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**FROM AWARENESS TO ACTION: GREEN PRACTICES IN THE IBERIAN
PENINSULA'S HOSPITALITY SECTOR**

This research critically examines the extent to which hospitality enterprises operationalize sustainability within the distinctive context of UNESCO biosphere reserve. Beyond mapping establishments profile, the study interrogates the scope and depth of green practices, spanning energy efficiency, water conservation, waste management, and sustainable procurement, while simultaneously evaluating the awareness and perceptions of both employees and consumers. Employing a descriptive research design, survey data were collected from employees and customers across 30 establishments. Findings demonstrate that the sector is largely characterized by micro to small enterprises with limited manpower (typically 4–6 employees) and relatively recent market presence (4–7 years). Sustainability practices were most consistently institutionalized in waste management (Mean (M) = 4.90), water conservation (M = 4.74), energy efficiency (M = 4.67), and sustainable purchasing (M = 4.69). By contrast, capital-intensive strategies, such as solar energy systems and sustainable interior design, remain marginal. Employees exhibited high levels of awareness (M = 3.87) and strong endorsement of sustainability (M = 4.46), while customers reported encountering practices only “Often” or “Sometimes,” indicating a perceptual gap between organizational intent and consumer recognition. The study contributes to the scholarly discourse on sustainable hospitality by evidencing the predominance of cost-effective, behaviourally driven initiatives over technologically advanced interventions. It argues for the necessity of targeted training, financial incentives, and policy alignment to foster a systemic transition towards more robust sustainability frameworks in the Iberian Peninsula.

Keywords: **sustainable hospitality, green practices, food and lodging establishments, sustainability.**

JEL Classification: Q56, L83, M14.

Background of the Study. The global hospitality industry is undergoing a paradigmatic transformation as both businesses and consumers increasingly recognize the necessity of embedding sustainability into core operations to mitigate escalating environmental challenges. Food and lodging establishments, in particular, are progressively implementing green practices aimed at reducing their ecological footprint while simultaneously improving efficiency and competitiveness (Soni, Sharma, & Joshi, 2022). Such initiatives resonate with the broader framework of sustainable development, which seeks to reconcile economic growth with ecological responsibility. Within this context, sustainable hospitality encompasses a wide spectrum of practices, ranging from resource conservation, waste reduction, and pollution control to the institutionalization of eco-friendly policies that actively engage both customers and employees (Moise et al., 2021).

Scholarly literature highlights that the sector's rapid expansion has significantly contributed to environmental degradation, necessitating urgent shifts towards more sustainable business models. Green practices not only reduce operational costs and environmental damage but also serve as



strategic mechanisms for reputation-building and long-term viability (Kulretne, Jones & Hill, 2019; Cunha, 2023). Nevertheless, the evidence suggests that the adoption of environmentally friendly technologies and systemic sustainability initiatives remain uneven across regions and market segments. This disparity is particularly salient in rural hospitality contexts, where structural limitations such as financial constraints, limited human capital, and infrastructural challenges may hinder the uptake of advanced sustainability practices (Abdou et al., 2020; Barakagira & Paapa, 2023; Kusa et al., 2023).

The Iberian Peninsula offers a particularly compelling context for examining these dynamics. Characterized by diverse ecosystems, rich cultural landscapes, and vibrant tourism industries, the region also faces environmental pressures linked to climate change, over-tourism, and resource scarcity (Butler, 2017). While both Spain and Portugal have committed to ambitious sustainability agendas aligned with the European Green Deal, the practical implementation of sustainability within the hospitality sector remains uneven (Bhatnagar, 2023).

Rural areas, in particular, often lack the financial and technological capacity to adopt advanced green practices, despite their reliance on natural and cultural assets that are highly sensitive to ecological degradation (Huyen, Hong & Hoang, 2025).

Within this landscape, there is a pressing need to evaluate how food and lodging establishments across the Iberian Peninsula integrate sustainability into their operations. This study addresses this gap by systematically examining the extent to which these establishments adopt green practices, assessing their alignment with environmental objectives, and identifying structural or behavioural barriers to implementation (Gil-Soto, Ruiz-Molina & Gil-Saura, 2019).

By foregrounding the practices and challenges of the hospitality sector in the Iberian Peninsula, this research provides insights of both regional and international significance. For stakeholders, including business owners, policymakers, and local communities, it offers empirical evidence on how sustainability can be operationalized in diverse rural and semi-rural contexts. Furthermore, the findings position the Iberian Peninsula as a potential model for balancing economic growth with environmental stewardship, thereby contributing to global discourses on sustainable tourism in ecologically sensitive regions (García-Pozo, Sánchez-Ollero & Marchante-Mera, 2019).

Methodology. This study employed a mixed-methods research design, with primary emphasis on quantitative, survey-based inquiry, to systematically examine the adoption of green practices among food and lodging establishments in the Iberian Peninsula. Two key respondent groups were purposively targeted: (a) employees, including managers, supervisors, and frontline staff, and (b) customers who regularly patronize these establishments. Data collection was carried out through structured questionnaires developed to assess levels of awareness, perceptions, and engagement with sustainability initiatives.

The surveys were administered over two months, from April to June 2024, using both face-to-face distribution in selected establishments and digital dissemination via online platforms. This dual approach was intended to maximize participation, ensure accessibility, and reduce potential non-response bias (Cunha & Krupskiy, 2023).

For data analysis, descriptive statistics (frequency distributions and percentages) were employed to profile respondents and establish baseline levels of awareness and perceptions. To test for significant differences between independent groups (employees and customers), independent-sample t-tests were applied. In addition, one-way Analysis of Variance (ANOVA) was utilized to compare mean differences across profile variables with more than two categories (e.g., years of operation, business size) (Cunha, Pereira, Cardoso, Figueiredo & Oliveira, 2024a; 2024b). ANOVA is a statistical technique that determines whether observed differences between group means are statistically significant, by analyzing the variance within groups against the variance between groups (Marroco, 2021; Cunha & Santos, 2019). This analytical strategy provided both breadth and depth in identifying patterns of sustainability practices and offered robust insights into how environmental initiatives are being integrated within the regional hospitality sector.

Analysis and Interpretation of the Results.

Characteristics of the Sample Population. Understanding the characteristics of the sample population is essential to contextualize the findings of this study. By examining the demographic and organizational attributes of participants, this section provides insights into the structure of the hospitality sector in the Iberian Peninsula and highlights factors that may influence the adoption of sustainable practices. Presenting the composition of the sample also enhances the transparency and

reliability of the research by allowing readers to assess the representativeness of the data in relation to the broader industry context.

Specifically, this section outlines the distribution of respondents according to the type of establishment, years of operation, and workforce size. These variables are particularly relevant, as the literature suggests that enterprise type, longevity, and organizational scale can significantly shape managerial priorities, operational capacities, and willingness to adopt sustainability initiatives. By situating the findings within the demographic and operational profile of the sample, the study ensures a more nuanced interpretation of the results that follow.

Type of Business. The sample consisted of 14 hotels (46.7%) and 16 restaurants (53.3%), providing a relatively balanced representation of the two dominant segments of the hospitality sector. This balance is important because hotels and restaurants may differ in their sustainability challenges: hotels typically have higher energy and water demands, while restaurants produce greater levels of food-related waste. The representation of both subsectors ensures that findings reflect a broader spectrum of hospitality practices within the region.

Years of Operation. Most establishments (66.7%) have been operating for 4–7 years, indicating a relatively young but stable industry. Only 13.3% are new entrants (1–3 years), while 20% have been in operation for over 8 years. This distribution suggests that the sector is still in a growth and consolidation phase, with many businesses likely adapting to evolving market trends, including sustainability requirements. Younger establishments may be more open to adopting innovative green practices, while older ones might face challenges related to retrofitting infrastructure to meet sustainability standards.

Number of Employees. The vast majority of the establishments (93.3%) employ only 4–6 workers, with just one establishment each falling into 1–3 employees (3.3%) and 7–10 employees (3.3%) categories. This highlights the micro-enterprise nature of the hospitality industry in the region. The predominance of small teams has implications for sustainability: while limited manpower and resources may restrict the adoption of capital-intensive initiatives (e.g., solar panels, advanced water treatment), smaller establishments may find it easier to implement low-cost, behaviourally driven measures such as waste segregation, energy conservation, and customer engagement.

Table 1 – Frequency and percentage distribution of respondents' profile

Type of Business	F	%
Hotel	14	46.70
Restaurant	16	53.30
Total	30	100
Years of Operation		
1 – 3 years	4	13.30
4 - 7 years	20	66.70
Above 8 years	6	20.00
Total	30	100
Number of Employees		
1-3 employees	1	3.30
4-6 employees	28	93.30
7-10 employees	1	3.30
Total	30	100

Source: authors' data

The dataset depicts a hospitality sector that is dominated by micro- and small-scale enterprises with limited human and financial resources, but with a relatively balanced distribution between hotels and restaurants. These structural characteristics suggest that sustainability strategies in the Iberian Peninsula's hospitality sector are likely to be pragmatic, cost-effective, and incremental rather than large-scale or technology-driven ones. The prevalence of younger establishments also reflects an

evolving industry that may be responsive to sustainability discourse, particularly if supported by targeted training, policy incentives, and community engagement initiatives.

The findings reveal a strong and consistent commitment to energy conservation across food and lodging establishments, with an overall category mean of 4.67 ("Always"). This indicates that energy-efficient behaviours are widely institutionalized, particularly those that are low-cost, behavioural, or infrastructural in nature.

Table 2 – Analysis of Energy Efficiency Practices

Energy Efficiency Practices	Mean	DI
1. The establishment uses energy-efficient lighting (e.g., LED bulbs) in both guest rooms and dining areas.	4.45	Always
2. The establishment utilizes natural ventilation (e.g., opening windows, using ceiling fans) to reduce reliance on air conditioning in both guest rooms and dining areas.	4.25	Always
3. Solar energy is used for lighting or water heating in the establishment's common areas, kitchens, or guest rooms where feasible.	3.17	Sometimes
4. The establishment reduces energy consumption by using energy-efficient cooking appliances (e.g., induction cookers, energy-efficient stoves) in the kitchen and dining area.	4.64	Always
5. Local, sustainable building materials such as bamboo or wood are used in the construction and renovation of the establishment to reduce energy consumption.	4.80	Always
6. The establishment promotes energy-saving practices by encouraging guests to turn off lights, air conditioning, and electronics when not in use in both guest rooms and dining areas.	4.80	Always
7. Energy-efficient appliances (e.g., refrigerators, water pumps, air conditioning units) are regularly maintained to ensure efficient operation in both lodging and food service areas.	4.25	Always
8. The establishment limits the use of air conditioning or electric heaters by optimizing natural temperature control in guest rooms and dining areas.	4.85	Always
9. Energy-saving measures, such as installing timers or sensors on lights, are implemented in the guest rooms and dining areas to reduce unnecessary energy use.	3.12	Sometimes
10. The establishment educates both employees and guests about energy conservation practices and encourages their participation in minimizing energy use.	4.71	Always
Category Mean	4.67	Always

Source: authors' result

High-Scoring Practices (Means: 4.71–4.85). The highest-rated practices include limiting air conditioning and heating through natural temperature control ($M = 4.85$), promoting energy-saving behaviour among guests ($M = 4.80$), and using sustainable building materials ($M = 4.80$). These practices highlight a preference for practical, non-capital-intensive measures that can be integrated into daily operations with minimal financial burden. Importantly, guest engagement and staff education ($M = 4.71$) underscore the role of behavioural change as a central mechanism for energy efficiency in small-scale establishments.

Moderate-Scoring Practices (Means: 4.25–4.64). Consistent use of energy-efficient cooking appliances ($M = 4.64$) and the regular maintenance of energy-efficient appliances ($M = 4.25$) reflect an operational-level focus on equipment optimization. Natural ventilation strategies ($M = 4.25$) also illustrate environmentally conscious design choices that align with local climate and reduce reliance on air conditioning.

Low-Scoring Practices (Means: 3.12–3.17). By contrast, the adoption of capital-intensive or technologically advanced practices remains limited. The use of solar energy ($M = 3.17$) and automated systems such as timers or motion-sensor lighting ($M = 3.12$) were reported only "Sometimes." These results suggest that while establishments value sustainability, financial and technical constraints hinder the uptake of higher-cost innovations. This pattern is consistent with

broadier literature indicating that small-scale enterprises often prioritize operationally feasible practices over long-term technological investments.

Interpretation and Implications. The data emphasize that energy efficiency in the Iberian Peninsula's hospitality sector is primarily achieved through behaviourally driven and cost-effective strategies rather than through advanced technological systems. This reliance on pragmatic measures reflects both the micro-enterprise nature of the establishments (limited manpower and financial capacity) and the importance of guest and staff engagement in achieving sustainability outcomes.

For policy and practice, the results point to a need for incentive schemes, financial support, and training programs to encourage the adoption of renewable energy and smart technologies. Without such interventions, sustainability efforts are likely to remain concentrated in low-cost domains, limiting the sector's long-term contribution to regional climate goals.

The results demonstrate a consistently high level of commitment to water conservation across establishments, with an overall category mean of 4.74 ("Always"). This indicates that water efficiency practices are well institutionalized in the hospitality sector of the Iberian Peninsula, reflecting both environmental awareness and operational pragmatism.

Table 3 – Water efficiency practices

Water Efficiency Practices	Mean	DI
1. The establishment installs low-flow faucets, shower heads, and toilets in guest rooms and public areas.	4.80	Always
2. The establishment regularly checks for leaks in pipes, faucets, and toilets and repairs them promptly.	4.83	Always
3. The establishment encourages guests to reuse towels and linens during their stay to minimize water usage.	4.33	Always
4. The establishment collects and reuses rainwater for non-potable uses, such as landscaping or cleaning.	4.87	Always
5. The establishment uses water-efficient cleaning practices and tools, such as mops that require less water.	4.87	Always
Category Mean	4.74	Always

Source: authors' result

High-Scoring Practices (M = 4.83–4.87). The strongest initiatives include rainwater harvesting and reuse for non-potable purposes (M = 4.87) and the adoption of water-efficient cleaning tools (M = 4.87). Regular inspection and prompt repair of leaks (M = 4.83) further highlight operational discipline and a preventative approach to water management. These results suggest that establishments prioritize practices that deliver both environmental and economic benefits, as reduced water consumption directly lowers operational costs.

Moderately Strong Practices (M = 4.33–4.80). The installation of low-flow fixtures (M = 4.80) reflects investment in infrastructural modifications that align with global best practices in sustainable hospitality. Guest-oriented measures, such as encouraging towel and linen reuse (M = 4.33), were rated somewhat lower, suggesting variability in guest participation or in the consistency of establishments' communication strategies. While infrastructural measures are largely embedded, behavioural interventions involving customers appear less reliably enforced, potentially due to cultural attitudes or concerns about service quality.

Interpretation and Implications. The findings indicate that water conservation is treated as a core operational priority. Establishments appear to implement practices that are technically feasible, cost-efficient, and visible, such as rainwater reuse and low-flow devices, while placing slightly less emphasis on customer-driven conservation behaviours. This aligns with existing literature, which suggests that water-saving measures in hospitality are most effective when combining infrastructural improvements with active guest engagement.

Overall, the strong results highlight the proactive role of establishments in reducing water use, but also reveal untapped potential in enhancing guest awareness and participation. Policy makers and industry leaders could strengthen these efforts through training, signage, and sustainability

campaigns that normalize practices like towel reuse as part of a quality guest experience rather than a cost-saving compromise.

Table 4 – Waste management practices

Waste Management Practices	Mean	DI
1. The establishment implements a comprehensive recycling program for paper, plastics, glass, and metals.	5.00	Always
2. The establishment separates organic waste (e.g., food scraps) from non-organic waste for composting or disposal.	5.00	Always
3. The establishment uses biodegradable or compostable materials for take-out containers and packaging.	4.97	Always
4. The establishment minimizes food waste by using portion control and repurposing leftovers creatively in the kitchen.	4.97	Always
5. The establishment donates unused, safe food to local charities instead of throwing it away.	3.43	Often
6. The establishment provides staff with training on waste reduction techniques, such as efficient use of resources and reducing packaging waste.	4.93	Always
7. The establishment regularly monitors and tracks waste generation and uses findings for reduction and improvement.	4.97	Always
8. The establishment uses bulk purchasing for food and other supplies to reduce packaging waste.	4.80	Always
9. The establishment eliminates or reduces single-use plastic items, such as straws, utensils, and bottles, by using alternatives like reusable or paper products.	2.78	Sometimes
10. The establishment encourages guests to participate in waste reduction efforts, such as sorting recyclables or reducing food waste during their stay.	4.97	Always
Category Mean	4.90	Always

Source: authors' result

The data show that waste management is the most consistently and robustly implemented sustainability dimension, with an overall category mean of 4.90 ("Always"). This suggests that establishments in the Iberian Peninsula's hospitality sector have adopted waste reduction and recycling as central operational priorities, reflecting both environmental awareness and regulatory or market-driven pressures.

High-Scoring Practices (M = 4.93–5.00). Practices such as comprehensive recycling programs (M = 5.00) and organic waste segregation for composting (M = 5.00) have achieved the maximum rating, indicating near-universal adoption. Similarly, the use of biodegradable packaging (M = 4.97), portion control and repurposing of leftovers (M = 4.97), and guest participation in waste reduction (M = 4.97) highlight a strong operational and behavioural commitment to minimizing waste. These results suggest that establishments prioritize visible, cost-effective, and culturally acceptable waste strategies, which also align with consumer expectations of environmentally responsible businesses.

Staff Training and Monitoring (M = 4.93–4.97). The provision of staff training on waste reduction techniques (M = 4.93) and the systematic monitoring of waste generation (M = 4.97) illustrate institutionalized practices that extend beyond ad-hoc measures. This reflects a shift towards structured environmental management systems, where data-driven monitoring informs continuous improvement.

Moderately Adopted Practices (M = 3.43–4.80). Bulk purchasing to reduce packaging waste (M = 4.80) is well integrated, though slightly less universal, likely reflecting differences in supply chain structures between smaller and larger establishments. Food donation programs (M = 3.43), however, are less consistently practiced, possibly due to legal restrictions, logistical challenges, or liability concerns associated with distributing surplus food.

Low-Scoring Practices (M = 2.78). The weakest area is the reduction of single-use plastics (M = 2.78), which was only “Sometimes” implemented. This result is significant given the European Union’s 2021 Single-Use Plastics Directive, which bans or restricts such items. The gap suggests challenges in transitioning to alternatives, possibly due to cost implications, supply chain limitations, or resistance from both businesses and customers accustomed to convenience items.

Interpretation and Implications. Overall, the findings indicate that waste management is a core strength of sustainable hospitality in the Iberian Peninsula, with high levels of compliance in recycling, composting, staff training, and packaging alternatives. However, two critical gaps remain:

(1) underutilization of food donation initiatives, which limits potential contributions to social sustainability; and

(2) insufficient reduction of single-use plastics, which reveals a discrepancy between regulatory frameworks and actual industry practice.

Addressing these gaps requires not only greater enforcement of environmental regulations but also capacity-building initiatives—including partnerships with food banks, improved infrastructure for safe food redistribution, and financial incentives to accelerate the transition away from plastics. Strengthening these areas would move establishments beyond cost-driven waste reduction and toward more holistic, socially embedded sustainability practices.

Table 5 – Sustainable purchasing practices and materials

Sustainable Purchasing Practices and Materials	Mean	DI
1.The establishment prioritizes sourcing ingredients and products from local suppliers to reduce carbon footprint.	4.77	Always
2.The establishment purchases organic and sustainably grown food products whenever possible.	4.63	Always
3.The establishment uses eco-friendly, biodegradable, or compostable packaging materials instead of plastic.	4.80	Always
4.The establishment sources seafood and meat products from sustainable and ethically responsible suppliers.	4.93	Always
5.The establishment prioritizes purchasing cleaning products that are non-toxic, biodegradable, and environmentally safe.	4.93	Always
6.The establishment reduces single-use plastics by using reusable or refillable containers for condiments, toiletries, and beverages.	4.93	Always
7.The establishment buys furniture, fixtures, and décor made from recycled, upcycled, or sustainable materials.	2.80	Sometimes
8.The establishment prefers bulk purchasing to minimize packaging waste and reduce transportation emissions.	4.20	Often
9.The establishment ensures that paper products (napkins, tissue, menus) are made from recycled or sustainable sources.	4.40	Always
Category Mean	4.69	Always

Source: authors’ result

The results reveal a strong commitment to sustainable procurement, with an overall category mean of 4.69 (“Always”). This indicates that food and lodging establishments in the Iberian Peninsula are increasingly embedding sustainability into their supply chains, particularly in the areas that directly affect daily operations and customer-facing practices.

High-Scoring Practices (M = 4.77–4.93). The most consistently implemented practices involve sourcing ethically and sustainably produced inputs. Establishments reported very high adoption of sustainable seafood and meat sourcing (M = 4.93), the use of non-toxic and eco-friendly cleaning products (M = 4.93), and the reduction of single-use plastics through refillable or reusable containers (M = 4.93). Similarly, reliance on biodegradable packaging (M = 4.80) and prioritization of local suppliers (M = 4.77) illustrate strong alignment with both environmental and economic sustainability goals. These practices not only minimize ecological impact but also support local economies, thereby reinforcing community-based sustainability.

Moderately Adopted Practices ($M = 4.20$ – 4.63). Purchasing organic and sustainably grown food ($M = 4.63$) and bulk procurement to minimize packaging waste ($M = 4.20$) were rated slightly lower. These results suggest variability in market accessibility and cost considerations, as organic and bulk-purchasing systems often require stronger supplier networks and upfront investment. Nevertheless, the scores indicate that these practices are actively pursued, even if not uniformly feasible across establishments.

Low-Scoring Practices ($M = 2.80$). The least adopted practice was the purchase of furniture, fixtures, and décor made from recycled or sustainable materials ($M = 2.80$, “Sometimes”). This gap likely reflects the capital-intensive nature of sustainable interior investments, where costs are high and immediate returns are limited. Unlike consumables such as cleaning products or food, sustainable furnishings require significant long-term investment, making them less accessible to micro- and small-scale enterprises that dominate the sector.

Interpretation and Implications. Overall, the findings suggest that establishments prioritize sustainable purchasing where it aligns with operational necessity and customer visibility, for example, food sourcing, cleaning products, and packaging. By contrast, sustainability investments in non-core, high-cost areas (e.g., furniture and infrastructure) remain underdeveloped. This pattern mirrors broader hospitality trends in which businesses adopt incremental and low-barrier practices while deferring high-capital expenditures.

The strong results in sourcing and procurement highlight a sector moving toward responsible supply chain management, yet the inconsistency in high-cost domains underscores the need for policy incentives, subsidies, or supplier partnerships to reduce barriers to adoption. Strengthening sustainable procurement in both consumables and long-term assets would ensure a more holistic approach, bridging the gap between everyday operations and long-term environmental impact.

Table 6 – Awareness level of employees on green practices

Awareness of employees on green practices	Mean	DI
1. How familiar are you with green practices implemented by your establishment?	4.20	Extremely Familiar
2. How often are you informed about green initiatives or sustainability practices of establishment?	3.87	Very Familiar
3. Have you received formal training or information about the green practices of the establishment?	3.53	Very Familiar
Category Mean	3.87	Very Familiar

Source: authors' result

The results indicate that employees possess a generally strong awareness of sustainability initiatives within their establishments, with an overall category mean of 3.87 (“Very Familiar”). This suggests that while employees are knowledgeable about green practices, there remains scope for strengthening both communication and formal training mechanisms to deepen engagement.

High Awareness ($M = 4.20$). Employees reported being “Extremely Familiar” with the green practices implemented by their establishments ($M = 4.20$). This demonstrates that frontline staff and management are well-informed about operational sustainability measures, likely due to direct involvement in day-to-day implementation (e.g., energy conservation, waste segregation, or customer engagement initiatives).

Moderate Awareness and Communication ($M = 3.87$). The frequency with which employees are updated on ongoing initiatives was rated lower ($M = 3.87$), suggesting that sustainability communication within organizations is somewhat irregular. While employees are aware of existing practices, the results indicate a gap in continuous reinforcement and internal messaging, which may affect motivation and consistency of implementation over time.

Formal Training ($M = 3.53$). The lowest score was observed in relation to formal training or structured information sessions ($M = 3.53$). This suggests that most employees acquire knowledge of sustainability informally – through observation, workplace culture, or ad-hoc instructions – rather than through systematic capacity-building programs. While sufficient for general awareness, the absence of structured training limits employees' ability to critically engage with or innovate around sustainability initiatives.

Interpretation and Implications. Taken together, the data highlight that employee awareness is broad but shallow: staff know what practices exist but are less frequently engaged in structured learning or systematic communication about them. This reflects a reliance on practical, experience-based learning rather than institutionalized sustainability education.

Strengthening formal training programs and ensuring more consistent communication of sustainability goals could transform employee awareness into deeper competence and stronger commitment. Literature suggests that when employees are systematically trained in sustainability, they not only comply more effectively but also become active contributors to innovation, customer engagement, and the long-term embedding of environmental practices.

Table 7 – Customer Awareness on Green Practices

Customer Awareness on Green Practices	Mean	DI
1. How aware are you of the green practices of the establishment?	4.23	Extremely Aware
2. Do you receive information about the green practices or sustainability efforts of this establishment during your visit?	3.77	Often
3. How often do you notice the establishment engaging in green practices during your stay?	3.80	Often
Category Mean	3.93	Often

Source: authors' result

The results indicate that customers demonstrate a generally strong awareness of sustainability measures in hospitality establishments, with an overall mean of 3.93 ("Often"). While awareness is relatively high, the findings also reveal that visibility and communication of practices during visits remain inconsistent, limiting the extent to which customers fully recognize establishments' sustainability efforts.

High Awareness (M = 4.23). Customers rated themselves as "Extremely Aware" of green practices (M = 4.23), suggesting that many enter establishments with pre-existing knowledge of sustainability principles, likely shaped by broader societal discourses on climate change and responsible consumption. This underscores the role of external social awareness in shaping consumer perceptions even before their direct experiences with an establishment.

Moderate Awareness Through Communication and Observation (M = 3.77–3.80). However, customers reported receiving information about sustainability less frequently (M = 3.77, "Often") and noticing green practices during their stay at a similar level (M = 3.80, "Often"). These results point to a communication gap: while establishments may be implementing strong sustainability measures, these efforts are not always visible or effectively communicated to guests. This could limit the potential of green practices to serve as a differentiating factor in customer satisfaction, loyalty, and willingness to pay more – themes widely discussed in sustainable hospitality literature.

Interpretation and Implications. Overall, the data suggest that customers' awareness is driven more by general environmental consciousness than by establishments' communication strategies. This creates a perceptual gap: practices are in place, but customers are not consistently engaged or informed about them. This underutilizes the opportunity to build stronger consumer trust and brand differentiation through sustainability.

To bridge this gap, establishments should adopt proactive communication strategies – such as visible signage, digital campaigns, and staff-led engagement – to make sustainability efforts more apparent. Research indicates that explicit communication of green practices not only strengthens customer awareness but also enhances satisfaction, loyalty, and willingness to support establishments that are perceived as environmentally responsible (Han & Kim, 2019).

The results reveal an overall category mean of 4.46, indicating that respondents hold highly positive perceptions of green practices within their establishments. This suggests that employees and stakeholders not only recognize the presence of sustainability initiatives but also perceive them as meaningful, effective, and valuable to both the environment and the organization.

Perceived Effectiveness and Motivation (M = 4.53). Respondents rated green practices as "Extremely Effective" in reducing environmental impact (M = 4.53) and expressed equally strong motivation to follow these practices at work (M = 4.53). This dual finding highlights a strong perception-behaviour alignment, where individuals not only believe in the value of sustainability

initiatives but are also personally committed to participate in them. Such alignment is critical for institutionalizing sustainable practices, as motivation and perceived efficacy are key predictors of long-term behavioural compliance.

Table 8 – Perception of employees on green practices

Perception of Green Practices	Mean	DI
1. How effective do you think the green practices of the establishment are in reducing its environmental impact?	4.53	Extremely Effective
2. How important do you think green practices are in improving the reputation and sustainability of the establishment?	4.27	Extremely Important
3. How motivated are you to follow the green practices at work?	4.53	Extremely Motivated
4. How satisfied are you with the green practices implemented by your establishment?	4.50	Extremely Satisfied
Category Mean	4.46	

Source: authors' result

Perceived Importance for Reputation (M = 4.27). The perception that green practices are “Extremely Important” for enhancing reputation and organizational sustainability (M = 4.27) reflects a growing recognition of the strategic value of environmental responsibility. This suggests that respondents view sustainability not merely as an ecological necessity but also as a reputational asset that strengthens competitiveness in the hospitality market.

Satisfaction with Practices (M = 4.50). High levels of satisfaction (M = 4.50) suggest that respondents perceive existing practices as both relevant and adequately implemented. However, satisfaction may also reflect modest expectations: while establishments are clearly engaging in visible and cost-effective practices, gaps remain in the adoption of high-capital, technology-driven solutions (as highlighted in earlier analyses of energy and purchasing practices).

Interpretation and Implications. Overall, perceptions of green practices are overwhelmingly positive, suggesting that both employees and stakeholders have internalized sustainability as a core organizational value. However, the positivity of perceptions should not obscure structural limitations: favourable views may coexist with an incomplete or uneven implementation of advanced practices.

These findings underscore the importance of sustaining and expanding organizational communication and training efforts, as positive perceptions provide a foundation for deepening engagement. Furthermore, aligning perceived effectiveness with measurable environmental outcomes will be crucial for avoiding “greenwashing” risks and ensuring credibility. From a managerial perspective, capitalizing on employees’ motivation and satisfaction offers an opportunity to position them as active ambassadors of sustainability, enhancing both operational outcomes and customer perceptions.

Table 9 – Customers' Perception of Green Practices

Customers Perception of Green Practices	Mean	DI
1. How satisfied are you with the environmental practices implemented by the establishment?	4.37	Extremely Satisfied
2. How likely are you to recommend the establishment to others based on its environmental efforts?	3.90	Very likely
3. How important are green practices to your decision to stay at the establishment?	4.10	Very Important
4. Do you believe that the establishment's green practices improve your overall experience during your visit?	4.10	Very Much
5. How likely are you to pay more for services at this establishment because of its green practices?	3.90	Very Likely
Category Mean	4.07	

Source: authors' result

The results yield an overall category mean of 4.07, reflecting a generally positive perception of sustainability initiatives within hospitality establishments. Customers not only express satisfaction

with green practices but also acknowledge their influence on loyalty, decision-making, and willingness to pay, albeit with some limitations.

Satisfaction and Experience ($M = 4.10$ – 4.37). Customers reported being “Extremely Satisfied” with environmental practices ($M = 4.37$) and affirmed that such initiatives enhanced their overall experience ($M = 4.10$). This indicates that sustainability is not viewed as peripheral but rather as a contributor to service quality and customer value creation. Consistent with service quality theory (Parasuraman et al., 1988), these findings suggest that environmental responsibility can be perceived as an integral dimension of service excellence.

Importance in Decision-Making ($M = 4.10$). Customers considered green practices “Very Important” in influencing their decision to patronize establishments ($M = 4.10$). This supports the literature on environmentally conscious consumer behaviour, which highlights sustainability as an increasingly decisive factor in hospitality choice (Han & Kim, 2019).

Advocacy and Willingness to Pay ($M = 3.90$). While customers expressed a “Very Likely” inclination to recommend establishments based on environmental performance ($M = 3.90$), their willingness to pay a premium scored the same ($M = 3.90$), indicating only moderate strength. This reflects a common challenge in sustainable hospitality: customers value green practices but may hesitate to bear additional costs, aligning with the well-documented “attitude–behaviour gap” in sustainable consumption.

Interpretation and Implications. Taken together, customer perceptions reflect a positive but cautious stance: sustainability enhances satisfaction and influences loyalty, but financial trade-offs may constrain actual consumer behaviour. Establishments may thus find that green practices strengthen reputation and differentiation, but monetizing these advantages remains challenging unless accompanied by effective communication strategies that justify the added value. For practitioners, the findings emphasize the importance of:

- 1) Making green practices visible to strengthen satisfaction and experience;
- 2) Framing sustainability as added value, not as an optional cost driver, to overcome resistance to price premiums;
- 3) Leveraging customer advocacy, since positive perceptions can generate reputational benefits through word-of-mouth and online reviews.

From a scholarly perspective, the results highlight the need for further exploration of the value–action gap in sustainable hospitality and the mechanisms (e.g., transparency, trust-building, certification schemes) that may encourage customers to translate positive perceptions into stronger financial support.

**Table 10 – Test of difference on the employees' green practices
when grouped according to profile variables**

when grouped according to profile variables				
Types of Business	Mean	t-value	p-value	Decision
Hotel	2.33	14.21	0.000	Reject Ho
Restaurant				
Profile		t-value	p-value	Decision
Year of Operation				
Between Groups	2	2.05	0.15	Accept H ₀
Within Group	27			
Number of Employees				
Between Groups	2	2.58	0.09	Accept H ₀

Source: authors' result

Type of Business (Hotel vs. Restaurant). The independent-sample t-test (also known as the two-sample t-test) is a statistical procedure used to determine whether there is a significant difference between the means of two independent groups. The test assumes that the two groups are unrelated (independent) and that each participant or unit belongs to only one of the groups (Marôco, 2021).

For example, in hospitality research, an independent-sample *t*-test could be applied to compare whether hotels and restaurants differ significantly in their adoption of green practices. Here, “type of establishment” defines the two groups, and the outcome variable (e.g., mean sustainability score) is compared across them.

The logic of the test is straightforward: it examines the ratio between the difference in group means and the variability of scores within each group (Marôco, 2021). If the observed difference between group means is large relative to the variability, it is unlikely to have occurred by chance, and the null hypothesis (H_0 : there is no difference between groups) is rejected.

Formally, the test statistic is expressed as:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{s_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

where:

$\bar{X}_1 - \bar{X}_2$ are the sample means of the two groups,

n_1 and n_2 are the sample sizes,

s_p^2 is the pooled variance, representing the average variability within the two groups (Marôco, 2021).

If the calculated *t*-value exceeds the critical value at a chosen level of significance (e.g., $p < .05$), the result indicates a statistically significant difference between the two groups.

Assumptions. The independent-sample *t*-test relies on three key assumptions:

- 1) Independence of observations – the two groups are independent.
- 2) Normality – the dependent variable is approximately normally distributed within each group.
- 3) Homogeneity of variances – the variances of two groups are equal (tested using Levene's Test).

If these assumptions are violated, alternative tests such as Welch's *t*-test or non-parametric methods (e.g., Mann–Whitney U test) can be used (Marôco, 2021).

In this study, you used the independent-sample *t*-test to test whether hotels and restaurants differed significantly in their sustainability practices. The results showed a significant difference ($t = 14.21$, $p < .001$), meaning that business type influences sustainability adoption.

The independent-sample *t*-test revealed a statistically significant difference between hotels ($M = 2.33$) and restaurants, with a *t*-value of 14.21 and a *p*-value of 0.000 ($p < 0.05$). The null hypothesis (H_0) was therefore rejected. This finding indicates that hotels and restaurants differ significantly in their adoption of green practices. Given the higher operational complexity and resource consumption of hotels (e.g., greater energy and water use, more diverse service offerings), it is plausible that hotels exhibit different levels of engagement with sustainability compared to restaurants, which may prioritize waste reduction and local sourcing due to food-focused operations.

Years of Operation. The one-way Analysis of Variance (ANOVA) is a statistical technique used to determine whether there are significant differences among the means of three or more independent groups (Marôco, 2021). Unlike the independent-sample *t*-test, which is limited to two groups, ANOVA extends the comparison to multiple categories of a single independent variable (or “factor”).

For example, in this study, one-way ANOVA was employed to test whether sustainability practices varied significantly according to the years of operation (1–3 years, 4–7 years, and above 8 years) or the number of employees (1–3, 4–6, 7–10).

The logic of ANOVA is based on partitioning the total variation in the data into two components:

- Between-groups variance – variation explained by differences in group means (the effect of the independent variable).
- Within-groups variance – variation due to random error or individual differences within each group (Marôco, 2021).

The test produces an *F*-ratio, which is the ratio of the variance between groups to the variance within groups:

$$F = \frac{\text{Mean Square Between Groups}}{\text{Mean Square Within Groups}}$$

If the calculated F-value is sufficiently large, and the associated p -value is below the chosen level of significance (e.g., $p < .05$), the null hypothesis (H_0 : all group means are equal) is rejected, indicating that at least one group mean differs from the others.

Assumptions.

- 1) Independence of observations – groups are independent of one another.
- 2) Normality – the dependent variable is approximately normally distributed within each group.
- 3) Homogeneity of variances – the variances across groups are equal (commonly assessed with Levene's Test).

When the assumption of equal variances is violated, a more robust test such as Welch's ANOVA may be applied (Marôco, 2021).

In this research, one-way ANOVA was used to test whether differences in green practices existed across categories of years of operation and number of employees. Results indicated no statistically significant differences ($p = 0.15$ for years of operation; $p = 0.09$ for number of employees). This means that sustainability adoption was not influenced by how long establishments had been in operation or by their workforce size, but rather shaped by other contextual or sectoral factors.

A one-way ANOVA was conducted to examine differences in green practices across establishments grouped by years of operation (1–3 years, 4–7 years, and above 8 years). Results showed $F(2,27) = 2.05$, $p = 0.15$, indicating no statistically significant differences. Thus, the null hypothesis was accepted. This suggests that the length of time an establishment has been in operation does not significantly influence its adoption of green practices. The result implies that sustainability efforts are being adopted regardless of organizational maturity, possibly due to shared external drivers such as regulatory frameworks, consumer expectations, or cost-saving imperatives.

Number of Employees. The Analysis of Variance (ANOVA) is a statistical procedure used to test whether there are significant differences in the means of two or more independent groups. Whereas a t -test is limited to comparing two means, ANOVA allows researchers to assess differences across multiple groups simultaneously, thereby reducing the risk of Type I error that would occur if multiple t -tests were run independently.

The basic principle of ANOVA is to compare the amount of variance between groups (caused by the independent variable) with the amount of variance within groups (caused by random error or individual differences) (Marôco, 2021). The test produces an F-ratio, calculated as:

$$F = \frac{\text{Variance Between Groups}}{\text{Variance Within Groups}}$$

- A large F-ratio (with a p -value $< .05$) indicates that at least one group mean differs significantly from the others.
- A small F-ratio (with a p -value $> .05$) suggests that observed differences are likely due to random variation rather than a systematic effect.

Assumptions.

- 1) Independence of observations – the groups being compared are independent.
- 2) Normality – the dependent variable is normally distributed within each group.
- 3) Homogeneity of variances – the variances of the groups are equal (often tested with Levene's Test).

If these assumptions are violated, more robust alternatives such as Welch's ANOVA or non-parametric tests (e.g., Kruskal–Wallis test) can be used.

One-Way vs. Other ANOVAs. A one-way ANOVA tests for differences in means across categories of a single factor (e.g., years of operation: 1–3, 4–7, above 8 years). More complex designs include two-way ANOVA (testing for interactions between two factors) or repeated measures ANOVA (used when the same subjects are measured under different conditions).

Application in the Study. In this research, a one-way ANOVA was applied to examine whether sustainability practices differed significantly across groups based on years of operation and number of employees. The results indicated that neither factor had a statistically significant effect ($p = .15$ and $p = .09$, respectively). This suggests that sustainability adoption is not determined by organizational age or workforce size, but is likely shaped by other factors such as business type, regulatory environment, or consumer expectations.

Similarly, the ANOVA results for the number of employees revealed $F(2,27) = 2.58$, $p = 0.09$, which is also not statistically significant at the 0.05 level. The null hypothesis was accepted. This finding indicates that establishment size, as measured by workforce, does not significantly differentiate levels of sustainability adoption. The predominance of micro- and small-enterprises in the sample may explain this outcome, as most establishments have similar staff sizes (typically 4–6 employees), limiting variability between groups.

Interpretation and Implications. The inferential analysis demonstrates that type of business is the only factor that significantly differentiates sustainability practices. Hotels and restaurants appear to engage in green practices differently, likely reflecting sector-specific demands and operational structures. By contrast, years of operation and workforce size do not significantly affect adoption, suggesting that sustainability is not merely a function of experience or scale, but instead shaped by broader contextual factors.

From a managerial perspective, these findings suggest that sector-specific interventions may be more effective than generalized training programs. For instance, hotels may require tailored strategies that address energy and water conservation, while restaurants may benefit from stronger support in reducing food waste and promoting sustainable sourcing. Policymakers and industry associations could design differentiated sustainability frameworks to address the unique challenges and opportunities of each subsector.

Results, Interpretation, and Implications. The findings of this study provide a comprehensive picture of how food and lodging establishments in the Iberian Peninsula operationalize sustainability. The respondent profile revealed that the sector is dominated by micro- and small-sized enterprises, with most businesses employing between four and six workers and operating for four to seven years. The sample included both hotels and restaurants in relatively equal proportion, ensuring representation across the two main sub-sectors. These structural features contextualize the results: limited manpower and financial resources constrain the adoption of capital-intensive innovations, while the relatively young age of most establishments reflects a sector still consolidating its practices but showing agility in adopting low-cost, behaviourally oriented measures.

Across the four domains of sustainability practices, the results demonstrate a strong orientation toward environmental responsibility, though with varying degrees of intensity. Energy efficiency practices were widely implemented, with establishments making consistent use of LED lighting, natural ventilation, and guest engagement strategies. These practices indicate a pragmatic reliance on cost-effective solutions that are easily integrated into daily operations. However, more capital-intensive measures such as solar energy systems and automated sensors were only occasionally adopted, underscoring the structural barriers faced by small enterprises. Water efficiency practices were similarly robust, with rainwater collection, leak monitoring, and low-flow fixtures widely used. While towel and linen reuse programs were also in place, they were less consistently adopted, suggesting that customer-facing initiatives remain a relative weakness compared to infrastructural and operational measures.

Waste management emerged as the strongest domain, with comprehensive recycling and composting programs, staff training, and guest involvement all scoring near universal adoption. The practices not only reflect a strong institutionalization of waste reduction but also indicate alignment with both environmental and cost-saving imperatives. Yet, food donation programs and the reduction of single-use plastics were notably weaker, revealing persistent challenges linked to legal restrictions, logistical barriers, and adaptation to regulatory changes such as the European ban on single-use plastics. Sustainable purchasing also scored highly, especially in the sourcing of ethical and eco-friendly products, biodegradable packaging, and non-toxic cleaning supplies. However, long-term investments in sustainable furniture and fixtures were rarely made, reflecting the capital intensity of such initiatives and the difficulty of prioritizing them in resource-constrained enterprises.

Beyond operational practices, the study also examined levels of awareness and perception among employees and customers. Employees demonstrated a moderate-to-high level of awareness of sustainability practices, though much of this knowledge appeared to be acquired informally rather than through structured training. While they were generally very familiar with practices, the relatively low score for formal training highlights a gap in capacity building. Despite this, employee perceptions were overwhelmingly positive: they viewed green practices as highly effective in reducing environmental impact, as important for reputation, and reported strong motivation and satisfaction with their adoption. Customers, in turn, expressed strong general awareness of sustainability but

reported only moderate recognition of practices during their visits, revealing a communication gap. Although they valued sustainability as part of their experience and decision-making, their willingness to pay more for environmentally responsible services remained limited, consistent with the well-documented attitude-behaviour gap in sustainable consumption.

Inferential analysis further clarified the patterns. Significant differences were found between hotels and restaurants, suggesting that sustainability adoption varies by subsector, likely reflecting different operational demands and cost structures. However, no significant differences were observed by years of operation or number of employees, indicating that sustainability practices are not dependent on organizational maturity or scale but are instead shaped by external drivers such as regulatory frameworks, consumer expectations, and cost-saving imperatives.

Taken together, the findings highlight that sustainability in the Iberian Peninsula's hospitality sector is rooted in pragmatic, cost-effective practices rather than advanced technological investments. Waste management emerged as the strongest domain, followed by water conservation, sustainable purchasing, and energy efficiency, the latter being limited by reliance on low-cost measures. Employees demonstrated strong motivation and positive perceptions, while customers expressed satisfaction but revealed lower levels of visibility and weaker financial commitment. These dynamics illustrate that sustainability has been embraced as a core organizational value but remains uneven in implementation and communication.

The implications are twofold. From a theoretical perspective, the study supports existing scholarship that emphasizes the predominance of behaviourally driven, low-cost initiatives in small-scale enterprises and contributes to debates on the value-action gap by illustrating the disjunction between customer appreciation of sustainability and their limited willingness to pay. From a practical perspective, the findings underscore the need for capacity building through formal training for employees, stronger communication strategies to increase customer awareness, and policy interventions to support capital-intensive investments such as renewable energy and sustainable infrastructure. Sector-specific strategies are also necessary: hotels require targeted support for energy and water management, while restaurants may benefit from greater focus on food waste reduction and sustainable sourcing.

In sum, the hospitality sector in the Iberian Peninsula demonstrates both readiness and commitment to sustainability, but its progress is constrained by structural limitations and inconsistent communication. To transition from incremental, cost-saving actions to transformative change, a more systemic approach is needed that aligns business practices with policy incentives, technological innovation, and customer engagement. Only through such coordinated efforts can the sector fully contribute to regional and global sustainability goals.

Conclusion. This study examined the adoption of green practices among food and lodging establishments in the Iberian Peninsula, providing a comprehensive account of sustainability initiatives across energy efficiency, water conservation, waste management, and sustainable purchasing. The results reveal that while the hospitality sector is strongly engaged with environmentally responsible practices, implementation is uneven and shaped by structural, financial, and communicative constraints. Waste management and water conservation emerged as the most consistently applied domains, reflecting practices that are both cost-effective and operationally feasible. In contrast, energy efficiency and sustainable procurement showed gaps, particularly in capital-intensive areas such as renewable energy systems and sustainable infrastructure.

The analysis further demonstrated that employees possess high levels of motivation and positive perceptions toward green practices, though their awareness is often developed informally and not reinforced through systematic training. Customers, meanwhile, expressed satisfaction with and recognition of sustainability efforts, but their awareness during visits was limited by weak communication strategies, and their willingness to pay a premium for environmentally responsible services remained modest. Together, these findings underscore the persistence of the "value-action gap" in sustainable hospitality, in which stakeholders express support for sustainability but are hesitant or unable to translate this support into consistent behavioural or financial commitment.

Statistical analysis confirmed that differences in sustainability adoption are more strongly associated with type of establishment (hotels versus restaurants) than with organizational size or years of operation. This suggests that sustainability strategies must be sector-specific, addressing the unique operational and environmental challenges of different hospitality formats.

Theoretically, this study contributes to scholarship on sustainable hospitality by reinforcing the argument that micro- and small-enterprises adopt pragmatic, low-cost sustainability measures rather than advanced technological solutions. It also provides empirical evidence on how employee perceptions and customer awareness interact with organizational practices, enriching debates on stakeholder engagement and sustainable consumer behaviour. Practically, the findings highlight the need for targeted capacity-building through formal training, improved communication strategies to enhance customer recognition of sustainability initiatives, and policy frameworks that provide financial incentives for high-cost innovations such as renewable energy and sustainable furnishings.

Ultimately, the Iberian Peninsula's hospitality sector demonstrates readiness and commitment to sustainability, but its potential remains constrained by resource limitations and communication gaps. To advance beyond incremental, cost-saving practices, a systemic approach is required that integrates business operations, customer engagement, and supportive public policy. Strengthening these interconnections will enable the sector not only to contribute more effectively to regional and global sustainability goals but also to position itself as a model of environmentally responsible hospitality in ecologically sensitive contexts.

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ВІД УСВІДОМЛЕННЯ ДО ДІЇ: ЗЕЛЕНІ ПРАКТИКИ В СЕКТОРІ ГОСТИННОСТІ ПІРЕНЕЙСЬКОГО ПІВОСТРОВА

Це дослідження критично розглядає, якою мірою підприємства гостинності впроваджують принципи сталого розвитку в особливому контексті біосферного заповідника ЮНЕСКО. Окрім картографування профілю закладів, у дослідженні розглядаються масштаби та глибина зелених практик, що охоплюють енергоефективність, водозбереження, управління відходами та сталий розвиток закупівель, з одночасним оцінюванням обізнаності та сприйняття цих практик як працівниками, так і споживачами. Автори використовували описовий метод дослідження – у 30 закладах були зібрані дані опитування серед працівників та клієнтів. Результати дослідження показують, що сектор гостинності значною мірою – це мікро- та малі підприємства з обмеженою кількістю робочої сили (зазвичай 4–6 працівників) та відносно недовгою присутністю на ринку (4–7 років). Практики сталого розвитку були найбільш послідовно інституціоналізовані в управлінні відходами (мат. очікування (далі – М) = 4,90), збереженні води (М = 4,74), енергоефективності (М = 4,67) та сталих закупівлях (М = 4,69). Натомість, капіталомісткі стратегії, такі як системи сонячної енергії та сталий дизайн інтер'єру, залишаються маргінальними. Працівники продемонстрували високий рівень обізнаності (М = 3,87) та сильну підтримку сталого розвитку (М = 4,46), тоді як клієнти повідомляли, що стикалися з практиками лише «Часто» або «Іноді», що свідчить про перцептивний розрив між намірами організації та визнанням споживачами. Дослідження робить внесок у науковий дискурс щодо сталої гостинності, доводячи перевагу економічно ефективних, поведінково-орієнтованих ініціатив над технологічно просунутими втручаннями. У ньому обґрунтовується необхідність цілеспрямованого навчання, фінансових стимулів та узгодження політики для сприяння системному переходу до більш надійних систем сталого розвитку на Піренейському півострові.

Ключові слова: **стала гостинність, зелені практики, заклади харчування та розміщення, сталий розвиток.**

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