

# Exploration on the effective path to promote the development of tourism economy from the perspective of low-carbon economy

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## Abstract

Tourism economy is an important part of my country's national economy and plays an important role in promoting economic and social development. In recent years, green ecology and low-carbon environmental protection have gradually been put on the agenda of economic development, and low-carbon economy has become a new wave of economic and social development. In this context, low-carbon tourism and green tourism are widely concerned by the society. The integration of low-carbon economy and tourism economy is in line with the goal of high-quality economic development in my country, is conducive to building a long-term and effective ecological civilization, and promotes the formation of a new green economic development model. Based on this, the article mainly analyzes the opportunities and challenges faced by the tourism economy in the development of the low-carbon economy, expounds the main problems in the process of low-carbon development of the tourism economy, and puts forward an effective path to promote the green development of the tourism economy. It aims to provide reference and reference for realizing the low-carbon development of the tourism economy and promote the long-term and stable development of the tourism economy.

## Keywords

Low-carbon economy; tourism economy; low-carbon tourism; development path.

## 1. Introduction

With the continuous improvement of people's quality of life, tourism has gradually developed into an important way for people to relax, experience life and broaden their horizons. In this context, the tourism economy has developed rapidly. At the same time, there are problems such as environmental pollution and natural destruction in the process of development and use of the natural environment by tourism development, resulting in an ecological crisis. In 2021, General Secretary Xi Jinping proposed at the "Leaders' Climate Summit" to abandon the development model that damages or even destroy the ecological environment, abandon the short-sighted practice of sacrificing the environment for temporary development, seize the major opportunities of green transformation, and promote the green cycle and low carbon development. In this context, the tourism economy, as a powerful economic type, needs to integrate the concept of low-carbon economic development and promote the green construction of the tourism industry.

## 2. An overview of low-carbon economy and tourism economy

### 2.1. Low carbon economy

The low-carbon economy is based on the concept of sustainable development, mainly through technological innovation, institutional innovation, industrial transformation, new energy development and many other methods to reduce the consumption of high-carbon energy such as coal and oil, control greenhouse gas emissions, and ultimately achieve A form of economic

development in which economic and social development and ecological environmental protection are simultaneously developed. With the proposal of "carbon neutrality" and "carbon peaking" in the two sessions this year, the low-carbon economic development model has received widespread attention from all walks of life. Under the low-carbon economy, low-carbon technology has received extensive attention. With the help of clean coal technology, carbon dioxide capture and storage technology, etc. to neutralize and decompose carbon compounds, the development of wind, solar, nuclear, geothermal, biomass and other clean energy is the development of clean energy. Important technical support for a low-carbon economy. How to achieve the goal of slowing the growth of carbon dioxide concentration in the atmosphere, and finally achieve a win-win situation for various types of economic and ecological protection, has become a new vane for economic and social construction[1].

## **2.2. Importance of promoting green and low-carbon development of tourism economy**

The feasibility of the integrated development of tourism economy and low-carbon economy is related to the interconnection of the two. On the one hand, both are important economic types to achieve "low energy consumption, low emission, and low pollution" development, and they essentially stand on the same position on green development. On the other hand, low-carbon development provides guidance for the sustainable development of the tourism economy, which pays attention to ecological livability and environmental harmony, which needs to be achieved by environmental protection[2]. Therefore, it is of practical value and significance to promote the green and low-carbon development of the tourism economy. One is to promote the transformation and upgrading of the tourism economy. The development of tourism industry has a radiating and driving effect, which can drive the development of local employment and catering industry, and play an important role in promoting local economic development. In recent years, with the continuous development of tourism resources, the natural resources are continuously exhausted, the ecological environment is destroyed, and the support for the development of tourism economy is gradually lost. Integrating the concept of low-carbon economic development into the tourism economy can promote the high-quality development of tourism construction, attach importance to the protection of the ecological environment and save energy, and promote the transformation and upgrading of the tourism industry to the direction of intensive, high-end, and technological development. The second is to promote the construction of ecological civilization. The source of the development of the tourism economy is the beautiful natural ecological environment. People get spiritual comfort from the natural scenery during the journey, and the tourism economy can develop. Paying attention to environmental protection while developing the tourism economy can stabilize the reciprocal relationship between the low-carbon economy and the tourism economy, change the traditional tourism economic development model, break through the limitations of the traditional tourism industry, and promote the construction of ecological civilization[3].

## **3. Opportunities and challenges for tourism economic development from the perspective of low-carbon economy**

### **(1) Improve the tourism environment and enhance the tourism experience**

With the continuous integration and development of low-carbon economy and tourism economy, the tourism environment has been significantly improved, and the sense of satisfaction, experience and happiness that people can obtain from tourism will be significantly improved, which is conducive to the long-term development of the tourism economy. Low-carbon development forces the tourism industry to upgrade itself. The most obvious is the improvement of the basic play environment. The optimization of the environment will improve the reputation of the scenic spot among tourists, attract more tourists to visit, and increase the

revisit rate. The improvement of the economic benefits of the scenic spot will allow more capital to be invested in the low-carbon construction[4]. In this way, the low-carbon development of the tourism economy has formed a stable spiral upward stage, and the tourism environment and the tourism economy are moving towards a better direction. In this process, the experience of tourists is also greatly satisfied, and they get a pleasant enjoyment of body and mind.

#### (2) Accelerate industrial evolution and promote technological renewal

High energy consumption and low productivity are often closely linked. For the tourism economy, if those energy-intensive projects and technologies are not eliminated or updated, the production capacity of tourism projects cannot be improved, let alone the long-term stable development of the tourism economy. The increasing popularity of low-carbon economy will promote the tourism industry to adjust the energy supply mode, transform traditional energy consumption methods into new energy modes such as tidal energy, wind energy, and solar energy, and realize the innovation of energy supply. In addition, while curbing the development of a number of projects, low-carbon tourism will also force tourism companies to develop new projects, the development of scenic spots will become more diversified, and integrated tourism methods such as tourism, leisure, and health will be favored. Tourism” has been supported, and new technologies such as virtual reality, artificial intelligence, and big data have been increasingly applied in the development of tourism economy[5].

#### (3) High energy-consuming projects are banned, and scenic spots are facing a crisis of transformation

The low-carbon economy requires the tourism economy to rectify the projects with high energy consumption. However, due to the high cost of rectification, tourism companies generally choose to rebuild. The selection of new projects and the design of the layout of the scenic spot will directly affect the future development prospects of the scenic spot and affect the transformation and upgrading of the scenic spot. Especially for the design of large-scale ornamental projects, which will involve some high-polluting performances such as fireworks and salutes, which are contrary to the development requirements of low-carbon economy, they need to be replaced and rectified, and at the same time to maintain the ornamental value of the project, it is necessary to carry out Re-planning and design. The arrangement and layout of programs and projects in tourist attractions according to local cultural characteristics, customs, etc., whether it can achieve personalized development while meeting the consumption needs of consumer groups is the top priority of the transformation[6].

#### (4) The technology application model needs to be studied, and the economic cost of scenic spot construction increases

At present, the application of low-carbon technologies in the tourism economy lacks practical experience, mostly stagnant at the level of theoretical research, and an application model that can be directly deployed has not yet been formed. Specifically, the specific application of low-carbon technology to maximize the economic benefits of tourist attractions, simplify energy consumption, and improve environmental protection is an issue that needs to be carefully studied and discussed. meet up”, which could not gain rapid popularity. The introduction of low-carbon technology into tourist attractions will undoubtedly significantly increase the cost of construction of scenic spots. Due to the high research and development costs of new technologies and the required infrastructure for application, scenic spots need to be invested in various aspects of construction, which can easily lead to the lack of capital turnover. The weekly bottleneck will eventually affect the normal operation of the entire scenic area[7].

## 4. Main problems existing in the process of low-carbon development of tourism economy

### (1) Low awareness of green and low-carbon tourism

Relevant surveys and studies have shown that nearly 90% of consumers consider the economic perspective rather than the environmental perspective when making travel plans. Generally speaking, people's awareness of low-carbon environmental protection in tourism needs to be strengthened. On the one hand, few consumers can link the low-carbon economy with the tourism economy[8]. When participating in tourism activities, it is difficult for them to realize that their choice of travel mode, diet mode, and living style will affect the tourism economy. Development, it is impossible to timely and accurately judge whether their behavior is in the category of non-low carbon behavior, and whether it will affect the construction of green ecological civilization. On the other hand, nearly 50% of consumers believe that low-carbon economy and tourism economy are in conflict with each other. If they choose low-carbon tourism, their sense of relaxation, pleasure and comfort in tourism will be greatly reduced. Even can not be satisfied, lose the significance of its implementation of tourism plans, subconsciously reject green and low-carbon tourism[9].

#### (2) The development of scenic spots brings environmental pollution

At present, as an important tertiary industry in my country, the status of tourism in the national economy is gradually improving. In order to play the leading role of the tourism economy on the local economy, regions with certain natural resource advantages or other related advantages have participated in the construction of the tourism industry and vigorously developed the local tourism economy. In the process of developing scenic spots, there are often environmental pollution problems. First of all, some developers lack the concept of environmental protection and have weak awareness of sustainable development. In order to achieve short-term economic interests, they do not hesitate to develop and construct tourist attractions at the cost of destroying the ecological environment, which will bring irreversible damage to the ecological environment[10]. Finally, in the construction of tourist attractions, a large amount of construction waste will be generated. If it is not disposed of properly and discarded at will, it will cause secondary damage to the local ecological environment. Third, the construction of large-scale entertainment facilities in the scenic area is becoming more and more popular. The development of these entertainment and play projects has increased the burden of self-repair of the ecosystem and caused damage to the existing ecological resources in the area.

#### (3) The problem of energy consumption is increasing day by day

The development of tourism economy involves many contents, such as travel, food, accommodation, etc. It is a complex type of economy. Among them, the choice of transportation mode is an important aspect that affects the energy consumption of tourism economy. On the one hand, people's choice of travel mode during travel is concentrated on self-driving, taxi, airplane, etc. These modes of transportation have high carbon emissions, especially airplanes, even if they are short-distance flights. It will produce more than three times the carbon emissions of the same mileage of railways. In order to improve the comfort of customers and create long-term economic benefits, travel companies often choose flying as a mode of transportation, which brings severe challenges to the green and low-carbon transformation of the tourism economy. On the other hand, the setting of transportation modes in the scenic area also has the problem of energy consumption[11]. With the development of the scenic spot, the sightseeing area of the scenic spot is getting larger and larger, and the sightseeing bus has been incorporated into the scenic spot. The long-term operation of sightseeing buses will adversely affect the environment in the scenic area and significantly increase the carbon emissions in the scenic area.

#### (4) Insufficient application of green and low-carbon technologies

For the tourism economy, in order to achieve low-carbon development, it is inseparable from the extensive application of low-carbon technologies. However, looking at the overall situation

of the application of low-carbon technologies in the tourism industry, there are obvious problems of insufficient application, which hinder the green and low-carbon development process of the tourism economy. From the perspective of technology research and development, my country's tourism industry is still lacking in low-carbon technology innovation, and there is still a big gap compared with foreign countries, especially for the high energy consumption links in the process of tourism economic development, the development of key low-carbon technology is not enough. In place, let alone its application practice, restricting the low-carbon development of the tourism economy. In terms of scenic spot development, the application of low-carbon technology in infrastructure construction and service methods needs to be deepened. In order to save construction costs, developers often choose to apply the lowest-grade low-carbon technology to cope with the corresponding inspections, while low-carbon technology There are still many deviations in practice, further reducing the actual effectiveness of low-carbon technologies.

(5) The construction of professional talent team is not strong

With the increasing prosperity of the tourism economy, in order to realize the parallel between the low-carbon economy and the tourism economy, it is necessary to increase the publicity of green tourism and focus on the construction of tourism talents. Whether it is for the development of the tourism industry or the realization of low-carbon goals, talents are an important support. From a horizontal point of view, the current construction of tourism talent team is slightly narrow. The talent training of the tourism industry mainly focuses on the introduction of scenic spots, historical outlines, humanistic feelings, etc. The training on low-carbon economy, green environmental protection, ecological protection, green tourism and other related content is not in place, resulting in tourism staff in guiding tourists to green and low-carbon. The ability to travel is not strong. From a vertical perspective, tourism industry talents need to deepen their understanding of the relationship between low-carbon economy and tourism economy. Regarding low-carbon tourism, it is not simply recommending green travel methods to tourists, choosing green consumption methods, participating in green publicity activities, etc., but attaching importance to the transmission of ideas, relying on professional knowledge and skills, so that more and more consumption Participants have low-carbon concepts and participate in the practice and promotion of low-carbon tourism. How to transfer green tourism with professional knowledge is a long-term issue for the construction of the talent team in the tourism industry.

## **5. Effective ways to promote the development of tourism economy from the perspective of low-carbon economy**

### **5.1. Pay attention to the publicity of low-carbon tourism concept**

To fundamentally realize the low-carbon development of the tourism economy, it is necessary to start with ideology, and by promoting the concept of low-carbon tourism in the society, to form a broad awareness of low-carbon environmental protection, and to promote the parallel between the tourism economy and the low-carbon economy. From the government level, it is necessary to give full play to the leading role of the government. Through detailed and thoughtful top-level design, the low-carbon tourism propaganda goals are issued to various local units. From the perspective of scenic spots, when carrying out daily activities in various scenic spots, it is necessary to avoid extravagance and waste. Through the low-carbon layout of scenic spots, a demonstration of low-carbon environmental protection tourism should be done, and tourists should be actively promoted and educated, starting from the details, to help Tourists recognize and correct incorrect thinking and behavior in travel. From the enterprise level, we can focus on the development of some low-carbon and environmentally friendly

tourism programs, and reduce the carbon emissions generated by group tourism by recommending this type of tourism routes to consumers.

### **5.2. Strengthen the perfection of the tourism management system**

A scientific and reasonable tourism management system is an important guarantee for the implementation of the low-carbon development of the tourism economy, and is conducive to the orderly management and supervision of various activities in the development of the tourism industry. On the one hand, government departments strengthen the management and certification of low-carbon tourism, with the participation of experts, R&D institutions, enterprises, etc., to formulate clear general standards for low-carbon transportation, low-carbon scenic spots, and low-carbon accommodation, and strictly follow the standards. Scoring and grading various tourism facilities, and through the publicity of the evaluation results, encourage all scenic spots and units to actively participate in the construction of low-carbon tourism. On the other hand, formulate a reward and punishment system for low-carbon tourism, and provide financial subsidies and tax incentives for enterprises that actively respond to the government's call and use low-carbon technologies or new energy with good efficiency, so as to encourage the priority development of such enterprises and cultivate A group of good demonstration and leading enterprises in the tourism industry; for enterprises whose carbon emissions exceed the standard, corresponding penalties will be implemented according to the level of exceeding the standard, such as charging carbon treatment service fees, etc., and urge them to improve their development models.

### **5.3. Carry out innovation in tourist attractions projects**

Entering a new era of low-carbon economic development, projects with high energy consumption and large carbon emissions in tourist attractions will be gradually banned, and scenic spots may face the problem of simplification and duplication of tourism projects. In order to achieve long-term development of tourist attractions, it is necessary to make active adjustments to scenic spots, and introduce and innovate personalized and low-carbon tourism projects. At present, the project types of tourist attractions are mainly ornamental. When the scenic spots are laid out, if they lack creativity and characteristics, they will not be able to attract tourists to "revisit the old places", which is not conducive to the long-term development of the scenic spots. In this regard, tourist attractions can reasonably design the layout of the scenic spots, and improve the tourists' "unfinished" interest in the scenic spots by integrating the project categories such as viewing, participation, and experience, and increase the revisit rate. In addition, the scenic spot needs to locate the market before the project construction. According to the market positioning and the key points of future industrial layout, analyze the characteristics, needs and preferences of the main consumer groups, scientifically set up green tourism projects, and improve the effectiveness of the project construction.

### **5.4. Optimize the planning of tourism transportation**

Transportation and accommodation are one of the important components of the tourism economy, which can not only affect the travel experience of consumers, but also affect the development of the tourism economy. Among them, the choice of transportation mode is also one of the important sources of carbon emissions. Therefore, it is necessary to control the traffic layout in tourism. On the one hand, the flow of private cars is restricted. According to local carbon emission requirements, the guidelines for the restriction of odd and even number plates are published. Especially around scenic spots with large traffic flow, preventive diversion and dispersion of traffic flow are carried out. On the other hand, the government will take the lead, and enterprises will participate in the establishment of special tourist trains to facilitate the transportation between scenic spots and scenic spots and between scenic spots and cities, so that tourists can easily reach their destinations in a time similar to that of self-driving tours,

attracting more People actively choose public travel modes. In the use of special trains, implementing the concept of green and environmental protection can apply green and low-carbon technologies to promote the energy-saving and environmentally-friendly development of public transportation and realize the low-carbon development of the tourism economy.

### **5.5. Strengthen the application of low-carbon technology**

With the continuous improvement of the level of science and technology, low-carbon technology has been significantly developed, but its application in the development of tourism economy needs to be improved, and there is a lot of potential space to play the role of energy saving and emission reduction. Since my country is currently lagging behind in the research and development of low-carbon technologies, and the application cost of new environmental protection technologies in the tourism economy is relatively high, few tourism units will actively choose to use low-carbon technologies. In this regard, relevant units and institutions need to strengthen guidance, make overall planning, and promote the integration of low-carbon technologies into the development of tourism economy. For example, the construction of green hotels can lead a number of new trends in the development of green tourism. By applying low-carbon technologies in water source use, temperature control, electrical appliance use, garbage disposal, etc., it can significantly reduce carbon emissions; at the same time, the development and use of New energy equipment, by concentrating green energy such as solar energy, wind energy and geothermal energy, can replace the use of traditional energy and help to achieve green and low-carbon development of the tourism economy.

### **5.6. Do a good job in the training of tourism staff**

The integrated development of the tourism economy and the low-carbon economy requires the joint efforts of many parties, including the participation of tourism-related staff. By strengthening the training of staff, the recognition of the concept of low-carbon tourism is enhanced from the workforce, and it is urged to practice and promote low-carbon tourism methods in their daily work. During training, focus on the following aspects. The first is to change the attitude of the staff towards low-carbon tourism, which affects their behavior. Only by recognizing this method of low-carbon tourism from the heart can staff members practice this type of tourism, thereby affecting their family members, relatives, friends and other surrounding areas. people. The second is to master certain low-carbon tourism knowledge, and on the basis of low-carbon tourism awareness, guide low-carbon tourism behavior with scientific knowledge, and provide explanations and guidance for tourists on low-carbon tourism. The third is to cultivate hands-on and practical ability. Through the training of professional skills, the ability and level of staff to carry out energy saving and emission reduction work in daily work will be improved, and the training of "academic + practical" talents will be promoted.

## **6. Conclusion**

To sum up, the low-carbon development of the tourism economy is a comprehensive project, which requires the joint participation of the government, enterprises and consumers. management mechanism, standardize the construction standards of the tourism industry, deepen the concept of low-carbon environmental protection, and ultimately promote the realization of the green and ecological development of the tourism economy.

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