

Regionally Adjusted SBTool Version to be Used by iiSBE Chapters

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Abstract

European countries building regulatory frameworks have been adapted in harmony with the European legislation.

In Spain, the approval of the new building code has meant the overcoming and modernization of the building regulations. As in the rest of the performance-based building codes in other countries, the sustainability is not yet specifically addressed in this first version of the Code, but there are several requirements that may be considered as an important step towards more sustainable buildings.

The implementation of the Energy Performance of Building Directive (EPBD) will put building constructions on an equal footing with electrical appliances, heating and cooling equipment, etc in terms of energy labeling from A to E qualification.

This methodology produce information that allow to get easily the minimum acceptable performance or reference values and the best practice building construction for those sustainable assessment methods based on the performance benchmarks. Other environmental issues can be also adapted to the same energy labeling system.

This report exposes the Spanish initiative to develop a methodology for SBTool regionally adaptation by the definition of a list of impacts that a building caused in the environment and life cycle cost in accordance with ISO/CEN standards for assessment environmental building and calculation methods. The impacts could be weighted, by authorized third-party organizations

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according to the apparent relative importance of the sustainability, the extent, duration, intensity of potential effect and the effects on the environment.

This methodology allows local organizations or iiSBE Chapters to develop one or more rating systems that suit the region.

The proposed method develops a comprehensive check-list of measures and strategies for accomplishment with the environmental performance of the buildings. This method places emphasis on the ability to have the system reflect the relative importance of performance issues in a particular region.

A list of mandatory criteria should be evaluated. Each criterion is associated with one or more impacts and the impact reduction is evaluated by the implementation of a list of sustainable measures to be incorporated in the building construction project.

The result is calculated for each “impact”, and shows the impact avoided, as amelioration from reference building. It shows two outputs, the first shows the score obtained in the assessment process and, the second shows the global impact reduction from reference building.

A labeling system similar to energy can be calculated by waiting the impact and defining the reference building in terms of sustainability.

Keywords: Environmental assessment tool, Impacts evaluation, Building Code, Energy labeling

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