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GRIHA RATING FOR EXISTING BUILDINGS

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ABSTRACT

Population is growing everywhere in increasing manifold and at the same time construction sector has to expand to accommodate this increasing population within and nearby the cities. This increasing demand in construction sector has lead to increase in greenhouse gases. Now India stands second in the world after China in generation of greenhouse gases. Thus there is urgent need to improve energy efficiency of Indian construction sector. GOI is making provisions to manage these increasing energy demands. One of its initiatives is constructing green and energy efficient building. During initiation stage only buildings will be planned to be environment friendly. And at the same time try to make existing building green and energy efficient. The plan is to develop a rating system that will evaluate the building so that it fulfills different criteria to become energy efficient. One such rating system is GRIHA i.e. Green Rating for Integrated Habitat Assessment developed by TERI. Rating is provided to buildings (new as well as old) which further enjoy different incentives from government and at the same time conserve energy and protect environment.

Keywords: GRIHA, TERI, LEED, Rating, Existing Building, Green House Gases.

I. INTRODUCTION

Construction sector in India is in boom with ever increasing demand to accommodate increasing population. But during construction of these buildings they are consuming 30 to 40% of total energy demand of the nation. Buildings basically require energy for activities like heating, cooling, lightning and other appliances and remaining 10 to 20% during construction and material manufacturing. Buildings are prime generators of Green house gases (GHG), thus posing a threat to the environment. Increasing green house gases and Global warming are its consequences. It has caused melting of ice glaciers, increase in sea level and causing submergence of the coastal areas. World is now verge to think a concrete solution for this. Different nations have already started to take steps regarding this issue. Indian government has to take concrete steps in energy conservation, pollution reduction and environment conservation.

II. GRIHA RATING SYSTEM

'Green Rating for Integrated Habitat Assessment' (GRIHA) is developed by 'The Energy and Research Institute' (TERI). It is tool developed to study and rate the performance of a building as per surrounding environment. Points are awarded for fulfilling the different criteria assigned in rating system. Final score after adding all points will decide the rating of building. Some points are mandatory, will remaining are optional points which are awarded with commitment to meet the requirements for which points are allocated.