

## Factors Influencing Non-Green Hotels to Adopt Green Practice: Small Hotels in Thailand Active Beach Cluster

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### Abstract

This study analyzed the impact of factors on the adoption of green practices among non-green hotels in Thailand active beach cluster (Chonburi, Rayong, Chanthaburi, and Trat). Primary data were collected from a sample of 318 non-green hotel owners and managers using a proportionate stratified sampling method. Exploratory factor analysis (EFA) was employed to group the variables, and multiple regression analyses were conducted to analyze the data.

To analyze the attribute of green factors of small hotel in Thailand (Objective 1), EFA was conducted and revealed that the factors can be categorized into four groups: (1) Green Strategic Management (innovative and energy-efficient technologies, cost allocation for environment activities, effective marketing, investment in infrastructure and system, and strategic planning), (2) Leadership (owner's awareness, perceived green standard and green law, and environmental leadership), (3) Key-Partner (clear organizational identity, partner, supplier, and hotel guests' awareness), and (4) Employee Empowerment (green knowledge, employee adaptability, rewards and incentive, and facilities and resources). This classification accounts for 71.781% of the total variance. To analyze the influences of green factors to green practices of small hotel in Thailand (Objective 2), multiple regression was analyzed and indicated that all four groups (EFA result) of factors are significantly associated with green practices of small hotels; Key-Partner, Employee Empowerment, Green Strategic Management, and Leadership, are significant predictors of green practices, explaining varying percentages of the practice's variance: 29.9%, 27.4%, 15.5%, and 1.5% respectively.

The study suggests that hoteliers of small hotel should prioritize promoting an understanding of natural resource usage among employees and stakeholders which can be achieved through training programs, awareness campaigns, and effective communication strategies. Additionally, hotels should integrate green practices into their marketing strategies, finances, and operational plans to ensure that green practice is an integral part of their business model. As a result, hotels can successfully implement green practices and contribute to both environmental sustainability and business profitability.

**Keywords:** Green Hotel, Green Factor, Green Practice, Active Beach Cluster

## Introduction

### Small Hotel and Environment Impacts

The hospitality industry represents a prominent component of the broader tourism sector and is inextricably linked to a range of environmental challenges, including the depletion of natural resources, loss of biodiversity, air and water pollution (Gazta, 2018). Despite not being the foremost contributor to environmental degradation compared to other service industry businesses (Graver et al., 2019), the sector's influence cannot be overlooked given its dependence on and impact on critical natural resources such as land, water, air, energy, and waste. Moreover, given that hotels are frequently located in tourist destinations, the ecological footprint can be extensive (Claver-Cortés et al., 2007).

According to Oleskow-Szlapka et al. (2011), a single night's stay in a hotel can lead to the emission of 20.6 Kgs of carbon dioxide and can consume more energy than the occupants. Moreover, the hotel industry is a significant contributor to global energy consumption, with its energy consumption having increased threefold from several hundred petajoules (PJ) in 1990 to 2,000 PJ in 2020, as reported by Gössling (2005). For small hotels, existing literature suggests that small hotels have substantial effects, particularly in terms of energy consumption and waste generation (Becken, 2005; Mensah, 2020). The generation of solid waste by small hotels, especially non-green hotels is often identified as one of the most significant environmental impacts (Radwan et al., 2012). However, many small hotels tend to neglect their environmental responsibilities and rely on landfilling as the primary waste disposal method (Mensah, 2020). This disregard for solid waste management can be attributed to factors such as limited funds, lack of knowledge, and inadequate decision-making (Bonilla et al., 2011; Erdogan & Baris, 2007).

Studies conducted in Korea and the Caribbean have highlighted significant environmental impacts of small hotels, including high energy consumption and the generation of waste such as food and plastic waste (Kim et al., 2013; Gössling et al., 2013). These studies have also indicated a lack of sustainable practices implemented by small hotels to mitigate their environmental impact. In the context of Thailand, small hotels face similar environmental

challenges, particularly in solid waste management. The adoption of a “green” concept has been suggested as a way for these hotels to differentiate themselves and address environmental concerns (Khunon & Muangasame, 2013). However, it is important to critically examine the extent to which small hotels in Thailand have embraced green practices and overcome the barriers they face.

### **Small Hotel and Green Practice**

The hospitality industry has displayed a notable interest in the adoption of green practices (Nicholls & Kang, 2012), considering them to mitigate their environmental footprint while simultaneously yielding cost reductions and attracting environmentally conscious, high-quality tourists (Merli et al., 2019). This commitment aligns with the United Nations Sustainable Development Goals (SDGs), particularly SDG 12 (Responsible Consumption and Production) and SDG 14 (Life Below Water), which emphasize responsible resource use and the conservation of marine ecosystems (Visseren-Hamakers, 2020). The recognition of the potential benefits associated with green practices has led hoteliers worldwide to actively seek and implement sustainable initiatives in line with these global goals. The Green Lodging Trends Report 2018, which surveyed 4,544 hotels from 61 countries, found that 99.4% of hotels utilized energy tracking systems, 75.6% practiced recycling in common areas of the property, 98.1% tracked water consumption regularly, 98.3% checked heating, ventilation, and air conditioning (HVAC) filters regularly, 91.5% adopted a line/towel reuse program, 77.2% had written environmental policies in place, and 90.0% conducted annual staff training on green practices (Chua & Han, 2022).

Despite the growing global interest in green practices within the hotel industry, the adoption of such practices in Thailand appears to be relatively low. This can be observed through the limited number of hotels seeking certification from prominent organizations promoting environmental management standards. For instance, in the year 2022, only 245 out of a total of 24,269 hotels nationwide sought certification from the Green Leaf Foundation—an organization dedicated to developing environmental management standards specifically for the hotel and tourism sector (Green Leaf Foundation, 2022). Similarly, in 2021, a mere 87 hotels applied for certification under the Department of Environmental Quality Promotion (DEQP)’s Green Hotel standards (QDEP, 2021). These figures indicate that most hotels in Thailand have yet to prioritize and actively pursue green practices.

Based on data from the 2018 National Statistical Office, it is evident that Thailand boasts a total of 24,389 hotels. These can be further categorized into three distinct groups: 21,490 hotels with fewer than 60 rooms, 2,322 hotels with room counts ranging from 60 to 149, and 577 hotels featuring 150 rooms or more (National Statistical Office, 2018). Notably, the majority of these establishments fall within the category of hotels with fewer than 60 rooms, accounting for a substantial 88% of Thailand’s total hotel inventory. This statistical insight underscores the prominence of small-scale hotels in Thailand’s hospitality sector.

The prominence of hotels with fewer than 60 rooms is a pivotal aspect of the Thai hotel industry. Therefore, the proposition of developing a model to promote the transformation of these small hotels into eco-friendly or “green” establishments could potentially catalyze a significant transformation within the broader hotel industry in Thailand.

The prevalence of small hotels in Thailand is notable, yet the adoption of green hotel practices remains scarce. This is particularly true for small hotels, which frequently confront financial constraints that hinder the implementation of environmental initiatives. Small hotels also lack expertise and insufficient policy support to address environmental concerns (Cole et al., 2021; Kerber & Kramm, 2022). As a result of financial limitations and other challenges, small hotels are more prone to neglect environmental issues when compared to larger hotel chains (Hsieh, 2012).

The National Tourism Policy Board, Ministry of Tourism and Sports, has published a National Tourism Development Plan for the period of 2017-2021. The plan sets up 8 tourism development clusters, which aim to improve competitiveness in the tourism industry, distribute income, and promote sustainable tourism development. The 8 clusters are: Lanna Civilization, Royal Coast, Active Beach, Andaman, Southern Isan Civilization, Central Chao Phraya River, Mekong River Way of Life, and World Cultural Heritage (Ministry of Tourism and Sports, 2017). The rapid increase in tourist numbers has led to overcrowding in every cluster, but there is evidence that waste and pollution increased highly in the Active Beach cluster (Chonburi, Rayong, Chanthaburi, and Trat).

The Active Beach cluster in Thailand comprises Chonburi, Rayong, Chanthaburi, and Trat provinces, all located in the eastern part of the country. These provinces stand as a sought-after destination for international eco-conscious travelers within Thailand. serves as a quintessential illustration of a unique tourist destination endowed with rich natural attractions (Thailand Insider, 2020). This distinctiveness accentuates the importance of studying its sustainable practices. However, as documented by the Office of Natural Resources and Environmental Policy and Planning in 2019, the Active Beach Cluster confronts substantial challenges pertaining to pollution and waste management, rendering it one of the most impacted areas in the nation. This environmental context further underscores the need for comprehensive research and sustainable initiatives. The Department of Environmental Quality Promotion (2021) reported that in 2019, only 48 out of 371 hotels in Thailand that met the Green Leaf Foundation and Department of Environmental Quality Promotion’s green standards were located in the Active Beach cluster. Additionally, of the 48 hotels that met the standards, only 18 were classified as small hotels. This finding is significant when compared to the 1,785 small hotels in the Chonburi, Rayong, Chanthaburi, and Trat regions that have no green designation.

Given the modest ratio of small hotels with green standards in the Active Beach Cluster, this area presents an opportunity for the promotion and development of green hotels. By incorporating environmentally friendly practices into the operations, hotels in this cluster and other cluster in Thailand can reduce the impact on the environment, gain a competitive edge, and contribute to the sustainable development for the hotel.

### **Justification of the Study**

While there is a growing body of literature on green practices in the hotel industry, the motivation behind hotels adopting green practices remains insufficiently researched from an academic standpoint (Moise et al., 2021). In the realm of research on green hotels, much attention has been given to the demand side (Mbasera et al., 2016), such as examining green customer behavior, motivations, and expectations. Conversely, the supply side has received less attention and the majority of research has focused on the attributes of green hotels and the contribution of green guidelines (Chan & Wong, 2006). Only a limited number of studies have focused on the factors and motivations behind hotels adhering to green guidelines (B. DiPietro et al., 2013; Chua & Han, 2022). This indicates a need for further exploration and understanding of the motivations or factors behind hotels adopting green practices.

The literature on green practices in the hotel industry has primarily focused on large hotels and hotel chains (De Lurdes Calisto et al., 2021), with very few studies examining small hotels. This gap in the literature leaves small hotels underrepresented in the research on green practices (Agyeiwaah, 2020; Baker et al., 2014). While some studies have examined green practices in independent hotels, more research is needed to understand the specific challenges that small hotels face in adopting green and eco-friendly practices (Hockerts, 2015). The limited research on green practices in small hotels highlights the need for further investigation into the factors that influence decision-making processes and the unique challenges and opportunities that small hotels face.

Consequently, conducting a study focused on examining the factors that influence the adoption and implementation of green practices in small hotels holds significant importance. Such an investigation can facilitate the analysis of strategies and methodologies that enable small hotel establishments to effectively mitigate environmental footprint while concurrently enhancing the competitiveness.

### **Objectives**

1. To analyze the attribute of green factors of small hotel in Thailand.
2. To analyze the influences of green factors to green practices of small hotel in Thailand.

## Materials and Methods

### 1. Population and Sample

The study utilized a quantitative research design to collect and analyze data from small hotels located in the Active Beach cluster in Thailand. The Hotel Act of 2004 is legislation that delineates the definitions and operational features of hotels in Thailand, and it has been in effect since 2004 until the present day. The Hotel Act of 2004 defines a small hotel as an establishment with fewer than 80 rooms (The Hotel Act of 2004, 2004).

The Thailand Digital Government Development Agency (2017) reported the presence of 1,786 small hotels within this cluster. To ascertain an appropriate sample size, the formula developed by Krejcie and Morgan (1970) was applied. This calculation considered a 95% confidence level and a maximum margin of error of 0.05. The resulting sample size was then rounded up to include 318 small hotels. Purposive and stratified sampling techniques were employed to select both the study population and participants, as detailed in Table 1.

**Table 1** Purposive and Stratified Sampling Techniques' Result

Province	Number of hotels	proportional allocation
Chonburi	776	138
Rayong	289	52
Chanthaburi	271	48
Trat	450	80
<b>Total</b>	<b>1,786</b>	<b>318</b>

Data were collected through the distribution of 318 self-administered questionnaires with the permission of the hotels. On-site and online data collection was conducted at the hotels after prior appointment, during the period from January to February 2023.

### Instruments of the Study

Primary data was collected from the self-administered structured questionnaires. To attain content validity, the questionnaire was first verified by the advisor, after that, it was evaluated by five experts related to tourism and hospitality through Index of Item-Objective Congruence (IOC) which the IOC score of the questionnaire was 0.82. and it was greater than the minimum score at 0.75, implied that the questionnaire was valid. A set of 35 questionnaires was distributed to non-target samples as a trial to identify any potential errors or issues with the questionnaire before collecting data from the intended population. To assess the reliability, Cronbach's Alpha Coefficient was employed. The resulting Cronbach's Alpha coefficient was 0.955, exceeding the minimum threshold of 0.7 (Peterson, 1994), indicating a high level of reliability. The questionnaires were

directly distributed to the owners or managers of small hotels in Active Beach Cluster in their hotel. Once they agree, two pre-screening questions are asked: first, confirming the respondents' hotel size (was their hotel acquired less than 80 rooms or over), second identifying the respondents who owner or manager were or not. When the voluntary respondents met the two criteria, the questionnaires were distributed to the participants to complete questionnaires. Questionnaires were collected on site and checked for completeness to ensure a high usable rate. Moreover, the questionnaire was also stored online via Google form to collect data to meet the goals. In the online questionnaire, the respondents were checked to see if they met the specified criteria. A total number of 318 responses were completely obtained. Of the respondents, 22.7% identified as owners, while 77.3% were hotel managers.

To simplify the data and investigate the underlying theoretical structure of the phenomena, Exploratory Factor Analysis (EFA) was applied as a method of data reduction to identify the number and characteristics of variables by reducing a large set of unrelated variables into a smaller set of factors. Varimax factor rotation with orthogonal rotation methods can create a solution where the factors or components are uncorrelated with one another, and it can decrease the number of factors that have high factor loading, leading to a clearer separation of factors or easier interpretation of the nature of factors. The guideline based on practical significance suggests that factor loadings between 0.30-0.40 are normally acceptable, those exceeding 0.50 are necessary for practical significance, and those exceeding 0.70 indicate a well-defined structure (Kretzschmar & Gignac, 2019). In this study, a factor loading of 0.60 or higher was used as the criterion for variable inclusion and retention for further analysis. In addition, Multiple Regression was utilized for investigating the effect of factor towards green practice.

## Results and Discussion

### Results

Factor analysis was conducted on 20 factors to categorize the differentiation value drivers toward small hotels from non-green hotel's point of view. Principal Component Analysis and Varimax rotation were conducted on variables to define the number of appropriate factors. According to Schmitt (2011) suggested that factor loading 0.60 or above are considered practically significant. In this study, only variables with loading of 0.60 and greater were chosen for interpretation, consequently, the 4 items were eliminated at this stage. Finally, the 16 items were remained and extracted to four factors for further analysis.

**Table 2** KMO and Bartlett's Test

Tests		Results
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.875
Bartlett's Test of Sphericity	Approx. Chi-Square	5105.359
	df	190
	Sig.	0.000

Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity are two statistical calculations tests. The research results (Table 2) obtained a Kaiser-Meyer-Olkin of 0.875, which is greater than 0.5 and close to 1, indicating that all data and variables were highly correlated and could be used for factor analysis of the research objectives. Likewise, the Bartlett's test should be statistically significant (Sig. < 0.05) and the Sig. value of 0.000, which is less than 0.05 indicates that the correlation matrix is not an identity matrix (Vanichbuncha, 2019). Hence, all 16 variables are related enough for factor analysis.

**Table 3** Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.616	48.08	48.08	9.616	48.08	48.08	3.955	19.773	19.773
2	2.212	11.058	59.137	2.212	11.058	59.137	3.605	18.025	37.798
3	1.438	7.189	66.327	1.438	7.189	66.327	3.452	17.259	55.056
4	1.091	5.454	71.781	1.091	5.454	71.781	3.345	16.725	71.781

Table 3 presents the initial communality determination, identifying four important components that explain the total variance of the data. Component 1 accounts for 48.080% of the variation, followed by component 2 (11.058%), component 3 (7.189%), and component 4 (5.454%). These results highlight the significance of these components in explaining the data's variance, with component 1 being the most influential. This initial communality determination provides valuable insights for subsequent data analysis and interpretation.

Table 4, the factor analysis aimed to determine the factors affecting green practice in small hotels. The findings indicate practical significance, with all constructs displaying factor loadings ranging from 0.652 to 0.819. The eigenvalues of these factors range from 1.091 to 9.616, with four distinct factors extracted. The groups classified by EFA were named after the characteristics or factors identified within each group as follows:

Component 1 - Green Strategic Management consisted of innovative and energy-efficient technologies, cost allocation for environment activities, effective marketing, investment in infrastructure and system, and strategic planning.

Component 2 - Leadership comprised of owner's awareness, perceived green, standard and green law, and environmental leadership.

Component 3 - Key-Partner included clear organizational identity, partner, supplier, and hotel guests' awareness.

Component 4 - Employee Empowerment involved green knowledge, employee adaptability, rewards and incentive, and facilities and resources.

Collectively, these factors account for 71.781% of the total variance.

**Table 4** Results of Exploratory Factor Analysis for Green Factor

Factor/Items	Factor Loading	Eigen Value	% of Variance
<b>Green Strategic Management</b>		9.616	48.080
Innovative and energy-efficient technologies	0.687		
Cost allocation for environment activities	0.741		
Effective marketing	0.791		
Investment in infrastructure and system	0.819		
Strategic Planning	0.656		
<b>Leadership</b>		2.212	11.058
Owner's awareness	0.766		
Perceived Green standard and green law	0.777		
Environmental leadership	0.790		
<b>Key-Partner</b>		1.438	7.189
Clear Organizational identity	0.695		
Partner	0.722		
Supplier	0.732		
Hotel guests' awareness	0.786		
<b>Employee Empowerment</b>		1.091	5.454
Green knowledge	0.655		
Employee adaptability	0.652		
Rewards and incentive	0.740		
Facilities and Resources	0.694		
<b>Total</b>		<b>14.357</b>	<b>71.781</b>

The variables that were analyzed using exploratory factor analysis (EFA) were further analyzed using multiple regression analysis to examine the impact of each group of factor variables on green practice and to test the hypothesis of this study as shown in Table 5.

**Table 5** Summary of Hypothesis Testing

Hypotheses	Model Summary	ANOVA <sup>a</sup>		Results
	R Square	F	Sig.	
H1: Green Strategic Management influences green practice	0.155	58.058	0.001 <sup>b**</sup>	Accepted
H2: Leadership influences green practice	0.015	4.935	0.027 <sup>b**</sup>	Accepted
H3: Key-Partner influences green practice	0.299	134.520	0.001 <sup>b**</sup>	Accepted
H4: Employee Empowerment influences green practice	0.274	119.492	0.001 <sup>b**</sup>	Accepted

**Note.** a. Predictors Variables b. Factor\*\*  $p < 0.05$

The study examined the relationships between various factors and their impact on green practice in small hotels. The results obviously supported all the proposed hypotheses. Green Strategic Management was found to be a significant and positively influencing predictor, explaining 15.5% of the variance in green practice. Similarly, Leadership exhibited a statistically significant relationship, accounting for 1.5% of the variance. Key-Partner emerged as a highly influential predictor, explaining 29.9% of the variance in green practice. Lastly, Employee Empowerment was also identified as a significant and positively associated predictor, explaining 27.4% of the variance in green practice. These findings emphasize the crucial role of these factors in fostering green practices within small hotels.

## Discussion

**Objective 1: To analyze the attribute of green factors of small hotel in Thailand.**

Based on the literature review and content analysis, 20 factors affecting the success of Green Practices in small hotel were identified (clear organizational identity, partner, owner's awareness, perceived green standard and green law, environmental leadership, trend, government regulations, green knowledge, employee adaptability, rewards and incentive, facilities and resources, competitors, supplier, hotel guests' awareness, government campaign, innovative and energy-efficient technologies, cost allocation for environment activities, effective marketing, infrastructure and system investment, and strategic planning).

The factors were evaluated using small hotels in the Active Beach Cluster (non-green hotels) to assess their performance in relation to all 20 factors. The questionnaire data were then subjected to EFA to identify the relevant factors and to group them accordingly. The results of the statistical analysis indicated that out of the initial 20 factors, 16 were selected for further analysis. These 16 factors were then grouped into 4 categories, each of which was named by the researcher based on the characteristics of the factors within the respective group, as depicted in Figure 1.

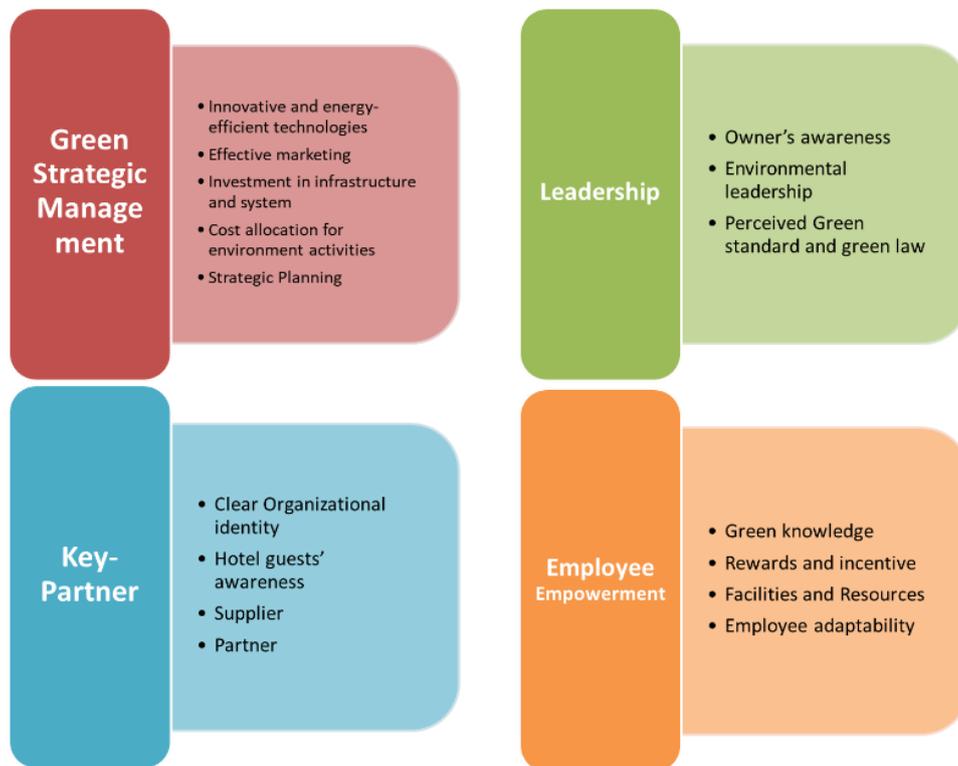


Figure 1 Green Factors of Small Hotel

**Objective 2: To analyze the influences of green factors to green practices of small hotel in Thailand.**

The four groups of factors derived from the EFA analysis were subsequently subjected to a multiple regression analysis to determine their impact on green practices. The results indicated that all four groups of factors exert an influence on the adoption of the green hotel concept among small hotels (non-green hotels) in the cluster. Notably, the Key-Partner factor demonstrated the most significant influence at 29.9%, followed by Employee Empowerment at 27.4%, Green Strategic Management at 15.5%, and Leadership at 1.5%, respectively.

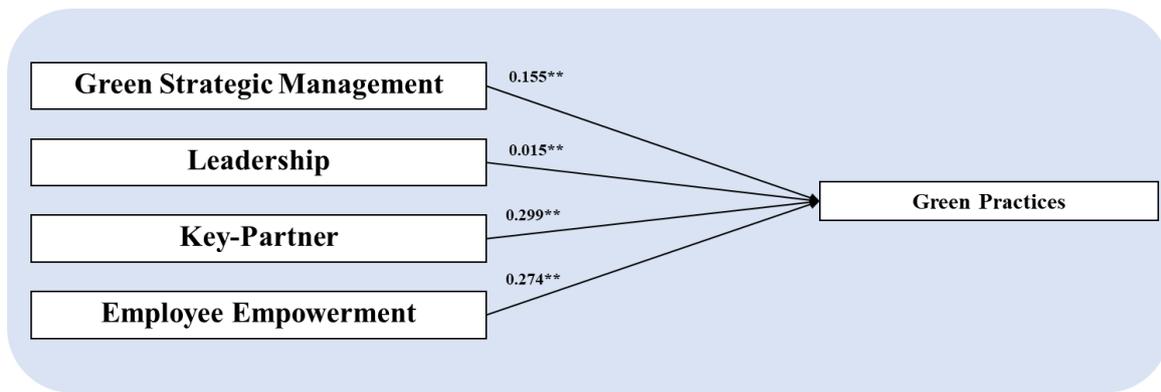


Figure 2 The Influences of Green Factors to Green Practices in Small Hotel

### Enhancing Small Non-green Hotels into Green Hotels: Leveraging Green Factors as Key Tools

The concept of Green Strategic Management has multiple contributions to small hotels and the wider hotel industry's green practices. These include adopting energy-efficient technologies, allocating a budget for eco-friendly initiatives, conducting cost-benefit analyses, promoting environmental awareness among guests, and incorporating feedback from local communities. These contributions enhance academic knowledge and guide green strategy implementation in small hotels.

While innovative technologies offer environmental benefits, their implementation costs and compatibility with existing infrastructure must be carefully assessed (Wang et al., 2016). Budget allocation for eco-friendly development may also require trade-offs with other operational priorities (Durairaj et al., 2002), necessitating a comprehensive evaluation of financial resources. Additionally, conducting robust cost-benefit analyses requires accurate data collection and consideration of long-term impacts (Singh et al., 2014). However, promoting environmental awareness among guests may face challenges in changing guest behavior and effectively communicating green initiatives (Millar & Baloglu, 2011). Lastly, incorporating local communities' feedback is complex due to balancing stakeholder interests and ensuring effective communication channels (Minkler, 2005).

Leadership in a small hotel has significant effects on green practices. Owners or executives play a crucial role in ensuring environmental standards, encouraging employee participation, and promoting green practices (Nor-Aishah et al., 2020). Leadership commitment, employee engagement, and industry-wide influence are vital in driving green practices. However, commitment must translate into concrete actions integrated into the hotel's overall strategy (Raub & Martin-Rios, 2019). Hornig et al. (2016) stated that encouraging and incentivizing employee participation requires thoughtful design and ongoing support, considering challenges such as resistance to change and lack of awareness. Furthermore, taking a leadership position in promoting green concepts requires a comprehensive understanding of industry trends, best practices, and stakeholder expectations (Boiral et al., 2009).

Key-Partner significantly impacts green practices in small hotels. Executive commitment sets the tone for green practice, while promoting environmental awareness ensures minimal environmental impact. Extending the green concept to all involved parties fosters collaboration and sustainable practices throughout the supply chain and guest experience (Sigala, 2014). Designing infrastructure for minimal environmental always impact emphasizes green architecture, energy efficiency, waste management, and resource conservation (He et al., 2018). Consequently, executives must integrate green goals into strategic planning and decision-making, align financial resources, and monitor progress. Ongoing communication, training, and engagement with employees, customers, and partners are also essential to extend the green concept (Cook, 2008).

The concept of Employee Empowerment emphasizes creating knowledge and understanding of green practices, encouraging employee participation and idea proposals, ensuring correct procedures and methods, and developing environmental management plans. It is essential to address potential barriers, such as resistance to change and knowledge gaps, while fostering a culture that values green (Chan et al., 2014). Employee participation and idea proposals should be encouraged and supported through recognition programs, incentives, and channels for feedback (Pham et al., 2019). However, effective implementation of employee suggestions may require careful evaluation and consideration of feasibility, cost, and alignment with overall environmental goals (Trang et al., 2019).

To transform a small non-green hotel into a successful green hotel, the following strategies can be employed to improve the four key groups of green factors:

### 1. Green Strategic Management

**Innovative Technologies:** Invest in energy-efficient technologies, such as LED lighting, smart thermostats, and renewable energy sources, to reduce energy consumption and lower operational costs.

**Cost Allocation:** Allocate a portion of the budget specifically for environmental activities and initiatives, ensuring that there are dedicated resources for sustainability efforts.

**Effective Marketing:** Develop and implement effective marketing strategies that highlight the hotel's commitment to sustainability, such as promoting eco-friendly amenities and practices.

**Infrastructure and System:** Upgrade infrastructure to include sustainable features like water-saving fixtures, waste recycling systems, and green building materials.

**Strategic Planning:** Develop a long-term sustainability plan that outlines goals, objectives, and action steps, ensuring that green practices are integrated into the hotel's overall strategy.

### 2. Leadership

**Owner's Awareness:** Ensure that the hotel owner are well-informed about the benefits of green practices and are committed to implementing them.

**Perceived Green Standards:** Adhere to recognized green standards and certifications to demonstrate the hotel's commitment to environmental responsibility.

**Environmental Leadership:** Appoint an environmental leader or sustainability manager responsible for overseeing and driving green initiatives within the hotel.

### 3. Key-Partner

**Organizational Identity:** Develop a clear organizational identity that emphasizes sustainability and responsible practices, which can help attract eco-conscious partners and guests.

**Partnerships:** Collaborate with eco-friendly partners, suppliers, and vendors who share the hotel's commitment to sustainability, ensuring that products and services align with green objectives.

**Guest Awareness:** Raise awareness among hotel guests about the property's eco-friendly initiatives through clear communication, signage, and engagement activities.

### 4. Employee Empowerment

**Green Knowledge:** Provide training and educational programs to enhance employees' understanding of sustainability and green practices.

**Employee Adaptability:** Encourage employees to adapt to new green processes and technologies, and involve them in decision-making related to sustainability.

**Rewards and Incentives:** Implement a rewards and recognition system to motivate and reward employees for their contributions to sustainability efforts.

**Facilities and Resources:** Ensure that employees have access to the necessary facilities, resources, and tools to support sustainable practices, such as recycling bins, composting facilities, and energy-efficient equipment.

By actively implementing these strategies and improving these four groups of green factors, small hotels can make significant progress toward becoming successful green hotels. These efforts not only benefit the environment but also attract eco-conscious guests and contribute to long-term cost savings and competitiveness in the hospitality industry.

### Limitations of the Study

The quantitative data collection in this study solely relied on questionnaires administered to managers or owners of small hotels and did not encompass input from employees at various organizational levels. As a result, the evaluation was limited to a singular perspective and required a substantial amount of time to collect the questionnaires. To gain a comprehensive understanding of green practices, future studies should design questionnaires that allow for input from employees across different hierarchical levels. This will provide diverse perspectives and enhance the convenience of data storage and analysis.

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