

Evaluating the Roles of Green Practice on the Sustainability of Business Operations in Eko Hotels and Suites, Lagos, Nigeria

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ABSTRACT: The increasing global concern for environmental sustainability has positioned green practices as a vital strategy in the hospitality industry, prompting this study to evaluate the role of green practices in sustaining business operations at Eko Hotel, Lagos, Nigeria. The research examined the implementation of eco-friendly measures such as energy conservation, water management, waste reduction, and sustainable sourcing, while also assessing their impact on customer perceptions, business performance, and environmental responsibility. A descriptive survey research design was employed, combining both quantitative and qualitative methods, with data collected through structured questionnaires administered to staff, management, and guests, as well as interviews and secondary sources. Descriptive statistics and thematic analysis were used to analyze the findings, providing a holistic view of green practices in the hotel. Eko Hotel was chosen as a case study due to its prominence as Nigeria's largest hospitality establishment and its significant environmental footprint. The findings revealed that awareness of visible green practices, such as energy-efficient lighting and waste reduction programs, was high among respondents, while recognition of less visible measures like sustainable sourcing was relatively low. Major barriers identified included high costs of implementation, limited guest engagement, and infrastructural challenges such as reliance on diesel generators. Despite these challenges, the study showed that green practices positively influence both environmental sustainability and business operations, enhancing guest loyalty and brand reputation.

Keywords: *green practices, sustainability, hospitality industry, environmental management, business operations*

Introduction

The incorporation of green strategies in the hotel sector is a vital development that aligns economic development with environmental sustainability. The project explores how hotels can implement environmentally friendly measures to minimize their environmental impacts without compromising on service excellence and profitability. I believe adopting sustainable measures makes the hotel operate more effectively as well as contribute constructively to the international agenda of green conservation as well as social accountability. In the research, the aim is to examine the numerous areas of green measures ranging from the use of new technologies as well as the preservation of resources through the role of the hotel as a socially responsible enterprise.

The hotel sector is a significant driver of economic growth worldwide, offering hospitality services to both business and vacation travelers. As part of the tourism industry, hotels are important creators of employment opportunities, revenue, and cultural exchange (Fagbolu et al., 2022). The growth of the sector has been driven by rising global travel, urbanization, and infrastructural development. Coupled with its economic benefits, however, the hotel sector is also known to contribute high rates of resource use and environmental degradation. From high water consumption and energy use to the generation of large amounts of waste, hotels are key contributors to environmental degradation. These issues have raised increasing debate on the adoption of sustainable hotel management practices to ensure that hotel operations are in line with global efforts to conserve the environment (Wei and Liu, 2023).

The concept of green practices in the hospitality sector is environmentally friendly policies and operating procedures intended to minimize ecological footprints without compromising efficiency and profitability (Prakash et al., 2022). Green practices include energy conservation, water management, waste reduction, and the use of environmentally friendly materials.

Sustainable hotel operations give precedence to using resources in manners that satisfy the present without undermining the future's capability to fulfill their own (Abdou et al.,

2020). Over the last decades, many hotels have adopted practices such as the utilization of solar power, motion sensors for lighting, recycling programs, and biodegradable packaging as efforts towards reducing their environmental footprints. These practices align with the emerging trend of sustainable tourism, which promotes tourism experiences with priority on the sustainability of the environment as well as maintenance of local culture (Ndalnamu et al., 2024).

Green certification is the measurement of the energy efficiency, waste reduction, use of green buildings, as well as the use of natural resources. Green certification is awarded when the hotel is found to meet these measures. Not just the image of the hotel is enhanced, but the hotel also receives a loyal client base devoted to being environmentally friendly (Han et al., 2011).

One of the biggest hindrances in the adoption of green measures in the hotel industry is the perceived cost of implementation. Most hotel owners view green measures as added expenditures, requiring large investments in infrastructure, as well as the employees. However, long-term analysis reveals that the more efficient use of resources results in significant savings (Scholz et al., 2020). For example, the use of energy-efficient light bulbs, low-flow fittings, as well as state-of-the-art HVAC solutions saves money through the reduction of utility bills as well as operating costs. In addition, waste reduction measures as well as the use of responsibly sourced materials guarantee the hotel's financial sustainability. Not only do green measures guarantee compliance with green policies but also operating savings in the long run (Ganandran et al., 2014).

Sustainability in the hotel industry extends beyond environmental conservation to encompass social and economic dimensions. Hotels have increasingly adopted corporate social responsibility (CSR) initiatives that promote ethical labor practices, community engagement, and responsible sourcing of goods and services. Supporting local suppliers and farmers helps reduce transportation emissions while strengthening regional economies (Madanaguli et al., 2021). Many hotels have also implemented sustainable food sourcing policies, focusing on organic, locally grown, and ethically produced ingredients. By reducing reliance on plastic packaging and single-use items, hotels contribute to broader waste reduction efforts. These sustainability measures not only enhance brand reputation

but also foster strong relationships with guests, employees, and stakeholders (Simões et al., 2023).

The role of technology cannot be overlooked when considering the pursuit of green measures in the hotel industry. Artificial intelligence (AI) and clever solutions have been applied by the hotel industry in optimizing energy use, automating waste reduction, as well as developing more guest-centric experiences. AI-powered energy management solutions apply occupancy patterns in optimizing light levels as well as temperature levels, reducing energy waste (Mohammad and Iva, 2024). Digital checking using smartphones as well as the abolition of keys have also diminished the use of paper materials, contributing to the carbon footprint reduction. Water harvesting, greywater reuse, as well as advanced filtration solutions, have enhanced the use of water. These innovations have been the drivers of improved efficiency, savings, as well as improved sustainability efforts in the hospitality industry (Palermo et al., 2022).

Looking ahead, the road to sustainability in the hotel industry will be paved with continuous innovation and strategic investment. As environmental concern continues to drive consumer choice and industry regulation, companies will need to remain ahead of the curve in their response to green practice. Research and development efforts in energy conservation, waste reduction, and resource conservation will drive the evolution of sustainable hospitality. Hotels that prioritize sustainability will not only fulfill their environmental responsibilities but achieve long-term profitability, customer satisfaction, and industry leadership. In a world where sustainability is now a necessity and no longer a choice, hotels will have to adopt green practices in order to thrive in an evolving global landscape (Sun and Nasrullah, 2024).

Statement of the Problem

Sustainability is a key focus in the hospitality sector, with research showing green hotel practices can preserve the environment through energy-saving, waste reduction, and water management. Many hotels have adopted green measures and certification schemes, but there's a disconnect in implementing, perceiving, and assessing the long-term impact of these measures (Wu and Tham, 2023).

Research on sustainability in hotels has limitations, including uneven adoption across regions, with advanced economies leading and developing economies lagging. Additionally, small and medium-sized hotels are underrepresented in research, and there's a lack of data on returns from green investments, making it difficult to assess cost-benefit relationships (Merli et al., 2019).

Research on consumer attitudes towards green hotels is limited, particularly regarding their willingness to pay more for eco-friendly lodging. Additionally, how hotels communicate their green efforts to guests is under-explored, making it challenging for hotels to meet guest expectations (Rahman et al., 2015). This implies that the available information regarding the role of green practices on sustainable hospitality business operations is not sufficient.

With these gaps, the current study focuses on examining the roles of green practices within the hotel industry by evaluating the operating challenges along with consumer responses. To fill these gaps, the study aims to provide a comprehensive picture of the sustainability landscape within the hospitality business operations using Eko Hotel, Lagos, Nigeria as a case study.

The Concept of Green Practices in Hospitality

The hotel sector has long seen the value in adopting environmentally friendly measures in efforts to reduce its ecological impact. Green hospitality is the adoption of measures intended to save resources, decrease emissions, and optimize the operating process. Some of the measures include energy management, reduction of waste, use of resources, and environmentally friendly sourcing (Kruesi and Remy, 2024). Worldwide, the measures have been being adopted in the hospitality sector as a measure of answering rising concerns about the environment, compliance with regulation, as well as changing consumer attitudes. Sustainability is not just beneficial for the environment but also reinforces the brand image, makes the hotel more cost-efficient, as well as improving the guest experience (Pereira et al., 2021).

Energy conservation is one of the fundamental aspects of sustainable hotel management. Electricity is used widely in hotels for lighting, heat, cooling, and day-to-day activities. Energy-efficient appliances such as LED bulbs, motion sensors, and automatic thermostats

have enabled the conservation of power consumption without compromising the ease of the guest (Švec et al., 2023). The majority of establishments have switched to renewable energy sources such as solar power plants and wind turbines to reduce the consumption of non-renewable energy sources. Energy management systems also regulate energy consumption automatically based on the occupancy rate. These technological advancements guarantee reduced carbon footprints as well as cost savings in terms of operational expenses, hence making energy efficiency a priority in sustainable hospitality (Kumar and Majid, 2020).

Water conservation is also a significant aspect of green hotel policies. Water is utilized extensively for guest amenities, housekeeping, as well as for the use of recreational areas. Low-flow faucets, low-flow showerheads, as well as rainwater harvesting, reduce excessive use of water. Certain hotels have also set up wastewater treatment as well as recycling plants for the reuse of the same for non-potable uses like irrigation as well as landscaping. By adopting these measures, the sector ensures long-term sustainability of the water as well as solves the problem of the shortage of water as well as ecological decline (Abdou et al., 2020).

Effective waste management is also at the core of green hotel operations. Hotels create large volumes of waste through food service, guest stays, and housekeeping. Recycling schemes, food waste composting, and the reduction of single-use plastic all work toward waste reduction. Most hotels have also allied with local organizations to give away surplus food, cutting down waste but contributing toward the well-being of the local population. Green purchase policies also support waste management through the use of biodegradable and recyclable materials. By adopting formal waste reduction measures, the hotel reduces its impact on the environment as well as makes its processes compatible with the circular economy (Chikezie et al., 2023).

Sustainability in the Hotel Industry

Hotels across the globe have seen the need to incorporate environmentally friendly practices into their operations to minimize harmful environmental impacts. This sector, which is synonymous with high resource usage, has moved towards models that harmonize guest comfort with environmental responsibility. Hotels have incorporated measures

intended to lower carbon footprints, save water, lessen wastes, and encourage responsible sourcing. Not only do these methods assist in safeguarding the environment, but they also make businesses more resilient by lowering the cost of operations and satisfying the needs of environmentally conscious consumers. Companies that emphasize sustainability position themselves as industry leaders, showcasing a desire for long-term ecological and financial sustainability (Sun and Nasrullah, 2024).

Energy efficiency is the new foundation of hotel management. The majority of properties have put in energy-efficient equipment such as LED bulbs, motion sensors, and energy-efficient thermostats to conserve electricity. Some have converted from utilizing conventional energy sources such as coal and natural gases to renewable energy sources such as solar power plants and windmills. Advanced heating, ventilation, and air conditioning systems also count towards energy conservation since these units provide temperature control with less loss of energy. With the implementation of energy-efficient practices, the hotel conserves carbon emissions in addition to conserving money in the long term by means of lowering the utility bills (Pandiyan et al., 2023).

Water conservation is also a priority sector in the hospitality sector due to the excessive use of guest amenities, laundry, and landscaping. Low-flow faucets, rainwater harvesting, and water recycling have been installed at multiple locations as a measure of avoiding unnecessary waste. Greywater reuse for irrigation as well as toilet flushing is also popular as a measure of maximizing efficiency. Encouragement of guest interaction through measures like the reuse of linens and towels also helps the hotel's efforts toward responsible use of water. These measures enable the hotel to continue its operations without compromising the level of service (Sadi and Adebitan, 2014).

Waste minimization initiatives have also been gaining traction as companies seek to limit environmental pollution. Recycling programs, composting programs, and biodegradable materials have been initiated across many properties. Portion control initiatives as well as donation programs have also proven effective at limiting excess production. Digitalization initiatives such as electronic check-ins as well as paperless invoicing have also been effective at reducing waste. Proper disposal programs as well as recycling programs guarantee hotel conformity to global initiatives aimed at limiting waste through sustainability initiatives (Abdou et al., 2020).

Green/Eco-Friendly Hotels: Case Study

According to Filimonau and Tochukwu (2020), Eko Hotels and Suites, a leading hospitality hotel in Lagos, Nigeria, has been at the fore in the efforts of incorporating environmental sustainability in its operations. In acknowledgment of the hospitality sector's role in the preservation of the environment, the hotel has been engaged in numerous green measures with the aim of mitigating its ecological impact as well as developing a green mindset.

A cornerstone of Eko Hotels' sustainability efforts is the annual Climate Gala, organized in collaboration with Green Fingers Wildlife Conservation. This event serves as a platform to raise awareness about pressing environmental issues and advocate for sustainable practices. The inaugural gala featured a "Trash Fashion Show," where designers presented gowns made entirely from recycled materials, showcasing the potential of upcycling in fashion. Dr. Iyadunni Gbadebo, the hotel's Director of Sales and Marketing, emphasized the establishment's commitment to environmental stewardship, stating, "At Eko Hotels, we believe the hospitality industry has a unique opportunity—and responsibility—to lead the charge in sustainable practices." Furthermore, the hotel has pledged to create a dedicated fund in partnership with Green Fingers to protect endangered species and their habitats (Filimonau and Tochukwu, 2020).

In its pursuit of green operations, steps have been taken at Eko Hotels to reduce energy consumption. There has been investment in energy-efficient appliances and light fittings, and energy consumption has decreased significantly. Water conservation steps have also been implemented progressively, such as the use of low-flow fittings and the implementation of linen and towel reuse programs. These steps have the objective of eradicating wastage of water and the use of sustainable resources. The hotel also made a change from the use of single-use plastic-based materials such as utensils and amenities (Salami et al., 2024).

Eko Hotels' efforts at being green also translate to social interaction as well as learning. It has also run environmentally friendly painting competitions among children with the view of molding environmentally conscious youth. It coincides with international celebrations such as Earth Day and involves planting of trees as a measure of keeping the environment.

As per the hotel's chairman, Mr. Christopher Chagoury, the implementation of green policies is necessary since the employees have been sensitized to be the drivers of environmentally friendly measures with much passion (Salami et al., 2024).

Moreover, Eko Hotels is also practicing sustainable sourcing through the use of local and organic foodstuffs in its cuisine. This is a support for local farmers as well as a reduction in the carbon emissions from food transportation. In addition, the hotel is also using eco-efficient designs in buildings, with energy-efficient windows, adequate insulation, as well as the use of sustainable materials in the buildings. Not only is this energy-efficient but also creates a healthier indoor environment for the clients as well as employees (Chagoury, 2024).

The hotel's efforts fall in line with the international hospitality industry's drive toward green certification as a gauge of their efforts toward being more sustainable. Green certificates such as LEED (Leadership in Energy and Environmental Design) encourage the hotel toward energy-saving measures, the use of water, as well as waste reduction. Obtaining these types of certificates not only saves the environment but also makes the hotel more appealing to eco-concerned tourists (Lin et al., 2023). Eko Hotels and Suites' holistic strategy for sustainability includes environmental protection, community outreach, and the use of green technologies. By incorporating these into its operations, the hotel is setting the standard for environmental stewardship in Nigeria's hospitality industry, proving that luxury and sustainability can go hand in hand.

Methods

This study employs a descriptive survey research approach in which a mix of quantitative and qualitative data collection was utilized. Eko Hotels and Suites was used as a case study; with research population being the hotel managers, employees, and customers of the hotel, out of which samples were randomly selected. These populations were selected because they played influential roles in the implementation and experience of green practices in the hotel industry. The total sample size of one hundred and sixty (160) participants; ten (10) management, fifty (50) employees, and one hundred (100) guests was considered adequate for this descriptive study, providing sufficient data for meaningful

analysis. Frequency distribution tables, and graphs were used to analyse the findings that ensued from the survey conducted for this work.

Results

The findings of the survey conducted for this work are interpreted under these research questions:

- I. What is the extent to which energy-saving, water-saving, and waste reduction measures are being implemented in the hotel?
- II. What are the barriers the hotels is facing in implementing green practices?
- III. What is the attitudes of the guest toward green hotels, and how green initiatives drive hotel booking and guest loyalty?
- IV. What is the role of successful implementation of sustainable practice on sustainability of the hotel's business operations?

The findings suggest that Eko Hotel has established a strong foundation in sustainable operations but requires improved communication, increased guest engagement, and strategic cost management to realize the full potential of its green initiatives. By addressing these gaps, the hotel can strengthen its environmental reputation, enhance guest loyalty, and secure a sustainable competitive advantage in that the hospitality industry.

What is the extent to which energy-saving, water-saving, and waste reduction measures are being implemented in the hotel?

Table 1: Respondents' Opinions on Green Practices

<i>Item</i>	<i>Response Option</i>	<i>Frequency</i>	<i>Percent (%)</i>
Willingness to Pay More for Green Practices	Yes	14	29.8
	Maybe	19	40.4
	No	14	29.8
Participation in Green Programs When Lodging	Yes	14	29.8
	Sometimes	19	40.4
	No	14	29.8

Motivation for Patronising Eco-Friendly Hotels	Hotel Reputation	19	40.4
	Environmental Concern	10	21.3
	Cost Savings	9	19.1
	Peer Influence	9	19.1
Most Influential Green Initiative	Renewable Energy Use	15	31.9
	Waste Reduction & Recycling	12	25.5
	Water Conservation	7	14.9
	Sustainable Food Sourcing	6	12.8
	Eco-Friendly Room Amenities	7	14.9

Source: Author's Compilation, 2025

What are the barriers the hotels is facing in implementing green practices?

Table 2: Implementation and Impact of Green Practices at Eko Hotel

<i>Item</i>	<i>Response Option</i>	<i>Frequency</i>	<i>Percent (%)</i>
Green Practices of Interest	Biodegradable products	10	21.3
	Green certification	11	23.4
	Water conservation	10	21.3
	Energy-efficient lighting	11	23.4
	Sustainable sourcing	9	19.1
	Waste reduction	11	23.4
Commitment to Environmental Sustainability	Poor	11	23.4
	Fair	12	25.5
	Good	13	27.7
	Excellent	11	23.4
Participation in Eco-Friendly Programs	No	25	53.2
	Yes	22	46.8
Adequacy of Information on Green Practices	Yes	22	46.8
	No	13	27.7
	Not sure	12	25.5
Perceived Barriers to Green Practice	High Costs	7	14.9
	Lack of Guest Awareness	5	10.6
	Insufficient Regulations	3	6.4

	Staff/Management Resistance	2	4.3
Effectiveness of Eko Hotel's Green Practices	Moderately Effective	12	25.5
	Very Effective	11	23.4
	Neutral	11	23.4
	Not Very Effective	7	14.9
	Not Effective at All	6	12.8
Impact of Green Practices on Business	Enhances Sustainability	22	46.8
Sustainability	Neutral Impact	12	25.5
	No Impact	13	27.7
Total		47	100.0

Source: Author's Compilation, 2025

What is the role of successful implementation of sustainable practice on sustainability of the hotel's business operations?

Table 3: Incentives to Support Sustainability Initiatives

<i>Incentive Type</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Discounts on Stay	13	27.7
Free Eco-Friendly Items	16	34.0
Loyalty Points	7	14.9
Recognition/Certificates	6	12.8
Other Incentives	5	10.6
Total	47	100.0

Source: Author's Compilation, 2025

Discussion

The findings reveal strongly recognized eco-friendly practices at Eko Hotel. 73.3% of participants indicated knowledge of efforts such as installing energy-efficient lighting, green certification standards, and having a waste reduction program (each 23.4%); followed by water conservation and use of biodegradable products (21.3%). This aligns with Eko Hotel's current sustainability practices, which include using energy-efficient equipment, low-flow fixtures, and eliminating single-use plastics (Filimonau and Tochukwu, 2020). Staff explained the changes began in 2019 with measures like replacing

plastic utensils with biodegradable options in outlets such as Sky Restaurant and Lagoon Breeze. Low-flow systems were installed across the hotel, with greywater redirected for landscaping. Regular staff sessions continue to reinforce these environmental routines.

Sustainable sourcing was noted less often; 19.1% of respondents indicated understanding of this practice, even though this hotel promotes eating food products that are locally grown or organic (Chagoury, 2024). Clearly, there is a lack of public recognition of Eko Hotel's sustainable sourcing practice, this indicates not only less recognition, but also possible lack of awareness. In terms of knowledge, respondents varied, with 36% indicating knowledge as "Fair", 26% as "Good", 21% as "Poor", and 17% as "Excellent." This indicates not only a mix of knowledge but also a level of misunderstanding. Acampora et al. (2022) recommended these levels of knowledge on sustainability, or lack of, would inhibit stakeholder participation; thus, this finding demonstrates that there is an opportunity for Eko Hotel to enhance awareness and communication regarding less visible efforts such as sustainable sourcing—for improving its environmental reputation.

The study's findings on green practice implementation and barriers partially align with prior research. The 72.3% awareness rate is notable; however, barriers such as high costs (14.9%), a lack of guest awareness (10.6%), insufficient regulations (6.4%), and staff/management resistance (4.3%) reflect challenges identified by Salami et al. (2024) in the Nigerian hospitality sector. This is supported by the interview conducted. Staff indicated that consistent adoption of green habits was difficult, with some employees struggling to see immediate value in sorting waste or switching materials. A mention was also made of the high cost of implementing water recycling systems and the conflict created by persistent reliance on diesel generators.

Effectiveness ratings were moderate (25.5% "Moderately Effective", 23.4% "Very Effective", 23.4% "Neutral"), contrasting with more optimistic perceptions in hotels with green certifications, where Lin et al. (2023) reported stronger guest support due to standardised frameworks. The lower recognition of sustainable sourcing compared to waste reduction differs from Kumar (2021)'s findings, where eco-certified beach clubs saw balanced awareness across practices due to transparent communication.

Green practices were moderately acknowledged as environmentally positive with 59.6% of participants saying they had a positive impact, 27.7% were unsure and 12.8% said they had a negative impact. Participation in green efforts was low, 46.8% reported taking part, 53.2% declined to participate, and 27.7% reported that there was not enough information available about the green practices which may have led to the ambiguity. Respondents were more likely to see renewable energy use (31.9%) and waste reduction (25.5%) as initiatives, demonstrating a preferred visibility in this green practices. This aligns with Mensah (2020) findings that something like linen reuse could increase participation when the information is communicated effectively. Participants relied on distinct sources of information (43% came from the internet/social media, 21% by word of mouth, 11% hotel staff) demonstrating a lack of concerted messaging; Bilderback (2023) acknowledged that unified communication has benefit for guest understanding, Eko Hotel lacks a consistent channel to provide, thus consistent and accessible information on their practices may improve engagement.

The findings have meaningful implications on sustainability and business operations for Eko Hotel. While 46.8% feel that green practices enhance business sustainability and 40.4% believe the reputation of the hotel as the motivating factor for choosing eco-friendly hotels, it is clear that there is business to be gained through green initiatives (Bilderback, 2023). However, 40.4% were uncertain about an increase in pay for green services and 27.7% do not feel that business is impacted by green practices. Nevertheless, the 40.4% uncertainty in paying more for green services, and 27.7% insignificantly perceiving business impacts suggest that the long-term implications of greener alternatives need to be communicated as Yang et al. (2024) endorse. The wide range of suggestions for improvement (e.g., zero-waste policies, green roofs, composting, etc.) and equation a preference for incentives, such as free eco-friendly items (34%), or discounts (27.7%), indicates that the opportunity to engage guests through tailored programmes is very promising. The support for stricter government regulation (44.7%) also supports Okeke's (2021) suggestion that policy support was important, which indicates that Eko Hotel may be convenient to advocate for stronger guidelines and regulations that improve its overall sustainability and marketplace position.

Conclusion

This study investigated the role of green practices in promoting the sustainability of business operations at Eko Hotel, Lagos, with a particular focus on guest awareness, participation, and perceptions. The findings revealed that green practices at Eko Hotel are widely recognized and generally well regarded. Guest awareness was notably high for visible initiatives such as the use of energy-efficient light bulbs and waste reduction measures like waste separation. However, recognition was significantly lower for less visible or abstract initiatives such as sustainable sourcing, indicating a communication gap in conveying the full scope of the hotel's environmental efforts.

The data also highlighted key barriers to maximizing the impact of green practices. High implementation costs and limited guest awareness emerged as the most significant challenges. Despite these constraints, the majority of respondents agreed that green practices contribute positively to environmental protection, and nearly half believed they also enhance business sustainability. Importantly, the research demonstrated that beyond satisfaction with their stay, guest loyalty was positively influenced by perceptions of the hotel's sustainability efforts, underscoring the dual environmental and competitive benefits of green practices.

Respondent suggestions for improving sustainability were diverse, ranging from technical innovations such as energy monitoring systems, smart irrigation, and green roofing to operational strategies like zero-waste policies, composting, and plant-based menus. Regarding motivational incentives, free eco-friendly items (34%) and stay discounts (27.7%) were the most preferred, followed by loyalty points, recognition-based rewards, and other creative incentives.

The findings suggest that Eko Hotel has established a strong foundation in sustainable operations but requires improved communication, increased guest engagement, and strategic cost management to realize the full potential of its green initiatives. By addressing these gaps, the hotel can strengthen its environmental reputation, enhance guest loyalty, and secure a sustainable competitive advantage in the hospitality industry.

Bibliography

1. Abdou, A. H., Hassan, T. H., & Dief, M. M. E. (2020). A Description of Green Hotel Practices and Their Role in Achieving Sustainable Development. *Sustainability*, 12(22), 9624. mdpi. <https://doi.org/10.3390/su12229624>
2. Abdul Basit, S., Behrooz Gharleghi, Khadija Batool, Hassan, S. S., Asghar Afshar Jahanshahi, & Mujde Erdinc Kliem. (2024). Review of Enablers and Barriers of Sustainable Business Practices in SMEs. *Journal of Economy and Technology*, 2. <https://doi.org/10.1016/j.ject.2024.03.005>
3. Abubakar, I. R., Maniruzzaman, K. M., Dano, U. L., AlShihri, F. S., AlShammari, M. S., Ahmed, S. M. S., Al-Gehlani, W. A. G., & Alrawaf, T. I. (2022). Environmental Sustainability Impacts of Solid Waste Management Practices in the Global South. *International Journal of Environmental Research and Public Health*, 19(19), 12717.
4. Acampora, A., Preziosi, M., Lucchetti, M. C., & Merli, R. (2022). The Role of Hotel Environmental Communication and Guests' Environmental Concern in Determining Guests' Behavioral Intentions. *Sustainability*, 14(18), 11638. <https://doi.org/10.3390/su141811638>
5. Adewale, B. A., Babatunde Fatai Ogunbayo, Aigbavboa, C. O., & Ene, V. O. (2024). Evaluation of Green Design Strategies Adopted by Architects for Public Buildings in Nigeria. 24–24. <https://doi.org/10.3390/engproc2024076024>
6. Agrawal, R., Agrawal, S., Samadhiya, A., Kumar, A., Luthra, S., & Jain, V. (2023). Adoption of green finance and green innovation for achieving circularity: An exploratory review and future directions. *Geoscience Frontiers*, 15(4), 101669. <https://doi.org/10.1016/j.gsf.2023.101669>
7. Alhudaithi, M., Arregui, F. J., & Cobacho, R. (2022). Proposal of a Water Consumption Efficiency Indicator for the Hotel Sector. *Water*, 14(23), 3828. <https://doi.org/10.3390/w14233828>

8. Ali, B. M., & Akkaş, M. (2024). The Green Cooling Factor: Eco-Innovative Heating, Ventilation, and Air Conditioning Solutions in Building Design. *Applied Sciences*, 14(1), 195. <https://doi.org/10.3390/app14010195>
9. Ali, M., Munala, G., Muhoro, T., Shikuku, J., Nyakundi, V., & Gremley, A. (2020). Water Usage Patterns and Water Saving Devices in Households: A Case of Eastleigh, Nairobi. *Journal of Water Resource and Protection*, 12(04), 303–315. <https://doi.org/10.4236/jwarp.2020.124018>
10. Alreahi, M., Bujdosó, Z., Dávid, L. D., & Gyenge, B. (2023). Green Supply Chain Management in Hotel Industry: A Systematic Review. *Sustainability*, 15(7), 5622. <https://doi.org/10.3390/su15075622>
11. Andriane, D., Martins, T., & J. Milograna. (2023). Integrated systems for rainwater harvesting and greywater reuse: a systematic review of urban water management strategies. *Water Science & Technology: Water Supply*. <https://doi.org/10.2166/ws.2023.240>
12. Antón, R., & Almeida, A. (2019). The Circular Economy Strategy in Hospitality: A Multicase Approach. *Sustainability*, 11(20), 5665. <https://doi.org/10.3390/su11205665>
13. Awa, H. O., Etim, W., & Ogbonda, E. (2024). Stakeholders, Stakeholder Theory and Corporate Social Responsibility (CSR). *International Journal of Corporate Social Responsibility*, 9(1). <https://jcsr.springeropen.com/articles/10.1186/s40991-024-00094-y>
14. Baena, V., & Cerviño, J. (2024). Tourism in the Era of Social Responsibility and Sustainability: Understanding International Tourists' Destination Choices. *Sustainability*, 16(19), 8509. <https://doi.org/10.3390/su16198509>
15. Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2022). Impact of Tourism Development upon Environmental sustainability: a Suggested Framework for Sustainable Ecotourism. *Environmental Science and Pollution Research*, 30(3), 5917–5930. NCBI. <https://doi.org/10.1007/s11356-022-22496-w>

16. Bilderback, S. (2023). Integrating Training for Organizational sustainability: the Application of Sustainable Development Goals Globally. *European Journal of Training and Development*, 48(7/8), 730–748.
17. Calisto, M. de L., Umbelino, J., Gonçalves, A., & Viegas, C. (2021). Environmental Sustainability Strategies for Smaller Companies in the Hotel Industry: Doing the Right Thing or Doing Things Right? *Sustainability*, 13(18), 10380. <https://doi.org/10.3390/su131810380>
18. Carlisle, S., Ivanov, S., Dijkmans, C., & Marco-Lajara, B. (2022). Environmental Skills Gaps in Tourism and Hospitality Organisations. *Tourism*, 70(3), 411–431. <https://doi.org/10.37741/t.70.3.6>
19. Chagoury, G. (2024). Eko Hotel. Itbng.com. <https://www.itbng.com/eko-hotel-sustainable-energy-solutions>
20. Chikezie, J., Adedeji, E. O., Onihunwa, J. O., Meduna, P. N., & Joshua, D. A. (2023). Waste Management Practices and Operational Performance of Hotels in Lagos State, Nigeria. *Journal of Applied Sciences and Environmental Management*, 27(4), 781–785. <https://doi.org/10.4314/jasem.v27i4.20>
21. Clark, Q. M., Disha Basavaraja Kanavikar, Clark, J., & Donnelly, P. J. (2025). Exploring the potential of AI-driven food waste management strategies used in the hospitality industry for application in household settings. *Frontiers in Artificial Intelligence*, 7. <https://doi.org/10.3389/frai.2024.1429477>
22. Ezeudu, O. B., Tenebe, I. T., & Ujah, C. O. (2024). Status of Production, Consumption, and End-of-Life Waste Management of Plastic and Plastic Products in Nigeria: Prospects for Circular Plastics Economy. *Sustainability*, 16(18), 7900–7900. <https://doi.org/10.3390/su16187900>
23. Fagbolu, O., Oluwafemi Jacob Orimaye, Ayoola, A. C., Ajudua, E. I., & Omotoba, N. I. (2022). Tourism and Hospitality Industry: Implications on National Development in Nigeria. 6(2), 85–99.

24. Filimonau, V., & Tochukwu, C. O. (2020). Exploring managerial approaches to mitigating solid waste in hotels of Lagos, Nigeria. *Journal of Cleaner Production*, 270, 122410. <https://doi.org/10.1016/j.jclepro.2020.122410>
25. Folorunso, O. S. and Abubakar, M. I. (2024). Technological Innovations in the Hospitality Industry and Its Impact on the Customer's Decision Making. *Journal of Management and Social Science Research*, 5(3), 51-63.
26. Folorunso, O. S., Bashiru, A. A., Akerele, E. E., Oyedun, M. A., Solihu, A. O., & Arazu, C. G. (2026). Making Sustainable Development Goals Work for People in Africa: A Tourism Perspective. *ECOSIGHT*, 1(1), 36-47.
27. Folorunso, O. S., Osadare, O. O., Akerele, E. E., and Bashiru, A. A. (2026). Prospects and Challenges of Contactless Service Adoption at Eko Hotel & Suites, Lagos, Nigeria. *International Journal of Home Economics, Hospitality and Allied Research*, 5(1), 28-43.
28. Ganandran, G. S. B., Mahlia, T. M. I., Ong, H. C., Rismanchi, B., & Chong, W. T. (2014). Cost-Benefit Analysis and Emission Reduction of Energy Efficient Lighting at the Universiti Tenaga Nasional. *The Scientific World Journal*, 2014, 1–11. <https://doi.org/10.1155/2014/745894>
29. Ghimire, B. T., Muneenam, U., & Techato, K. (2023). Renewable Energy Use in Green Hotels for Sustainability: A Systematic Review. *ProQuest*, 13(6), 618–627. <https://doi.org/10.32479/ijeep.14521>
30. Guo, Y., Xia, X., Zhang, S., & Zhang, D. (2018). Environmental Regulation, Government R&D Funding and Green Technology Innovation: Evidence from China Provincial Data. *Sustainability*, 10(4), 940. <https://doi.org/10.3390/su10040940>
31. Habib, Md. A., Karim, Md. R., Dulal, M., & Munir, M. S. (2022). Impact of Institutional Pressure on Cleaner Production and Sustainable Firm Performance. *Sustainability*, 14(24), 16748. <https://doi.org/10.3390/su142416748>
32. Hall, C., Dayal, N., Majstorović, D., Mills, H., Paul-Andrews, L., Wallace, C., & Truong, V. (2016). Accommodation Consumers and Providers' Attitudes,

- Behaviours and Practices for Sustainability: A Systematic Review. *Sustainability*, 8(7), 625. <https://doi.org/10.3390/su8070625>
33. Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: a review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, 29(7), 1–22. <https://www.tandfonline.com/doi/full/10.1080/09669582.2021.1903019>
 34. Han, H., Hsu, L.-T. J., Lee, J.-S., & Sheu, C. (2011). Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. *International Journal of Hospitality Management*, 30(2), 345–355. <https://doi.org/10.1016/j.ijhm.2010.07.008>
 35. Hou, H. (Cynthia), & Wu, H. (2020). Tourists' perceptions of green building design and their intention of staying in green hotel. *Tourism and Hospitality Research*, 21(1), 146735842096337.
 36. Imaah, amp;, Egbujie, K., & Ugochukwu. (2023). Implementing Green Building Strategies In The Design Of A 5 Star Hotel. <https://www.seahipublications.org/wp-content/uploads/2023/11/IJIESR-D-3-2023.pdf>
 37. Kaithlin, J. (2024). Green Certification and Its Impact on Hotel Marketability and Profitability. *Journal of Modern Hospitality*, 3(2), 39–51. <https://doi.org/10.47941/jmh.1959>
 38. Kassim, M. A. (2023, January 20). Environmental Sustainability Practices in Hotels: From Attitudes to Implementation Case of Resort Hotels in Bishoftu, Ethiopia. *Www.intechopen.com; IntechOpen*. <https://www.intechopen.com/chapters/85756>
 39. Khan, A. J., Ul Hameed, W., Iqbal, J., Shah, A. A., Tariq, M. A. U. R., & Ahmed, S. (2022). Adoption of Sustainability Innovations and Environmental Opinion Leadership: A Way to Foster Environmental Sustainability through Diffusion of Innovation Theory. *Sustainability*, 14(21), 14547. <https://doi.org/10.3390/su142114547>

40. Khatter, A. (2023). Challenges and Solutions for Environmental Sustainability in the Hospitality Sector. *Sustainability*, 15(15), 11491–11491. <https://doi.org/10.3390/su151511491>
41. Kholijah, S. (2024). Analysis of Economic and Environmental Benefits of Green Business Practices in the Hospitality and Tourism Sector. *Involvement International Journal of Business*, 1(1), 60–74. <https://doi.org/10.62569/ijb.v1i1.7>
42. Kim, A., Kim, K. P., & Nguyen, T. H. D. (2021). The Green Accommodation Management Practices: The Role of Environmentally Responsible Tourist Markets in Understanding Tourists' Pro-Environmental Behaviour. *Sustainability*, 13(4), 2326. <https://doi.org/10.3390/su13042326>
43. Kruesi, M. A., & Remy, D. (2024). Green is the New Black in the Hotel Industry: Optimizing Revenue Through Promoting Sustainability. *Journal of Hospitality & Tourism Cases*. <https://doi.org/10.1177/21649987241270463>
44. Kumar, C. R., & Majid, M. A. (2020). Renewable Energy for Sustainable Development in India: Current status, Future prospects, challenges, employment, and Investment Opportunities. *Energy, Sustainability and Society*, 10(1). <https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-019-0232-1>
45. Kumar, R. (2021). Impacts of Plastic Pollution on Ecosystem Services, Sustainable Development Goals, and Need to Focus on Circular Economy and Policy Interventions. *Sustainability*, 13(17), 9963. mdpi.
46. Nygaard, A. (2023). Is sustainable certification's ability to combat greenwashing trustworthy? *Frontiers in Sustainability*, 4. <https://doi.org/10.3389/frsus.2023.1188069>
47. Ogunkah, I., & Yang, J. (2012). Investigating Factors Affecting Material Selection: The Impacts on Green Vernacular Building Materials in the Design-Decision Making Process. *Buildings*, 2(1), 1–32. <https://doi.org/10.3390/buildings2010001>
48. Okeke, A. (2021). Towards sustainability in the global oil and gas industry: Identifying where the emphasis lies. *Environmental and Sustainability Indicators*,

- 12(100145), 100145. Sciencedirect.
<https://www.sciencedirect.com/science/article/pii/S2665972721000465>
49. Olawade, D. B., Fapohunda, O., Wada, O. Z., Usman, S. O., Ige, A. O., Ajisafe, O., & Oladapo, B. I. (2024). Smart waste management: A paradigm shift enabled by artificial intelligence. *Waste Management Bulletin*, 2(2).
<https://doi.org/10.1016/j.wmb.2024.05.001>
50. Olya, H., Altinay, L., Farmaki, A., Keneybayeva, A., & Gursay, D. (2020). Hotels' sustainability practices and guests' familiarity, attitudes and behaviours. *Journal of Sustainable Tourism*, 29(7), 1–19.
51. Wang, M., Liao, G., & Li, Y. (2021). The Relationship between Environmental Regulation, Pollution and Corporate Environmental Responsibility. *International Journal of Environmental Research and Public Health*, 18(15), 8018.
<https://doi.org/10.3390/ijerph18158018>
52. Wu, Y., & Tham, J. (2023). The impact of environmental regulation, Environment, Social and Government Performance, and technological innovation on enterprise resilience under a green recovery. *Heliyon*, 9(10), e20278–e20278.
<https://doi.org/10.1016/j.heliyon.2023.e20278>
53. Yang, J., Reza, M. N. H., Al Mamun, A., Masud, M. M., & Rahman, M. R. C. A. (2024). Predicting guest satisfaction and willingness to pay premium prices for green hotels. *Humanities and Social Sciences Communications*, 11(1).
<https://doi.org/10.1057/s41599-024-04024-y>
54. Zhang, L., Xu, M., Chen, H., Li, Y., & Chen, S. (2022). Globalization, Green Economy and Environmental Challenges: State of the Art Review for Practical Implications. *Frontiers in Environmental Science*, 10(1).
<https://doi.org/10.3389/fenvs.2022.870271>
55. Zhang, S., Ocłóń, P., Klemes, J. J., Michorczyk, P., Pielichowska, K., & Pielichowski, K. (2022). Renewable energy systems for building heating, cooling and electricity production with thermal energy storage. *Renewable and Sustainable Energy Reviews*, 165, 112560. <https://doi.org/10.1016/j.rser.2022.112560>