

Urban Planning Path Selection Based on the Concept of Eco- City

Yixiao Xu

Zhuhai Xingge City Development Co., LTD, Zhuhai 519000, China.

Abstract: With the development of social economy, people pay more attention to the integration of human and nature, pay more attention to the construction of urban ecological environment, and put material civilization and ecological civilization in the same important position. Therefore, the concept of ecological city has become an important part of the current urban planning and design. However, in the actual urban planning and design, the application of the eco-city concept still has certain problems, resulting in the protection of natural resources in the urban planning and design of the situation is not enough. In this paper, we will analyze the path of urban planning based on the eco-city concept, and fully combine the principles of the eco-city concept to analyze the path of urban planning.

Keywords: Eco-City Concept; Urban Planning; Planning Paths

Introduction

With the development of social economy, people's quality of life has been effectively improved, and people have higher requirements for the convenience and comfort of the city. This has led to the traditional urban planning concept has been unable to meet people's requirements for urban development. Therefore, in the process of urban planning and development, adopt the concept of eco-city to effectively combine human and nature, and improve the construction of urban ecological environment, which can better meet people's needs. Ecological city concept for urban planning and development, to promote the sustainable development of the city.

1. Overview of eco-city concept

Eco-city concept refers to the relationship between people, resources and the environment in the process of urban planning and construction for effective coordination, so as to achieve the optimal allocation of various types of resources, improve the quality of the urban environment, and promote the sustainable development of the city. At the same time, the relevant departments through the formulation of scientific and reasonable laws and regulations to encourage people to participate in urban planning under the concept of eco-city, so that people can participate in environmental protection, thus promoting the harmonious coexistence of man and nature. Through advanced scientific and technological means to achieve better protection of natural resources, so that the urban ecosystem is maintained in a better balance, thus promoting the sustainable development of the city.

2. Based on the concept of eco-city urban planning principles

2.1 Ecological Priority Principle

Based on the eco-city concept of urban planning, we need to adhere to the basic principle of ecological priority, give full consideration to the ecological elements of the city, to achieve the maximum degree of protection of the urban ecological environment system, and effectively reduce the impact of urban development on the natural ecological environment. In this way, the natural landscape and historical sites can be effectively preserved. At the same time, in the urban planning process, need to be based on the concept of eco-city to carry out urban landscape planning and design, to enhance the art of urban landscaping, and comprehensively improve the overall aesthetics of the city. Finally, we need to pay attention to the ecological environment of the city's climate regulation, and resistance to natural disasters, so that the city can better cope with natural disasters and promote the sustainable development of the city.

2.2 Principle of keeping up with the times

Under the background of rapid social and economic development, people's concepts are also changing, which puts forward higher re-

quirements for urban planning. Therefore, in the process of urban planning, it is necessary to fully adhere to the principle of keeping abreast of the times to make clear the opportunities and challenges in the current urban planning process, so as to combine the actual situation of the city to make the urban planning direction and goal setting. This can develop a more perfect urban planning program, so that all kinds of urban resources can be better utilized, so that the natural ecological environment of the city to be better protected, so that the city's historical and cultural characteristics to be better protected, to achieve the effective integration of historical and cultural elements and modern fashion, to promote the better development of the city.

2.3 Overall coordination principle

Based on the concept of eco-city urban planning needs to adhere to the principle of overall coordination to strengthen the link between the city and the countryside, so that the city and the countryside form a whole. And through reasonable regional integrated planning and configuration to realize the flow of resources between urban and rural areas, to promote the integrated development of urban and rural areas. Make full use of the city's economic development to drive the better development of the rural economy, the use of rural ecological resources to promote the development of the urban ecological environment, so that can effectively get rid of the traditional urban planning concept of the constraints, to achieve a better use of resources, and promote the better development of the city.

3. Problems of current urban planning under the concept of eco-city

3.1 Difficulties in the implementation of the concept of eco-city

China's urban construction process, pay more attention to economic development, resulting in excessive resource development, there are more serious ecological and environmental problems. This leads to how to effectively coordinate the relationship between economic development and ecological environmental protection in the process of urban planning under the eco-city concept has become a very important issue. Although the eco-city concept gives a clearer path, but in the actual implementation of the process need to make certain trade-offs, resulting in the implementation of the eco-city concept is more difficult. Some city managers still exist in the concept of economic development is greater than everything, in the process of urban planning pay more attention to economic development and ignore the protection of the ecological environment, resulting in the application of the concept of eco-city in urban planning is difficult to effectively implement.

3.2 Backward urban planning and design methods

The urban planning and design under the concept of eco-city needs to fully consider the relationship between urban development and the ecological environment, to coordinate urban resources, improve the quality of the urban ecological environment, so as to realize the ecological and energy-saving nature of the city. However, in the actual urban planning process, urban planning and design methods are backward, resulting in urban planning methods and the concept of eco-city can not achieve effective integration, which leads to the implementation of urban planning and design program feasibility is low, and need to constantly optimize and adjust to barely implement the urban construction, which not only affects the construction of the city's ecological environment, but also affects the development of the city's economy.

3.3 Insufficient protection of natural resources

Eco-city concept of urban planning through rational planning and design to the city's natural landscape and historical sites for effective preservation, to increase the city's historical and cultural heritage, and increase the city's landscape effect. However, in the actual urban planning process, some cities, in order to pursue the overall effect of eco-city planning, there are cases of demolition of historical sites or destruction of natural landscapes, resulting in insufficient protection of urban natural resources. This will not only increase the cost of urban planning and development, but also have a negative impact on urban development, directly affecting the sustainable development of the city.

4. Analysis of urban planning path selection based on the concept of eco-city

4.1 Enhance the rationality of regional layout

Want to better apply the eco-city concept in the urban planning process needs to be more scientific and reasonable planning and design of urban planning of residential living areas, industrial parks and green areas, so as to enhance the rationality of the layout of the entire region. Through a reasonable layout to make the city's natural landscape and humanistic landscape for better integration, so as to realize the overall enhancement of the urban landscape. At the same time in the urban planning process need to strengthen the planning and construction of ecological industry, promote the development of new energy, thereby reducing urban energy consumption, promote the green and healthy development of the city.

4.2 Strengthen the protection of ecological environment system

There are rivers, wetlands, lakes and other ecological systems in the city, which can effectively regulate the city's climate, water quality, etc., and is also an important place for the survival and reproduction of plants and animals. Therefore, in the process of urban planning and design of eco-city concept, it is necessary to increase the protection of the urban ecological environment, through the setting of ecological corridors and other protective measures in the city to create better conditions for the growth and reproduction of plants and animals, and to promote the development of biodiversity to create better conditions for the ecological development of the city. For example, in the process of urban planning and development of a city, the construction of urban ecological environment through the wetland park, effectively protect the urban water ecological environment, and create good conditions for the survival and reproduction of plants and animals. Good ecological environment construction has attracted a large number of Siberian red-billed gulls to winter here, and gradually formed an important landscape for viewing Siberian red-billed gulls, realizing the effective integration of the city and nature.

4.3 Strengthen the utilization of new energy

New energy sources such as wind, water and solar energy are green, clean and environmentally friendly, do not have a large impact on the ecological environment, and play a very important role in the sustainable development of the city. So in the eco-city concept of urban planning and design need to strengthen the development and utilization of new energy, through the development and utilization of new energy can effectively reduce the urban pollution emissions, effectively reduce the urban development of the surrounding ecological environment pollution and damage, so that the urban development and ecological environmental protection can maintain a good balance between the city can be more effective to promote the development of the city, to achieve the sustainable development of the city.

4.4 Strengthen the protection of natural relics

Natural relics are very important landscape resources in the city, which is an important reflection of the city's history and culture. Therefore, in the urban planning of eco-city concept, it is necessary to strengthen the protection of historical natural relics. Historical and natural monuments are local cultural heritage, which can increase the historical and cultural heritage of the city, thus increasing people's sense of identity and sense of belonging, thus promoting the better development of the city. At the same time, through the protection of historical and natural monuments can effectively realize the effective integration of historical and natural monuments with education and tourism, and promote the better development of urban education and economy, thus promoting the sustainable development of the city.

Conclusion

To sum up, the eco-city concept is the key to realize the sustainable development of the city, so in the process of urban planning and design need to adhere to the principles of urban planning and design under the eco-city concept, through the scientific and reasonable urban layout planning, the rational application of new energy sources, the strengthening of ecological environmental protection, and pay attention to the protection of natural relics, etc. to realize a better planning and design of the city, and to promote effective integration of the city and

the nature, to better promote the development of cities. Better promote the development of the city.

References

- [1] Wu J. Path selection of urban planning based on the concept of eco-city[J]. Intelligent Building and Engineering Machinery,2023,5(4):103-105.
 - [2] Chai XX. Discussion on urban planning path based on eco-city concept[J]. Engineering Technology Research, 2022, 7(3):206-208.
- [3] Shangguan ZM. Analysis of urban planning points based on the concept of eco-city[J]. Building Materials Development Orientation, 2021, 19(3):49-50.
- [4] Wang CW. Discussion on Urban Planning Path Based on Eco-city Concept [J]. Urban Construction Theory Research (Electronic Edition),2023(6):19-21.

About the author:

Yixiao Xu, (born in September 1984), male, Han nationality, born in Jieyang, Guangdong Province, bachelor degree, research direction: urban planning.