



## At a Glance

# CONSTRUCTION AND DEMOLITION WASTE

**Construction and demolition (C&D) waste** is debris or inert waste from construction, renovation, and demolition of structures such as buildings, roads, and bridges.

## THE CRISIS

- **The booming construction industry**, expected to develop about 104 billion sq ft of land by 2030. Add to that waste created by floods and earthquakes.
- **The lack of a systematic database and official data** creates serious problems for debris collection and treatment.
- The changes to the **Bureau of Indian Standards (BIS)** regarding codes that permit the use of recycled building components are yet to be implemented.
- **Taxes on recycled C&D products** increase their cost relative to virgin products.

## BURIED IN RUBBLE

- Waste daily in India: 30,000 MT
- Daily in Delhi: 3,000 MT
- Daily in Mumbai: 2,500 MT
- Waste generated by new construction: 40–60 kg/sqm
  - By demolition, renovation: 300–500 kg/sqm
  - By building repairs: 40–50 kg/sqm

## THE LAWS

- The ‘**Construction and Demolition Waste Management Rules, 2016**’ issued by the Union Ministry of Environment, Forests and Climate Change defines stakeholder responsibilities, and criteria for processing and recycling facilities.
- **Some cities have their own by-laws.** The Municipal Corporation of Greater Mumbai has issued guidelines as well as set up a helpline for waste collection at a nominal fee.

## GLOBAL BEST PRACTICES

- C&D waste management as part of **Low Carbon Green Growth Strategies.**
- **Laws** for step-by-step demolition and utilisation of recycled aggregates.
- Separate **building codes** for various recycled aggregates and road pavements.

## LAYING THE FOUNDATION

- The BIS is developing standard guidelines for construction project management.
- Urban local bodies in Delhi, Pune and Mumbai plan to set up C&D waste recycling facilities.
- A school building in Rajkot and the IRRAD building in Gurgaon utilise C&D waste innovatively in their construction.

- **Standard building construction specifications** that recommend greater use of recycled materials.
- A **construction waste charge** on developers to reduce disposal at landfills and subsidise waste recycling centres.
- **Standards for Aggregates** that focus on fitness of use and do not discriminate between resources.
- Recycling waste concrete, asphalt and sludge for **road construction**, and extensive use of recycled products in **non-structural frameworks.**

## GOING FORWARD

- Fast track the formation of **BIS codes on recycled material.**
- **Certify** recycled C&D waste products.

## BUILDING THE FUTURE

Reusing and recycling C&D waste:

- Conserves landfill space.
- Reduces the carbon footprint of the construction industry.
- Reduces the millions of tonnes of aggregate shortage.
- Provides cheaper alternatives to mined and excavated resources.

- Promote the use of **alternative construction material**
- **Include recycled C&D waste products** in the Central Public Works Department’s (CPWD) Schedule of Rates (SOR)
- Promote **construction management practices** to minimise waste
- Introduce **tax policies** to minimise waste and prevent unsafe disposal.



238, Sidhartha Enclave, New Delhi - 110014, India  
T: + 91-11-46574171/72/73, F: +91-11-46574174  
E: info@chintan-india.org