

# Innovation in Economic Management of Architecture and Real Estate under Low Carbon Mode

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**Abstract:** *In recent years, with the development of China's economy and the continuous acceleration of urbanization, in order to ensure that construction and real estate construction meet the strategic goals of low-carbon environmental protection and green energy conservation, construction enterprises should recognize the importance of innovation in real estate economic management under the low-carbon model, optimize, improve, and innovate the existing economic management system. Only then can we ensure that real estate enterprises move towards a long-term and stable path of sustainable development. This article conducts research and analysis on the innovation of economic management in construction and real estate under low-carbon mode.*

**Keywords:** *Low-carbon Mode; Construction and Real Estate; Economic Management; Innovate*

## 1. Introduction

In the current low-carbon model, construction enterprises need to continuously develop and operate their own management and construction models in order to create a traditional green real estate industry. In this process, it is necessary to increase the promotion of environmental protection materials, building structures, and building decoration materials. Through social promotion and marketing, public opinion should be expanded, so as to continuously deepen the concept of low-carbon environmental protection into all aspects of construction and real estate, and comprehensively improve the actual value of China's construction and real estate.

## 2. Challenges faced by economic management of construction and real estate under low-carbon mode

### 2.1. Low carbon background leads to an increase in housing prices

In the current low-carbon context, in order to ensure that construction and real estate enterprises can move towards a healthy and stable sustainable development path, advanced technological means should be actively introduced, and the establishment of new green and environmentally friendly buildings can be achieved through innovation and optimization of economic management models.[1] However, in the current situation, in the process of researching and developing low-carbon and environmentally friendly technologies, a large amount of manpower and capital costs need to be invested, and the application of alternative energy such as solar energy and wind energy will be involved in this process, which will lead to an increase in the construction costs of buildings and real estate, and transfer the increase in construction costs to consumers, leading to an increase in housing prices.

### 2.2. Low carbon model affects the development of real estate enterprises

Under current circumstances, low-carbon technology has been widely applied in various industries in China. Under the current low-carbon model, the construction costs of construction and real estate in China continue to increase, further increasing housing prices and increasing consumer purchasing pressure, posing new challenges to the real estate economy.[2]

### 2.3. The low-carbon model will suppress the short-term development of real estate

In the continuous development of China's construction and real estate industries, a large amount of

national fossil energy is consumed, which has a higher consumption rate compared to traditional industrial resources. In the current process of construction and real estate production in China, carbon emissions often exceed national standards. Once low-carbon and environmentally friendly construction is required, it will seriously inhibit the short-term development of real estate enterprises.[3]

### **3. Problems in the current economic management process of architecture and real estate**

#### ***3.1. Relatively weak low-carbon awareness and low resource utilization rate***

In recent years, with the acceleration of urbanization construction in China, the construction and real estate industry has faced new opportunities. With the increasing demand for housing in various cities and regions, a large number of real estate enterprises will enter the real estate market, thereby increasing market competition pressure. In the current market environment, some enterprises only focus on short-term production benefits in order to obtain more economic and social benefits, without realizing the importance of ecological benefits. In addition, their low-carbon awareness is relatively weak, and the existing economic management system is not perfect and sound, resulting in the inability to carry out economic management work in an orderly manner under the low-carbon model. At the same time, although China has a large amount of construction and real estate resources, due to the large population base and relatively low per capita reserve resources of individuals, it will face serious resource shortages during the construction of real estate and buildings.

#### ***3.2. Insufficient cost control and production efficiency not meeting standards***

The level of cost control will directly determine the future development of construction and real estate enterprises, and also affect the production efficiency and quality of real estate project development. In the current situation, during the implementation of construction and real estate projects, due to the lack of accuracy and reliability in cost budgeting, as well as the lack of standardization and rationality in cost management, there are many problems in cost control work, seriously affecting the level and quality of cost control, and causing the project benefits of real estate enterprises to continuously decline. Firstly, due to the influence of traditional concepts, most real estate enterprises place more emphasis on construction progress and scale during the development and construction process, and use construction scale and efficiency as the main indicators of performance measurement. They do not recognize the importance of cost control, which leads to cost control work being superficial and the quality of cost control not being in place. In addition, due to the imperfect, unsound, unscientific, and unreasonable existing cost control mechanisms, as well as the lack of a sound, unified, and standardized supervision and management mechanism, the cost budget is unreasonable and non-standard, making it difficult to carry out cost control work in an orderly manner, resulting in high consumption and high costs during the construction process of construction and real estate projects.

#### ***3.3. Incomplete production and sales system, relatively low low-carbon efficiency***

Due to the relatively late application and insufficient deepening of the low-carbon model in the management process of construction and real estate brokerage, the existing production and sales system is also incomplete and incomplete, which leads to many problems in the production and sales process of real estate and construction, making the benefits of the low-carbon model unable to be maximized, and seriously affecting the future development of construction and real estate enterprises. For example, in terms of production methods, the actual application standards and requirements are not clearly defined in the application of environmentally friendly materials. Therefore, some developers only use some environmentally friendly materials in order to save construction costs, while others still use ordinary materials. However, they may exaggerate the environmental labels in the subsequent marketing process. At the same time, even though some developers have started to apply environmentally friendly technologies and materials in construction and real estate, and have invested a lot of financial and human resources, they still use traditional and outdated methods in the subsequent marketing process, without combining low-carbon promotional highlights, which seriously affects marketing effectiveness and reduces the economic and social benefits of the enterprise, making it impossible for real estate enterprises to embark on a long-term stable and healthy development path.

#### ***3.4. Unclear economic management objectives***

To promote the different levels of economic management in construction and real estate in a low-carbon mode, it is necessary to plan comprehensively, arrange meticulously, and deploy in detail, clarify management objectives, in order to promote the long-term stable and standardized operation of

real estate economic management, and effectively prevent hidden dangers and risks in the economic management process. In the current situation, the economic management goals of real estate and construction enterprises are not clear. However, the current government's macroeconomic regulation methods cannot provide targeted guidance on the problems that arise during the operation of enterprises in a timely manner, resulting in short-term benefits in the regulation of the real estate market and unable to promote the healthy development of real estate and construction enterprises towards economic management.

#### **4. Specific implementation plan for innovation in construction and real estate brokerage management under low carbon mode**

##### ***4.1. Establishing a sound and comprehensive management planning system.***

The government financial department should pay timely attention to the dynamic changes of China's construction and real estate economic market and development environment, develop a more targeted and scientific real estate economic planning management system and planning law enforcement system through tracking feedback, analysis and statistics, and actively learn from the management experience of other advanced units and departments, so as to comprehensively improve the level and quality of China's construction and real estate economic market management.

##### ***4.2. Promoting innovation in the real estate economic management system***

In the current low-carbon model, in order to move towards standardized and scientific development in the daily operation and management of the construction and real estate economy, government management departments should be required to play their own functional role, providing clear guidance for management planning, and also establishing sound, unified, and standardized laws, regulations, and rules. Only then can we ensure that each department, link, and business unit can clarify their responsibilities and authorities, and thus ensure the orderly and standardized development of construction and real estate economic management work under the current low-carbon model. Firstly, the government and relevant departments should clarify their responsibilities, authorities, and responsibilities in the management of the construction and real estate economy under a low-carbon model. By implementing the responsibility system, detailed division of authority, rights, and responsibilities is carried out to ensure that all levels of units and governments can fulfill their functional obligations and management responsibilities, and clarify the management authority and scope of each unit and department. In addition, governments at all levels should maximize the active role of the government in the process of market economy management, coordinate domestic real estate market activities through macroeconomic regulation, and guide real estate enterprises to carry out low-carbon construction. They should also plan their own policies in a coordinated manner with the actual development status of the real estate economy, in order to meet the overall needs of the overall situation, and actively explore more innovative enterprise management and business models, in order to establish a sound, unified, and standardized independent development and innovation system, stimulate the vitality of the real estate market, and ensure that real estate enterprises can move towards a long-term stable and sustainable development path.

##### ***4.3. Improving laws and regulations on real estate management***

In the current low-carbon model, in order to innovate and optimize the management methods of construction and real estate economy, it is necessary to strengthen supervision and legislation, and comprehensively promote the continuous implementation of China's real estate economic rights and responsibilities system through the support of corresponding laws and regulations. Firstly, based on the real estate economic management model under the low-carbon model, existing laws, regulations, and rules should be optimized and improved, in order to comprehensively promote China's natural resource development and utilization management as well as real estate investment and transaction supervision legislation. Combined with existing regulations and real estate policies, a sound, comprehensive, and orderly legal and regulatory system for green, environmentally friendly, low-carbon, and energy-saving real estate economy should be established, in order to fully mobilize the enthusiasm and initiative of real estate enterprises in economic management innovation, and promote real estate enterprises to move towards a long-term stable and sustainable development path.

##### ***4.4. Implementing the concept of low-carbon environmental protection***

With the acceleration of urbanization construction in China, real estate enterprises will cause

damage to the natural environment during their continuous development. Therefore, real estate enterprises should implement the concept of low-carbon environmental protection in their economic management process. For example, in the construction process of buildings and real estate projects, green materials and construction technologies should be selected to comprehensively ensure that green and low-carbon can be organically combined with building construction work. Furthermore, it makes the construction process more green, environmentally friendly, energy-saving, and emission reduction. By scientifically and reasonably treating the waste, dust, and toxic substances generated during the construction process, environmental pollution is prevented and the local natural ecological environment is protected.

#### **4.5. Scientific control of construction costs for real estate enterprises**

In the current low-carbon context, in order to promote the continuous improvement of economic management level in construction and real estate, construction enterprises should actively introduce advanced scientific and technological advancements, and further research and innovation in related technologies in the future planning and construction process. At the same time, construction enterprises should also have effective and efficient communication with developers, so as to use more green materials and technologies in the construction process, comprehensively improve the quality and level of China's construction and real estate construction, and ensure that the development of green buildings can meet the strategic goals of green environmental protection, low-carbon energy conservation. In order to ensure the effective completion of the above goals, it is necessary to change the traditional single and outdated investment, construction, operation, and management model of real estate enterprises in this process, and effectively integrate it with other construction project investments to comprehensively improve the efficiency and quality of China's real estate economic construction and operation management. Effective control and comprehensive management of construction costs can be carried out, enabling construction units to obtain more economic benefits social results.

Therefore, the management personnel of real estate enterprises should actively introduce advanced real estate business models based on the actual development status of the enterprise, thereby improving the level and quality of their own business management, and ensuring that resources can be effectively and reasonably utilized. At the same time, real estate enterprises should choose high-quality low-carbon environmental protection materials with environmental performance and benefits, and integrate new environmental protection technologies in the construction process, in order to comprehensively improve the level of real estate economic management under the low-carbon model. In this process, for the construction of rural roofs and walls, efforts can be made to promote prefabricated building components and effectively control indoor temperature differences based on the current regional environmental and climatic conditions. By scientifically and reasonably equipping environmentally friendly building materials, new types of house wall structures can be utilized to comprehensively improve the quality of rural residential buildings. Compared with traditional buildings, prefabricated building have higher energy saving performance, which can save 50% of building energy consumption in the use process; For areas with relatively high ambient temperatures, the energy-saving performance of the entire building can be comprehensively improved by laying lightweight wall structures, such as insulation panels, on the walls and exterior of the building.

#### **5. Conclusion**

In summary, in the current low-carbon model, in order to promote the long-term and stable sustainable development of construction and real estate enterprises, advanced low-carbon management models and concepts should be actively introduced, and the level and quality of economic management in construction and real estate should be comprehensively improved. Only in this way can construction enterprises occupy a dominant position in the fierce market competition and obtain more economic and social benefits.

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