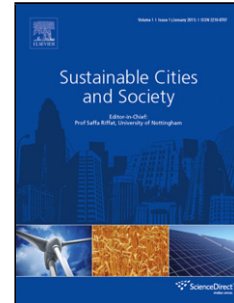


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Development of Sustainability Assessment Tool for Existing Buildings

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Highlights

- Sustainability is one of the primary concern the modern building industry, especially the existing buildings, to overcome its environmental impacts.
- Each rating system has its assessment attributes, evaluation models, and ranking scale.
- The key aspect of developing a global or generic rating tool is identifying the sustainability assessment attributes that have the significant effect on the sustainability of existing buildings.
- Introducing multilevel weight-based assessment model helps in reflecting the local variations in the sustainability appraisal process.
- Integration of BIM and energy simulation modeling are utilized in the proposed sustainability assessment framework.
- Explicit calculation procedures and easiness of use are crucial aspects in the overall sustainability appraisal process.

ABSTRACT: Under climate change impacts, the world is becoming one village. This motivated the application of sustainability rating systems of buildings away from their origins

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