

E-Newsletter-Vol - IX

LIGHT HOUSE PROJECTS

October 15, 2021, New Delhi

Hon'ble Prime Minister enrolls as Technograhi

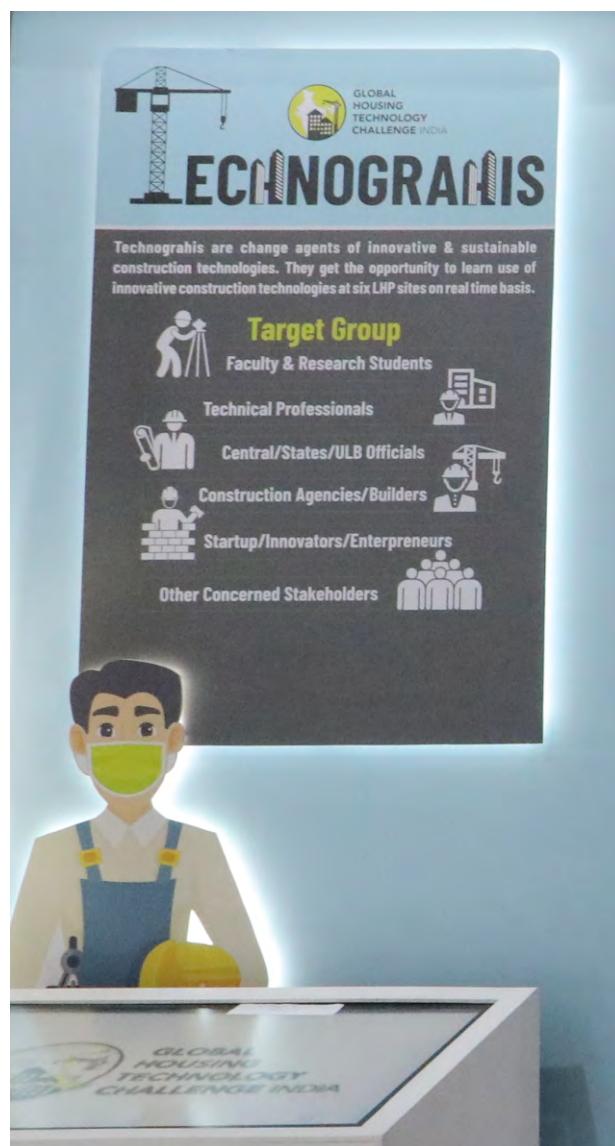


During the 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo in Lucknow, Uttar Pradesh, Hon'ble Prime Minister Shri Narendra Modi enrolled himself as a Technograhi. The Conference-cum-Expo was hosted by Ministry of Housing and Urban Affairs (MoHUA).

While inaugurating the Conference-cum-Expo, Hon'ble Prime Minister once again lauded the stakeholders for enrolling as Technograhis and encouraged others to do so. The Technograhi enrolment module was launched in February 2021 by Shri Durga Shanker Mishra, Secretary, MoHUA. Technograhis are the change agents of innovative and sustainable technologies who will bring about technology transition in the construction sector for its adoption & replication in the country. The module, which is free of cost, was launched to enable the stakeholders learn about technologies being used for construction of Light House Projects (LHPs) at six cities of India through on-site visits or e-learning module for further adoption and mainstreaming in local context.

LHPs, under Global Housing Technology Challenge-India (GHTC-India), are being built at Lucknow (Uttar Pradesh), Chennai (Tamil Nadu), Rajkot (Gujarat), Agartala (Tripura), Indore (Madhya Pradesh) and Ranchi (Jharkhand). They consist of more than 1,000 houses each.

So far, close to 18,000 people have enrolled themselves as Technograhis and are learning about the innovative technologies through on-site visits or e-learning module. More information at <https://ghtc-india.gov.in/>.



Hon'ble Prime Minister inaugurates Azadi@75 - New Urban India: Transforming Urban Landscape Conference-cum-Expo



Hon'ble Prime Minister Shri Narendra Modi on 5th October 2021 inaugurated 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo in Lucknow. Hon'ble Governor of Uttar Pradesh Smt Anandiben Patel, Hon'ble Raksha Mantri Shri Rajnath Singh, Hon'ble Minister for Housing and Urban Affairs Shri Hardeep S Puri, Hon'ble Chief Minister of Uttar Pradesh Yogi Adityanath, Hon'ble Minister of State (MoS) Shri Kaushal Kishore, Hon'ble Minister of Heavy industries Shri Mahendra Nath Pandey, and other dignitaries were also present on the occasion. The Conference-cum-Expo was organised as part of Azadi ka Amrit Mahotsav.

In his inaugural address, Hon'ble Prime Minister mentioned about

reviving cities through maximum use of technology and spoke about the Light House Projects (LHPs). The foundation stones for Light House Projects were laid by Hon'ble Prime Minister on 1st January 2021.

The Hon'ble Prime Minister said, "I just saw a house being built in Lucknow under the Light House Project. The technology being used in these houses will not require plaster and paint. The already prepared walls will be used in these houses. This will speed up the construction of houses. I am sure all the people who have come to Lucknow from all over the country will learn a lot from this project and try to implement it in their cities also."

Indian Housing Technology Mela

An exhibition on indigenous, innovative construction technologies, named as Indian Housing Technology Mela (IHTM), was organised at 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo in Lucknow. The exhibition showcased domestically developed indigenous and innovative construction technologies, materials and processes which could be useful for Beneficiary Led Construction houses under Pradhan Mantri Awas Yojana-Urban (PMAY-U) and other low & mid-rise houses.

The exhibitors of IHTM were from across the country, from both from Private and Government sectors and represented technology providers of proven and potential technologies, manufacturers, building centres,



innovators, IITs, R&D Institutes State/Local bodies, implementing agencies of PMAY(U) and agencies involved in 6 LHPs. IHTM turned out to be the biggest attraction of the 3-day event.

83 technologies/materials/processes covering different aspects of construction of low to medium height houses, were displayed. On one hand, IHTM displayed Compressed Stabilized mud block system successfully been used in Kerala, Auroville, Puducherry; on the other hand, it demonstrated Robotic Block laying machine developed by a start-up from Hyderabad. Innovation in cement and concrete, environment friendly and employment generating indigenously developed bamboo corrugated roofing sheets, Block made from crop residue and industrial waste of flyash, slags from



Message from JS&MD (HFA)
Shri Kuldip Narayan

PMAY(U) has been touching upon new heights since the Mission was launched in 2015 to provide a roof over the heads of people in urban areas. The month of October gave us new hopes towards ensuring 'Housing for All' by 2022 as Hon'ble Prime Minister inaugurated the 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo in Lucknow. At the event, Hon'ble Prime Minister digitally handed over house keys to 75,000 PMAY(U) beneficiaries across Uttar Pradesh and spoke to three of them to know about their transformational stories. This, by all means, gave the Mission a major push towards working even more tirelessly towards achieving our HFA goal.

Meanwhile, with Light House Projects (LHPs) we also ushered into a new era in India's building construction technology sector. In some months from now LHPs will be ready, and people will get comfortable and affordable homes with all basic facilities.

In true sense, this project will bring a technology revolution as we are also actively running our Technograhi campaign. Students, engineers, technical professionals and other stakeholders from across the country are taking LHP site visits to learn about the use of LHP technologies so that they may be further replicated in other projects. We are also engaging the Technograhis through our online e-module course. The Hon'ble Prime Minister has also said that in 21st century India, the most important way to revive cities is the maximum use of technology. At the same time, LHPs promote urban infrastructure development for an 'AatmaNirbhar Bharat'.

I am honoured to share that Hon'ble Prime Minister also enrolled himself as a Technograhi at the Lucknow event, giving a major fillip to the campaign.

A pucca house brings smiles and lights up the lives of people. A house is the most valuable asset for every human being. With PMAY(U), we have been able to transform the lives of millions of beneficiaries and are continuing to do so.

Here's to that spirit.

steel industry; precast clay hollow blocks made of silt and industrial waste, insulated roofing and walling components, innovating doorsystem, earthquake resistant confined masonry are some of the technologies which have great potential to be used across the country.

These technologies are being evaluated by a Technical Evaluation Committee (TEC) set up by MoHUA for their technical competencies and further use in field.

During the event, two dedicated parallel sessions were hosted with experts, stakeholders and academia. In the first one, discussions and deliberations were held on 'Main streaming Innovative Construction Technologies for Low & Mid-Rise Houses' by using innovative building materials, processes and technologies in construction sector; Strategy for standardization, propagation, demonstration and construction using indigenous/innovative technologies. The second discussion was on held 'Marketing Strategies for Innovative Construction Technologies in the Construction Sector'.

Technograhis visit to LHP sites



Under Awas Par Samvaad initiative of Pradhan Mantri Awas Yojana (Urban), a technical session was organised at LHP Indore recently. Over 50 Technograhis, who were participants of Awas Par Samvaad, were briefed about innovative construction technologies on site.



Similarly, several on-site training sessions have been organised for Technograhis at other Light House Project sites. Large group of students, representatives from various institutes, organisations, civil engineers and other interested stakeholders are learning about the innovative technologies in use, their benefits and future use. The engaging sessions for Technograhis are being organised on regular basis.

During the Azadi Ka Amrit Mahotsav week - from 27th September to 3rd October 2021 - several batches of Technograhis, more than 75 in number, visited the LHP sites. So far, 763 Technograhis have visited LHP sites to learn the use of innovative technologies.

Hon'ble Prime Minister's greets the audience during inaugural session



Glimpses from Hon'ble Prime Minister's visit to IHTM stalls

M/s Timpack Pvt. Ltd



System/Product: Bamboo mat corrugated roofing sheet & ridge cap for roofing and bamboo mat wall panels

This is a patented technology developed by Indian Plywood Industries Research & Training Institute (IPIRTI), Ministry of Environment, Forest and Climate Change & Building Materials & Technology Promotion Council (BMTPC), MoHUA. Bamboo mat corrugated sheets, ridge cap and bamboo mat board are made out of multi-layer bamboo mats soaked in PU resin and pressed in hot press.

It is eco-friendly, sustainable, renewable & can be made available in any part of the country.

M/s Mutha Industries Pvt Ltd



System/Product: Bamboo Wood

Epitome Bamboo wood is environment-friendly, natural and stronger than most hardwood in the market. The flooring is made from strand woven bamboo.

It displays higher tensile strength than many alloys of steel. It has capabilities for higher compressive strength than many mixtures of concrete. Bamboo wood flooring is an eco-friendly product. It offers durability and luxurious finish of hardwood, but without ecological damage.

Auroville Earth Institute



System/product: Compressed Stabilised Earth Blocks (CSEB)

CSEB are produced from local soil mixed, stabilised with small amount of cement or lime. The mix is pressed in a mould using press machine. They are affordable, suitable for all climatic conditions and reduce carbon emissions significantly less than ordinary burnt clay bricks. The press can produce about 75 different types of blocks.

M/s Green Jams



System/Product: Agrocrete®, BINDR™ as Building Materials

Agrocrete® - made from crop residues like paddy straw, cotton stalk, bagasse, etc., & industrial by-products like slags, ashes & lime sludge. BINDR™- made using slags from various steel and ferro alloy manufacturing processes.

Agrocrete® is stronger than conventional fly ash bricks, burnt clay bricks, highly suitable for low-rise as well as high-rise constructions. BINDR™ requires less water for curing.

M/s Apana Ghar



System/Product: Structural Terracotta Blocks

Structural Terracotta Blocks are made of silt and industrial wastes, green building product which may be used in building construction. This system saves time, is resource-efficient, cost effective & ideal for scattered or up to G+3 storied building.

M/s EPACK Polymers Pvt Ltd.



System/Product: Prefab Structural Components

Pre-Engineered Steel Building system, LGSF System and Insulated Sandwich Panels.

Steel structures have lower maintenance cost & last for years (average life of 50-100 years). Use of standard components reduce the engineering, production, and installation time, with overall saving in money and time. Prefabricated buildings produce less waste during the building construction process. Prefabricated Building Construction reduce total construction time on a project by more than 50%.

M/s Eco Vision Industries

System/Product: Green Building Technology

Made out of 50% fly-ash, mixture of cement, water and preformed foam. The blocks replace conventional bricks/blocks. It doesn't require sand-cement mortar. A precast concrete flooring/roofing system for single and multi-storey buildings. The system is energy efficient, recyclable, environment-friendly, cost-effective and time saving. Pre-fabrication in factory leads to better quality control.



M/s Samudyam Projects Pvt Ltd

System/Product: Glass Fibre Reinforced Concrete (GFRC)

GFRC is one of the most versatile building materials available to architects and engineers. It is making a significant contribution to the economics, technology, and aesthetics of modern construction worldwide for over 50 years.

It is weather-resistant, suitable in earthquake prone areas, environment-friendly, easy to handle, can be installed rapidly and transported easily. The plant can be installed near the project site if the quantum of product requirement is high.

Glimpses of IHTM stalls



PROGRESS OF LIGHT HOUSE PROJECTS AS ON OCTOBER 15, 2021

CHENNAI, Tamil Nadu

Technology Name: **Precast Concrete Construction System-Precast Components**



No. of Dwelling Units : **1152 Nos. (G+5)**
 No. of Block / Tower : **12 Blocks**
 Units in each Block / Tower : **96 Nos.**

Activities	Progress
Superstructure Work	Completed in 12 blocks
Sample unit	Completed
Internal work (Electrical, Plumbing etc.)	In progress – all 12 blocks
Masonry work	In progress - all 12 blocks at different floors
Internal works (Flooring, Plastering, doors etc.)	In progress - 8 blocks
Infrastructure work	<ul style="list-style-type: none"> • Boundary wall (260 m completed) • Sewerage & water supply, internal road (140 m completed) • Community hall (work up to plinth in progress) • Underground water tank (bottom raft completed) • Installation of lift in progress in 4 blocks (9, 10, 11, 12)

INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System**



No. of Dwelling Units : **1024 Nos. (S+8)**
 No. of Block / Tower : **8 Blocks**
 Units in each Block / Tower : **128 Nos.**

Activities	Progress
Superstructure work	<ul style="list-style-type: none"> • Ground Floor & First floor Shear wall work completed and is in progress upto IVth floor. • Ground Floor & First floor Pre-engineered Steel (PEB) erection work in progress-5 block & deck sheet work in block no. 3 at 1st floor in progress.
Infrastructure Work	<ul style="list-style-type: none"> • Boundary wall, Community Centre, Road work, underground tank & Sewer line work is in progress. • Steel (PEB) erection work in progress.



PROGRESS OF LIGHT HOUSE PROJECTS AS ON OCTOBER 15, 2021

LUCKNOW, Uttar Pradesh

Technology Name: **PVC Stay in Place Formwork System**



No. of Dwelling Units : **1040 Nos. (S+13)**
 No. of Block / Tower : **4 Blocks**
 Units in each Block / Tower : **A(494), B(130), C(208) & D(208)**

Activities	Progress
Foundation (Dwelling Units)	
Raft, Column upto Plinth	Completed – 4 Blocks
Plinth Beam & Anchor Bolts	Completed – 3 Block, In progress – 1 Blocks
Superstructure work	<ul style="list-style-type: none"> • Stilt to 1st Floor shear wall (Staircase & Lift well) work is in progress in all Blocks. • Stilt to 4th Floor Pre-engineered Steel (PEB) erection work in progress – 2 Blocks (Block A & C), Started in Block-D
Social Infrastructure Work	<ul style="list-style-type: none"> • In Community Centre and Commercial Block, the foundation & column casting upto plinth beam completed, & plinth beam shuttering work is in progress. • Electrical substation excavation work completed.
Sample Flat	Sample flat is ready on 1st floor of Block A

RAJKOT, Gujarat

Technology Name: **Monolithic Concrete Construction using Tunnel Formwork**



No. of Dwelling Units : **1144 Nos. (S+13)**
 No. of Block / Tower : **11 Blocks**
 Units in each Block / Tower : **104 Nos.**

Activities	Progress
Foundation work	<ul style="list-style-type: none"> • Completed in 10 blocks • In progress – 1 block • Block no. 6 (dewatering in progress)
Superstructure works	<ul style="list-style-type: none"> • Block No. 8- Ground +12 storeys completed • Block No. 9- Ground +12 storeys completed • Block No. 11- Ground +12 storeys completed • Block No. 10- Ground +11 storeys completed
Masonry work	• In progress - 4 blocks
Internal (electrical work)	• In progress - 4 blocks
Infrastructure work	<ul style="list-style-type: none"> • Foundation work completed for Community hall and Aaganwadi. • Superstructure work is in progress.
Sample flat	• Completed in (Block - 8)

PROGRESS OF LIGHT HOUSE PROJECTS AS ON OCTOBER 15, 2021

AGARTALA, Tripura

Technology Name: **Light Gauge Steel Structural System & Pre-Engineered Steel Structural System**



No. of Dwelling Units : **1000 Nos. (G+6)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **A(112), B(154), C(118), D(168), E(168), F(168) & G(112)**

Activities	Progress
Foundation (Dwelling Units)	
Pile Work	Completed – 3 Blocks In progress – 4 Blocks
Pile capping & Plinth beam	Yet to be taken up
Excavation	Block A, F & G started.



RANCHI, Jharkhand

Technology Name: **Precast Concrete Construction – 3D Volumetric Construction**



No. of Dwelling Units : **1008 Nos. (G+8)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **144 Nos.**

Activities	Progress
Status of statutory approvals & Site mobilization	<ul style="list-style-type: none"> Statutory approvals have been obtained, except RERA structural drawings & designs has been approved by Committee of Experts. The setting up of casting yard is under progress. Batching Plant erection has been completed, & commissioning is under progress.
	<ul style="list-style-type: none"> The pre-cast boundary wall erection has been completed up to 178 mt & Production up to 280 mt has been completed. The foundation work for 2 nos. of Tower Cranes is in progress. The Tower Crane equipments have arrived at site. Pre-Cast table, Pre-Stress bed, two nos. 2D moulds & 1 no. 3D POD mould, have arrived at site.

Social Media Corner



We see urbanisation as an opportunity and we are committed to making our cities world class urban spaces that further 'Ease of Living.'



PM @narendramodi Ji visited three exhibitions on themes of Clean Urban India, Water Secure Cities, Housing For All, New Construction Technologies, Smart City Development, Sustainable Mobility & Cities Promoting Livelihood Opportunities at the Conference-cum-Expo in Lucknow.



The second exhibition was on 75 Innovative Construction Technologies, named 'Indian Housing Technology Mela' (IHTM), showcasing domestically developed resource efficient, climate resilient rapid technologies.



Session on mainstreaming Innovative Construction Technologies like innovative building materials, Strategy for Standardization, construction using Indigenous & innovative Technologies is being held at Azadi@75-New Urban India: Transforming Urban India landscape.



A session on 'Marketing Strategies for Innovative Construction Technologies in the Construction Sector' is being held today at Azadi@75- New Urban India: Transforming Urban Landscape held at Indira Gandhi Pratishthan, Lucknow.

#AzadiKaAmritMahotsav



Housing For All @PMAYUrban · Oct 7

The highlight of 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo: When Hon'ble Prime Minister Shri @narendramodi enrolled as a #Technograh.

Hon'ble PM inaugurated the Expo on 5th October in Lucknow.

#TransformingUrbanLandscape



Pradhan Mantri Awas Yojana - Urban, Government of India

Published by Mhupa India · 4 October at 17:49
1 day to go!
Indian Housing Technology Mela will be hosted in Lucknow, Uttar Pradesh, from October 5 to October 7. Block the dates!
#TransformingUrbanLandscape



Pradhan Mantri Awas Yojana - Urban, Government of India

Published by Mhupa India · 4 October at 15:41
Indian Housing Technology Mela will give stakeholders an opportunity to showcase, explore, learn about innovative construction technologies, systems for future learnings & adoption.
With themes on Set Out in Lucknow. More information: <https://light-houseproject.in>
#AzadiKaAmritMahotsav #HousingForAll #PMAYUrban #TransformingUrbanLandscape #GHTCIndia #ConstructionTechnology



Pradhan Mantri Awas Yojana - Urban, Government of India

Published by Mhupa India · 30 September at 20:30
5 days to go!
Indian Housing Technology Mela (IHTM) will be inaugurated on 5th October 2021 in Lucknow. The 3-day event will promote technology & indigenous innovative construction techniques in housing at large scale.
Come, let's build a #NewUrbanIndia!
Registration details & more information at: <https://light-houseproject.in>
#IndianHousingTechnologyMela #IHTM #AzadiKaAmritMahotsav #TransformingUrbanLandscape #HousingForAll



Housing For All @PMAYUrban

#IndianHousingTechnologyMela is biggest attraction of 'Azadi@75 - New Urban India: Transforming Urban Landscape' Conference-cum-Expo in Lucknow.

Highlights from Day 2. Read more: pib.gov.in/PressReleasePa...

#TransformingUrbanLandscape
#AzadiKaAmritMahotsav



In a few months time, 1,144 flats under #LightHouseProject in Rajkot will be ready. The allotment process has already been done. Here are glimpses of the sample flat.



Housing For All @PMAYUrban · Sep 19

A walkthrough #LightHouseProject site in Indore!

Watch: A #Technograh describes her experience of visiting the site & learning the use of innovative construction technologies & their nitty-gritties.



Housing For All @PMAYUrban · Sep 15

In the #Technograh training series, an on-site programme was organised at #LightHouseProject Indore recently. Over 50 Technograh, who were participants of #AwasParSamvaad, were briefed about innovative construction technologies on site. Here are the glimpses from the visit.



Housing For All @PMAYUrban

#LightHouseProjects under #GHTCIndia making a home of hope & dream for people!

Here's a glimpse of the work in progress at #LHP Rajkot site, 1,144 houses are being constructed using France's advanced technology named Monolithic Concrete Construction using Tunnel Formwork.

