

## Enhancement of Building Sustainability by Using Environment-Friendly Material

**Authors :** Rina Yadav, Meng-Ting Tsai

**Abstract :** In the present scenario, sustainable buildings are in high demand. The essential decision for building sustainability is made during the design and preconstruction stages. Main objective of this study is reduction of unfavorable environmental impacts, which is a major cause of global warming. Based on this problem, to diminish the environmental hazards, present research study is applied to provide a guideline to designer that will be useful for material selection stage of designing. This can be achieved by using local available materials such as wood, mud, bamboos instead of cement, steel, concrete by reducing carbon dioxide emission. Energy simulation will be analyzed by software to get the comparable result. It will be encouraging and motivational for designer while using ecofriendly material to achieve points in Leadership in energy and environmental design (LEED) in green rating system.

**Keywords :** sustainability design, lead rating, LEED, building performance analyses

**Conference Title :** ICSAUD 2015 : International Conference on Sustainable Architecture and Urban Design

**Conference Location :** Kyoto, Japan

**Conference Dates :** November 12-13, 2015