampled companies include environmental-related information on their websites, and only 28% include an explicit statement with a heading such as "Environmental Statement," "Environmental Policy," or "Green Policy." These facts indicate that sustainable development programs have not been widely adopted by the major hotel companies. Actions must be taken to move the hotel industry toward greater environmental responsibility. It is necessary to first discover the barriers that prevent the implementation of environmental policies and then develop ways to remove the barriers, increase environmental awareness, offer green education workshops and conferences, share the best green practices, and mandate solutions through legislation.

With regard to environmental programs per se, our study identified 12 such areas: (1) energy efficiency,(2)water conservation, (3)waste management (recycling and reuse), (4) carbon dioxide emission reduction, (5)bio-diversity protection & restoration of native eco-systems, (6)noise pollution Published by ScholarWorks@UMass Amherst, 2010

13
reduction, (7) green buildings, (8) ecological food, (9)green education and training for employees and

customers, (10) partnerships, (11) sustainable development procurement practices and green supply International CHRIE Conference-Refereed Track, Event 13 [2010] chains, and (12) improved air quality. Obviously, hotel companies such as Accor, Wyndham, IHG, Rezidor, Fairmount, and TUI are well ahead of their competitors in integrating environmental protection into their business strategies and operations. Their websites detail their environmental commitment from planning to implementation and from implementation to evaluation. Their websites also provide information about environmental resources or educational information to increase the environmental awareness of those who visit the site. It is worth noting that many of these hotel companies have developed their own sustainable development niches. An example is IHG's Innovation Hotel, an online showcase of what the green hotel of the future might look like. IHG also has developed an online sustainable development reporting and management system called Green Engage. The system assists the general managers of IHG's 4,000 hotels to manage energy, water, and waste consumption more effectively. Accor's websites describes the company's systematic environmental management system and how it is monitored. The environmental achievements of these pioneering hotel companies can become models for hotel companies that have yet to include environmental issues in their agendas.

Some of the sampled hotel companies provide green products to their customers. For example, Marriott, Accord, Fairmount, and Wyndham offer green meeting packages which assist meeting planners by suggesting meeting structures that encourage awareness of environmental issues and optimal waste diversion strategies in conference delegates. Other green products such as green cuisine and ecorooms also reflect their companies' environmental commitment.

In this paper we have also summarized the actions taken by the top 50 hotel companies to carry out their environmental policies. The same actions can be adopted by other hotels to reduce their negative environmental impact and protect environmental resources. It was noted that the environmentally sensitive hotel companies do not take protecting the future of the earth as just their own responsibility; the plate of the taken that the protecting the future of the earth as just their own responsibility; the plate of the taken that the plate of the earth as just their own the policies.

consider a product's effects on mankind and nature before deciding whether to purchase if from a

Hsieh and Jeon: Hotel Companies' Environmental Awareness & Commitment supplier.

Environmental certification provides formal recognition to environmentally competent hotels. To maintain this recognition, hotels must pass regular re-evaluations by the certificate-issuing organization. The re-evaluations are intended to ensure the company's continued compliance with the requirements and to check that proper operational standards are being maintained. Environmental certification benefits hotels by allowing them to determine whether they are performing their environmental actions correctly and conform to appropriate standards. It also provides the hotels with a benchmark for maintaining that competence. Our study identified the most important environmental certifications available to major hotel companies and these are listed above. This list can serve as a reference for other hotels seeking to be certified.

To fulfill their environmental responsibilities, some hotel companies have created divisions or positions related to sustainable development. For example, Accor has a Sustainable Development Department with six full-time employees who report directly to the Executive Committee. Due to today's complicated economic and political environment, businesses face increasing pressure to adopt environmentally conscious principles; the hospitality industry is no exception. Therefore, we predict that the demand for employees with skills and knowledge in pertaining to sustainable development will increase in the hospitality industry. Likewise, hotel managers will be required to equip themselves with relevant knowledge so that they can turn environmental and social policies into everyday actions. That is why we want to sensitize hospitality educators to the need for sustainable development component in their curricula and thus equip their students to become leaders in promoting sustainable development in the hospitality industry.

As our sample was limited to the websites of the 50 largest hotel companies, it provides only a
International CHRIE Conference-Refereed Track, Event 13 [2010]
preliminary understanding of the environmental practices of the hotel industry more broadly. It is
possible that some hotel companies have established environmental policies or initiated environmental
programs but do not mention them on their websites. To obtain comprehensive information about the
major hotel companies' environmental practices, it is suggested to expand the data collection by
including interviewing hotel companies, it is necessary to expand data collection by including interviews
with the leaders of the hotel companies and analyzing their news releases and reports. We also suggest
that a new assessment tool be developed to evaluate the overall performance of hotels with respect to
environmental issues. It would also be worthwhile to investigate why 52% of the top 50 hotel companies
in our study do not include environmental information on their public websites. What are the barriers
that prevent them form being environmentally friendly? Future studies designed to answer these
questions can make important contributions to the sustainable development research literature and, most
of all, promote the implementation of green policies in the hospitality industry.

References

- Brundtland, G. (ed.) (1987). *Our common future: The World Commission on Environment and Development*. Oxford: Oxford University Press.
- Chen, A. (2009, June 2). Working toward very low energy consumption building of the future. Berkeley Lab, US Energy Department, Retrieved January 12, 2010, from http://newscenter.lbl.gov/feature-stories/2009/06/02/working-toward-the-very-low-energy-consumption-building-of-the-future/
- Deloitte Tourism, Hospitality, & Leisure (2008). Industry Trends 2008. Retrieved January 12, 2010 from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_cb_THLtrends010108.pdf
- Miles, M. B., & Huberman, A. M. (1994). Qualitative Data Analysis. Thousand Oaks, CA: Sage.
- Ramos, T.B., and Caeiro, S. (2010). Meta-performance evaluation of sustainability indicators. *Ecological Indicators*, 10 (2), 157-166.
- Top 50 (July 2009). Hotels, 43(7), 34-34.
- World citizens-A global partnership for travel & tourism. (2008). Retrieved January 12, 2010, from http://www.wttc.org/eng/Tourism_News/Press_Releases/Press_Releases_2008/World_Citizens_ %E2%80%93 a global partnership for Travel and Tourism/