

The Problems and Countermeasures of the Development of China's Green Tourism Industry under the Dual Carbon Background

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ABSTRACT

Under the goal of achieving "carbon peak" and "carbon neutrality", green and low-carbon transformation is one of the important directions for the high-quality development of the tourism industry. A low-carbon economy can promote the green development of the tourism industry, stimulate national demand for green tourism, and force tourism enterprises to upgrade their products. The deep integration and development of low-carbon economy and tourism industry is an inevitable choice of the times. China should take green and low-carbon consumption as the breakthrough point, integrate the concept of low-carbon economic development, achieve green development of tourism industry, and innovate the path of green and low-carbon development of China's tourism industry.

KEYWORDS

Low-carbon economy; Tourism industry; Green development.

1. INTRODUCTION

China attaches great importance to the construction of ecological civilization and the protection of the ecological environment. In the face of increasingly severe environmental pollution, China has accelerated the promotion of green development during the 14th Five Year Plan period, proposing the "dual carbon" goals of "carbon peak" and "carbon neutrality". Green development is an important part of ecological civilization construction, which can solve ecological problems in economic development. The tourism industry is a strategic pillar industry of China's national economy, but driven by the demand of the tourism market and economic interests, problems such as ecological imbalance, excessive commercialization, environmental pollution, and natural damage are becoming increasingly apparent, hindering the high-quality development process of the tourism industry. Green development is an important concept for the sustainable development of the tourism industry. In September 2022, Chinese Minister of Culture and Tourism, Hu Heping proposed the initiative of adhering to the green concept and working together to promote sustainable development of the tourism industry at the BRICS Tourism Ministers Meeting. This study aims to clarify the relationship between low-carbon economy and green development of tourism industry, analyze the main problems of green development of tourism industry at present, and propose corresponding development paths.

2. THE CONNOTATION OF GREEN DEVELOPMENT IN THE TOURISM INDUSTRY

2.1. Core Concepts

2.1.1. Low carbon economy

In 2003, the energy white paper "Our Energy Future: Creating a Low Carbon Economy" released by the UK first mentioned a low-carbon economy. Low carbon economy is based on the concept of sustainable development, mainly through various means such as technological innovation, institutional innovation, industrial transformation, and new energy development, to reduce the energy consumption of high carbon energy sources such as coal and oil, control greenhouse gas emissions within a reasonable range, and ultimately achieve a coordinated development of economic and social development and ecological environment protection. Mei Yan pointed out that low-carbon economy refers to reducing energy and resource consumption, minimizing greenhouse gas emissions, and mitigating global climate change through technological innovation, institutional innovation, and conceptual transformation, without affecting economic and social development. That is to say, low-carbon economy is the harmonious unity of social and economic growth and ecological environment protection. From the perspective of the development of low-carbon economy, it not only requires multiple stakeholders to fulfill their environmental protection responsibilities, promote coordinated development between ecological environment and economic development, but also fundamentally promote the structural transformation and upgrading of the economy, industry, and energy.

2.1.2. Green tourism

The tourism industry has promoted the rise of green tourism by creating green and low-carbon tourism destinations, promoting green tourism leisure methods, and guiding tourists towards green consumption concepts. Geng Shufeng et al. pointed out that green tourism mainly refers to tourism that brings physical and mental pleasure by visiting the original natural landscape. Shi Yun believes that green tourism is mainly tourism activities based on the original natural environment, and the tourism process emphasizes environmental awareness and sustainability. Low carbon tourism activities with green attributes belong to the category of green tourism. Green tourism can provide citizens with comfortable, safe, and healthy products, as well as evoke responsible behaviors and attitudes towards the environment, achieving the effect of protecting the ecological environment. The goal of green tourism is to protect and respect the natural environment, reduce carbon dioxide emissions from tourism activities, and unleash the green value of tourism.

2.2. Basic connotation

In the context of a low-carbon economy, the green development of the tourism industry advocates for multi-dimensional carbon reduction in tourism, and adheres to the development of low-carbon tourism with low energy consumption and low pollution. During the tourism process, any tourism participant should be responsible for the environment and society during the tourism activities, uphold the concept of caring for nature, protecting ecological balance, and inheriting civilization, and promote the harmonious unity of the ecological environment and social economy. Starting from the concept of green tourism, the green development of the tourism industry needs to highlight the sustainability of tourism, which is manifested in the rational use of tourism resources, reducing carbon emissions during tourism activities, arousing national awareness of green tourism, and achieving protection of the ecological environment. Liu Yuqing and others have constructed a green development framework for the tourism industry based on the concept of green development, in which the economy, society, and nature coordinate and coexist. In the context of a low-carbon economy, the green development of the tourism industry needs to balance economic growth, social well-being, and environmental pollution prevention and control. Among them, economic growth and

social well-being are the expected outputs of green development in the tourism industry; Environmental pollution is an unexpected output and a key issue that needs to be addressed.

3. THE LOGICAL RELATIONSHIP BETWEEN LOW-CARBON ECONOMY AND GREEN DEVELOPMENT OF TOURISM INDUSTRY

3.1. Low carbon economy promotes green development of tourism industry

The low-carbon economy is the driving force for the green development of the tourism industry. Tourist destinations have strong and lasting appeal, not only reflected in the beautiful and high-quality ecological environment, but also in the harmonious development and mutual promotion between humans and nature. In the context of a low-carbon economy, personnel and tourists in various tourism industries have shifted their environmental protection behavior from traditional passive protection to proactive protection. The development model of tourism enterprises and destinations has shifted from traditional extensive protection to low-carbon protection. For example, Nan'ao County in Shantou City, Guangdong Province, actively responds to the call for low-carbon economic development, adheres to the strategy of "ecological island, prosperous tourism island, and strong ocean island", vigorously promotes the protection and restoration of a series of islands such as "Blue Bay", pilot projects for near zero carbon emission cities, and the construction of island ecological cultural, sports, and tourism industries. This has improved the production capacity of marine ecological products, promoted local development, and increased people's income.

3.2. Low carbon economy drives national demand for green tourism

Under the background of low-carbon economy, the tourism methods of Chinese residents are gradually shifting from sightseeing to green, low-carbon, and healthy. The country and people are paying more and more attention to individual physical and mental health and comprehensive development. In 2020, the sudden attack of the COVID-19 led to a serious threat to the health of residents, and the public's health awareness was raised again. "Hot springs+wellness+tourism" and "ecology+climate+wellness+tourism", which advocate green tourism concepts, have become the first choice for many people seeking physical and mental health due to their advantages of being close to nature, relaxing the body and mind, and being green and low-carbon. Tourists enjoy green tourism not only for the sake of physical fitness, but also for the purpose of feeling coordinated and balanced while relaxing both physically and mentally. Wetland parks, forest parks, and other tourism activities closely related to low-carbon have become the main leisure methods for modern residents. The data shows that in 2021, the number of tourists visiting the forest and grass system ecotourism in China reached 2.083 billion, exceeding half of the total number of domestic tourists. Obviously, in the context of a low-carbon economy, green tourism has become a new trend in the development of the tourism industry.

3.3. Low carbon economy forces tourism enterprises to undergo green transformation

The low-carbon transformation of the tourism industry is an inevitable requirement for achieving high-quality socio-economic development, and also an inevitable trend in line with the development of the times. With the development of low-carbon economy, tourism enterprises have realized that developing tourism should not only meet the growing demand of tourism consumption, but also reflect the concept of low-carbon, green and environmental protection in the development of tourism industry, and drive local economic development by protecting green ecology. This means that tourism enterprises must change the situation of blindly developing tourism resources and disregarding ecological environment scenic spots. Tourism enterprises must be aware of the significant impact of their actions on the environment and environmental protection, carry out green management, establish

environmental standards, enhance environmental awareness promotion, emphasize the reuse of goods, advocate green travel, create low-carbon, low consumption, and low pollution tourism products, and achieve green transformation and upgrading of the tourism industry.

4. THE MAIN ISSUES OF GREEN DEVELOPMENT IN THE TOURISM INDUSTRY

There are "non green" issues in the development process of the tourism industry, such as the use of predatory development and extensive management models in tourism development, uneven quality of tourists, disorderly human development, and resource destruction.

4.1. Increased carbon emissions and severe air pollution in the tourism industry

The increase in carbon emissions and severe air pollution in the tourism industry, coupled with the shortcomings of various crude tourism development models, have led to an increase in air pollution and environmental degradation. According to the 2020 China Energy Statistical Yearbook, the total energy consumption of transportation, warehousing and postal industry, wholesale and retail industry, and accommodation and catering industry related to tourism in 2019 was 439.09 million tons and 136.24 million tons of standard coal, respectively. According to a report by the Institute for Sustainable Development at the University of Cambridge, the tourism industry accounts for approximately 5% of global greenhouse gas emissions. The World Tourism Organization (UNWTO) predicts that by 2030, global carbon dioxide emissions related to the tourism industry will increase by 25%, with transportation emissions from world tourism increasing by 45% compared to 2016. In addition, tourism is a comprehensive industrial model that integrates eating, drinking, playing, entertainment, and housing, which generates carbon emissions in all aspects. Among them, the carbon emissions generated by travel modes and catering and accommodation have significantly increased. On the one hand, tourism transportation will increase carbon emissions and exacerbate environmental pollution; On the other hand, the increase in foot traffic for catering and accommodation around the scenic area, as well as the increase in the use of disposable items, will lead to an increase in carbon emissions.

4.2. Non renewable tourism resources pose significant obstacles to the green development of the tourism industry

Tourism, as a collection of special social, cultural, and economic phenomena, is closely related to humanities, natural environment, etc. Its profound historical and cultural heritage, abundant resources, harmonious social environment, and unique ecological advantages are important foundations for the green development of the tourism industry. Tourism resources are fragile, and some enterprises, in pursuit of maximizing their own interests, disregard the carrying capacity of the natural environment and develop various projects, which not only consume a large amount of resources but also disrupt ecological balance. Destructive development goes against the concept of low-carbon economy and seriously affects the green development of the tourism industry. In addition, whether it is developing projects involving water resources such as cruise ships and rafting, or carrying out infrastructure construction during tourism development, it will inevitably affect the ecological environment and the sustainable development of the tourism industry. In terms of non renewable cultural and tourism resources, the 2021 Statistical Bulletin on the Development of Culture and Tourism by the Ministry of Culture and Tourism of the People's Republic of China shows that a total of 324600 cultural and tourism units of various types across the country have been included in the statistical scope, a decrease of 17000 compared to the end of 2020; There are a total of 10545 cultural relics institutions in China, a decrease of 769 compared to the end of last year. Although China has abundant cultural and tourism resources, the quantity is showing a downward trend, which has a significant impact on the

development of the tourism industry. The non renewability of tourism resources and the decreasing trend in the quantity of tourism resources will seriously affect the sustainable development of the tourism industry.

4.3. Lack of environmental awareness among tourists and need to strengthen their awareness of green consumption

Green consumption refers to the consumption behavior of various consumer entities implementing the concept of green and low-carbon in the process of consumption activities. Tourists are the main contributors to the economy of scenic areas, and all facilities within the scenic area are built and served for tourists. The environmental awareness and consumption concept of tourists are closely related to the development of green tourism. It is not difficult to find that promotional slogans such as "turn off lights", "do not smoke", and "civilized travel" can be seen everywhere in most tourist places. However, there are still some tourists with weak environmental awareness and inadequate awareness of green consumption, mainly reflected in the following three aspects: first, tourists choose more high carbon self driving tours for travel; Secondly, it is preferred to choose disposable items for consumption during the tourism process; Thirdly, the pursuit of luxury in accommodation and food leads to unnecessary extravagance and waste. It can be seen that the environmental awareness of Chinese tourists needs to be improved, and their awareness of green consumption needs to be strengthened.

5. COUNTERMEASURES AND SUGGESTIONS

To address practical issues, multiple entities such as the government, enterprises, and tourists should participate, take multiple measures, maintain coordinated development between the ecological environment and economic operation, and achieve green development of the tourism industry in the context of a low-carbon economy.

5.1. Innovate green development mechanisms and improve green tourism regulations

The innovative green development mechanism is an important guarantee mechanism for establishing and implementing the concept of green sustainable development, which is crucial for the green development of various enterprises. Specifically, the green development mechanism includes standards and information mechanisms, incentive and constraint mechanisms, and value transformation and realization mechanisms. To develop green tourism, it is necessary to firmly choose innovative green development mechanisms. Firstly, in response to the current challenges of resource depletion and environmental capacity overload faced by many tourism enterprises, the government needs to establish a tourism environment monitoring and early warning mechanism, continuously improve the tourism visit reservation system, scientifically manage tourism enterprises while reducing resource loss and protecting the environment. The second is to establish a sound green certification mechanism for tourism enterprises, actively guide enterprises to strictly implement green standards, and ensure the green development of China's tourism industry. Thirdly, the government needs to carry out tourism project construction in ecological protected areas and ecologically fragile areas, establish and develop a green development supervision mechanism, and evaluate it, and rectify tourism enterprises that do not meet the requirements of green development. Fourthly, China's tourism regulatory authorities and local governments should work together to create targeted and rational laws, regulations, and management systems based on regional characteristics, providing solid support for the green development of the tourism industry.

5.2. Strengthen the concept of green consumption and enhance low-carbon environmental awareness

To achieve green development in the tourism industry, it not only requires the support of policies and regulations, but also the support and cooperation of tourism consumers. Therefore, it is crucial to strengthen the green consumption concept and environmental awareness of tourism consumers. Firstly, we should attach importance to the ideological education of tourism consumers. Tourists should have the concept of low-carbon, green, and environmental protection. Schools, communities, and other social entities can regularly hold green tourism knowledge lectures to enhance public awareness of environmental protection. Secondly, environmental education and promotion should be carried out through major media such as radio, television, and newspapers, explaining vivid and vivid knowledge of green tourism to the public, and strengthening their awareness of low-carbon environmental protection. Ruxin Fengjiang National Forest Park has always attached great importance to ecological civilization construction. It has set up a 2000 meter ecological and cultural education corridor, as well as placed a certain number of promotional signs, warning signs, ecological and cultural education ornaments, etc., enhancing the public's awareness of ecological protection. Finally, in light of the changing characteristics of environmental issues in recent years, the public should be aware that low-carbon and environmentally friendly tourism can not only generate economic benefits, but also social benefits. This will enable the public to focus on specific environmental issues and guide them to start from practical life and become good citizens who love and protect the environment.

5.3. Create green tourism products and reducing tourism resource consumption

The low-carbon economy is mainly characterized by low energy consumption, low pollution, and low emissions. The green development of the tourism industry requires the transfer of carbon emissions, offsetting carbon emissions, and improving energy utilization efficiency. In terms of scenic areas, it is necessary to adjust high energy consuming and high carbon emitting projects, appropriately use new energy core technologies, reduce resource consumption, and achieve green economic development. The scenic area itself should cherish tourism resources, while reminding tourism consumers to protect and cherish resources during the tourism process, and popularizing and promoting knowledge related to green tourism. Scenic areas can achieve the goal of reducing resource consumption through the use of new technologies, such as making more use of new energy and network resources, and reducing publicity and printing; Advocate for walking to replace sightseeing buses; Dig deeper into the cultural connotations of resources and integrate them into tourist activities. In terms of travel agencies, it is necessary to develop low-carbon and green tourism products, which not only pursue economic benefits but also conform to the development of green economy. Travel agencies can sign green tourism contracts with tourism customers, to some extent limiting the damage of tourism resources by tourism consumers during the tourism process, thereby reducing the behavior of damaging tourism resources. For example, Ctrip has collaborated with the World Wildlife Fund several times to launch three initiatives to treat the Earth well: improving air quality, reducing food and plastic waste, and rejecting game, advocating for the hotel industry to transform towards sustainable development. In terms of hotels, we should adhere to the business philosophy of green, low-carbon, and environmental protection, focusing on the energy consumption of high energy consuming facilities such as air conditioning, lighting, and water heaters. We should achieve low-carbon operation by improving the energy utilization rate of service facilities and using renewable energy. At the same time, it is necessary to reduce the usage rate of disposable products, in order to implement the business philosophy of green, low-carbon, and environmental protection.

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