

# How to catch the investor's eye when going green in the Spanish hospitality industry

## Introduction

Environmental sustainability is becoming an increasingly central focus for the hospitality industry, driven both by ethical considerations and strategic business imperatives. According to Khatter et al. (2021), environmental sustainability encompasses financial benefits, stakeholder interests, customer satisfaction, marketing opportunities, and a strong commitment to environmental conservation. Thus, the integration of sustainability initiatives is no longer just about compliance but has become a significant factor in enhancing profitability and competitive advantage (Khatter, 2023). Researchers including Dixon-Fowler et al. (2013) and Ha et al. (2024) highlight a generally positive correlation between environmental and financial performance and identify various moderating factors. Similarly, Eccles et al. (2014) find that companies adopting sustainable practices tend to have better financial outcomes over the long term.

While the adoption of environmental policies largely depends on the attitudes of company managers (Fraj et al., 2015; Kucukusta, 2017; Molina-Azorin et al., 2015), investors can facilitate their implementation by channelling capital to companies that address climate change and pollution, encouraging an alignment between business goals and sustainability objectives (Rau and Yu, 2024).

Friedman and Miles (2001) underscore how socially responsible investment considerations, especially environmental factors, push corporations to enhance the transparency and quality of their social and environmental reporting. The influence of socially responsible investments highlights the growing importance of ethical and environmental accountability in corporate governance, a trend with which investors are increasingly aligned (Amel-Zadeh and Serafeim, 2018). Such factors can directly shape investment strategies in the hospitality sector, where transparency in social and environmental

practices is becoming essential. Clark et al. (2015) demonstrated that environmental, social, and governance (ESG) criteria are gaining prominence across industries, including hospitality, reflecting a broader shift in which sustainable practices play a critical role in attracting responsible investment. Against this background, understanding the criteria investors use to evaluate potential sustainable investments in the hospitality industry is crucial for comprehending current investment dynamics.

Despite the growing interest in sustainability within the hospitality sector, there is limited empirical research that directly engages with investors and seeks to understand their decision-making processes in this context. For example, while Singal (2014) demonstrates that hospitality firms investing in environmental programs can obtain financial benefits, the study did not delve into investors' perspectives or decision-making criteria. Some studies explore related issues, such as the influence of ESG criteria on investment decisions (Clark et al., 2015) and factors driving environmental sustainability in hotels (Khatter et al., 2021; Fraj et al., 2015), though they do not directly address investor-specific decision-making in green hospitality investments.

This study aims to bridge this gap by delving into the decision-making processes of hospitality investors concerning sustainable investments in one of the world's premier tourism destinations, Spain. Spain serves as an ideal context for studying sustainability in hospitality due to its diverse hotel sector and strong eco-conscious shift. This focus aligns with Molina-Collado et al. (2022), who highlight key sustainability themes in hospitality, such as environmental management and consumer attitudes, underscoring the relevance of eco-friendly practices. By focusing on Spain's dynamic hospitality sector, the present research seeks to provide valuable insights into how sustainability considerations influence investment choices, thereby contributing to a deeper understanding of sustainable investment behavior in the tourism industry. Unlike previous research, which examines the financial benefits for hospitality firms of environmental practices (Eccles et al., 2014; Jones et al., 2016; Kim et al. 2017; Khatter et al., 2021), this study explores the criteria and factors that investors themselves consider

when making sustainable investment decisions. Using a focus group-based concept mapping methodology enhanced by clustering based on the global index of consensus (GIC) indicator, the research seeks to capture and analyze investors' perspectives, identifying the key factors they prioritize when making sustainable investment decisions. This methodological approach also responds to calls for more qualitative methods in the hospitality sector (Mehmetoglu and Altinay, 2006). The study offers practical implications for both investors and hospitality industry stakeholders, providing insights that can help hospitality firms align their sustainability strategies with investor preferences. These findings may also inform industry-wide standards for green investments, contributing to more informed and strategic decision-making in the sector.

The remainder of the paper is organized as follows: Section 2 presents the theoretical background and research questions. Section 3 details the formal aspects of the methodology and briefly describes the sample. Section 4 presents the results. Finally, Section 5 discusses the most notable findings and addresses the research questions.

## **Theoretical framework and research questions**

Research increasingly underscores the positive relationship between sustainability and investment in the hospitality industry; a key insight is that sustainability practices drive both financial and operational benefits. Kim et al. (2017) and Jones et al. (2016) emphasize how adopting green practices, such as energy efficiency and eco-certifications, not only addresses environmental concerns but also enhances operational efficiency, making businesses more attractive to investors. In a complementary vein, studies by Sharma (2023) and Eccles et al. (2014) connect sustainable practices to strengthened competitive positioning and long-term financial gains. Both suggest that by fostering consumer loyalty and bolstering efficiency, companies can attract global investment and achieve superior financial performance over time. Finally, Khatter et al. (2021) expand on these advantages,

noting that sustainability offers additional benefits beyond operational and financial gains. Their findings reveal that environmental initiatives align with stakeholder interests, boost customer satisfaction, create marketing opportunities, and reinforce a brand's commitment to conservation.

Therefore, the shift toward sustainable investment is supported by several key drivers which can be summarized in the following concepts. (1) Cost savings, as green investments significantly lower operating expenses through energy efficiency, water conservation, and waste reduction, ultimately improving profitability (Maxwell and Decker, 2006; Han et al., 2020; Yenidogan et al., 2021). (2) Enhanced reputation, as consumer preferences increasingly shift toward sustainability. Sustainability initiatives boost public image, fostering brand loyalty and long-term profitability (Becerra-Vicario et al., 2022). Moise et al. (2019, 2021) and Chang et al. (2024) note that hotels with robust sustainability practices often experience higher customer satisfaction and loyalty, which further drives investment. (3) Regulatory compliance is also crucial. With frameworks like the European Union Taxonomy for Green Investments, meeting environmental standards helps investors avoid penalties and maintain access to financing. This alignment with future regulatory requirements decreases risk and ensures that green investments are forward-looking (Wang et al., 2021). Finally, (4) risk mitigation, as green investments reduce exposure to energy market volatility and environmental regulatory changes, increasing hotels' resilience in the face of market fluctuations and operational risks (Garcia et al., 2024). Supporting this view, Ashwin et al. (2016) demonstrate that companies incorporating ESG factors show lower stock performance volatility.

As sustainability increasingly aligns with financial goals in the hospitality sector, the distinctions between the shareholder and stakeholder models of corporate governance may become blurred. The shareholder model posits that a company should prioritize the interests of its owners, focusing primarily on maximizing financial returns (Jensen and Meckling, 1976). In contrast, the stakeholder model advocates for a broader consideration of various stakeholders, emphasizing that a

firm should also account for the interests of employees, customers, suppliers, and the community, alongside those of its capital providers (Freeman, 1984; Freeman and Dmytriiev, 2017; Dmytriiev et al. 2021). The shift toward sustainability suggests that successful hospitality businesses must integrate both models, recognizing that addressing the needs of multiple stakeholders can lead to enhanced long-term profitability and corporate resilience in an increasingly eco-conscious market (Aglietta and Reberieux, 2005; Ioannou and Serafeim, 2012).

Given the growing importance of sustainability in the hospitality industry, there is a need to understand the evolving criteria that investors consider when evaluating sustainable investments in this industry. Accordingly, the following question arises, which guides the overall direction of our research: *Which aspects related to environmental sustainability make an investment in the hospitality sector more attractive to investors?* In an attempt to answer this broader question, we pose the following two research questions:

*RQ1: Do investors in the hospitality sector rely on traditional investment management criteria when evaluating sustainable investments?*

*RQ2: Do hospitality sector investors integrate sustainability factors into their decision-making?*

These research questions will be assessed through focus group interviews with investors, to gain insights regarding the evolving criteria for sustainable investments. The study applies the concept mapping methodology to capture and analyze the perspectives of investors, providing a comprehensive understanding of the criteria influencing sustainable investment decisions in the Spanish hospitality industry. If the data reveal that investors still primarily rely on traditional financial metrics, it could suggest that while sustainability is acknowledged, it may not yet be fully integrated into core decision-making processes. On the other hand, if investors highlight sustainability-specific factors, such as long-

term environmental benefits or regulatory compliance, as crucial in their evaluations, this would indicate a significant shift in investment strategies to include broader considerations.

## Methodology and data collection

In this paper we apply a modified version of the traditional concept mapping methodology introduced by Trochim (1989); this methodological approach joins the concept mapping and consensus techniques (Fornells et al., 2015). This method is applied to a focus group; focus groups are considered an effective research method for identifying a range of ideas or emotions people have about a topic, uncovering factors that influence complex concepts, or facilitating the emergence of ideas through group interaction (Krueger and Casey, 2000). Focus groups are widely applied in hospitality, for example to explore work-life balance issues, revealing how long and unpredictable hours create stress for employees (O'Neill, 2012). They have also been used to discuss sustainability practices in hospitality, comparing online and in-person focus groups to generate actionable ideas for industry improvements (Richard et al., 2020). However, while focus groups are effective in generating qualitative data through open discussion and identifying a wide range of ideas, they often lack mechanisms that can objectively measure consensus or quantify the relative importance of different themes (Kitzinger, 1995; Krueger and Casey, 2000). This limitation can lead to subjective interpretations as well as difficulties in objectively measuring consensus, distinguishing the most influential factors, and quantifying the most important themes. To address these limitations, the concept mapping technique offers a complementary approach that enhances the traditional methodology by providing a structured and quantitative framework for analyzing complex issues (e.g., investment decision-making in the hospitality sector).

Concept mapping integrates the insights gained from focus group discussions into a process that objectivizes and quantifies the results, identifying consensus. This technique allows participants

to individually rate and group the statements generated during the brainstorming phase (the different phases are described in detail below), ensuring that the analysis captures a broader consensus across the group rather than being dominated by a few vocal participants (Jackson and Trochim, 2002). The result is a more nuanced and balanced representation of the group's views, enhancing the reliability and validity of the findings. Studies on creative tourism and destination development have applied concept mapping to quantify the themes gathered from focus groups involving diverse stakeholders (Lindroth et al., 2007). Similarly, in research exploring social-ecological drivers in sustainable tourism, concept mapping was used to produce a visual representation of key drivers, helping prioritize actions based on consensus across stakeholder groups (Leven and Bosak, 2022).

The final methodological enhancement in this study involves applying the abovementioned GIC to the clusters obtained through concept mapping. GIC offers a mathematical tool to identify the most consensual groupings, ensuring that the final clusters reflect the highest level of agreement among participants. This approach was successfully used in hospitality research to define “excellence” in hospitality to quantify the most agreed-upon factors from focus group data (Fornells et al., 2015). GIC is a one-dimensional absolute order-to-magnitude model. It comprises  $n$  basic labels corresponding to the  $n$  ordered responses provided by the members of the focus group (scored on Likert scales, described in detail below). We employ the GIC as a level of agreement metric across an entire solution ( $k_i$ ) that involves the notion of entropy and statement recurrence within the set of possible solutions (Equation 1). GIC emphasizes statements that appear the most across solutions ( $r - 1$ ). The recurrence index (RI), as indicated in Equation 3, considers both the frequency of occurrence and the degree of consensus (DC). This index needs be maximized. Note that concept mapping originally provides a set of  $r - 1$  different cluster solutions where  $r$  is the number of statements. This index returns an ordering criterion, the higher the GIC, the better the solution.

$$GIC(k) = \sum_{i=1}^k w(C_i^k) * Dc(C_i^k) \quad (1)$$

$$\text{where } w(C_i^k) = \sum_{X \in C_i^k} RI(X) \quad (2)$$

$$RI(X) = \frac{\sum_{k=1}^{r-1} \sum_{i=1}^k 1_{C_i^k}(X)}{\sum_{k=1}^{r-1} N(k)} \quad (3)$$

where  $1_{C_i^k}$  is the characteristic function that indicates membership of an element in  $C_i^k$ .

In summary, by combining the qualitative richness of focus group discussions with the quantitative precision of concept mapping, the methodology used in this study ensures a comprehensive, objective, and consensual analysis of the decision-making processes of investors in the hospitality sector.

### Implementation of the methodology

The methodology was implemented following the six-step process outlined in Fornells et al. (2015). The study began with focus group discussions, conducted in July 2022, to gather diverse insights from stakeholders. These insights were then organized using concept mapping, and the GIC was applied to quantify agreement and validate the clusters. Below is a detailed explanation of each step.

**Step 1: Preparation.** This step selects focus group members for the study. For this research, we enrolled seven prominent investors in the Spanish hospitality market, specifically chosen for their involvement in sustainable investment. The focus group was representative of investors in the Spanish hospitality sector, including stakeholders with diverse investment scopes and expertise, ranging from private and family investment entities to specialized investment firms, global real estate consultancies, and sustainability experts. This diversity reflects the current structure of investment practices in Spain's hospitality industry, where various types of investors consider factors such as environmental impact,



social responsibility, and governance practices in their decision-making processes. The selected participants, therefore, represent a comprehensive cross-section of perspectives, allowing for a thorough exploration of key aspects in sustainable investment; this aligns with Harrison and Klein's (2007) guidelines for ensuring diversity in qualitative research.

**Step 2: Generation of statements.** In the second step, participants were invited to a brainstorming session focused on the guiding research question; to optimize outcomes, the focus groups were facilitated by an expert in group dynamics (Bigné et al., 2002). During the session, all ideas were recorded in a database of statements. The investors generated a total of 42 statements during the brainstorming session, as shown in Table 1. All statements were reviewed and approved by the participants at the end of the session. The numerals used in Table 1 (Id) indicate the order in which the ideas were introduced.

[Insert Table 1 around here]

**Step 3: Structuring of statements.** The aim of this step is to identify the relationships between the various statements generated in the previous process. In this study each participant was required to assess and group the statements. Participants evaluated the relevance of statements to the guiding research question using a 5-point Likert-type scale (from 1, "not at all relevant" to 5, "highly relevant"). At the same time, they also created groupings of the statements. Each participant could form as many groups as necessary based on their own criteria. However, empty groups or groups with only a single statement were not permitted.

All participants' groupings were then combined to form a grouping matrix. In this matrix, both rows and columns represented the statements, and the intersection of a row and column showed how many times the statement in the row had been grouped with the statement in the column. The diagonal

of the matrix was equal to the number of participants. Both the evaluation and the grouping of statements were critical elements of the study. The evaluation scores were used to calculate the degree of consensus in the resulting clusters and solutions, while the groupings informed the construction of the grouping matrix. This matrix revealed how frequently each statement had been paired with another. The resulting matrix for this step can be found in Annex I.

**Step 4: Representation of statements.** This phase consists of four main steps. First, the multidimensional scaling (MDS) technique is applied to reduce the data from an  $r$ -dimensional space to a two-dimensional space, where the proximity between statements reflects how often they were grouped together by experts. The resulting two-dimensional MDS projection explains 72.93% of the variability of the statements. Figure 1 illustrates the MDS results, with each point representing a statement from the brainstorming session, labeled accordingly. Statements positioned closer together indicate higher similarity or frequent co-occurrence in groupings, while those farther apart were grouped less frequently.

[Insert Figure 1 around here]

Second, a clustering algorithm is applied iteratively to partition the data based on Euclidean distances, producing multiple clustering solutions, each corresponding to a different number of clusters. The resulting dendrogram for this step can be found in Figure 2.

[Insert Figure 2 around here]

Third, the RI, as defined in Equation 3, is calculated to assess the stability of the clusters across different iterations. This index highlights how consistently certain clusters appear in various solutions, helping to identify stable groupings that recur frequently. Figure 3 displays the statements ranked by their RI values, from highest to lowest. In cases where multiple statements have the same RI, their

order is determined by their statement Ids. Statements with an RI of zero are not included in the figure.

All RI values are expressed as percentages.

[Insert Figure 3 around here]

Finally, a consensus method is employed to measure the agreement level for each cluster across the remaining solutions. The GIC (Equation 1) is applied to rank these solutions, prioritizing those with higher GIC scores as the most suitable outcomes, with stable clusters receiving further validation from the recurrence analysis. The values for this metric are available in the last column of Table 2.

**Step 5: Interpretation of maps.** In this step, experts are asked to determine which of the filtered set of solutions fits best according to the focus group criteria (Trochim, 1989). Importantly, experts have the last word in selecting the most suitable solution in terms of adequation, adjustment, and explicability. While the selected solution may not be optimal in terms of commonly used clustering metrics, it is suitable for the experts. In our study, the selected configuration was configuration 12, identifying three key clusters. The details of these clusters are presented in Table 2, which highlights the grouping with the highest level of consensus from our analysis. This table provides information on the number of clusters and the elements in consensus for each  $k$  value. Each configuration is accompanied by its own set of indicators. According to the GIC, the most relevant results are highlighted in grey.

[Insert Table 2 around here]

**Step 6: Utilization of maps.** The final step involves utilizing the previously determined solution to create a graphical representation of the experts' opinions on the guiding research question (Bigné et al., 2002). Figure 4 presents the dendrogram of the final solution, illustrating the hierarchical clustering process and showcasing the optimal grouping of elements.

[Insert Figure 4 around here]

## Results

After applying the concept mapping technique to the 42 statements generated during the brainstorming session on the guiding question, “*What aspects of environmental sustainability make investment in the hospitality sector more attractive?*”, the consensus analysis subsequently revealed 16 key ideas, grouped into three distinct clusters. As shown in Table 3, these clusters are labelled as *Funding*, *Investing*, and *Stakeholder Engagement*. The first cluster (C2, *Funding*) reflects the emphasis on financial aspects such as higher income, access to cheaper capital, affordable and subsidized investments, and incentives for sustainable investment. The second cluster (C6, *Investing*) addresses core investment principles like risk management, long-term sustainability measures, alignment between investors and operators, and prioritization of investments, all of which are directly related to the investment decision-making process. Finally, the third cluster (C8, *Stakeholder Engagement*) is linked to the growing awareness of all stakeholders regarding sustainability and includes: consumer awareness, stakeholder alignment, potential changes in consumer mindset, and customer-operator alignment.

[Insert Table 3 around here]

A more detailed analysis of Table 3 reveals that the statements within the *Funding* cluster demonstrate a high degree of consensus (RI = 1.00), with consistently high average relevance ratings ranging from 4.00 to 4.66. These findings underscore the critical importance of access to affordable capital, investment support, and incentives for sustainable investment, all of which are essential for enhancing income and asset value. In contrast, the *Investing* cluster shows a lower relative importance (RI = 0.33), with average ratings spanning from 2.83 to 4.66. Here, key priorities include alignment between investors and operators and the implementation of long-term sustainability measures,

reflecting the strategic importance of risk management and investment alignment. The *Stakeholder Engagement* cluster demonstrates moderate consensus (RI = 0.39), with average ratings ranging from 3.66 to 4.50, focusing on consumer awareness, stakeholder alignment, and shifts in consumer mindset.

The results provide clear responses to our research questions. First, RQ1 (*Do investors in the hospitality sector rely on traditional investment and strategic management criteria when evaluating sustainable investments?*) is directly answered by the *Funding* and *Investing* clusters. The strong consensus in the *Funding* cluster (RI = 1.00), emphasizing financial aspects such as access to cheaper capital, investment incentives, and income generation, confirms that traditional financial metrics remain a primary consideration for investors. Similarly, the *Investing* cluster, with its focus on risk management, alignment between investors and operators, and long-term sustainability measures, indicates that these classical investment principles are still central to the decision-making process. Therefore, both clusters provide a positive response to the first research question; investors in the hospitality sector continue to rely heavily on traditional financial and strategic criteria when evaluating sustainable investments.

Second, RQ2 (*Do hospitality sector investors integrate sustainability-specific factors into their decision-making?*) is clearly positively answered by the *Stakeholder Engagement* cluster. This cluster highlights the growing importance of sustainability-specific factors such as consumer awareness, stakeholder alignment, and the potential for shifts in consumer preferences. The moderate consensus (RI = 0.39) in this cluster indicates that investors are increasingly incorporating these sustainability-driven considerations into their decision-making processes. Thus, sustainability-specific factors are gaining traction in investment evaluations alongside traditional financial metrics, particularly in terms of how investors engage with stakeholders and respond to consumer demands for environmentally responsible practices.

## Discussion

These findings highlight the role of sustainability in investment decisions within the Spanish hospitality sector, indicating a persistent reliance on traditional financial criteria while showing moderate integration of environmental considerations. As emphasized in the Introduction, sustainability in the hospitality industry is gaining momentum due to both ethical imperatives and the promise of financial and competitive advantages (Khatter, 2023). However, our results suggest that the sector's investors still prioritize classical financial metrics (as seen in the strong consensus around the *Funding* and *Investing* clusters), which emphasize income potential, cost savings, and risk management. These findings align with earlier research, which underscores that traditional investment approaches remain significant drivers of profitability in the sector (Dixon-Fowler et al., 2013; Sharma, 2023).

The results also show that, while ESG criteria are gaining importance, their influence in the hospitality sector appears supplementary rather than central to core financial and strategic decision-making. There was moderate consensus in environmental factors observed in the *Stakeholder Engagement* cluster, where elements such as consumer awareness and alignment with sustainability-minded customers point to an engagement with the reputational and customer loyalty benefits associated with sustainable practices. This aligns with research from Kim et al. (2017) and Jones et al. (2016), which highlights how green practices can improve operational efficiency and competitive positioning. Additionally, our findings align with Eccles et al. (2014), who identify that companies integrating sustainability practices could achieve better long-term financial performance. This strategic alignment between sustainability and risk mitigation parallels the findings of Clark et al. (2015), who note a gradual increase in the inclusion of ESG criteria as part of risk assessment in various sectors, including hospitality. Meanwhile, Khatter et al. (2021) and Fraj et al. (2015) underscore that successful

implementation of environmental policies often depends on company management attitudes and investor support. However, despite their benefits being recognized, these sustainability-driven factors were seen as secondary considerations among our participants; their impact has yet to be fully integrated into investment evaluation criteria. The results thus confirm that financial motivations remain dominant. The strong consensus on financial incentives (e.g., access to affordable capital and subsidies for sustainable investments) indicated by the *Funding* cluster illustrates that economic drivers still significantly influence investment decisions. This reliance on financial metrics is reflective of Freeman and Dmytriiev's (2017) stakeholder model, which describes how companies balance profitability with broader environmental and social commitments to appeal to an increasingly eco-conscious market.

### **Limitations and further research**

Despite offering key insights into investor criteria for sustainable investments in the Spanish hospitality sector, this study is subject to some limitations. The sample size, restricted to a small group of investors within a specific market, may limit the broader applicability of these findings. The insights gathered may not fully reflect investment priorities in different regions or industries. Moreover, as ESG standards and regulations rapidly evolve, the findings represent a snapshot of current attitudes but may not fully account for ongoing shifts in sustainability expectations. Although traditional financial metrics remain central, further research could examine specific factors that influence the prioritization of sustainability alongside profitability, offering a more comprehensive understanding of investment dynamics in this sector.

To address these limitations and shed further light on sustainable investment dynamics, future research could involve a larger and more diverse sample. Expanding the research to include managers' perspectives on sustainable investment would also be beneficial. By directly comparing investor and

manager criteria, future studies could identify areas where alignment and communication on sustainability goals might be strengthened, ultimately enhancing investment appeal in the hospitality sector.

## Conclusions

The concept mapping technique used in this study provides insights into the factors enhancing the attractiveness of environmental sustainability investments in the Spanish hospitality sector. Through consensus analysis, the 42 statements generated by participants were refined into 16 core ideas within three clusters, capturing the collective perspectives of Spanish hospitality investors on essential criteria for sustainable investments.

The results indicate that, while sustainability considerations are increasingly relevant, traditional financial metrics such as profitability, cost savings, and access to capital remain the primary drivers in investment decisions. Environmental considerations are generally valued only when they align with these financial objectives, suggesting that sustainability must be closely tied to economic benefits to influence investor preferences in this sector. Though investors acknowledge the long-term benefits of sustainability, these factors remain secondary to core financial metrics. To truly *catch the investor's eye*, sustainability initiatives in this sector must be tightly linked to economic performance, underscoring that *going green* still requires a compelling financial case.

## Industry implications

The findings suggest that the hospitality industry can meet investor expectations more effectively by integrating sustainability into its core financial strategies. Given that traditional financial metrics dominate investment decisions, focusing on eco-friendly initiatives that are also profitable can



help companies align financial and environmental goals. As demand for sustainable hospitality options grows, companies that implement credible green practices can strengthen brand loyalty and appeal to socially conscious investors. Although environmental factors currently play a secondary role to financial considerations, businesses committed to sustainability may gain an edge as these criteria gain traction. Additionally, increasing stakeholder engagement allows hospitality businesses to align with environmentally conscious consumers and suppliers. Building sustainable partnerships and fostering community involvement can enhance a company's social responsibility profile, increasing its appeal to investors. As sustainability becomes a market priority, balancing financial and environmental goals will allow the sector to attract forward-looking investments.

### Recommendations for regulators

Since profitability is a key driver of green investments, regulators could promote sustainability in the sector by increasing financial incentives and subsidies for eco-friendly initiatives. Enhanced tax benefits, low-interest green loans, and subsidies for renewable energy adoption could make sustainable projects more financially attractive, broadening industry adoption and aligning with investor priorities for both profitability and environmental responsibility.

## References

Aglietta, M. (2005). *Corporate Governance Adrift: A Critique of Shareholder Value*. Cheltenham/Edgar Elder.

- Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial analysts journal*, 74(3), 87-103.
- Ashwin Kumar, N. C., Smith, C., Badis, L., Wang, N., Ambrosy, P., & Tavares, R. (2016). ESG factors and risk-adjusted performance: a new quantitative model. *Journal of sustainable finance & investment*, 6(4), 292-300.
- Becerra-Vicario, R., Ruiz-Palomo, D., Fernández-Miguélez, S. M., & Gutiérrez-Ruiz, A. M. (2022). Examining the effects of hotel reputation in the relationship between environmental performance and hotel financial performance. *Journal of Hospitality and Tourism Management*, 53, 10-20.
- Bigné, J., Aldás-Manzano, J., Küster, I., & Vila, N. (2002). The concept mapping approach in marketing: an application in the travel agencies sector. *Qualitative Market Research: An International Journal*, 5(2), 87-95.
- Chang, R., Chanda, R. C., Vafaei-Zadeh, A., Hanifah, H., & Gui, A. (2024). Assessing Green Practices on Eco-Friendly Hotel Customer Loyalty: A Partial Least Squares Structural Equation Modeling and Fuzzy-Set Qualitative Comparative Analysis Hybrid Approach. *Sustainability*, 16(9), 3834.
- Clark, G. L., Feiner, A., & Viehs, M. (2015). From the stockholder to the stakeholder: How sustainability can drive financial outperformance. *Available at SSRN 2508281*.
- Dixon-Fowler, H. R., Slater, D. J., Johnson, J. L., Ellstrand, A. E., & Romi, A. M. (2013). Beyond “does it pay to be green?” A meta-analysis of moderators of the CEP–CFP relationship. *Journal of business ethics*, 112, 353-366.
- Dmytriiev, S. D., Freeman, R. E., & Hörisch, J. (2021). The relationship between stakeholder theory and corporate social responsibility: Differences, similarities, and implications for social issues in management. *Journal of Management Studies*, 58(6), 1441-1470.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management science*, 60(11), 2835-2857.
- Fornells, A., Rodrigo, Z., Rovira, X., Sánchez, M., Santomà, R., Teixidó-Navarro, F., & Golobardes, E. (2015). Promoting consensus in the concept mapping methodology: an application in the hospitality sector. *Pattern Recognition Letters*, 67, 39-48.
- Fraj, E., Matute, J., & Melero, I. (2015). Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tourism management*, 46, 30-42.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- Freeman, R. E., & Dmytriiev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. *Symphonya. Emerging Issues in Management*, (1), 7-15.
- Friedman, A. L., & Miles, S. (2001). Socially responsible investment and corporate social and environmental reporting in the UK: an exploratory study. *The British accounting review*, 33(4), 523-548.
- García, C. J., Herrero, B., & Morillas-Jurado, F. (2024). The impact of the environmental, social and governance dimensions of sustainability on firm risk in the hospitality and tourism industry. *Corporate Social Responsibility and Environmental Management*.

- Ha, N. M., Nguyen, P. A., Luan, N. V., & Tam, N. M. (2024). Impact of green innovation on environmental performance and financial performance. *Environment, Development and Sustainability*, 26(7), 17083-17104.
- Han, H., Chen, C., Lho, L. H., Kim, H., & Yu, J. (2020). Green hotels: exploring the drivers of customer approach behaviors for green consumption. *Sustainability*, 12(21), 9144.
- Harrison, D., & Klein, K. (2007). What's the difference? diversity constructs as separation, variety, or disparity in organizations. *Academy of management*, 32(4), 1199-1228.
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of international business studies*, 43, 834-864.
- Jackson, K. M., & Trochim, W. M. (2002). Concept mapping as an alternative approach for the analysis of open-ended survey responses. *Organizational research methods*, 5(4), 307-336.
- Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the hospitality industry: Some personal reflections on corporate challenges and research agendas. *International Journal of Contemporary Hospitality Management*, 28(1), 36-67.
- Khatter, 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.
- Khatter, A. (2023). Challenges and solutions for environmental sustainability in the hospitality sector. *Sustainability*, 15(15), 11491.
- Kim, S. H., Lee, K., & Fairhurst, A. (2017). The review of "green" research in hospitality, 2000-2014: Current trends and future research directions. *International Journal of Contemporary Hospitality Management*, 29(1), 226-247.
- Kitzinger, J. (1995). Qualitative research: introducing focus groups. *British Medical Journal*, 311(7000), 299-302.
- Krueger, R. A., & Casey, M. A. (2000). A practical guide for applied research. *A practical guide for applied research*.
- Kucukusta, D. (2017). Chinese travelers' preferences for hotel amenities. *International Journal of Contemporary Hospitality Management*, 29(7), 1956-1976.
- Leven, C. L., & Bosak, K. (2022). Concept mapping: An effective and rapid participatory tool for analysis of the tourism system? *Sustainability*, 14(16), Article 10162.
- Lindroth, K., Ritalahti, J., & Soisalon-Soininen, T. (2007). Creative tourism in destination development. *Tourism Review*, 62(1), 53-58.
- Maxwell, J. W., & Decker, C. S. (2006). Voluntary environmental investment and responsive regulation. *Environmental and Resource Economics*, 33, 425-439.
- Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial Behavior, Agency Costs and Ownership Structure*.
- Mehmetoglu, M., & Altinay, L. (2006). Examination of grounded theory analysis with an application to hospitality research. *International Journal of Hospitality Management*, 25(1), 12-33.

Moise, M. S., Gil-Saura, I., & Ruiz-Molina, M. E. (2021). "Green" practices as antecedents of functional value, guest satisfaction and loyalty. *Journal of Hospitality and Tourism Insights*, 4(5), 722-738.

Moise, M. S., Gil-Saura, I., Šerić, M., & Ruiz Molina, M. E. (2019). Influence of environmental practices on brand equity, satisfaction and word of mouth. *Journal of Brand Management*, 26, 646-657.

Molina-Azorín, J. F., Tarí, J. J., Pereira-Moliner, J., Lopez-Gamero, M. D., & Pertusa-Ortega, E. M. (2015). The effects of quality and environmental management on competitive advantage: A mixed methods study in the hotel industry. *Tourism Management*, 50, 41-54.

Molina-Collado, A., Santos-Vijande, M. L., Gómez-Rico, M., & Madera, J. M. (2022). Sustainability in hospitality and tourism: a review of key research topics from 1994 to 2020. *International Journal of Contemporary Hospitality Management*, 34(8), 3029-3064.

O'Neill, J. (2012). Using focus groups as a tool to develop a hospitality work-life research study. *International Journal of Contemporary Hospitality Management*, 24(6), 873-885.

Rau, P. R., & Yu, T. (2024). A survey on ESG: investors, institutions and firms. *China Finance Review International*, 14(1), 3-33.

Richard, B., Sivo, S., Orłowski, M., Ford, R., Murphy, J., Boote, D., & Witta, E. (2020). Qualitative research via focus groups: Will going online affect the diversity of your findings? *Cornell Hospitality Quarterly*, 62(1), 32-45.

Sharma, R. (2023). Hospitality sustainable practices, a global perspective. *Worldwide Hospitality and Tourism Themes*, 15(3), 212-219.

Singal, M. (2014). The link between firm financial performance and investment in sustainability initiatives. *Cornell Hospitality Quarterly*, 55(1), 19-30.

Trochim, W. M. (1989). An introduction to concept mapping for planning and evaluation. *Evaluation and program planning*, 12(1), 1-16.

Wang, M., Li, X., & Wang, S. (2021). Discovering research trends and opportunities of green finance and energy policy: A data-driven scientometric analysis. *Energy Policy*, 154, 112295.

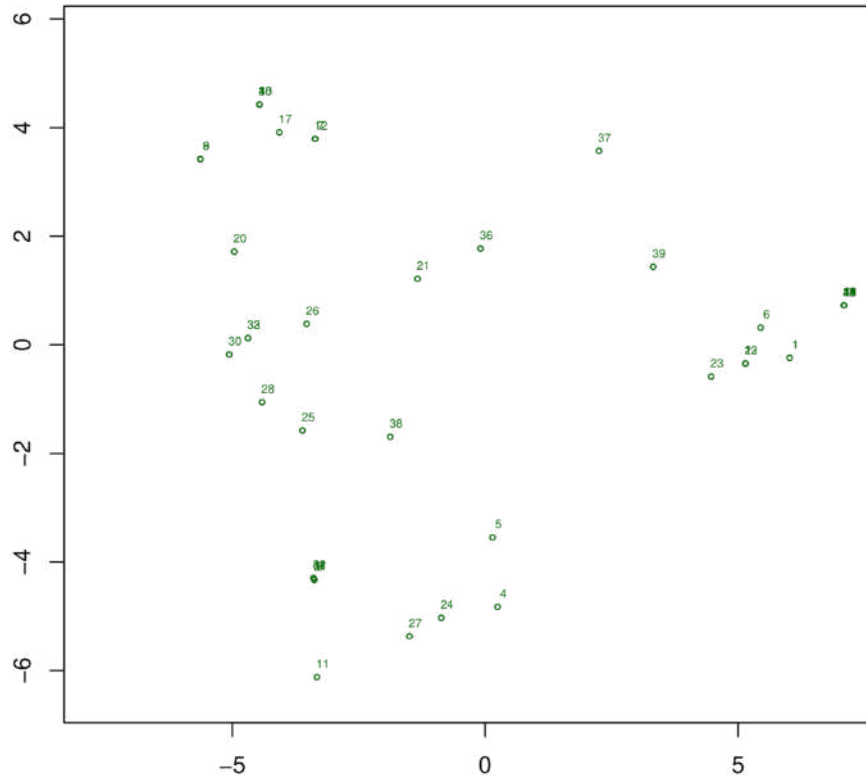
Yenidogan, A., Gurcaylilar-Yenidogan, T., & Tetik, N. (2021). Environmental management and hotel profitability: operating performance matters. *Tourism & Management Studies*, 17(3), 7-19.

Table 1: Statements gathered during the generation of statements phase

<b>Id</b>	<b>Statements</b>	<b>Relevance</b>	<b>Grouping</b>
1	Lower costs	[1-5]	<Label>
2	Higher income		
3	Ability to reduce environment impact		
4	Energy efficiency		
5	Compliance with European Union taxonomy		
6	Risk management		
7	Positive impact on reputation		
8	Publishable		
9	To be and appear sustainable		
10	Consumer awareness		
11	Green space: infrastructure		
12	Brand proposition		
13	Lower operating costs		
14	Affordable investments (in relative terms)		
15	Access to cheaper capital		
16	Incentives for sustainable investment		
17	Alignment with stakeholders		
18	Subsidized investment		
19	Higher asset value in case of exit		
20	Social impact		
21	Team engagement		
22	Greater resource autonomy (water, energy, etc.)		
23	Long-term sustainability investment measures		
24	Net zero carbon		
25	Certifiable investment		
26	Benchmark: Tracking data in sustainability		
27	ESG standard		
28	Comparable and transparent reporting		
29	Investment support		
30	Alignment with the environmental objectives of the destination		
31	Integration with the environment		
32	Alignment with local entities/administration		
33	Align investors interest with the local entities/administration		
34	Sustainable design		
35	Change in potential consumer mindset		
36	Screening operators with sustainable criteria (ESG)		
37	Alignment between investor and operator		
38	Availability of best practices in sustainable investment		
39	Investment priorities		
40	Alignment customer-operator		
41	Access to more capital from additional funding sources		
42	Circularity		

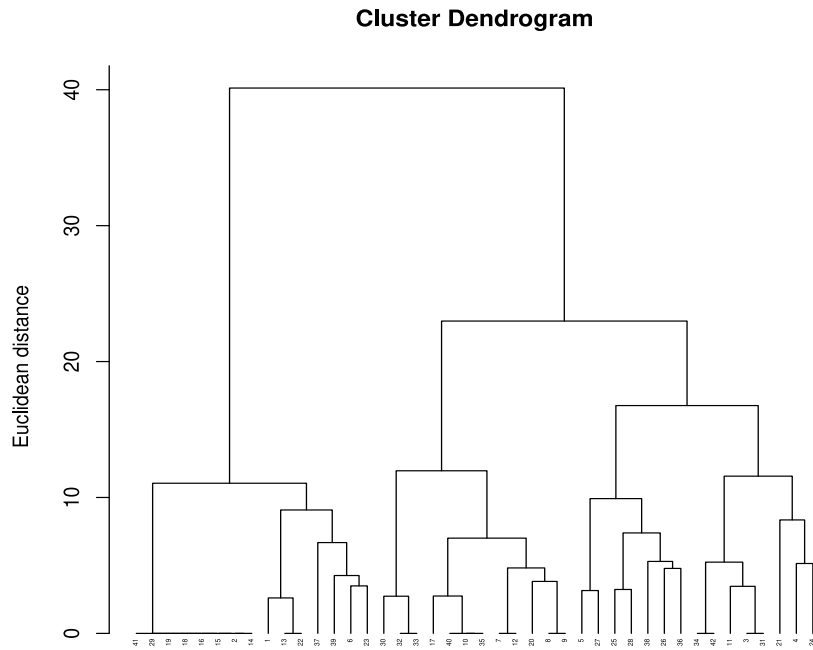
Source: Authors' elaboration

Figure 1: Multidimensional Scaling projection of statement groupings.



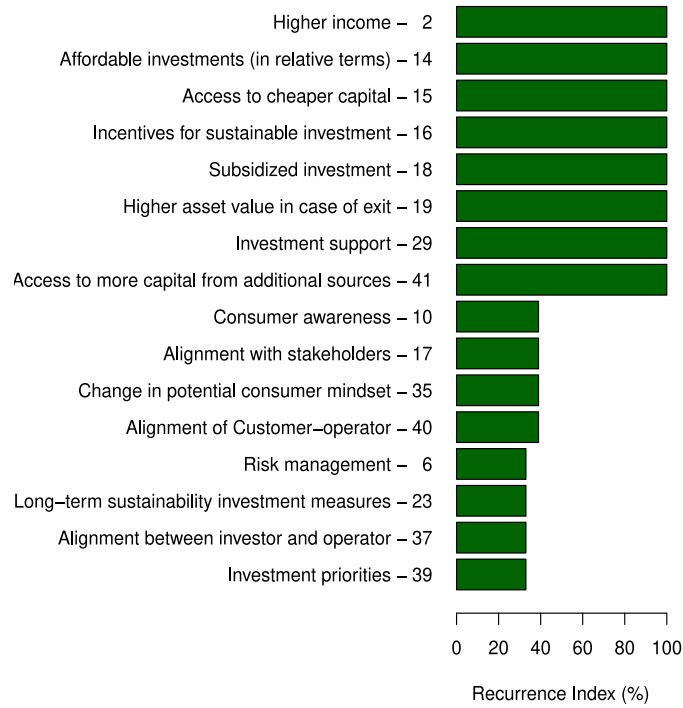
Source: Authors' elaboration

Figure 2: Cluster Dendrogram



Source: Authors' elaboration

Figure 3: Ranking of the statements based on recurrence index greater than zero



Source: Authors' elaboration

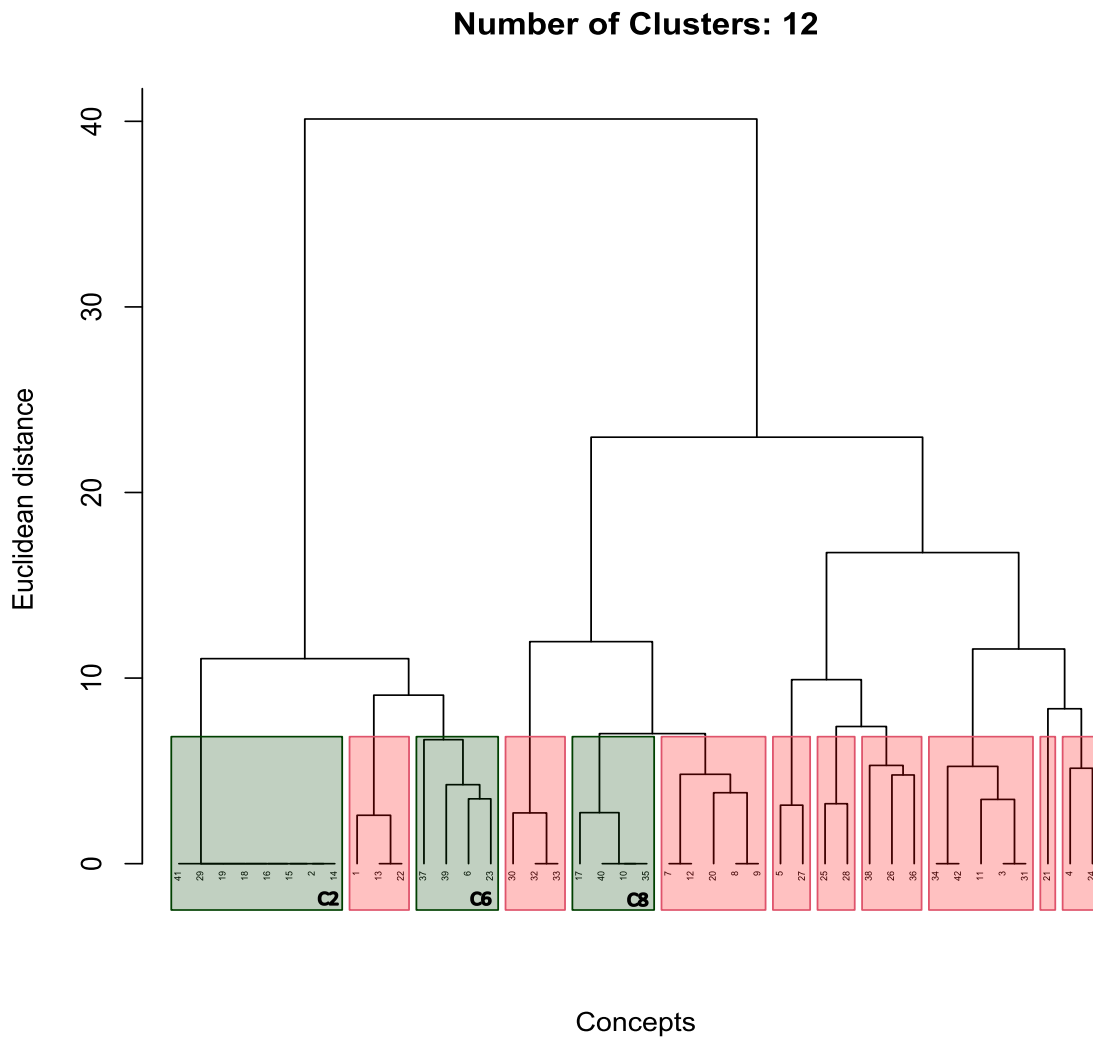


Table 2: Results for r-1 runs of clustering

Conf (k)	Num. clusters with consensus	Elements in clusters with consensus	GIC
2	1	15	2.427
3	1	15	2.427
4	1	15	2.427
5	1	15	2.427
6	1	15	2.427
7	2	15	1.588
8	2	15	1.588
9	2	12	1.294
10	2	12	1.294
11	2	12	1.294
12	3	16	1.512
13	2	12	1.327
14	2	12	1.327
15	2	12	1.327
16	2	12	1.327
17	2	12	1.327
18	2	12	1.327
19	2	12	1.327
20	2	12	1.327
21	2	12	1.327
22	2	12	1.327
23	2	12	1.327
24	2	12	1.327
25	1	8	1.109
26	1	8	1.109
27	1	8	1.109
28	1	8	1.109
29	1	8	1.109
30	1	8	1.109
31	1	8	1.109
32	1	8	1.109
33	1	8	1.109
34	1	8	1.109

Source: Authors' elaboration

Figure 4: Final representation of the experts' selected solution (k=12).



Source: Authors' elaboration

Table 3: Solution for K=12. This solution gives 12 clusters where according to consensus values eight clusters are discarded. In this tables we add the Likert average and RI for all the statements for this configuration.

Cluster	Label	Cluster consensus	Id	Likert avg.	RI	Statements
C2	Funding	0.138	2	4.00	1.00	Higher income
			14	4.16	1.00	Affordable investments (in relative terms)
			15	4.33	1.00	Access to cheaper capital
			16	4.50	1.00	Incentives for sustainable investment
			18	4.00	1.00	Subsidized investment
			19	4.66	1.00	Higher asset value when in case of exit
			29	4.00	1.00	Investment support
			41	4.50	1.00	Access to more capital from additional funding sources
C6	Investing	0.138	6	2.83	0.33	Risk management
			23	4.16	0.33	Long-term sustainability investment measures
			37	4.66	0.33	Alignment between investor and operator
			39	3.50	0.33	Investment priorities
C8	Stakeholders engagement	0.138	10	4.16	0.39	Consumer awareness
			17	4.50	0.39	Alignment with stakeholders
			35	4.00	0.39	Change in potential consumer mindset
			40	3.66	0.39	Alignment customer-operator

Source: Authors' elaboration

### Annex I: Grouping matrix for statement relationships

	1 - Lower costs	2 - Higher income	3 - Ability to reduce environment impact	4 - Energy efficiency	5 - Compliance with European Union taxonomy	6 - Risk management	7 - Positive impact on reputation	8 - Publishable	9 - To be and appear sustainable	10 - Consumer awareness	11 - Green space: infrastructure	12 - Brand proposition	13 - Lower operating costs	14 - Affordable investments (in relative terms)	15 - Access to cheaper capital	16 - Incentives for sustainable investment	17 - Alignment with stakeholders	18 - Subsidized investment	19 - Higher asset value in case of exit	20 - Social impact	21 - Team engagement	22 - Greater resource autonomy (water, energy, etc.)	23 - Long-term sustainability investment measures	24 - Net zero carbon	25 - Certifiable investment	26 - Benchmark: Tracking data in sustainability	27 - ESG standard	28 - Comparable and transparent reporting	29 - Investment support	30 - Alignment with the environmental objectives of the destination	31 - Integration with the environment	32 - Alignment with local entities/administration	33 - Align investors interest with the local entities/administration	34 - Sustainable design	35 - Change in potential consumer mindset	36 - Screening operators with sustainable criteria (ESG)	37 - Alignment between investor and operator	38 - Availability of best practices in sustainable investment	39 - Investment priorities	40 - Alignment of customer-operator	41 - Access to more capital from additional funding sources	42 - Circularity								
Lower costs - 1	7																																																	
Higher income - 2	4	7																																																
Ability to reduce environment impact - 3	0	0	7																																															
Energy efficiency - 4	2	0	3	7																																														
Compliance with European Union taxonomy - 5	1	1	1	1	7																																													
Risk management - 6	4	4	0	1	2	7																																												
Positive impact on reputation - 7	1	1	2	0	1	1	7																																											
Publishable - 8	0	0	2	0	0	0	6	7																																										
To be and appear sustainable - 9	0	0	2	0	0	0	6	7	7																																									
Consumer awareness - 10	0	0	1	0	0	0	4	6	6	7																																								
Green space: infrastructure - 11	0	0	6	3	2	0	1	1	1	0	7																																							
Brand proposition - 12	1	1	2	0	1	1	7	6	6	4	1	7																																						
Lower operating costs - 13	6	3	0	3	1	3	1	0	0	0	0	1	7																																					
Affordable investments (in relative terms) - 14	4	7	0	0	1	4	1	0	0	0	0	1	3	7																																				
Access to cheaper capital - 15	4	7	0	0	1	4	1	0	0	0	0	1	3	7	7																																			
Incentives for sustainable investment - 16	4	7	0	0	1	4	1	0	0	0	0	1	3	7	7	7																																		
Alignment with stakeholders - 17	0	0	1	0	0	0	3	4	4	6	0	3	0	0	0	0	7																																	
Subsidized investment - 18	4	7	0	0	1	4	1	0	0	0	0	1	3	7	7	7	0	7																																
Higher asset value in case of exit - 19	4	7	0	0	1	4	1	0	0	0	0	1	3	7	7	7	0	7																																
Social impact - 20	0	0	3	0	0	0	4	4	4	3	2	4	0	0	0	0	3	0	7																															
Team engagement - 21	2	0	0	3	0	1	2	2	2	2	0	2	3	0	0	0	2	0	3	7																														
Greater resource autonomy (water, energy, etc.) - 22	6	3	0	3	1	3	1	0	0	0	0	1	7	3	3	3	0	3	3	0	3	7																												
Long-term sustainability investment measures - 23	3	3	0	1	2	3	1	0	0	0	0	1	3	3	3	3	0	3	3	0	1	3	7																											
Net zero carbon - 24	2	1	3	3	2	0	1	1	1	0	4	1	2	1	1	1	0	1	1	1	1	2	1	7																										
Certifiable investment - 25	0	0	1	0	3	1	1	2	2	2	2	1	0	0	0	0	2	0	2	1	0	1	1	7																										
Benchmark: Tracking data in sustainability - 26	0	0	1	1	1	1	2	3	3	2	1	2	1	0	0	0	3	0	2	2	1	1	1	3	7																									
ESG standard - 27	0	0	2	2	6	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	3	3	1	7																							
Comparable and transparent reporting - 28	0	0	1	0	3	1	2	3	3	2	2	0	0	0	0	0	2	0	2	1	0	1	2	4	4	3	7																							
Investment support - 29	4	7	0	0	1	4	1	0	0	0	0	1	3	7	7	7	0	7	0	0	3	3	1	0	0	0	7																							
Alignment with the environmental objectives of the destination - 30	0	0	2	0	1	0	3	3	3	2	3	3	0	0	0	0	2	0	4	2	0	0	2	3	2	1	3	0	7																					
Integration with the environment - 31	0	0	7	3	1	0	2	2	2	1	6	2	0	0	0	0	1	0	3	0	0	0	3	1	1	2	1	0	2	7																				
Alignment with local entities/administration - 32	0	0	1	0	2	0	3	3	3	2	2	3	0	0	0	0	2	0	3	2	0	0	2	2	2	2	4	0	6	1	7	7																		
Align investors interest with the local entities/administration - 33	0	0	1	0	2	0	3	3	3	2	2	3	0	0	0	0	2	0	3	2	0	0	2	2	2	2	4	0	6	1	7	7																		
Sustainable design - 34	0	0	4	2	1	0	1	2	2	1	4	1	0	0	0	0	1	0	2	0	0	1	2	2	2	1	2	0	2	4	1	1	7																	
Change in potential consumer mindset - 35	0	0	1	0	0	0	4	6	6	7	0	4	0	0	0	0	6	0	3	2	0	0	0	2	2	0	2	0	2	1	2	2	1	7																
Screening operators with sustainable criteria (ESG) - 36	1	1	0	1	2	2	2	1	1	2	0	2	2	1	1	1	3	1	1	2	2	2	0	2	4	1	2	1	1	0	1	1	0	2	7															
Alignment between investor and operator - 37	2	3	1	0	1	3	3	2	2	3	0	3	2	3	3	3	3	3	2	1	2	2	0	0	0	0	0	3	1	1	1	1	0	3	2	7														
Availability of best practices in sustainable investment - 38	0	0	1	1	2	1	1	1	1	1	1	1	0	0	0	0	2	0	1	1	0	2	1</																											