



Let's Save Our Environment By Changing Our Building Technologies & Lifestyle.

Why India Needs to Change Quickly?

- Why move towards better construction technologies?
- What's the need to change our lifestyles?
- Why we need smart cities and why we need them quick?



Economy

The Indian cities represent:

- 61% of gross domestic product (GDP)
- Hence cities are “Engines of Economic Growth”

Sub-Sectors in Construction:

- Real Estate
- Infrastructure



Economy

Construction Projection :

- **Real Estate** Sub-sector Projected To Reach **INR13,250 Billion** By 2023
- **Infrastructure** Sub-sector constitutes more than **40 %** Of The Construction Sector - Projected to Reach **INR8674 Billion** by 2023



Economy

Construction Projection :

- Urban population in India is expected to shoot up to 590 million by 2030.
- Even at current population levels, urban housing shortage is estimated to be more than 29 million.



Environment & Health

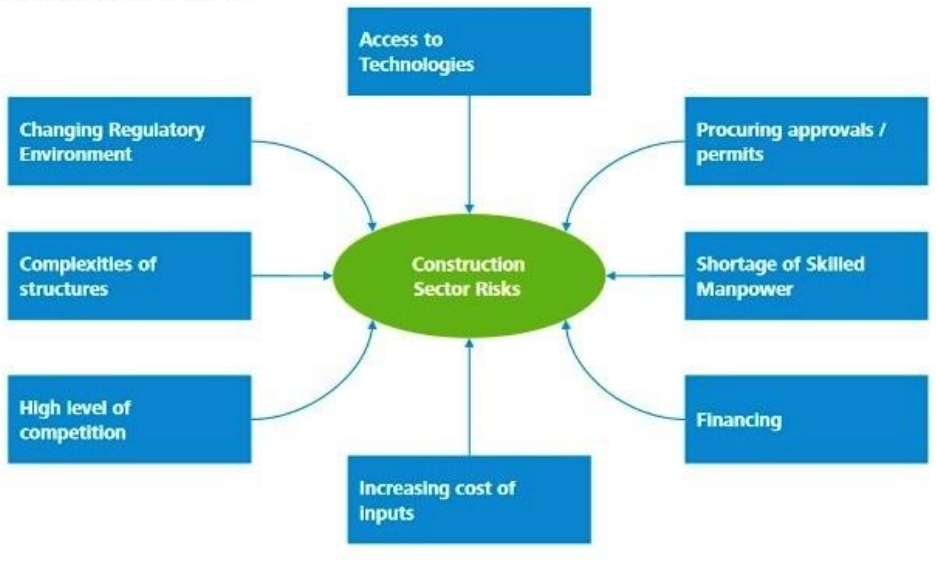
Indian Buildings account for:

- Construction industry in India generates about **10-12 million tons** of Construction and Demolition (C&D) waste annually !
- These wastes generate huge **air pollution** and also makes the areas dirty, a garbage dump, which leads to **diseases**.



Construction Sector Risks

Construction Sector Risks



BEST APPROACH : GRIHA RATED GREEN BUILDINGS

- **GRIHA, an acronym for Green Rating for Integrated Habitat Assessment, is the National Rating System of India.**
- **The basics benefits of following GRIHA rating system are :**
 - ◆ ¶ Up to 30% reduction in energy consumption
 - ◆ ¶ Limited waste generation due to recycling
 - ◆ ¶ Less consumption of water
 - ◆ ¶ Reduced pollution load & liability

GREEN BUILDINGS

- **Minimal disturbance to landscapes and site condition**
- **Use of Non-toxic Recycled and Environmental Friendly Building Materials**
- **Use of Recyclable Materials**
- **Efficient use of Water and Water Recycling**
- **Use of Energy Efficient and Eco-Friendly Equipment**
- **Use of Renewable Energy**
- **Indoor Air Quality for Human Safety and Comfort**
- **Effective Controls and Building Management Systems**

GAPS THAT WE NEED TO BRIDGE

- Green Buildings are perceived to take **longer time** to get constructed
- Green Buildings are perceived to be **costlier** than conventional buildings
- Green Buildings are perceived to be **more complex** for the layman to understand

Recyclable Steel Buildings

**The Most Efficient Solution
to Ease The Transition
towards Green Buildings
is :**

**Recyclable
Multi-Storeied
Steel Buildings**



Recyclable Multi-Storey Steel Buildings



Recyclable Steel Buildings



Recyclable Steel Buildings



Recyclable Steel Buildings



Benefits of Recyclable Steel Buildings

- Save more than 50% of Construction Time
- Very Easy Integration of Products listed in the GRIHA Catalogue
- Complete Design Flexibility to Achieve Green Building Ratings
- Can Mount Solar Panels on the Roof
- Recyclable , Relocatable



Benefits of Recyclable Steel Buildings

- 98% less water use
- Considerable reduction in lighting demand
- Considerable reduction in Air Conditioning demand
- Savings in energy and productivity gains resulted in approximately 7-year payback for green features



NEED FOR A CATALYST IN INDIA

SMART CITIES NEED TO BE DEVELOPED GREEN AND THAT TOO MUCH FASTER

RECYCLABLE STEEL BUILDING TECHNOLOGY IS THE BEST SOLUTION TO INDIA'S CONSTRUCTION CHALLENGES !

**LET'S REJECT CONCRETE FOR SUPER-STRUCTURE
LET'S REJECT BRICK-MORTAR
LET US ADOPT RECYCLABLE STEEL TECHNOLOGY**



THANK YOU

Kindly feel free to contact - Anish Chopra

+91-9911980099 ;

anish.chopra@hotmail.com

anish@greenifyi.com