

Contribution of Green Buildings towards Achieving Sustainability: A Perspective of Leed-Certified Buildings in Sri Lanka

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Recently, the focus on green buildings has come to the forefront in many countries. However, in the context of Sri Lanka, the number of green-certified buildings seems to be still at a minimal level and the focus is solely on the energy efficiency features. Although green buildings are meant to be sustainable, the level of incorporation of sustainable features and their contribution to sustainability is questionable. Therefore, the current study aims to examine the extent of incorporation of sustainable features in green-certified buildings in Sri Lanka. A review was conducted into the USGBC database and the profile of green-certified buildings in Sri Lanka was examined to identify the extent of green certification in Sri Lankan buildings and their level of achieving sustainable features. The reasons for the level of achievement of those sustainable features were then identified by interviewing professionals who engaged in green buildings. Accordingly, the selected buildings have over 80% of achievement in terms of water efficiency and sustainable sites, while other design features such as energy and atmosphere, indoor environmental quality, and material and resources are achieved below 50%. Further, energy and atmosphere, and indoor environmental quality features require alternatives with higher initial cost, early commitment, and an integrated design process. Most of the time, energy and indoor environmental quality features seem easy to achieve, but often turn out to be far more complicated, and thus less feasible, than anticipated. Knowing sustainabe achievement of features would enable green building investors to select the most appropriate features for a given construction.

Keywords: green building, leed certification, sustainable features, sustainable development, Sri Lanka