Strategies for Eco-Cultural Restoration and Infrastructure Development of Hospitality in Green Tourism Within Territorial Communities

Oleksii Hutsaliuk[1][0000-0002-6541-4912], Viktoriia Odnolko[2][0000-0002-9175-6780], Antonina Zarubina[3][0000-0002-1457-9485], Oleg Semeniuk[4][0000-0002-1496-464X], Larysa Semeniuk[5][0000-0001-8681-0060] and Yurii Onoiko[3][0000-0002-3311-7200]

[1] Private Higher Education Institution «Rauf Ablyazov East European University», Cherkasy, 18036, Ukraine
[2] Odessa National Marine University, Odessa, 65029, Ukraine
[3] Volodymyr Vynnychenko Central Ukrainian State University, Kropyvnytskyi, 25006, Ukraine
[4] Borys Grinchenko Metropolitan Kyiv University, Kyiv, 04053, Ukraine
[5] National University of Technologies and Design, 2, Kyiv, 01011, Ukraine
alex-g.88@ukr.net

Abstract. The study examines the main approaches to the hospitality industry's eco-cultural transformation and infrastructure advancement in the context of service economy development and European integration. An analysis of the integration of environmental and cultural aspects into the formation of modern tourism and hotel services to increase the competitiveness and sustainability of the industry showed: 76% of travelers seek sustainable travel options, 43% book “green” accommodations, 70% pay attention to environmental initiatives, and the implementation of sustainable practices leads to a 10-15% increase in revenue and a 20-25% rise in customer loyalty. In 2023-2024, over 150 Ukrainian hotels received eco-certification, while the development of culturally oriented routes attracted more than 1.2 million tourists, with 30% of new tourism products created based on local identity and natural uniqueness. It identifies key challenges and prospects for implementing comprehensive eco-cultural strategies that consider territorial communities' local particularities and needs. The study offers a set of recommendations for local governments, businesses, and non-governmental organizations regarding the development and implementation of effective measures to support the sustainable development of the hospitality industry within green tourism. Special attention is given to the necessity of cross-sectoral cooperation, investment attraction, and raising environmental awareness among tourism market stakeholders. Thus, the research contributes to a deeper understanding of mechanisms and strategies allowing territorial communities to use their natural and cultural resources as efficiently as possible to develop environmentally sustainable green tourism while ensuring social and economic growth and improving the life quality of the local population.

Keywords: Service Economy, Sustainable Development, Eco-Cultural Restoration, Green Technologies, Tourism.

1 Introduction

Subsequent paragraphs, however, are indented. Contemporary global development is increasingly affected by processes of globalization, growing intercultural interaction, digital transformation, and environmental responsibility. In this context, the service economy gains particular importance. It refers to a model of economic activities with the priority not in the production of material goods but in the provision of high-quality services, including those in tourism and hospitality sectors. The hospitality industry is a key catalyst for social and economic changes, promoting employment, interregional exchange, and infrastructure development.

Given the current challenges, such as climate changes, depletion of natural resources, and the growing demand for environmentally safe and culturally sensitive services, the need for the eco-cultural transformation of the hospitality industry becomes more relevant than ever. This transformation involves the implementation of sustainable development principles, harmonization of the human–environment interaction, and the incorporation of local cultural contexts in the creation of tourism and service products.

Moreover, the infrastructure advancement in the sector requires new approaches to planning, modernization, and management with the focus on energy efficiency, inclusiveness, and technological innovation. It concerns not only the physical infrastructure (transport, logistics, and accommodation facilities) but also the digital, service-oriented, and managerial infrastructure.

These aspects are of strategic importance for Ukraine, which is actively integrating into the European space and striving to meet the EU standards. The development of the service economy and the tourism industry in the context of environmental and cultural sensitivity not only strengthens the country's international competitiveness but also stimulates the regional development, creates added value in related industries, and enhances the cultural identity.

The experience of such transformations is equally relevant to European Union countries, especially under the increasing pressure on the natural environment and the need for economic decarbonization. Joint efforts to develop approaches to the sustainable development of the hospitality industry contribute to the creation of a unified eco-space, reduce social and environmental risks, as well as establish new standards for cooperation in labor, education, certification, and tourism.

In the context of decentralization in Ukraine, the development of green tourism is gaining special importance as an efficient tool for the social and economic evolvement of territorial communities. Granting greater authority to local governments creates opportunities for independent planning, investments, and implementation of sustainable development strategies at the local level. Green tourism based on the principles of environmental responsibility, authenticity, support for local production, and cultural heritage becomes a key component of the eco-cultural transformation, contributing to employment, the preservation of the natural environment, and the establishment of a positive regional image.

Eco-cultural strategies for the development of green tourism can serve as the foundation for comprehensive regional development programs that integrate environmental, social, and economic aspects. Decentralization allows territorial communities to respond more flexibly to local needs, attract external investments, establish

intermunicipal partnership, and take part in international eco-projects.

Thus, the study of approaches to the eco-cultural transformation and infrastructure advancement of the hospitality industry in the context of the service economy not only addresses the current challenges at both global and European levels but also has practical significance for ensuring the balanced, competitive, and sustainable development of Ukrainian society. Therefore, this topic requires comprehensive scientific reflection, systematization of approaches, and the development of practical recommendations for various levels of governance and entrepreneurship.

The study aims to substantiate theoretical foundations and develop practical approaches to the eco-cultural transformation and infrastructure advancement of the hospitality industry in the context of the development of the service economy, taking into account challenges of globalization, European integration processes, and sustainable development principles, as well as to provide recommendations for enhancing the competitiveness and resilience of the industry in Ukraine and European countries.

2 Literature review

Ukrainian researchers pay considerable attention to the implementation of environmental practices in the hospitality sector. In particular (Abramova and Myroshnyk, 2020) examine trends in the development of eco-hotels in Ukraine as well as the experience of foreign countries in implementing environmental standards in the hotel business.

Digitalization is a key driver of modernization in the hospitality industry. For instance, Valikevych and Shestakova (2024) analyze global practices in the use of digital tools in tourism industry management, particularly the introduction of mobile applications, online booking systems, and augmented reality technologies. Dyshkantiuk (2024) investigates barriers to the adoption of sustainable practices, including high costs and low awareness among entrepreneurs.

The service quality is a crucial factor in the development of the service economy by Povorozniuk (2022) considers theoretical aspects of the service quality in the hotel and restaurant business in Ukraine and defines areas for its improvement.

Huzar (2024) characterizes the main features of hospitality services depending on guest requests, as well as analyzes the development of the hospitality industry from the perspective of the economic development and growth.

According to scientists by Chen and Liu (2025), green tourism contributes to the sustainable development and the reduction of negative environmental impacts of tourism activities. At the same time, the researchers stress the important role of digital technologies, particularly social media and mobile applications, in promoting environmentally responsible tourism, as they provide tourists with the necessary information to make conscious decisions regarding accommodation, leisure, and transport as part of sustainable practices.

Foreign authors also examine innovations as a key factor for growth and value creation at new tourism and hospitality enterprises. They focus on the influence of external environments, particularly the public policy and macroeconomic conditions, which shape the entrepreneurial orientation of industry participants. Particular attention is paid to the role of social entrepreneurship as a driver of innovations and a tool

for ensuring the sustainable development in the tourism and hospitality sector. The research highlights that combining an innovative approach with entrepreneurial activity not only stimulates the industry growth but also efficiently addresses social and environmental challenges in the current globalized environment (Sharma, G. et al., 2024).

Foreign researchers Chakraborty and Ghosal (2024) provide a comprehensive analysis of the complex interaction of internal and external factors affecting the formation of multidimensional ecological and social systems during the evolution of tourist areas. They emphasize the need to strike a balance between the economic growth, environmental protection, and the preservation of cultural heritage (Chakraborty and Ghosal, 2024).

Haldorai et al. (2023), relying on the theory of the organizational identity and the resource-based approach, investigate the close relationship between the formation of the green identity in organizations, the implementation of environmental innovations in services, and the improvement of ecological efficiency at hotel enterprises. Their study stresses that given the significant environmental impact of the hospitality industry, tourism management systems increasingly recognize their responsibility to the environment, integrating the philosophy of green living into hotel business development strategies (Haldorai et al., 2023).

Sukhorukova, G. (2025) notes that after the full-scale invasion, tourism in Ukraine suffered greatly. However, despite everything, the industry did not stop. Even new directions appeared. How exactly tourism is developing now, what are the difficulties and trends, she focused on in her publication.

It is worth noting that important scientific works in the research vector of the analyzed problem are the works of the team of authors Hutsaliuk et al., 2023 and Hutsaliuk et al., 2024. Particular attention is paid to the consideration of environmental management and safety issues.

Despite existing research, there is a need for further study of the integration of ecological and cultural aspects into the development of the hospitality industry, especially in the context of European integration and globalization.

3 Methodology

The research is based on the interdisciplinary approach that combines elements of economic theory, environmental management, cultural studies, public administration, and European studies. The study applies the following core methods:

System analysis used to determine structural elements of the eco-cultural transformation of the hospitality industry and their interaction within the service economy.

Comparative analysis applied to examine practices of the ecological and cultural integration in hospitality industries of EU countries in order to identify relevant European integration approaches for Ukraine.

Content analysis of EU strategic documents (such as the European Green Deal, the EU Strategy for Sustainable Tourism, etc.) aimed at exploring the regulatory and institutional context of European integration in tourism and hospitality. The authors conducted a systematic analysis of key regulatory and institutional documents of the EU, including the European Green Deal (European Green Deal, 2023) and the EU

Strategy for Sustainable Tourism (UNWTO, 2024). These documents define priorities for the sustainable development, digital transformation, and environmental responsibility in the hospitality industry. For example, in 2021, the European Parliament adopted a resolution on the creation of a sustainable tourism strategy that implies the integration of environmental and social aspects into the EU tourism policy.

SWOT analysis applied to the infrastructure policy in the hospitality sector, which allows assessing strengths and weaknesses, as well as opportunities and threats to the infrastructure development, taking into account economic, social, and environmental interests. The results are presented in Table 1.

Table 1. SWOT analysis of the infrastructure policy in the hospitality industry.

Strengths	**Weaknesses**
Availability of the natural, recreational, and cultural potential for the infrastructure development. Interest of local communities in tourism as a source of income. Growth of domestic tourism after 2022. Availability of eco-friendly initiatives (eco-estates, green tourism). Potential for the integration of small businesses (homesteads, farms, crafts) into the service system.	Outdated or fragmented tourism infrastructure (transportation, water supply, sanitation) Lack of comprehensive planning or strategic documents at the level of territorial communities Limited funding for modernization, dependence on external donors or programs Low level of the digital infrastructure (Wi-Fi, mobile communication, online booking systems) Underdeveloped logistics to tourist sites (lack of routes, schedules, cycling infrastructure)
Opportunities	**Threats**
Attraction of investments through public-private partnership (PPPs) and European grants Development of green, ethno-cultural, health and recreational tourism Establishment of regional hospitality clusters with an ecological focus Staff advanced training through EU programs and educational initiatives Demand for digital services, potential for creating smart tourism	Military risks, reduced safety for tourists in certain regions Decreased purchasing power of tourists due to economic instability Inability of communities to maintain the established infrastructure (lack of personnel, services, knowledge) Persistence of the shadow tourism sector, hindering the tax efficiency Urbanization pressure on natural areas due to unauthorized or excessive construction

Source: Designed by the authors.

Thus, the SWOT analysis shows that the infrastructure policy in the hospitality sector holds the significant development potential provided that European integration opportunities are strategically utilized. It is crucial to maintain a balance between economic benefits, environmental feasibility, and social inclusiveness – key priorities of the European model of sustainable development.

The case study method is used to examine successful examples of the eco-cultural transformation of the tourism infrastructure in specific regions of Ukraine in detail. This method allows analyzing how particular communities or businesses have implemented sustainable development principles, adapted European standards into practice, and achieved positive results in the hospitality sector.

For example, the Yaremche community in the Ivano-Frankivsk region has become

an example of the active implementation of green tourism: eco-villages are being developed, festivals of authentic culture are held, and a waste sorting system has been introduced. According to the State Agency for Tourism Development of Ukraine, the Carpathians consistently rank among the top three most popular domestic tourist destinations – with over 1.7 million tourists in 2023 (State Agency for Tourism Development of Ukraine, 2024).

Another case is the Shatsk community in the Volyn region that has implemented environmental routes around the Shatsk Lakes and established partnership with environmental organizations. Because of these improvements, more tourists came in 2023, over 10% more than in 2022, and the Tourist Tax brought in twice as much revenue (Volyn Regional State Administration, 2024).

The case study method allows not only recording achievements but also identifying success factors, barriers, and the potential for scaling up practices in other regions. This contributes to the development of a national model of sustainable tourism in the context of European integration.

Expert surveys were conducted involving specialists in tourism, ecology, management, and local self-government to assess the implementation of innovative solutions in the service sector.

In particular, according to the results of the pilot expert survey conducted in 2023 by the State Agency for Tourism Development of Ukraine, 78% of surveyed experts emphasized the critical need to implement sustainable practices in the hospitality sector, including the energy efficiency, service digitalization, and environmental certification of accommodation facilities. About 65% of respondents identified decentralization as a key catalyst for the development of local tourism, especially in communities with the cultural and natural potential (State Agency for Tourism Development of Ukraine, 2024). This is complemented by the findings of the analytical report by U-LEAD with Europe, which noted that in the context of decentralization, more than 40% of amalgamated communities in 2022–2023 introduced local strategies for sustainable tourism focused on environmental balance and cultural heritage (U-LEAD, 2024).

This study also partially builds on the methodology developed by Hutsaliuk et al. (2025a, 2025b), which enables the formulation of strategies for ecological and cultural restoration, as well as the development of hospitality infrastructure in the context of green tourism within territorial communities.

The use of these methods allows comprehensively examining how European approaches can be adapted to Ukrainian realities, uncovering the development potential of the hospitality industry based on the principles of environmental sustainability, cultural identity, and infrastructure renewal in the context of the service economy and decentralization.

4 Results

The hospitality industry is an important component of the service economy, ensuring the interrelation between tourist flows, cultural exchange, territorial development, and the preservation of the resource potential. In the context of globalization and European integration, hospitality is transforming not only into a service sector but also into a

strategic resource for sustainable development and international cooperation.

At the European level, according to Eurostat (2023), EU residents (aged 15 and older) made over 1.1 billion tourist trips in 2023, which is 6% more compared to 2022 and 0.4% higher than the 2019 level. This indicates the general recovery of tourism activity in Europe (Fig. 1) (Eurostat, 2023).

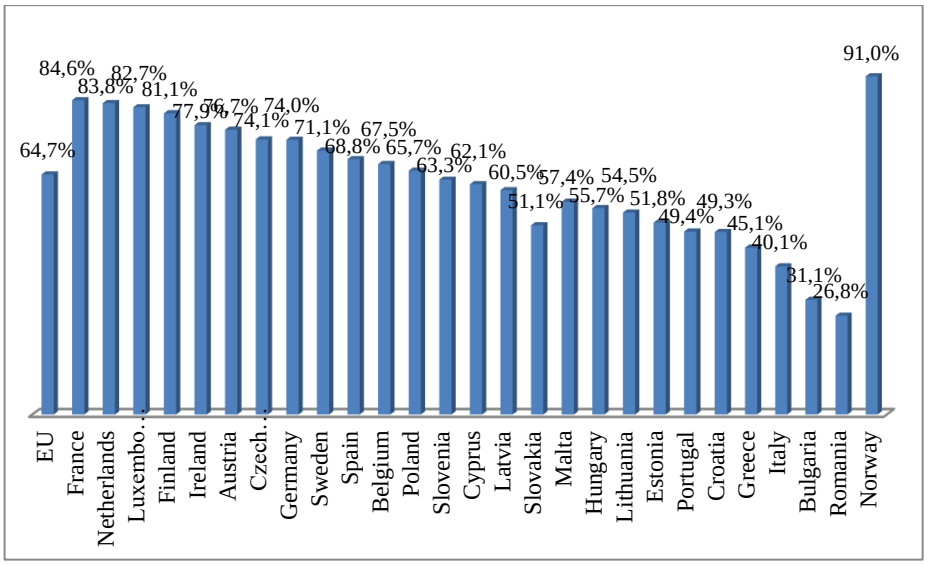


Fig. 1. Share of the EU population (aged 15 and older) engaged in tourism, by destination, 2023 (%).
Source: based on Eurostat (2023).

The Ukrainian hospitality market shows resilience even in the toughest times. The country's tourism sector is recovering due to domestic tourism, temporarily displaced persons, and relocated populations. Despite maintaining its viability, the Ukrainian tourism industry faces a number of serious challenges. According to the survey of market participants, 71% of respondents consider economic instability to be the main issue. In addition, safety concerns and damaged infrastructure significantly hinder logistics and the provision of tourist services. The shortage of personnel remains one of the key obstacles: 42% of respondents experience the workforce deficit because of emigration or career changes, while another 40% consider staff mobilization as a cause (Tourism Statistics, 2025).

Modern trends require not just infrastructure modernization but the qualitative transformation of the very paradigm of how the industry operates in terms of ecological sustainability, digitalization, and cultural sensitivity. The eco-cultural transformation becomes a response to the challenges of climate change, the loss of local identity, the overloading of tourist locations, and the decline in service quality. Its implementation involves rethinking management principles, service delivery, environmental design, human resource policy, and interaction with local communities.

The development of the service economy imposes new requirements on the func-

tioning of the hospitality industry that should now meet the criteria of sustainability, innovation, and cultural sensitivity. In this context, a number of conceptual approaches are being shaped to define the direction of the industry's transformation at the current stage (Fig. 2).



Fig. 2. Key approaches to the eco-cultural transformation and infrastructure advancement of the hospitality industry in the context of service economy development
Source: Designed by the authors.

The eco-cultural transformation involves the integration of environmental principles with the preservation and promotion of cultural heritage within the hospitality sector. The main approaches include the integration of local culture into tourism products: using elements of folk architecture, traditional cuisine, crafts, local rituals, and festivals; eco-friendly design and construction: utilizing natural materials, energy-efficient technologies, and green landscaping; education and awareness for tourists: incorporating information about ecological practices, regional culture, and sustainable lifestyles into travel programs; support for local initiatives and communities: encouraging the development of small family businesses, environmentally responsible farms, and guesthouses.

The development of the service economy requires high-quality services, innovation, and sustainable infrastructure. Key infrastructural approaches include the creation of environmentally friendly accommodations (eco-hotels, glamping sites, apartment complexes with minimal environmental impact); the development of sustainable mobility: bike routes, electric transport, pedestrian zones at tourist centers; digitalization of services: implementation of digital platforms for booking, e-tours, virtual tours, and environmental monitoring; infrastructure for recreation and wellness: development of environmentally friendly leisure options: eco-trails, wildlife observation areas, wellness resources (mineral waters and nature-based SPA complexes); inclusivity and accessibility: expanding access to tourism services for disabled people, the elderly, and families with children.

The service economy prioritizes the quality, innovations, personalized services, and sustainable development. In the context of the hospitality industry, it implies the focus on long-term customer value rather than short-term profit; flexibility in responding to tourists' demands – from green expectations to authentic experiences; partnership among government, communities, and businesses in the development of the tourism infrastructure.

The efficient eco-cultural transformation is impossible without proper governance. Key managerial approaches include the implementation of sustainable quality management systems (e.g., certification according to ISO standards, Green Key, or Eco-Label); territorial planning given the ecological capacity, namely: construction control, preservation of natural landscapes, and zoning of tourist areas; monitoring the impact of tourism on local ecosystems and culture: regular assessment and strategy adjustments; development of cooperative management models: collaboration among municipalities, private operators, and non-governmental organizations.

The key role in the service sector is played by human capital, particularly by organizing trainings on environmentally responsible service, ethical interaction with tourists, and the preservation of the local identity; developing soft skills among hospitality personnel: emotional intelligence, intercultural communication, and digital literacy; promoting the study of local history, traditions, and linguistic heritage, which enhances the integration of culture into tourist experience.

The service economy is introducing innovative solutions to promote the greening of the industry: smart hotels with energy-saving systems, process automation, and minimal carbon emissions; renewable energy sources (solar panels, geothermal systems) to power hotels and accommodation facilities; digital tools for monitoring the eco-efficiency: mobile apps to assess carbon footprint, monitor water and energy consumption; ioarchitecture: organic construction taking into account the climate, terrain, and cultural characteristics of the region.

The development of the service economy is also closely related to the support for community social capital, which includes involving local residents in tourism activities by creating conditions for self-employment, family businesses, and rural tourism; community participation in decision-making regarding tourist zoning, infrastructure, and regional branding; support for social entrepreneurship in tourism (e.g., youth hostels employing locals from vulnerable groups).

Thus, approaches to the eco-cultural transformation and infrastructure advancement in the service economy are not limited to isolated technical or cultural measures. They represent a systemic model that combines the following:

– environmental protection policy,
– social responsibility,
– cultural authenticity,
– high service standards,
– and strategic planning.

Such approaches allow the hospitality industry not only to be economically efficient but also environmentally safe and socially just, complying with the global Sustainable Development Goals (SDGs).

Modern approaches to the eco-cultural transformation and infrastructure advancement in the hospitality sector require comprehensive thinking, consideration of local specificities, and active involvement of territorial communities. Within the ser-

vice economy, these approaches not only improve the quality of tourist services but also ensure sustainable employment, environmental safety, and the cultural authenticity of regions.

The analytical overview of the integration of environmental and cultural aspects into the development of modern tourism and hotel services, with the focus on their role in enhancing the competitiveness and sustainability of the hospitality industry:

In the modern European context, the hospitality industry is considered not only as a component of the service economy but also as a tool for implementing sustainable development policies, cultural dialogue, and environmental responsibility. In this regard, Ukraine, which is on the path of active European integration, should adapt the industry to the EU standards and values. In particular, the integration of ecological and cultural approaches in hospitality is becoming one of the key areas of modernization in accordance with such EU strategies as the European Green Deal, the Sustainable Tourism Strategy, and the cultural heritage policy (European Green Deal, 2023).

The ecological component of the transformation takes on paramount importance. The implementation of innovative energy-efficiency solutions, in particular, the use of LED lighting, heat pumps, automated climate control systems, and solar panels, is a response to the EU requirements for reducing CO_2 emissions and enhancing building the energy efficiency. Waste management through sorting, composting of organic waste, and minimizing the use of single-use products is a standard practice in European Union countries and requires broader implementation in Ukraine. Efficient water conservation, reuse of water, as well as support for local suppliers and products are not only environmentally reasonable but also economically beneficial solutions that fully comply with European sustainable business practices (Green Key Global, 2023).

On the other hand, the cultural component plays a key role in shaping the attractiveness of tourist destinations. European countries actively support the development of cultural tourism, integrating the local identity into services. It is achieved through the adaptation of architectural solutions to local styles, the development of thematic routes (ethnographic, gastronomic, festival), and the use of traditional elements in design, cuisine, service, and the organization of cultural events (Cultural Routes of the Council of Europe, 2024). This approach is also supported at the level of EU programs funding the development of cultural products, digital solutions for heritage promotion, as well as cross-border cultural initiatives.

The integration of environmental and cultural approaches forms the foundation for creating a sustainable new-generation service model based on the principles of responsibility, authenticity, and European quality standards (Ukraine Crisis Media Center, 2025). The combination of these two dimensions ensures not only compliance with EU criteria but also contributes to the growth of tourist attractiveness, economic resilience, and social cohesion of communities. This approach allows the Ukrainian hospitality industry to become a full-fledged part of the single European space while preserving the national cultural identity and natural resources.

The implementation of the eco-cultural transformation in the context of European integration allows Ukraine not only to benefit from technical and financial support tools of the EU but also to build the trust of European tourists seeking meaningful, ethical, and sustainable recreation. At the same time, it opens up new opportunities for the development of local small and medium-sized businesses, job creation, preservation of intangible cultural heritage, and the establishment of a positive international

image of the country.

An innovative form of sustainable hospitality business is functioning in rural areas of Ukraine: an eco-hotel built out of local natural materials such as wood, clay, and straw. Architectural solutions include green roofs that not only harmoniously blend into the landscape but also contribute to thermal insulation and microclimate preservation. The hotel offers guests meals made of local organic products: seasonal vegetables, honey, and cheeses sourced from local farmers. In addition to accommodation, guests are offered workshops on pottery, weaving, and traditional cooking, as well as tours to local artisans. Everything is designed in an ethnic style, conveying the spirit of the region. A portion of the income is allocated to support the adjacent nature park, biodiversity conservation, and preservation of cultural heritage. Similar examples are already being implemented in the Carpathian region, Podillia, and Polissia, particularly in such locations as Eco Village Bukovel, Carpathian Eco Resort, and the Poliske Siaivo ethnic estate (Bukovel, 2025).

In today's world, tourism services are transforming into a multidisciplinary platform of interaction between natural, cultural, and economic environments. The hotel industry is increasingly acting not just as a place to stay, becoming an information hub, a cultural center, and a platform for ecological education. This aligns with European approaches to developing sustainable service ecosystems that take into account the interests not only of consumers but also of the local community, the environment, small businesses, and cultural heritage institutions.

Particular attention is given to the creation of a unique tourism product that cannot be mass-replicated. It refers to authentic language, distinctive landscapes, traditional crafts, and the lifestyle of local residents. The value of such an offering lies in its originality and meaningful content complying with the European trend of experiential and ethical tourism (Cultural Routes of the Council of Europe, 2024).

In practice, it is implemented through several key mechanisms. In particular, regional branding increasingly relies on the use of natural and cultural symbols in logos, visual identity, and souvenir products. For example, it results in such narratives as eco-lodge in the Carpathians or ethnic tour of the steppes of Tavria, combining elements of adventure, tradition, and environmental awareness.

The restoration of old buildings in traditional architectural styles using biomaterials (straw, wood, clay) is combined with modern thermoregulation technologies, enabling the integration of energy efficiency with contextual design. The construction of new facilities in accordance with the local environment ensures architectural harmony with both the landscape and the social and cultural fabric of the area. Detailed examples of such initiatives are described in the EU Guidebook on Sustainable Tourism (Green Key Global, 2023; UNWTO, 2024).

Another important area is social inclusion: tourism infrastructure is developed with accessibility for disabled people, families with children, and the elderly. Local residents, bearers of the culture, are engaged in the process: cooks who make borscht according to family recipes, potters, musicians, shepherds, tour guides – each of them creates a living, authentic story of the place.

Thus, the eco-cultural transformation of the hospitality industry is not only a response to global challenges but also a chance for Ukraine to integrate into the European service space while preserving its own identity. The successful combination of environmental responsibility, cultural uniqueness, and inclusivity forms a new para-

digm of tourism as a space for meaningful, sustainable, and deeply human experience.

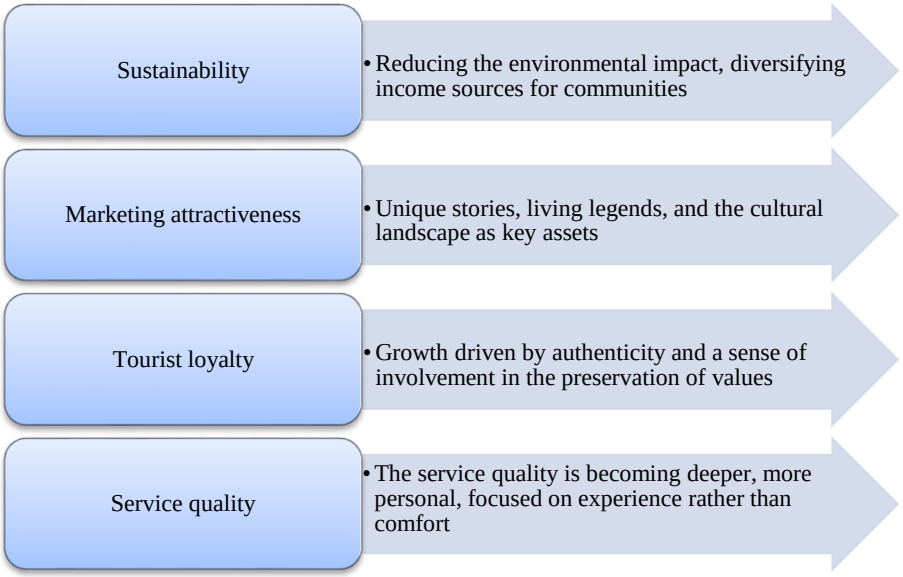


Fig. 3. The impact of the integration of the eco-cultural approach on the quality, loyalty, sustainability, and competitiveness of the hospitality industry.
Source: Designed by the authors.

Fig. 3 illustrates the significant impact of the integration of the eco-cultural approach into the hospitality industry on its key operational aspects. Firstly, the service quality is acquiring a deeper and more personal character: the focus shifts from mere comfort to the creation of unique experience that fosters an emotional connection between the tourist, the place, and the culture.

Secondly, tourist loyalty increases due to the perceived authenticity of the offering and the sense of contributing to the preservation of natural and cultural values. It fosters long-term relations between visitors and destinations.

The marketing attractiveness grows through unique stories, living legends, and the cultural landscape, which become the primary assets for promoting a region or a hospitality facility. These distinctive features set the offer apart from mass tourism.

Finally, the eco-cultural approach enhances the resilience of the hospitality industry by reducing environmental pressure and diversifying income sources for local communities. This creates conditions for sustainable development, maintaining a balance between economic, social, and environmental resources.

International experience in the eco-cultural transformation of the hospitality sector shows efficient models that can serve as benchmarks for Ukraine and other European countries. In Austria, particularly in the Tyrol region, the eco-Alpine hotels model focuses on using local products, such as regional cheeses, organizing tours to traditional artisans, and building with locally sourced timber, enhancing environmental responsibility and supporting the regional economy (Tyrol Tourism). In Japan, in Gifu Prefecture, historic mountain villages such as Shirakawa-go have been adapted to

receive modern tourists without losing their authenticity, successfully combining cultural heritage with modern service standards (Japan National Tourism Organization). Iceland presents an example of hotel development based on geothermal heating and strict regulation of access to natural attractions, minimizing the tourism impact on the country's unique ecosystem (Iceland Travel, 2024).

The integration of environmental and cultural approaches in the hospitality industry not only aligns with current global trends in sustainable tourism but also opens up new opportunities for building competitive advantages in the context of the evolving service economy. It enables the shift from the mere provision of services to the creation of meaningful tourist experience, which can ensure long-term success and sustainable development of the industry.

International experience demonstrates that the integration of ecological and cultural aspects into tourism and hospitality services not only meets the current demands of sustainable development but also contributes to the preservation of cultural heritage and the support for local communities. These practices can serve as development guidelines for Ukraine's hospitality industry, particularly in the context of European integration and globalization.

Table 2 presents comparative practices of the eco-cultural integration in Ukrainian and EU tourism, illustrating a variety of approaches that combine environmental responsibility with the preservation of cultural heritage. The analysis of these practices highlights the importance of the harmonious development of tourist regions by implementing sustainable environmental technologies and promoting local traditions, which enhances the destination attractiveness, strengthens local communities, and cultivates the long-term interest among tourists.

Table 2. Comparative practices of the eco-cultural integration in tourism (Ukraine and the EU).

Country / Region	Type of integration	Environmental approaches	Cultural component	Results / Impact
Ukraine, the Carpathians	Ecotourism, green tourism	Eco-lodges, waste sorting, local food products	Ethnic houses, Hutsul cuisine, trembita, embroidery	Development of rural communities, preservation of traditions. According to the State Statistics Service of Ukraine, domestic tourism in the region increased by 12% in 2023.
Ukraine, Podillia	Agricultural estates and historical routes	Low-impact rural guesthouses	Pottery workshops, historical tours	Increase in rural employment. According to the State Statistics Service of Ukraine, the number of agricultural estates grew by 8% in 2023.
Germany, Bavaria	Eco-hotels, sustainable transport	Passive houses, solar energy, cycling tours	Folk festivals, beer culture, local crafts	Attractiveness to green tourists, stable demand. Overnight stays in the region increased by 5% in 2023.
Austria, Tyrol	Alpine ecotourism	Energy-efficient chalets, nature parks	Mountain traditions, cheese	Preservation of natural balance, development of branded tourism. Tourist flow in-

			festivals, regional costumes	creased by 4% in 2023.
Italy, Tuscany	Wine and gastronomic tourism	Organic wineries, CO_2 minimization	Medieval architecture, farm-to-table cuisine	High competitiveness and return visits. The region welcomed 3.2 million tourists in 2023.
France, Provence	Cultural and landscape tourism	Olive groves, bio-farms, minimal plastic use	Provincial culture, handicrafts, literary tours	Harmonious blend of nature and culture. Tourist flow increased by 6% in 2023.
Ukraine, Polissia	Ecotourism with natural authenticity	Recreational areas, wetlands, wild meadows, eco-trails	Forest culture, Polissian songs, woodcraft	New direction in eco-cultural tourism. According to the State Statistics Service of Ukraine, the number of tourists in the region increased by 10% in 2023.

Source: based on State Statistics Service of Ukraine (2024) and Eurostat (2023).

The comparative analysis of eco-cultural integration practices in Ukraine and the EU confirms that the successful development of tourism is possible only through a comprehensive approach that combines environmental innovations with a deep understanding of the region's cultural characteristics. This balance not only promotes the environmental and cultural preservation but also stimulates the economic growth, expands opportunities for the sustainable development, and enhances the competitiveness of tourism destinations.

Ukraine is actively developing local initiatives focused on preserving the authentic culture combined with elements of the sustainable development (particularly in the Carpathians, Podillia, and Polissia regions).

European countries have well-established systemic models where environmental sustainability is a standard, and culture is presented as living heritage incorporated into all services.

The outcomes in both cases show that integrating ecology and culture drives increased demand, encourages responsible tourist behavior, and improves the competitiveness of tourism products.

In the today's tourism environment, the development of the hospitality infrastructure requires a comprehensive approach that integrates environmental, social, cultural, and digital aspects. Such an integrative approach not only improves the service quality but also contributes to the sustainable development of regions and meets the needs of diverse tourist categories.

The environmentally oriented tourism infrastructure involves the implementation of green technologies and practices aimed at minimizing the environmental impact. For instance, hotels certified according to LEED standards demonstrate the reduction in energy consumption by 25–30%, CO_2 emissions by 33%, and water usage by 30% compared to non-certified buildings, which also contributes to lower operating costs. These measures not only reduce the ecological footprint but also attract environmentally conscious tourists (Singhal, 2024).

The socially inclusive infrastructure is focused on ensuring the accessibility of tourism services for everyone, including disabled people. For example, Laredo in the USA has been recognized for creating a barrier-free environment, including the adaptation of museums and other facilities for disabled persons. Such initiatives foster social cohesion and the development of local communities (DualTourism, 2025).

The creative and cultural tourism infrastructure emphasizes the preservation and promotion of cultural heritage using digital technologies. The implementation of AR/VR technologies, mobile guides, and interactive museums allows creating deeper cultural experience for tourists. It forms a unique regional identity and ensures the development of the creative economy.

The digital and smart infrastructure ensures a modern level of service and efficient management of tourist flows. The use of QR codes to provide information about tourist sites, online booking systems, and electronic ticketing enhances convenience for tourists and optimizes the work of service providers.

The logistical and service support infrastructure is the foundation for ensuring the resilience of tourist regions. The development of transportation networks, information centers, medical stations, and recreation areas improves tourist satisfaction and contributes to the sustainable development of infrastructure facilities (Trang et al., 2024).

Overall, the integrated approach to the development of the hospitality industry infrastructure allows creating a competitive, sustainable, and inclusive tourism environment that meets contemporary societal challenges and needs.

The development of the hospitality infrastructure in Ukraine requires the alignment of economic, social, and environmental interests to ensure the sustainable growth.

The economic aspect involves attracting investments, developing small businesses, and increasing the tax base. According to research, the motivational mechanism for attracting foreign investments includes regulatory, economic, and organizational factors supported by partial harmonization of the legal framework with other countries, decentralization of executive power at regional and local levels, the creation of tourism clusters based on innovative projects, and special economic zones offering preferential conditions for investors (Biletska, 2024).

The social aspect focuses on job creation, inclusiveness, and the preservation of the local identity. According to the State Statistics Service of Ukraine (2024), the number of employees engaged in tourism-related businesses is steadily increasing, indicating a positive impact of tourism on employment.

The environmental aspect aims to minimize negative impacts, protect landscapes, and foster ecological awareness among tourists. Ecological and rural green tourism accounts for more than 10% of the Ukrainian tourism market, and its growth rate is 2–3 times higher than that of other types of tourism (Sofiichuk, 2018).

Therefore, priority areas for the infrastructure development in the hospitality industry should be multifunctional and integrative, ensuring comfort, sustainability, and harmony between the community and the environment.

The tourism infrastructure development policy should be based on the local potential and require a long-term strategy integrating environmental safety, cultural identity, and digital transformation. Coordination at the interregional level supported by the state and international partners can mitigate most threats. Investments in the human infrastructure, i.e. education, certification, and advanced training, are also essential.

The SWOT analysis of the infrastructure policy of the Yabluniv community in the context of tourism development (Table 3) reveals its strategic strengths and areas for improvement.

Table 3. SWOT analysis of the infrastructure policy of the Yabluniv community in the context of tourism development.

Strengths	**Weaknesses**
Natural and recreational resources: forests, alpine meadows, rivers; potential for eco- and active tourism. Rich ethnic and cultural heritage: Hutsul traditions, folk crafts, architecture. Availability of rural green tourism homesteads; local residents' interest in developing the sector. Potential for the creation of eco-trails, craft routes, and the development of recreational areas.	Insufficient transport accessibility: poor road quality, limited public transportation. Lack of engineering infrastructure (sewerage systems, treatment facilities, centralized water supply). Poor service quality, lack of certification systems and staff training programs. Weak digital infrastructure: no Internet access in some villages, lack of digital services for tourism.
Opportunities	**Threats**
Participation in State Fund for Regional Development and EU projects (e.g., HORIZON, Interreg) to support the infrastructure development. Development of eco-lodges, craft centers, and gastronomic tourism (e.g., dairy and meat farms, brynza cheese, mushroom tours). Launch of tourism clusters with neighboring communities for joint branding of the Carpathians. Creation of Hutsul culture interpretation centers and preservation of UNESCO intangible heritage elements. Growing demand for domestic tourism among Ukrainians seeking quiet recreation.	Military actions in the country reduce the overall attractiveness for international tourists. Uncontrolled construction or mass tourism can harm natural resources. Youth outflow leading to a shortage of qualified personnel in the service sector. Lack of long-term strategic planning at the community level. Inability to handle large tourist flows (worn-out roads, lack of parking zones, etc.).

Source: Designed by the authors.

The community's strengths include the availability of natural and cultural assets – well-preserved Carpathian landscapes, Hutsul heritage – as well as active local initiatives in the green tourism development. However, its weaknesses remain the underdeveloped road infrastructure, limited access to digital services, and insufficient investments in tourist reception facilities.

Opportunities include accessing EU grant programs, developing creative tourism, strengthening the brand as an eco-cultural destination, and fostering partnership with the private sector. Threats involve youth migration, a low level of professional qualifications in the hospitality sector, and the risk of losing authenticity due to excessive commercialization. This analysis allows the community to define strategic priorities for the sustainable development of tourism, taking into account local resources and European approaches.

To enhance the tourism attractiveness of the Yabluniv community and ensure the harmonious development of its infrastructure, it is reasonable to implement a set of recommended actions in five key areas. The transport sector should focus on the reconstruction of main roads as well as the development of eco-routes and bicycle paths, which will not only improve accessibility but also promote sustainable mobility. The development of the environmental infrastructure through eco-trails, campsites, and support for local residents' initiatives will contribute to preserving the natural balance. Tourist sites can be revitalized by converting traditional houses into museums or hostels and establishing craft centers that preserve and promote the local identity. As to digital services, it is recommended to implement interactive route maps, a community website with homestead booking functionality, and active social media engagement. Lastly, the human resource development is key to delivering the high-quality service: investments should be made in training personnel in foreign languages, digital marketing, and customer-oriented service principles. This integrated approach corresponds to European best practices and will contribute to the sustainable growth of the community's tourism potential.

An example of a matrix of infrastructure projects for a tourism-oriented community (based on the model of a conditional Carpathian separate territorial community similar to the Yabluniv community) is presented below. The matrix includes the basic assessment of cost, impact on the community/economy/environment, priority level, and implementation deadlines (Table 4).

Table 4. Matrix of tourism infrastructure projects for the community.

№	Project name	Estimated cost (EUR)	Implementation deadlines	Potential impact	Priority level
1	Reconstruction of the main tourist road (village – route)	300,000 – 500,000	12–18 months	High (logistics + tourism)	High
2	Development of an eco-trail with interactive panels and navigation	40,000 – 60,000	6 months	Medium (environmental education + recreation)	Medium
3	Establishment of a local culture center/museum of Hutsul crafts	80,000 – 120,000	9–12 months	High (tourism + cultural identity)	High
4	Installation of bio-toilets and waste collection points in tourist areas	15,000 – 25,000	3–4 months	Medium (ecology + comfort)	Low
5	Creation of a mini-market space for craft producers	25,000 – 40,000	5–6 months	High (support for small businesses)	Medium
6	Providing Internet access to public tourist sites (Wi-Fi, QR guides)	10,000 – 20,000	2–3 months	Medium (digitalization)	Low

7	Energy modernization of a rural hotel/hostel building	60,000 – 90,000	8–10 months	High (energy efficiency + tourism)	High
8	Implementation of an online booking system for homestays	5,000 – 10,000	1–2 months	Medium (marketing and convenience)	Medium
9	Creation of a campsite/recreational area near a waterbody	50,000 – 70,000	6–9 months	Medium (youth tourism, nature)	Medium
10	Training center for guides and homestead owners	20,000 – 30,000	3–4 months	High (service quality, employment)	High

Source: Designed by the authors.

The matrix of tourism infrastructure projects for the community (Table 4) is an analytical tool that allows structuring potential initiatives according to their significance for the development of the tourism sector. The table suggests three key priority criteria. Projects classified as high priority are those that have strategic importance for increasing the tourist flow, developing the infrastructure, or creating new jobs. Medium-priority initiatives focus on strengthening existing opportunities, improving them, or expanding the range of services. Low-priority projects provide additional convenience or emotional comfort but are not critically necessary for the functioning of the community's tourism system. This approach allows for a justified focus in planning the infrastructure development and the efficient use of resources according to the real needs and potential of the territory.

Strategic approaches to eco-cultural restoration and the development of the hospitality infrastructure are key factors for the sustainable development of green tourism in territorial communities. Green tourism, which includes eco- and agro-tourism, is an important area for the sustainable development of territorial communities in Ukraine. This type of tourism contributes to the preservation of natural and cultural resources, provides additional income sources for the local population, and supports environmental and social responsibility. According to the State Agency for Tourism Development of Ukraine, green tourism has a significant development potential, especially in rural regions where it can become the basis for the economic growth and the preservation of traditions.

The comprehensive assessment and preservation of cultural heritage are key aspects of eco-cultural restoration. The inventory of local cultural values, the restoration of authentic architectural elements, and the integration of culture into tourism products contribute to preserving the community identity and enhancing the attractiveness of regions for tourists. Ecological restorative activities include the rehabilitation of degraded natural landscapes, the creation of protected areas, and the promotion of green consumption principles. These measures not only improve the state of the environment but also create new opportunities for ecotourism that align with European standards of sustainable development.

The engagement of the local community and the development of social capital are integral parts of the sustainable tourism strategy. Supporting local initiatives, educating, and raising awareness among residents about the importance of resource conservation provide the community with equal access to tourism benefits and promote social cohesion.

The development of the hospitality infrastructure should be environmentally responsible. The use of eco-friendly materials, the expansion of eco-lodge networks, and the organization of waste disposal systems minimize the negative impact on the environment and improve the quality of tourist services. Improving the transport and digital infrastructure is crucial to ensure accessibility to tourist sites. The implementation of eco-friendly transport, the provision of high-quality Internet coverage, and the creation of tourist information centers meet the current requirements of tourists and promote the sustainable regional development.

Improving the service quality and implementing innovative solutions, such as staff training, certification of eco-farms, and the use of digital technologies in marketing, are essential for the competitiveness of tourism services. These measures form a positive image of regions and attract a larger number of tourists.

Thus, strategic approaches to eco-cultural restoration and the development of the hospitality infrastructure are key factors for the sustainable development of green tourism in territorial communities of Ukraine. They facilitate the preservation of natural and cultural resources, economic growth, and improvement in the life quality of the local population.

The integration of eco-cultural and infrastructural approaches into the sustainable tourism development in territorial communities of Ukraine and the EU requires a comprehensive strategic vision that combines environmental, cultural, and economic aspects. One of the key areas is the establishment of regional green tourism clusters uniting communities to coordinate infrastructural and cultural projects. Such clusters facilitate the creation of joint brands and products, experience exchange, and organization of joint marketing campaigns. The European Cluster Collaboration Platform supports these initiatives by promoting cross-border cooperation and the green transition (European Cluster Collaboration Platform, 2024).

An important element is the creation of a monitoring and impact assessment system for tourism, which allows tracking ecological, social, and economic indicators. The use of the obtained data enables the adjustment of policies and projects, ensuring the sustainable development of tourism. The United Nations World Tourism Organization (UNWTO) has developed the Statistical Framework for Measuring the Sustainability of Tourism (SF-MST) that integrates statistics on economic, environmental, and social aspects of sustainable tourism (UNWTO, 2024).

The engagement of international partners and funding is critical for the implementation of eco-cultural initiatives. The European Union offers a wide range of grant programs, such as Horizon Europe and Interreg, which support projects in tourism, culture, and ecology. Ukraine is extensively integrating into these programs, opening up new opportunities for the development of sustainable tourism (One-Planet Network, 2025).

The revival of intangible cultural heritage is another strategic area. The active involvement of traditional knowledge, such as folk crafts, music, dance, and gastronomy, in tourism products contributes to the preservation of the cultural identity and the development of local communities. UNESCO supports such initiatives, particularly through the inclusion of elements of Ukrainian cultural heritage in the Representative List of the Intangible Cultural Heritage of Humanity.

Environmental management of natural resources involves the introduction of ecological standards and regulations in the use of natural territories, especially in zones with high tourist pressure. The use of such natural technologies as green roofs, biofiltration, and water conservation at tourist sites allows preserving biodiversity and promoting the sustainable tourism development.

Thus, the integration of eco-cultural and infrastructural approaches into the sustainable tourism development requires a comprehensive approach combining the efforts of local communities, national governments, and international partners. It not only preserves natural and cultural heritage but also promotes the economic development and improves the life quality in territorial communities.

Innovations in the development of the hospitality infrastructure are key to the sustainable development of green tourism in Ukraine and EU countries. The use of smart technologies, such as the Internet of Things (IoT), allows for efficient monitoring of natural resource conditions and tourist site loads. Automation of booking systems, guest registration, and the adoption of augmented reality (AR) electronic tickets enhance the quality of tourist services. The EU is actively implementing similar solutions as part of the Smart Tourism initiative that supports innovative and sustainable tourism development in European cities (European Commission, 2024).

The integration of renewable energy sources, such as solar panels and wind turbines, into tourist facilities reduces the carbon footprint and ensures the energy efficiency. The EU is developing strategies for the use of renewable energy in tourism, particularly in coastal regions where tourism is combined with offshore renewable energy. Ukraine also shows the growing potential for renewable energy, opening up new opportunities for the sustainable development of the tourism infrastructure (European MSP Platform, 2024).

Social inclusion and partnership are important aspects of developing the tourism infrastructure. Ensuring accessibility of the infrastructure for disabled people, creating employment opportunities for various population groups, and involving the public in decision-making processes promote social cohesion. The EU implements programs aimed at supporting inclusive tourism and partnership between different sectors.

However, the implementation of sustainable tourism development strategies faces a number of challenges and risks. They include the need to balance the nature conservation with the infrastructure development, limited financial resources of communities, the impact of climate changes on natural resources and the seasonality of tourism, as well as unpredictable events such as pandemics that can alter tourist flows. Overcoming these challenges requires strategic planning, attracting investments, and active involvement of all stakeholders.

Successful practices in the development of eco-cultural tourism demonstrate the importance of integrating cultural heritage, the sustainable approach to the infrastruc-

ture, and community participation. A vivid example in Ukraine is the Kosiv district where the revival of Hutsul culture is carried out by creating an ethnic center, supporting crafts, and developing the green infrastructure. This area is widely supported by national and international funds, including the Ukrainian Cultural Foundation (Ukrainian Cultural Foundation, 2025).

As part of the Zielone Płuca Polski (Green Lungs of Poland) program, Poland has created a system of eco-homes and cultural routes combined with investments in the modern road infrastructure and digital services for tourists. This initiative covers the northeastern voivodeships of the country and is supported by the Ministry of Climate and Environment of Poland (Ministry of Climate and Environmental Protection of Poland, 2024).

Another example is the Tuscany region in Italy where historic villages are preserved in their authentic form and adapted to the modern needs of sustainable tourism. The region is establishing green hotels, developing gastro-tourism, and supporting local initiatives through European Union programs, particularly as part of the rural development policy.

These examples mean the efficiency of combining cultural authenticity, sustainable planning, and digital innovations in creating the attractive tourism environment that brings long-term benefits to both local communities and tourists.

Therefore, eco-cultural restoration and the development of the hospitality infrastructure in territorial communities are complementary components shaping sustainable green tourism. The comprehensive strategic approach not only enhances the competitiveness of regions but also ensures the long-term preservation of natural and cultural resources, as well as social cohesion of local communities.

5 Conclusions

Thus, having conducted the research, we can conclude that eco-cultural restoration and the development of the hospitality infrastructure are interrelated and critically important components of the sustainable development of green tourism in territorial communities. The comprehensive strategic approach that combines the preservation of natural and cultural resources with the implementation of modern, environmentally responsible technologies and infrastructural solutions creates a solid foundation for enhancing the competitiveness of tourist regions.

The eco-cultural transformation not only preserves unique cultural heritage and the natural environment but also shapes the community identity, strengthens social cohesion, and ensures the involvement of the local population in the tourism development process. At the same time, the development of the environmentally oriented hospitality infrastructure, from transport routes and smart digital services to green hotels and waste management systems, improves the service quality, enhances tourist comfort, and minimizes negative environmental impacts.

The integration of cultural and ecological components with modern infrastructural solutions is a key to establishing sustainable tourism clusters capable of generating long-term economic benefits, promoting the conservation of biodiversity and cultural diversity, as well as supporting social stability and community development.

Challenges related to balancing the development and preservation require efficient planning, the involvement of international and governmental resources, and the active participation of all stakeholders. The development of monitoring and assessment systems, as well as the application of innovative approaches, will facilitate the adaptation of strategies to new conditions and challenges.

The eco-cultural transformation involves the synergy between environmental standards and cultural heritage, the adaptation of global practices to the local context, and the promotion of responsible consumption and tourism. The infrastructure advancement includes the modernization of hotel complexes, the development of green technologies, digitalization of services, and the integration of transport, energy, and logistics infrastructure in accordance with European standards.

This issue is extremely relevant to Ukraine due to its aspiration for European integration and the need to renew the economic model focused on the sustainable development, job creation, attracting investments, and enhancing the tourism attractiveness. At the same time, deepening cooperation with Ukraine in the hospitality sector provides Europe with opportunities for the exchange of innovations, preservation of cultural diversity, and strengthening cross-border regional integration.

Thus, the eco-cultural optimization and infrastructure advancement of hospitality in territorial communities represent not just an investment in tourism but a comprehensive sustainable development strategy. This strategy ensures a harmonious combination of economic, social, and environmental interests and opens prospects for the sustainable future of green regions of Ukraine and Europe.

References

1. Abramova, A. & Myroshnyk, Y. (2020). Eco-trend in hospitality: Economic and social aspects. Efektyvna Ekonomika, 5. https://doi.org/10.32702/2307-2105-2020.5.82
2. Biletska, N. (2024). Investment potential of the tourism industry of Ukraine in the system of strategic management of its development. Business Inform. 5, 175-181. https://doi.org/10.32983/2222-4459-2024-5-175-181
3. Bukovel. (2025). Bukovel joined the international Climate Friendly Travel program. https://bukovel.com/sustainability/bukovel-doiednavsia-do-mizhnarodnoi-programi-climate-friendly-travel
4. Chakraborty, P. & Ghosal, S. (2024). An eco-social exploration of tourism area evolution in mountains through stakeholders' perspective. Environmental Development, 49(100963), 100963. https://doi.org/10.1016/j.envdev.2024.100963
5. Chen, T. & Liu, G. (2025). Global perspectives on environmental policy innovations: Driving green tourism and consumer behavior in circular economy. Journal of Environmental Management, 374(124138), 124138. https://doi.org/10.1016/j.jenvman.2025.124138
6. Cultural Routes of the Council of Europe. (2024). Cultural Routes. https://www.coe.int/en/web/cultural-routes?utm_source
7. Dyskhantyuk, O. (2024). Institutional transformation for sustainable development of the hospitality industry. Ukrainian Economic Journal, (7), 141–147. https://doi.org/10.32782/2786-8273/2024-7-23
8. UNWTO. (2024). EU Guidebook on Sustainable Tourism for Development. https://www.unwto.org/EU-guidebook-on-sustainable-tourism-for-development

9. European Green Deal. (2023). https://ecoaction.org.ua/ievropejskyj-zelenyj-kurs.html
10. Eurostat. (2023). https://ec.europa.eu/eurostat/
11. Haldorai, K., Kim, W.G., Agmapisarn, C., Li, J. (2023). Who we are and what we do: The relevance of green organizational identity in understanding environmental performance. International Journal of Hospitality Management. 114, 103574 https://doi.org/10.1016/j.ijhm.2023.103574
12. Hutsaliuk, O., Bondar, I., Kalinin, O., Sokolovskiy, V., & Navolokina, A. (2025a). Integration development of logistics activities of corporate enterprises based on intellectualization and management technologies. In Lecture Notes in Networks and Systems (pp. 270–286). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-87376-8_24
13. Hutsaliuk, O., Bondar, Iu., Tomareva-Patlahova, V., Kalinin, O., Navolokina, A., Kozlovska S. (2025b). Integration of Operational and Economic Security of the Enterprise: Reorganization, Technologies, Risks and Outsourcing. Data-Centric Business and Applications. Lecture Notes on Data Engineering and Communications Technologies. Cham: Springer, 240, 35-61. https://doi.org/10.1007/978-3-031-81557-7_3
14. Hutsaliuk, O., Bondar, Iu., Doroshenko, T., Zarubina, A., Onoyko, Y., Semeniuk, L. (2023). Ecological Air Tourism in the System of Environmental Engineering. IOP Conference Series: Earth and Environmental Science, 1269, 012031. https://doi:10.1088/1755-1315/1269/1/012031
15. Hutsaliuk, O., Tsaturian, R., Kalinin, O., Gedz, M., Buhaieva, M., Kramskyi, S., Navolokina, A. (2024). Technological Synergy of Engineering Integrating in Digitalization Economy, Nanotechnology and Intelligent Digital Marketing for Corporate Enterprises in Provisions of their Economic Security. Nanotechnology Perceptions, 20 (S8), 348–366. https://doi.org/10.62441/nano-ntp.vi.1295
16. Huzar, U. (2024). Theoretical and methodological principles of the development of the hospitality industry. Economy and Society, (59). https://doi.org/10.32782/2524-0072/2024-59-112
17. European Cluster Collaboration Platform. (2024). *Support resources: European Cluster Collaboration Platform*. EU Tourism Platform. https://ec.europa.eu/growth/sectors/tourism/ecosystem-support-resources
18. Ukraine Crisis Media Center. (2025). Interreg Europe: Ukraine is actively involved in the process. UCMC press center. https://uacrisis.org/en/interreg-europe-ukrayina-aktyvno-doluchayetsya-do-protsesu?utm_source
19. Sofiichuk, K. (2018). Risks of the tourism industry in Ukraine. Journal of Environmental Management and Tourism, 9(2), 334. https://doi.org/10.14505//jemt.9.2(26).15
20. UN Tourism. (2024). *UN standards for measuring tourism*. United Nations. Retrieved August 2, 2025, from https://www.unwto.org/un-standards-for-measuring-tourism
21. Ministry of Climate and Environmental Protection of Poland. (2024). https://www.gov.pl/web/klimat
22. European MSP Platform. (2024). *Offshore renewable energy & tourism*. European Commission. Retrieved August 2, 2025, from https://www.msp-platform.eu/practices/offshore-renewable-energy-tourism
23. Povoroznyuk, I. (2022). Problems of service quality at hospitality industry enterprises. Economy and Society, (41). https://doi.org/10.32782/2524-0072/2022-41-8
24. Trang, P. H., Nam, V., Nguyen, H. L. D., Le, T.-L. & Dang-Pham, D. (2024). Sustaining the future of tourism logistics through digital technologies: A roadmap for digital transformation. In Transforming Logistics in a Developing Nation (pp. 387–413). Springer Nature Singapore. http://dx.doi.org/10.1007/978-981-97-7819-5_14

25. Sharma, G. D., Taheri, B., Cichon, D., Parihar, J. S. & Kharbanda, A. (2024). Using innovation and entrepreneurship for creating edge in service firms: A review research of tourism and hospitality industry. Journal of Innovation & Knowledge, 9(4), 100572. https://doi.org/10.1016/j.jik.2024.100572
26. Singhal, H. (2024). *Green building certifications: What hotels need to know*. Open Source and Free Hotel Booking Management Software; QloApps. https://qloapps.com/green-building-certifications-what-hotels-need-to-know/?utm_source
27. European Commission. (2024). Smart Tourism initiative.https://smart-tourism-capital.ec.europa.eu/index_en?utm _source
28. State Agency for Tourism Development of Ukraine. (2024). https://www.tourism.gov.ua/
29. State Statistics Service of Ukraine. (2024). https://ukrstat.gov.ua
30. Sukhorukova, G. (2025). Review of the Tourism Industry in Ukraine: Challenges, New Directions and Prospects. https://hub.kyivstar.ua/articles/oglyad-turistichnoyi-galuzi-v-ukrayini-vikliki-novi-napryamki-ta-perspektivi
31. One-Planet Network (2025). Sustainable Tourism Program. https://www.oneplanetnetwork.org/organisations/ european-cultural-tourism-network-ectn
32. DualTourism. (2025). Tourism and Inclusion: Towards an Accessible Future for All. https://dualtourism.eu/tourism-and-inclusion-towards-an-accessible-future-for-all/?utm_ source
33. Eurostat. (2025). Tourism Statistics. https://ec.europa.eu/eurostat/statistics-explained /index.php?title=Tourism_statistics
34. Ukrainian Cultural Foundation. (2025). https://ucf.in.ua/
35. U-LEAD. (2024). U-LEAD with Europe. https://u-lead.org.ua/?utm_source
36. Green Key Global. (2023). Unlocking sustainability in the hospitality industry. Green Key Criteria. https://www.greenkey.global/criteria/?utm_source
37. Valinkevych, N., & Shestakova, A. (2024). Digital transformation as a competitive advantage in the tourism and hospitality industry. Economy and Society, (68). https://doi.org/10.32782/2524-0072/2024-68-37
38. Volyn Regional State Administration. (2024). Tourist collection in Volina for 2023 has doubled since 2022. https://www.voladm.gov.ua
39. Iceland Travel. (2024). Your DMC in Iceland. https://www.icelandtravel.is/