

Background note: Awareness Workshop on clay fired Resource Efficient Bricks (REBs)

Date: 24th May 2016; **Venue:** MGSIPA Complex, Sector-26, Chandigarh

Bricks are one of the oldest known building materials. Bricks were signature mark of the entire Indus Cultural Tradition, where mud bricks were used around 7000 BC. A national level study undertaken by TERI during 2013-15 had estimated that about 190,000–280,000 brick kilns in the country produce 220–280 billion bricks annually using 29–35 million tonnes of coal and 12–16 million tonnes of biomass. Bricks, due to their enviable characteristics of pleasant aesthetic appearance, weathering resistance, thermal/ acoustic insulating properties and ease in handling/workability have always maintained their position as a prominent walling material since their first use for building habitats.

With less availability of space due to increasing population and demand, majority of the construction in cities and towns is taking place in the form of multi-storey buildings using RCC (Reinforced Concrete Cement) columns. In this type of construction, bricks are increasingly being used as filler material rather than load bearing unit.

This provides an opportunity to use Resource Efficient Bricks (REBs), like perforated bricks and hollow blocks, in place of conventional solid bricks. The shift towards REBs would help in saving fuel and reducing pollution in brick production process. There is also significant reduction in the consumption of top (agricultural) soil which is the main raw material in brick making. Increased use of REBs in building construction would also help in reducing material consumption (cement, steel) due to decreased dead load as well as reduction in energy consumption of buildings due to improved insulation properties of REBs.

Bureau of Indian Standard (BIS) has already notified the specifications for REBs. Acknowledging the benefits of using REBs in building construction, Punjab PWD has recently included these products in their specifications. However, it is being felt that there is a need to increase the awareness level of government officers dealing with construction sector on the benefits of using these products. Therefore, under the UNDP-GEF supported project “Energy Efficiency Improvements in Indian Brick Industry” being executed by MoEFCC, an awareness workshop is being organized at Chandigarh for officers of Punjab Public Works Department (PWD). It is expected that the workshop will also have representation from officers of other government departments engaged in construction activities of Punjab as well as from Haryana, Himachal Pradesh and Jammu and Kashmir. The objectives of the workshop are:

1. To provide a platform to understand various technological aspects of REBs
2. To facilitate the understanding on use of REBs during building construction
3. Motivate the Government Departments to use REBs in place of conventional solid bricks during building construction