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Green Retrofitting Aged Residential Buildings: An Empirical Study in Hong Kong

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Abstract

Given the urgent needs to reduce carbon emission and energy consumption, green retrofit provides a sustainable solution to improve existing buildings' performance and contributes to a low carbon urban development. Accordingly, studies on the promotion of green retrofit technologies (GRTs) and green retrofit policies (GRPs) have received great attention globally. However, few research efforts have been done to study the implementation of GRTs and GRPs for particular regions such as Hong Kong. This paper aims to perform an empirical investigation on the promotion of GRTs and GRPs adoption within the context of Hong Kong. The findings of the paper are very useful for various stakeholders to have a better understanding of the GRTs and GRPs, such as their applicability and importance in the local applications. The priority guide provides a valuable reference for the local government to review their current policies, develop the future GRPs, and nurture a healthy environment for green retrofit. This study is significant for providing a fundamental guide for future research and development of green retrofit in local and global contexts.

Keyword: Green retrofit; Aged residential building; Technology; Policy; Hong Kong