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Sustainability of High-Rise Affordable Housing: Critical Issues in Applying Green Building Rating Tools

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Abstract : Nowadays, going green has become a trend, and being emphasized in the construction industry. In Malaysia, there are several green rating tools available in the industry and among these, GBI and GreenRE are considered as the most common tools adopted for residential buildings. However, being green is not equal to or making something sustainable. Being sustainable is to take economic, environmental and social aspects into consideration. This is particularly essential in the affordable housing sector as the end-users belong to lower-income and places importance on many socio-economic needs beyond the environmental criteria. This paper discusses the arguments in proposing a sustainability framework that is tailor-made for high-rise affordable housing. In-depth interviews and observation mapping methods were used in gathering inputs from the end-users, non-governmental organisations (NGOs) as well as the professionals. 'Bottom-up' approach was applied in this research to show the significance of participation from the local community in the decision-making process. The proposed sustainability framework illustrates the discrepancies between user priorities and what the industry is providing. The outcome of this research suggests that integrating sustainability into high-rise affordable housing is achievable and beneficial to the industry, society, and the environment.

Keywords: green building rating tools, high-rise affordable housing, sustainability framework, sustainable development

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