

Challenges and Implementation of the Green Economy in the Indonesian Tourism Industry

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Abstract: This paper analyses sustainable difficulties in Indonesian tourism and finds novel solutions to assist green economy tourism models. The research method is qualitative descriptive, employing secondary data from similar journals and the Green Growth Bappenas website. This study examines Indonesia's tourism sector's primary issues, including energy consumption, waste management, water use, and biodiversity. This research uses field research, stakeholder interviews, and literature studies to find new ways to reduce environmental and natural resource impacts and boost economic advantages. The project aims to create a strategic model or framework for green economic sustainability in Indonesia's tourism sector. A literature assessment on green economy-based tourism, sustainable tourism, cross-disciplinary methods, and green and sustainable economy tourism strategies is included in the research. Research findings. Contribution to a new Indonesian tourist strategy to increase green economic sustainability and reduce environmental and natural resource impacts. The government, commercial sector, community, and other parties must work together to implement this policy, taking into account local realities, economic sustainability, and the environment.

Keywords: Green Economy; Cross-Sectoral Collaboration; Local Conditions; Economic Sustainability; Ecotourism and Environment; Tourism Industry; Tourism Development and Management.

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1. Introduction

Challenges and obstacles to tourism sustainability are significant in tourism development and management. The goal of this challenge is to lessen the negative effects of tourism while maximising its beneficial aspects. Problems include excessive energy usage, food waste, poor waste management, an unsupportive business climate (particularly in developing nations), an absence of trained workers, a lack of capital, and insufficient investment [1]. The tourism sector's high energy consumption and greenhouse gas (GHG) emissions is a major obstacle. Energy use in accommodation, especially for heating and air conditioning, is also an important aspect, with significant variations between countries [2]. This challenge demands an emphasis on factors that influence emissions, such as the number of tourists, travel distance, and travel motives. Emphasis is also needed on reducing GHG emissions, especially from air transportation and energy use in accommodation, to maintain the sustainability of tourism in the context of a green economy [13].

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Extensive water use in the tourism sector can be a challenge in some areas, especially regarding golf courses, irrigated parks, swimming pools, spa/wellness facilities, and guest rooms. Global tourism is known to use around 5% of the world's water [14]. This water usage varies greatly, ranging from 100 to 2000 liters per guest night. In Indonesia, the problem of waste management and processing in the tourism industry is also serious. Along with the rapid growth of tourism, especially in popular destinations such as Bali, Yogyakarta, and Lombok, the increasing amount of waste is a major concern [3]. As in Europe and the United States, tourists who come to Indonesia also contribute to this waste problem. Although specific data may vary, the high volume of waste from tourism activities, such as the use of single-use plastics, water bottles, and food packaging, is a serious concern [15].

Water pollution from untreated waste, whether from hotels, restaurants, or water extraction, is an important concern. Not only does it affect the water quality around tourism locations, but it can also have a negative impact on the water ecosystem and the surrounding environment [16]. Tourism can also damage biodiversity and natural habitats, such as coral reefs, mountains, rainforests, wetlands, and others. The development of beach resorts, for example, often results in damage or destruction of coastal wetlands [4]. These challenges show that tourism must confront significant issues related to natural resources, waste management, and habitat preservation. A sustainable approach is needed to reduce the negative impact of tourism on the environment [5]. The expansion of the tourism sector often destroys marine habitats, coral reefs, seagrass beds, and oyster beds, threatens other marine species, and disrupts natural ecosystems. Biodiversity challenges in tourism involve the introduction of alien species, disturbance of wildlife, land transformation, overexploitation of natural resources, and water and waste pollution. [6]-[7].

Threats to cultural heritage are also significant in tourism. Natural and cultural heritage is the main motivation for tourists, but the development of tourism infrastructure often threatens the integrity of cultural heritage [17]. Lack of awareness and protection of vulnerable cultural heritage, such as cultural attributes in rural communities, can threaten the survival of indigenous culture [18]. Public awareness of the issue of climate change is crucial in efforts to ensure nature conservation. Understanding the impact of economic activities that may produce excessive negative effects is important in order to shape more sustainable policies for the future [19].

The government and stakeholders need to work together to strengthen public awareness of the importance of preserving natural resources and how more environmentally friendly economic activities can bring long-term benefits to all parties [20]. With these efforts, it is hoped that tourism development in the context of Green Economic Growth can be carried out more effectively and sustainably. Apart from identifying the threats faced by the tourism sector, it needs to be recognised that there are also opportunities to manage tourism with a new paradigm, namely prioritising green economy standards [21]. Tourism inherently makes a positive contribution to economic growth but is often criticised for its negative impact on the environment and natural resources [22].

Ecotourism development requires significant changes in conventional tourism modes, focusing on natural, cultural, and social resources [23]. There is a trade-off between economic benefits and ecosystem service benefits, which requires attention to economic, environmental, and social aspects. Green economic models and sustainable infrastructure are presented as steps towards more sustainable ecotourism [8]. The tourism sector's contribution to the Sustainable Development Goals (SDGs) must be evaluated in a multidisciplinary manner to address climate change, eradicate poverty, and encourage a green economy. Sustainable materials management (SMM) for a circular economy must be implemented in the tourism industry to manage materials more productively throughout their life cycle [24].

Reusing materials and products can provide major savings for businesses through efficient resource management [25]. The relationship between water, energy, and food (WEF) is an important issue in the development of the tourism sector in the future, especially in mitigating and adapting to the increasing pressure on natural resources due to population growth and energy and food needs [26]. The text discusses the importance of the transition to sustainable tourism with a focus on the green economy, sustainable materials management, and attention to the water-energy-food nexus in order to address environmental challenges and sustainable development [27].

Opportunities for green economic development the Green Growth Program has begun to be implemented in Indonesia with the aim of increasing climate investment in the current era of industrialisation. This increase in investment is expected to have a positive impact on economic growth [28]. However, the implementation of the Green Growth Program in Indonesia faces various challenges, such as a lack of respect for Natural Resources (SDA), conventional investment tendencies, institutional design problems, trade-offs between economic growth and environmental preservation, as well as a lack of efficiency in government budget allocation for research and development [29]. The government is committed to overcoming the problem of environmental degradation through the Green Growth Program, which has a main focus on capacity building and green investment to support sustainable development in Indonesia [9]. This program not only addresses environmental damage issues

but also focuses on green investment. The main goal is to implement the Green Growth Program in all industrial sectors in Indonesia to create an attractive investment environment for investors [30]. To achieve this goal, this program must be implemented in all regions in Indonesia, including 34 provinces, through regulations issued by the Regional Government. It is hoped that all Indonesian people will understand and realise the importance of the Green Growth Program for both the economy and the environment [31]. Apart from that, implementing the principles of good governance in carrying out the Green Growth Program is an important key to ensuring that this program can be implemented well.

1.1. Purpose of the Study

The purpose of the study is to critically examine the challenges and implementation strategies associated with fostering a green economy within the Indonesian tourism industry. Indonesia, renowned for its rich biodiversity and stunning landscapes, faces significant environmental threats due to the rapid growth of its tourism sector. This study aims to identify the hurdles hindering the transition to a more sustainable and ecologically responsible tourism model. Challenges may include the lack of awareness among stakeholders, insufficient regulatory frameworks, and the pressure for rapid economic growth.

In addressing these challenges, the study will explore potential implementation strategies, such as the promotion of eco-friendly tourism practices, the development of stringent environmental policies, and the integration of local communities in sustainable tourism initiatives. By shedding light on these issues, the study endeavours to provide valuable insights that can guide policymakers, industry players, and communities toward fostering a green economy in the Indonesian tourism sector.

2. Review of Literature

The implementation of the green economy in the Indonesian tourism industry has garnered increasing attention in recent literature, highlighting both challenges and opportunities [2]. Scholars have underscored the pivotal role of sustainability in the tourism sector, emphasising the need for environmentally conscious practices to mitigate the industry's impact on ecosystems and local communities [10]. One key challenge identified is the existing gap between theoretical frameworks and practical implementation. While numerous green initiatives and policies have been proposed, translating them into tangible actions within the complex dynamics of the Indonesian tourism industry poses a significant hurdle [4].

Furthermore, the literature emphasises the necessity of stakeholder collaboration to implement green practices effectively. This involves fostering partnerships among government bodies, local communities, businesses, and tourists [7]. Scholars argue that a lack of coordination and communication among these stakeholders often hinders the seamless integration of sustainable initiatives [32]. Moreover, the literature points out the importance of educational programs to raise awareness among industry players and tourists alike, as understanding the benefits of green practices is crucial for their successful adoption [5].

In addition to these challenges, the literature also sheds light on successful green economy implementations in other global tourism destinations, providing valuable lessons and best practices for Indonesia [1]. Case studies and comparative analyses offer insights into how similar challenges were addressed elsewhere, offering a roadmap for the Indonesian tourism industry to navigate its unique hurdles [9].

The importance of policy frameworks that incentivise sustainable practices and penalise environmental negligence is a recurring theme in the literature, highlighting the need for robust regulatory support. In summary, the literature on the challenges and implementation of the green economy in the Indonesian tourism industry reveals a multifaceted landscape [11].

While challenges such as the gap between theory and practice, stakeholder collaboration, and awareness persist, the identification of successful models and policy recommendations provides a basis for optimistic progression toward a more sustainable tourism sector in Indonesia [3]. The synthesis of these findings offers a comprehensive understanding of the current state of green economy implementation in the Indonesian tourism industry and points towards future avenues for research and action [6].

3. Methodology

This research applies a qualitative descriptive approach. A qualitative approach requires data in the form of written words, oral interview data, and behavioural observations [10]. The descriptive method provides a clear picture or description without treating the research object. The data used comes from secondary data sources, namely journals with similar topics and the official Green Growth Bappenas. Data collection was carried out using documentation study techniques. This research carries out an in-depth analysis of the main challenges faced by the Indonesian tourism sector in achieving green economic sustainability. These include aspects such as high energy consumption, waste management, excessive water use, and impacts on biodiversity. By conducting field research, interviews with stakeholders, and literature reviews, this research aims to identify

innovative strategies that can be implemented in the Indonesian tourism sector. This is done to reduce negative impacts on the environment and natural resources while increasing economic benefits [33]. The focus of this research is directed at developing a strategic model or framework that can help the Indonesian tourism sector achieve green economic sustainability.

4. Result

The Literature Review and Local Context Analysis include an in-depth literature review to understand the concept of green economy-based tourism, the implementation of sustainable tourism, cross-disciplinary approaches to sustainable tourism, and green and sustainable economic tourism strategies, especially in analysing the local context in Indonesia, including challenges, opportunities, policies existing, and unique characteristics of the tourism sector in Indonesia.

4.1. Implementation of sustainable tourism

All aspects of tourism, from planning for the future to day-to-day operations, must adhere to sustainable development principles [34]. In this section, we will quickly go over what sustainable, environmental, cultural, rural, and community tourism are. There has been a shift in emphasis away from chasing the quantity of tourists to Indonesia by the Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency (Kemenparekraf/Baparekraf). However, initiatives to promote ecotourism in Indonesia continue to receive the bulk of its attention.

Conceiving of a vacation idea with potential for lasting change. Concerning the present and future of all local residents and tourists, there are environmental, social, cultural, and economic considerations. The Ministry of Creative Economy and Tourism has established four guiding principles to promote environmentally responsible travel. Among these, we find environmental sustainability, cultural sustainability—which necessitates constant development and maintenance, long-term socioeconomic sustainability, and sustainable management (tourist business) [35].

To achieve ecological sustainability, economic sustainability, and ethical and social justice, sustainable tourism aims to lessen the negative effects of tourism on society, the environment, and the economy. It also involves creating tourist attractions and activities that strike a good balance between these three factors [36]. Green tourism is defined as tourism activities that minimise environmental impacts, reduce energy use and emissions of carbon while enjoying ecological-human-cultural integrity [11]. It must meet the current needs of tourists and destinations while also providing opportunities for future development, all while maintaining heritage, ecological integrity, biological diversity, and life support systems. In order to implement operational strategies that promote green tourism in an environmentally conscious and harmonious manner, it is crucial to consider the connection between tourist activities and nature [12].

4.1.1. Ecotourism

Ecotourism is defined by the United Nations World Tourism Organisation (UNWTO) as "holistic tourism" that places an emphasis on learning about and respecting local ecosystems and ways of life. Ecotourism is essentially a subset of the travel industry that is gaining popularity as an alternative by centring its activities around protecting the environment and promoting sustainable practices.

Since ecotourism does not necessitate substantial financial inputs, it can play a big role in green growth for developing nations that possess substantial natural resources. It can also reach out to locals who are in a position to spearhead ecotourism initiatives and other forms of community-based conservation [13]. So, to guarantee a green economy, ecotourism can generate export prospects in outlying areas while also providing jobs for unskilled workers in rural towns. For this reason, developing nations that are short on both financial and natural resource richness should consider ecotourism as a viable economic growth enterprise [37].

According to the UNWTO, ecotourism not only helps preserve cultural and natural heritage but also brings in much-needed revenue for host communities [39]. To ensure that ecotourists have the greatest possible experience, Forbes Advisor studies how different countries rank on the Ecotourism Index [38].

The index is built using a variety of evaluation markers, such as the following: total species richness, percentage of flora and fauna that are in protection, total number of UNESCO-recognized natural heritage sites, CO2 emissions per capita, and overall environmental performance metrics including air quality [40].

After that, a score between zero and one hundred is generated from all of these indications. An improved level of ecotourism in a nation is indicated by a higher score [41]. This led to Brazil being named the top ecotourism destination in the world, with an index score of 94.9 points [42]. Among the world's most biodiverse nations, Indonesia ranks eighth, with an abundance of over 43,000 species of plants and animals [43].

4.1.2. Agro Tourism and village tourism

The concept of developing a tourist village involves efforts to make the village an attractive tourist destination. This is achieved by combining the natural and cultural attractions of the village, public tourism facility services, and adequate accessibility to the traditions and ways of life of the village community. Rural tourism emphasises healthy activities and life infused with clean air, fresh water, landscapes, culture, and traditions [44]. This concept has similarities to ecotourism but emphasises traditional landscapes and culture. In general, modern models of rural tourism are usually linked economically to existing farms, often referred to as agro-tourism [45]. On rural farms, healthy food can be used as a source of satisfaction and relaxation for tourists [46].

Combining the concept of agro-tourism with fruit garden tourism can create an attractive destination that is of interest to the wider community. Agro-tourism is not only limited to planting, harvesting, and processing local food or crops on farms but also includes the opportunity to stay in a beautiful natural environment [47]. Tourists can learn about farm life and culture, including religious traditions and folklore [48]. Apart from providing a unique experience for visitors, this practice can also contribute directly to farmers' income and open up opportunities to sell local agricultural products [49].

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4.1.3. Cultural Heritage Tourism

refers to a form of tourism that emphasises visits to places or locations that have unique historical, cultural, and traditional values [7]. The main aim of cultural heritage tourism is to introduce, preserve, and promote the cultural heritage of a region or nation to visitors. Places that are cultural heritage tourist attractions can be historical sites, monuments, ancient buildings, museums, arts and culture centers, archaeological sites, old cities, traditional festivals, or even cultural practices that are still preserved by the local community. Tourists who visit these places will get the experience of learning about history, culture, traditions, and people's lives in the past. Cultural heritage tourism also plays a role in efforts to preserve cultural heritage. By increasing public awareness and promoting visits to historical places, tourism can provide the financial support needed to maintain, restore, and preserve cultural heritage for future generations.

Indonesia is one of the famous cultural heritage tourist destinations, and a number of cultural heritage sites have become famous tourist attractions. Temple sites, such as Borobudur Temple in Central Java and Prambanan Temple in Yogyakarta, are major attractions for tourists interested in historical and archaeological heritage.

Apart from that, batik is also a famous cultural heritage in Indonesia. Locations such as Jogja and Semarang are batik production centers that are famous for their distinctive designs and beauty. Batik is not only traditional clothing but also a highly valued art object. Traditional dances are also a major attraction, especially in Bali and Yogyakarta. Dances such as the Kecak Dance in Bali and the Ramayana Dance in Yogyakarta are featured in arts and cultural performances that attract tourists who want to experience the beauty of traditional Indonesian performing arts. All this cultural heritage has become a big attraction for Indonesian tourism. They not only offer artistic and historical beauty but also provide an in-depth experience of the rich and diverse culture of Indonesia.

4.1.4. Community Tourism

Community Tourism is a form of tourism that places local communities at the centre of the tourism experience. In this model, local communities have a significant role in developing, planning, and managing tourist destinations and offering authentic experiences to tourists. Community tourism emphasises interaction between tourists and local communities, which allows tourists to interact directly with local communities, understand their culture, and support economic and social activities within these communities. The main goal is to provide more equitable benefits to local communities, improve their welfare, and promote economic and environmental sustainability. In community tourism, visitors can be involved in various activities led by the local community, such as taking a cultural tour, learning traditional activities, cooking local food, staying at someone's house, or being involved in social projects supported by the local community.

The community tourism concept aims to provide broader and more equitable benefits to local communities while providing meaningful and in-depth experiences for tourists who want to understand local culture better and contribute positively to the communities they visit. In the community tourism concept, local communities have an important role in developing and managing tourism activity itineraries. This method utilises preexisting business models to link the objective of sustainable tourist growth with consideration of environmental factors. By preserving both the natural and man-made environments, enhancing the quality of life for local residents, and maximising economic advantages for the area, this kind of community-based tourism seeks to implement the principles of sustainable development.

4.2. Cross-Disciplinary Approach to Sustainable Tourism

A cross-disciplinary approach to sustainable tourism covers various interrelated aspects of achieving sustainability goals in the tourism sector. Renewable Energy (Green Energy) involves the use of renewable energy resources such as sun, wind, water, and biomass to meet tourism energy needs [14]. The integration of all these aspects forms an environmentally friendly, efficient, and sustainable tourism system. With this approach, the tourism sector can continue to grow while minimising its negative impact on the environment and local communities (Table 1).

Table 1: Aspects of a Cross-Disciplinary Approach to Sustainable Tourism

Aspect	Description
Green Transportation and Sustainable Mobility	Development of environmentally friendly transportation systems, including the use of electric vehicles and optimisation of travel routes to minimise environmental impact.
Green Buildings	Emphasis on environmentally friendly building designs incorporating efficient technology and the use of recycled building materials.
Green Infrastructure	Implementation of efficient water, waste, and energy management systems, along with the construction of environmentally friendly public facilities.
Green Agriculture	Adoption of sustainable farming practices utilising organic methods and efficient water management to reduce the ecological footprint of agricultural activities.
Smart Technology	Integration of technological innovations, such as smart sensors and information-based applications, to minimise energy consumption and enhance overall environmental management in the tourism sector.
Renewable Energy Sources	Exploration of alternative energy sources, including solar electricity, water wave electricity, and turbines, as viable options to replace fossil fuel electricity and reduce the carbon footprint of the tourism industry.

A cross-disciplinary approach to sustainable tourism has a very important impact. The integration of various aspects, such as renewable energy, environmentally friendly transportation, green buildings, and green infrastructure, aims to reduce negative impacts on the environment.

The focus of the disciplinary approach includes social and economic aspects, ensuring the participation of local communities in economic benefits and preserving their culture. This approach not only increases the efficiency of resource use but also encourages the development of environmentally friendly innovation and technology.

Collaboration between scientific disciplines is key in efforts to achieve the common goal of sustainable tourism. Through this approach, awareness of the importance of protecting the environment and local culture is also increased, with education encouraging the active role of tourism industry players and tourists in supporting the overall goal of sustainable tourism.

4.3. Barriers and Challenges to Green and Sustainable Economy Tourism

Problems arise with sustainable tourism. Planners and policymakers face a significant challenge when it comes to sustainable ecotourism. Environmentally conscious tourism faces six distinct obstacles: (i) high energy consumption and greenhouse gas emissions; (ii) water waste; (iii) improper waste management; (iv) habitat loss and biodiversity loss; (v) dangers to cultural heritage and cultural integrity; and (vi) a dearth of information and communication platforms. It is clear that the significance of developing a thorough plan to attain sustainable tourism is recognised by this method. The mentioned framework has a structured approach by establishing seven pillars to achieve these goals [15], which cover:

- Climate resilience and innovation
- Low-carbon and technology shift
- Natural resource and waste management
- Branding, marketing and e-distribution
- Capacity building and green jobs
- Infrastructure and communications

- Policy reform, public–private partnerships (PPPs), and finance

Opportunities in developing ecotourism development [2] to introduce environmentally friendly investments in green economy tourism.

- Governance, policies, and frameworks for sustainable tourism: Increasing institutional networks and public-private participation.
- Provision of adequate economic instruments: Development of financial instruments that support sustainable tourism practices, such as funding and economic incentives.
- Implementation of integrated management programs: Implementation of programs that integrate various aspects of tourism management, such as environmental, cultural, and social.
- Bridging the smart technology industry with the tourism sector: Leveraging the latest technology to support more environmentally friendly and efficient tourism practices.
- Creation of cultural response (heritage) and public awareness: Promoting public awareness of cultural heritage and the environment and building a positive response to sustainable tourism practices.

4.4. Innovative Strategy for Green Economy Tourism Model

A green economy strategy in tourism management in Indonesia can be formulated based on an approach that refers to the strategic objectives and pillars that have been identified in the framework mentioned (Figure 1).

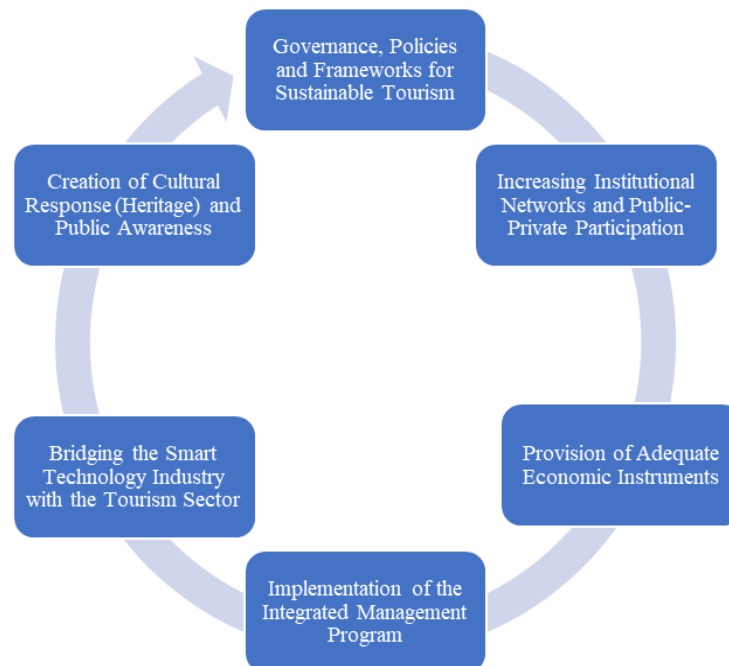


Figure 1: Innovative Strategy for Green Economy Tourism Model image

The following are strategies that can be implemented:

4.4.1. Governance, Policies and Frameworks for Sustainable Tourism

- Sustainable Policy Development: Design and implement policies that support environmentally friendly and sustainable tourism practices.
- Preparation of a Framework: Establish a comprehensive framework for managing tourism by taking environmental, cultural, and economic aspects into account.

4.4.2. Increasing Institutional Networks and Public-Private Participation

- Strategic Partnership, building cooperation between government, private, and community institutions in managing sustainable tourism.
- Active Community Involvement: This can be achieved by encouraging active community participation in the tourism management and development process.

4.4.3. Provision of Adequate Economic Instruments

- Development of financial instruments is carried out by encouraging the development of financial resources that support sustainable tourism practices, such as funding schemes and economic incentives to finance the green economy program.
- Preparation of partnership funding assistance to protect local communities from the world of the tourism industry, which is capital-intensive and wasteful in the use of natural resources.

4.4.4. Implementation of the Integrated Management Program

- Management Integration through programs that integrate environmental, cultural, and social aspects in comprehensive tourism management.

4.4.5. Bridging the Smart Technology Industry with the Tourism Sector

- Adoption of New Technology, using the latest technology to support environmentally friendly and efficient tourism practices, such as applications for resource management and tourist information.
- The Internet is used for marketing, booking, and other online services.

4.4.6. Creation of Cultural Response (Heritage) and Public Awareness

Education and Campaigns, increasing public awareness about the importance of cultural heritage and the environment, as well as building positive attitudes towards sustainable tourism through educational programs and campaigns.

This strategy must be implemented holistically, involving collaboration between various related parties, including the government, private sector, community, and other stakeholders. The implementation of this strategy must also pay attention to local conditions, economic sustainability, and the environment in order to achieve sustainable tourism in Indonesia.

5. Major Findings

One major finding is the growing awareness and interest among stakeholders in adopting sustainable practices. Various initiatives, such as eco-friendly accommodations, responsible tourism campaigns, and conservation programs, have gained traction. Additionally, the rich biodiversity and natural beauty of Indonesia offer a unique opportunity to attract environmentally conscious tourists.

However, a considerable challenge lies in the need for comprehensive regulatory frameworks to support and enforce sustainable practices across the industry. Inconsistencies in environmental policies and a lack of strict enforcement mechanisms hinder the effective transition to a green economy. Addressing this challenge requires collaboration between government bodies, private enterprises, and local communities to establish clear guidelines and incentives for sustainable tourism practices.

Furthermore, the implementation of green practices faces financial barriers, particularly for small and medium-sized enterprises (SMEs) within the tourism sector. Initial investments in eco-friendly infrastructure and technologies can be daunting, and many businesses may struggle to balance economic viability with environmental responsibility. Encouraging financial support mechanisms, such as grants or incentives, is crucial to overcoming this obstacle and promoting the widespread adoption of sustainable practices. In terms of implementation, fostering education and awareness campaigns is essential. Training programs for industry stakeholders, including local communities, tour operators, and hospitality staff, can enhance understanding and commitment to green principles.

Additionally, partnerships with international organisations and collaboration with established eco-friendly destinations can provide valuable insights and support for the Indonesian tourism industry's transition. In conclusion, while the Indonesian tourism industry is making strides towards a green economy, challenges such as regulatory inconsistencies, financial constraints, and the need for widespread education still pose significant hurdles. Overcoming these challenges requires a coordinated effort from all stakeholders, emphasising the importance of a sustainable and responsible approach to tourism for the long-term benefit of both the industry and the environment.

6. Conclusion

Innovative strategies in managing green economy tourism in Indonesia require a holistic and integrated approach. To achieve success in implementing this strategy, cross-sector collaboration between the government, private sector, community, and other relevant parties is key while considering local conditions, economic sustainability, and the environment. In this framework, several key strategies have been identified. The importance of developing sustainable policies and establishing a comprehensive framework that supports environmentally friendly tourism practices. Building strategic partnerships between government, the private sector, and the community to manage sustainable tourism and involve active community participation in the management process.

Procurement of supporting economic instruments, such as the development of financial resources for sustainable tourism practices and partnership funding assistance, is also a priority. It is necessary to implement an integrated management program that integrates environmental, cultural, and social aspects. In addition, bridging the technology industry with the tourism sector through the adoption of the latest technology and the use of the Internet for marketing and online services is an important part of this strategy. Creating public awareness about the importance of cultural heritage and the environment and building positive attitudes towards sustainable tourism through educational programs and campaigns.

6.1. Recommendation

Implementing the green economy in the Indonesian tourism industry presents several challenges, but it is a crucial step towards sustainable development. One of the primary obstacles is the need for widespread awareness and education among industry stakeholders regarding the benefits of adopting environmentally friendly practices. This involves overcoming resistance to change and convincing businesses to invest in sustainable infrastructure and operations. Additionally, the implementation of green practices requires significant financial resources, posing a challenge for many small and medium-sized enterprises in the tourism sector. Coordinating efforts among various stakeholders, including government bodies, businesses, and local communities, is essential to ensure a unified approach to sustainable tourism.

However, despite these challenges, the potential benefits are immense. A successful transition to a green economy in the tourism industry can lead to reduced environmental impact, enhanced natural resource conservation, and the preservation of Indonesia's rich biodiversity. This, in turn, can attract eco-conscious tourists, contributing to the industry's long-term resilience and economic growth. To address these challenges effectively, strategic policies, incentives, and collaborative initiatives are necessary to promote the integration of green practices across the entire tourism value chain.

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Data Availability Statement: The data utilised in this study were obtained from publicly available sources, including academic journals, government publications, and official reports from the Green Growth Bappenas website. All data supporting the findings of this study are properly cited and can be accessed through these public domains. For further inquiries, the corresponding author can be contacted at alexander@unmus.ac.id.

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