
Academic Research Paper

Assessing Sustainability in Non-Hotel Organizations: Commitment and Practice Implementation Within a Multidimensional Measurement Framework

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Abstract

Purpose - Attention to sustainability in tourism finds strong momentum in recent paradigms of community-based and regenerative tourism. However, the sector faces the need for a measurement framework that is simultaneously comprehensive and adaptable to micro-organizations, which are highly prevalent in the non-hotel accommodation sector. Traditional hotel-centric models often fail to capture the specific characteristics and personal commitment of small-scale operators. This study addresses this academic gap by investigating the current state of sustainability among a broad community of non-hotel tourism operators. The main purpose of this research is to assess sustainability commitment and practice implementation within the non-hotel accommodation sector. By analyzing indicators relating to both the importance perceived by managers and the actual presence of the respective practices within the property, the study aims to map the value-action gap and identify the structural barriers that condition the ecological and socio-economic transition of the non-hotel hospitality sector.

Design/methodology/approach - The study adopts an empirical quantitative research design based on a multidimensional framework, structured into an original model derived from the main literature sources, and refined through consultation with experts and practitioners from the Vivere di Turismo

community, and encompassing 64 indicators grouped into six pillars and the three dimensions of sustainability. Data collection was carried out through an online survey addressed to a wide community of non-hotel operators, resulting in a robust sample of 616 valid questionnaires. The questionnaire utilized a comparative two-dimensional scale where respondents evaluated each indicator based on both its perceived importance and its actual implementation within the business. The collected data underwent descriptive and comparative statistical analysis to examine differences across distinct accommodation types, which include entrepreneurial and non-entrepreneurial tourist rentals, farmhouses, bed and breakfasts, and property managers. Furthermore, a performance matrix analysis was applied through the star plotting technique to identify the best performers for each pillar and sustainability dimensions. The findings reveal a consistent gap between sustainability commitment and practice implementation across all sustainability pillars.

Originality/value - This research provides an original contribution by overcoming the fragmentation of existing scientific literature, which is often limited to measuring single aspects of sustainability, such as environmental focus, energy consumption, or isolated community relations. This study proposes an original and holistic model that ensures comprehensive coverage of the three macro-dimensions of sustainability through six structured pillars. An additional contribution lies in the comparative analysis across accommodation types, which highlights significant differences in sustainability commitment and implementation practices among different forms of non-hotel accommodation. Future studies should focus on further refining quantitative metrics capable of enhancing these integrated impacts on a global scale.

Practical implications - The main interpretations indicate that, although non-hotel operators demonstrate a strong personal commitment to sustainability, a significant gap remains between sustainability commitment and the implementation of sustainability practices. This gap appears to be driven by both the small scale of these businesses and external infrastructural barriers (particularly in sustainable transport and mobility), as well as by a still limited openness toward the outside environment (the community, local operators, schools, and universities). To overcome the constraints associated with the small scale of these businesses, policy makers and trade associations must foster regional cooperation networks and public-private partnerships, as well as specific actions to enable these structures to face the costs of certifications or hiring specialized sustainability personnel.

Keywords: *Non-hotel organization; sustainability; sustainability measurement; sustainability commitment; sustainable practices.*

JEL Codes: L83; Q56; M14; C38; L26.

1. Introduction

The non-hotel sector in Italy represents a composite and dynamic segment, characterized by its own distinct identity compared to the hotel industry. This uniqueness manifests both in terms of services provided and the approach toward guests, factors that have gradually transformed the sector from a "second choice" relative to hotels into a valid accommodation alternative. It now attracts the same target audience

as hotels—those seeking diverse offerings—as well as more specific niche targets.

In Italy, the non-hotel sector accounts for 87.58% of the over 265,300 accommodation facilities (ISTAT 2024 data), representing an increase of over 1.7% compared to the previous year (it was 86% in 2023); hotels represent 12.42% of the total (down from 14% in 2023). However, with reference to the number of beds, the weight of the non-hotel segment is more limited: just over 58.47% (up from 57.1%), compared to 41.53% for the hotel offering, which has declined since 2023 (when it was 42.9%).

The largest number of non-hotel accommodation facilities (65.7% of the total) belongs to the category of "entrepreneurial rental accommodations"; Bed & Breakfasts (B&Bs) represent 15% of the non-hotel segment. In 2024, non-hotel facilities hosted 27.7% of the total arrivals in Italy, marking a 3.53% increase among the approximately 65.7 million tourists in our country in 2024. Overnights in the non-hotel sector increased by 0.81%, with a notable surge (7.52%) for entrepreneurial rental accommodations.

It is nearly impossible to determine with exact precision the impact of the non-hotel segment on the economy. This difficulty arises because official ISTAT sources (ISTAT, Production and Value Added by Branch of Activity, 2025) do not distinguish between the two macro-segments of accommodation. Furthermore, the sector's vast and interconnected supply chain—ranging from local craftsmanship to transport and communication—makes it difficult to measure the specific share derived from tourism versus that from residents.

The latest official data, the 2023 Tourism Satellite Account (CST), which for the first time also measures indirect impact, values tourism at 9.6% of the GDP (ISTAT, CST, 2025). The direct impact of tourism consumption generates 106.8 billion euros of GDP, reaching 206.4 billion euros when total indirect effects are considered (ISTAT: CST, 2023). Various estimates regarding the specific impact of the non-hotel tourism sector suggest figures between 10 and 11 billion euros, although these methodologies utilize proxies, such as the ratio of beds compared to the hotel sector (Openeconomics, 2024), or projections based on data from individual sub-segments (B&Bs, apartments, etc.) analyzed by specific associations and web portals.

In recent years, the significant growth in short-term residential rentals for tourism purposes (so-called "short-term lets")¹ has generated intense academic attention. This interest is driven by inputs and reflections from institutions, the business world, and society at large, regarding the social, economic, and environmental impacts generated by these facilities and the broader non-hotel sector. Discussions are often fueled by allegations of negative impacts: gentrification issues, increased safety concerns, scarcity of

¹ The term "short-term rental" refers to a type of lease shorter than 30 days, regulated in Italy by Decree-Law No. 50/2017, converted with modifications by Law No. 96 of June 21, 2017, and subsequent amendments. These concern the use of housing for occasional occupancy, thus meeting needs primarily associated with tourists. Article 13-ter of Decree-Law No. 145 of 2023 introduced, starting from November 2, 2024, the obligation for these facilities—along with all accommodation establishments—to register with the National Database of Accommodation Facilities and Properties intended for short-term or tourism rentals (BDSR) of the Ministry of Tourism for the assignment of a CIN (National Identification Code). As of November 2025, 617,474 CINs have been issued by the Ministry, equal to 89.29% of the total facilities registered on the BDSR (691,515 facilities).

residential housing, and particularly rising housing costs. The latter is seen as a consequence of the potential increase in rental income, leading to an exclusion effect for low-income individuals regarding property access (Cócola Gant, 2016; Franco & Santos, 2021; Davidson & Lees, 2010; Wachsmuth & Weisler, 2018). Added to these are environmental concerns (waste disposal, consumption of scarce resources, etc.) linked to the massive presence of tourists in urban centers, where a large portion of non-hotel accommodations is concentrated.

However, while the non-hotel sector can create negative effects on the environmental, economic, and social conditions of a territory, it also responds to specific guest needs which, if satisfied, positively impact the well-being of individuals, communities, and tourism destinations. The success of the non-hotel segment lies in its ability to intercept the modern needs of tourists, focusing on the creation of a "guest experience" that involves the visitor in every phase of the stay, making them feel unique and valued (Menchiari, 2023). These facilities favor daily autonomy and internal socialization, as well as psychophysical well-being and regeneration, particularly for accommodations immersed in natural contexts (Mehmetoglu, 2007; Farmaki, 2012; Vujko et al., 2025; Nicolau, Rodríguez-Sánchez & Ruiz-Moreno, 2024). Furthermore, they meet the search for authenticity and immersion in local culture, offering non-standardized experiences that allow interaction with the social fabric and territorial identity (MacCannell, 1973; Wang, 1999; Cohen, 1988; Richards, 2011; Farmaki, 2012). This deep connection with local history and traditions transforms the accommodation into a tool for learning and discovering cultural heritage. Thanks to direct interaction with hosts, the non-hotel structure enhances the sense of belonging to a community (Tussyadiah & Pesonen, 2016; Zloteanu et al., 2018).

Therefore, because the non-hotel structure intercepts a need for a more personalized and immersive vacation, and due to the "person-intensive" bond characterizing all stay phases—starting from the booking—it can act as a driver for transmitting local identity, culture, environmental respect, and principles for the proper use of resources.

In fact, recent tourism studies on the three dimensions of sustainability have focused not only on destinations but on the contribution of economic operators. Due to the negative debates that often dominate the non-hotel segment, research has increasingly turned toward measuring sustainability within this sub-sector. However, measurements of sustainability in accommodation facilities have long prioritized environmental aspects and undervalued the economic and social dimensions. This is even more evident in contributions focusing on the non-hotel segment. The lack of holistic models and consolidated approaches means that a broad and established set of indicators is not yet available; instead, we find individual measurements often linked to single aspects of sustainability or specific sub-segments.

The present work is the result of research conducted by the authors, based on a convention between the Department of Economics and Management of the University of Florence and Vivere di Turismo, a benefit corporation representing a community of non-hotel facilities operating throughout Italy with training and growth support services. The research aims to measure the sustainability impacts of non-hotel organizations. The evaluation is based on an original model of 64 indicators (expressing as many sustainability practices) related to six pillars of sustainability across the environmental, economic, and

social dimensions².

The objective of the research is to capture a dual aspect—cultural and operational—namely: 1) Commitment, measured as the importance attributed by operators to the various sustainability practices considered by the model; 2) effective Practice Implementation (operational engagement), referring to the actual putting into practice of sustainability measures by operators. The results reveal a snapshot of activities that promote the local economy, environmental care, the enhancement of local cultural heritage, and collaboration among operators and with local institutions. Beyond their scholarly utility, the results allow for practical reflections on how to engage these organizations to develop community-based and regenerative tourism, acting as a *trait d'union* between tourist needs and those of the community.

2. Literature review and theoretical framework

Attention to sustainability in tourism, which has been at the heart of academic contributions for decades, finds strong momentum in recent paradigms of community-based and regenerative tourism. In relation to these approaches, the sector faces the need for a measurement framework that is simultaneously comprehensive—encompassing multiple aspects of sustainability—and specific to diverse tourism contexts.

The measurement of sustainability in the tourism sector occupies a central role in contemporary scientific discourse and in the guidelines of international bodies responsible for defining development policies and ESG (Environmental, Social, and Governance) reporting standards. Interest in such metrics emerged in the early 2000s at the tourism destination level, with the aim of identifying monitoring tools capable of guiding local growth that is not only competitive but also sustainable (Larimian & Sadeghi, 2021; Rutecka, Cicha, Rizun & Strzelecki, 2023; Silveira et al., 2021). In this evolutionary path, institutional initiatives have played a decisive role, starting with the guide published by the World Tourism Organization in 2004 (UNWTO, 2004). Subsequently, UNWTO and UNEP identified twelve key variables—including local prosperity, employment quality, social equity, and environmental purity—articulated into approximately 200 indicators to facilitate destination monitoring by both public and private operators (UNWTO-UNEP, 2005). Similarly, the European Commission contributed through the Tourism Sustainability Group (TSG), which selected a set of 50 indicators, distinguishing between "core" and optional parameters (TSG, 2007). Despite this wealth of contributions, literature highlights how the proliferation of models has not always favored a systematic validation of the different measurement sets. A significant evolution occurred in 2010 with the identification of the NECSTouR network as the entity responsible for testing sustainable tourism models in Europe (COM, 2010/352). This model is based on ten operational pillars, including deseasonalization, the protection of cultural and environmental heritage, and the management of water and energy resources, monitored through a set of approximately 200 indicators that integrate sustainability and competitiveness. Currently, scientific literature on destinations appears flourishing and multifaceted, progressively focusing on themes of contextual regeneration and community well-being.

² This paper represents a summary and an alternative analysis of the main research results, which are the subject of a specific forthcoming publication: Varra, L. (2026) "Organizzazioni turistiche extralberghiere e sostenibilità. il contributo allo sviluppo umano, economico, sociale ed ecosostenibile. dalle evidenze di una ricerca sul campo", Roma Aracne Editore.

At the corporate level, the hotel sector was the first to be subject to systematic attention due to its direct impact on water and energy resource consumption (Singh et al., 2023). Recent studies estimate that the sector is responsible for 5% of global greenhouse gas emissions, making energy KPIs indispensable tools for mitigation strategies (Voukkali et al., 2023). The adoption of environmental indicators also serves as a lever to improve corporate image and attract an increasingly conscious clientele (Campos et al., 2024; Jhunjhnuwala, 2023; Wang et al., 2019). Prevailing practices focus on internal efficiency through resource savings, recycling, and food waste management (Barakagira & Paapa, 2024; Pereira et al., 2021; Lagioia et al., 2024). However, quantitative measurement via indicators still appears fragmented due to the lack of shared models and the difficulty of data acquisition. This also applies to CSR applications, which suffer from a lack of widespread sensitivity to the topic (Abdalla Eltoun, Soeiro & Mariani, 2024; Navarro, Martinez & Jimenez, 2020). A significant methodological contribution is offered by the research of Abdalla Eltoun et al. (2024), which utilized the Delphi technique to validate a set of 70 sustainability indicators in hotels. This model categorizes indicators into four dimensions: environmental (36 indicators), social (24), economic (4), and resilience (6). The environmental dimension is considered the most important, representing 51% of the total (Jones, 2014), followed by the social dimension at 34%. Among the most utilized measurements are those concerning waste management, food waste reduction (Junaedia, 2020; Pirani & Arafat, 2016), and water savings (Nizic, Grdic & Endres, 2017). In parallel, innovative approaches such as that of Arzoumanidis et al. (2021) propose measurements based on life cycle assessment and the circular economy (Vargas-Sánchez, 2018). Increasingly, measurement is linked to personnel management through Micro-level Corporate Social Responsibility (ML-CSR) practices, which positively influence employee creativity (Ahmad et al., 2022).

Unlike the hotel sector, the non-hotel segment presents a less consolidated body of literature and even more pronounced methodological fragmentation, due to the variety of accommodation types. Nonetheless, a transition is observed from a purely "eco-efficient" view focused on cost savings (2015-2018 period) to a "regenerative" vision (2023-2026), which values the human dimension and local identity. A critical aspect is that measurement in this area often bypasses quantitative indicator sets, relying more on qualitative methodologies or the analysis of strategic best practices.

Research has underscored the need for specific measurement systems for non-hotel micro-enterprises, which, despite having smaller individual impacts than hotels, require indicators that go beyond simple economic "survival" (Alipour et al., 2019). A central theme is external social sustainability, specifically the relationship with the resident community, particularly in cities of art affected by the short-term rental phenomenon (Thompson, 2025). In this context, indicators aim to detect the impact on local rental prices and the degree of resident acceptance, transforming the host from a potential nuisance into a "custodian of values" and an activator of territorial innovation (Jørgensen, Sundbo & Fuglsang, 2024).

Within the non-hotel sector, Bed & Breakfasts (B&Bs) represent the most investigated typology. Research by Hugo and Plunkett (2019) on a sample of B&Bs highlights the use of 12 qualitative indicators primarily linked to pro-environmental behaviors: recycling (practiced by 93% of managers), use of low-energy lighting, linen reuse, and the purchase of local food products. However, a divergence emerges between the importance attributed to environmental protection and territorial promotion and the scant attention paid to the formal communication of such practices or the incentivizing of public transport.

A relevant contribution to more widespread measurement practices comes from digital platforms, such as Booking.com's Sustainable Travel Program. The study by Rutecka et al. (2023) analyzes the application of 30 indicators divided into five categories: waste management, energy/greenhouse gases, water, community support, and nature protection. Although apartments numerically constitute the largest share of structures with sustainability badges, B&Bs present the highest percentage of adherence relative to the total category (4.16%). The most frequent indicators concern waste separation and recycling (present in 97% of awarded structures), followed by water waste reduction (94%), while community support practices appear less widespread (38%).

The link between sustainability and competitiveness in the non-hotel sector is further explored through indicators of operational efficiency and guest satisfaction (Hsu et al., 2024). In specific contexts, sustainability is also measured through "Network Science," where the cohesion of social networks among local actors becomes an indicator of resilience and innovative capacity (Baggio & Valeri, 2020). Finally, the use of zero-kilometer products and the narration of cultural heritage are identified as pillars of the economic and social dimension, capable of generating a competitive advantage based on local identity (García-Almeida et al., 2025). In summary, although quantitative measurement is still in the refinement phase, the non-hotel segment is consolidating models that integrate environmental ethics with social responsibility and communicative transparency (Abbas et al., 2022).

Despite the increasing volume of studies on sustainability metrics, a significant theoretical and empirical gap remains in understanding how the personal values of non-hotel operators translate into concrete actions. To address this, it is essential to integrate the concept of Sustainability Commitment, which stems from the broader framework of Organizational Commitment (Meyer & Allen, 1991). In micro-scale hospitality, this is often characterized as affective commitment—a genuine psychological bond and desire to contribute to the territory's well-being. Recent research (Abbas et al., 2022; Singh et al., 2023) suggests that while high levels of commitment act as a primary driver, they do not automatically guarantee the Implementation of Practices. This "value-action gap" is particularly pronounced in the non-hotel sector, where operational engagement is frequently constrained by structural and resource-related limitations. Consequently, a truly holistic measurement framework must move beyond a monolithic view of sustainability; it must distinguish between the "mindset" (Commitment) and the "operational reality" (Practice Implementation). By adopting this dual perspective, it becomes possible to identify not only what operators do, but also the cultural and ethical foundation that motivates their role as "guardians of the destination".

3. Materials and methods

The research aimed to assess the impact of the non-hotel sector in terms of environmental, economic, and social sustainability. For the evaluation of sustainability, a dual interpretation of the phenomenon was considered:

- Commitment: representing the sensitivity within the organizations regarding sustainability issues, measured through the importance attributed by operators to various environmental, economic, and social sustainability aspects.
- Practice Implementation: representing the actual operational engagement, namely the presence of concrete responses from the organizations to implement sustainability, with

particular attention to community involvement and the dissemination of sustainable values and behaviors among tourists.

The research methodology involved three phases:

- Desk Analysis: a collection and study of major contributions from scientific literature, functional to understanding the role of the non-hotel sector within the landscape of the economy and tourism studies, as well as the state of the art of the scientific and institutional debate on sustainability, recent territorial development approaches, and accommodation operators' behaviors.
- Definition of an Indicator Model: developed based on the main literature contributions and primary international standards.
- Field Research: conducted via an online questionnaire to measure the contribution to sustainability provided by operators in the non-hotel segment.

The development of the indicator framework followed a multi-stage process. First, a structured review of the tourism and hospitality sustainability literature was conducted, drawing on destination sustainability models, hotel sustainability assessment frameworks, ESG-related approaches, and studies focusing on non-hotel accommodation businesses. Particular attention was paid to international reference frameworks and sustainability measurement systems proposed by organizations such as UNWTO, UNEP, TSG, and NECSTouR. The review highlighted several recurring sustainability domains, including environmental impacts, local economic development, sustainable human resource management, sustainable mobility, cultural heritage, and community engagement, while also emphasizing the widespread adoption of the environmental, social, and economic dimensions of sustainability, as well as the ESG (Environmental, Social, and Governance) paradigm.

A preliminary set of indicators was subsequently discussed and refined through consultation with experts and practitioners belonging to the Vivere di Turismo community, a nationwide network of non-hotel accommodation operators. In addition, in July 2025, a focus group organized by the Vivere di Turismo community involved 12 external consultants and experts in sustainability and tourism accommodation. This validation process helped assess the relevance, applicability, and comprehensibility of the indicators within the specific context of small-scale hospitality businesses. The final set of 64 indicators was then grouped according to thematic affinity and assigned to six sustainability pillars: Environment and Resources; Sustainable Transport and Mobility; Cultural Heritage and Identity; Hospitality and Community; Work, Well-being and Human Growth; and Proximity Economy. The resulting framework was designed to ensure balanced coverage of the environmental, economic, and social dimensions of sustainability while remaining applicable to the operational realities of non-hotel accommodation organizations.

The model also sought to break down the pillars into the three dimensions of sustainability: for example, the area of transportation and sustainable mobility can be measured both with reference to environmental impacts (e.g., indicator: Provision of eco-friendly transportation to guests); with reference to social impacts (e.g., indicator: Local community awareness campaigns on non-polluting transportation); and with reference to the economic dimension (e.g., indicator: Discounts for guests arriving by public or non-polluting transportation).

This approach has given rise to a model according to the following scheme³:

Figure 1. Allocation of Sustainability Indicators to Pillars and Dimensions

Sustainability Pillars		Sustainability Dimensions		
		 Environmental	 Social	 Economic
1	 Environment and Resources	S1.1, S1.2, S1.3, S1.4, S1.5, S1.7, S1.8	S1.4, S1.5, S1.7, S1.8, S1.9, S1.10	S1.2, S1.3, S1.4, S1.6, S1.10
2	 Sustainable Transport and Mobility	S2.1, S2.2	S2.1, S2.2, S2.3, S2.4, S2.5, S2.6	S2.1, S2.2, S2.5
3	 Cultural Heritage and Identity	S3.6, S3.7, S3.8, S3.11	S3.1, S3.2, S3.3, S3.4, S3.5, S3.6, S3.7, S3.9, S3.10, S3.11, S3.12, S3.13	S3.1, S3.2, S3.5, S3.8, S3.9, S3.10, S3.11, S3.12, S3.13
4	 Hospitality and Community	S4.5, S4.8	S4.4, S4.5, S4.6, S4.7, S4.9, S4.10, S4.11, S4.12	S4.1, S4.2, S4.3, S4.4, S4.5, S4.6, S4.7, S4.9, S4.10, S4.11, S4.12
5	 Work, Well-being and Human Growth	S5.1, S5.2, S5.3, S5.15	S5.1, S5.2, S5.3, S5.4, S5.5, S5.6, S5.7, S5.8, S5.9, S5.10, S5.11, S5.12, S5.13, S5.14, S5.15	S5.2, S5.4, S5.9, S5.14, S5.15
6	 Proximity Economy	S6.1, S6.8	S6.1, S6.2, S6.3, S6.5, S6.6, S6.7, S6.8	S6.2, S6.4, S6.5, S6.6, S6.8

Overall, based on the literature review, 64 indicators were identified and assigned to the six sustainability pillars in relation to the environmental, economic, and social dimensions of sustainability. Within these cross-sections, some indicators may appear more than once, as they contribute to multiple dimensions simultaneously. For example, providing guests with eco-friendly transportation may also contribute to economic sustainability, as it can represent a source of innovation and competitiveness. The indicators were utilized to assess both the cultural and operational dimensions of sustainability.

An online questionnaire was employed, organized into three parts:

1. General characteristics of the business.
2. Formal organization of sustainability (roles and formal documents, such as sustainability reports).
3. Measurement, with reference to the model's pillars, of the cultural orientation and corporate behaviors regarding sustainability.

Regarding Part 3, a 5-point scale was used for each indicator to detect both the importance attributed to the factor by the company and the intensity (i.e., the robustness) of the sustainable actions

³ Some indicators contribute simultaneously to more than one sustainability dimension. Therefore, the same indicator may appear under environmental, social, and economic dimensions. The correspondence between the acronyms and the indicators is reported in the appendix of this paper.

and behaviors implemented.

For the Importance Attributed, the numerical grades correspond to: 1 = not at all important; 2 = slightly important; 3 = moderately important; 4 = very important; 5 = fundamental. Regarding Presence (Implementation), the grades correspond to: 1 = not at all present; 2 = slightly/sporadically present; 3 = moderately present; 4 = very/almost always present; 5 = completely/always present.

The online survey was primarily administered during the two-day meeting of the Vivere di Turismo community at the Tourism Festival in Rimini on November 25 and 26, 2025. Completion was carried out ensuring respondent anonymity and compliance with current privacy regulations.

The analysis of the questionnaire results regarding cultural orientation and concrete behaviors in relation to individual sustainability factors was performed through Gap Analysis.

Finally, the data were analyzed through a Bivariate Scatter Plot to observe the distribution of the organizations. Subsequently, a Quadrant Analysis (or Strategic Matrix) was applied to categorize respondents based on cut-off points to map the "Best Performers". These are defined as organizations that positioned themselves in the highest tier for both Commitment and Practice Implementation, achieving a score of at least 4 in both dimensions. In other words, the objective was to determine the number of the most virtuous companies in terms of sustainability and to identify which, among the various types of facilities represented, is the most engaged in sustainability.

Therefore, considering the scale used in the questionnaire, the best performers were identified as follows: with regard to the importance attributed, it was considered that a high sensitivity to each topic covered by the indicators could correspond to a rating of 4 (corresponding to "very important") or 5 (corresponding to "fundamental"), excluding the others. Similarly, with regard to the presence of practices, ratings lower than 4 were excluded, since, even where they existed, they corresponded to a sporadic or moderate presence of the practice; therefore, best performers were considered those who used the practices examined by the indicators at least at level 4 of the scale, i.e., responding to "very/almost always" or "completely/always." The combination of the two highest scores (at least 4 for importance and at least 4 for presence) led to the identification of the "best performers."

4. Results

A total of 632 non-hotel tourism operators participated in the survey. Following data cleaning, 616 questionnaires were identified as complete and correct across all sections and were used for the analysis. Table 1 illustrates the characteristics of the respondents.

Most respondents (30.8%) carry out entrepreneurial rental accommodation activities. Almost 21% exercise non-entrepreneurial tourist rentals, therefore with a number of apartments up to 4. The same percentage is found for those who act as property managers—third parties who, through a mandate, manage the tourist occupancy of the accommodations. B&Bs represent 9.7% of the total, while agritourism activities represent 4.7%. In the responses relating to the "other" entry, a variety of situations were found, many traced back to the macro-categories suggested in the questionnaire, leaving in "Other" only the most particular cases, often referring to the start of the hospitality activity with hybrid forms between traditional classifications and those of the questionnaire.

Table 1. Characteristics of respondent facilities by type.

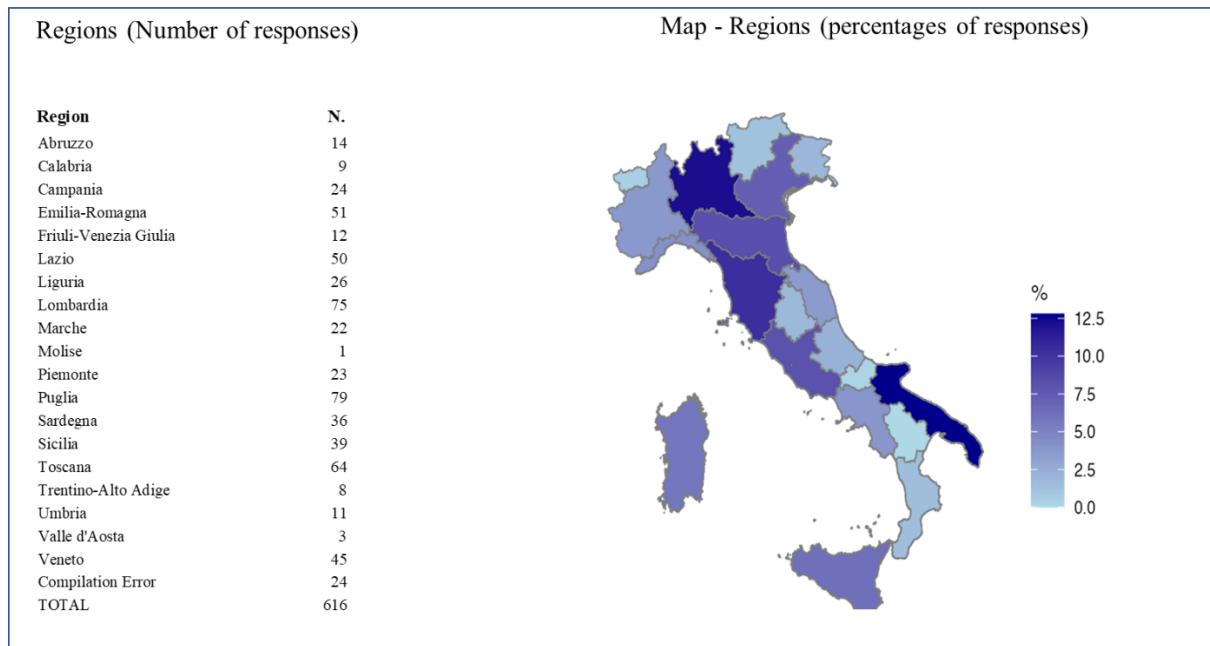
Facilities Type	N.	%
Holiday dwellings (rented)- Entrepreneurial tourist rentals	190	30.8
Non-entrepreneurial tourist rentals	129	20.9
Property Managers	129	20.9
Bed & Breakfast (B&B)	60	9.7
Farmhouses	30	4.9
Holiday homes (Case per ferie)	24	3.8
Hostels	3	0.5
Tourist camp-sites and holiday villages	8	1.2
Mountain shelters	3	0.5
Consultant	22	3.5
Other collective accommodation	15	2.4
Total	616	100

As shown in Table 2, the structures involved in the survey are predominantly young, although there are realities with a history of over thirty years.

Table 2. Characteristics of responding facilities: business start-up by period

Period	Number of start-ups (tot. 611)	%
1960-1995	10	1.6
1996-2005	40	6.5
2006-2015	102	16.7
2016-2026	459	75.1

As shown in Table 2, the structures involved in the survey are predominantly young, although there are realities with a history of over thirty years.

Figure 2. Characteristics of responding facilities: territorial distribution by region

An analysis of the distribution of the respondents' activities with respect to the territory (Figure 2) highlights a significant presence in all regions of Italy, with Puglia and Lombardy being the regions with the highest number of businesses started. The respondents' businesses are mainly located in Puglia (79), Lombardy (75), and Tuscany (64).

With reference to company size (Table 3), the majority—almost 49%—of the organizations have a number of employees between 1 and 3. There is a good percentage (17.7%) of activities with a number of employees between 4 and 10; 97% of respondents declare they have up to 10 employees.

Table 3. Business Size (Number and Percentage)

Size Class	N	%
0	161	26.1
1-3	301	48.9
4-10	109	17.7
11-15	17	2.8
16-30	15	2.4
> 30	13	2.1

The second part of the questionnaire investigated the presence of specific sustainability roles in the company. Tables 4 and 5 show the results with reference to the environment and community relations, respectively.

Table 4. Presence of an environmental sustainability role (Number and Percentage)

Answer	N.	%
No, there isn't one	411	66.7
Yes, but it's not a specific, exclusive role.	166	26.9
Yes, it's a specific role outsourced.	20	3.2
Yes, it's a specific internal role.	19	3.1
Total	616	100

As shown in Table 4, when asked: "Is there anyone in the company who is responsible for environmental activities?" (e.g., environmental certifications, research into eco-friendly solutions, etc.), most respondents indicated the lack of a specific role in the organization. Only 19 companies have an internal role, while in 20 cases the related activities are entrusted to external experts.

Table 5. Presence of a role of active community engagement (Number and Percentage)

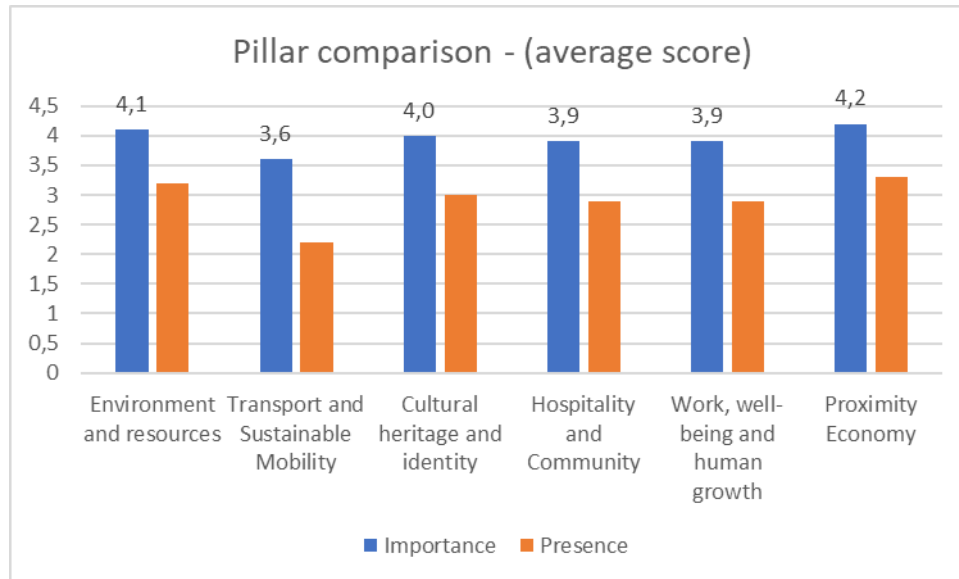
Answer	N.	%
No, there isn't one	352	57.1
Yes, but it's not a specific, exclusive role.	179	29.1
Yes, it's a specific role outsourced.	15	2.4
Yes, it's a specific internal role.	70	11.3
Total	616	100

With regard to the presence of roles that deal with community involvement in reception, promotional activities, or other initiatives in partnership with citizens (Table 5), a greater internal presence (70 cases found) is noted compared to organizational solutions for environmental sustainability; the cases in which a role for community involvement activities exists but is not exclusively focused on it account for over 29% of cases, while for environmental sustainability this was the case in less than 27% of responding companies

4.1 Assessing Sustainability: commitment and practice implementation

The results of the survey on cultural orientation (commitment) to sustainability and the practices present in the company are compared below. Figure 3 presents the results by pillar.

Figure 3. Comparison between Commitment (importance attributed to the practice) and practice implementation (presence of the practice) - Average score per pillar



As can be seen (Figure 3), organizations are very attentive to the pillar of the proximity economy and the environment, followed by attention to Cultural Heritage and Identity. On the other hand, they are more deficient both in terms of assigned importance and practices present in the structures regarding the sustainable transport and mobility pillar. Although the recognized importance is not high, it is nonetheless with reference to the mobility pillar that the greatest gap is found (Figure 4), while on Environment and Resources and on proximity economy—despite being recognized as very important—the lowest gaps are found.

Figure 4. Gap between commitment (importance attributed to the practice) and practice implementation (presence of the practice)

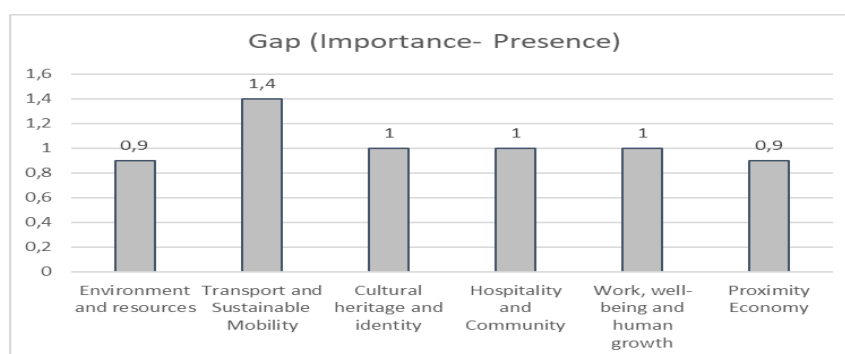


Figure 4 highlights how the main gap refers to transport, while the areas relating to the environment and the local economy are better covered.

Table 6. Maximum Commitment for indicators (% of respondents scoring ≥ 4 for "Importance")

Indicator	Pillar	Importance % of score ≥ 4
Separate waste collection	Environment and Resources	91.4
Waste cost/quantity monitoring systems	Environment and Resources	89.6
Guest awareness initiatives on waste separation	Environment and Resources	87.3
Environmentally responsible workplaces	Work, Well-being and Human Growth	81.5
Guest awareness initiatives on water and energy consumption	Environment and Resources	81.0
Community campaigns on cultural heritage	Cultural Heritage and Identity	80.0
Systems for monitoring/reducing energy consumption	Environment and Resources	80.0
Guest feedback collection tools	Hospitality and Community	78.8
Authentic online storytelling of local identity	Cultural Heritage and Identity	78.4
Promotion of the local economy	Proximity Economy	78.4
Integrated packages with local operators	Proximity Economy	78.4
Use of local suppliers and professionals	Proximity Economy	78.0
Seasonality reduction initiatives	Cultural Heritage and Identity	77.3
Accessibility services for disabled guests	Hospitality and Community	77.1
Women in key positions (.....)	Work, Well-being and Human Growth	76.8
Pet waste collection kit	Hospitality and Community	56.2
Consultants for environmental/social responsibility	Work, Well-being and Human Growth	55.0
Environmental certifications	Environment and Resources	54.5
Inclusion and equal-opportunity initiatives	Hospitality and Community	52.0
Opening the property to the local community	Hospitality and Community	51.6
Employees with university/ITS qualifications	Work, Well-being and Human Growth	51.3
Community campaigns on sustainable transport	Sustainable Transport and Mobility	50.5
Social working groups and partnerships	Hospitality and Community	50.3
Awareness materials on sustainable transport	Sustainable Transport and Mobility	47.4
Discounts for guests using public/non-polluting transport	Sustainable Transport and Mobility	43.0

The analysis of the indicators used by our model for each pillar highlights that environmental issues are particularly deeply felt among the research respondents. The highest commitment is shown towards waste sorting (with 91.4% of respondents scoring 4 or 5 in terms of “Importance”), followed by waste monitoring systems and ‘Guest awareness initiatives on waste separation’.

As shown in Table 6, environmental awareness is also evidenced by other indicators not included in this pillar but closely related to it (for example: Environmentally responsible workplaces). The percentages of those scoring 4 or higher are lower for the theme of sustainable transport and mobility, which occupy the lowest positions in the maximum commitment table, confirming the lowest average score among the pillars examined.

With reference to practice implementation (“Presence”), Table 7 shows the percentages of respondents who scored 4 or 5 for the actual presence of the examined indicators within their property.

Table 7. Maximum Practice Implementation for indicators (% of respondents scoring ≥ 4 for "Presence")

Indicator	Pillar	Presence % of score ≥ 4
Separate waste collection	Environment and Resources	83.9
Guest awareness initiatives on waste separation	Environment and Resources	75.2
Women in key positions	Work, Well-being and Human Growth	70.0
Use of local suppliers and professionals	Proximity Economy	66.6
Promotion of the local economy	Proximity Economy	64.8
Environmentally responsible workplaces	Work, Well-being and Human Growth	64.7
Employee involvement in organizational values	Work, Well-being and Human Growth	60.6
Self check-in / online check-in	Hospitality and Community	54.6
Systems for monitoring/reducing energy consumption	Environment and Resources	54.4
Information on property and destination history	Cultural Heritage and Identity	54.4
24/7 guest communication tools	Hospitality and Community	54.2
Guest awareness initiatives on water and energy consumption	Environment and Resources	52.9.
Guest feedback collection tools	Hospitality and Community	52.2
Use of eco-friendly cleaning products	Environment and Resources	51.1
Presence of native plants and trees (.....)	Cultural Heritage and Identity	50.7
Social working groups and partnerships	Hospitality and Community	25.8
Environmental certifications	Environment and Resources	24.8
Agreements for eco-friendly vehicle rental	Sustainable Transport and Mobility	24.8
Environmental working groups and partnerships	Environment and Resources	24.7
Provision of eco-friendly transportation to guests	Sustainable Transport and Mobility	24.2
Post-secondary internships	Work, Well-being and Human Growth	23.7
Post-graduate internships	Work, Well-being and Human Growth	22.4
Awareness materials on sustainable transport	Sustainable Transport and Mobility	21.4
Community campaigns on sustainable transport	Sustainable Transport and Mobility	18.8
Discounts for guests using public/non-polluting transport	Sustainable Transport and Mobility	12.2

As shown in Table 7, the practices most substantially present (score of 4 or 5) within the organizations that took part in the research concern the Environment and Resources. However, a solid presence of indicators across all pillars can be observed.

The practices found are predominantly linked to enhancing the local context in which the companies operate, and sharing the identity and heritage of both the company and the destination, including the involvement of local professionals and services. Practices related to labor are well represented, such as the presence of women in leadership/key roles, the sharing of the company mission with employees, etc. On the other hand, practices relating to sustainable mobility are scarce, as is the availability of post-diploma or post-graduate internship offers within the company. Partnerships with other operators or citizens for sustainability initiatives are also limited.

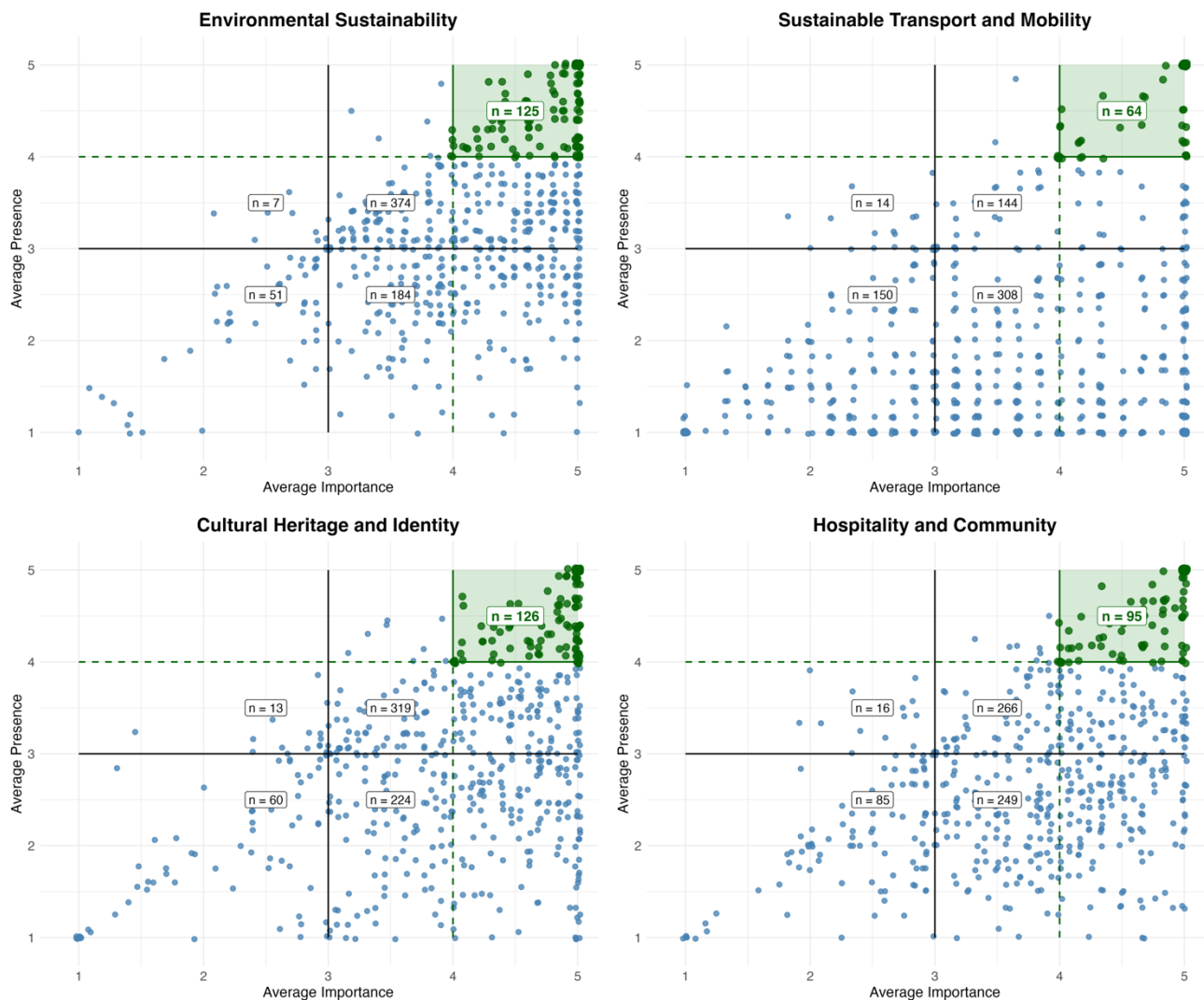
In addition to analyzing the average score data, we wanted to understand how many of the 616

respondents are the most virtuous companies (The best performers) i.e., those that have reported scores of at least 4 with reference to both the cultural and operational dimensions.

Through a plotting methodology, an analysis of the best performers per pillar was conducted, as shown in Figure 5; subsequently, in line with the model that linked the indicators to the three dimensions of sustainability as well as to the six identified pillars, we performed the same analysis for environmental, economic, and social sustainability (Figure 6).

Finally, the analysis regarding the dimensions of sustainability was conducted by distinguishing between types of facilities (taking into account the most well-represented categories among the respondents), in order to see whether sustainability performance varies depending on the type of facility (Table 8).

Figure 5. Best performers by pillar (% scoring 4 or 5 for both Importance and Presence)



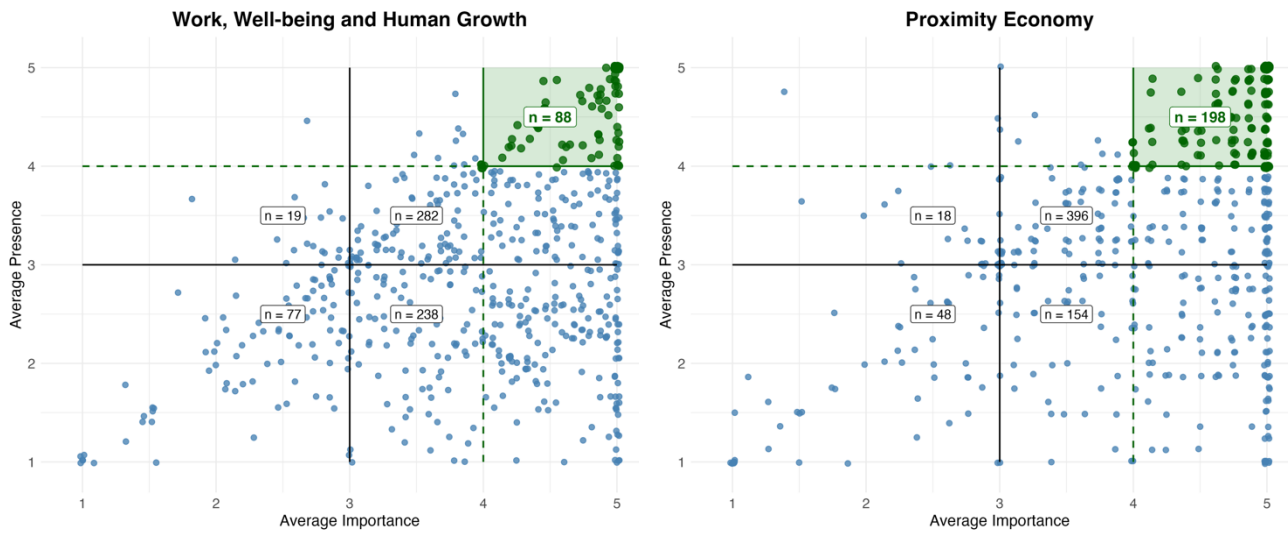
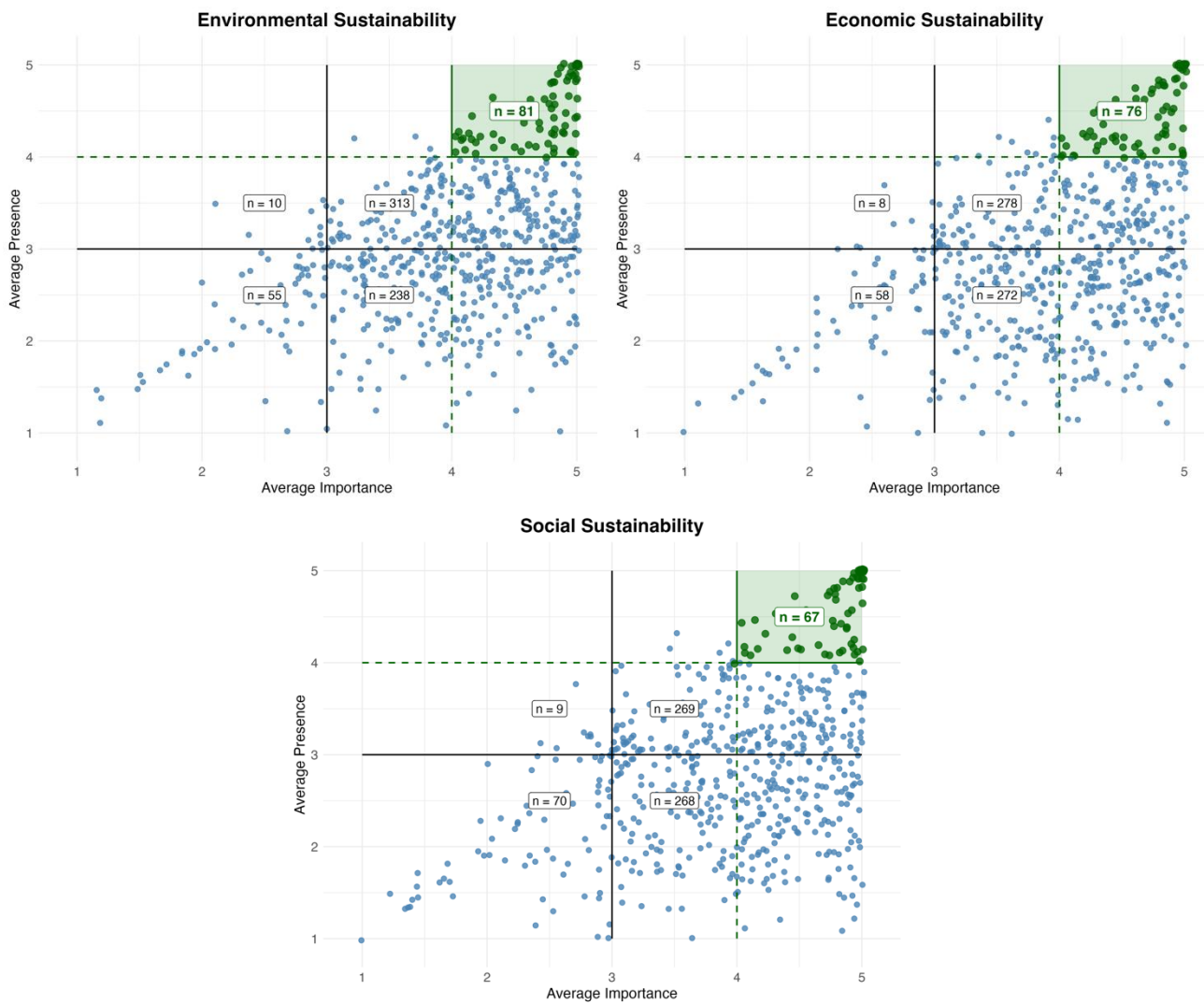


Figure 6. Best performers by sustainability dimension (% scoring 4 or 5 for both Importance and Presence)



As shown in Figure 5, when considering the average scores across the different indicators, the highest percentage of those who assigned the top scores for both importance and presence relates to the Proximity Economy (198 best performers), followed by Cultural Heritage and Identity (126) and Environment and Resources (125 best performers). Sustainable Transport and Mobility represent the area where the combination of maximum commitment and maximum practical implementation is the lowest (64 best performers).

Non-hotel accommodation organizations perform better in the environmental sustainability dimension (Figure 6): 81 respondents assigned an average score higher than 4 for both importance and presence to the indicators linked to this dimension of sustainability; 79 are the best performers with reference to economic sustainability, and 67 for social sustainability.

Finally, with reference to the different types of structures, Table 8 and Table 9 present the results related to the best performers for the main types present in the analysis. Types with few numbers, such as campsites, etc., were eliminated.

Table 8. Best performers by facility type and pillar (% scoring 4 or 5 for both Importance and Presence out of the total number of facilities of that type)

Facility Type	N.	Environment and Resources	Sustainable Transport and Mobility	Cultural Heritage and Identity	Hospitality and Community	Work, Well- being and Human Growth	Proximity Economy
Holiday dwellings (rented) - Entrepreneurial tourist rentals	190	21.6%	10.0%	20.0%	14.2%	12.6%	29.5%
Non-entrepreneurial tourist rentals	129	15.5%	8.5%	18.6%	13.9%	10.9%	28.7%
Farmhouses	30	30.0%	16.7%	26.7%	20.0%	23.3%	46.7%
Bed & Breakfasts	60	28.3%	11.7%	26.7%	18.3%	23.3%	41.7%
Property Managers	129	15.5%	11.6%	17.8%	18.6%	12.4%	31.7%
Total	538						

Table 8 shows that, regarding the facility type, Farmhouses are the best performers, having the highest percentage of respondents across all pillars who assigned a score of at least 4 to both the importance and presence of the pillar indicators. These are followed by Bed and Breakfasts. Except for 'Cultural Heritage and Identity' and 'Environment and Resources', Property Managers record the lowest percentages of best performers. Regarding the 'Cultural Heritage and Identity' pillar, Non-entrepreneurial tourist rentals are the lowest performers, while for 'Environment and Resources', the

results for Property Managers are equal to those of Non-entrepreneurial tourist rental.

Table 9. Best performers by facility type and sustainable dimensions (% scoring 4 or 5 for both Importance and Presence out of the total number of facilities of that type)

Facility Type	N.	Environmental Sustainability	Economic Sustainability	Social Sustainability
Holiday dwellings (rented) - Entrepreneurial tourist rentals	190	14.2%	12.7%	11.6%
Non-entrepreneurial tourist rentals	129	8.6%	8.5%	7.0%
Farmhouses	30	23.3%	16.7%	16.7%
Bed & Breakfasts	60	15.0%	15.0%	11.7%
Property Managers	129	13.2%	14.0%	8.5%
Total	538			

Also, with reference to the aggregation of indicators by sustainability dimension, Farmhouses report the best performance, which is particularly pronounced in the case of Environmental Sustainability compared to the other facility types.

5. Discussion, conclusions, and future implications

The empirical findings generated by this study offer a comprehensive and multidimensional exploration of sustainability dynamics within the non-hotel accommodation sector, successfully bridging the theoretical framework present in contemporary literature with the operational realities of micro-hospitality businesses. Academic discourse has increasingly recognized that tourism sustainability can no longer be evaluated through a monolithic or purely hotel-centric lens, paving the way for paradigms rooted in community-based and regenerative tourism architectures (Larimian & Sadeghi, 2021; Rutecka, Cicha, Rizun & Strzelecki, 2023; Silveira et al., 2021).

By exploring the specific context of non-hotel organizations, this research addresses a prominent academic gap, validating a structured approach that explicitly separates internal organizational mindsets from concrete field executions. The necessity of transitioning from a historically cost-driven eco-efficiency lens toward a mature, holistic regenerative paradigm represents a defining evolution in contemporary tourism studies (Alipour et al., 2019; Jørgensen, Sundbo & Fuglsang, 2024). The empirical baseline established by analyzing 616 fully validated responses from diverse Italian operators demonstrates that while non-hotel managers possess an exceptionally high psychological and emotional proximity to sustainable values, the operational externalization of these values is frequently mediated, and sometimes constrained, by structural, scale-dependent, and destination-wide barriers.

When assessing the explicit behavioral alignment within individual sustainability domains, a comparative evaluation of the six pillars indicates that operators do not view sustainable integration as an undifferentiated series of requirements, but rather as an organic extension of their territorial identity.

The empirical results demonstrate that the Proximity Economy and the Environment and Resources pillars occupy positions of absolute prominence, exhibiting the highest mean scores and, simultaneously, the narrowest operational gaps. This strong correspondence between high internal importance and robust practical implementation validates the theoretical assertion that non-hotel small-scale accommodation managers act as organic custodians of their destination rather than detached commercial entities (Jørgensen et al., 2024). This phenomenon is most vividly demonstrated within corporate waste management strategies. Such alignment corresponds directly with preceding baseline studies in micro-hospitality, which identify systematic recycling and localized waste mitigation as the most immediate, low-barrier, and universally adopted pro-environmental behaviors among small-scale operators (Hugo & Plunkett, 2019; Rutecka et al., 2023).

Conversely, the deep data interrogation reveals a more complex reality regarding the internal structural formalization of these practices. Despite the widespread presence of eco-friendly workplace routines and energy consumption monitoring systems, which are heavily utilized to optimize internal operational efficiency and cultivate a green corporate image (Campos et al., 2024; Jhunjhnuwala, 2023; Wang et al., 2019), a stark organizational omission emerged regarding dedicated sustainability governance. The vast majority of surveyed organizations explicitly lack any formal, dedicated corporate role or exclusive department assigned to environmental oversight or formal ESG reporting standards. This structural informality is highly characteristic of the micro-entrepreneurial scale, where management tasks are centralized directly within the figure of the individual owner or manager, relying entirely on their personal affective commitment and internal psychological bonds rather than institutionalized mandates (Meyer & Allen, 1991; Singh et al., 2023). Interestingly, the data reflect a slightly higher organizational flexibility regarding active community engagement roles compared to environmental certifications. The operational tendency to assign community, promotional, and local relational responsibilities to internal staff members, even if non-exclusively, confirms that small hospitality properties naturally prioritize informal human interactions, localized network science cohesion, and direct territorial storytelling over bureaucratic external compliance paths (Baggio & Valeri, 2020; García-Almeida et al., 2025).

The socio-economic dimension of non-hotel hospitality emerges from the results as a core competitive driver, fueled by an authentic embeddedness within the local regional fabrics. The high scores attributed to the use of digital channels for authentic destination storytelling, the active promotion of the local economy, and the structural reliance on local suppliers, artisans, and professionals indicate that micro-organizations generate extensive positive multiplier effects across their communities, sustaining regional prosperity and protecting shared cultural assets (UNWTO-UNEP, 2005; García-Almeida et al., 2025). Human resource dimensions within the sector also present encouraging evolutionary markers, particularly regarding social equity and gender inclusion. The widespread presence of women in leadership and pivotal operational roles represents a consolidated reality across the sample, mirroring broader academic evidence that links progressive internal corporate social responsibility practices to heightened workplace creativity, organizational resilience, and balanced labor dynamics (Ahmad et al., 2022). Furthermore, the robust levels of employee engagement in sharing the property's values and overarching mission illustrate a highly human-centric management model, where transparency and corporate internal ethics serve as primary mechanisms to bridge the traditional value-action gap (Abbas et al., 2022).

The execution of a rigorous quadrant analysis and strategic mapping of the best performers across distinct structural types reveals substantial heterogeneity within the Italian non-hotel landscape, carrying significant implications for targeted policy interventions. Agrisector hospitality, specifically farmhouses, achieved the absolute highest percentages of virtuous best performers across every single sustainability pillar and macro-dimension. This clear operational dominance is exceptionally pronounced within the Environmental Sustainability dimension, confirming that the structural, physical, and historical connection of farmhouses to land management, agricultural conservation, and rural biodiversity creates a highly mature ecological transition matrix. Bed and Breakfasts immediately follow as the second most virtuous cluster, showing exceptional performance metrics particularly within the Proximity Economy and the Cultural Heritage and Identity pillars. This specific operational strength aligns precisely with digital platform monitoring indicators, which demonstrate that B&Bs maintain the highest relative rates of sustainability badge adherence and territorial integration within their broader categories (Rutecka et al., 2023). In contrast, commercialized or heavily scaled typologies, such as property managers and entrepreneurial tourist rentals, demonstrate lower overall percentages of absolute excellence on environmental indicators, yet showcase highly sophisticated, digitally driven capabilities regarding guest feedback mechanisms, online connectivity, and operational destination marketing (Hsu et al., 2024). Non-entrepreneurial tourist rentals represent the lowest performing segment regarding cultural identity narrative structures, highlighting how a lack of commercial scale often directly corresponds to a reduced capacity for complex destination storytelling.

The most systemic and uniform deficiency identified across the entire empirical sample occurs within the Sustainable Transport and Mobility pillar. Indicators evaluating community awareness campaigns for non-polluting transport, the availability of informational transit brochures, structured agreements for eco-friendly vehicle rentals, or targeted financial discounts for guests arriving via public transport consistently produced the lowest aggregate scores, the largest value-action gaps, and the absolute lowest volume of best performers across all accommodation types. This pervasive operational disconnect is not indicative of an ethical disregard for carbon footprint mitigation, but rather highlights severe external infrastructural dependencies and deep structural bottlenecks that cannot be resolved individually by micro-enterprises (Hugo & Plunkett, 2019).

In this regard, it is necessary to consider the fact that most of the companies participating in the survey, as well as most of the Italian non-hotel businesses, belong to the short-term rental typology, located largely in the urban centers of large cities of art: in such contexts, the "light" means of transport (such as bicycles) made available by tourism companies to move within the urban context is not particularly necessary, but rather the local transport system which, in order to be used in place of one's own vehicle, must be functioning. The small scale of non-hotel properties effectively bars them from independently financing complex transport networks or often even soft mobility systems. Consequently, this barrier leaves them dependent on public transport infrastructure, regional destination policies, or external private-public partnerships, which are frequently reported as weak, uncoordinated, or inaccessible. These findings suggest that performance in the Sustainable Transport and Mobility pillar depends not only on operators' commitment, but also on the quality of local transport infrastructure and destination-level planning, factors that are often beyond the direct control of individual businesses. A similar operational barrier explains the restricted participation in formal working groups, the limited acquisition of third-party certified environmental labels, and the low

frequency of professional or post-graduate vocational internship offers, confirming that small business hospitality universally prioritizes immediate, tangible internal actions over complex external administrative formalization (Abbas et al., 2022).

In conclusion, this research demonstrates that the non-hotel accommodation sector is well positioned towards sustainability, although it is not yet fully integrated with all aspects of sustainability. This internal ethical framework effectively compensates for the widespread lack of formal organizational certifications or official reporting requirements, as well as other rarely present good practices. The future practical implications of these findings require a radical shift from more stable regulatory frameworks than has been the case in recent years and often with notable differences across territories, to the development of cooperative models that are coordinated and supported. To successfully overcome the inherent vulnerabilities of microenterprises and address the serious gaps identified in sustainable transport, the implementation of systemic destination cooperation networks is essential. Trade associations can play a significant role, actively contributing to the implementation of collaborative frameworks to legally and operationally connect independent accommodation facilities within shared regional networks. Here too, opportunities can arise from the ability to leverage public funding, which requires local governments to raise awareness, develop knowledge, and coordinate efforts.

Communities, too, due to their informality and greater responsiveness, can play a significant role. In this regard, we believe that the community under study, *Vivere di Turismo*, can carry out numerous actions to raise awareness of sustainability, monitor practices being introduced within companies, and act as a link between the world of non-hotel organizations and institutions.

This collaborative approach can facilitate the collective financing of sustainable mobility options, such as shared electric shuttle services, regional cycling networks, and integrated tourist transport agreements. Furthermore, local trade associations and institutional policymakers must develop targeted administrative support mechanisms to reduce the financial and bureaucratic barriers that prevent micro-structures from accessing formal environmental certifications. For example, local tax reductions could be envisaged for operators who undertake these formal paths towards sustainability.

On the internal management front, operators must transform many of their informal, everyday actions for guests, the environment, and the community into transparent and formalized digital communications to attract informed consumer segments. Websites and all external communications must highlight both the importance of sustainable practices and behaviors and the company's contribution to sustainability. In other words, the commitment to and presence of sustainability practices must be recognizable by customers and a must for the organization. Finally, from a scientific perspective, future academic research must focus on refining quantitative indicators and measurement sets specific to small-scale hospitality, explicitly capturing the social impact, affective commitment, and unique local regeneration capabilities of the non-hotel sector within the broader global tourism economy.

This study presents some limitations that should be acknowledged. First, although the sample is large and geographically distributed across Italy, respondents were recruited through the *Vivere di Turismo* community. Consequently, a degree of self-selection bias may be present, as participants are

likely to be more aware of sustainability issues than the average non-hotel accommodation operator. Therefore, the findings should be interpreted with caution and should not be considered fully representative of the entire non-hotel sector. Second, the study focuses exclusively on the Italian context. Future research could test the proposed framework in different countries and tourism destinations in order to assess its broader applicability and external validity. Finally, the research adopts a predominantly descriptive approach aimed at mapping sustainability commitment and practice implementation within the non-hotel accommodation sector. The framework was developed as a practical tool for assessing multiple dimensions of sustainability and comparing different types of non-hotel accommodation businesses. Future studies could further refine and validate the indicator system through additional empirical applications and longitudinal analyses.

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Conflict of interest

The author declares no conflicts of interest in this paper.

References

1. Abbas, J.; Wang, M.; Suacana, I.W.G.; & Singh, S.K. (2022). Sustainable management practices and guest loyalty in the hospitality industry: The role of sustainability commitment. *Journal of Cleaner Production*; 330:129875. DOI: <https://doi.org/10.1016/j.jclepro.2021.129875>
2. Abdalla Eltoum, S.; Soeiro, A.; & Mariani, M.M. (2024). Validating sustainability indicators for hotels: A Delphi study. *International Journal of Hospitality Management*; 118:103683. DOI: <https://doi.org/10.1016/j.ijhm.2023.103683>
3. Ahmad, N.; Ullah, Z.; Mahmood, A.; Ariza-Montes, A.; Vega-Muñoz, A.; Han, H.; & Scholz, M. (2022). Corporate Social Responsibility at the Micro-Level as a "Trigger" for Employee Creativity: The Role of Work-Engagement and Appraisal of Self-Efficacy. *Frontiers in Psychology*; 12:773434. DOI: <https://doi.org/10.3389/fpsyg.2021.773434>
4. Alipour, H.; Safaeimanesh, F.; & Soivani, S. (2019). Perspectives on Sustainable Tourism Development in Small Island States: The Case of North Cyprus. *Sustainability*; 11(11):3108. DOI: <https://doi.org/10.3390/su11113108>
5. Arzoumanidis, I.; D'Eusano, M.; Raggi, A.; & Petti, L. (2021). Circular economy in the hospitality sector: A review of the literature and a framework for measurement. *Journal of Cleaner Production*; 312:127623. DOI: <https://doi.org/10.1016/j.jclepro.2021.127623>
6. Baggio, R.; & Valeri, M. (2020). Network science and sustainable tourism. *Annals of Tourism Research*; 83:102917. DOI: <https://doi.org/10.1016/j.annals.2020.102917>
7. Bramwell, B.; & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*; 19(4-5):411-421. DOI: <https://doi.org/10.1080/09669582.2011.583320>

8. European Commission (COM). (2010). Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe. *COM/2010/0352 final*; Brussels
9. Donohoe, H.M. (2011). Defining environmentally sustainable tourism: The contributions of Canada's National Round Table on the Environment and the Economy. *Journal of Sustainable Tourism*; 19(1):41-59. DOI: <https://doi.org/10.1080/09669582.2010.502574>
10. Donohoe, H.M.; & Needham, R.D. (2006). Moving best practice forward: Delphi characteristics, methods, and applications. *International Journal of Tourism Research*; 8(5):341-358. DOI: <https://doi.org/10.1002/jtr.581>
11. Hsu, C.H.; Liu, X.; & Huang, S. (2024). Operational efficiency and guest satisfaction in the non-hotel sector. *International Journal of Hospitality Management*; 120:103750. DOI: <https://doi.org/10.1016/j.ijhm.2024.103750>
12. ISTAT. (2024). *Movimento turistico in Italia*. ISTAT; Roma
13. ISTAT. (2025). *Production and Value Added by Branch of Activity*. ISTAT; Roma
14. ISTAT. (2025). *Tourism Satellite Account (CST) - Direct and Indirect impact*. ISTAT; Roma
15. Jørgensen, M.T.; Sundbo, J.; & Fuglsang, L. (2024). The host as a custodian of values: Resident acceptance and innovation in short-term rentals. *Tourism Management*; 100:104812. DOI: <https://doi.org/10.1016/j.tourman.2023.104812>
16. Larimian, T.; & Sadeghi, A. (2021). Sustainable tourism monitoring tools at the destination level: A systematic review. *Sustainability*; 13(12):6521. DOI: <https://doi.org/10.3390/su13126521>
17. Meyer, J.P.; & Allen, N.J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*; 1(1):61-89. DOI: [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
18. OECD. (2020). *OECD Tourism Trends and Policies 2020*. OECD Publishing; Paris. DOI: <https://doi.org/10.1787/6b47b985-en>
19. Rutecka, M.; Cicha, K.; Rizun, M.; & Strzelecki, A. (2023). Sustainable Travel Program: Analyzing sustainability indicators in digital platforms. *Information*; 14(3):156. DOI: <https://doi.org/10.3390/info14030156>
20. Singh, S.K.; Del Giudice, M.; Chiappetta Jabbour, C.J.; Latan, H.; & Sohal, A.S. (2023). Stakeholder pressure, environmentally friendly policies, and green hotel performance. *Journal of Cleaner Production*; 410:137108. DOI: <https://doi.org/10.1016/j.jclepro.2023.137108>
21. Tourism Sustainability Group (TSG). (2007). *Action for More Sustainable European Tourism*. European Commission; Brussels
22. UNWTO. (2004). *Indicators of Sustainable Development for Tourism Destinations: A Guidebook*. World Tourism Organization; Madrid
23. UNWTO-UNEP. (2005). *Making Tourism More Sustainable: A Guide for Policy Makers*. World Tourism Organization & United Nations Environment Programme; Madrid/Paris
24. World Bank. (2022). *Sustainability Standards for the Tourism Sector*. World Bank; Washington, DC

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Appendix A – Indicators

Table A1. Pillars, indicator codes, and labels

Pillar	Code	Label
Environment and Resources	S1.1	Separate waste collection
	S1.2	Systems for monitoring/reducing energy consumption
	S1.3	Use of eco-friendly cleaning products
	S1.4	Guest awareness initiatives on water and energy consumption
	S1.5	Guest awareness initiatives on waste separation
	S1.6	Waste cost/quantity monitoring systems
	S1.7	Environmental certifications
	S1.8	Environmental working groups and partnerships
	S1.9	Community environmental awareness initiatives
	S1.10	Knowledge-sharing practices on waste reduction
Sustainable Transport and Mobility	S2.1	Provision of eco-friendly transportation to guests
	S2.2	Discounts for guests using public/non-polluting transport
	S2.3	Awareness materials on sustainable transport
	S2.4	Community campaigns on sustainable transport
	S2.5	Agreements for eco-friendly vehicle rental
	S2.6	Partnerships promoting sustainable mobility
Cultural Heritage and Identity	S3.1	Cultural initiatives at the property
	S3.2	Agreements with museums and cultural institutions
	S3.3	Guest awareness materials on cultural heritage
	S3.4	Community campaigns on cultural heritage
	S3.5	Use of local products and traditions
	S3.6	Presence of native plants and trees
	S3.7	Monitoring perceptions of destination conditions
	S3.8	Monitoring tourism pressure
	S3.9	Information on property and destination history
	S3.10	Information materials on local traditions
	S3.11	Seasonality reduction initiatives
	S3.12	Local identity certifications/labels
	S3.13	Authentic online storytelling of local identity
Hospitality and Community	S4.1	Self check-in / online check-in
	S4.2	24/7 guest communication tools
	S4.3	Guest feedback collection tools
	S4.4	Pet-friendly services
	S4.5	Pet waste collection kit
	S4.6	Services for guests with special needs
	S4.7	Accessibility services for disabled guests
	S4.8	Environmentally responsible hospitality practices
	S4.9	Opening the property to the local community

Pillar	Code	Label
	S4.10	Inclusion and equal-opportunity initiatives
	S4.11	Social working groups and partnerships
	S4.12	Participation in local networks
Work, Well-being and Human Growth	S5.1	Environmentally responsible workplaces
	S5.2	Environmental training for employees
	S5.3	Employee incentives linked to resource efficiency
	S5.4	Professional development opportunities
	S5.5	Women in key positions
	S5.6	Welfare and work-life balance policies
	S5.7	Organizational climate surveys
	S5.8	Employee involvement in organizational values
	S5.9	Performance monitoring and rewards
	S5.10	Employees with university/ITS qualifications
	S5.11	University internship agreements
	S5.12	Post-secondary internships
	S5.13	Post-graduate internships
	S5.14	Consultants for managerial innovation
	S5.15	Consultants for environmental/social responsibility
Proximity Economy	S6.1	Use of local suppliers and professionals
	S6.2	Integrated packages with local operators
	S6.3	Promotion of the local economy
	S6.4	Partnerships to share value
	S6.5	Involvement of local associations/cooperatives
	S6.6	Participation in business networks and local projects
	S6.7	Support for local events and initiatives
	S6.8	Transparent communication of local value