



GLOBAL ENVIRONMENTAL SUSTAINABILITY POLICIES AND PRACTICES IN HOTELS: IMPLICATION FOR NIGERIA

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Article history:		Abstract:
Received:	20 th January 2024	The hospitality industry is considered to have relatively lower environmental footprint than other sectors. Hotels have however being identified as the most significant contributor to environmental degradation, pollution and climate change, due to the use of acute amount of water and energy; and while at this emit huge amounts of greenhouse gases. Numerous studies has been conducted on environmentally sustainable policies and practices (ESPPs) at the global scene; however, there hardly exists a compendium of information of their findings. This study provides a systematic review of 20 scholarly articles on ESPPs globally. More so, a website analysis of 10 most prominent hotels in Nigeria was carried out. The review revealed that ESPPs in global hotels are in seven main categories namely energy efficiency, waste management, water efficiency, staff training, environmental awareness, eco-certifications, and offering of eco products. There is a variation in the adoption of ESPPs, with more prominence amongst chain hotels than independent ones. The most important factors influencing adoption of ESPPs include owners and shareholders' interests, staff education/training and government regulations. ESPPs in hotels has the capacity of reducing operational costs while enhancing technical efficiencies; and beyond this can facilitate enhancing green satisfaction, willingness to pay a premium, loyalty and brand equity. The website analysis shows that none of the hotels included their ESPPs, suggesting low priority and perceived importance. Based on this, the adoption of ESPPs and rightly communicating this to the public is strongly advised within the Nigerian hotel industry' and beyond this in other tourism and hospitality ventures.
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INTRODUCTION

Environmental sustainability has garnered immense attention of nations, governments, industries and the public in recent times. The term, which is one of the three fundamental framework of sustainability or sustainable development, others being social and economic sustainability. Some of such reasons for enhanced popularity is connected to the seemingly unrepentant issues of climate change, pollution, and environmental degradation. It has been demonstrated extensively in literature that the consumption of natural resources has been negatively impacted upon by economic development (Khatter et al., 2019; Gryshchenko et al., 2022; Ibragimo et al., 2021). Notably, the hospitality industry is considered to have relatively lower environmental footprint than other sectors within the larger tourism industry such as aviation. The most significant contributor to environmental degradation within the industry is however the hotel sector (Abdou et al., 2022). Hotels engage the use of acute amount of water and energy; and while at this emit huge amounts of greenhouse gases (Salama et al., 2021). In developing nations like Nigeria where most hotels are powered by generators; the impact becomes more comprehensive.

The implementation of environmental sustainability policies and practices within the hospitality industry is relatively a new and emerging activity. Interestingly, this has been attracting the attention of practitioners and scholars globally (Abdou et al., 2022). Kim et al (2012) argued that ESPPs represents measures that are engaged by hotels in meeting their environmental management goals. As policies, they refer to goal statements that are developed by firms, and

appropriately documented and communicated to stakeholders; while practices are the actual measures that are deployed within the organization. Beyond this, the perspectives of customers are changing towards being green; and is greatly influencing the types of services that they demand for in hotels. Some visitors even seek lodging and affiliated services in eco-friendly hotels, otherwise known as green hotels, or hotels that have publicly declared the environmental responsibility strategies (Horng et al., 2017; Nilashi et al., 2019). Such action would usually include adopting initiatives which reduces wastes, save water and enhance energy efficiency which are actions that are environmentally friendly; and beyond this reducing the operational costs of the hotels. There is therefore more or less pressure on hotels in adopting ESPPs which can satisfy the needs and perspectives of the customers (Moise et al., 2021) and communicating such to the public through various means, and especially on their websites and social media spaces. When such needs are met, it has a high likelihood of leading to customers' loyalty and various post-purchase behavioural intentions (Yusif et al., 20107; Al Haibusi et al., 2020, 19, 20); and overall contributing to the competitiveness of the hotel brand.

Numerous studies has been conducted on environmentally sustainable policies and practices (ESPPs) at the global scene; however this is not so much the case in Nigeria. Also, despite the enormous studies that has been carried out at the global scene; there hardly exists a compendium of information of their findings. This study provides a systematic review of scholarly articles on ESPPs globally, representing one of the few attempts to do this; while drawing out implications for Nigeria. Specifically, the objectives are to:

- identify key environmental sustainability policies and practices in hotels globally
- appraise the factors influencing the adoption of ESPPs
- determine whether or not variation exists in the adoption of ESPPs across hotels
- assess the impacts of ESPPs on guest behavioural intention, and hotel performance

LITERATURE REVIEW

Sustainability concept in the hotel industry

Sustainability: This is the careful use of resources so as to avoid the depletion or damage to resources. Sustainability is about meeting of the present generation needs without compromising the ability of future generations to satisfy their own need (Grant 2020; Brundtland, 1987). Elkington (2004) posit that true sustainability rest on the Triple Bottom Line (TBL) and can only be achieved when a balanced approach towards environmental, social and economic progress is adopted. Wirtenberg (2012) defined "triple bottom line" approach to integrating people, planet, and profits into all management actions or decisions. Sustainability plays an important role in the hospitality industry, it is concerned with human consumption as it relates to our carbon footprint, whether it be food, construction of buildings, transportation of employees and guests to and from the facility, or water usage plus depletion, all of which come into play before, during, and after the existence of the hotel business (Burton, 2019).

The environmental pillar refers to the ecological action taken with regards to planet earth. Hotels carries out several actions that concern the planet and are linked with other pillars of sustainability; economical (money) pillar and social (people) pillar. Environmental sustainability refers to "meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them, and more specifically, as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity (Morelli, 2011).

Environmentally Sustainable Practices (ESPs) in the Hotel Industry

Given the increased concerns about climate change and environmental degradation, the imperative for industries especially the hotel industry to implement environmentally sustainable practices (ESPs) have been urgent (Khatte et al., 2019). ESPs have been identified as essential measures designed to enable organizations to attain environmental management goals; they are implemented to by entities to help maintain the qualities of natural resources utilization during business operations (Kraft, 2017; Giordino and Crocco, 2022). Rahman et al., (2012) refers to such measures as green practices, which are value added business strategies of benefits hospitality that engages environmental protection initiatives. ESPs are mainly focused on energy conservation, water conservation, waste management and reduction (Yu et al., 2017). Also included in ESPs is by hoteliers is green purchasing (i.e., purchase of green and locally produced items), environmentally responsible sourcing, green construction, indoor air quality, green transportation, and noise control (Moise, 2021).

Environmental sustainability in Nigerian Hotels

Kukoyi and Ezenagu (2013) examined the activities of soarak hotel and casino Lagos towards environmental sustainability, the study identified the impact of the hotel on its immediate environment. It was revealed that the hotel contributed negatively to the environment through its practices. Nwokorie and Obiora (2018) examined the impact of the activities of hotels in the Ilaro area of Ogun State, Nigeria, as they affect the environment and well-being of the local people through their daily business operations including sustainable maintenance of local infrastructure, source of energy supply (and usage), water and sanitation management, source of (food) raw materials, food production mechanism, waste and sewage disposal, as well as their level of involvement in community development in the area of operation. The results showed that hotels in the area have not embraced sustainable development practices in the host community.

Viachaslau and Tochukwu (2020) examined managerial approaches to mitigating solid wastes in hotels in Lagos Nigeria, so as to establish the approaches to managing solid waste and evaluate their effectiveness. The results revealed that

Lagos hotels do very little to mitigate solid waste generation, and recommends it is necessary to raise environmental commitment of managers and improve environmental awareness of guests and staff. Idoko and Kasim (2019) examined the environmentally friendly practices towards biodiversity conservation by transnational hotels in Lagos, Nigeria. The result revealed that only three hotels practice biodiversity conservation. Mu'azu et al., (2014) examined environmental proactiveness of hotels in Nigeria; it empirically examined the factors with major influence on the adoption of environmental management practices in Nigerian hotels. The study revealed that energy management practices involving the use of energy saving equipment as hotels most the common practice towards environmental management, and there positive and significant relationship between the green practice constructs and adoption of green practices. The empirical review shows that there are few studies on environmental sustainability of hotels in the Nigerian hospitality sector, while most of these studies have established the negative impacts of hotel practices on the environment calling for the need for policies and incentive supports that promotes environmental sustainability. There is the need to examine current environmental sustainability practices globally, and provide recommendations for hotels in Nigeria.

METHODOLOGY

The PRISMA approach is engaged in reporting the findings of this systematic review on EPPs in the hotel industry. To establish the relevance of the findings within the Nigerian context, a website analysis of the top 10 hotels in Nigeria (as ranked by) was carried out.

Search strategy

A preliminary search was first carried out on Google Scholar for the purpose of examining the range of evidences that exists on the subject matter; and also to generate the likely search terms that would be employed. Three online databases were focused on in searching for items; this include Scopus, Science Direct and Google Scholar. The choice of these databases was based on their relevance in obtaining scientific articles, especially in the case of the first two; while the latter is a more encompassing database, not limited to specific discipline. The key search terms include 'environmental sustainability' or 'environmental management' or 'environmental sustainable practices' or 'environmental sustainable policies' or 'environmental sustainable actions' and 'hotels' or 'hospitality'. This was operationalized using the Boolean operators of 'and' and 'or'. All searches were carried out in a one month period in September 2023.

Inclusion/exclusion criteria

While using the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type; and Population, Intervention) approach (Methley et al., 2014), various features were used in defining the articles that are included or excluded in the study. With respect to sample, the focus is on global studies; hence studies which has been carried out in any country meets the criteria of inclusion. On the other hand, given that the researchers are more English language proficient; studies that were not carried out or reported in English Language were excluded. The phenomenon of interest is environmental sustainability practices and policies in hotels; hence studies on this were being restricted to. Studies which were conducted on other arms of sustainability; and also those in other sectors within the tourism and hospitality industry were not included. As regards design and evaluation, studies that engaged quantitative and/or qualitative research approaches were included; while excluding systematic reviews like this study. The research type that were included in study were peer-reviewed. Articles that were not peer-reviewed were excluded; while focusing on articles that were published between 2013 and 2023.

Table 1: Inclusion and exclusion criteria

	Inclusion	Exclusion
Sample	Global studies written in English	Studies written in other languages
Phenomenon of interest	Environmental sustainability policies and practices in hotels	Other sustainability types; and studies in other sectors in the tourism and hospitality industry
Design	Primary research: Quantitative & Qualitative Secondary research: studies which used secondary data, but not systematic reviews	Systematic review
Evaluation	Quantitative and qualitative analysis on the phenomenon of interest	Systematic analysis
Research type	Peer reviewed studies	Non-peer reviewed studies
	Journal articles	Conference proceedings Book and book chapters Editorials Study protocols
	Within 2013 to 2023	Studies outside the time frame
	Cross-sectional	longitudinal

Studies selection

The first generic search on google scholar yielded 23900 articles. More defined searches on the three databases provided a total of 6826 articles. First, duplicates were removed. This led to 3011 articles. After the application of the inclusion and exclusion criteria; only 20 articles were included for final analysis.

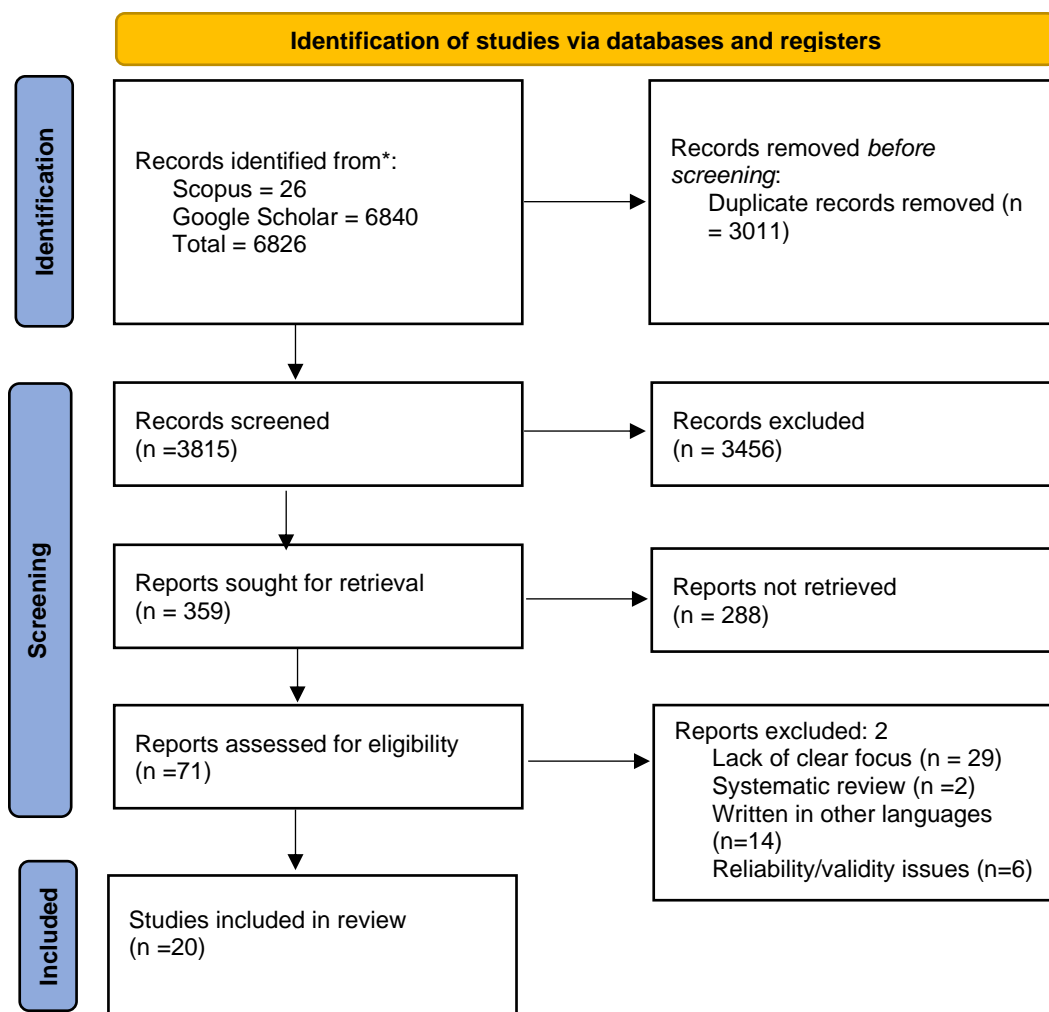


Figure 3.1: Prisma flow chart

Data extraction and quality assessment

The data was extracted following a proforma which was designed to collect details about the articles in six major categories (Table 2). One critical aspect that must be considered in included is in terms of the validity and reliability of the studies that are included (Tawfik et al., 2019). This is because, any level of bias introduced by these studies, would compromise the integrity of the systematic review. It was seen that all the studies followed standard validity and reliability procedures.

Data synthesis and analysis

Textual analysis was largely engaged in appraising the content of the studies and synthesizing them. According to Haneem et al (2017), this involves the presentation of the results of the results in the context in which they have been

carried out, and reporting their areas of concordance or otherwise. Further from this, basic descriptive statistical analysis was carried out in presenting the outcomes on charts and figure.

Website analysis

The website appraisal of 10 most prominent hotels in Nigeria was carried out to examine whether or not they have policy statements and practices that are on environmental sustainability.

RESULTS

Description of studies

The studies were carried out in 13 nations namely Egypt (n=3), United Arab Emirates (UAE) (n=2), India (n=2), Australia (n=2), Spain (n=2), Portugal (n=2), Catalonia (n=1), South Africa (n=1), Zimbabwe (n=1), Cyprus (n=1), Sri Lanka (n=1), Italy (n=1), Turkey (n=1), and Malaysia (n=1). More studies focused on 4 and/or 5 star hotels (n=10); while others (n =7) were on general hotel types without specification of the types. The main methodological approach employed by most studies was quantitative (n =14), while others either engaged qualitative or mixed method or qualitative approach. The main instrument used was the questionnaire while the most favoured analytical tool was SEM. Qualitative studies engaged mostly the use of interviews, while analysis was carried out using the thematic analysis. The sample audience for the study were either the employees of the hotels or the guests.

Table 2: Description of studies and summary of findings

Author	Country	Focus of study	Type of hotel	Methodological Approach	Participants , recruitment & sampling methodology	Data Analysis	Results
Rosalind Jenkins and Karankiola (2014)	UAE	Communication of environmental policies and practices by hotels	4 and 5 star hotels	Qualitative	Website analysis	Content analysis	Cheapest and easiest to implement practices were adopted Chain/corporate hotels provide more environmental reporting than independent hotels
Bagur-Femenias et al (2016)	Catalonia	Adoption of EP in small hotels	Small hotels	Quantitative	Questionnaire 210 hotel managers	SEM	Voluntary commitment to ES enhances better outcomes than others
Mbasera et al (2016)	South Africa Zimbabwe	ESPS in hotels and contributions towards minimizing negative environmental impacts	Various hotel types	Qualitative	8 hotels	Thematic analysis	No formal ES policies exists, however some engage in ES practices Despite awareness of some hotel managers about green management initiatives, there is no implementation of it
Alameeri et al (2018)	UAE	Sustainable management practices	4 and 5 star hotels	Quantitative	Questionnaire		Employee and government management are the main factors under the major criteria Education and training, customer culture and policy requirements are the predominant sub-factors Prioritization of economic sustainability

							over social and environmental sustainability
Alipour et al (2019)	Cyprus	Employees perspectives on sustainable practices	4 and 5 star	Quantitative	287 Questionnaire Eight 4 and 5 star hotel in Mediterranean island	SEM	Employees are legitimate and credible source of information about sustainability practices. It is also revealed that as going green is becoming a means toward branding, hotels are making efforts to implement a genuine sustainability practice. Study also indicated that the majority of employees validated the sustainability practices as genuine.
Khatter et al (2019)	Australia	Hotels ES policies and practices and corporate social responsibility	Various hotel types	Mixed method	Secondary data: 220 hotels Website analysis Physical assessment within premises	Content analysis	While ESPPs are common practices; more visible activities are seen within the chain hotels
Kularatne et al. (2019)	Sri Lanka	Impact of ESP on hotel efficiency	Various hotel types	Quantitative	Secondary data (2010-2014)	Data development analysis	Technical efficiency ranged from 46.8% to 71.5%, with a mean of 61%. ESP enhanced hotel efficiency especially in aspects of waste management and energy efficiency
Merli et al (2019)	Italy	Reasons why hotels should go green	Various hotel types	Quantitative	Quantitative: Questionnaire 325 guests in 10 hotels	SEM	Customers recognize the environmental commitment of green hotels and serve to enhance their

							dissatisfaction and loyalty. There is also a higher tendency of developing specific loyalties to the implementation of green practices by the hotel.
Moise et al (2019)	Spain	Impact of EP on brand equity, satisfaction and word of mouth	3 and 4 star hotels	Quantitative	Questionnaire 378 guests: 3 and 4 star hotels	SEM	Positive relationships was established between the variables.
Preziosi et al (2019)	Portugal	Impact of environmental practices and communication on customers loyalty	4 star hotel	Mixed method	2 hotels Interview: 5 hotel managers Questionnaire : 152 quests	Partial Least Square Structural Equation Modelling (PLS-SEM)	Environmental behaviour of guests has impact on their loyalty and perception of communication about environmental initiatives. Perception of environmental communication has impact on perception of environmental practices in the hotels Perception of hotels environmental practices influences guest loyalty
Abdou et al (2020)	Egypt	Green hotel practices and SDGs	4 and 5 star	Quantitative	48 staff Four and five star hotels Questionnaire	t-test	Implementation of green hotel practices in the certified four and five Green Star hotels surveyed contributed positively to achieving SDG 6, SDG 12, SDG 7 and SDG 13, respectively. The main driver of the

							adoption of Green Star criteria was the hotels' commitment to environmental sustainability. The findings also indicated that, overall, there were statistically significant differences between four and five Green Star hotels in all SDGs addressed.
Cop et al (2020)	Turkey	Perceived behavioral control as a mediator of hotels' green training, environmental commitment, and organizational citizenship behavior: A sustainable environmental practice	4 and 5 star hotels	Quantitative	306 employees: 4 and 5 star hotels	SEM	Green training enhances commitment to environment and organization behaviour. The relationship is mediated fully by perceived behavioral control
Gonzalez-Rodriguez et al (2020)	Spain	Factors influencing willingness of customers to pay premium in environmentally friendly hotel	4 star hotel	Quantitative	Questionnaire 454 guests	SEM	Customers' environmental concerns have a greater explanatory value on their willingness to pay a price premium than do their perceptions of the hotels' environmental practices.
Tiwari and Thakur (2020)	India	ES through adoption of sustainability innovations	Various hotel types	Quantitative	Questionnaire 120 hotels managers	ANOVA, correlation and regression	Adoption of ESP is driven chiefly by environmental opinion of the leaders
Nisar et al (2021)	Malaysia	Green HRM and environmental performance	Various hotel types	Quantitative	Questionnaire 374 employees	PLS SEM	Green training and development is a key practice

							to build intellectual capital and foster pro-environmental behaviors.
Khatte et al (2021)	Australia	Barriers and drivers of environmental sustainability	Various hotel types	Qualitative	Hotel manager Interview	Thematic analysis	Barriers: views and imperatives of hotel owners and stakeholder, availability of resources, financial challenges, time Drivers: guest preferences, owner and shareholder interests, and financial factors
Pereira et al (2021)	Portugal	Sustainability practices in luxury hotel	Luxury hotel (5 star)	Qualitative	Interview	Thematic analysis	Environmental practices that address energy efficiency measures that reduce water consumption, waste, and carbon emissions and that control, protect, and maintain fauna and flora to promote of unique natural landscapes. This has led to reduction in operational costs
Shanti and Joshi (2022)	India	Impact of ESP on hotel brand equity	Green hotels	Quantitative	Questionnaire : 400 customers	PLS-SEM`	Green brand image of hotels, green brand awareness and green perceived value enhances hotel green brand equity
Abdou et al (2022a)	Egypt	Effect of ESPs on customer	Eco-hotels	Quantitative	12 five star eco-friendly hotels	SEM	ESPS leads to customer citizenship

		citizenship behaviour	(five star)		374 guests		behaviour (such as providing feedback, helping others, tolerance and green advocacy) and green perceived value. GPV partially mediates relationship between ESP and CCB
Abdou et al (2022b)	Egypt	Nexus of ESP, green satisfaction and CCB from a social exchange theory perspective	Five star	Quantitative	12 five star eco-friendly hotels 374 guests	SEM	ESPS leads to customer citizenship behaviour (such as providing feedback, helping others, tolerance and green advocacy) and green satisfaction. The latter partially mediates relationship between ESP and CCB

KEY ESPPS OF HOTELS

Eight studies identified the various ESPPs in their study hotels (Table 3). The evidences revealed that ESPPs in hotels are seven main categories. This include eco-certifications (Peziosi et al., 2019), waste management (Kularatne et al., 2021; Pereira et al., 2021), energy efficiency (Kularatne et al., 2021; Pereira et al., 2021), water efficiency (Pereira et al., 2021); staff training (Alameeri et al., 2018; Abdou et al., 2022; Cop et al., 2020), offering of eco-friendly products (Merli et al., 2019), and environmental awareness (Khattar et al., 2019; Pereira et al., 2021; Abdou et al., 2022). More studies show that energy efficiency and waste managements have been largely incorporated in the hotels.

Eco-certifications: this entails the hotel obtaining permits or labels which shows that they are environmentally sustainable. One of such certification is the eco-label. It was observed that most studies that identified this, were those who appraised the four or five star hotels; or green hotels. This badge communicates to the public that the hotel are engaging in practices that protect environmental integrity.

Waste management: this involves all actions that concerns waste reduction, re-use and re-cycling within the. Examples include the separation of wastes using labelled/coloured bins (Abdou et al., 2022), provision of soaps and shampoo dispensers instead of individual bottles (Abdou et al., 2022), boycotting of single use plastics (Merli et al., 2019), use of environmentally certified products like paper and toiletries (Merli et al., 2019) which are biodegradable.

Water efficiency: this are practices that aids reduced usage or re-use of water. Such include the use of water saving showerheads, low-flow toilets and infrared activated faucets (Pereira et al., 2021; Abdou et al., 2022), adoption of linen/towels programs where they are washed upon request, or after as against daily changing of linen and towels, water consumption reduction: heating of water with thermodynamic solar panels (Pereira et al., 2021), covering of pools when not in use (Pereira et al., 2021),

Energy efficiency: these are practices which aids in reducing the consumption of energy within the hotels; and investment in alternative sources of energy. Examples include the use of energy efficient light bulbs and appliances in rooms and public areas; use of motion sensors in low traffic areas for automatic turning off of light; use of renewable energy sources like wind and solar

Environmental awareness: this covers the provision of knowledge to guests; encouragement of guest to be friendly (Abdou et al., 2022), creating of specific action plan such as using posters, signs and symbols in communicating knowledge.

Offering eco-friendly products: such products can include offering organic food (Abdou et al., 2022), and use/provision of bicycles for free (Merli et al., 2019).

Staff training: this involves providing awareness and training programs for staff about environmental sustainability. In some studies, a more encompassing world like green human resources management is used; which evolved beyond training and development.

Table 3: Key environmental sustainability policies and practices themes in hotels

	Eco-certifications	Waste management	Energy efficiency	Water efficiency	Environmental awareness	Staff training	Offering eco-friendly products
Alameeri et al. (2018)						+	
Khatter et al (2019)		+	+	+	+		
Kularatne et al (2019)		+	+				
Merli et al (2019)		+					+
Preziosi et al (2019)	+						
Pereira et al (2021)		+	+	+	+		
Abdou et al (2022)			+	+	+	+	+
Cop et al (2020)						+	
N	1	4	4	3	3	3	2

Factors influencing adoption of ESPPs

The evidences (n=7) available revealed that employee education (Alipour et al., 2019) and training (Alameeri et al., 2018; Cop et al., 2020), government regulations (such as policy requirements) (Alameeri et al., 2018), guest preferences (Khatter et al., 2021), owner and shareholder interests (Abdou et al., 2020; Tiwari and Thakur, 2020; Khatter et al., 2021), and financial capability (Khatter et al., 2021) constitute the factors influencing the adoption of ESPPs in hotels. On the other hand are the barriers to the adoption of ESPPs which include views and imperatives of hotel owners and stakeholder, availability of resources, financial challenges, and time (Khatter et al., 2021).

Variation in adoption of ESPPs across hotels

It was shown that the cheapest and easiest to implement practices were adopted (Rosaland Jenkins and Karankiola, 2014) even amongst 4 and 5 star hotels. Most hotels do not have ES policies but engage in ES practices (Mbasera et al., 2016). This study was within two African contexts namely South Africa and Zimbabwe. In other cases, evidences shows that while ESPPs are common practices; more visible activities are seen within the chain hotels (Rosaland Jenkins and Karankiola, 2014; Khatter et al., 2019). One study (Bagur-Femenias et al., 2016) emphasized that voluntary commitment to ES amongst hotels enhances better outcomes than others. This was within small hotels context. Hence, hotels which adopt ESPs willingly rather than being forced such as within governmental regulations generated better outcomes.

Impact of ESPPs on guests’ behavioural intention

Evidences suggest that ESPs in hotels enhances green satisfaction (Merli et al., 2019; Moise et al., 2019; Abdou et al., 2022b), and can influence the willingness to pay a premium (Gonzalez-Rodriguez *et al.*, 2020). It was also revealed that the perception of environmental communication has impact on perception of environmental practices in the hotels (Preziosi et al., 2019); and also that the perception of hotels environmental practices influences guest loyalty such as word-of mouth recommendation (Moise et al., 2019; Preziosi et al., 2019), and revisit intention (Preziosi et al., 2019; Merli et al., 2019) as well as enhances brand equity (Alipour et al., 2019; Moise et al., 2019; Shanti and Joshi, 2022). In other words, hotels which communicate their ESPPs and are seen to practice it evidently are at better chance of

increasing their customers' loyalty and income generation. Specifically one study (Merli et al., 2019) contextualized the type of loyalty. Notably, it was revealed that guests have higher tendency of developing specific loyalties to the implementation of green practices by the hotel.

Impact of ESPPs on hotel performance

One evidence (Kularatne et al., 2019) revealed that ESPs enhanced hotel efficiency especially in aspects of waste management and energy efficiency. The mean technical efficiency recorded was 61%. With respect to green training, one study (Cop et al., 2020) demonstrated that this enhances commitment to environment and organization behaviour. The relationship is mediated fully by perceived behavioral control. ESPs especially the ones which reduce water consumption, waste, and carbon emissions led to reduction in operational costs (Pereira et al., 2021). It also help the hotels to contribute positively to achieving SDG 6, SDG 12, SDG 7 and SDG 13, respectively (Abdou et al., 2020).

Impact of ESPPs on guests' behavioural intention towards the environment

It was shown that ESPs leads to customer citizenship behaviour (such as providing feedback, helping others, tolerance and green advocacy), green perceived value (Abdou et al., 2022a; 2022b) and higher environmental concerns (Gonzalez-Rodriguez et al., 2020).

Discussion and Implication

The identification of seven main categories in which ESPPs are centred on globally is first an indication that the hotel industry has come to understand the important role it can play in contributing to environmental conservation. It has been argued that every individual, industry and sector are held accountable and should be able to contribute towards attainment of sustainability goals. The most engaged practices were with respect to energy efficiency and waste management. Energy efficiency would perhaps be a default dimension that the hotel industry would first begin to take action in contributing to environmental sustainability. This is because actions in this area could also lead to a reduction in operational costs. Notably, the hotel sector appears to be one which could not be efficiently run without power supplies; hence achieving energy efficiency would by default be a top priority. Given the high demand and consumption rates of hotel products; issues that borders on waste management would also be an area of priority. This finding aligns with Verma and Chandra (2016) who had noted that hotels utilizes large amount of resources- water, energy, non-durable goods and it contributes significant CO₂ emissions and waste generation on a daily basis

The fact that the websites of the hotels appraised in Nigeria do not indicate any environmentally sustainability policy nor practices does not absolutely mean that any of these ESPPs is not been practiced. Such was also reported in South Africa and Zimbabwe (Mbasera et al., 2016). This may be a question of the priority placed on them; and on the decision of whether or not that aspect of the hotel should be communicated to the public. Beyond advocating that hotels in the country which do not currently engage any of these measures should seek to incorporate this into their programs; it is important to emphasize the need for such to be communicated. If not, then it would be assumed that the industry as it is either not in tandem with global trends; or that they are not contributing to ensuring the environmental arm of the sustainability framework. In this light, further studies would be required to ascertain this.

Of the various factors influencing the adoption of ESPPs, the evidences revealed that owner and shareholder interests was the major factor, as identified in three studies. There is no gainsaying that the perspectives of the owner of an establishment would typically prevail on how the operations of such establishment is carried out. When the owners or shareholders of the hotels are environmentally inclined or aware of the need for ESPPs, this would readily spearhead actions; as every other part of the hotel are more or less drafted in to key into the environmental narrative. Where such is lacking; then it might not be a readily easy task. Another which ranks second is employee training. Staff training. Evidently, stakeholders play critical roles in facilitating the adoption of ESPPs. Involving employees (important stakeholders) via training and information provision is crucial in driving ES. Employees are legitimate and credible source of information about sustainability practices. Other factors namely government regulations, guest preferences, and financial capability even though highlighted in one study each hold great importance in facilitating the adoption of ESPPs. For example, government regulations and guest preferences can force hotels to tune towards adopting ESPPs. In the case of Nigeria, where adoption appears to be quite low, governmental regulations could drive the necessary action, just as the way EIA is required for every developmental project. However, this would be subject to their interest. Financial capabilities lie within the hotel frame; and perhaps would be better advised that implementation should be driven first by the 4 and 5 star hotels with higher revenue turnover. On the other hand, smaller hotels could also adopt the relatively cheaper initiatives. This was reported to be used by small hotels in Bagur-Femenias et al (2016) study. Interesting, Rosaland Jenkins and Karankiola (2014) noted that it was the cheapest and easiest to implement practices that were adopted in 4 and 5 star hotels. This is because some ESPs require high initial financial commitment, such as investment in solar or wind paneled electricity.

This may also explain why the adoption of ESPPs are common within chain hotels than the independent ones. Regardless of whether or not they are chain hotels; an aspect that was established by Bagur-Femenias et al. (2016) is that voluntary commitment to ES amongst hotels enhances better outcomes. Voluntary commitment would also come from a position of acute understanding of the need to engage ESPPs. Hence, in the Nigerian case, while voluntary commitment is advised; the need for increased awareness on the need for ESPPs amongst hoteliers and further driven by regulatory framework cannot be overemphasized. Another crucial aspect of this study is the impact of ESPPs on guests' behavioural

intention. The evidences suggests that ESPPs can enhance the satisfaction of customers', and increase loyalty commitment. One study further revealed that this can even influence their willingness to pay a premium. This however is dependent on the perception of the environmental practices and communication that is made. To a large extent; the deployment of ESPPs within the Nigerian space has the tendency of generating more positive outcomes for the industry, as they have the tendency of retaining customers'; and enhancing their revenue strength.

More so, another valid reason why this is essential in the Nigerian space is the fact that adopting ESPs enhances the efficiency of hotels especially in waste management and energy efficiency (Kularatne et al., 2019) and can aid in the reduction of operational costs (Pereira et al., 2021). A relevant example here would be reduced expenses for example on fuel for power generation; while clean sources of energy are used at lower costs. The hotels can also be instrumental in shaping the right environmental concerns and behaviour amongst the guests; and transferring this to the cultivation of customer citizenship behaviour. In a more direct terms, the hotels can stand in a place of creation of environmental awareness through their ESPPs. This aligns with Najar (2020) which noted that organizations are encouraged to adopt ES strategies because of its importance to preserving natural resources and environment, it addresses increased consumer awareness of environmental degradation and demand for eco- friendly products and services, and can help reduce cost. Guests which had hitherto not be eco-conscious can patronize such establishments and adopt practices which they can further deploy in their everyday life. Hotels thus function within the larger environmental awareness and advocacy structure of environmental sustainability.

CONCLUSION

It would be seen that adoption of ESPPs within the hotel industry holds significant benefits not only environmentally but also economically. Adopting this and rightly communicating this to the public is strongly advised within the Nigerian hotel industry' and beyond this in other tourism and hospitality ventures. Given that customers' in contemporary age seek information online, such ESPPs should be communicated on hotel websites and social media handles. This study while conducting a global review of studies on ESPPs is without some limitations. One is founded within the inclusion/exclusion criteria, for example limiting the study to 10 years period of 2013-2023; and also excluding studies written in languages other than English. In this light, some studies which could have enhanced the quality of findings of this study could have been excluded. Future studies should seek to accommodate these researches. In other to be able to explicitly apply the suggestions of this study to the Nigerian scene; there is need for empirical studies which are conducted physically in the hotels in order to appraise the extant ESPPs and the level of engagement.

REFERENCES

1. Abdou, A. H., Hassan, T. H., & El Dief, M. (2020). A Description of Green Hotel Practices and Their Role in Achieving Sustainable Development. *Sustainability* 2020, 12(22), 9624; <https://doi.org/10.3390/su12229624>
2. Abdou, A. H., Shehata, H. S., Mahmoud, H., Albakhit A., & Almahayitah, M. (2022). The Effect of Environmentally Sustainable Practices on Customer Citizenship Behavior in Eco-Friendly Hotels: Does the Green Perceived Value Matter?. *Sustainability*, 14(12), 7167. <https://doi.org/10.3390/su14127167>
3. Al Halbusi, H., Jimenez Estevez, P. Eleen, T., Ramayah, T.; & Hossain Uzir, M.U. (2020). The Roles of The Physical Environment, Social Servicescape, Co-Created Value, and Customer Satisfaction in Determining Tourists' Citizenship Behavior: Malaysian Cultural and Creative Industries. *Sustainability*, 12, 3229.
4. Alameeri, A., Ajmal, M.M., Hussain, M. & Helo, P. (2018), "Sustainable management practices in UAE hotels", *International Journal of Culture, Tourism and Hospitality Research*, 12(4),. 440-466. <https://doi.org/10.1108/IJCTHR-10-2017-0100>
5. Alipour, H., Safeeimanesh, F. & Soosan, A. (2019). Investigating Sustainable Practices in Hotel Industry-from Employees' Perspective: Evidence from a Mediterranean Island. *Sustainability* 2019, 11(23), 6556; <https://doi.org/10.3390/su11236556>
6. Bagur-Femenias L., Celma, D., & Patau, J. (2016). The Adoption of Environmental Practices in Small Hotels. Voluntary or Mandatory? An Empirical Approach. *Sustainability* 2016, 8(7), 695; <https://doi.org/10.3390/su8070695>
7. Brundtland, G. H. (1987). *Our common future: Report of the 1987 world commission on environment and development. Oslo: United Nations.*
8. Burton, S. (2019). *Handbook of sustainable refurbishment. Housing, S.I: Routledge*
9. Cop, S., Alola, U. & Alola, A. (2020). Perceived behavioral control as a mediator of hotels' green training, environmental commitment, and organizational citizenship behavior: A sustainable environmental practice. *Business Strategy and the Environment*, 29(8), 3495-3508. <https://doi.org/10.1002/bse.2592>
10. Elkington, J. (2018). 25 years Ago I Coined the Phrase "Tripple Bottom Line." Here is Why it's Time to Rethink It. *Harvard Business Review*.
11. Erdogan, N., & Baris E. (2007). Environmental protection programs and conservation practices of hotels in Ankara, Turkey [Versão eletrônica], *Tourism Management*, 28, 604-614.

12. Giordino, D., & Crocco, E(2022). Sustainable Development: A New Frontier for SMEs. In Management Strategies for Sustainability, New Knowledge Innovation, and Personalized Products and Services; IGI Global: Hershey, PA, USA, 2022; pp. 68–93.
13. [González-Rodríguez, M.R.](#), [Díaz-Fernández, M.C.](#) & [Font, X.](#) (2020). Factors influencing willingness of customers of environmentally friendly hotels to pay a price premium, *International Journal of Contemporary Hospitality Management*, 32(1), 60-80. <https://doi.org/10.1108/IJCHM-02-2019-0147>
14. Grant, M. (2020). Understanding sustainability. Retrieved from <https://www.investopedia.com/terms/s/sustainability.asp>.
15. Gryshchenko, O. Babenko, V. Bilovodska, O., Voronkova, T., Ponomarenko, I & Shatska, Z. (2022). Green tourism business as marketing perspective in environmental management. *Glob. J. Environ. Sci. Manag.*, 8, 117–132.
16. Horng, J.; Liu, C.; Chou, S.; Tsai, C., & Chung, Y. (2017). From innovation to sustainability: Sustainability innovations of eco-friendly hotels in Taiwan. *Int. J. Hosp. Manag.*, 63, 44–52.
17. Ibragimov, K.; Perles-Ribes, J.F. & Ramón-Rodríguez, A.B. (2022). The impact of climate change on tourism demand: Evidence from Kazakhstan. *Anatolia* 33, 293–297.
18. Idoko, O., & Kasim, A (2019). Exploring the Nigerian Transnational Hotels' Environmentally Friendly Practices Towards Biodiversity Conservation in LAGOS, NIGERIA. *European Journal of Social Sciences Studies*.
19. [Khatler, A.](#), [McGrath, M.](#), [Pyke, J.](#), [White, L.](#) & [Lockstone-Binney, L.](#) (2019). Analysis of hotels' environmentally sustainable policies and practices: Sustainability and corporate social responsibility in hospitality and tourism, *International Journal of Contemporary Hospitality Management*, 31(6) 2394-2410. <https://doi.org/10.1108/IJCHM-08-2018-0670>
20. [Khatler, A.](#), [White, L.](#), [Pyke, J.](#) & [McGrath, M.](#) (2021). Barriers and drivers of environmental sustainability: Australian hotels, *International Journal of Contemporary Hospitality Management*,. 33(5), 1830-1849. <https://doi.org/10.1108/IJCHM-08-2020-0929>
21. Khatler, A., McGrath, M., Pyke, J., White, L. & Lockstone-Binney, L. (2019). Analysis of hotels' environmentally sustainable policies and practices. *Int. J. Contemp. Hosp. Manag.*, 31, 2394–2410.
22. Kim, Y.J., Palakurthi, R. & Hancer, M. (2012). The environmentally friendly programs in hotels and customers' intention to stay: An online survey approach. *Int. J. Hosp. Tour. Adm.*, 13, 195–214.
23. Kraft, M.E (2017). *Environmental Policy and Politics*; Routledge: New York, NY, USA, 2017
24. Kukoyi, I. A., & Ezenagu, N. (2013). Hospitality Business Vs Environmental Sustainability: A Study of Soarak Hotel and Casino Lagos. *International Journal of Science and Research*, 2(9), 288-293
25. Kularatne, T., Wilson, C., Manssan, J., Hoang, V. & Lee, B. (2019). Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka, *Tourism Management*, 71, 213-225. <https://doi.org/10.1016/j.tourman.2018.09.009>
26. Mbasera, M., Du Pleiss, E., Saayman, M. & Kruger, M. (2016). Environmental friendly practices in hotels: original research. *Acta Commercii*, 16(1), <https://hdl.handle.net/10520/EJC191607>
27. Merli, R., Preziosi, M., Acamporo, A., & Ali, F. (2019). Why should hotels go green? insights from guests experience in green hotels. *International Journal of Hospitality Management*, 81, 169-179. <https://doi.org/10.1016/j.ijhm.2019.04.022>
28. Moise, M.S., Gil-Saura, I., & Šerić, M. (2019). Influence of environmental practices on brand equity, satisfaction and word of mouth. *J Brand Manag* 26, 646–657 <https://doi.org/10.1057/s41262-019-00160-y>
29. Moise, M.S., Gil-Saura, I., & Ruiz, M.E. (2021). The importance of green practices for hotel guests: Does gender matter? *Ekon. Istraživanja*, 34, 3508–3529.
30. Moise, M.S.; Gil-Saura, I. & Ruiz Molina, M.E. (2021). The importance of green practices for hotel guests: Does gender matter? *Ekon. Istraživanja*, 34, 3508–3529.
31. Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1, 19-27. Retrieved from <http://www.environmentalmanager.org/index.php/journal>
32. Mu'azu, L., Rashid, B., & Zainol, N (2014). Are hotels in Nigeria proactive in environmental management practices? Proceedings of the Tourism and Hospitality International Conference (THIC 2014)
33. Najar, A. (2020). Environmental Sustainable Practices In The Hotels: From Existence To Implementation. *Ecology, Environment and Conservation*. 26. 111-116.
34. Nilashi, M.; Ahani, A.; Esfahani, M.D.; Yadegaridehkordi, E.; Samad, S.; Ibrahim, O.; Sharef, N.M., & Akbari, E. (2019). Preference learning for eco-friendly hotels recommendation: A multi-criteria collaborative filtering approach. *J. Clean Prod.*, 215, 767–783.
35. Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K. & Gill, S. S. (2021). Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behaviour. *Journal of Cleaner Production*, 311, 127504. <https://doi.org/10.1016/j.jclepro.2021.127504>

36. Nwokorie, E. C. & Obiora J. N. (2018). Sustainable development practices for the hotel industry in Nigeria: Implications for the Ilaro area of Ogun State. *Research in Hospitality Management*, 8(2): 125–131
37. Pereira, V., Silva, G., & Dias, A. (2021). Sustainability Practices in Hospitality: Case Study of a Luxury Hotel in Arrábida Natural Park. *Sustainability* 2021, 13(6), 3164; <https://doi.org/10.3390/su13063164>
38. Preziosi, M., Tourais, P., Acmpora A., Videira, N. & Merli R,. (2019). The role of environmental practices and communication on quest loyalty: examining EU-Ecolabel in Portugese hotels. *Journal of Cleaner Production*, 237(10), 117659. <https://doi.org/10.1016/j.jclepro.2019.117659>
39. Rahman, I., Reynolds, D., & Svaren, S. (2012). How “green” are North American hotels? An exploration of low-cost adoption practices. *Int. J. Hosp. Manag.*, 31, 720–727.
40. [Rosalind Jenkins, N.](#) & [Karanikola, I.](#) (2014). Do hotel companies communicate their environmental policies and practices more than independent hotels in Dubai, UAE? *Worldwide Hospitality and Tourism Themes*, 6(4), 362-380. <https://doi.org/10.1108/WHATT-01-2014-0003>
41. Salama, W. & Abdelsalam, E. (2021) Impact of Hotel Guests’ Trends to Recycle Food Waste to Obtain Bioenergy. *Sustainability*, 13, 3094
42. Shanti, J., & Joshi, G. (2022). Examining the impact of environmentally sustainable practices on hotel brand equity: a case of Bangalore hotels. *Environ Dev Sustain* 24, 5764–5782 <https://doi.org/10.1007/s10668-021-01682-9>
43. Tiwari, V. & Thakur, S. (2021). Environment sustainability through sustainability innovations. *Environ Dev Sustain* 23, 6941–6965 <https://doi.org/10.1007/s10668-020-00899-4>
44. Verma, V. & Chandra, B. (2016). Hotel guest’s perception and choice dynamics for green hotel attribute: A mix method approach. *Indian Journal of Science and Technology*, 9(5). <http://dx.doi.org/10.17485/ijst/2016/v9i5/77601> ,
45. Viachaslau F & Cynthia. O. T (2020). Exploring managerial approaches to mitigating solid waste in hotels of Lagos, Nigeria, *Journal of Cleaner Production*, 270, 2020.
46. Wirtenberg J. (2012). Triple-Bottom-Line” Leadership Excellence, 06/2012, 29(6), 8
47. Yu, Y., Li, X. & Jai, T. (2017). The impact of green experience on customer satisfaction: Evidence from TripAdvisor. *Int. J. Contemp. Hosp. Manag.*, 29, 1340–1361
48. Yusof, Y. Awang, Z. Jusoff, K. & Ibrahim, Y. (2017). The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry. *Int. J. Green Econ.*, 11, 1–14