Green property development practice in China: Costs and barriers

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Abstract

The promotion of sustainable practice in property development has resulted in the development of various green technologies. Will green technologies bring about additional cost to the property projects? This paper examines the costs and barriers in applying the green elements to the process of developing property projects. By conducting three case studies in China, it is found that the passive design strategy, for example, walls insulation, low-E window and solar heating appliances are comparatively inexpensive to apply as opposed to 'active' design strategies such as solar PV or heat pump technologies. By analyzing the additional cost of the three types of green buildings, it is concluded that the major barrier, the higher costs has hindered the extensive application of green technologies in China. A green strategy plan (GSP) is proposed to provide a vehicle for a more systematic use of green strategies to increase the sustainability of a property project. Research findings in the study provide valuable references to guide property development practice towards the sustainable agenda and the manner in which stakeholders approach or low carbon property development projects