



Research on Existing Issues in Continuously Promoting Green Building Engineering Management

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Abstract: With the rapid growth of population and the huge demand for urbanization construction, China's construction industry has achieved rapid development in recent years. However, due to weak environmental awareness, the traditional construction industry still relies mainly on extensive construction methods. In the production of building materials and construction projects, there is often a large amount of waste of resources and energy, as well as pollution and damage to the natural environment. This is also the reason why environmental problems are becoming increasingly prominent at present. Therefore, green buildings were born in this way. However, in the process of promoting green construction, many problems have also arisen. This article provides corresponding discussions on this issue.

Keywords: green building, engineering management, existing problems, ponder over

1. Introduction

After the reform and opening up, with the development of society and the continuous development of the construction industry, people not only have great material satisfaction, but also pursue higher spiritual realms. The concepts of green building and environmental protection have been widely recognized and praised. Green building project management can create a better ecological environment for humanity and promote the healthy development of cities. However, there are still some problems in the current management of green building projects, and we need to combine them with the problem to seek effective solutions to promote the healthy development of cities in China.[1]

2. Overview of Green Buildings

Green building refers to minimizing resource consumption and pollutant emissions during the actual lifespan of a building, making it more efficient, healthy, and harmonious with nature. The construction management of green buildings refers to the use of scientific and effective methods during the construction process to reduce environmental pollution and resource consumption, which can better protect the environment and make the construction industry more in line with the concept of sustainable development.[2]

3. Continuously promoting the existing problems in the management of green building projects

In the current construction process, enterprises mainly face the following problems in promoting green building project management: ① The implementation of regulations related to green buildings is not perfect, and the theme has not appeared for a long time. People only have a superficial understanding of it without specific operating methods. In the design and construction process of green buildings, there are still many evasions, and there is a lack of effective supervision in the material procurement process. ② The imperfect evaluation system will hinder the development of green construction projects.[3] The entire management system is only limited to some public buildings and residential buildings, while complex buildings cannot achieve this goal, thereby limiting the development of green construction projects. At present, the management level of green construction projects in China is not high, with a shortage of professional talents. The management concepts of construction enterprises are relatively lagging behind, and the management methods used cannot meet the needs of green construction project management. They still only focus on economic benefits and ignore the concept of green environmental protection. In addition, there is a very shortage of relevant technical personnel, and construction personnel are not very clear about the standards of green buildings and do not have specialized guidance, which makes it difficult to achieve the management goals of green construction projects.

4. Effective Ways and Strategy Analysis for Continuously Promoting Green Building Engineering Management

4.1 Establish a sound green standard system

With the continuous deepening of green management concepts and sustainable development strategies in engineering project management, higher requirements have been put forward for the transformation of engineering project management work. In response to the current problems in green engineering project management and based on the current development situation in China, we need to build a complete set of green standards that can support the management and development of green engineering projects, update relevant processes, technologies, and materials in a timely manner, conduct energy-saving evaluations, and evaluate them, so as to further optimize the internal and external environment of green engineering project management. By improving and implementing the green standard system, enterprises can be guided to implement green engineering project management, establish a clear green engineering construction special standard, and conduct in-depth research on it, so as to better promote the sustainable development of green engineering project management.

4.2 Improve the management level of green building projects and strengthen team building

In the process of developing green building projects, as the construction party, it is necessary to strengthen their own team building, enhance their ability to manage green building projects, and thus achieve the goals of green building project management. Therefore, when recruiting construction and management personnel, construction companies need to have both theoretical knowledge of green building construction and solid work experience, be familiar with relevant laws and policies issued by the country, hire green building project management talents, enhance team building and professional capabilities, and promote the smooth progress of green building project management work. Construction companies should increase training for their employees, enhance their understanding of green building project management, and introduce incentive mechanisms from the perspectives of construction, technology, and management. This will enable employees to fully understand the importance of energy conservation and protection in green building project management, and apply relevant technology and knowledge to improve the overall level of green construction management in the building.

4.3 Increase policy support efforts

Given the significant role played by the state in the management and development of green engineering projects, and in response to the current problems in the management of green engineering projects in China, the state should strengthen support for green engineering project management, improve relevant policies and regulations, and in response to the actual situation of high investment and low returns in green engineering project management in China, improve and perfect the management system of green engineering projects, creating a favorable environment for their development. For example, prioritizing government support policies such as tax reduction and exemption, such as prioritizing inclusion in provincial-level key engineering projects and funding subsidies, enhance the initiative of enterprises in promoting green engineering project management, enhance investor enthusiasm for green engineering projects, ensure a balance of investment and benefits among various stakeholders in green engineering construction, and promote green engineering. Provide guarantees for the smooth implementation and development of the project. Under the leadership of the government, it is advocated to establish green values, cultivate people's awareness and habits of green consumption, cultivate people's green consumption concepts, enhance their understanding of green management concepts and sustainable development strategies, and promote the development of green engineering project management through the continuously expanding green construction demand market, thereby alleviating current environmental problems and promoting the healthy and sustainable development of the green building market.

4.4 Effectively manage the innovation of engineering materials

According to relevant national regulations, purchase the most suitable environmentally friendly building materials, such as using environmentally friendly water-soluble engineering coatings for construction, in order to better meet the needs of green environmental protection. According to the construction plan and material procurement, ensure that there is no waste. When purchasing engineering materials, it is necessary to fully consider the price and durability of the materials, pay attention to the composition of the materials, and strictly control the management during the construction process.

4.5 Innovation Engineering Energy Consumption Management

On construction sites, water resources are often wasted. Therefore, in order to improve the efficiency of water resource utilization and reduce unnecessary losses, it is necessary to manage the water resources on the construction site. The first aspect is to set up a small water-saving equipment to reduce water resource waste and ensure the water use condition in en-

gineering construction. Reasonable and scientific utilization and treatment of wastewater generated during the construction process, such as building rainwater and sewage collection tanks, using them for dust reduction, etc., can enable efficient reuse of water resources.

4.6 Strengthen technical management

Before construction begins, the chief engineer and others should evaluate the plan to ensure its feasibility. Then, it is necessary to communicate with on-site management personnel, material procurement, storage and other management personnel at all levels to determine the key points of technical management and implement them in practice. Roof greening technology should solve problems such as leakage, debris shedding, and daily maintenance. During construction, roof leakage can be evaluated to ensure that the formation leakage rate is above 85%, while the concrete surface leakage rate is controlled within 2% -2.5% to avoid top layer leakage. By repairing buildings to prevent garbage from falling off, greening should be done every 4-6 weeks to ensure that green buildings can fully realize their value while avoiding various problems.

4.7 The application of sustainable energy technologies

The first aspect is to utilize solar energy. Solar energy is a high energy and pollution-free energy source that has a long history in the world. In areas with abundant solar energy, solar energy devices can be used, most importantly solar water heaters. In addition, solar photovoltaic power generation is widely used in green and energy-saving buildings due to its advantages such as no noise and no environmental pollution. Solar energy resources are very abundant and can achieve short distance power supply, which not only saves the cost of long-distance transmission, but also integrates with buildings. Therefore, it can be efficiently applied in modern buildings. The second is to utilize wind power generation. Like solar energy, wind power is a clean energy source. China has abundant wind resources, and we should increase the promotion of wind power generation and the utilization of clean energy. Efficiently convert wind power into electricity and reduce the use of non renewable energy.

5. Conclusion

In summary, in the process of economic and social development in our country, correspondingly, the efficient and high-speed lifestyle in cities has made people increasingly busy. Long term high-intensity work can cause great harm to the human body. In order to better protect one's health in cities, green buildings can play a great role. Green buildings can provide humans with a healthier and greener living environment. To better ensure the management of green building projects, targeted and targeted solutions must be provided to ensure the sustainable and stable development of green building projects.

References

- [1] Zeng Facui. Innovation in Construction Engineering Management and Green Construction Management. Residential and Real Estate, 2021.
- [2] Fu Rao. Key Measures Analysis of Green Building Engineering from the Perspective of Managers. Engineering Technology Research, 2020.
- [3] Yang Qing. Research on the Application of Green Building Development Concept in Construction Engineering Management. Residential and Real Estate, 2020.