Development strategy research of low-carbon tourist city

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Abstract. Construction of low-carbon tourist city has become a strategic choice for the
development of city construction in our country, becoming the direction and goal of future city
development in China. In this paper, the development strategy of low-carbon tourist city is put
forward from the aspects of building low-carbon tourism culture, strengthening and perfecting
the relevant rules and regulations, establishing and perfecting the decision-making
management mechanism of low-carbon tourist city construction, establishing accurate, timely,
efficient and comprehensive ecological environment monitoring and supervision network,
building economical resource utilization system, strengthening science and technology
supporting of low-carbon city construction, establishing low-carbon tourism scenic spot,
low-carbon community or low-carbon demonstration area, etc.

1. Introduction
With the rapid development of economy, urban tourism become a new growth point of city
economy. At the same time of achievements of material and spiritual civilization provided by
cities, the achievements advanced civilization in cities is suffering destruction constantly, such
as continuous deterioration of urban environment, the urban ecological environmental unbalance
caused by tourist overload, the smaller and smaller living space of human being, sharply
decline of biological diversity. As a result, the natural and cultural ecological system was
damaged. In our country, a decision has been issued, that is “In our country, it is hoped to cut
carbon dioxide emissions per unit of gross domestic product (GDP) by 40 %–45 % by 2020
from the 2005 level. Also, we should incorporate it into the long-term plan of national
economic and social development as an obligatory target, and formulate relevant domestic
statistics, monitoring and assessment measures.” Therefore, it has profound significance to
advocate low-carbon tourism and develop low-carbon tourist city. Under the double pressure
of global climate change and the rapid development of urbanization in China, low-carbon
tourism city construction has become a strategic choice for the development of city
construction in our country, becoming the direction and goal of future city development in
China.

2. Development strategies of low-carbon tourist city

2.1. Raise awareness and build low-carbon tourism culture
The building of low-carbon city culture needs cooperation between various aspects strength,
adherring to concept priority is an important measure. On the one hand, we should advertise
“low-carbon concept” to people using various propaganda means, enhancing cognition of
tourists and tourism operators, building low-carbon tourism culture jointly. For example, we
could creat the atmosphere of low-carbon tourism culture by means of making feature films,
photos and information of indicator board in scenic spot. On the other hand, tourism product system should be reconstruction. Firstly, it needs to dig deeply and extract containing culture in tourism resources, promote and leisure the original tourism product brand, doing depth and fine in tourism product. Secondly, heavyweight tourist attractions that could attract foreign or remote tourists are digged based on a detailed investigation of tourism resources. Thirdly, leisure vacation products are packed and digged, and tourism experience of tourists should be diversified. We can build novel low-carbon tourism culture driven by all kinds of tourism projects, such as self-driving, camping ground, provincial low-carbon tourism demonstration zone, etc.

2.2. Improve and perfect the relevant rules and regulations, provide fundamental guarantee for the development of low-carbon city

We need to earnestly implement a series of laws and regulations, including “Circulation Economy Promotion Law”, “Environmental Protection Law”, “Cleaner Production Promotion Law”, “Energy Saving Law”, “Environmental Impact Assessment Law”, etc. Also, we need to implement green management vigorously, promote clean production and improve the added value of products and technical content continually, providing green products with long service life, less consumption of resources and environmental friendly.

It needs to issue some laws and regulations, such as “Low-carbon City Construction Regulation”, “Circular Economy Development Guidelines of Low-carbon City”, “Cleaner Production Verification Rules of Low-carbon City”, “Building Energy Saving Regulation of Low-carbon City” and “Environment Protection Regulation of Low-carbon City Construction Project”. Moreover, it is necessary to establish industry technical standards and technical specifications of low-carbon city, establishing and improving technical regulations system. Policies and regulations of financial, tax and environmental protection that could promote the development of low-carbon city circular economy are formulated and improved. Mandatory standard of energy consumption for products is established, the standard of waste recycle, technical regulations and detection methods are improved. Moreover, low-carbon compensation mechanism is established and perfected, environmental symbols and green procurement system are established, the sustainable consumption is guided, and the market for green products is standardized.

2.3. Establish an perfect the decision-making management mechanism of low-carbon tourist city construction

Organizational leadership is strengthen, target management responsibility system is perfected. Leading group of low-carbon tourist city construction is established, overall the action of departments and regional, and the major events in the low-carbon city construction are coordinated.

Decision-making mechanism of first making environmental impact assessment and then making decision is established. It needs to make environmental impact assessment and preliminary review for all kinds of construction projects in accordance with the law. As to the project not passing pre-qualification, the relevant departments shall not handle related formalities. Also, we need establish expert consultation committee of low-carbon city construction, and implement evaluation system of expert consultation on significant plans, policies and projects.

Assessing, monitoring and incentive mechanism of low-carbon city construction is formulate. Annual implementation scheme of low-carbon city construction is decomposed and implemented, the work of environmental protection and low-carbon city construction is listed into the important content of work performance appraisement of the leading cadres at all levels and accountability system is established. The work of low-carbon city construction should be incorporated into the supervision scope of major events. In addition, auditing system of environment protection should be built, and be incorporated into the scope of responsibility
auditing during the leader’s tenure of office.

2.4. Establish accurate, timely, efficient and comprehensive ecological environment monitoring and supervision network
The network construction of environmental dynamic monitoring is strengthen. Environmental dynamic monitoring system is established, remote sensing, geographic information system and satellite positioning system are applied, the accuracy and timeliness of the monitoring are enhanced. Local area network of environmental protection is established to realize automatic monitored control system in city networking, and information about the ecological environmental quality and government information of environmental protection are released timely through environmental protection website.
Environmental warning system and fast feedback system are established and perfected. Construction of warning system, such as natural disasters, geological disasters, biological safety, public health is strengthen, forecast information timely is released, reducing the loss of all kinds of disasters. Emergency monitoring and disposal system dealing with unexpected pollution accidents is constructed, database of risk sources and emergency monitoring plan of key pollution sources are established, the ability of emergency monitoring is strengthen and the speed of making fast feedback is enhanced, reducing the pollution losses to the minimum. The construction of environmental management institution and team are strengthen. environmental management department are perfected and strengthen according to the principle of unity, simplicity and effectiveness, and the funds of environmental monitoring, supervision, education and information personnel should be pulled into financial budget.

2.5. Build economical resource utilization system
On the basis of playing the market’ role to the fullest extent, we need to optimize the utilization of land resource, water resource and energy, establish economical resource utilization system and stable supply system, enhance resource bearing capacity and eliminate the resource bottleneck of sustainable development effectively.
Resource management system is perfect. Natural resource management system with combining sufficiently with each other, efficient, administrating according to law and authoritative is established. The paid use of natural resources, competitive exploitation and asset-like management are promoted, and the reform of property right system of natural resources is promoted actively.
Resources are exploited and protected reasonably. It needs to make meeting the development of economic and social, and requirements of water quantity and water quality for ecological environment as the guidance and the unified management system of water resources is established and perfected. Land use control system is implemented strictly, the quantum of construction land is controlled strictly, land arrangement and reclamation are developed actively, enhancing the intensive utilization level of land. Mining structure and layout are adjust, the number of mines is reduced, and scale exploitation and intensive management is promoted.

2.6. Strengthen science and technology supporting of low-carbon city construction
Technical supporting system of low-carbon city is established. Based on developing high and new technology, developing ecological link technology of economy system as the key, our goal is to form a green technology supporting system of low-carbon city, including environmental engineering, resource utilization of waste, clean production technology as well as ecological restoration.
Technical innovation is strengthen, the development of low-carbon technologies is promoted. Energy saving, cost-reducing and pollutants discharge reduction are promoted using technology of energy conservation and emissions reduction. New “carbon neutral” tourism activities are developed through promotion of low-carbon technology, advocating tourists
compensating their own carbon emissions in the process of tourism. We could organize “carbon neutral” tourism activities by means of enhancing energy efficiency, research renewable energy and afforestation.

Industrial structure is optimized, cleaner production is implemented. On one hand, we should try our best to use toxic or harmful raw materials and intermediate products as few as possible or don’t use that. On the other hand, we should recycle raw materials and intermediate products, improve management and enhance efficiency. At the same time, we should keep clean in the process of the whole production by mean of updating equipment, technology and process timely, scientific management of promoting production, maintenance and training.

2.7. Strengthen of public participation ability construction
Public participation system is established and perfected, conditions for the public participation are created, and public participation should be pulled into systematic orbit. Relevant trainings of low-carbon city construction at all levels of government, enterprise and community are developed. We should organize and guide the masses to carry out all kinds of mass constructive activities, such as rubbish classification, saving water and decreasing pollution, recycling and reusing resources, green communities, green courtyard, forming mass foundation of low-carbon city construction. Also, system of environmental integrity is established, the government information of environmental protection is made public, citizens’ rights to know, to participate and to supervise of the low-carbon city construction are expanded.

2.8. Increase investment of low-carbon city construction
Governments at all levels should arrange sufficient funds used in ecological environment protection and construction in financial budget in accordance with the requirements of establishing public finance. In addition, it is needed to establish and perfect funding system of environmental protection. Municipal public finance should arrange appropriate pollution control fund and special funds of supervision capability construction of environmental protection every year. Pollution charges in full according to law are levied, and the charges should be used in low-carbon construction projects, on a priority basis. According to the new pollution charge regulation, it is essential to levy pollution charges in full comprehensively and in accordance with the law. Pollution charges are mainly used in helping enterprises to implement cleaner production, environmental management system certification, establishing environmental protection model enterprises and organizing low-carbon project construction. Incentive finance and taxation policies are introduced. The government should build frequent supporting policies of direct financial subsidies, stimulating enthusiasm for developing low-carbon economy for enterprises by way of funding or discount loans. For example, in order to enhancing the enterprises’ technology investment and product development of clean energy and strengthening the comprehensive utilization of resources, we could adopt a method that combines deduction from income tax, investment exempts or tax rebate, accelerated depreciation and tax deferral to provide tax support.

2.9. Establish low-carbon tourism scenic spot, low-carbon community or low-carbon demonstration area
Internal resources in scenic spots are integrated, and industry chain of low-carbon scenic spots is built. The basic elements of tourism scenic area mainly include six aspects—eating, accommodation, transportation, traveling, shopping, entertainment. Therefore, it is necessary to integrate the six key elements of scenic spot using the idea of integrated management scientifically and reasonably, forming the internal industry chain development model of low-carbon scenic spot. Low-carbon community aims at not only minimizing carbon emissions produced by all the
activities in the community, but also hoping to achieve the goal of zero carbon emission through some measures, for example, ecological afforestation. Community is a entity unit of a city. Establishing low-carbon city could start from new residential district, such as building low-carbon communit or low-carbon demonstration area. Moreover, we can learn the advanced experience of low-carbon community construction from abroad, pay attention to construct energy saving building, use environmental protection material, optimize community structure, advocate green transportation and advanced garbage disposal idea according to the local climate, terrain and other natural environment conditions.

2.10. Give priority to the development of public transportation
With the accelerating process of urbanization, rising of people’s living standards, increasing number of private vehicles, city disease, such as traffic congestion, environmental pollution, arises at different levels in the process of urban development. As to low-carbon tourist city, it is necessary to optimize urban bus lines, increase the number of bus stations, increase the use of new energy public transport vehicles and strengthen investment of public transport facilities on the basis of the existing transport facilities. In addition, the corresponding travel policy should be set up, and the government should take the lead to take bus to commute to work, limiting the use of private cars. Strongly advocate walking, riding a bicycle or electric vehicles to commute to work. Increase rental stations of bicyclesand electric vehicles, decrease the times of transferring between buses in people’s travel and increase the convenient degree of bus trip.

3. Conclusion
Constructing low-carbon tourist city needs extensive participation of the whole society. Government should set up development plan of low-carbon city and strengthen supervision; enterprises shoud strengthen technological innovation and production of low-carbon products; also, the public should cultivate low-carbon consumption patterns and consumption habits. Only vigorously implement low-carbon transport, low-carbon building, low-carbon production, low-carbon tourism, and create synergy in the whole society, can the development of low-carbon tourist city realize.

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