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SETTING STANDARDS FOR GREEN: AN ANALYSIS OF TAIWAN GREEN HOTEL RATING PROGRAM

This study first focuses on Taiwan's newly implemented green hotel evaluation scheme, the "Regulatory Standards for Accrediting Green Hotels" and introduces the latest advancement and development in the field. Then, we compare this program with 7 well-known green hotel rating programs. Similar to other programs, Taiwanese is also strong in environmental protection. However, there are two significant differences of Taiwan's rating program: certification not by NGO, and no symbolized rating sign. No matter what kind of rating programs, the results of this study show that almost all of the rating programs' criteria get very little involvement in ecological conservation, so we suggest that rating programs would be made more effective by adding factors of ecological conservation. Surveys should also be conducted on an ongoing basis to clarify and incorporate ecological viewpoints and to keep green hotel rating systems updated. These measures should also enhance the hotel buildings being compatible with the local environment, and the concept of food miles.

Keywords: green hotel; green hotel rating program; environmental compatibility; food miles; Taiwan

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РОЗРОБКА ЕКОСТАНДАРТІВ: АНАЛІЗ ТАЙВАНЬСЬКОЇ ПРОГРАМИ РАНЖУВАННЯ ЕКО-ГОТЕЛІВ

У статті розглянуто нещодавно впроваджена на Тайвані схема оцінювання еко-готелів "Нормативні стандарти акредитації еко-готелів", яка представляє новітні досягнення і розвиток у даній сфері. Також порівняно тайваньську програму ранжування еко-готелів і 7 відомих програм рейтингів еко-готелів. Як й інші програми, тайваньська приділяє особливу увагу охороні довкілля. Проте є дві істотні відмінності в програмі Тайваню: сертифікацію виконує не НДО і відсутність знаку-символу рейтингу. Незалежно від програми ранжування, результати цього дослідження показали, що майже всі з критеріїв рейтингів мало пов'язані з охороною довкілля, тому слід вважати, що рейтингвання буде ефективнішим, якщо в нього додати чинники охорони екологічного середовища. Також на постійній основі повинні проводитися обстеження з метою уточнення і впровадження екологічної оцінки і постійного оновлення системи оцінювання еко-готелів. Ці заходи повинні також підвищити сумісність будівлі готелю з місцевим довкіллям і сприяти розвитку концепції мінімальної відстані перевезення продуктів.

Ключові слова: еко-готель; програма ранжування еко-готелів; екологічна сумісність; мінімальна відстань перевезення продуктів; Тайвань.

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РАЗРАБОТКА ЭКОСТАНДАРТОВ: АНАЛИЗ ТАЙВАНЬСКОЙ ПРОГРАММЫ РАНЖИРОВАНИЯ ЭКО-ОТЕЛЕЙ

В статье рассмотрена недавно внедренная на Тайване схема оценки эко-отелей "Нормативные стандарты аккредитации эко-отелей", которая представляет новейшие достижения и развития в данной отрасли. Проведено сравнение тайваньской программы ранжирования эко-отелей и 7 известных рейтингов эко-отелей. Как и другие программы,

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тайваньская уделяет особое внимание охране окружающей среды. Однако есть два существенных различия в программе Тайваня: сертификацию выполняет не НТО и отсутствие знака-символа рейтинга. Независимо от программы ранжирования, результаты этого исследования показали, что почти все критерии рейтингов программ мало связаны с охраной окружающей среды, так что следует полагать, что рейтингование будет более эффективным, если в него добавить факторы охраны среды. Также на постоянной основе должны проводиться обследования по уточнению и внедрению экологической оценки и постоянному обновлению системы оценивания эко-отелей. Эти меры должны также повысить совместимость здания отеля с местной окружающей средой и способствовать развитию концепции минимального расстояния перевозки продуктов.

Ключевые слова: эко-отель; программа ранжирования эко-отелей; экологическая совместимость; минимальное расстояние перевозки продуктов; Тайвань.

Introduction. According to the World Travel & Tourism Council (WTTC), global tourism expenditures will increase from USD 4.21 trln. to USD 8.61 trln. Moreover, the total contribution of travel and tourism to global employment, including jobs indirectly supported by the industry, is forecasted to rise by 2.3% per annum from 258,592,000 jobs (8.8% of the total employment) in 2011 to 323,826,000 jobs (9.7%) by 2021. Looking solely at the World Trade Organization's international trade numbers, tourism is the world's largest service sector industry (Lew, 2011). It generates about 10% of the total world GDP and employs over 10% of the global workforce, and it is on the verge of tremendous growth. As one of the largest industries and one that is reliant on the quality of the environment to ensure its survival, tourism plays a major role in environmental preservation (Tzschentke et al., 2008). Tourism industry coincides with the green trend of the future that aims to preserve and conserve nature for future generation. This will be the great return to nature - the "green wave" (Holjevac, 2003). As many hotels are appreciating or rather implementing the concept of "going green", it is important that everybody joins the team. Hotels use enormous amount of energy and so it becomes mandatory that hotels go for environmental friendly practices that conserve water and energy and reduce waste reduction. Going green is also more than a mere fad in the hotel industry. Hotel developers and managers may be wary of the current emphasis on green hotel development, because such trends have come and gone in the past. This time, however, consumers will almost certainly continue to demand that hotels join the green hotel rating programs.

Hotel industry is not only being requested to provide suitable services and products to guests to fulfill their demands, but also is expected to spare efforts to reduce environmental impact. Therefore, under the goal of achieving sustainable business development and operation, the concept of green hotel spouts ardently (Shieh et al., 2012). Although different green hotel rating programs have been applied in the hotel industry for decades starting from Green Seal 1989, there are lots of studies discussing the relative issues about green hotel rating program. Some countries or regions around the world have developed different appraisal systems for green hotels (Sheu et al., 2012; Shieh et al., 2012). Accreditation will provide certification programs with legitimacy and credibility and may eventually lead to the shift of tourism towards more sustainable practices. The current initiative to create global standard for sustainable tourism has the potential to change the face of the tourism. Widely varying

standards over the past 20 years as to what constitutes "green" or "sustainable" tourism have led to accusations of "greenwashing", a term used to describe businesses or organizations that claim to use "green" or "sustainable" practices, but don't actually comply with generally accepted standards.

The green hotel rating or classification systems offer benefits to various sectors. Shieh et al. (2012) pointed out the benefits to travel agency, tour operators, hotel industry, government and consumers. The hotel classification systems facilitated the travel agents' tasks of hotel selection for their customers. They also indicated that major tour operators had their own hotel classifications to assist in the tour operations and their marketing. Consumers can also benefit from an easy comparison between hotels in various destinations which compete in a healthy fashion.

Worldwide green hotel rating programs, now numbering more than 80, have become a popular tool providing recognition to tourism businesses that meet a determined set of program requirements. Certification as defined in tourism is a process by which a logo or a seal is awarded to those who meet or exceed a set of criteria that have been set by the certification body (Honey, 2002). This worldwide proliferation of green hotel rating programs, however, has led to consumer confusion, lack of brand recognition and widely varying standards (Shieh et al., 2012). Unfortunately, it is currently difficult to verify such claims, given the lack of consistency among the myriad green rating systems. Therefore, the current green rating systems for hotels cannot provide some measure of comparability. By viewing from the foregoing, although the definitions of green hotel differ in some details, they all use environmental protection as the basic prerequisite to try any possible way to reduce impact on the environment; therefore, they reach the same purpose by using different means. For the sake of discussion simplicity and consistence, we continue to use the name of "green hotel" in this study.

Since the efforts made by Taiwan hotel operators are still at the trial stage, this article will first start to introduce the development progress of green hotel rating system in Taiwan, then discuss and compare with several green hotel rating systems in some countries or areas having developed and prompted the concept of green hotel for many years, and follow with the introduction on how domestic administration implement the green hotel rating program in Taiwan.

Green Hotel Rating Program in Taiwan. Taiwan's hotel rating program has been evolving over the past 30 years. In response to rapid growth of the hotel industry, the Taiwan Tourism Bureau (TTB) announced a revised hotel rating system by changing its grade representation from a number of plum blossoms to a number of stars in December 2002 to provide consumers with a reference for selecting Taiwan's hotels (Su & Sun, 2007). In the meantime, determined to keep up with Europe and North America in promoting eco-friendly hotels, the Taiwan Environmental Protection Administration (EPA) recently formulated the regulatory standards for accrediting green hotels. In addition, building on efforts to upgrade Taiwan's accommodation sector, the 'Top-notch Tourism Plan' was launched in January 2009 as a four-year initiative to train accommodation industry staff on the issues such as cleanliness, courtesy and Taiwanese culture in order to raise the quality of service. One part of the initiative is to encourage hotel owners to obtain ISO certification, as well as to improve food safety under HACCP system as well as to improve environmental protection through adopting Taiwan's Green Mark system.

As we mentioned previously, many countries have their own certification scheme. Of these, the Hotel Association of Canada's Green Leaf eco-rating system is probably the most sophisticated and it has already been used to certify hundreds of hotels. Revisions of the regulatory standards for accrediting green hotels have been undertaken with reference to these overseas certification schemes and have also taken into account local conditions in Taiwan's hospitality industry and the opinions of stakeholders. The purpose of the regulatory standards for Accrediting Green Hotels is to give boost to hotel operators whose business and management practices are eco-friendly and to encourage more hotels to join this worldwide trend. Although understanding the concept of green hotel rating programs can catch up with the green trend, a better approach is to participate in green hotel rating programs. Current incentives for green may diminish, and early adopters will have the best chance at those incentives. Based on this thought, besides the esteem derived from having a good corporate image and the satisfaction of instilling confidence in consumers, accredited green hotels in Taiwan can also enjoy certain privileges: The Government Procurement Act and the Green Procurement Promotion Plan stipulate that when giving contracts to suppliers government departments will give priority to the certified green products and will pay 10% more for such products. This policy aims to increase the competitiveness of manufacturers of green products.

The criteria of the regulatory standards for accrediting green hotels consists of 7 categories comprising a total of 38 items (Table 1) that have been deemed sufficient for judging whether or not a hotel is eco-friendly enough. These include: limiting the use of elevators/escalators outside of peak hours; resetting the room's automatic thermostat to its normal set value once the guest has left; separate filtering and recycling treatment of wastewater from spas/swimming pools and restaurants/bathrooms; not giving guests disposable bathroom utensils unless they ask for them; not using cleaning products containing halogenated solvents; installing drainers for waste cooking oil and recycling food waste.

The EPA points out that hotels seeking accreditation need to submit the information asked for on the inspection form, with additional explanations where necessary, and it is accepting online applications from the hotels that wish to go through the inspection process. Inspectors will then carry out an on-site inspection and submit the results, in the form of a recommendation to award or refuse accreditation, to an evaluating committee. Hotels that do not meet the required standards can submit further applications after making the recommended improvements. Successful certification would give a hotel the right to display a logo indicating that it is one of Taiwan's Green Hotels.

In Taiwan, more and more hotel operators stop offering disposable utensils to their guests, and will not voluntarily change towels or bed sheets for guests who continue their stay in the hotel. However, such policies rely on cooperation between hotel operators and consumers since it merely is a simplified eco compliance policy and needs great improvement in comparison with the policies adopted by foreign green hotels (such as carbon neutral policies adopted by Trafalgar Hotel under Hilton Hotel Group and Wedgewood Hotel and Spa in Canada). Nevertheless, viewing from eco-policies adopted by domestic hotels being awarded as green hotels in 2008, many of them have implemented eco-concept in construction of their hardware facilities,

which definitely will be the direction for other hotels to implement their CSR in the future.

Taiwanis government is in the process of establishing its green hotel rating system. In order to implement the philosophy of a green hotel, the EPA has started to draft "Hotel Green Mark Specification Standards" in order to achieve effective management and appraisal of domestic hotels. The said draft bill has adopted the structure of "Green Leaf Eco-rating Program" of Canada, on the other hand, it also collaborated with current situation in the domestic hotel industry by adopting environment management improvement measures such as energy saving, water saving, green purchase, reduction of disposable articles and waste, management of dangerous substance, garbage classification and resources recycling into rating items. During several seminars held in 2008, hotel operators have consecutively proposed the following suggestions, including to provide subsidy and tax reduction measures to the hotels willing to apply for green mark for improvement of hardware and software and acquisition of facilities, integrate green mark and energysaving and watersaving mark products manufacturers with original suppliers of hotels, or provide more purchase channels for green mark and energy saving and water saving mark products, in order to stimulate their intention to purchase green products. Through the setup of rating system, more hotels will participate in this green program and consumers will have more options to combine consumption with environmental protection.

Table 1. Taiwan's Criteria of Green Hotels

Categories	Items
Corporate environmental management	9
Energy conservation measures	12
Water conservation measures	6
Green procurement	2
Reduction of disposable products and waste	3
Management of hazardous materials	3
Garbage sorting and recycling	3

Empirical Evidence on Green Hotels in Taiwan. To promote green consumption thought to public, or equally as waste reduction (for instance, hotels/motels may reduce the frequency of changing bed spreadsheet, towelsetc., the EPA designs a eco-labeling certification mechanism, Award-2008 Most Environmental Hotel Contest, for tourism sector by the concepts of water saving, electricity saving, and resource recycling.

The "2008 Most Environmental Hotel Contest" has been held in 3 stages:

First Stage: "IN means be environmental!"

This activity was launched on December 25, 2007 and ended on January 15, 2008. There were 27 hotels/motels self-registered and 107 hotels/motels were nominated via the Internet recommendations.

Second Stage: "You decide who is most environmental?"

This activity had more than 43,000 people voting online and the voting ended on February 15, 2008.

Third Stage: "Onsite inspection".

The onsite inspection results were announced on March 5, 2008. There were 19 hotels, including 9 international tourist hotels and 10 general tourist hotels, elected as prizewinners.

Comparisons of Green Hotel Rating Programs. Following creation of the green hotel concept, each country or region around the world has developed different appraisal systems for their hotels. The lack of methods to enforce sustainable management and regulate green messages in tourism has lead to an increasing number of voluntary initiatives in the form of codes of conduct, manuals, awards and eco-labels. There are too many eco-labels, with different meanings, criteria, geographical scope, confusing messages, limited expertise and expensive systems, only partly meeting the requirements of the compliance assessment (Font, 2002). This study follows and extends the study of Shieh et al. (2012) and Sheu et al. (2012) and adds the regulatory standards for accrediting green hotels in Taiwan to compare these 8 green hotel rating systems, including Green Leaf in North America; Green Seal in the US; Canada's Green Key; the EU's Eco-label and Green Key; Britain's Green Tourism Business Scheme; China's Green Hotel Standard and the regulatory standards for accrediting green hotels in Taiwan. We summarize the comparison in Tables 2-5.

Table 2. A Comparison of Green Hotel Rating Programs

Rating Program	Green Leaf	Green Seal	Green Key	Eco-label
Countries/Regions	North America	US	Canada, EU	EU
Organization System Analyzed	TerraChoice & Audubon International	Green Seal	Hotel Association of Canada & Environment Canada	European Eco-labeling Board (EUEB)
Participation	Voluntary	Voluntary	Voluntary	Voluntary
Grade Sign	Leaf	Color	Key	Flower
Level	5	3	5	None
Beginning	1998	1989	1997/2005	1992
Rating Program	GTBS*	GHS**	LEED***	RSAGH****
Countries/Regions	UK	China	US	Taiwan
Organization System Analyzed	Visit Britain / International Centre for Responsible Tourism (ICRT)	China Hotel Association	US Green Building Council (USGBC)	Environmental Protection Administration (EPA)
Participation	Voluntary	Voluntary	Voluntary	Voluntary
Grade Sign	Color	Ginkgo biloba	Color	None
Level	3	5	4	5
Beginning	1997	2003	2000	2007

Adapted from the studies of Shieh et al. (2012) and Sheu et al. (2012).

Remarks: GTBS* is the abbreviation for Green Tourism Business Scheme.

GHS** is the abbreviation for Green Hotel Standard.

LEED*** is the abbreviation for Leadership in Energy and Environmental Design.

RSAGH**** is the abbreviation for Regulatory Standards for Accrediting Green Hotels

Table 3. A Comparison of 8 Green Hotel Rating Systems - Environmental Protection

Rating System	Green Leaf	Green Seal	Green Key	Eco-label	GTBS	GHS	LEE D	RSAGH
Air Quality			V	V	V		V	V
Water Quality	V	V	V	V	V	V	V	V
Noise Control					V		V	V
Waste Management	V	V	V	V		V	V	V
Hazardous Substances Management		V	V	V			V	V
Non-ionizing Radiation Control							V	V
Resource Sorting / Recycling	V	V					V	V
Environment Sanitation				V		V	V	V

Table 4. A Comparison of 8 Green Hotel Rating Systems - Natural Conservation

Rating System	Green Leaf	Green Seal	Green Key	Eco-label	GTBS	GHS	LEED	RSAGH
Wildlife Conservation								
Wildlife Habitat Protection								
Soil & Underwater Conservation	V	V					V	
Green Procurement		V			V	V	V	
Land Use			V		V		V	
Biodiversity							V	

Table 5. A Comparison of 8 Green Hotel Rating Systems - Building Infrastructure

Rating System	Green Leaf	Green Seal	Green Key	Eco-label	GTBS	GHS	LEED	RSAGH
Building Materials			V				V	
Sustainable Design			V				V	
Energy Efficiency	V	V	V	V	V	V	V	V
Ecological Engineering Method							V	
Compatibility with Local Environment					V		V	
Environment Greening			V	V		V	V	

Discussion. The purpose of this study was to propose guidelines for establishing green hotel rating systems in Taiwan. The result should be to guide customers in selecting hotels that can conform to their demands and expectations. In this study we

compare the criteria of these 8 different hotel ratings, as given by their bulletins and forms.

The findings demonstrate that almost all green hotel rating programs currently have no clear criteria for evaluating to emphasize the ecological dimension, Taiwan is no exception. The analysis of the green hotel rating program in Taiwan indicates potential areas for improvement, if one accepts the concept of ecological conservation. The idea is to build a solid concept of ecological conservation and then to encourage hoteliers to remain aware of ecological conservation. Though Taiwan's green hotel rating program is strong on environmental protection, however, no clear criteria have been proposed for evaluating ecological conservation. More criteria regarding the dimensions of ecological conservation should be added to the green hotel rating program to evaluate hotels more completely. According to the concept of ecological conservation, this study suggests that the rating program will be made more effective by adding two factors. One is compatibility with the local environment; the other is implementation of the concept of food miles.

In Taiwan, because of topography constraints and better landscape, lots of hotels were established nearby scenic areas or protected areas. However, some hoteliers do not attach importance to compatibility with the local environment, even destroy animal habitat and threaten local biodiversity. In recent years, typhoons caused many disasters and heavy losses to Taiwan after huge and larger than forecasted rainfalls, for example, 88 floods happened in 2009. We can not only witness several damaged hotel buildings, but also precious natural resources are destroyed every time a typhoon comes.

The concept of food miles (Garnett, 2003; Harwell, 2005; Smith et al., 2005; MacGregor & Vorley, 2006; Saunders & Barber, 2006; Engelhaupt, 2008) presents an argument to buy goods which have travelled the shortest distance from a farm to a table, and to discriminate against long-haul transportation, especially air-freighted goods. The long-distance transport of food is associated with additional emissions due to increased transportation coupled with greater packaging. Therefore, the solution proposed by food miles campaigners is to source food from as close to where it will be finally consumed as possible. Furthermore, the concept of food miles has captured public attention and apparently is changing some consumers' behavior, although only around 1/3 of the shoppers know it. Hu et al. (2009) indicated the increasing ratios of people in Taiwan who eat out as local consumers, especially at the international hotels. Because of this trend, food miles should be considered as the vital criterion while evaluating the green hotels in Taiwan.

It is worth mentioning that green hotel rating programs are mostly sponsored by non-governmental organizations (NGOs), in addition to promotion of green hotels, these rating results are served as reference for consumers to conduct green consumption. In contrast with the green hotels certified by NGOs in other countries, Taiwan green hotels are still evaluated by the authority - EPA. Third party public and private sector tourism industry stakeholders may potentially award ecolabels or seals of approvals to tourism enterprises judged to have fewer impacts on the environment than other similar enterprises. These ecolabels would provide tourists with the information regarding the environmental performance of tourism enterprises, thereby enabling them to make informed choices while purchasing products and services from touroperators, travel agencies, resorts/hotels, and/or other tourism service

providers for their vacations (Rhodes & Brown, 1997; Sirakaya, 1997; Weissman, 1997; Sirakaya & McLellan, 1998; Sirakaya & Uysal, 1998; Sirakaya et al., 1999). In practice, a tourism enterprise seeking an ecolabel or eco seal is required to meet specified standards and preset criteria identified by the third-party environmental accreditation scheme offering the label (Mihalic, 2000). Because an NGO or a third-party plays an impartial role and is more in line with the spirit of voluntariness and self-discipline, Taiwanese authorities should consider adopting such an approach.

Conclusion and Suggestions. Eco-consciousness is now a part of the everyday vernacular. "Global warming", "organic" and "sustainable" are the current buzzwords. Following the gradual elevation of global warming issue and commencement of green consumption trend, environmental protection has become a key issue concerned by many industries. However, a common complaint at the lodging industry is that it only recently woke up to environmental issue and then acted primarily due to market pressure, but the industry has long worked on environmental matters, by whatever name (Stipanuk, 1996). As for "no chimney industry"- hotel industry, to carry out environmental protection policies is considered inevitable for sustainable operation. Hotels, like most businesses, have responded to this burgeoning trend, raising their green profile in a number of ways. Green efforts can be as basic as water conservation measures (such as encouraging the reuse of linens), housekeepers employing environmentally safe cleaning products, or eco-sensitive spa and bath amenities to grander initiatives such as all-green construction. The greenest of the hotels offer courtesy vans that run on alternative fuels, eco-friendly cleaning products, recycling bins in guest rooms, and even climate-neutral rooms. Hotels offering this feature attempt to eliminate or offset all heat-trapping gas emissions associated with their rooms' materials or operations by investing in renewable energy. Some of these greening efforts, such as linen reuse, are inexpensive and easy to implement, and yield immediate savings. Others require a substantial commitment of time and money, but the long-term benefits greatly outweigh the initial costs. Many guests respond favorably to these efforts and are enthusiastic about helping to conserve natural resources, which fosters a loyal customer base. In short, green hotels are a win-win situation for everyone involved.

Taiwanese green hotel rating system is at a trail stage while we write this article. Examining green hotel rating systems in other countries or regions that established and developed for many years can contribute to the development of a green rating system for Taiwan hotels. Surveys should also be conducted on an ongoing basis to clarify and incorporate ecological viewpoints and to keep green hotel rating systems updated. These measures would also increase the hotel buildings compatibility with the local environment and the concept of food miles. The findings of our study would help to develop a completely green hotel rating system in Taiwan that is trusted and useful to consumers and can be considered a guideline for hoteliers and authorities.

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