Energy Efficiency label for Residential Sector in India

Introduction

Real estate sector is a globally recognized sector as one of the fastest growing and energy intensive sectors. The real estate market of India is expected to climb up to US$ 180 billion by 2020 in comparison to US$ 126 billion in 2015. Rapid commercialization, economic activities, and urbanization have collectively fueled a rise in the construction of buildings and increasing energy use over the last decade.

India, the fastest growing economy of the world, has seen tremendous construction activities in last one decade. The steep increase in urban population, coupled with demand for a better lifestyle, has led to a high demand of residential buildings. The sector has been growing at Compounded Annual Growth Rate (CAGR) of 6% and by year 2030; it is estimated that around 3 billion m2 of new area will be added w.r.t year 2018.

The economic importance of the residential sector in India can be judged by the estimate that for every Indian rupee (INR) invested in the housing and construction, INR 0.78 is added to the gross domestic product of the country. With such surging demand, it has been estimated that residential (housing) sector is expected to contribute around 11 per cent to India’s GDP by 2020. Thus, it is imperative to constantly provide a firm fillip to housing sector to meet the target of housing for all by Honorable Prime Minister of India under the Pradhan Mantri Awas Yojna (PMAY) and to keep India at the trajectory of expected growth.

Need of the proposed Labelling Program

The challenge in terms of soaring energy consumption in the housing segment is needed to be tackled with a multi-faceted approach. Making houses energy efficient is certainly a way of avoiding a long term futile electricity consumption liability in residential buildings. This program helps the country in the same direction by designing an energy efficient residential labelling system.
Ministry of Power has launched Eco Niwas Samhita 2018 on 14th December 2018, which prescribed the minimum energy performance through energy efficient envelop design. The proposed labeling program takes forward Eco Niwas Samhita 2018 and motivates consumers to move forward to design more efficient construction. Energy labels help consumers to make efficient decisions through the provision of direct, reliable and costless information.

**Objective of the labelling program**

The key objective of the programme is to make a transparent instrument over the energy performance of a home which will gradually lead to an effective model taken into consideration while deciding over the home prices in future. The objectives of the proposed labelling program are to provide:

1. information to consumers on the energy efficiency standard of the Homes
2. a benchmark to compare one home over the other on the energy efficiency standards
3. a consumer driven market transformation business model solution for Energy Efficiency in housing sector
4. steering the construction activities of India towards international best practices norms

**Scope of the program**

Proposed Labelling program will cover all types of residential buildings in India. All the envisaged objectives can be achieved through the proposed labeling mechanism by making it as a mandatory information required in any real estate transaction/leasing.

**Benefits of the program**

The proposed labelling program is expected to save a large amount of energy through imparting energy efficiency to houses nationwide with annual savings of 90 BU in the year of 2030. The estimated cumulative energy saving potential through proposed labelling program is around 388 BU by year 2030 which is greater than the energy consumption in 2016 (250 BU). Moreover, a five star rated home will be 40% more energy efficient than one star rated home.

**Implementation Manual**

The programme will be implemented through structured process which is explained in Implementation Manual for “Energy Efficiency Label for Residential Buildings”. This document is available on BEE Website (www.beeindia.gov.in) for download.