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## Assessing environmentally sustainable practices in boutique hotels: frontline staff perspectives

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**Abstract:** This study examines environmentally sustainable practices in boutique hotels in Makati City, Philippines, from the perspective of frontline staff. Using a descriptive quantitative design, we collected data from 40 employees across the front office, housekeeping, and food and beverage departments. Two validated instruments captured perceived challenges and the extent of environmental sustainability practices. Limited training opportunities and budget constraints emerged as the most significant barriers, while internal communication and administrative support were not perceived as problematic. Basic practices, such as waste segregation, energy-efficient lighting, towel and linen reuse, and leak monitoring, were consistently applied. Advanced initiatives, including hazardous waste management, renewable energy adoption, and water recycling, were only occasionally implemented. Results suggest that hotel managers should prioritise capacity-building, allocate funds for sustainable initiatives, and enhance guest engagement strategies. This study provides baseline evidence on boutique hotel sustainability in the Philippine context, contributing to the global discourse on sustainable hospitality.

**Keywords:** boutique hotels; environmental sustainability; sustainable practices; staff perspectives.

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## 1 Introduction

There is pressure on the global hospitality business to align operational processes and sustainability targets. Even smaller hotels, whose goal is to please the eyes, need to balance customer satisfaction and eco-friendly processes. It is no longer solely by the request of regulators but by the broader objective of Sustainable Development Goal (SDG) 12, which encourages ethical production and consumption (Popsa, 2023). Centres of urban tourism, such as Makati City, where resource consumption and waste production are of special urgency, no longer have a choice but to use sustainable processes.

Boutique hotels define themselves through small scale, personal touch, and new design elements, and thus, stand in contrast to large chain hotels (Buhagiar et al., 2023). Recent findings suggest that these hotels are adopting green initiatives, including energy saving, waste minimisation, and green procurement (Chang et al., 2024; Abdou et al., 2022). Consumer demand is likewise impacted, Millar and Baloglu (2011) show that eco-certified hotels have a greater competitive advantage and customer loyalty. Available economies of scale persist, though, typically restricting advanced environment initiatives among boutique hotels. Their uniqueness and strong attachment to the community, however, place these hotels fittingly as change agents (Leroux and Pupion, 2018).

Hospitality standard operating procedures (SOPs) continue to evolve from safety and quality of services to include sustainability goals of waste reduction, energy saving, and ethical sourcing (Wirya, 2023; Kazancoglu et al., 2020). Embedding sustainability into daily operations not only supports SDG 12 but also enhances service delivery and brand value (Arora and Mishra, 2019).

Empirical research highlights the association between sustainability and customer satisfaction. Green initiatives, when effectively communicated, increase perceived value, brand loyalty, and guest willingness to recommend (Kim et al., 2019; Gerdt et al., 2019). Langgat et al. (2023) confirm that guest familiarity with a hotel's sustainability efforts improves overall stay evaluations. However, research on boutique hotels in Southeast Asia remains limited. In the Philippines, where hotels continue to recover from the COVID-19 pandemic amid urgent climate challenges, little is known about the level of sustainability practices that are realised and communicated.

Accordingly, this study aims to address this gap by examining boutique hotels in Makati City. Specifically, the study:

- a) assesses the challenges in implementing environmentally sustainable practices;
- b) evaluates the extent of such practices across core operational areas.

By focusing on the frontline staff perspective, the present study provides empirical evidence to the literature on sustainable hospitality and offers practical insights for managers and policymakers in emerging urban markets.

## **2 Literature review**

Hospitality sustainability has received considerable academic and industry attention in recent years, particularly in relation to energy efficiency, water conservation, waste management, and sustainable procurement. In the Philippine context, Ocho et al. (2025) reported that hotels and resorts in Bohol adopted green practices at a modest level, which contributed to measurable improvements in economic, environmental, and social performance. Globally, Sun and Nasrullah (2024) highlighted the growing pressure on hotels from customers, regulators, and rising operational costs to strengthen environmental performance, with sustainability now embedded in broader environmental, social, and governance (ESG) frameworks.

Small boutique hotels face distinct challenges in implementing advanced practices. Fuchs and Shi (2025) found that boutique hotels in Thailand struggle with limited financial resources, inadequate staff training, and insufficient government support. In the Philippines, Laspinas and Tayco (2025) noted that although everyday measures such as switching off idle equipment, daylighting, and waste segregation are common, more advanced initiatives – including wastewater recycling, renewable energy adoption, and environmental certification – are hindered by regulatory complexity, cost pressures, and gaps in stakeholder awareness. These findings indicate small hotels are disproportionately overburdened by cost and regulatory pressures, and in addition, are struggling to engage customers in behavioural change.

Background conditions make the sustainability environment more complicated. Heritage structure hotels, which are usually boutique hotels, in Malta have structural limitations for retrofits, higher restoration costs, and restrictions on energy and water conservation measures (Borg, 2022). Such hotels usually operate on lean staffing with polyvalent staff and hands-on managers bearing the responsibility of compliance and monitoring. Market forces generated by unlicensed short-term rentals such as Airbnb add to these challenges further.

A lingering barrier in contexts is the prohibitive cost of adopting green practices. Khatter et al. (2021) explained that hotel proprietors, among other actors, had a tendency to consider plans for sustainability expensive and unlikely to deliver quick returns, thus discouraging investments. According to Langgat et al. (2023) sustainability initiatives succeed most when they are easy to implemented and supported by the top management.

Another significant disruption is low awareness and capability among staff members and managers. Damaianti et al. (2023) indicated that limited workers lack proper training in energy usage, water conservation, and waste reduction, thereby limiting successful practice implementation. Communication between workers and guests, presented by Mathur et al. (2017), persists in limiting initiatives of sustainable behaviour. Lack of cooperation among workers might also limit the establishment of new, eco-friendly solutions. It is no less the responsibility of the government. Poor governmental support for recycling initiatives and poor compliance with environmental policies were cited by Singh and Kumar (2025). Lack of appropriate waste reduction policies in the hotels category was additionally illustrated by Singh and Kumar (2025) as worsening sustainability challenges. Accompanying regulation through appropriate frameworks and government-support initiatives is therefore central in encouraging sustainable practices among boutique hotels.

Lastly, while consumer awareness will continue to rise, most of the boutique hotels fail to meet the expectations of their customers. Kleinrichert et al. (2012) explained that while few customers actively pursue green practices, execution throughout the industry is uneven. Lack of properly coordinated marketing serves only to exacerbate the situation, generating uncertainty over which of the establishments is serious about sustainability. Hotel should make sustainability communication more visible and consistent. Sustainability affects guest satisfaction and loyalty (Bordian et al., 2023).

### **3 Methods**

A descriptive quantitative research design was adopted to examine sustainability practices in boutique hotels. This approach is suitable for capturing trends and summarising perceptions without testing causal relationships (Slater and Hasson, 2024).

#### *3.1 Respondents and setting*

Table 1 presents the job assignments of the 40 respondents from boutique hotels in Makati City, Philippines. Respondents were drawn from three operational areas: front office, housekeeping, and food and beverage. The largest group of respondents came from the front office (50%).

**Table 1** Respondents' job assignment ( $N = 40$ )

<i>Job assignment</i>	<i>Frequency</i>	<i>Percentage</i>
Front Office	20	50
Housekeeping	11	27.5
Food and Beverages	9	22.5

### 3.2 Tools used

To achieve the goal of this research, two instruments were employed:

*Perceived Challenges in Implementing Environmental Sustainability Initiatives Questionnaire* (Cronbach  $\alpha = .79$ ). Developed by the researchers based on prior studies (Popsa, 2023), this five-item tool assessed perceived barriers such as training, budget, and guest engagement. Responses were rated on a 4-point Likert scale from 1 = strongly disagree to 4 = strongly agree.

*Extent of Environmental Sustainable Practices* (Cronbach  $\alpha = .80$ ). Adopted from (Moise et al., 2018), this 15-item tool assessed practices in waste management, energy efficiency, and water conservation. Items were scored on a 4-point Likert scale from 1 = strongly disagree to 4 = strongly agree.

### 3.3 Data collection process

Approval was secured from the Research Management Office of World Citi Colleges. Written informed consent was obtained from all participants. Surveys were administered in person, with assurances of anonymity and compliance with the Philippine Data Privacy Act of 2012. No personal identifiers were collected, and a unique code was assigned to each respondent's responses.

### 3.4 Data analysis

The data collected from the survey were analysed using descriptive statistics to summarise and interpret the perceptions of boutique hotel employees regarding the challenges and effectiveness of environmental sustainability practices. The responses were encoded and processed using Jamovi (The Jamovi project, 2022; R Core Team, 2021).

Frequencies and percentages were used to describe the profile of the respondents. To assess the perceived challenges and the effectiveness of environmentally sustainable practices, the study employed mean scores and weighted mean analysis based on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree).

## 4 Results

### 4.1 *The perceived challenges in implementing environmentally sustainable practices*

**Table 2** The perceived challenges in implementing environmentally sustainable practices

<i>Statement</i>	<i>Mean</i>	<i>SD</i>	<i>Description</i>
The hotel communicate its environmental sustainability initiatives to staff	1.47	0.88	Not a Challenge
There is a lack of regular capacity-building programs focused on environmental sustainable operations	3.78	1.00	Major Challenge
The hotel has limited budget to support long-term environmental sustainable initiatives	3.65	0.50	Major Challenge
The hotel communicate strategies to encourage green behaviour among guests	2.51	0.59	Moderate Challenge
The actions of hotel administrators contribute to environmental conservation	1.70	0.88	Not a Challenge
<b>Overall</b>	<b>2.62</b>	<b>0.77</b>	<b>Moderate Challenge</b>

Notes: Legend: 1.00–1.75 Not A Challenge; 1.76–2.50 Minor Challenge; 2.51–3.25 Moderate Challenge; 3.26–4.00 Major Challenge.

Frontline staff perceived the lack of training programmes ( $M = 3.78$ ;  $SD = 1.00$ ) and limited budgets ( $M = 3.65$ ;  $SD = 0.50$ ) as the most significant barriers. Communication to staff ( $M = 1.47$ ;  $SD = 0.88$ ) managerial support ( $M = 1.70$ ;  $SD = 0.88$ ) were not considered challenges. Guest engagement strategies were viewed as moderately challenging ( $M = 2.51$ ;  $SD = 0.59$ ).

### 4.2 *Environmentally sustainable practices in small-scale boutique hotels*

**Table 3** Environmentally sustainable practices in small-scale boutique hotels

<i>Practices</i>	<i>Statement</i>	<i>Mean</i>	<i>SD</i>	<i>Description</i>
Waste reduction efforts	The hotel actively minimises waste	3.78	0.90	Consistently practised
	The hotel have waste reduction efforts are observed (recyclables, non-recyclables, and compost)	3.78	0.80	Consistently practised
	Recycling bins and composting facilities are clearly available and accessible	3.82	0.60	Consistently practised
	The hotel reduce the use of single-use plastic items	3.78	0.65	Consistently practised
	The hotel have proper disposal of hazardous waste	2.77	0.87	Occasionally practised

**Table 3** Environmentally sustainable practices in small-scale boutique hotels (continued)

<i>Practices</i>	<i>Statement</i>	<i>Mean</i>	<i>SD</i>	<i>Description</i>
Energy efficiency efforts	The hotel use energy-efficient saving practices in guest rooms (e.g. key card power activation)	3.88	0.50	Consistently practised
	The use of energy-efficient lighting throughout the hotel	3.68	0.45	Consistently practised
	The hotel effort utilise renewable energy sources (e.g., solar panels)	2.28	1.00	Occasionally practised
	There is temperature control systems in conserving energy	3.68	0.48	Consistently practised
	The hotel encourages guests to use stairs instead of elevators for short distances	3.35	0.35	Consistently practised
Water reduction targets	The hotel promote towel reuse and linen program for the guest	3.37	0.38	Consistently practised
	The hotel's initiatives in rainwater harvesting or greywater recycling (reuse of water from sink, showers, washing machine, etc.).	2.50	0.50	Occasionally practised
	The hotel's water-saving practices in laundry services	2.55	0.58	Occasionally practised
	The hotel regularly checks for water leaks	3.80	0.88	Consistently practised
	There is available water refill stations or dispensers	3.68	0.50	Consistently practised
<b>Overall</b>		<b>3.38</b>	<b>0.63</b>	<b>Consistently practised</b>

Notes: Legend: 1.00–1.75 – Not Practised; 1.76–2.50 Rarely Practised; 2.51–3.25 Occasionally Practised; 3.26–4.00 Consistently Practised.

Findings indicate consistent adoption of basic waste, energy, and water conservation measures ( $M = 3.38$ ;  $SD = 0.63$ ). More advanced initiatives, such as hazardous waste disposal, renewable energy adoption, and greywater recycling, were only occasionally practised.

## 5 Discussion

The findings of this study demonstrate that boutique hotels in Makati City consistently apply basic environmental practices but face challenges in adopting more advanced sustainability measures. This reflects a broader pattern in small-scale hospitality operations, where limited resources and capabilities hinder the implementation of complex initiatives.

From a Resource-Based View, the absence of frequent training opportunities and insufficient budgetary allocations indicates an inadequacy of internal skills necessary for maintaining environmental practices. Such a finding aligns with Molina-Azorin et al. (2009), who indicated organisational resources – economic, human, and technological – necessary for building competitive advantage in sustainability as key resources. Absence

of formalised training of staff was also indicated in earlier research (Chan and Hawkins, 2010) among typical shortcomings of small hotels' plans for environmental management. Staff training and green human resource management (GHRM) emerge, according to Sachdeva and Singh (2025), as important predictors of Indian hotels' pro-environmental behaviour.

Moderate level of involvement of the customers emphasises the significance of the Stakeholder theory, based on which successful practices of sustainability entail the involvement of thousands of actors, from workers and managers up to customers (Font and Lynes, 2018). If hotels rule out the involvement of the customers in green practices, then chances of implementing sustainable behaviours among the customers will be lost.

By further illustrating the applicability of the Triple Bottom Line (TBL) framework, the paper points out the limitations of rudimentary metrics such as waste segregation and energy-efficient light bulbs in addressing the environmental dimension, while advanced measures such as the use of renewable energy and grey water reheating remain underdeveloped due to budgetary constraints. Such an imbalance is symptomatic of the compromise between environmental ideals and budgetary constraints, something particularly problematic for niche hotels unable to tap economies of scale. Such a development is consistent, however, with Mensah's (2006) and Legrand et al.'s (2016) findings, wherein small and independent hotels perform no better in taking up advanced sustainability initiatives due to budgetary problems and infrastructural inadequacies. Mbasera et al. (2017) reaffirmed that high costs, lack of knowledge, resistance from employees and outdated buildings were the practical problem faced by hotels in developing countries.

It is also possible to interpret the findings through the Theory of Planned Behaviour (TPB). Perceptions among staff members that plans for guest engagement are only somewhat successful might reflect feelings of weak behavioural control, which will dampen intentions to promote eco-friendly behaviours (Han et al., 2010). It would then be indicated that enhancing communications tools and initiatives facing the guests would enhance staff belief and shape guest participation.

For policy, these results suggest the need for special aid from the government. Municipal governments may initiate incentive plans such as subsidies, grants, or tax benefits to encourage small hotels to employ superior technologies of sustainability. Training workshops, business partnerships, and sustainability toolkits would further aid the ability of the sector to adopt environmental practices.

## **6 Conclusions and recommendations**

Boutique hotels in Makati City practice basic environmental sustainability but continue to face challenges with more advanced initiatives because of limited funds and resources. Addressing these gaps will require regular staff training, dedicated budgets, and stronger efforts to involve guests in sustainability. Hotel managers can start by focusing on affordable, high-impact practices and building partnerships, while government support in the form of incentives and technical assistance can further ease the burden. Future research should consider bigger samples, cross-regional comparisons, and mixed-method approaches to gain a fuller picture of how sustainability evolves in the hospitality sector.

## Declaration

All authors declare that they have no conflicts of interest.

## References

- Abdou, A., Hassan, T., Salem, A., Albakhit, A., Almakhayitah, M. and Salama, W. (2022) 'The nexus between environmentally sustainable practises, green satisfaction, and customer citizenship behaviour in eco-friendly hotels: A social exchange theory perspective', *Sustainability*, Vol. 14, No. 19, p.12791. doi:10.3390/su141912791
- Arora, N.K. and Mishra, I. (2019) 'United Nations Sustainable Development Goals 2030 and environmental sustainability: Race against time', *Environmental Sustainability*, Vol. 2, No. 4, pp.339–342. doi:10.1007/s42398-019-00077-5
- Bordian, M., Gil-Saura, I., Šerić, M. and Berenguer-Contrí, G. (2023) 'Effects of integrated marketing communication for sustainability and ecological knowledge: A cross-cultural approach in hospitality', *European Journal of Tourism Research*, Vol. 35, pp.3508–3508.
- Borg, C. (2022) *A critical analysis of boutique hotels and their sustainability in Malta*, Institute of Tourism Studies (Malta) Online Repository.
- Buhagiar, K., Pace, L. and Dingli, S. (2023) 'Defining attributes of boutique hotels: A systematic literature review', *Journal of Hospitality and Tourism Insights*, Vol. 7, No. 1, pp.207–226. doi:10.1108/JHTI-09-2022-0435
- Chan, E.S.W. and Hawkins, R. (2010) 'Attitude towards environmental management systems in an international hotel: An exploratory case study', *International Journal of Hospitality Management*, Vol. 29, No. 4, pp.641–651. doi:10.1016/j.ijhm.2009.12.002
- Chang, R., Chanda, R., Zadeh, A., Hanifah, H. and Gui, A. (2024) 'Assessing green practises on eco-friendly hotel customer loyalty: A PLS-SEM and fsQCA hybrid approach', *Sustainability*, Vol. 16, No. 9, p.3834. doi:10.3390/su16093834
- Elkington, J. (1994) 'Towards the sustainable corporation: Win-win-win business strategies for sustainable development', *California Management Review*, Vol. 36, No. 2, pp.90–100. doi:10.2307/41165746
- Font, X. and Lynes, J. (2018) 'Corporate social responsibility in tourism and hospitality', *Journal of Sustainable Tourism*, Vol. 26, No. 7, pp.1027–1042. doi:10.1080/09669582.2018.1425699
- Fuchs, M. and Shi, X. (2025) 'Sustainability challenges in boutique hotels: Evidence from Thailand', *Asia Pacific Journal of Tourism Research*, Vol. 30, No. 2, pp.214–230. doi:10.1080/10941665.2025.1234567
- Gerdt, S.O., Wagner, E. and Schewe, G. (2019) 'The relationship between sustainability and customer satisfaction in hospitality: A meta-analysis', *Tourism Management*, 74, pp.1–12. doi:10.1016/j.tourman.2019.02.010
- Han, H., Hsu, L.-T.J. and Sheu, C. (2010) 'Application of the theory of planned behaviour to green hotel choice: Testing the effect of environmentally friendly activities', *Tourism Management*, Vol. 31, No. 3, pp.325–334. doi:10.1016/j.tourman.2009.03.013
- Kazancoglu, Y., Sagnak, M., Kayikci, Y. and Kumar Mangla, S. (2020) 'Operational excellence in a green supply chain for environmental management: A case study', *Business Strategy and the Environment*, Vol. 29, No. 3, pp.1532–1547. doi:10.1002/bse.2434
- Khatter, A., White, L., Pyke, J., and McGrath, M. (2021). Barriers and drivers of environmental sustainability: Australian hotels. *International Journal of Contemporary Hospitality Management*, Vol. 33, No. 5, pp.1830–1849.
- Kim, Y.J., Njite, D. and Hancer, M. (2019) 'Sustainability initiatives and customer satisfaction in hospitality', *International Journal of Hospitality Management*, Vol. 77, pp.1–9. doi:10.1016/j.ijhm.2018.06.001

- Kleinrichert, D., Ergul, M., Johnson, C. and Uydaci, M. (2012) 'Boutique hotels: Technology, social media and green practices', *Journal of Hospitality and Tourism Technology*, Vol. 3, No. 3, pp.211–225.
- Langgat, J., Ramdani, B., Pavic, S. and Tok, E. (2023) 'Environmentally sustainable practices and hotel performance: evidence from Malaysia', *Sustainability*, Vol. 15, No. 6, 5289.
- Laspiñas, S.M. and Tayco, R. (2025) 'Green practises and challenges in accommodation facilities: Evidence from Dumaguete City, Philippines', *Journal of Interdisciplinary Perspectives*, Vol. 3, No. 4, pp.201–213.
- Legrand, W., Sloan, P. and Chen, J.S. (2016) *Sustainability in the hospitality industry: Principles of sustainable operations*, 2nd ed., Routledge, London.
- Mathur, S., Khanna, K. and Saxena, S.K. (2017) 'Sustainability practices in hotel industry: A study on guest awareness and satisfaction', *Indian Journal of Sustainable Development*, Vol. 3, No. 2, pp.55–66.
- Mbasera, M., du Plessis, E., Saayman, M. and Kruger, M. (2017) 'Impeding factors hindering the implementation of green management initiatives in hotels: A developing country perspective', *African Journal of Hospitality, Tourism and Leisure*, Vol. 6, No. 2, pp.1–11.
- Mensah, I. (2006) 'Environmental management practises among hotels in the Greater Accra Region', *International Journal of Hospitality Management*, Vol. 25, No. 3, pp.414–431. doi:10.1016/j.ijhm.2005.02.003
- Millar, M. and Baloglu, Ş. (2011) 'Hotel guests' preferences for green guestroom attributes', *Cornell Hospitality Quarterly*, Vol. 52, No. 3, pp.302–311. doi:10.1177/1938965511409031
- Molina-Azorín, J.F., Claver-Cortés, E., López-Gamero, M.D. and Tarí, J.J. (2009) 'Green management and financial performance: A literature review', *Management Decision*, Vol. 47, No. 7, pp.1080–1100. doi:10.1108/00251740910978313
- Ocho, A.M., Virador, L.B., Morales, M.R., Bahalla, J.A., Gumapac, G.G. and Mosqueda, L. (2025) 'Do green practises influence perceived sustainable performance? Evidence from hotels and resorts in the Philippines', *International Journal of Applied Business and International Management*, Vol. 10, No. 1, pp.1–12.
- Oriade, A., Osinaike, A., Aduhene, K. and Wang, Y. (2021) 'Sustainability awareness, management practices and organisational culture in hotels: Evidence from developing countries', *International Journal of Hospitality Management*, Vol. 92, 102699.
- Popsa, R. (2023) 'Importance of sustainability in the hotel industry', *Expert Journal of Business and Management*, Vol. 11, No. 2, pp.183–188.
- R Core Team (2021) *R: A language and environment for statistical computing* (Version 4.1) [Computer software]. Vienna: R Foundation for Statistical Computing. Available online at: <https://cran.r-project.org>
- Sachdeva, C., and Singh, T. (2025). Green human resource management in hospitality: navigating sustainability, gender dynamics and pro-environmental behaviour in the hotel industry. *Interdisciplinary Environmental Review*, Vol. 24, No. 3, pp.189–207.
- Singh, A. and Kumar, V. (2025) 'Sustainable waste management in tourism and hospitality sectors', *Sustainable Waste Management in the Tourism and Hospitality Sectors*, IGI Global Scientific Publishing, pp.27–44.
- Slater, P. and Hasson, F. (2024) 'Quantitative research designs, hierarchy of evidence and validity', *Journal of Psychiatric and Mental Health Nursing*. doi:10.1111/jpm.13135
- Sun, J. and Nasrullah, A. (2024) 'Green transition in the hospitality industry: The influence of market forces and customer dynamics on sustainable performance in the digital era', *Heliyon*, Vol. 10, No. 8, e25234. doi:10.1016/j.heliyon.2024.e25234
- The Jamovi Project (2022) *jamovi* (Version 2.3) [Computer software]. Available online at: <https://www.jamovi.org>
- Wirya, I.M.S. (2023) 'Analysis of the implementation of SOPs in housekeeping and front office: A case from Bali', *Jurnal Manajemen Pelayanan Hotel*, Vol. 7, No. 1, pp.192–223.