

## Sustainable Tourism for Blue Growth

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*Blue Economy has emerged as a comprehensive development paradigm that advocates for the sustainable use of ocean resources to drive economic growth, improve livelihoods, and maintain healthy marine ecosystems. This paper examines the capacity of sustainable tourism to function as a transformative mechanism within the Blue Economy, fostering ecosystem regeneration rather than degradation. Using the Croatian coastal region as a case study, the research examines the degree of alignment between sustainable tourism principles and Blue Economy objectives. A mixed-methods research design was adopted, integrating an extensive literature review with a structured stakeholder survey across key blue economy sectors. Data were analyzed through SWOT analysis and validated via focus group discussions. The results indicate that, although the blue economy provides a comprehensive framework for sustainable tourism development, there exists a substantial knowledge gap among stakeholders regarding sustainable practices. The study underscores the necessity of developing an integrated strategic framework that harmonizes sustainable tourism and Blue Economy principles, alongside enhancing stakeholder education and capacity-building initiatives to facilitate resilient, long-term development.*

**Keywords:** Sustainable tourism development, Blue Economy, stakeholder perceptions, policy recommendations, Croatia

### Introduction

Coastal and maritime regions are increasingly positioned at the forefront of global sustainability efforts, as they confront the dual imperatives of economic development and environmental protection. Tourism, as one of the fastest-growing global economic sectors, offers substantial opportunities for employment, investment, and cultural exchange, yet simultaneously exerts significant pressure on marine and coastal ecosystems through habitat degradation, pollution, and overexploitation of natural resources.

To address these challenges, the Blue Economy has emerged as a holistic development framework that advocates for sustainable utilization of ocean resources to stimulate economic growth, improve livelihoods, and safeguard healthy marine ecosystems (World Bank 2017). Encompassing both established and emerging sectors, the Blue Economy promotes a systematic, inclusive, and ecosystem-based framework for integrated ocean governance (European Commission, The 2018

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Annual Economic Report on EU Blue Economy, Publications Office of the EU 2018). Rooted in sustainable use, management, and conservation of aquatic and marine ecosystems, the Blue Economy framework is increasingly incorporated into national development strategies across coastal nations (UN/ECA 2016). Within this paradigm, tourism is recognized as an important sector for achieving sustainable coastal development. Recent research highlights the Blue Economy's crucial role in linking climate resilience with the sustainable development of coastal communities. As articulated by the United Nations, the Blue Economy seeks to "improve human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (Lee et al. 2020). Consequently, it represents an essential pathway toward fulfilling Sustainable Development Goal 14: "to conserve and sustainably use the oceans, seas, and marine resources".

Sustainable tourism, when conceived and implemented through ecologically responsible, inclusive, and community-oriented approaches, holds the potential to act as a transformative driver of blue growth. It can support the regeneration of natural systems, enhance socio-economic resilience, and promote the preservation of cultural and environmental heritage. However, despite the strategic importance of sustainable tourism within the Blue Economy framework, its practical integration into tourism policies and planning processes remains limited and insufficiently explored, particularly in the Croatian context.

The study addresses mentioned research gap by combining the concepts of development, integration, and governance with the themes of coastal and marine management and stakeholder perceptions. It adopts an interdisciplinary approach that simultaneously covers both ecological and socio-economic dimensions. Through the analysis of relevant scientific literature and policy documents on the topic of the blue economy and sustainable tourism, as well as an analysis of stakeholder attitudes and practices in Croatia, evidence-based recommendations have been formulated. These recommendations aim to contribute to the advancement of sustainable tourism as a core element of Croatia's blue economy strategy.

## Literature Review

Marine and coastal tourism plays a critical role in the broader framework of the Blue Economy, which emphasizes the sustainable use of ocean and marine resources to support economic development while conserving marine ecosystems. Sustainable tourism, a key component of this approach, is defined as tourism that respects local communities, cultural heritage, and environmental integrity while minimizing negative environmental impacts and maximizing socio-economic benefits (Cummings G. and Greenberg Z 2022). In the context of Blue Economy, sustainable tourism practices focus on balancing economic growth with the preservation of marine ecosystems, recognizing the interdependence between tourism and ocean health. The key challenge in achieving sustainable coastal and marine tourism lies in the over-exploitation of resources. Over-tourism, particularly in fragile coastal areas and islands, often leads to significant environmental degradation, such as biodiversity loss and deterioration of marine ecosystems (Fosse et al. 2019). Despite its economic contributions, including substantial employment and investment in

coastal regions, tourism can generate negative externalities that threaten both the environment and local communities (WTTC 2023). As a result, the integration of sustainability principles into tourism management is essential for mitigating these impacts and ensuring long-term ecological and economic benefits. The Blue Economy model offers a framework for addressing these challenges. Introduced by Pauli (2010), the Blue Economy emphasizes "economies of scope" that prioritize innovation, diversity, and ecosystem restoration over traditional economies of scale. This model advocates for using marine resources in ways that not only support economic growth, but also restore and preserve the health of marine environments, which are vital to both the success of tourism and the well-being of coastal communities. Circular economy solutions, highlighted by Martínez-Vázquez et al. (2021), are particularly relevant in the context of coastal tourism. By promoting the efficient use of resources and minimizing waste, these solutions help reduce the environmental footprint of tourism, particularly in protected marine areas. Additionally, integrating community-based tourism approaches can empower local population, enabling them to take an active role in tourism development and management. This participatory approach ensures that tourism benefits are equitably distributed, fostering both social and environmental sustainability.

The Blue Economy also intersects with broader sustainable development frameworks, such as "Sustainable Development Space 2.0" model proposed by Holden et al. (2024). This model emphasizes integration of environmental boundaries, social justice, and basic human needs, suggesting that sustainable development in tourism requires both technical innovations and strong societal narratives focused on human rights, ecological preservation, and social equity. Such framework highlights the importance of creating governance systems that can manage the complex transitions necessary for sustainable tourism and marine resource management. Financial mechanisms play a crucial role in supporting sustainable tourism initiatives within the Blue Economy. Streimikiene et al. (2023) emphasize that advanced sustainable finance models can significantly enhance the achievement of Sustainable Development Goals (SDGs), particularly in coastal regions dependent on tourism. Financial support for green technologies and eco-friendly infrastructure is essential in terms of reducing the environmental impact and fostering the development of sustainable tourism initiatives (Ahmad *et al.*, 2024). At the local level, quality governance is critical for the success of sustainable tourism. Jasiński and Żabiński (2021) demonstrate that effective local governance correlates with improved sustainability outcomes in tourism-dependent communities. In the context of the Blue Economy, effective governance ensures that tourism policies are aligned with both environmental and social goals, enabling communities to benefit from tourism while protecting their natural resources.

Blue Economy is a concept that envisions sustainable use of ocean and marine resources to promote economic growth, improve human well-being, and protect ocean ecosystems. It represents a shift from traditional economic model that prioritize resource exploitation towards an approach that values both economic development and environmental sustainability. Blue Economy emphasizes the importance of balanced use of marine resources in a way that doesn't degrade oceans' health but contributes to social equity, job creation, and sustainable

development. However, the implementation of Blue Economy faces various challenges. Critics argue that the "Blue Growth" within Blue Economy, seeks for economic expansion through marine resource exploitation, can often overlook ecological and social implications. The term "Blue Growth" is linked to economic strategies aimed at increasing value derived from oceans, yet it has been criticized for exacerbating social inequalities and environmental degradation.

A recent critique proposed an alternative framework called "Blue Degrowth" which advocates for reduced exploitation of marine resources and a more equitable distribution of benefits leaving aside „growth“ as the primary goal. In line with the broader societal concept of "degrowth," Blue Degrowth proposes key principles such as cessation of overexploitation, localized production, and safeguarding shared oceanic resources. This approach envisions a society that shifts away from endless economic growth focusing instead on social equity and ecological preservation. One innovative method to measure Blue Economy activities, as introduced by Biekša et al. (2022), uses satellite data to quantify marine economic activities such as fishing, shipping, and offshore exploration. This technique overcomes the limitations of traditional national statistics, providing a more global, transparent, and scalable approach in understanding economic impacts of maritime industries. The use of nighttime light from satellites allows real-time monitoring thus contributing to more efficient policy development, especially in countries with limited statistical resources. Moreover, an essential aspect of Blue Economy governance is its focus on equity. As highlighted by Martínez-Vázquez et al. (2021), the early ideals of social equity in the Blue Economy have been overshadowed by neoliberal and capitalist frameworks, leading to increased inequality in the distribution of marine resources' benefits. Their study proposes a Blue Economy Equity Model that integrates ethical principles such as respecting human rights, preventing harm, ensuring equality, and fostering community development. This model aims to make Blue Economy governance more inclusive and yet, addressing the social disparities exacerbated by existing policies.

The concept of Blue Economy is also closely linked to sustainable tourism, especially in coastal and marine areas. Sustainable tourism within Blue Economy frameworks calls for an integrated approach that balances environmental protection, community well-being, and economic growth. For instance, Klinger et al. (2018) emphasize the need for policies that harmonize different sectors like fisheries, aquaculture, and tourism to ensure that they contribute to sustainable growth while preserving marine ecosystems. This approach aligns with the idea of using marine resources in ways that are socially equitable and environmentally responsible.

Blue Economy and sustainable tourism share a common foundation for promoting sustainability, social justice, and responsible resource management. In order to foster tourism industry that would bring benefits to local communities and environment it's necessary to adopt a holistic and equitable approach to Blue Economy governance. In conclusion, the Blue Economy represents a dynamic framework that, when implemented with equity and sustainability at its core, can support a flourishing, sustainable future for both marine ecosystems and the communities that depend on them. Sustainable marine and coastal tourism is an integral component of the Blue Economy, supporting both economic growth and the conservation of marine

ecosystems. By adopting circular economy solutions, promoting community-based tourism, and aligning financial mechanisms with sustainability goals, tourism can contribute to a more sustainable future. The Blue Economy provides a framework for balancing economic development with environmental preservation, ensuring that marine resources are used in ways that benefit both current and future generations.

Community-based tourism is one of the approaches for planning local development in coastal sub-areas in the future. It involves local people in every part of tourism planning and management process, giving locals a chance to become active participants. They build value and trust, improve their knowledge and interact with tourists, which creates mutual understanding and learning. The more the local population feels supported by tourism, the more they support and develop tourism, which favors the destination's sustainability and cultures and its values protection, which is a win-win situation for all stakeholders. Since tourism can also damage the environment, leading to loss of natural resources and biodiversity, it is essential for a destination to be sustainable whereas negative economic, ecological and social impacts of tourism should be limited. That is where local communities play a crucial role since, they are taking the initiative to minimize negative impacts on their environment, which is why the involvement of the community in the tourism sector is essential for sustainability but also for the preservation of local culture and tradition. Community-based tourism emphasizes the importance of the relationship between tourists and the local population and provides an opportunity for tourists to help the local community as their money is used to develop the destination and thus leaves a positive footprint (Zivrali 2022).

As part of responsible recovery, the tourism industry must play a more active role in protecting the coastal and marine environment by adopting a more circular and resilient model of tourism. In 2021, UNWTO launched the Glasgow Declaration on Climate Action in Tourism at COP26. The Declaration proposes an integrated approach to mitigation and adaptation and aims to protect and restore ecosystems, including marine and coastal ecosystems, by supporting nature's ability to reduce carbon, as well as preserving biodiversity, food security and water supplies (UN Tourism 2024).

The so-called SAVE (Scientific, Academic, Volunteer, and Educational) tourism is fundamental to Blue Economy development since SAVE travelers view tourism to learn, research, help, explore and grow thus preserving and improving destinations, including their resources and communities. The mentioned forms of tourism contribute to Blue Growth, since tourism acts as a bridge between economic, social, and environmental sustainability, directly contributing to the development of the Blue Economy. The success of tourism depends on a balanced, healthy, and rich cultural and natural heritage (Hammad 2023).

Investing in coastal and maritime tourism to support the transition to Blue Economy will be crucial in ensuring that the sector fulfills its obligations according to the 2030 Agenda for Sustainable Development. It will also bring significant benefits to coastal communities themselves. The World Bank estimates that destinations across the Mediterranean region alone lose up to €268 million each year to plastic pollution. In the post-pandemic era, tourists want to travel to places where sustainability is embraced and ecosystems prosper and are ready to pay more which

generates even greater economic benefits at local level, while also supporting job growth.

To tackle new development challenges, economic actors need to upgrade and re-invent their business processes and introduce changes into their existing products and services. This is especially challenging for micro and small enterprises, working in an economic value-chain of coastal tourism and maritime transport, which have no extra capital for investing in digital and sustainable technologies and have limited skills in communicating new green-values to their users. Efficient transition to sustainable Blue Economy needs systematic support to widespread collaboration for maximization of the available potential in the Adriatic region.

The collaboration in the area is missing mainly due to the underdeveloped collaboration mechanisms, especially expressed in micro and small enterprises, in which parties from whom it is expected to collaborate on industrial transition haven't got an exact idea of their role and expectations. Consequently, there is no transition without necessary skills, knowledge, and vision.

## Methodology

The Blue Economy and its connection to sustainable tourism as a topic is increasingly present in scientific and professional discussions. However, it remains insufficiently explored in the Croatian context. The key motivation for this research was the need for a deeper understanding of the role of the tourism sector and business entities as well as the public sector in promoting sustainability within the Blue Economy sector.

For the purposes of this research, questionnaire surveys were conducted. The following key research questions were posed: (1) how familiar the respondents were with the concept of the Blue Economy, and (2) to what extent they believed their organization contributed to the development of the Blue Economy. The aim of the survey was to examine the level of awareness, attitudes, and opinions of stakeholders from mentioned sectors regarding the relationship between the Blue Economy and sustainable tourism, as well as to identify potential and challenges in implementing sustainability principles in their operations.

An initial preliminary survey was conducted in October 2024 on a sample of 13 respondents. This preliminary study served as the foundation for designing a broader investigation and for defining guidelines for further analysis.

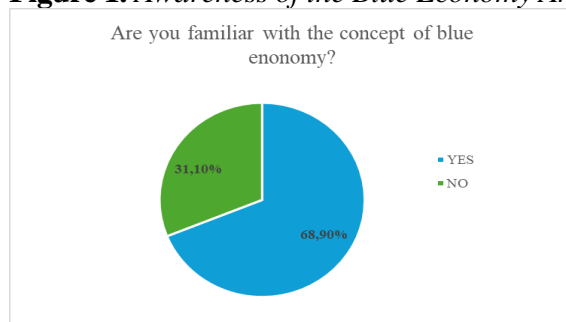
The main research was carried out from December 2024 to January 2025 on a sample of 100 organizations operating within the Blue Economy sector in the Republic of Croatia, covering areas such as fisheries, food production and processing, shipbuilding, machinery and equipment manufacturing, sustainable tourism, transport, culture, academia, and the public sector. Out of the total questionnaires distributed, 63 complete responses were received, where all respondents answered all the questions. Limitations of the research related to the relatively small sample size were solved by organizing a focus group involving key stakeholders, which enabled further interpretation of the results through qualitative analysis of participants' opinions and attitudes, with particular emphasis on sector-

specific challenges and potential solutions. Based data collected, a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) was conducted, allowing results' systematization and providing a key factors overview of keys that influence the integration of sustainability principles into the Blue Economy sector. The SWOT analysis served as a key tool for summarizing the research findings and for developing strategic recommendations for sustainable tourism and Blue Economy development in Croatia.

## Results

The survey was conducted on a sample of 100 respondents, of whom 63 fully answered the questions posed in the survey. The results highlight the level of awareness, perceptions, and the perceived impact of Blue Economy principles on the development of sustainable practices within the tourism sector.

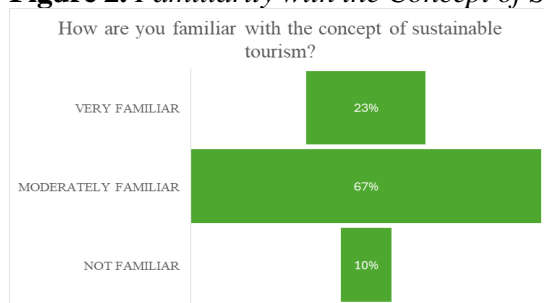
**Figure 1.** *Awareness of the Blue Economy Among Respondents*



Source: authors

The majority of respondents (68.9%) are familiar with the concept of the Blue Economy, while 31.1% aren't (Figure 1). High level of awareness suggests a growing interest in education on sustainable practices in ocean- and coastal-based economies. However, a considerable proportion of those who aren't familiar with the concept highlights the need for further efforts in promoting and educating about the importance of the Blue Economy as a key element of sustainable development.

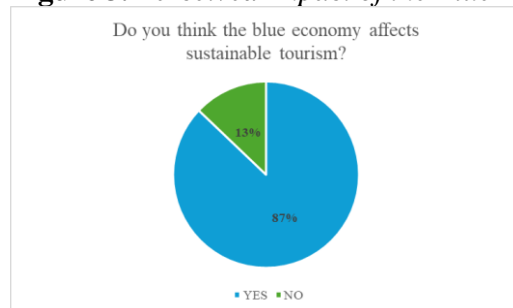
**Figure 2.** *Familiarity with the Concept of Sustainable Tourism*



Source: authors

According to Figure 2, the majority of respondents (67.2%) reported being moderately familiar with the concept of sustainable tourism, while 23% indicated a high level of familiarity. A smaller proportion (9.8%) stated that they were not familiar with the concept at all. These findings suggest that while a significant share of respondents possess a basic to moderate understanding of sustainable tourism, there is also a notable segment with advanced knowledge. However, the presence of approximately 10% of respondents unfamiliar with the concept highlights a potential barrier to widespread adoption of sustainable practices in tourism. As emphasized by Jędrzejczak-Gas et al. (2024), insufficient awareness can hinder the effective implementation of sustainability policies. In light of this, targeted educational initiatives and awareness-raising campaigns are recommended in order to promote knowledge, principles and benefits of sustainable tourism (Becla and Czaja 2022).

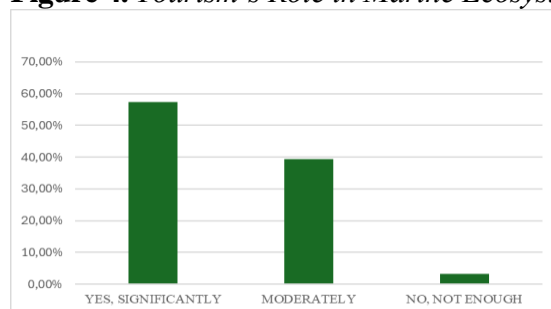
**Figure 3.** *Perceived Impact of the Blue Economy on Sustainable Tourism*



Source: authors

Figure 3 illustrates that the majority of respondents (87%) recognize the impact of the Blue Economy on sustainable tourism, while 13% don't perceive such an influence. The high share of affirmative responses underscores a strong awareness of the interconnection between the sustainable management of marine and coastal resources—a core principle of the Blue Economy—and the development of environmentally responsible and economically viable tourism practices. These findings support the assertion made by Campbell et al. (2021) that the integration of sustainability into the tourism sector, alongside the preservation of marine ecosystems and the empowerment of local communities, is crucial for long-term success of both the Blue Economy and sustainable tourism.

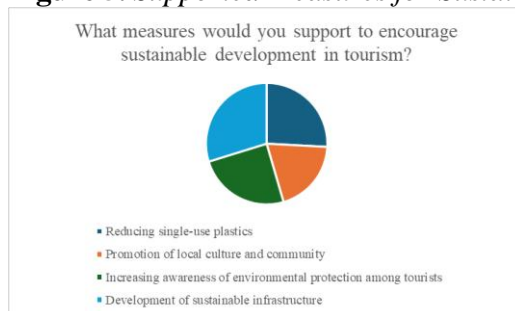
**Figure 4.** *Tourism's Role in Marine Ecosystem Conservation*



Source: authors

In response to the question "Do you believe that tourism can contribute to the conservation and regeneration of marine ecosystems?" (Figure 4), most of respondents (57.4%) indicated that they believe tourism can contribute significantly. Additionally, 39.3% felt that tourism's contribution is moderate, while only a small percentage (3.3%) stated that tourism is not effective enough in this regard. These results suggest a widespread belief that tourism, when managed sustainably, can play a significant role in preserving and regenerating marine ecosystems. This may be attributed to the increasing awareness of eco-friendly tourism practices, such as marine protected areas, sustainable tourism certificates, and initiatives that promote environmental education among tourists. However, 39.3% of respondents who view the contribution as moderate, suggest that there are still challenges to be addressed. This could include issues such as over-tourism, inadequate enforcement of regulations, and the need for more effective strategies that integrate conservation with tourism development. The small percentage (3.3%) who believe that tourism is insufficiently effective in this regard may reflect concerns about negative impacts of poorly managed tourism on marine ecosystems, such as pollution, habitat destruction, and overexploitation of resources. These results are consistent with the findings of other researchers, who emphasize that tourism, when managed in a sustainable manner, can significantly contribute to the conservation and restoration of marine ecosystems (Voronina et al. 2024). The results indicate a positive attitude towards sustainable practices but also emphasize the need for further education and promotion of the Blue Economy. By combining education, strategic initiatives and cooperation between the public and private sector, it is possible to further increase awareness of the sustainable development importance. Also, the research shows the respondents' thoughts on priorities for encouraging sustainable development in tourism. Each offered measure has a significant role, but obvious differences in percentages indicate that respondents perceive certain aspects as more urgent or effective for achieving sustainable goals.

**Figure 5. Supported Measures for Sustainable Tourism**



Source: authors

The survey results clearly indicate a strong inclination towards prioritizing sustainability in tourism practices, with respondents showing significant support for various key measures (Figure 5). The development of sustainable infrastructure received the highest level of endorsement (86.9%), confirming its central role in achieving sustainable tourism goals. Investing in eco-friendly infrastructure, such as renewable energy systems, efficient waste management, and sustainable transport,

emerges as a fundamental prerequisite for balancing tourism growth with environmental conservation. Such long-term investments are not only crucial for minimizing the ecological footprint but also for strengthening the overall resilience and appeal of tourist destinations. Reduction of single-use plastics was supported by 75.4% of respondents, reflecting a global shift in awareness regarding the severe environmental impacts of plastic waste, particularly in sensitive coastal and natural areas. This measure is seen as a highly actionable step that can yield immediate positive effects by significantly reducing pollution and protecting ecosystems critical to tourism. Raising environmental awareness among tourists was endorsed by 72.1% of participants, underscoring the recognition that education and behavioral change are vital components of sustainable tourism. Informing and sensitizing tourists encourages more responsible choices and creates a ripple effect that promotes broader adoption of sustainable practices throughout the sector. Promotion of local culture and communities was supported by 57.4% of respondents. Although this measure received relatively lower support compared to the others, it highlights the essential role of cultural authenticity and community empowerment in sustainable tourism. Strengthening local identities and involving local populations in tourism development not only preserves cultural diversity but also ensures that economic benefits are more equitably distributed.

Overall, the results reflect a mature understanding among stakeholders that sustainable tourism requires a multifaceted approach. The integration of infrastructural development, environmental responsibility, tourist education, and cultural preservation forms a comprehensive strategy that enhances both the sustainability and competitiveness of tourism destinations in the long term.

The key strengths, weaknesses, opportunities, and threats related to the integration of sustainability principles within the blue economy and the development of sustainable tourism were identified using the SWOT analysis. By combining quantitative and qualitative methods, the research ensured a holistic approach that captures both statistical trends and deeper contextual factors influencing stakeholder attitudes and actions in the Croatian context.

Coastal and maritime tourism is a key sector of ocean-based industries, providing significant economic benefits to coastal and island communities through employment, investment, and revenue. However, this development also brings challenges such as resource depletion, biodiversity loss, and pollution. Sustainable tourism presents a solution by fostering economic, social, and environmental sustainability.

Tourism in Croatia has significant economic potential, closely linked to sustainable development and the Blue Economy. Croatia, with its rich cultural and natural heritage and access to the Adriatic Sea, holds a unique advantage in developing sustainable tourism based on Blue Economy principles. The Blue Economy connects economic growth with the conservation of marine ecosystems, emphasizing the responsible use of resources and the protection of natural and cultural heritage. Sustainable utilization of marine and coastal resources enables the growth of Blue Economy sectors such as nautical tourism, fisheries, renewable energy, and marine conservation. Croatia possesses key components for successful development of this sector, which is one of the greatest strengths of its tourism industry.

**Table 1. SWOT Analysis**

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Sustainable (green) competitive economic potential</li> <li>• Tourism as one of the fastest growing economic activities and main GDP contributors</li> <li>• Cultural, historical, archaeological and natural heritage</li> <li>• Functional areas with joint characteristics</li> <li>• Knowledge on innovative tourism products and services such as cultural/creative industries</li> <li>• Critical mass of niches of excellence</li> <li>• Strong potential of nautical sector</li> <li>• Sustainable tourism brings vitality to local economy</li> <li>• Safe tourism destination</li> <li>• Slow tourism potential</li> </ul>	<ul style="list-style-type: none"> <li>• Rich natural, cultural, historic and archaeological heritage but underexploited in a sustainable and responsible way or not exploited at all</li> <li>• Inadequate knowledge and skills on sustainable tourism</li> <li>• Inadequate quality level in tourism offers</li> <li>• Poor implementation of sustainable tourism development policies and responsible tourism concepts</li> <li>• Low level of stakeholders' involvement (local population, visitors)</li> <li>• Insufficient ecological awareness of tourism participants</li> <li>• Seasonality</li> <li>• Lack of common branding strategies regarding macro regional tourism potentials</li> <li>• Complex and un-harmonized regulatory framework</li> <li>• Low level of tourism offers diversification</li> <li>• Low level of accessibility for the visitors with special access needs</li> <li>• Inconsistency in the quality of infrastructure</li> <li>• Low labour productivity</li> <li>• Insufficient entrepreneurial and managerial skills</li> <li>• Low innovation capacity</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• Increase in cross-border cooperation</li> <li>• Infrastructure improvement</li> <li>• EU funding for sustainable tourism cross-border cooperation</li> <li>• Evolution towards "experience" economy</li> <li>• Development of circular economy concept in sustainable tourism</li> <li>• Development of information and communication technology (ICT)</li> <li>• Cooperation in efficiency and effective cooperation of tourism and R&amp;D sector, innovation networks</li> <li>• Improving employment and education in tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Changing demography</li> <li>• Low level of integrated development initiatives and good governance policies</li> <li>• Tourism as a vulnerable activity</li> <li>• Climate change</li> <li>• COVID 19</li> <li>• Security issues</li> </ul>

Source: authors compilation

One of the main advantages of Croatia is its position as one of the fastest-growing tourist destinations in the world, with tourism being a major contributor to the gross domestic product (GDP). The Blue Economy enables sustainable tourism, which not only contributes to economic growth but also regenerates resources and reduces environmental impact. Croatia's rich cultural, historical, archaeological,

and natural heritage, along with a strong infrastructure for nautical tourism, is crucial for developing sustainable tourism products in line with blue economy principles. Sustainable tourism, which includes responsible management of marine resources, can bring significant economic vitality to local communities, creating new jobs and improving the living standard.

On the other hand, the development of sustainable tourism is facing many obstacles, such as inadequate knowledge and skills on sustainable tourism forms, inadequate level of quality in tourism offers, poor implementation of sustainable development policies and responsible tourism concepts, as well as low level of stakeholders' involvement. Although Croatia is rich of natural and cultural resources, many of these resources have not been utilized sustainably. More investment is needed in developing sustainable tourism and Blue Economy practices, such as marine ecosystem conservation and implementing responsible tourism that uses eco-friendly technologies. The lack of expertise in sustainable tourism and Blue Economy, along with poor implementation of sustainable development policies, slows progress. Additionally, tourism seasonality and lack of regional branding strategies impede the development of an integrated tourism product that would include all aspects of the Blue Economy.

However, there are many opportunities for sustainable tourism development in the future through connection with Blue Economy practices, such as infrastructure improvement, increase in cross-border cooperation encouraged by the European Union, as well as the EU funding for sustainable tourism cross-border cooperation. Increasing cross-border cooperation, particularly in marine resource conservation, could strengthen sustainable tourism initiatives and support joint coastal management. Furthermore, EU funding for sustainable tourism and Blue Economy projects could help improve infrastructure in tourist destinations, providing better access to sustainable resources. According to Blue Economy principles, the development of circular economy and use of innovative technologies, such as renewable energy in tourist facilities, represent opportunities to reduce environmental impact and increase Croatia's competitiveness as a destination. Technological development, especially in information and communication technologies (ICT), can help enhance the efficiency of tourism based on Blue Economy principles. Content related to marine ecosystems, the conservation of natural resources, and cultural heritage can be better promoted and more accessible to the public. Additionally, cooperation with research and development sector can enable tourism to offer innovation and better integration of the Blue Economy into sustainable tourism.

Threats to the realization of sustainable tourism goals include restrictions in tourist mobility, changing demography, low level of integrated development initiatives and good governance policies, vulnerability of tourism as an economic activity and climate change. Demographic changes, climate change, and global crises such as the COVID-19 pandemic have shown how sensitive tourism, especially tourism based on natural resources, can be to external factors. Security issues and political instability may also reduce the number of visitors, while climate change could threaten coastal ecosystems and marine resources, which are vital for the development of the Blue Economy. The threat of poorly developed integrated

initiatives and ineffective policies may slow down the progress in implementing Blue Economy principles in tourism.

The discussion in the focus group, stressed that Croatia has significant potential for further development of sustainable tourism through the Blue Economy. The participants emphasized the necessity to invest in sustainable practices, improve infrastructure, and foster stronger cooperation among all stakeholders, from local communities to the tourism sector. The implementation of Blue Economy principles will not only help regenerate natural resources but also preserve marine ecosystems and cultural heritage.

## Conclusion and Discussion

Sustainable tourism and the Blue Economy represent two interconnected yet distinct concepts, both aiming to preserve the environment, promote economic sustainability, and ensure social justice, particularly in coastal and marine areas. While both approaches emphasize the importance of conserving natural resources and ecosystems, there are key differences in their focus, with opportunities for mutual reinforcement and integration.

Sustainable tourism focuses on responsible tourism management, emphasizing minimizing negative environmental impacts and maximizing socio-economic benefits for local communities. This approach seeks to strike a balance between the economic benefits derived from tourism and the preservation of ecosystems, particularly by reducing over-tourism, which can lead to resource overexploitation and environmental degradation (Cummings G. and Greenberg Z 2022). Additionally, sustainable tourism includes concepts such as community-based tourism, where local communities play an active role in decision-making processes regarding tourism development and benefit distribution (Martínez-Vázquez et al. 2021).

On the other hand, the Blue Economy refers to sustainable use of ocean resources for economic growth, improved livelihoods, and the preservation of marine ecosystems. The Blue Economy encompasses a wide range of sectors, including fisheries, renewable energy, aquaculture, and tourism. The primary goal of the Blue Economy is to ensure that the utilization of ocean resources doesn't compromise ecological balance while contributing to sustainable economic development (Pauli 2010).

Both, sustainable tourism and the Blue Economy share a common goal of conserving marine resources and protecting ecosystems, but their focuses differ: sustainable tourism is more specifically concerned with tourism practices and managing visitor impact in coastal areas, while the Blue Economy covers a broader spectrum of ocean-related economic activities. However, these concepts complement each other in the context of better managing coastal and marine resources. The Blue Economy represents a key tool for balancing economic growth and environmental sustainability (Martínez-Vázquez et al. 2021). Sustainable tourism within the Blue Economy can serve as a best practice model that links environmental protection with the prosperity of local communities (Campbell et al. 2021). In the

future, the integration of these principles should be a priority in planning and development of tourism activities in coastal areas (Voronina et al. 2024).

The findings highlight the growing importance of sustainability in tourism, with key measures such as development of environmentally friendly infrastructure and waste reduction widely supported (Biekša et al. 2022). There is a clear emphasis on balancing growth with environmental conservation, as well as on raising awareness among tourists to encourage long-term behavioral change (Holden et al. 2024). The promotion of local culture also plays a vital role, ensuring that destinations maintain their unique identity while empowering communities (Campbell et al. 2021). Together, these measures underline the need for a holistic approach to sustainable tourism that benefits both the environment and local populations (Ahmad et al. 2024). These findings also point the importance of financial development and eco-innovation in achieving sustainable development (Streimikiene et al. 2023), as well as the role of digital transformation in supporting these goals (Kolupaieva et al. 2024). Good governance at the local level has also been recognized as an essential factor in implementing sustainable development (Jasiński and Żabiński 2021).

This survey also underlines the growing significance of sustainable tourism and its integration with the Blue Economy as an essential approach for balancing economic growth with environmental sustainability. Sustainable tourism within the Blue Economy has been identified as a best practice model, which not only prioritizes environmental protection but also enhances the prosperity of local communities. In line with this, the future development of tourism activities in coastal areas must prioritize these principles to ensure long-term benefits for both the environment and local populations. The results highlight several key measures that support sustainability in tourism, including the development of environmentally friendly infrastructure and waste reduction initiatives. Respondents agree on the importance of balancing tourism growth with environmental conservation, particularly emphasizing the need for raising awareness among tourists to foster long-term behavioral change. Additionally, the promotion of local culture is seen as a vital element for preserving a destination's unique identity while empowering local communities. These measures reflect the need for a holistic approach to tourism that aligns with both environmental goals and socio-economic development. Furthermore, the survey suggests that financial development, eco-innovation, and digital transformation are critical components for achieving sustainable tourism and Blue Economy objectives. Good governance at local level is also recognized as a crucial factor in implementing sustainable development practices effectively. Without sound governance, sustainable tourism policies may not be adequately enforced, limiting their potential benefits.

One of the key differences between sustainable tourism and the Blue Economy is the scope of their activities and goals. Sustainable tourism specifically deals with tourism-related issues and its environmental impact, while the Blue Economy spans a broader range of ocean-linked sectors, such as energy production (e.g., marine energy), maritime transport, aquaculture, fisheries, and renewable energy. While sustainable tourism addresses the management of tourism flows and its negative consequences, the Blue Economy goes further, seeking an entire economic model that balances the development of these activities with ecosystem conservation.

Blue Economy also introduces principles like circular economy, which promotes efficient resource use and waste reduction through recycling and regeneration, supporting sustainability across all sectors, including tourism (Martínez-Vázquez et al. 2021). This approach provides a broader basis for integrating sustainable tourism into wider economic frameworks, while sustainable tourism remains more focused on mitigating the ecological impacts of tourist activities (Fosse et al. 2019).

The integration of sustainable tourism and Blue Economy requires aligning their goals within a shared framework focused on sustainable resource management, reducing negative impacts, and generating benefits for local communities. A key connection could be the circular approach in tourism, which is already present in the Blue Economy but needs to be more thoroughly implemented within tourism, especially in coastal and protected areas. This includes the development of eco-tourism, which contributes to environmental preservation and carbon footprint reduction while simultaneously supporting local economies through activities that do not harm ecosystems. Moreover, focusing on integrated community management of resources, where communities take a central role in decision-making processes related to tourism and the protection of coastal areas, can become a key component for both approaches. Financial support for green infrastructure projects and green technologies is also critical for linking the Blue Economy with sustainable tourism (Streimikiene et al. 2023). Reconciling both approaches requires proactive policies and innovative financial models that enable investment in sustainable technologies and infrastructure, reduce tourism's negative impacts, and strike a balance between economic development and environmental preservation (Biekša et al. 2022, Ahmad et al. 2024).

In conclusion, the survey emphasizes the importance of adopting a sustainable tourism framework that integrates Blue Economy principles. While significant opportunities exist for growth, the successful realization of sustainable tourism goals will require addressing the identified weaknesses and threats through improved governance, better stakeholder involvement, and increased investment in eco-innovation and circular economy practices.

Sustainable tourism focuses specifically on responsible management practices within the tourism sector, aiming to minimize negative environmental impacts while maximizing socio-economic benefits for local communities. Its core objective is to balance the economic benefits derived from tourism with the preservation of ecosystems, particularly by addressing issues such as over-tourism and resource depletion. In this context, the promotion of community-based tourism has emerged as a central strategy, where local population actively engages in tourism planning and management. This approach ensures the benefits of tourism being equitably distributed, fostering a sustainable relationship between visitors and host communities (Martínez-Vázquez et al. 2021, Cummings G. and Greenberg Z 2022).

On the other hand, the Blue Economy represents a broader economic model that includes not only tourism but also sectors such as fisheries, renewable energy, aquaculture, and maritime transport. Its primary aim is to ensure the sustainable use of ocean resources without compromising the ecological balance of marine ecosystems. The Blue Economy seeks to create a harmonious relationship between

economic growth and the preservation of marine environments by promoting resource efficiency, waste reduction, and the regeneration of ecosystems. This model introduces principles like circular economy, which has a direct application to the tourism sector, as it encourages practices that minimize waste and enhance the efficient use of resources across industries, including tourism (Pauli 2010, Martínez-Vázquez et al. 2021).

Despite these differences, sustainable tourism and Blue Economy share a common goal of conserving marine resources and protecting ecosystems. While sustainable tourism primarily addresses the environmental impacts of tourism activities, the Blue Economy encompasses a wider range of ocean-related activities, seeking a more holistic approach to ocean resource management. The integration of these two approaches can lead to a more comprehensive model for managing coastal and marine resources. Specifically, sustainable tourism can benefit from broader principles of the Blue Economy, such as resource efficiency and circular economy practices, which can be applied to tourism activities to reduce their environmental footprint. Additionally, by aligning the goals of both concepts, there is potential for fostering local economic development through eco-tourism and responsible tourism practices that support both environmental preservation and community empowerment (Fosse et al. 2019, Zivrali 2022).

One of the key opportunities for further integration lies in promoting community-based tourism as part of the Blue Economy framework. The involvement of local communities in decision-making processes regarding tourism development and resource management is essential for ensuring the long-term sustainability of both, the tourism sector and marine ecosystems. Communities play a pivotal role in minimizing the negative impacts of tourism by taking active responsibility for the protection of their environment and cultural heritage. The integration of community-based tourism within the broader Blue Economy model can ensure that economic activities contribute to social justice and the preservation of both natural and cultural resources (Zivrali 2022).

To achieve this integration, it is essential to focus on developing sustainable financial mechanisms and policies that support the transition to a Blue Economy. Investment in green infrastructure and technologies is crucial for reducing the environmental impact of tourism while supporting local economies. Financial support should be targeted towards small and micro-enterprises in coastal tourism and maritime sectors, which often face barriers in adopting sustainable practices due to limited resources and technical expertise. The development of clear and efficient collaboration mechanisms between various stakeholders—including governments, local communities, businesses, and environmental organizations—is key to facilitating this transition (Streimikiene et al. 2023, Biekša et al. 2022). The tourism sector should adopt more circular and resilient models, as outlined in the UNWTO's Glasgow Declaration on Climate Action. This declaration emphasizes the need for tourism to support nature-based solutions that mitigate climate change, restore ecosystems, and preserve biodiversity. By incorporating these principles, the tourism sector can play a more active role in the protection of coastal and marine environments, aligning with the broader goals of the Blue Economy. The promotion of initiatives such as SAVE tourism, which encourages learning, research, and

community involvement, can further enhance the connection between tourism and Blue Growth, contributing to economic, social, and environmental sustainability (UN Tourism 2024, Hammad 2023). The successful integration of sustainable tourism and the Blue Economy requires proactive policies, innovative financial models, and active participation of local communities. By aligning these two approaches, it is possible to create a more sustainable tourism industry that supports the preservation of coastal and marine ecosystems while providing socio-economic benefits for local communities. Through collaboration, investment in green technologies, and the adoption of circular economy principles, sustainable tourism can become a vital component of the Blue Economy, contributing to long-term sustainability and the resilience of coastal region

For Croatia's coastal regions, the integration of sustainable tourism and the Blue Economy offers a significant opportunity to enhance both environmental protection and socio-economic resilience. Croatia's Adriatic coast, with its rich biodiversity and pristine landscapes, is a key destination for tourism, making it crucial to manage tourism's growth while preserving marine ecosystems. By adopting the principles of sustainable tourism and Blue Economy, Croatia can develop a model that balances tourism expansion with ecosystem conservation. The application of community-based tourism in Croatia could be particularly effective, where local communities are involved in tourism planning and resource management, ensuring that benefits of tourism are widely shared and that local cultural heritage is preserved. Additionally, Croatia can leverage its position as a hub for marine tourism by promoting eco-tourism, supporting initiatives that contribute to the restoration of marine ecosystems such as coral reefs and seagrass beds, which are vital to marine biodiversity. Croatia's coastline can benefit from the integration of circular economy principles in the tourism sector. Encouraging waste reduction, recycling, and sustainable management of coastal areas can help mitigate negative impacts of tourism on marine resources. By prioritizing green infrastructure projects, such as eco-friendly hotels and sustainable transport systems, Croatia can align its coastal tourism sector with Blue Economy principles, creating a model for other Mediterranean nations.

Croatia's commitment to the Blue Economy should be reflected in policies that foster innovation and green technologies within the tourism sector. Financial support for micro and small enterprises in coastal tourism can encourage businesses transition towards more sustainable practices. The Croatian government, alongside with local stakeholders, should prioritize collaboration in developing clear strategies and frameworks to ensure that both, tourism and the broader economy thrive while safeguarding the marine environment for future generations. To ensure the implementation of the proposed strategic framework, it would be advisable to prepare a set of indicators to monitor and assess their impact on the long-term development of the local community.

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