



## Online Workshop/Webinar on Role of Standards & Policy in Resource Efficiency and Circular Economy Transition in India and the EU

January 21, 2022, at 14:00 – 17:00 Hrs. (IST) / 09:30 – 12:30 Hrs. (CET)

# Circular Economy in Real Estate: Current policies on Resource Efficiency but what next?

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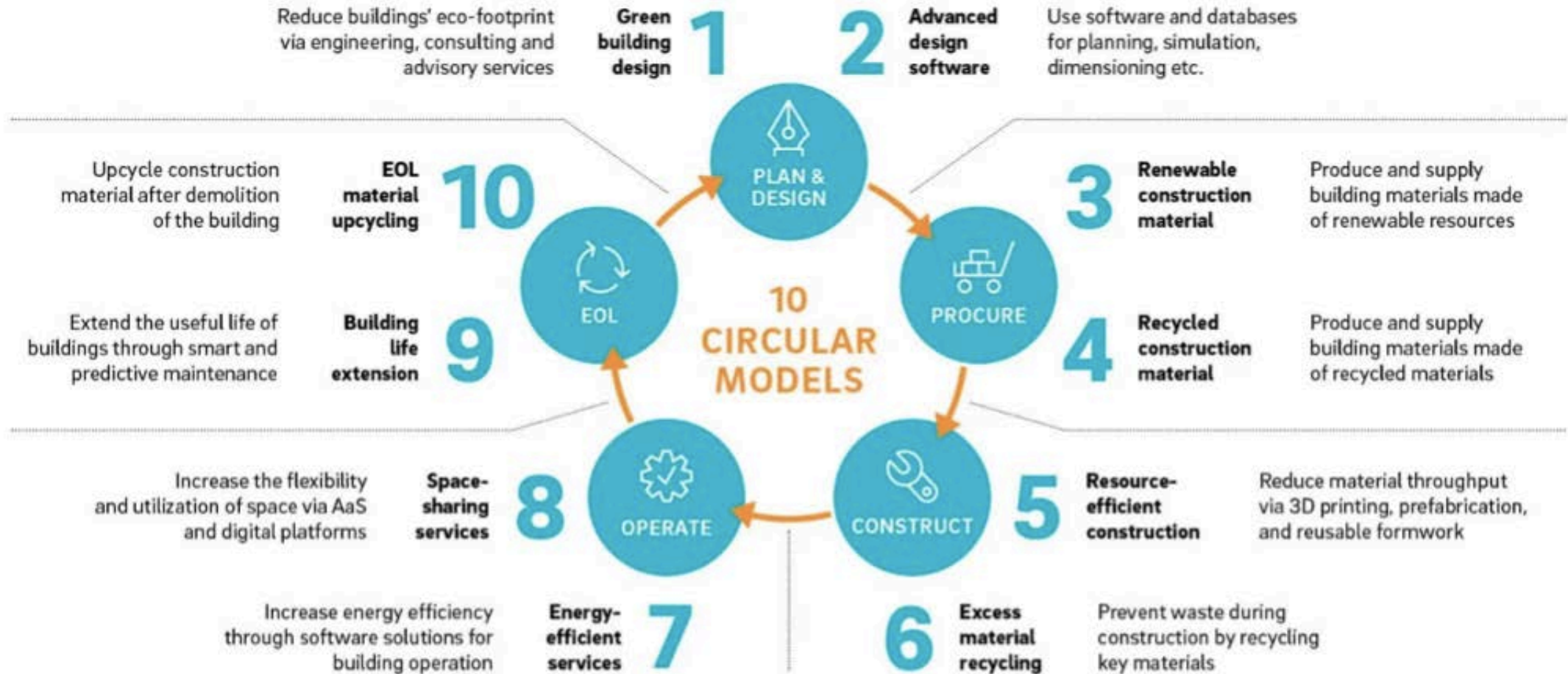
# Agenda

- Need for Action
- Current Scenario
- Policy Framework for Circular Economy in RE
- Looking Ahead
- Conclusion



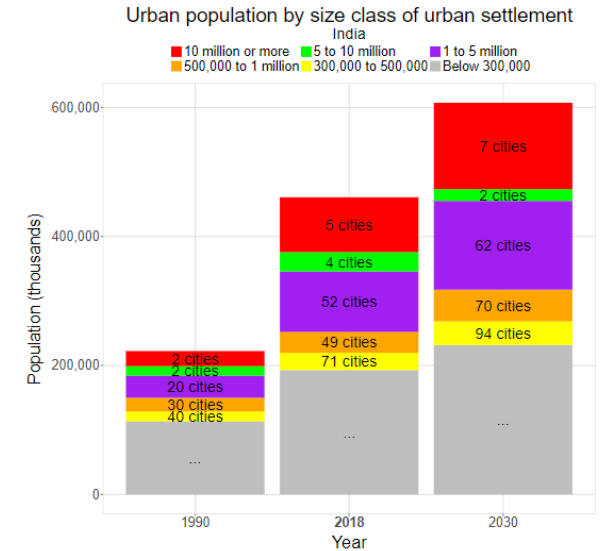
# Circular Business Model for Sustainable Construction

## 10 circular business models for more sustainable construction

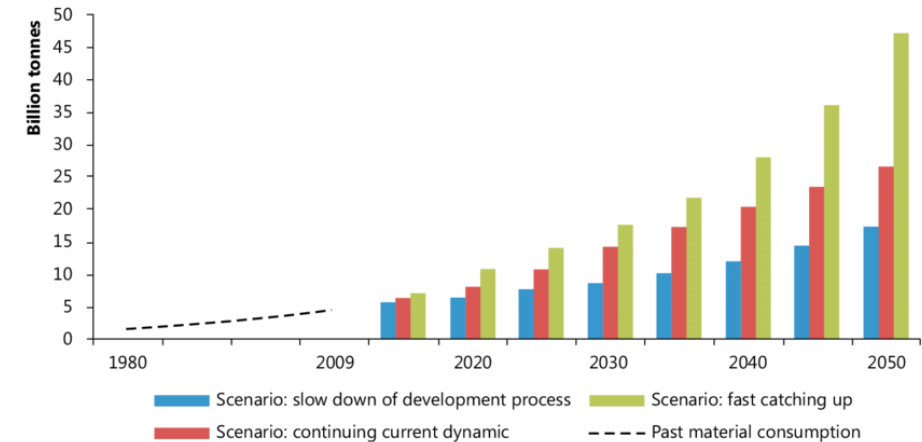


# Need for Action: Resource Efficiency

- Resource extraction of 1580 tonnes/acre: much higher than the world average of 450 tonnes/acre.
- Low material productivity compared to global average.
- Much lower recycling rate at 20-25% vis-à-vis of as high as 70% in developed countries.
- 3rd highest CO2 emitter, responsible for 6.9% of global CO2 emissions.
- 30% of land undergoing degradation.
- High import dependency of many critical raw materials.



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**Note:** Urban population by size class of urban settlement and number of cities, 1990, 2018 and 2030. The grey area is a residual category that includes all urban settlements with a population of less than 300,000 inhabitants.



India's past material demand and future projections until 2050. (IGEP, 2013 In NITI Aayog, 2017)



# Current Scenario : C&D Waste

- India manages to recover and recycle only about 1 per cent of its construction and demolition (C&D) waste.
- India generates 150 million tonnes of C&D waste annually.
- Country has a recycling capacity for only about 6,500 tonnes per day - just 1.3 per cent of the total C&D waste generated.
- By 2017, 53 cities were expected to set up recycling facilities to recover material from the waste; only 13 cities have done it till date.
- No uniformity among cities to quantify and characterize C&D waste.

*As per: Another Brick off the Wall: Improving construction and demolition waste management in Indian cities - Report by Centre for Science and Environment (CSE), 2020*



# C&D Waste Policies and Framework

## Construction & Demolition Waste Management Rules, 2016 (MoEF)

The policy states three application of materials made from construction and demolition waste and its products.

- Drainage layer in leachate collection system at bottom of Sanitary Landfill Gas Collection Layer.
- Fines from construction and demolition processed waste having size up to 2 mm shall be used for daily cover over the fresh waste.
- Non-structural applications, such as kerb stones, drain covers, paving blocks in pedestrian areas.

## Draft National Resource Efficiency Policy, 2019 (MoEF)

Targets :

- Municipalities in Tier 1 and Tier 2 cities to start inventorizing construction and demolition waste data by 2022.
- Recycling rate for C&D waste to reach 50% by 2025 and 75% by 2030
- By 2025, 30% of total public procurement of materials for civil construction from recycled materials.



# Vendor Ecosystem



## My Malba

India's first on-call service for construction waste.

'MyMalba' is the Uber for Waste.



## Doctor Sand

Offering ethically sourced, branded sand and other minerals, with a promise of consistent delivered quality.



## Strawcture Eco

Using leftover Straw from crops to create innovative building materials



## GreenJams

Create carbon-negative building materials from crop residues and industrial by-products.



# Conclusion

- There are various aspects of CE for Real Estate
- Key ones to tackle are
  1. Increased uptake of upcycled materials through policy incentives
  2. Proper disposal for C&D waste and upcycling of the same back into the sector
  3. Policy on re-development to lay out guidelines on Demolition





Thank you!



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