

See discussions, stats, and author profiles for this publication at:  
<https://www.researchgate.net/publication/228315540>

# Creating a Green Brand for Competitive Distinction

ARTICLE *in* ASIAN BUSINESS & MANAGEMENT · JULY 2008

Impact Factor: 0.31 · DOI: 10.1057/abm.2008.19

---

CITATIONS

4

---

READS

47

1 AUTHOR:



Nicole Darnall

Arizona State University

46 PUBLICATIONS 1,442

CITATIONS

SEE PROFILE



## Creating a Green Brand for Competitive Distinction

Nicole Darnall

Department of Environmental Science & Policy, George Mason University, 4400 University Drive, MSN 5F2 Fairfax, VA 22030, USA.

E-mail: ndarnall@gmu.edu

This research examines the question of how an environmentally proactive hotel can gain competitive distinction by way of 'green' branding. It demonstrates that not all green branding options are created equal. The two most widely recognized options, unilateral commitments and participation in voluntary environmental programs, have significant variations in their ability to inform relevant constituencies, achieve external legitimacy and add firm value. To illustrate these points, this research systematically evaluates the efforts of Damai Lovina Villas, a small boutique Indonesian hotel, to promote its environmental activities by way of developing a green brand. Further, this study develops a framework that other companies can use to assess their green branding options.

*Asian Business & Management* (2008) 0, 000–000. doi:10.1057/abm.2008.19

**Keywords:** environmental strategy; green branding; voluntary environmental program; certification; green hotel; case study

### Introduction

Individuals worldwide are becoming increasingly savvy about expressing environmental preferences.<sup>1</sup> For instance, changing market demand has affected intermediary markets, where Asian companies report that corporate buyers are offering preferential purchasing if they demonstrate minimal harm to the natural environment. Similarly, within the United States, 15 per cent of consumers routinely pay more for green products, and another 15 per cent seek green products if they do not cost more (Ginsberg and Bloom, 2004). The shift in global market demand is affecting product and service markets worldwide (D'Souza, 2004), with consumers willing to pay price premiums of \$30 per night for hotel services that demonstrate superior environmental performance (Rivera, 2002). Consumers have also revealed a willingness to spend 20–50 per cent more for organically produced food (Barkley, 2002) and \$3,000–8,000 more for hybrid cars over comparable non-hybrid models (Walters, 2005).

These examples illustrate that market opportunities exist for companies that consider the environment in their product and services development and endeavor



to develop a 'green' brand. Previous research has alluded to institutions that firms can use to develop green branding. For instance, companies can take unilateral action to improve environmental performance ([Anton \*et al.\*, 2004](#)) by self-advertising their environmental activities, or participate in a voluntary environmental program (VEP) that requires participants to self-monitor and publicly report their environmental performance ([Darnall and Carmin, 2005](#)). In other instances, companies can receive third-party certification for environmental activities ([Darnall and Carmin, 2005](#)). However, most previous research examining these options evaluates one in the absence of others. Even less is known about the practical trade-offs firms face when choosing one option over another.

This research offers three contributions to existing scholarship. First, while previous studies have examined the merits of firms' efforts to promote their environmental activities, no studies we know of consider the appropriateness of these different efforts for a company with an established proactive environmental strategy. That is, for companies that exceed the environmental expectations established by typical VEPs or certification schemes, these branding options might understate their sustainability activities and diminish their potential reputational value. However, at odds with this view is the belief that an organization's self-promotion of its environmental activities may suffer from diminished legitimacy in the eyes of environmentally conscious consumers. This research explores these less understood but important tensions related to green brands, and the various options available to organizations wishing to promote their sustainability visions.

The second contribution of this research relates to the fact that companies considering their green branding options are faced with a variety of choices, each with strengths and weaknesses. However, companies lack a systematic way to assess these options. This study offers a framework for doing so. Third, this research evaluates the strategic relevance of green branding mechanisms for smaller firms. This focus is important, since existing VEPs generally are not designed for the market conditions of small businesses. Our research considers appropriate what branding options are appropriate for these enterprises, and why green brands might be particularly relevant to companies operating in emerging Asian economies.

Drawing from the environmental management activities at Damaí Lovina Villas and Restaurant, a boutique Indonesian hotel, this research examines how an environmentally proactive organization can gain competitive distinction. It offers a framework that companies can use to assess green branding options, that is particularly relevant to smaller organizations operating in Asia. Further, it considers the legitimacy of these branding options by assessing the trade-offs associated with firms' unilateral actions to self-advertise their environmental activities and participation in a VEP requiring self-monitoring, third-party certification or both.



## Understanding Green Branding in the Hotel Industry

Globally, the hotel industry is beginning to recognize the benefits from undertaking proactive environmental efforts. For example, in the Americas (such as Costa Rica and Ecuador) and Africa (eg Kenya), eco-tourism represents a significant portion of gross domestic product and economic activity. While Asia is less recognized for eco-tourism, it is making headway. For instance, Thenmala Eco-tourism in Kerala, India, is India's first 'planned eco-tourism destination,' with ecologically sustainable nature trails, educational facilities and adventure activities (Schlichter, 2007). Additionally, Thailand's Evason Hua Hin Resort has been hailed as one of Asia's top green hotels for using biodegradable products and developing extensive energy conservation and waste minimization practices, while at the same time supporting community conservation projects (Agoda, 2007). Similarly, in Indonesia, one of the most populous countries in the world, Alila Ubud has been recognized internationally for its comprehensive waste recycling and water conservation efforts (Agoda, 2007). Hotels such as these recognize that an eco-friendly reputation can enable them to target environmentally conscious customers, gain differentiation advantages and yield premium prices for their services (Rivera, 2002).

However, consumers often have difficulty distinguishing which hotels have a strong sustainability ethic because of a lack of available information. In consumers' minds, performance differences between hotels are indistinct in that each hotel appears to have similar objectives and procedures. The lack of information potentially hampers market efficiency in that environmentally conscious consumers who wish to patronize green establishments have limited information, and individuals wishing to invest in environmentally conscious businesses have difficulty identifying them. Within this setting, the challenge for an environmentally conscious hotel is to inform consumers and investors about their otherwise ambiguous environmental activities and policies, thus reducing information asymmetries.

In general, information asymmetries occur when knowledge about a firm and its performance are unavailable to external parties. When information asymmetries are present, product prices, which are a function of production costs, efficiency and product quality, are pooled within common markets. In such cases, prices are no longer accurate market signals and instead reflect *average* costs, efficiencies and qualities of all enterprises operating within the common pool market (Akerlof, 1970). Because consumers and investors cannot make rational buying decisions, market failures arise (Alchian and Demsetz, 1972). For instance, when questions arise about a product's quality, consumers are less likely to buy it unless the manufacturer offers a guarantee or warranty (Barney and Ouchi, 1986). Similarly, in the absence of accurate



environmental information, consumers and investors are unable to draw distinctions (Darnall and Carmin, 2005) among hotels. Because there is no readily available means to determine which firms are cleaner than others (Darnall and Carmin, 2005), potential guests who wish to patronize and individuals who wish to invest in green hotels may find it difficult to do so.

To remedy environmental information asymmetries, a variety of institutional arrangements have evolved. However, two are more widely recognized than others — unilateral commitments and participation in VEPs (self-monitored, third-party certified and hybrid programs). The sections that follow discuss these institutional arrangements and offer examples of how they might resolve problems related to environmental information asymmetries.

### **Unilateral Commitments**

Unilateral commitments are firms' self-initiated efforts (Darnall and Carmin, 2005) to proactively address their environmental impacts. Firms that rely on unilateral commitments establish their own environmental goals, rather than having an outside party do so, and then self-promote their adherence to those goals. In an effort to educate interested parties about their environmental activities, companies that rely on unilateral commitments engage in direct marketing. For instance, by way of its website, Suneva Fushi Resort and Six Senses Spa, Maldives, emphasizes its efforts in resource conservation, energy and water efficiency and waste minimization. It also has an extensive community education program. Like other hotels relying on unilateral commitments, Wyndham Hotel, which has locations throughout Asia and elsewhere, provides information in its guest rooms about its towel exchange program in an effort to encourage guests to help reduce water, energy and detergent use.

Companies that rely on unilateral commitments have the advantage of maintaining internal control over their environmental program and messages that communicate information about those programs. However, these messages may suffer from external legitimacy problems. Legitimacy refers to organizations' actions that are considered desirable or appropriate within some socially constructed system of norms, values, beliefs and definitions (Suchman, 1995). Companies that self-advertise their efforts in the absence of some form of external verification may be perceived as less trustworthy because their messages are more readily manipulated to favor the company's position. As a consequence, unilateral commitments may resolve information asymmetries only on a basic level.

### **Voluntary Environmental Programs**

The second type of institutional arrangement that has evolved to remedy information asymmetries about firms' environmental practices is the VEP.



VEPs consist of formalized programs, codes, agreements or commitments that encourage organizations to voluntarily reduce their environmental impacts beyond the requirements established by environmental regulations (Carmin *et al.*, 2003). VEPs typically are developed and sponsored by a government, industry association, or non-profit organization. Sponsors of VEPs first determine the program's environmental goals and subsequently recruit companies to agree to fulfill program commitments.

As the name suggests, participants in self-monitored VEPs determine their conformance to program goals by way of self-monitoring their performance and reporting their activities to program sponsors (Darnall and Carmin, 2005; Darnall and Sides, 2008). All self-monitored VEPs generally emphasize conservation, energy efficiency, employee education, waste minimization and recycling. Related to the hotel industry, while more than a dozen self-monitored VEPs target hotels as participants, only a handful are relevant to Asian business. The most widely known is Best Green Hotels. To participate in Best Green Hotels, hoteliers use an online submission form to self-report information regarding 29 environmental activities that include towel and sheet re-use, alternative energy, gray-water recycling, organic food and guest and worker education (Table 1). Responses are then summarized and ranked based on the number of 'green' attributes. Between 1 and 6 green triangles are then assigned to participating hotels to indicate their level of 'greenness.' A rating of 6 triangles indicates that a hotel has all the green attributes deemed important by Best Green Hotels.

Participants in self-monitored VEPs self-advertise their commitment to VEP goals by way of corporate websites and promotional materials. Sponsors also promote the activities of member companies and advertise how they benefit the environment. For instance, establishments recognized by Best Green Hotels are included in an online database of more than 2,500 hotels, searchable by location and other identifiers. Best Green Hotels recognizes individual participants on their website and through recognition programs, which confers additional legitimacy to member hotels. Self-monitored VEPs therefore may provide information to the marketplace that can attract patronage from environmentally conscious consumers and investors. For these reasons, participants in self-monitored VEPs may derive additional benefits than companies that rely on unilateral efforts alone.

Other VEPs rely on independent third-party auditing to assure conformance to program goals. Although less prevalent than self-monitored VEPs, certified VEPs have significant popularity because of their external monitoring and reporting features. By virtue of undergoing external certification, companies may be encouraged to improve environmental performance to a greater degree than programs requiring self-monitoring alone (Potoski and Prakash, 2005). As a consequence, these VEPs may confer additional external legitimacy



**Table 1** Comparison of environmental goals required of Indonesian Green hotel brands

<i>Approach</i>	<i>Program name</i>	<i>Environmental requirements</i>
Unilateral Self-monitored VEP	— Best Green Hotels	Less known because varies from hotel to hotel Linen program Energy conservation Bulk purchasing Composting Organic Food Education of guests and staff Water conservation Recycling
Certified VEP	ISO 14001  ECOTEL	Environmental policy Environmental aspects and impacts Objectives and targets Implementation strategy Monitor and correct for problems Management review Environmental commitment Solid waste management Energy efficiency Water conservation and preservation Employee and community involvement
Hybrid VEP	Green Globe 21	Waste minimization, reuse and recycling Energy efficiency, conservation and management Management of fresh water resources Waste-water management Hazardous substances Transport Land-use planning and management Design of environmentally sensitive products Partnerships for sustainable development Protection of air quality Noise control Environmentally sensitive purchasing policy Involving staff, customers and communities in environmental issues

(Bansal and Hunter, 2003) about participants' environmental commitments. Further, the certification process is more likely to formalize managerial commitment towards achieving environmental performance goals (Rondinelli and Vastag, 2000). However, greater monitoring means greater cost to participating firms.

Within Asia, ISO 14001 is the most widely recognized third-party certified VEP, largely because it extends beyond the hotel industry to any type of sector, public or private. ISO 14001 requires participants to implement



an environmental management system (EMS).<sup>2</sup> EMSs consist of a collection of internal policies, assessments, plans and implementation actions (Coglianese and Nash, 2001), affecting the entire organizational unit and its relationships with the natural environment. Firms implementing ISO 14001 focus on continually lowering the environmental impact of their goods, products and services. Certification requires businesses to hire independent external auditors to review and verify that their EMS conforms to the ISO 14001 standard. Once certified, the ISO 14001 label indicates that a company has implemented a management system that documents the firm's pollution aspects and impacts, pollution prevention processes (Bansal and Hunter, 2003) and mechanisms for continual improvement over time (Darnall, 2006).

Like ISO 14001, ECOTEL also relies on independent third-party auditing to assure conformance to program goals. Certification is based on five environmental management areas, including environmental commitment, solid waste management, energy efficiency, water conservation and preservation, and employee and community involvement. Achieving ECOTEL certification involves undercover (and surprise) member inspections and interviews with hotel staff. Operating since 1994, more than 1,000 hotels have applied for certification (Szuchman, 2000). However, only 35 have obtained it, which makes this VEP highly exclusive. Participants are identified on an online searchable website. Hotels achieving ECOTEL certification can retain their label for a period of 2 years, but must agree to re-inspections (announced or unguided) at any time during that period.

Like participants in self-monitored VEPs, hotels participating in certified VEPs can self-promote their proactive environmental activities. Because they undergo external certification, participants may garner additional external legitimacy (Bansal and Hunter, 2003) for their environmental commitments. One reason relates to the fact that external monitoring provides more incentive for companies to improve environmental performance than programs requiring self-monitoring alone (Potoski and Prakash, 2005).

A less common VEP is the tiered monitoring or hybrid approach. Sponsors of hybrid VEPs allow companies to decide whether they would prefer to self-monitor or undergo independent third-party monitoring. These programs are popular because firms that do not fully embrace the additional commitments required by certification can still participate. Once a member at the self-monitoring level, participants may later choose to graduate towards membership at certified level or continue at the self-monitoring level. Related to the Asian hotel industry, the most widely known hybrid program is Green Globe 21 (GG21), based on the Australian Nature and Eco-tourism Accreditation Program Standard. It operates in 42 countries, and has about 150 certified hotels worldwide. About 23 per cent of GG21 participants operate in Asia, unlike the ECOTEL program, which has only four (11 per cent



of its total) certified hotels in Asia, with none in Indonesia or China. However, more than half (53 per cent) of GG21's participants are located in Indonesia. Participants are included in a website which is searchable directly by potential guests.

GG21 is designed to facilitate environmentally sustainable eco-tourism by promoting a core set of principles, including waste minimization, re-use and recycling, energy efficiency, conservation and management, management of fresh water resources, waste-water management, hazardous substances, transport, land-use planning and management, involving staff, customers and communities in environmental issues, design of environmentally sensitive products, partnerships for sustainable development, protection of air quality, noise control, environmental sensitivity and purchasing policy. Hotel participants also may use the GG21 label in their promotional materials. Participants complete an online self-assessment of their environmental activities. Program sponsors then provide participants with a report that is updated annually on where their performance is positioned relative to environmental and social benchmarks.

Like certified VEPs, hybrid VEPs take a more expansive view of environmental management by considering transportation impacts, design, partnerships, purchasing and landuse. However, the hybrid VEP also emphasizes many of the more specific environmental management activities put forward by self-monitored VEPs.

Table 2 summarizes each of the institutional arrangements for green brands that are available to Asian hotels and hotels worldwide. It illustrates that each of the green branding options vary according to their ability to reduce information asymmetries, and their goals, promotion, control of messages and external legitimacy.

While previous research has examined the merits of relying on these two institutional arrangements to create a green brand, to our knowledge these studies have not considered them simultaneously and within the context of a firm already having a well-developed environmental strategy. Such organizations may exceed the environmental expectations established by VEPs and limit the reputational value gained by participating in them. However, at the same time firms' self-promotion of sustainability activities may have less legitimacy in the eyes of environmentally conscious consumers and investors. Given the variety of institutional options and the complexity of their decision, firms would benefit from a framework to assess systematically their green branding choices. The following case study of Damaí Lovina Villas and Restaurant offers a basis for developing such an arrangement. The framework involves five components: (1) identifying the population of applicable VEPs and assessing their: (2) requirements, (3) benefits, (4) account for environmental activities of a specific firm and (5) assess investments — both fees and additional



**Table 2** Comparison of green branding approaches applicable to Indonesian hotels

<i>Program characteristics</i>	<i>Participation in Voluntary Environmental Programs</i>		
	<i>Unilateral approach</i>	<i>Self-monitored</i>	<i>Certified</i>
Environmental goals	Established internally	Established externally	Established externally and internally
Comprehensiveness	Less known because varies from hotel to hotel	Narrow focus on activities	Narrow focus on activities in addition to a broader focus on operational systems
Promotion of green brand	Self-promotion via website and corporate materials	Self-promotion plus external promotion by program sponsors	Self-promotion plus external promotion by program sponsors
Control of environmental messages	Internal control	Internal and external control	Internal and external control
Relative cost	Determined by hotel	Inexpensive	Moderate
External legitimacy	Low	Moderate	Moderate to high

<sup>a</sup>Sponsors of hybrid VEPs allow companies to decide whether they would prefer to self-monitor or undergo independent third-party monitoring.



**Table 3** Assessing green branding options

<i>Assessment step</i>	<i>Explanation</i>
(1) Identify the population of applicable VEPs	Consider both industry-specific VEPs, but also generic VEPs that apply to a variety of industries (eg ISO 14001)
(2) Assess relevant VEPs' environmental requirements	Determine their environmental goals, comprehensiveness, monitoring requirements
(3) Evaluate relevant VEPs' benefits	What is the probability that they will resolve information asymmetries in the market? Consider how they promote their brand, how recognized it is, whether it offers external legitimacy, whether the same benefits can be derived from undertaking unilateral commitments alone
(4) Assess the environmental activities of the firm in question	Identify gaps that will need to be addressed in order to meet participation requirements
(5) Estimate the investments required for VEP participation	Consider both participation/certification fees and additional environmental programs that may need to be implemented to qualify for program participation

environmental programs — required for VEP participation (Table 3). A conclusion is then reached regarding a preferred green branding approach.

### **Case Study: Developing Damai Lovina Villa's Green Brand**

Damai Lovina Villas and Restaurant is a profitable small boutique hotel located in Bali, Indonesia. It consists of eight luxury villas accommodating 16 guests, and employs a staff of 57. The hotel is situated 3.2 km from Lovina Beach among spice plantations, tropical jungles and terraced mountainsides, and offers poolside views of Javanese volcanoes and the ocean below. Visitors to the area are told that Damai's restaurant is 'not to be missed under any circumstances' (Fodors Travel, 2001: 178) since it is 'the most exquisite gourmet dining experience in northern Bali, if not the entire island' (Reader and Ridout, 2002: 361). New menus are developed each day based on available organic produce from local markets and the hotel's private garden.

Damai's customers are urban professionals vacationing from Scandinavia, predominantly Denmark. Most other guests come from other Western Europe and the United States. Visitors generally are celebrating special occasions. While the hotel operates at capacity during high season, its total annual occupancy is about 65 per cent. As a means of increasing occupancy, the hotel is considering how to leverage its proactive environmental strategy to create a green brand distinguishing itself from competitors. To that end, it is contemplating whether to unilaterally advertise its environmental strategy or participate in one or more VEPs.



## **Research design**

Data on Damai's environmental activities were gathered between 2003 and 2006 and included publicly available information, hotel documents and two site visits. Six in-depth personal interviews of between 30 min and 6 h with the hotel's general manager and suppliers were conducted to document the extent of the hotel's environmental activities. These meetings were followed-up with numerous e-mail communications. Detailed accounts were written and verified by the general manager in 2006. The advantage of fieldwork is the depth of knowledge and context gained from a process or situation. In this case, the ethnographic information, which can only be gathered through interviews, provides the detail necessary to fully understand the green branding process. While case studies are limited in terms of generalizability, they can be used in conjunction with other research to suggest patterns (Larson, 2000). Case studies can also be exemplars for understanding the complexity of a situation, as this research will demonstrate.

## **Damai Lovina Villas' environmental activities**

To assess Damai's best green branding approach, it is necessary to list its environmental activities, which will indicate how much the hotel would need to invest to qualify for recognition in a VEP.

## **Partnership with IPSA**

In developing its environmental strategy, the hotel partnered with Institut Pengembangan Sumber Daya Alam (IPSA or Institute for Natural Resources Development), a center for environmental education and training emphasizing low-input agricultural techniques. IPSA also has a factory that develops environmentally friendly agricultural and household products. The partnership encouraged Damai to receive training in organic farming procedures. At IPSA's suggestion, the restaurant uses organic practices to grow 80 per cent of its produce in the gardens surrounding the hotel. What Damai does not grow on-site is purchased from local farmers who also utilize organic farming principles.

IPSA has also developed organically produced massage oils, perfumes, soaps, lotions and shampoos specially for Damai. Damai purchases all body products in bulk and places them in refillable ceramic dispensers in guest rooms, thus eliminating the need to purchase and dispose of plastic toiletry bottles. Further, working closely with IPSA, Damai has created a line of organic spa products that are sold at the hotel.



Damaí has a chemical-free policy, made possible by using IPSA's non-toxic organic sanitizers. The organic products are also cheaper than traditional chemical-based detergents and sanitizers. In its gardens, pests are managed using biological controls. Through strategic planting of crops, indigenous insects help curb unwanted insects. Pests are also controlled by IPSA organic botanicals made of lemongrass and citronella.

All the hotel's natural wastes are composted, including pre- and post-preparation food scraps, spoilage, cooking oil, paper, flowers and natural packaging (eg crates and boxes). Animal-based wastes are treated using IPSA's non-toxic and environmentally safe micro-organism products. These products reduce bacteria development. Once treated, the waste is composted and used as fertilizer in Damaí's gardens. By using the hotel's compost instead of chemical fertilizers, Damaí has increased its crop production by 20 per cent.<sup>3</sup>

At IPSA's suggestion, the hotel uses permaculture (a method of producing foodstuff in a self-sufficient system) to reduce water consumption and encourage healthy crops. Damaí's farmers collect leaves and other natural garden waste and spread them among the crops. Like mulch, the natural waste reduces water evaporation. Permaculture also prevents weed growth and eventually becomes fertile compost. To further sustain its garden, Damaí's farmers allow a portion of their crops to go to seed. In other instances, plants are grafted. These efforts have reduced crop production costs by 90 per cent.

### **Minimizing waste and improving internal efficiencies**

The hotel has a significant emphasis on reducing energy use, solid waste and water consumption. It relies on a solar electric system and sells its surplus electricity. Guest rooms are fitted with energy-efficient compact fluorescent lights. Landscape lighting is also energy-efficient. Additionally, the hotel has installed one-way valves and sensors in its water system so that pumps operate only when water pressure falls below a specified threshold, instead of operating 24 h a day. By implementing these measures, Damaí has reduced its electricity use by 65 per cent and no longer pays a supplier for its electric consumption.

The hotel sends any plastic and glass containers back to their respective suppliers for re-use or recycling. Guest rooms are stocked with drinking cups made of recycled glass rather than plastic or paper, and the restaurant uses linen napkins and bamboo drinking straws that are washed and re-used. Finding an environmentally friendly substitute for plastic bin-liners proved challenging, since there was no local manufacturer of paper bags. However, the hotel found a local source for large unbleached paper envelopes. Hotel staff cut off the tops of the envelopes and use the remainder to line waste receptacles. These natural fiber 'bags' are composted with other natural waste from guest



rooms. Combined, these efforts have eliminated Damaí's need to landfill its solid waste.

Damaí's pool is kept at one-seventh of the salinity of seawater to inhibit algae growth and reduce the need for chemicals. However, to further impede algae development, the pool requires a 2 per cent chlorine solution. To eliminate the need to purchase chlorine, Damaí switched to iodized water. The new system converts non-iodized salt into pure chlorine. Once the chlorine oxidizes dead bacteria and algae, it is recycled back into salt, ready to be converted to chlorine again. While the system is not chemical free, it is a closed loop process and eliminates the use of stabilizers and calcium by-products associated with traditional chlorination systems.

Damaí utilizes a water re-use system that directs used water to on-site tanks. Waste water is filtered through a series of tanks containing volcanic rock, porous rubber and sand. Waste from toilets, or 'black water,' is collected and treated using natural enzymes to break down organic matter, and then passed through a series of filters. All treated water is tested once a month to ensure appropriate health ratings and re-used in the hotel gardens. Damaí's conservation efforts have reduced water consumption by 75 per cent.

### **Community involvement**

Through its partnership with IPSA, Damaí is helping local farming and fishing communities remediate the effects of agricultural techniques that are harmful to the environment. For example, at the end of each growing season, local farmers burn agricultural waste to generate ash for fertilizer. However, burning impairs air quality and human health, an issue compounded by the hundreds of small farms that operate in a single community. Poor air quality also diminishes tourism. The hotel is working with local farmers to teach them different composting methods and organic practices using IPSA products to increase the pace of decomposition and thus improve air quality.

Damaí's partnership with IPSA also extends to the fishing industry. Its interest relates to the fact that one of the biggest problems confronting fish farms is limiting the growth of blue/green algae. These algae produce harmful toxins, emit strong sulfurous odors, and deplete dissolved oxygen in water, causing fish to die. Typically, fish farmers rely on chemicals to control algae development. These chemicals are harmful to the environment and limit access to organically farmed fish. Damaí and IPSA are working with the fishermen to encourage them to use microorganisms to temper blue/green algae growth and forego chemical use.

The hotel is also working with local farmers and village leaders to reclaim eroded topsoil. Bali's terraced landscapes, traditional irrigation water systems and monsoon rains cause fertile topsoil to flow from rice paddies and drain



into the ocean. The topsoil loss requires farmers to use chemical fertilizers to grow their crops. As a means to address this issue, Damaí built a series of large rock wall filters in the river running through the property, creating a series of waterfalls; at the bottom of each is a large pool of water that captures much of the topsoil lost from the seven villages surrounding the hotel. Damaí encourages the local farms to reclaim their topsoil from the hotel pools to reduce the need for chemical fertilizers.

### **Room for improvement**

In spite of Damaí's rather extensive environmental strategy, there are still several areas that could be improved. For instance, the hotel's eight villas were originally constructed using energy-inefficient construction techniques, as opposed to integrating natural thatching and vents. The more traditional building materials help maintain comfortable room temperatures and reduce the need for air conditioning. Additionally, the hotel has refrained from promoting its environmental activities in guest rooms, restaurant and gardens, because of concerns that it might diminish its luxury status. For the same reason, Damaí also has not involved guests in an optional linen re-use program and in-room recycling, even though such programs have become increasingly popular within the luxury hospitality industry. Finally, Damaí does not have an employee incentive program promoting the continual improvement of the hotel's environmental and community practices.

### **Promoting its environmental efforts**

To date, Damaí's efforts to promote its environmental vision have relied entirely on the hotel website and local travel agents. The main page of Damaí's website directs environmentally conscious customers to an 'organic resort' link to learn about the hotel's sustainability vision. This link leads potential guests to a statement that says: 'Inspired by the abundance of natural beauty around the hotel, Damaí ... has instituted an ambitious environmental programme, from water treatment and conservation to 100 per cent organic farming of produce for the restaurant.' There is no additional information on its environmental programs.

Damaí also has little control over how travel agents promote it. Damaí provides agents and independent search engines with information about the hotel, and these entities use the information as they deem appropriate. Some have begun to market the hotel as environmentally conscious by advertising that Damaí produces 80 per cent of its food in local gardens, but this message is not consistent, and the hotel's other environmental efforts are not described.



### **Analysis of Damai's green branding options**

A close examination of the four VEPs relevant to Damai reveals that the hotel's environmental programs are more complex than typically required of VEP participants. For instance, Damai's chemical and plastic-free policies, partnership with IPSA, emphasis on organic products and on-site farming extend beyond most VEP parameters. However, there are some elements that VEPs emphasize where Damai could do better, such as more direct involvement of employees and hotel guests in its environmental efforts. Both activities incur little investment in resources. As a consequence, should the hotel choose to participate in Best Green Hotels or GG21, costs would likely only relate to the annual participation fee. Participation in Best Green Hotels is free, whereas participation in GG21 is \$2,033 annually, regardless of whether Damai seeks certification or not. Since Damai already has a strong environmental program, it would make sense that if the hotel chose to participate in GG21 it should obtain certification.

By contrast, should the hotel seek ISO 14001 certification, it would need to develop detailed plans and implementation strategies for how the hotel interacts with the natural environment, since its environmental practices, while extensive, are not formalized. The cost of developing an ISO 14001 EMS and certifying it by an independent third-party auditor ranges between \$270 and \$1,370 per employee (Darnall and Edwards, 2006). Certification is valid for 3 years. However, because the hotel has developed strong environmental management procedures prior to adopting an EMS, the cost of implementation and certification to ISO 14001 would probably be at the lower end of this range. Similarly, certification to ECOTEL standard would cost approximately \$12,550. These costs do not include modifications that would be required to achieve certification, such as adjustments to the hotel's lighting system so that all electrical devices can be turned off with one switch as guests leave their rooms. Additionally, the hotel would need to involve its guests to a greater degree by implementing a towel and sheet re-use program, a guestroom recycling program and stronger guest education. ECOTEL certification is valid for 2 years. Table 4 details the costs associated with each of Damai's green branding options.

Damai's interest in pursuing a green brand relates to its desire to increase its average annual occupancy beyond its existing 65 per cent rate. It is therefore relevant to ask how far annual occupancy would need to increase to cover the cost of each option. Since Damai's unilateral efforts to develop a green brand are determined entirely by the hotel itself, it would need to increase occupancy to a level at least equal to its investment. As participation in Best Green Hotels is free, Damai would not need to increase its occupancy to justify its participation; however, participation in ISO 14001 would require an increase of between 0.49 and 2.47 per cent in annual occupancy to cover certification costs



**Table 4** Damaí's cost of green branding

<i>Approach</i>	<i>Program name</i>	<i>Cost of green brand<sup>a</sup></i>	<i>Annual increased occupancy required to cover green brand costs</i>
Unilateral	—	Determined by hotel.	Determined by hotel
Self-monitored VEP	Best Green Hotels	Free. Self-promotion costs determined by hotel.	0%
Certified VEP	ISO 14001	\$270–1,370 per employee every 3 years. <sup>b</sup> Estimates include implementation, auditing, and certification costs. Self-promotion costs determined by hotel.	0.49–2.47% <sup>c</sup>
	ECOTEL	\$12,550 flat fee every 2 years, plus modifications costs required to obtain certification, which are difficult to assess. <sup>d</sup> Self-promotion costs determined by hotel.	0.60%+
Hybrid VEP	Green Globe 21	\$2,033 annual flat fee whether certified or not. Self-promotion costs determined by hotel.	0.19% <sup>c</sup>

<sup>a</sup>All values are in USD.

<sup>b</sup>See Darnall and Edwards (2006). Values include implementation costs, since Damaí will have to formally document its policies and procedures. However, because the hotel has developed strong environmental management capabilities, implementation and certification would likely be at the lower cost range.

<sup>c</sup>Estimates based on Darnall and Milstein (2007), but are converted into annual values.

<sup>d</sup>The cost of certification is 500,000 rupees (\$12,550) for hotels with less than 100 rooms and 5,000 additional rupees per room for hotels with more than 100 rooms (Nair, 2007).

(Darnall and Milstein, 2007) — most probably at the lower end of the range, since the hotel has developed strong environmental management capabilities that would offset implementation costs.

The cost of participating in ECOTEL is comparable to ISO 14001 certification. ECOTEL certification would require Damaí to increase its occupancy by about 0.6 per cent to cover costs. The hotel would also have to implement changes in its environmental programs to qualify for certification. Finally, participation in Green Globe 21 would require an increased annual occupancy of approximately 0.19 per cent. If occupancy increased by as little as 1.28–3.26 per cent, Damaí could participate in *all* of the aforementioned VEPs.

These findings suggest that participation in the most common VEPs relevant to the Asian hotel industry would have very little negative impact on



Damaí's profits, which reduces the risk associated with pursuing any (or all) of the hotel's green branding options. While previous research has not evaluated increased occupancy associated with green brands *per se*, it has evaluated the price premium that hotels can derive as a consequence of participating in VEPs. More specifically, hotels that participate in VEPs with more stringent environmental criteria can obtain price premiums of \$30 per night over non-green competitors. Such a premium would more than offset the cost of Damaí participating in VEPs of any kind. Additionally, participating in a VEP, which relies on external certification (such as ISO 14001, ECOTEL and GG21), may be of greater value, since these programs have more clearly articulated environmental goals that may further reduce external ambiguity for consumers and investors. Of the three programs, ISO 14001 and GG21 are more widely recognized. However, ECOTEL has the most stringent certification standards that add significant value to the hotel's green brand should it meet the requirements.

At the same time, participation in Best Green Hotels, a self-monitored VEP, has no participation fee. As such, there is little reason for Damaí not to participate in it. If it did, the hotel would qualify for a rating of 5 green triangles, which would give it the highest rating of any hotel in Bali. To achieve the highest rating of 6 green triangles, Damaí would need to involve its guests to a greater degree in its environmental efforts by implementing a towel and sheet re-use program, a guestroom recycling program and stronger guest education. These points are also emphasized by GG21 and ECOTEL.

Should Damaí seek a more conservative approach, participation in GG21 in combination with Best Green Hotels may be suitable. GG21 is one of the most widely recognized VEPs applicable to the hotel industry. The hotel qualifies for immediate certification based on its existing environmental practices, which means that unlike ISO 14001 and ECOTEL, Damaí will not incur implementation costs. Moreover, participation in GG21 is not costly. Should the hotel have concerns about the merits of GG21, it could participate in GG21 for several years and then assess whether it has improved its occupancy sufficiently to warrant continued participation.

Damaí also could continue its unilateral efforts to self-advertise its environmental strategy. In so doing, significant modifications would be required to more effectively characterize the hotel's environmental focus. Presently, Damaí's website ([www.damaí.com](http://www.damaí.com)) is limited as regards its environmental programs, which renders it ineffective in establishing a green brand of any sort. Modifications to the website should be made regardless of whether the hotel chooses to participate in a VEP or not. However, pursuing such a unilateral approach may be viewed less positively than if an independent organization, such as a VEP sponsor, promoted Damaí's efforts.



## Discussion and Conclusion

By 2006, the travel and tourism industry accounted for more than US\$3 trillion annually in global spending and employed about one out of every ten workers in the world. Within this industry, consumers and investors are increasingly expressing interest in environmentally friendly products, services and businesses. However, these individuals often have difficulty distinguishing which firms have strong environmental practices because of a lack of available information. To remedy environmental information asymmetries, some businesses are relying on institutions to inform consumers and investors about their environmental activities and distinguish themselves by creating a green brand.

This research demonstrates that not all green branding options are equal. The two most widely recognized options, unilateral commitments and VEP participation, have significant variations in their ability to reduce information asymmetries, achieve external legitimacy and add firm value. To illustrate these points, this research systematically compares and contrasts the efforts of Damaí Lovina Villas, a small boutique Indonesian hotel, to promote its environmental activities by way of developing a green brand.

It offers three contributions to previous research. First, it assesses the complex decisions facing companies wishing to create a green brand. It evaluates the various options available to organizations like Damaí that wish to promote their sustainability visions. By inventorying the hotel's environmental activities, the case demonstrates that Damaí has a well-established environmental program. Questions therefore exist about whether VEPs with less ambitious environmental requirements may diminish the hotel's potential external value gained by VEP participation. However, even for firms with strong environmental programs, VEPs often can identify issues that could be improved. The VEPs included in this study emphasize that Damaí could expand its environmental focus further by developing guest participation programs related to its recycling and energy conservation efforts, in addition to increasing its employee and guest education efforts.

Further, this research addresses the multifaceted issues associated with pursuing unilateral environmental commitments, as opposed to VEP participation. It suggests that companies which self-advertise their efforts in the absence of some form of external verification may be perceived as less trustworthy, because their messages are easier to manipulate in the company's favor. The ability of unilateral commitments to resolve information asymmetries therefore is diminished. Companies may benefit to a greater degree by simultaneously participating in a VEP, especially a certified one; participants undergoing external certification are more likely to formalize managerial commitment towards the environment (Rondinelli and Vastag, 2000) and improve



environmental performance to a greater extent than programs requiring self-monitoring alone (Potoski and Prakash, 2005). Certification therefore can confer additional external legitimacy (Bansal and Hunter, 2003) about participants' environmental commitments.

The second contribution of this research is that it offers a framework from which firms can assess green branding options. The framework involves five steps: (1) identifying the population of applicable VEPs, (2) evaluating the relevant VEPs' environmental requirements, (3) assessing the relevant VEPs' benefits, (4) evaluating the environmental activities of the firm in question, and (5) estimating the investments required for VEP participation. Related to the last step, it is important not simply to estimate the cost of green branding options in monetary terms, but also a break-even value. This will focus attention on the firm's ultimate goal for participation and multiple measurements that indicate when the goal has been achieved. With respect to the hotel industry, that break-even value could be the annual increased occupancy required to cover the cost of developing a green brand, as at Damaí; it could also be increased room prices, increased room stays, or some other meaningful value. Once the five steps are completed, a conclusion can be reached regarding the preferred green branding approach.

Developing a framework around which firms can assess green branding options is important because businesses are faced with a variety of choices, with various costs and benefits. In the absence of a systematic way to evaluate these options, many businesses may simply forgo green branding. In such instances, consumers and investors would be unable to draw distinctions between green firms and less environmentally friendly competitors. This issue is especially relevant to smaller firms, since they often lack resources to systematically evaluate the options. For instance, while Damaí had a fairly sophisticated environmental program in place for 6 years, it had not pursued green branding. The hotel wanted to receive more external value from its activities, but did not know where to begin. No doubt other smaller hotels are in a similar position.

Finally, this research illustrates how a smaller hotel can make significant strides in improving its environment and operational efficiencies. Most (if not all) of Damaí's environmental initiatives have long since paid for themselves. These findings are particularly relevant to other hotels and businesses operating in Indonesia and other Asian countries that lack strong environmental regulations and enforcement in that private sector entrepreneurial solutions can help solve environmental problems in the absence of effective government action. This issue is important because many emerging Asian countries are struggling with how to improve their economic status while protecting the environment. This research demonstrates that companies undertaking proactive environmental activities can improve their environment



and simultaneously reduce their operating costs. To the extent that governments can help educate firms about the virtues of developing proactive environmental programs, they may be able to greater balance their need for growth and environmental protection.

In sum, this research examines the question of how an environmentally proactive organization can gain competitive distinction by way of informing market participants about their environmental activities. It examines the importance of green branding and demonstrates that they are not all equal. The two most widely recognized options have significant variations in their ability to inform consumers and investors about participants' environmental practices and enhance external legitimacy and firm value. Further, this study develops a framework that companies can use to assess the trade-offs associated with their green branding options. By utilizing this framework, firms can better understand how they can help resolve environmental information asymmetries in the marketplace, thereby gaining competitive distinction for their proactive environmental activities.

### About the author

**Nicole Darnall** is Assistant Professor of Environmental Science and Policy and Assistant Professor of Public and International Affairs at George Mason University. Her research contributes to our understanding of management strategy and the policy sciences by advancing a nuanced conception of firms' responses to regulatory and social setting. She specializes in corporate sustainability, environmental policy innovation and the role of external stakeholders in the environmental governance of corporations and government.

### Notes

- 1 This paper draws on-field data gathered between 2003 and 2006, in addition to the instructional case study 'Sustainability and environmental standards: seeking competitive distinction at Damaí Lovina Villas', by Nicole Darnall and Mark B. Milstein of Cornell University, which won The Case Association's 2008 Best First Case Award and received an honorable mention at the 2006 *oikos* Sustainability Case Writing Competition, and is available through the *oikos* Foundation. The author thanks Glenn Knappe of Damaí Lovina Villas and Restaurant for providing data for this analysis.
- 2 Unlike most VEPs, ISO 14001 is not specific to an industrial sector, and any type of organization can certify to the standard.
- 3 Crop production increases due to composting is not unusual. At the extreme, some studies have shown that compost to agronomic crops can increase crop production as much as 900 per cent (Winter Sydner and Redente, 2002).



## References

- Q1 Agoda (2007) 'Go green: Agoda's top 10 eco-friendly hotels', [http://travel.agoda.com/blogs/member\\_submissions/archive/2007/07/30/go-green-agoda-s-top-10-eco-friendly-hotels.aspx](http://travel.agoda.com/blogs/member_submissions/archive/2007/07/30/go-green-agoda-s-top-10-eco-friendly-hotels.aspx) last accessed 6 February 2008.
- Akerlof, G. (1970) 'The market for lemons: quality uncertainty and the market mechanism', *Quarterly Journal of Economics* 84: 488–500.
- Alchian, A.A. and Demsetz, H. (1972) 'Production, information costs and economic organization', *American Economic Review* 62: 777–795.
- Anton, W.R.Q., Deltas, G. and Khanna, M. (2004) 'Incentives for environmental self-regulation and implications for environmental performance', *Journal of Environmental Economics and Management* 48(1): 632–654.
- Bansal, P. and Hunter, T. (2003) 'Strategic explanations for the early adoption of ISO 14001', *Journal of Business Ethics* 46(3): 289–299.
- Barkley, A. (2002) 'Organic food growth: producer profits and corporate farming', Paper presented at the 'Risk and Profit Conference', Department of Agricultural Economics, Kansas State University, Manhattan, KS, 15–16 August.
- Barney, J.B. and Ouchi, W.G. (eds.) (1986) *Organizational Economics*, San Francisco: Jossey-Bass.
- Carmin, J., Darnall, N. and Mil-Homens, J. (2003) 'Stakeholder involvement in the design of U.S. environmental initiatives: does sponsorship matter?' *Policy Studies Journal* 31: 527–543.
- Coglianesi, C. and Nash, J. (eds.) (2001) *Regulating from the Inside: Can Environmental Management Systems Achieve Policy Goals?*, Washington, DC: Resources for the Future.
- D'Souza, C. (2004) 'Ecolabel programmes: a stakeholder (consumer) perspective', *Corporate Communications* 9: 179–188.
- Darnall, N. (2006) 'Why firms mandate ISO 14001 certification', *Business & Society* 45(3): 354–381.
- Darnall, N. and Carmin, J. (2005) 'Cleaner and greener? The signaling accuracy of U.S. voluntary environmental programs', *Policy Sciences* 38: 71–90.
- Darnall, N. and Edwards Jr., D. (2006) 'Predicting the cost of environmental management system adoption: the role of capabilities, resources and ownership structure', *Strategic Management Journal* 27(2): 301–320.
- Darnall, N. and Milstein, M. (2007) 'Sustainability and environmental standards: seeking competitive distinction at Damaí Lovina Villas', Paper at International Association for Business and Society, 31 May–3 June, Florence, Italy.
- Darnall, N. and Sides, S. (2008) 'Assessing the performance of voluntary environmental programs: does certification matter?' *Policy Studies Journal* 36(1): 95–117.
- Fodors Travel (2001) *Fodor's Bali and Lombok*, 1st edn, New York: Random House.
- Ginsberg, J.M. and Bloom, P.N. (2004) 'Choosing the right green marketing strategy', *Sloan Management Review* 46: 79–84.
- Larson, A.L. (2000) 'Sustainable innovation through an entrepreneurship lens', *Business Strategy and the Environment* 9(5): 304–317.
- Nair, H. (2007) 'HVS International', personal communication, 20 February.
- Potoski, M. and Prakash, A. (2005) 'Covenants with weak swords: ISO 14001 and facilities' environmental performance', *Journal of Policy Analysis and Management* 24(4): 745.
- Reader, L. and Ridout, L. (2002) *Rough Guide to Bali & Lombok*, London: Rough Guides.
- Rivera, J. (2002) 'Assessing a voluntary environmental initiative in the developing world: the Costa Rican certification of sustainable tourism', *Policy Sciences* 35: 333–360.
- Rondinelli, D.A. and Vastag, G. (2000) 'Panacea, common sense, or just a label? The value of ISO 14001 environmental management systems', *European Management Journal* 18: 499–510.



Schlichter, S. (2007) 'Top 5 destinations for eco-tourism: get up and close with the natural world at these hot spots', 19 April, IndependentTraveler.com, <http://www.msnbc.msn.com/id/18215130/>, last accessed 26 February 2008.

Suchman, M. (1995) 'Managing legitimacy: strategic and institutional approaches', *Academy of Management Review* 20: 571–610.

Q2

Szuchman, P. (2000) 'Eco-credibility: is your hotel as green as it claims to be?', *Conde Nast Traveller*, August: 46.

Walters, P. (2005) 'Cities question the costs of hybrid cars', Philadelphia Associated Press, 9 December.

Winter Sydnor, M.E. and Redente, E.F. (2002) 'Ecosystem restoration', *Journal of Environmental Quality* 31: 1530–1539.