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An Analysis of Societal Propaganda and Practical Strategies Guided by the Popularization of Green Building Concepts

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Abstract:

. The article discusses the global trend towards green building practices driven by the increasing environmental challenges posed by human activities. It outlines the key characteristics of green buildings, such as energy efficiency, resource recycling, and indoor environmental quality. Developed countries have made significant strides in green building standards and certifications, including BREEAM in the UK, LEED in the US, and CASBEE in Japan. However, China's progress in green building has been slower due to various challenges such as insufficient policy support and low awareness. To address these challenges, the article proposes utilizing psychological theories to promote green building concepts in China, drawing parallels with successful initiatives like garbage classification. By leveraging spillover effects, cognitive dissonance, self-perception, and social diffusion theories, targeted propaganda strategies can be developed to raise awareness and drive the widespread adoption of green building practices in China. Such efforts are crucial for achieving sustainable development goals and improving the quality of life for residents while mitigating environmental impacts.

Keywords: Green building, Promotion Strategy, Sustainable development, psychological theories, Development Status

1. Introduction

Due to the continuous growth of the global population, the demand for land, water, and energy resources is also increasing, while these resources are not inexhaustible. More importantly, environmental issues facing the world are increasingly worsening due to human activities. The emission of large amounts of greenhouse gases in daily life leads to rising global temperatures, melting polar ice caps, and rising sea levels. Rapid industrial development generates large industrial emissions, and carbon dioxide from vehicle exhaust is one of the main gases causing the greenhouse effect. The use of electrical appliances and the excessive consumption of energy resources have led to the destruction of the ecological environment. Faced with these environmental issues, people's awareness of green environmental protection is gradually increasing. Because the construction industry consumes a large amount of energy and resources in the construction process, operation and maintenance, and during use, it has a significant negative impact on the global ecological environment and energy resources. Therefore, people are exploring and promoting green building concepts and advocating for their adoption over traditional construction methods.

2. Concept and Characteristics of Green Building

The concept of green building emerged in the process of continuously discovering and improving environmental issues. Green building advocates for harmonious coexistence with the environment and follows the principle of sustainable development. Its main purpose is to minimize the negative impact on the ecological environment, improve the energy efficiency of buildings, the utilization efficiency of water resources, and the quality of indoor environments.

2.1 Green buildings have six main characteristics

2.1.1 Energy Saving and Emission Reduction

Green buildings primarily reduce energy consumption and carbon emissions caused by building usage by employing advanced green energy-saving technologies and equip-

ment. This involves using renewable energy sources such as solar energy, geothermal energy, and energy-efficient devices such as LED lighting and high-efficiency insulation materials.

2.1.2 Resource Recycling

Green buildings promote the recycling of resources throughout their entire life cycle and maximize the utilization of energy resources to reduce unnecessary waste and overconsumption of natural resources. This is achieved through the use of renewable and recyclable materials and the recycling of construction waste.

2.1.3 Environmentally Friendly

Green buildings pay significant attention to the harmonious coexistence between the building project itself and its surrounding environment, minimizing the damage to the surrounding ecological environment. This is done through measures such as protecting natural landscapes, increasing green coverage, reducing urban heat island effects, and enhancing supervision and management.

2.1.4 Indoor Environmental Quality

Green buildings strive to provide users with a healthy and comfortable indoor environment to enhance residents' quality of life and work efficiency. This involves optimizing daylighting design, innovative natural ventilation methods, and improving air quality to ensure users experience a clean, comfortable, and environmentally friendly indoor environment.

2.1.5 Social Responsibility

Green buildings not only focus on environmental protection but also assume corresponding social responsibilities to promote sustainable social development. They consider the impact of buildings on communities, residents, and the surrounding environment, aiming to create a more equitable and harmonious social environment and promote awareness of green environmental protection.

2.1.6 Sustainable Development

Green building is a concrete manifestation of implementing the concept of sustainable development, achieving the coordinated development of the economy, society, and environment. By comprehensively considering economic benefits, social benefits, and environmental benefits, it achieves the long-term sustainable development of buildings.

2.2 Green Buildings: Pioneers of Sustainable Development

The characteristics of green building such as energy saving, resource recycling, environmental friendliness, indoor environmental quality, social responsibility, and sustainable development, green building has become the mainstream direction of development in the construction industry. It also receives strong support from governments, as it not only benefits environmental protection and improves users' quality of life but also paves the way for the future development of the construction industry, holding significant social and economic significance.[6]

3. Current Development of Green Building Worldwide

3.1 Development Status in Developed Countries

Most developed countries have made considerable progress in green building by the end of the 20th century. They have established relatively comprehensive green building evaluation standards.

3.1.1 BREEAM (Building Research Establishment Environmental Assessment Method) in the UK

BREEAM, introduced by the Building Research Establishment in the UK in 1990, is one of the world's earliest green building assessment systems. BREEAM assesses various aspects of green buildings, covering energy use, water resources, environmental pollution, waste management, transportation design, and comfort. It provides comprehensive environmental performance evaluations and assigns green grades to buildings (Pass, Good, Very Good, Excellent & Outstanding).

3.1.2 LEED (Leadership in Energy and Environmental Design) in the United States

LEED, developed by the U.S. Green Building Council in 1998, is a green building evaluation system. It covers assessment directions mainly including energy, atmosphere, water resources, material resources, indoor environment, and design innovation. Its purpose is to provide a comprehensive assessment framework for sustainable development in the construction industry and classify levels through point-based rating (Certified, Silver, Gold & Platinum).

3.1.3 CASBEE (Comprehensive Assessment System for Built Environment Efficiency) in Japan

CASBEE, launched by the Institute for Building Environment and Energy Conservation in Japan in 2001, is a green building evaluation system. It evaluates the overall environmental performance, economic performance, and social performance of buildings by examining energy effi-

ciency, water resource utilization, material resource utilization, indoor environmental quality, health, and comfort. Buildings are ultimately graded into five levels: A+, A, B, C & D. [7]

3.2 A Global Push for Green Building Initiatives

Apart from these representative green building assessment systems, other developed countries have also implemented their own green building evaluation systems. The main purpose of these assessment systems is to encourage and promote the greening transformation of the traditional construction industry amid the worsening global environmental issues, supporting its transition towards more environmentally friendly, energy-efficient, and sustainable practices. Governments in foreign countries have provided strong impetus at the policy level, issuing various policies and incentives such as energy-saving funds, tax exemptions, preferential loans, and fiscal subsidies. [4] Their incentivizing and compulsory actions in energy conservation practices have helped green buildings establish a foothold in the construction industry market. The promotion of green labels has greatly aided the dissemination of green building concepts. Visual designs like the "Energy Star" have played a leading role in green building promotion, evolving from mandatory implementation and passive promotion to incentive-based development models, guiding people to actively cooperate and implement in social activities.[3]

3.3 Current Status of Green Building Development in China

Against the backdrop of a low-carbon economy and sustainable development, China is committed to developing green buildings and encouraging the gradual transformation of the current traditional construction industry towards green building. However, China's progress in green building development has been relatively slow, and its current development process is still in the stages of research and development, promotion, and the improvement of policy and standard systems. The concept of green building was proposed by American architect Paul Soleri in the 1960s. China's green building development follows the principle of "adaptation to local conditions, four-saving and environmental protection." [5] Although each country or region has different descriptions of the concept of green building, they all revolve around the themes of efficient use of resources and energy, creating a healthy and comfortable living environment for users, and harmonious coexistence with the surrounding environment.

The popularization and promotion of the concept of green building in China have been significantly affected by obstacles faced in its development. To this day, the main obstacles facing the development of green building in China are insufficient government policy support, technological innovation bottlenecks, lack of green talents, and the low awareness of the Chinese market regarding green buildings.[6]

China's green building evaluation system was formulated by the China National Standardization Committee and was implemented in 2014. Its purpose is to guide and standardize the work of professionals in the construction industry in China, so that environmental friendliness and sustainability factors can be considered during the design, construction, and operation of buildings. The promotion and popularization of the concept of green environmental protection and green building in China still face significant challenges. Both the relevant workers in the construction industry and the general public have inadequate understanding of the concepts. In terms of green building, not only is there insufficient recognition among construction professionals, but there are also significant misconceptions among ordinary consumers. Many people generally believe that increasing green coverage makes a building "green," or they may think that green buildings are too expensive due to innovative green technology. Consumers prioritize current price factors when considering green buildings, overlooking the comfort and cost savings during usage that green buildings bring.[1]

4. Green Building Promotion Strategy

The focus of promotional efforts is to increase awareness and understanding of what green building entails among various sectors of society, thereby raising social awareness of green building. Currently, the entire traditional construction industry is continuously adopting and developing new green technologies to better facilitate the transition towards sustainability. Addressing the issue of market acceptance of green buildings, enhancing public understanding and awareness of green buildings can expedite their advancement. The design of green building promotion strategies can draw upon certain psychological theories to effectively disseminate green building concepts to society and promote their development and proliferation. [8]

4.1 Spillover Effect Theory

The spillover effect theory suggests that one person's actions or attitudes can influence those around them. When promoting the concept of green building, showcasing

success stories and positive impacts can stimulate others' interest and involvement. For instance, displaying completed and well-functioning green building projects, including residential, commercial, and public buildings, can highlight their energy-saving, environmentally friendly, and comfortable features, attracting more attention and learning about green buildings. Alternatively, setting an example through public figures or celebrities who actively advocate for and practice a green lifestyle can serve as role models, inspiring more people to support and engage in green building.

4.2 Cognitive Dissonance Theory

Cognitive dissonance theory suggests that people feel uncomfortable when faced with inconsistent or contradictory information, motivating them to change their behavior or attitude. When promoting the concept of green building, providing the public with scientific research data and practical examples related to green buildings can showcase their significant advantages in energy efficiency, emissions reduction, and improvement of indoor environmental quality. This can trigger cognitive dissonance, prompting individuals to reassess the differences and values between traditional buildings and green buildings. Additionally, emphasizing personal responsibility for environmental protection and sustainable development can align personal values with supporting green buildings, thereby alleviating cognitive dissonance and motivating action.

4.3 . Self-Perception Theory

Self-perception theory suggests that people understand their inner feelings and attitudes by observing their own behavior. When promoting the concept of green building, organizing public visits to green building projects allows individuals to experience their comfort, healthiness, and environmental friendliness firsthand. Encouraging public participation in the design and construction process of green buildings enhances their sense of involvement and identification. Providing relevant training and education to the public helps them grasp knowledge and skills related to green buildings, boosting their confidence and self-efficacy in practicing green building.

4.4 . Social Diffusion Theory

Social diffusion theory explores how new ideas or behaviors spread and are accepted in society. When promoting the concept of green building, leveraging social media platforms such as Weibo, WeChat, and TikTok can widely disseminate knowledge and information about green buildings, attracting more people's attention and participation. Apart from leading enterprises, cultivating experts, scholars, industry leaders, and opinion leaders in the green building field can help disseminate green building concepts and practical experiences to the public through various channels such as speeches, articles, and interviews, influencing more people to support green building.

4.5 . Green Building Promotion Strategy Guided by Psychological Theories

From a point-to-surface perspective, utilizing psychological theories can devise more comprehensive and targeted promotional strategies. China's experience in promoting "garbage classification" serves as a good case study. By drawing on and synthesizing previous experiences, effective dissemination of green building concepts to Chinese society can be achieved. Through the spillover effect theory, cognitive dissonance theory, self-perception theory, and social diffusion theory, information dissemination and influence can be achieved in the promotion process, driving the development and popularization of green building in China.

5. Conclusion

This article delves into the current global development status of green building, including the assessment systems adopted by developed countries such as the UK, the US, and Japan, namely BREEAM, LEED, and CASBEE, respectively. Subsequently, addressing the challenges facing the development of green building in China, it proposes promotional strategies based on psychological theories. Through the theories of spillover effect, cognitive dissonance, self-perception, and social diffusion, more targeted and effective promotional strategies can be formulated to promote the dissemination of green building concepts in China. Green building is crucial for addressing environmental issues, and promotional efforts are key to its widespread adoption. By utilizing psychological theories, we can better disseminate the concept of green building to society, ignite public interest and awareness in green building, and promote its widespread adoption and practice in China. This endeavor is significant for achieving sustainable development goals, improving the ecological environment, and enhancing residents' quality of life. Therefore, we call for joint efforts from governments, enterprises, and all sectors of society to strengthen the romoteon and dissemination of green building concepts and make active contributions to building a green and low-carbon future.

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