

Green Practices of Hotels in Clark Pampanga Based on ASEAN Standard: A Basis for Sustainability Program Capacity

Princess Catherine B. de Jesus

Bulacan State University

ORCI: 0009-0005-2883-4423

E-mail: princesscatherine.dejesus@bulsu.edu.ph

ABSTRACT

This study assessed the extent of green practices and the sustainability of programs within a selection of hotels in Clark Pampanga, Philippines. This study primarily focused on the assessment of the level of green practices and the assessment of the program capability on the sustainability of the green practices of the selected hotels in Clark Pampanga. The hotels considered are establishments who are formally practicing green concepts as part of their hotel service branding. The research utilized the ASEAN Green Hotel Standard Self Evaluation Checklist to assess the level of green practices as perceived by the hotel managers, guests and employees. In addition, the Program Sustainability Assessment Tool V2 (PSAT), a standardized instrument intended to assess the program's current capacity for sustainability of the green practices of the hotels was utilized. Hence, to find the significant difference in terms of the level of green practices and program capacity for sustainability among the clusters in the demographic profile, Analysis of variance (ANOVA) was used. Finally, a structured face- to-face was employed to identify and assess the strengths and weaknesses of their programs. The participants and respondents who answered the instrument are the top, middle management team and supervisors of the hotel for they are directly involved in the program and project proposal, planning and operation. The two (2) employees and one (1) manager and (2) guests from the 14 selected hotels were the respondents who assessed the level of green practices of the hotel. On the other hand, one (1) or two (2) managers particularly the top managers, middle managers and supervisors of the 14 selected hotels were the respondents who assessed the level of program capacity for sustainability as well as answered the structured interview. All respondents were regular employees and manager of the hotel establishment with at least 2 years residency. Quantitative analysis reveals a strong commitment to green practices among the surveyed hotels, particularly in waste management, energy efficiency, water conservation, and air quality. However, areas for improvement include the use of eco-friendly products and documentation of water guidelines. Furthermore, hotels demonstrate robust program sustainability across dimensions such as political support, funding stability, partnerships, organizational capacity, and program evaluation. Demographic factors such as establishment age and departmental affiliation show minimal influence on green practices, highlighting the significance of hotel classification in shaping sustainability initiatives. Based on the findings, a structured sustainability framework is proposed, encompassing leadership, stakeholder engagement, assessment, capacity building, implementation, monitoring, recognition, continuous

improvement, community engagement, and integration. Recommendations include collaboration with local communities, municipal support, tourism office involvement, academic institution engagement, hotel owner initiatives, guest participation, employee empowerment, and research for continuous improvement. By addressing key areas of improvement and leveraging strengths, hotels in Clark Pampanga can enhance sustainability efforts, leading to long-term environmental, social, and economic benefits.

Keywords: green practices, sustainability, ASEAN, program capacity, hotel

INTRODUCTION

The Department of Tourism has affirmed its dedication to bolstering global climate change mitigation endeavors through the promotion of green tourism, among other initiatives. Speaking at the commencement of the World Travel and Tourism Council Global Summit held in Manila on April 22, 2022, Tourism Secretary Bernadette Romulo-Puyat underscored that although the tourism sector has endured significant setbacks due to the COVID-19 pandemic, the resultant temporary lockdowns and cessation of tourism activities have afforded the environment a respite and an opportunity to rejuvenate. Romulo-Puyat further urged other nations equipped with the capability to organize and provide essential frameworks to encourage all sectors to embrace sustainability as part of their advocacy efforts (Adel, 2022).

During the global summit held in Manila, the World Tourism and Travel Council unveiled its "Hotel Sustainable Basics," a universally recognized and coordinated set of criteria intended for adoption by hotels as part of their commitment to responsible travel and tourism (RHG, 2022). These criteria, outlined by the tourism council, encompass various actions aimed at promoting sustainability, including the measurement and reduction of energy and water usage, waste management strategies, and efforts to minimize carbon emissions (Hotel Sustainability Basics, n.d.). Additionally, the initiative includes the introduction of a linen reuse program, the utilization of eco-friendly cleaning products, and the phasing out of single-use plastic items such as straws, stirrers, and water bottles. Furthermore, the implementation of bulk amenity dispensers and measures geared towards supporting local communities are also emphasized as part of this comprehensive sustainability framework (Dimara et al., 2017).

The tourism industry's significant contribution to waste production and pollution has long been a cause for concern. The escalating environmental issues have garnered widespread attention due to the degradation of natural landscapes (Baloch et al., 2023). Tourism can indeed exacerbate environmental degradation, emphasizing the need for effective management and the adoption of green practices within the industry. Green practices, also referred to as environmentally friendly practices, have gained traction among consumers, reflecting a growing awareness of environmental issues. With the surge in visitor numbers in Clark, Pampanga, accompanied by increased consumption of natural resources, environmental challenges have become more pronounced (Sanchez & Lacap, 2021). As highlighted by Herath et al., in 2023, heightened awareness of environmental concerns such as global warming, carbon emissions, toxic substance

usage, and resource scarcity has spurred policymakers and activists to advocate for the adoption of green practices, particularly within the hospitality sector. Consequently, the concept of green tourism has been embraced worldwide as a means to mitigate the environmental impact of tourism activities.

In the Philippines, particularly in Clark, Pampanga, the concept of green tourism is considered to be in practice. Despite the concerted efforts of the government and various organizations to promote green tourism, there are still segments of the hospitality industry in the city that have yet to fully embrace this concept. However, implementing green tourism practices requires significant investments from hospitality sectors (Dixon et al., 2025). The journey of the hospitality industry to the path to a green practice should be considered and analyzed in order to help them. Given this context, the study sought to find out extent of participation on green practices of the hospitality sectors in the city and the extent of its program sustainability: the hotels' greatest extent of capacity and the challenges they are currently facing. Therefore, the study's findings will be leveraged to develop a suitable business strategy framework tailored to the industry players, particularly hotels, in Clark, Pampanga, aimed at supporting and perpetuating the green tourism advocacy.

MATERIALS AND METHODS

Research Design

The study drew on a descriptive research design supplemented with an explanatory sequential mixed-method approach to know the level of green practices and the program capacity for sustainability of the selected hotels in Clark, Pampanga. Quantitative data were collected through the questionnaires based on the ASEAN Green Hotel Standard Self-Evaluation Checklist and the Program Sustainability Assessment Tool V2 (PSAT) to record green practices and sustainability capacity. Frequency, percentage, mean, and cluster analysis were the statistical methods used to identify strengths and weaknesses and differences in demographic profiles of the respondents. After that, qualitative data were collected from either face-to-face or telephone interviews to make clearer and support the survey results. The interviews provided an opportunity for the respondents to expand on their answers and give more information about the results.

Participants

The focus of the study were the selected hotels in Clark Pampanga. The two (2) employees and one (1) manager and (2) guests from the 14 selected hotels shall be the respondents to assess the level of green practices of the hotel. On the other hand, one (1) or two (2) managers particularly the top managers, middle managers and supervisors of the 15 selected hotels were the respondents to assess the level of program capacity for sustainability as well as to answer the structured interview. Hence, hotel names were not to be mentioned and codes shall be assigned for each of the 14 selected hotels.

Measures

The research utilized survey and documentary analysis as the primary methods for data collection and employed two research tools: a questionnaire and a structured interview. The questionnaire was divided into three parts. Part I measured the green practices of the selected hotels through the use of green products, solid waste management systems, energy efficiency, water efficiency and quality, and air quality management (both indoor and outdoor). Part II looked into the present capacity of hotel green practices for sustainability focusing on political support, funding stability, partnerships, organizational capacity, and program evaluation. Part III consisted of a structured interview that sought to understand the strengths and weaknesses of green practices programs in relation to their sustainability.

Procedures

The study used a structured method for both the instrument validation and administration of research tools. Firstly, the first section of the questionnaire was adapted from the ASEAN Green Hotel standard Self-Evaluation Checklist, where the items were changed from a dichotomous (Yes/No) style to a Likert scale to elicit measurable answers. The modified tool was then subjected to expert validation. The second section was based on the Program Sustainability Assessment Tool (PSAT) Version 2, a 2013 copyrighted instrument of Washington University in St. Louis, which was used with the permission under a Creative Commons Attribution-NonCommercial-ShareAlike License. The whole survey tool was checked and given the green light by the research adviser and panelists and was also further validated by the experts from DOT Region III, DOT NCR, and a sustainability manager from Conrad Manila. Based on their suggestions, the necessary changes were made to make the instrument appropriate for both hotel employees and guests. For gathering data, the questionnaires were handed out to employees, managers/supervisors, and guests of the selected hotels in Clark, Pampanga, in November 2024 through both personal delivery and email. Respondents were guaranteed anonymity and confidentiality to support integrity of the responses and ensure data validity. Besides supporting and validating the quantitative findings, structured interviews were carried out with ten (10) participants, one from each hotel, either face-to-face or via telephone. Selected questionnaire items were used as a basis for cross-verification of their responses.

Data Analysis

Descriptive Statistics was used in describing the data to be obtained. The questionnaire of each manager/supervisor - respondent was hand-scored. The data gathered were be classified, tallied, tabulated, analyzed, and interpreted. This includes the frequency distribution, average, weighted mean and Analysis of variance (ANOVA). To find the significant difference between the clusters in the demographic profile, Analysis of variance (ANOVA) was used. This is used to find of there is a significant difference between the means of two or more group. To assess the level of green practices program capacity for sustainability the total score and the total score

average was computed. Hence, this was obtained from the 7-point Likert Scale and the n/a responses were not included in the computation.

The PSAT v2 five (5) domains were scored an interpreted as follow:

Statistical Range	Descriptive Rating
6.50 – 7.00	To a very great extent
5.50 – 6.49	To a great extent
4.50 – 5.49	To a good extent
3.50 – 4.49	To a neutral extent
2.50 – 3.49	To a somewhat little extent
1.50 – 2.49	To a little extent
1.00 – 1.49	No extent at all

Data were coded and analyzed using Statistical Package for Social Science (SPSS). On the other hand, the qualitative part of the study was developed within the context of the result and emerged from the quantitative part. The interview was been transcribed, coded and analyzed for content and themes. Based from the quantitative data of the PSAT v2, the strengths, as well as the challenges among the five (5) given domains were identified and explained.

RESULTS AND DISCUSSION

Table 1

Profile of Respondents and Hotels

Variable	Category	Frequency	Percentage (%)
Year Established	2005–2008	4	28.57
	2009–2012	1	7.14
	2013–2016	3	21.43
	2017–2020	4	28.57
	2021–2024	2	14.29
Hotel Classification	Luxury	3	21.43
	Standard	7	50.00
	Economy	4	28.57
Department	Administration	15	30.00
	Food and Beverage	12	24.00
	Front Office	11	22.00
	Housekeeping	8	16.00
	Sales and Marketing	4	8.00

Table 1 demonstrate that hotels are quite varied in their age with the biggest groups being those

opening during 2005, 2008 and 2017, 2020. This points to a combination of the oldest and the newest hotels, which could lead to different sustainability initiatives. Most hotels tend to be in the standard category, which usually means having moderate resources when compared to luxury ones. The most common department is administration, implying that the view of managers plays a big role in evaluating green initiatives. On the whole, the distribution not only represents quite well different aspects of hotel operations and management but also increases the confidence in the results.

Table 2**Summary of Green Practices of Hotels**

Domain	Mean	Interpretation
Use of Green Products	5.39	Great Extent
Solid Waste Management	5.67	Great Extent
Energy Efficiency	5.66	Great Extent
Water Efficiency and Quality	5.78	Great Extent
Air Quality Management	5.93	Great Extent
Overall	5.71	Great Extent

Table 2 showed hotels have shown considerable implementation of green practices. The overall score was said to be "to a great extent." Out of the various areas, air quality management scored the highest mean, which greatly signifies that the hotels are almost completely compliant with the health and environmental standards. On the other hand, water efficiency and waste management are very good practices, and the industry, as a whole, is focused on conserving resources through these methods. A lower average score for green products, on the other hand, points to some issues with the adoption of environmentally friendly materials, which might be caused by problems with both the price and availability of such materials. Such findings would mean that, although the integration of operational sustainability is good, procurement-related sustainability, which is the aspect of buying goods and services, needs to be improved.

Table 3**Program Capacity for Sustainability**

Domain	Mean	Interpretation
Political Support	5.93	Great Extent
Funding Stability	6.34	Great Extent
Partnerships	6.17	Great Extent
Organizational Capacity	5.97	Great Extent
Program Evaluation	5.98	Great Extent
Overall	6.08	Great Extent

Table 3 indicate that hotels possess strong program capacity for sustaining green practices, as evidenced by the overall mean interpreted as “to a great extent.” Funding stability emerged as the strongest domain, highlighting the importance of financial resources in maintaining sustainability initiatives. Partnerships and organizational capacity also demonstrate high levels, suggesting effective collaboration and internal support systems. Conversely, political support, although still rated highly, is comparatively lower, indicating a need for stronger engagement with government institutions. These findings emphasize that while internal and financial capacities are robust, external institutional linkages require further strengthening.

Table 4**Differences in Green Practices by Profile (ANOVA)**

Variable	F-value	p-value	Interpretation
Year Established	0.895	0.578	Not Significant
Hotel Classification	159.295	0.000	Significant
Department	0.712	0.588	Not Significant
Position	0.561	0.824	Not Significant

Note. Significant at $p < .01$.

Table 4 shows that the type of hotel substantially determines the extent to which green practices are carried out, with more luxurious hotels generally leading the way in sustainability efforts. One reason for this could be the fact that they have more money, better technologies, and are more driven by customer expectations. On the other hand, attributes such as year established, department, and position do not reveal significant variations, which means that green practices are more or less uniformly carried out regardless of the organization's age or the employees' roles. This suggests that environmentally-friendly actions are deeply rooted in the institution rather than being based on the person or the department.

Table 5**Differences in Program Capacity for Sustainability by Profile (ANOVA)**

Variable	F-value	p-value	Interpretation
Year Established	0.851	0.528	Not Significant
Hotel Classification	25.126	0.000	Significant
Department	7.828	0.006	Significant
Position	0.932	0.461	Not Significant

Note. Significant at $p < .01$.

Table 5 results suggest that hotel classification and department have a strong impact on the hotel capacity for sustainability programs. They imply that factors like the size of the organization and work roles are the reason for differences in the management and the implementation of

sustainability programs. For example, departments that are closely related to the operations might show a higher level of commitment than others. On the other hand, the results also show that there are no major differences when it comes to year established and position. This is an indication that the capacity for sustainability is neither limited by the age of the organization nor the individual roles in the organization. Such findings emphasize the role of structural and organizational aspects in capacity-building of sustainability programs.

Table 6**Summary of Qualitative Themes on Sustainability Program Capacity**

Theme	Key Insight	Implication
Political Support	Limited policy engagement	Strengthen government collaboration
Funding Stability	Strong financial backing	Sustain long-term initiatives
Partnerships	Active stakeholder collaboration	Expand institutional linkages
Organizational Capacity	Strong leadership but workforce issues	Improve staff stability
Program Evaluation	Existing systems but needs improvement	Enhance impact measurement

Qualitative analysis of sustainability program capacity has uncovered several critical findings. Political support is minimal at present, which implies that the government stakeholders should be more strongly engaged, so that the program can be aligned with policy frameworks and the adoption of the program can be facilitated. Funding stability is, by contrast, a strong point as it assures a dependable financial basis that will support the continuity of the initiatives over time. The presence of active partnerships indicates that collaboration with stakeholders has been successful so, new institutional links can be created to make a wider impact. Although the organizational capacity in terms of leadership is good, staff turnover and possibly even skill gaps in the workforce are two of the factors that can contribute to deteriorated performance these indicate that enhancing employees' stability and professional development are of primary importance.

Although program evaluation mechanisms exist, they are not yet capable of accurately measuring the outcomes and thereby improving the effectiveness of the programs; this points to the importance of carrying out systematic assessments of impacts. Taken together, these results serve as a reminder that sustainability programs are built on a firm foundation but in the future, targeted enhancements in political involvement, staff management and evaluations are the key to success.

CONCLUSION

Research results present indisputably that hotels in Clark Pampanga are at a mature stage of implementing green practices especially in waste management, energy efficiency, water

conservation, and air quality management, concurrently these hotels display high program capacity for sustainability in terms of political support, funding stability, partnerships, organizational capacity, and program evaluation. The findings also indicate that the category of a hotel has a considerable effect on the level of green practices and sustainability capacity as top-class hotels largely demonstrated stronger implementation mainly because they have more resources and better organizational systems. On the other hand, this research has also uncovered main shortcomings that are yet to be met e.g. using environmentally friendly products, intensifying policy involvement, workforce certification, and finally, enhancing program evaluation mechanisms. All in all, the research indicates that sustainability-related practices among Clark hotels are well on their way but still need to be strategically strengthened in order to achieve environmental, social, and economic sustainability within the hospitality sector in the long term.

RECOMMENDATIONS

Based on the study's results, it is recommended that hotels in Clark, Pampanga enhance their sustainability in terms of their green practices by improving their collaboration with government institutions, local communities, tourism departments, and educational institutions to ensure government support for sustainability policies. The hotel management is also urged to promote the wider implementation of eco-friendly products, continue with employee training and employee retention, and enhance their evaluation tools for sustainability. Furthermore, it is recommended for hotel owners and administrators to implement a sustainability framework with components for leadership commitment, stakeholder engagement, monitoring tools, and continuous improvement strategies. Future researchers can also conduct similar research in different tourism sites in the Philippines to support and enhance the results of the current study and contribute to the development of a more comprehensive sustainability program for the Philippine tourism industry.

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