Resource Efficiency for an Urbanising India

Field Visit – 9th October 2015, Delhi

07:45 - 08:00  Assemble at DA; Tea/Coffee
08:00 - 09:30  Travel from DA to Burari
09:30 - 11:00  Visit Construction and Demolition Waste Recycling Plant - IL&FS Environmental Infrastructure & Services Ltd.
11:00 - 12:00  Travel from Burari to Bawana
12:00 - 13:00  Lunch and Discussion
13:00 - 14:30  Visit Cost Effective Technologies Housing Project – Adlakha Associates Pvt. Ltd.
14:30 - 16:00  Travel from Bawana to Ghitorni
16:00 - 16:30  Tea/Coffee
16:30 - 17:30  Visit Fly Ash Technology – TARA Machines and Tech Services Pvt. Ltd.
17:30 - 18:00  Debrief
18:00  Depart for DA/Hotel
Resource Efficiency for an Urbanising India

Field Note – 9th October 2015

Objective
The field visit aims to showcase the practice and policy connect of sustainability and resource efficiency, and thereby collectively deliberate on and identify drivers and challenges for scaling up alternate technologies. The one day field visit further aims to highlight possible strategies for implementing drivers to build synergies across sectors and mitigate challenges to avoid trade-offs.

Sites
1. Construction and Demolition (C&D) Waste Recycling Plant
The recycling plant was developed as pilot project between Municipal Corporation of Delhi and IL&FS Environmental Infrastructure & Services Ltd in 2010. This PPP, initiated for 10 years, demonstrates the potential of a scientifically managed process of collection and recycling of C&D waste. Here, 2000 tonnes/day of waste is collected from designated zones of Delhi. The waste is recycled into aggregates and converted to Ready Mix Concrete, pavement blocks, kerbstones and concrete bricks. The products after being tested in various laboratories have been found suitable as construction materials.

2. Cost Effective Technologies Housing Project
The low cost green housing constructed at Bawana, Delhi by Adlakha Associates Pvt. Ltd. is based on low rise high density concept of construction. The design of building blocks covers various parameters for efficient performance such as orientation aspect, space efficiency, clustering, acoustical privacy, circulation and elegance. With use of cost effective innovative technology like 200 mm thick load bearing wall, fly ash blended mortar bricks, precast reinforced concrete planks, ferrocement staircase treader, etc. the housing unit has witnessed cost saving of up to 20%.

3. Fly Ash Technology
Fly ash bricks reduce energy consumption by 20%, unlike conventional clay bricks. TARA Machines & Tech Services Pvt. Ltd., leading provider of fly ash technology promotes utilisation of waste from coal-based thermal power plants for production of high quality, affordable bricks and blocks. This technology improves profitability by uniform quality, reduces breakage and has higher productivity/person.