

Review and Comparison of Iran`s Sixteenth Topic of the Building with the Ranking System of the Water Sector Lead to Improve the Criteria of the Sixteenth Topic

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Abstract : Considering growing building construction industry in developing countries and sustainable development concept, as well as the importance of taking care of the future generations, codifying buildings scoring system based on environmental criteria, has always been a subject for discussion. The existing systems cannot be used for all the regions due to several reasons, including but not limited to variety in regional variables. In this article, the most important common LEED (Leadership in Energy and Environmental Design) and BREEAM (Building Research Establishment Environmental Assessment Method) common and Global environmental scoring systems, used in UK, USA, and Japan, respectively, have been discussed and compared with a special focus on CASBEE (Comprehensive Assessment System for Built Environment Efficiency), to credit assigning field (weighing and scores systems) as well as sustainable development criteria in each system. Then, converging and distinct fields of the foregoing systems are examined considering National Iranian Building Code. Furthermore, the common credits in the said systems not mentioned in National Iranian Building Code have been identified. These credits, which are generally included in well-known fundamental principles in sustainable development, may be considered as offered options for the Iranian building environmental scoring system. It is suggested that one of the globally and commonly accepted systems is chosen considering national priorities in order to offer an effective method for buildings environmental scoring, and then, a part of credits is added and/or removed, or a certain credit score is changed, and eventually, a new scoring system with a new title is developed for the country. Evidently, building construction industry highly affects the environment, economy, efficiency, and health of the relevant occupants. Considering the growing trend of cities and construction, achieving building scoring systems based on environmental criteria has always been a matter of discussion. The existing systems cannot be used for all the regions due to several reasons, including but not limited to variety in regional variables.

Keywords : scoring system, sustainability assessment, water efficiency, national Iranian building code

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