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Research Article

Sustainable Development of Tourism under the Background of Low-Carbon and Green Economy

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The development of tourism industry not only promotes social and economic progress and the improvement of people's happiness index but also causes resource damage and environmental pollution, which not only affects our living environment but also directly threatens the survival and development of mankind. Therefore, how tourism will develop in the context of low-carbon green economy has become the main problem of tourism development. Based on the above background, in order to solve the development problem of tourism in the future under the low-carbon green economy, based on the research results at home and abroad, starting from the starting point of sustainable development of tourism, this paper introduces the concept of "tourism consumption separation rate" and uses Kaya traditional accounting method. The structural decomposition analysis method and cointegration relationship test method are used to calculate, analyze, and test the tourism carbon emissions and influencing factors at the overall level of China and the middle, western, and eastern regions. Through this method, the accuracy of the calculation results is improved by 30%, which increases the accuracy of the experimental data and is more practical.

1. Introduction

With the continuous development of human society and economy, the actual problems caused by carbon emissions to people all over the world are gradually increasing. The frequent occurrence of extreme weather and natural disasters caused by carbon emissions has brought great losses to the survival and life of people all over the world, as well as the shortage of energy supply. China's economic development is very dependent on energy. The extensive use of primary energy will eventually lead to insufficient energy supply and an energy crisis, which will affect China's economic and social development. Sustainable environmental development will be challenged. Extensive economic growth mode has destroyed forests and caused serious air pollution. Therefore, to find out the key factors affecting China's carbon emissions is an inevitable choice for China's social and economic sustainable development, it is of theoretical and practical significance to study the carbon emission factor and its mechanism. Therefore, how to reduce the impact of human activities on global climate change has become an important task to achieve sustainable development in the future.

Due to the importance of low-carbon and green economy to the future development strategy of tourism, many research teams have begun to study this and achieved good results. For example, tourism is one of the sources of carbon dioxide emissions, and tourism activities will cause pressure on the ecological environment. Zha et al. research constructs the evaluation framework of tourism direct and indirect carbon dioxide emissions and puts the carbon dioxide emission factors into the efficiency evaluation framework based on the SBM bad model. On this basis, taking Hubei Province as an example, this paper evaluates the tourism carbon dioxide emission as a case study, measures the development efficiency and dynamic fluctuation of the low-carbon tourism economy in various cities from 2007 to 2013, and makes analysis [1]. Wu et al. pointed out that the calculation of tourism carbon dioxide emissions is a prerequisite for the formulation of energy-saving emission reduction targets in some regions of our country, and it is essential for the sustainable development of tourism in certain regions [2]. Shuxin w established a new method to analyze the characteristics and influencing factors of EETT in China from 1994 to 2013. Shuxin w found that the CO_2 emission per unit person time (CETTU) increased from 26.07 kg in 1994 to 14.01 kg in 2013. The decline of energy intensity, scale effect, and policy promotion is the key factor affecting energy consumption. Although the research results are relatively rich, there are still many deficiencies, which are mainly reflected in the fact that the above research results are more focused on a certain aspect of research and are not systematic and comprehensive [2].

In the calculation and research of tourism carbon dioxide emissions, tourism consumption stripping coefficient and Kaya traditional accounting method are good methods, which can solve the problem of large deviation in the calculation data of tourism carbon emissions in the past. Therefore, it is used in the calculation and analysis of tourism carbon dioxide emissions in China. The calculation of tourism carbon dioxide emissions is the premise of formulating energy conservation and emission reduction targets in some regions of China. It is also important for the sustainable development of tourism in some areas. Based on the concept of "tourism consumption stripping coefficient," Wu et al. proposed the calculation method of tourism emissions in Beijing, Shandong, Zhejiang, Hubei, and Hainan. The results show that, from 2009 to 2011, the total tourism emissions of the five provinces and cities increased continuously, and the per capita tourism emissions decreased from 56.569 kg to 54.088 kg. During this period, Hainan's tourism emissions are still the lowest. Hubei's tourism emissions soared from the third place in 2009 to the first in 2011. Beijing is the only downward trend that has not been disturbed. Hainan has the lowest total emissions, but the highest per capita emissions. Only Beijing and Hainan's per capita emissions continued to decline in 2009 and 2011 [3]. The emission of the tourism industry in Zhejiang Province shows an inverted U-shaped trend, while that of Shandong and Hubei Province shows a U-shaped trend. In the future, China should promote energy conservation and emission reduction by formulating action programs, innovating energy-saving technologies, strengthening environmental awareness, and developing regional tourism cooperation.

In order to solve the future development of tourism in the low-carbon green economy, this paper introduces the separation rate of tourism consumption and takes Kaya traditional accounting method as the first step, structural decomposition analysis method as the second step, and cointegration relationship test method as the third step to establish an analysis model to study how to develop a low-carbon economy and low-carbon tourism in response to global climate change, so as to achieve the goal of saving energy. Under the common requirement of environmental responsibility, we are actively promoting the construction of a green economy and the development of low-carbon tourism and exploring the future route of low-carbon tourism, which is also one of the hotspots of future research [4, 5]. How to develop tourism in the future is a comprehensive problem, including the transformation of social, economic, resource, and environmental values. There is little research on carbon tourism in China. At present, low-carbon tourism is only at the level of theoretical discussion and strategic positioning. Based on the classification of relevant research results at home and abroad, according to the relevant theories, such as the theory of sustainable development and the stripping coefficient of tourism consumption, this paper makes an in-depth and multifaceted evaluation and empirical analysis on the carbon dioxide emissions of tourism cities. The research results have certain practical significance and guiding practical value.

Sustainable development can protect the ecological environment and is a key issue that needs to be considered in the development of tourism.

2. Sustainable Development Strategy of Tourism under Low-Carbon and Green Economy

2.1. Tourism Consumption Separation Rate. It means "separation rate of tourist consumption" [6–8]. It is the added value of tourist consumption deducted from tourism related industries. The original intention is to refer to the percentage of tourism consumption in the added value provided by service sectors including tourism consumption. As the products of tourism industry only account for a part of the products of tourism consumption, it is necessary to deduct a certain proportion of its growth value. The idea of calculating this ratio is to convert the total value of market production, supply, transportation, and other industries into total tourism income with added value according to the percentage of the added value of tourism related industries and calculate the passenger consumption separation rate based on industry value-added words [9–11].

According to this calculation method, the calculation formula is set as follows:

$$E_N = \frac{V_N}{C_N}. \tag{1}$$

In formula (1), E_N represents the separation rate of tourism consumption of n industry, V_N represents the growth number of n industry; and C_N represents the tourism growth number of n industry, multiplying the growth rate of n industry by the tourism revenue of n industry, where the growth rate of n industry is the ratio of the growth number of n industry to the total revenue of n industry [12, 13].

2.2. Kaya Traditional Accounting Method. In order to clarify the contribution efficiency of China's overall and regional tourism carbon emission influencing factors, this paper adopts the Kaya traditional accounting method, namely, Kaya's accounting identity, which is used to analyze the key factors affecting the change of national carbon emissions [14, 15].

The expression is as follows:

$$C = \frac{C}{R} \times \frac{R}{\mathrm{GDP}} \times \frac{\mathrm{GDP}}{\mathrm{POP}} \times \mathrm{POP}. \quad (2)$$

In formula (2), W is carbon emission, R is energy consumption, GDP is GDP, and pop is household population (100 million). W/R is the energy structure, representing the carbon emissions per unit of energy consumption; w/GDP is the energy intensity, representing the energy consumption per unit of GDP; and GDP/Pop is the per capita GDP [16].

2.3. Structural Decomposition Analysis Method. The method of structural decomposition analysis (IDA) is used to analyze the changes of energy intensity, structure, economic scale, and industrial structure of national and cross-city structures based on industry data [17, 18]. In a word, IDA methods can be divided into two types: Divisia exponential decomposition analysis (Dida) and Laspeyres exponential decomposition analysis (Lida). This method can be divided into two types: arithmetic mean divisor index (AMDI) and logarithmic average divisor index (LMDI). The former model was weighted by arithmetic mean. The deduction process is relatively easy, but the residual value is too large to be calculated when the value is zero [19, 20]. The latter model uses logarithms instead of arithmetic based on the weight ratio and performs zeroing using analysis constraints. Avoid situations that cannot be calculated.

2.4. Cointegration Test Method. It is necessary to investigate whether there is a stable long-term relationship between various influencing factors before empirical research is carried out to ensure that the database is more stable. Therefore, it is inevitable to use the cointegration relationship test method to verify the periodic time series data. Whether there is a stable long-term relationship [21]. At present, there are two common cointegration testing methods: one Engle Granger (EG), mainly based on the stationarity test of regression residuals, followed by the j-j test.

Johansen Juselius mainly uses vector autoregression and VaR to verify the cointegration relationship. Before conducting an empirical study on the overall level and responsible regions of the influencing factors of carbon emissions in tourism industry, this paper examines whether there is a long-term cointegration relationship between the influencing factors on the basis of the *JJ* likelihood ratio test. In order to ensure that individual factors are taken into account, it is meaningful to analyze the decomposition of the influencing factors later [22, 23].

The expression of the *j-j* likelihood ratio test is as follows:

$$T_Y = \alpha + \prod_{1} q_{t-1} + \cdots + \prod_{k} y_{k-1} + \mu = \alpha + \sum_{j=1}^{k} \prod_{j} y_{t-j} + \mu_t. \quad (3)$$

However, the best method to analyze the fragmentation of index has not been established. Among the many IDA methods mentioned above, this article analyzed the theoretical basis, applicability, and functionality of the index decomposition analysis (IDA) in the existing literature and pointed out that the log average degradation index (IDA) LMDI method can eliminate the residual duration, so it is more applicable [24, 25].

3. Research Design

3.1. Accounting Scope of Tourism Carbon Emission. Tourism industry has the characteristics of a long industrial chain and high business relationship, which leads to the complexity and diversity of energy consumption and carbon dioxide emission measurement indicators. In addition, due to the lack of tourism statistics and the unclear definition of the scope of tourism carbon emission accounting, the measurement of tourism energy consumption and carbon emission has become a recognized problem. Before calculating the carbon dioxide emissions of tourism, it is necessary to determine the accounting scope of carbon dioxide emissions of tourism. Although China has incorporated the tourism industry into the carbon emission system, the five links of "eating, traveling, shopping, and entertainment" in the tourism industry have not been directly reflected. If the carbon emission of tourism is calculated according to this statistical classification, it is actually only a part of the carbon emission in the accommodation process of tourism and tourism service industry, resulting in the formation of "quantity leakage," because other situations are not taken into account. Therefore, domestic researchers believe that the statistical coverage of tourism should include economy, catering, communication and transportation, post and telecommunications, and social services, as well as accommodation and catering industry. They should be put forward independently of each other. Tourism revenue and tourism added value are considered from six aspects of transportation, post and telecommunications, trade, catering and accommodation, and social services.

3.2. Carbon Emission Research Design. In this paper, the "separation rate of tourism consumption" is used to calculate the "separation rate of tourism consumption," and the energy consumption of tourism industry is separated from tourism related industries.

The calculation formula of "tourism consumption separation rate" and the proportion of energy consumption in tourism related industries are as follows:

$$\mathrm{TVN}_K \equiv \mathrm{TE}_K \times \mathrm{VAE}_K = \mathrm{TE}_K \times \frac{\mathrm{VN}_K}{\mathrm{TPV}_K}. \quad (4)$$

In formula (4), TVN_K is the tourism growth value of tourism related industry K, TE_K is the tourism revenue of tourism related industry K, WAE_K is the growth value of tourism related industry K, TE_K is the growth value of tourism related industry K, and WAE_K is the total revenue of tourism related industry K, where $k = 1, 2, 3, 4$ represent “transport, “transport, and post and telecommunications,” “wholesale and retail,” “catering and accommodation,” and “social service industry.”

Based on the statistics of energy consumption of tourism related industries, this paper investigates and calculates the overall level of carbon emission of tourism industry in eastern, central, and western regions of China in accordance with the “reference method” proposed in IPCC “guidelines for greenhouse gas emission inventory.” The expression is as follows:

$$k^e = \sum_q k_q^e = \sum_j k_j^e = \sum_j k_{jq}^e = \sum_j \mathrm{DR}_{jqv}^e \times \beta_v. \quad (5)$$

In formula (5), k^e is China’s overall tourism carbon emission in e year; k_q^e is tourism carbon emission in q region in e year; k_j^e is tourism carbon emission in e year of J province; k_{jq}^e is tourism carbon emission of tourism related industry q in e year of j province; DR_{jqv}^e is energy consumption of tourism related industry q in e year of J province; and β_v is carbon emission coefficient of energy source v. Among them, $e = 1, 2, 3$ denote eastern, central, and western and $v = 1, 2, 3, \ldots$.

4. Analysis of Simulation Results of Tourism Carbon Emissions in China

4.1. Carbon Emission Algorithm Analysis. According to the calculation formulas (1) and (2) and based on the research data of added value and total revenue of tourism related industries, this paper calculates the transport; post and telecommunications; wholesale and retail; and the east, central, and western regions of China from 2010 to 2019. The “tourism consumption stripping coefficient” of the four tourism related sectors of social services is shown in Table 1. On the basis of calculating the “tourism consumption stripping coefficient” of each industry, according to the calculation formulas (4) and (5) and the energy consumption data of tourism related industries, we can separately calculate the overall level of China and its eastern, central, and western tourism carbon emissions, as shown in Table 1.

As shown in Figure 1, in terms of regions, in the past 10 years, the tourism carbon emission intensity of the industries in the west, the middle, and the east is limited by the energy utilization efficiency, energy consumption composition, management efficiency level, policy regulation environment, and energy conservation and emission reduction technology, which shows a different numerical distribution. On the whole, however, the intensity of tourism carbon emission in the west, middle, and east always shows “catering and acceptance > transport, post, and telecommunications > wholesale and retail > social service industry.”

4.2. Analysis on the Results of China’s Tourism Carbon Emissions. As shown in Figure 2 and Table 2, the measurement results of tourism carbon emissions of China as a whole and its eastern, central, and western regions show that there are two significant characteristics of China’s tourism carbon emissions from 2010 to 2019: (1) the tourism carbon emissions show an upward trend year by year, but the rising range gradually tends to be gentle. In terms of increase, China’s overall tourism carbon emissions increased from 48.9114 million tons in 2010 to 198.646 million tons in 2019, an increase of 149734600 tons. From the perspective of the increase rate, the annual growth rate of China’s overall tourism carbon emissions increased from 13.56% in 2011 to 17.95% in 2019, an increase of 4.39%. The difference of the rising range of tourism carbon emissions is relatively large. In terms of regions, the carbon emissions of tourism in the east, central, and western regions increased from 37.2162 million tons, 8.142 million tons, and 10.6621 million tons in 2010 to 118.6715 million tons, 63.2364 million tons, and 67.8244 million tons in 2019.

Note: since the tourism carbon emissions in 2010 are taken as the base period data, the annual growth rate of tourism carbon emissions in 2010 is set as 0.

Among them, the carbon emissions of tourism in the central and western regions increased fastest and the growth rate was about 5 times. This shows that although the carbon emissions in the central and western regions are lower than those in the east, the growth rate of carbon emissions caused by the rapid development of tourism industry is obviously higher than that in the east, as shown in Figure 2. However, affected by the factors of regional economic level, tourism carbon emissions in different regions are different. There are also differences in the rebound range of the two-year growth rate. In the more developed eastern region, the rebound amplitude is small and the rebound growth rate is only 6.39%. In the underdeveloped central and western regions, the rebound amplitude is relatively large, and the rebound growth rate reaches 8.24% and 10.37%, as shown in Table 2.

As shown in Table 3 and Figure 3, during the 10 years from 2010 to 2019, China’s overall carbon emissions from transport, post, and telecommunications; wholesale and retail; catering and accommodation; and social services show a gradual growth trend. From 48.911 million tons, 10.662 million tons, 8.1422 million tons, and 37.216 million tons in 2010, they will increase to 198.646 million tons, 67.824 million tons, 63.236 million tons, and 118.677 million tons in 2019, with an increase of 306.13%, 536.12%, 676.64%, and 218.88%, respectively.

With 2016 as the change node, tourism carbon emissions of China’s overall industries show a transformation from “low and median area” (2010–2015) to “high-value area” (2015–2019), as shown in Figure 3. In the above transformation, the increase rate of tourism carbon emissions of wholesale and retail is significantly higher than that of other industries. Tourism carbon emissions due to wholesale and retail have jumped from the fourth place in 2010 to the second in 2019, and from the “low-value area” of 8.142 million tons in 2010 to the “high-value area” (31.8091 million tons, 2019), as shown in Table 3. Although the carbon

Table 1: Stripping coefficient of tourism consumption in China and its regional industries from 2010 to 2019.

Industry	Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transportation, post, and telecommunications	0.21	0.21	0.45	0.46	0.12	0.32	0.3	0.3	0.73	0.12
Wholesale and retail	0.21	0.26	0.21	0.31	0.36	0.32	0.65	0.12	0.13	0.56
Catering and accommodation	0.35	0.36	0.46	0.44	0.46	0.2	0.12	0.3	0.44	0.62
Social services	0.16	0.05	0.22	0.21	0.05	0.37	0.32	0.58	0.33	0.32

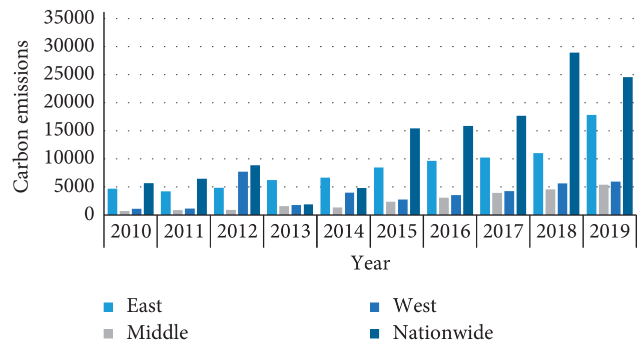

Figure 1: Tourism carbon emissions.

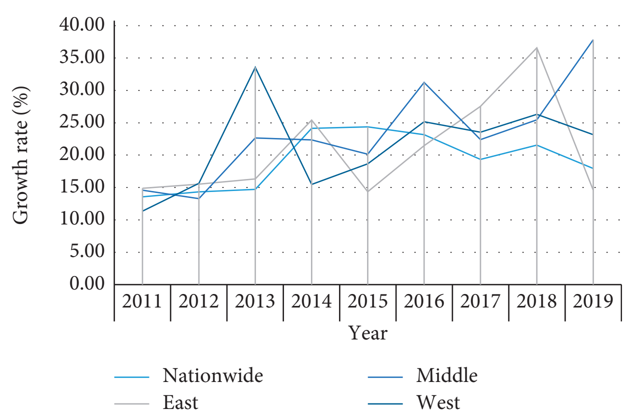

Figure 2: Annual growth rate of China's overall and regional tourism carbon emissions from 2010 to 2019.

Table 2: Annual growth rate of China's overall and regional tourism carbon emissions from 2010 to 2019.

Content	Year								
	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
Nationwide	13.56	14.33	14.69	24.16	24.37	23.17	19.32	21.54	17.95
East	14.87	15.50	16.31	25.43	14.35	21.45	27.54	36.58	14.58
Middle	14.58	13.28	22.64	22.34	20.15	31.24	22.38	25.46	37.84
West	11.35	15.64	33.56	15.48	18.65	25.16	23.54	26.31	23.15

Table 3: Carbon emissions by industry.

Content	Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transport	3721.62	3978.5	4823.3	6325.3	5921.44	8288.79	9268.4	10395.6	11087.4	11867.7
Wholesale	814.22	893.16	983.85	1510.6	1765.21	2277.91	3180.9	3948.4	4909.45	6323.64
Catering	1066.21	1366.1	1407.3	1833.6	2194.43	2909.54	4018.4	4268.2	5104.86	6782.44
Social service	4891.14	6327.6	6931.1	9462.5	11342.3	13476.2	15857.	17582.2	21541.8	19864.6

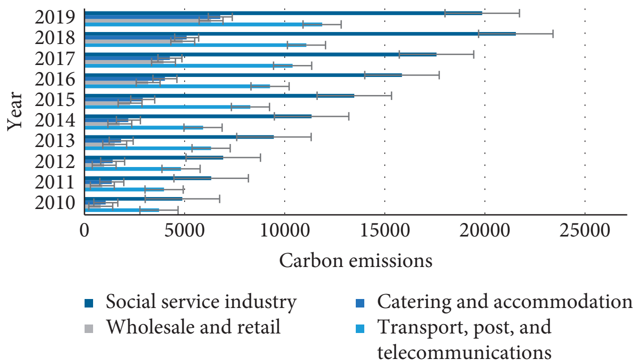

Figure 3: Analysis and comparison of carbon emission of China's overall and regional tourism growth rate from 2010 to 2019.

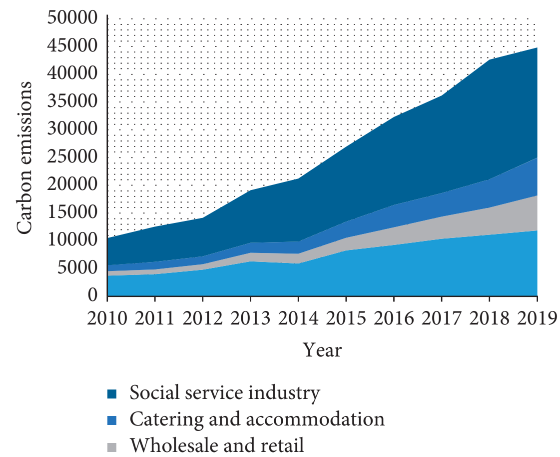

Figure 4: Carbon emissions by industry.

emission of tourism in the wholesale and retail industry is still lower than that of transport, post, and telecommunications, its rising value is obviously higher than that of transport, post, and telecommunications. This shows that when meeting the basic demand of tourism, the tourism motivation of tourists changes, which makes wholesale and retail tourism carbon emissions second only to transport. Another major source of tourism carbon emissions is post and telecommunications, catering, and accommodation, which is expected to exceed the level of tourism carbon emission caused by "food," "housing," and "transportation" in a certain period in the future.

The purpose of the research and analysis of tourism carbon emissions is to understand the current situation of tourism carbon emissions in China as a whole, regions, and industries. To analyze the intensity of tourism carbon emissions is to understand the contribution efficiency of tourism carbon emissions of provinces, cities, and industries. However, the research on the relationship between tourism economic growth and tourism carbon emissions is rare. Existing studies have pointed out that there is a correlation between energy consumption or carbon emissions and economic growth; that is, they are synchronized. This makes how to block the relationship between economic growth and resource consumption and environmental pollution become an important issue in today's academic research. Therefore, to clarify the relationship between tourism economic growth and tourism carbon emissions plays an important role in the realization of low-carbon tourism development under the premise of economic growth. In this context, this paper uses the index decomposition analysis method and cointegration relationship test method to analyze the correlation between China's overall level and its regional tourism carbon emissions.

As shown in Figure 4, combined with the data of the total amount of tourism carbon emissions and the growth rate of the eastern, central, and western industries, the three regions draw the following conclusions and suggestions: (1) the eastern region should focus on wholesale and retail businesses, with social services as the second choice; (2) make transportation, catering, and accommodation the first choice, and social service industry should be the third choice object.

The total carbon emissions (including direct and indirect) of China's tourism industry in the research years (2013, 2014, 2015, and 2016) were 140.26 million tons, 135.89 million tons, 148.93 million tons, and 16.978.47 million tons, respectively, accounting for 4.64%, 3.95%, 2.84%, and 2.71% of the total carbon emissions of all industries in China. It accounts for 4.11%, 3.50%, 2.54%, and 2.44% of China's total carbon emissions (including carbon emissions from domestic consumption). In the research year, the proportion of direct carbon emissions, indirect carbon emissions, and total carbon emissions of China's tourism industry in the total carbon emissions of all industries in China and the proportion of China's total carbon emissions (including the carbon emissions of living consumption) decreased in turn. (3) In the study years (2013, 2014, 2015, and 2016), the direct carbon emissions from tourism transportation were the largest, which were 49.9257 million tons, 42.2538 million tons, 36.8809 million tons, and 50.01427 million tons, accounting for 74%, 76%, 67%, and 68% of the total direct emissions of tourism industry. The second is commodity sales, catering, and accommodation. The proportion of tourism, entertainment, post and telecommunications, and other services is small, and the total emissions are also less. Take the tourism departments in 2007 as an example, 68% of transportation, 2% of sightseeing, 6% of accommodation, 6% of catering, 11% of commodity sales, 1% of entertainment, 1% of posts and telecommunications, and 5% of other services. In the study year, the direct carbon emissions of the tourism sector showed a trend of first rising and then decreasing, especially in the tourism transportation sector. In the research years (2013, 2014, 2015, and 2016), the indirect carbon emissions from tourism transportation were the largest, accounting for 39%, 43%, 40%, and 38% of the total indirect carbon emissions of tourism industry, which were 28.5328 million tons, 34.7507 million tons, 37.4926 million tons, and 37.04 million tons, respectively. However, compared with the percentage of direct carbon emissions from tourism transportation, these ratios are relatively small and have a large drop. The second is commodity sales, catering, accommodation, and other services, while the proportion of sightseeing, entertainment, post, and telecommunications is small. Take the tourism departments in 2010 as an example, the traffic, sightseeing, accommodation, catering, commodity sales, entertainment, posts, telecommunications, and other services were 38%, 6%, 11%, 12%, 16%, 3%, 1%, and 13%, respectively. In the study year, the overall carbon emissions of various sectors of the tourism industry showed an upward trend, while the local changes in various sectors. The direct carbon emission of the tourism transportation sector is higher than indirect carbon emission, while the indirect carbon emission of other tourism sectors is far higher than direct carbon emission. In particular, direct carbon emissions from tourism and entertainment account for only 20% of the total carbon emissions. Besides the ministry of tourism and transportation, the indirect carbon emissions of other tourism sectors are 3 to 4 times their direct carbon emissions. Therefore, the carbon emissions generated by other tourism sectors should also be paid attention to, because it is very important for the path analysis of carbon emission reduction and the formulation of carbon emission reduction policies. Although the direct carbon emission of tourism transportation is large, its relative indirect carbon emission is not as large as that of other tourism sectors.

5. Conclusion

For the total amount of tourism carbon emissions, annual growth has become the development trend, high east and low west has become the normal development. During the 10 years from 2010 to 2019, China's overall and regional tourism carbon emissions show an upward trend year by year, and the growth rate of central and western regions is significantly higher than that of the eastern region; in this upward trend, the tourism carbon emissions and the ability of tourism development to resist the crisis cycle are significant and show a "postcrisis rebound" effect after the end of the crisis to achieve compensatory growth in carbon emissions. In terms of tourism carbon emission intensity, decreasing year by year has become the development trend, and high in the west and low in the east has become the normal development. China's tourism carbon emission intensity is decreasing year by year in time and is high in the west and low in the east in space.

Therefore, combined with the trend chart of tourism carbon emission at the overall and regional level of China, China should take "enhancing the intensity of tourism carbon emission and reducing the total amount of tourism carbon emission" as the action guideline in the process of reducing tourism carbon emission, that is, on the premise of promoting the continuous growth of tourism income at the overall level and the regional level of China. To achieve the continuous reduction of tourism carbon emissions, complete the sustainable development of tourism under the green and low-carbon economy. As for the theme of "strategic research on sustainable development of tourism industry under the background of low-carbon and green economy," due to the restriction of the author's level and practical experience, there are the following research deficiencies and areas that need to be further improved in the future.

The research on the development strategy of tourism under the green and low-carbon economy is a systematic project, which needs to be based on the theories of tourism, geography, ecology, psychology, and economics. At present, the low-carbon concepts such as the low-carbon economy and low-carbon tourism are still in the research stage, and there is no unified theoretical framework The research is less and needs to be further improved. We explained, in this paper, the concept of sustainable development and the development of low-carbon tourism research ideas, combined with the concept of low-carbon economy to supplement and improve. However, under the green and low-carbon economy, the development of tourism strategy is a comprehensive process, and the selection of the index system needs to be further supplemented and improved. With further research in the future, the development of tourism is more in line with the requirements of the low-carbon concept and sustainable development concept and more suitable for practical application.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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