



GLOBAL
HOUSING
TECHNOLOGY
CHALLENGE INDIA

Indian Housing Technology Mela

5-7 October 2021

Indira Gandhi Pratishthan, Lucknow, Uttar Pradesh



Promoting Indigenous &
Innovative Materials, Skills,
Construction Techniques &
Processes for Low & Mid-Rise
Affordable Houses

BACKGROUND

Launch of Pradhan Mantri Awas Yojana-Urban (PMAY-U):

To provide all weather pucca houses to about 11.20 million eligible beneficiaries in urban areas by year 2022

Technology Sub Mission(TSM)

under PMAY-U to facilitate adoption of modern, innovative and green technologies and building materials for faster and quality construction of houses.

Global Housing Technology Challenge-India (GHTC-INDIA)

launched on 14th January 2019

to identify and mainstream globally best available proven construction technologies that are sustainable, green and disaster resilient which can bring a paradigm shift in construction practices for affordable housing.

Component 1

Construction Technology India (CTI-2019) :

Expo-cum-Conference
(2-3 March 2019)

- ▶ Innaugrated by Hon'ble Prime Minister
- ▶ Declared 2019-20 as Construction Technology year.

Component 2

Identifying Proven Demonstrable Technologies from across the globe

- ▶ 54 Proven Technologies were shortlisted
- ▶ Grouped in six broad categories

Component 3

Potential Future Technologies under ASHA-India

- ▶ Five Incubation centres setup across 4 IITs (Bombay, Kharagpur, Madras & Roorkee) and CSIR-NEIST (Jorhat) for Pre-Prototype Technologies.
- ▶ Acceleration support to Post-Prototype Technologies through BMTPC/WRI.

Light House Projects (LHPs)

Model housing projects of about 1000 houses each with physical & social infrastructure facilities are being constructed at six places using shortlisted proven innovative technologies under GHTC-India.

Agartala

1,000 Houses

Technology:
Light Gauge Steel Structural System & Pre-engineered Steel Structural System

Chennai

1,152 Houses

Technology:
Precast Concrete Construction System – Precast Components Assembled at Site

Indore

1,024 Houses

Technology:
Prefabricated Sandwich Panel System

Lucknow

1,040 Houses

Technology:
PVC Stay In Place Formwork System

Rajkot

1,144 Houses

Technology:
Monolithic Concrete Construction using Tunnel Formwork

Ranchi

1,008 Houses

Technology:
Precast Concrete Construction System – 3D Volumetric

TECHNOGRAHIS

LHPs are being promoted as Live Laboratories for different aspects of transfer of technology to the field which includes planning, design, production of components, construction practices and testing. Online Enrolment Drive for all stakeholders to register themselves as **Technograhis** to visit these pilot projects, learn the use of latest innovative technologies, innovate and adapt as per their local needs and contexts of new construction technologies to be adopted as 'Make in India'.

Indian Housing Technology Mela

Promoting Indigenous and Innovative Materials, Skills, Construction Techniques & Processes

Indian Housing Technology Mela (IHTM)

A platform for indigenous and innovative building materials, components, tools & equipment construction processes and technologies that are sustainable and suitable for construction of low and medium rise (G+3 storey) houses.

National Expo & Conference	Screening, Shortlisting & Grouping
<ul style="list-style-type: none"> Construction Technologies, Materials & Components Audio-Visual Demonstration Seminars/Panel Discussions Exchange of Knowledge Promotion, Sales & Marketing Business Development 	<p>Screening</p> <ul style="list-style-type: none"> Technical Evaluation <p>Shortlisting</p> <ul style="list-style-type: none"> Appropriate for different geoclimatic regions Sustainable with focus on use of locally available skills & resources Cost-effective, Energy Efficient, Environment-Friendly, Disaster Resilient <p>Region Wise Grouping</p> <ul style="list-style-type: none"> Shortlisted Technologies & Materials
Compendium/ Manual	
Training, Capacity Building & Handholding Support	

Out of 1.13 Crore sanctioned houses so far under PMAY(U), more than 60% individual houses are constructed through BLC vertical. Unlike the typical construction of apartments in clusters (G+3 and above), BLC houses are owner driven single or double storey houses generally on the land available with them and is self-constructed or through local masons/artisans. The requirement of building materials and construction technologies is different for these individual houses than those required for multi storeyed mass construction.

On the one hand, there are pockets of rich knowledge and repository on use of indigenous construction materials and technologies; and on the other, there is tremendous scope and interest among Innovators, Start-ups, Entrepreneurs, and Small & Medium Developers on use of Innovative and Alternate Construction Systems, Material, Components and Processes for low and mid-rise housing categories.

It is, therefore, imperative to promote the adoption of these technology options and identify other innovative appropriate construction technologies, materials and processes for their use in construction of houses under BLC and other low and mid-rise housing

Ministry of Housing & Urban Affairs, Government of India is organising Indian Housing Technology Mela (IHTM) to provide a platform for indigenous and innovative building materials, components, tools & equipment construction processes and technologies that are sustainable and suitable for construction of low and medium rise (G + 3 storey) houses for demonstration, cross learning, enabling better adoption and market linkages, and achieving desired scale.

IHTM will provide an interface for traditional technologies, new innovators & start-ups in the sector, technologists, to interact with Government and end consumers for knowledge exchange along with generating business opportunities under one roof.

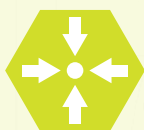
The Technical Evaluation Committee (TEC) constituted at MoHUA will screen and assess the participating innovative indigenous construction technologies and materials for their suitability and adaptability in different geographical and climatic regions of the country.

For further details, please visit :

<https://ghhc-india.gov.in/IHTM>



4C Strategy for IHTM



COLLECT

Nationwide call to invite applicants, collect details of their previous works, learnings, financial details & replication models.



COLLATE

Assessment of applications on parameters of technical viability, suitability, cost effectiveness & other factors.



CATEGORISE

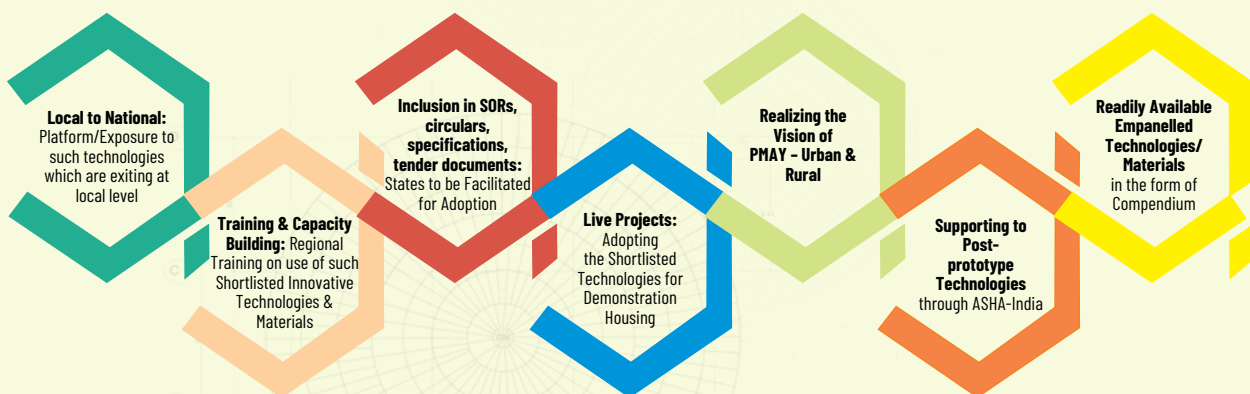
Grouping of applications as per their region/context specific for use by States/UTs, stakeholders and beneficiaries.



CONNECT

Showcasing & disseminating knowledge to all relevant stakeholders for further learning and adoption.

Expected Outcomes



सत्यमेव जयते

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