

Global Housing Technology Challenge-India

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In news

The Prime Minister laid the foundation stone of Light House Projects (LHPs) under Global Housing Technology Challenge (GHTC)-India at six sites across six States through video conferencing.

About Global Housing Technology Challenge-India (GHTC-India)

GHTC-India aims to identify and mainstream a basket of innovative technologies from across the globe that are sustainable and disaster-resilient. Such technologies would be cost-effective, speedier and ensure a higher quality of construction of houses, meeting diverse geo-climatic conditions and desired functional needs.

Key features

- It intends to get the best globally available innovative construction technologies through a challenge process.
- It aims to demonstrate and deliver ready to live-in houses in minimum time and minimum cost with high-quality of construction in a sustainable manner.
- This challenge seeks to promote future potential technologies through Incubation support and accelerator workshops, in order to foster an environment of research and development in the country
- It seeks to obtain the best available innovative construction technologies from across the globe through a unique competitive process.
- It aims to transform the eco-system of the housing construction sector in the country through lighthouse projects built using advanced proven technologies.

- It will foster the development of domestic technological research, and building platforms for knowledge sharing and networking across the sector.
- The GHTC-India platform aspires to provide an eco-system for the adoption of innovative technologies in the housing construction sector in a holistic manner.
- Lighthouse projects are envisaged that will be built using these innovative technologies and further support will be provided to upcoming domestic technologies to foster an environment of research and development.
- Conceptualised through extensive consultations with various stakeholders, GHTC-India leverages the scale and successes of the Pradhan Mantri Awas Yojana (Urban) and its Technology Sub-Mission.
- It furthers the transformative vision of the government in technological advances to rapidly deliver low-cost housing that meets stringent environmental, societal, quality and economic standards.
- To enable a technology transition, GHTC-India will encourage participation from across the affordable urban housing and construction sectors, such as technology providers, researchers, start-ups, developers, academia, public sector agencies, and civil society organizations.

Components of GHTC

Light House Projects

- LHPs are model housing projects with houses built with shortlisted alternate technology suitable to the geo-climatic and hazard conditions of the region. This will demonstrate and deliver ready to live houses with speed, economy and with better quality of construction in a sustainable manner.
- The period of construction is maximum 12 months from the date of handing over of sites to the construction agency after all statutory approvals. Approvals will be

accorded through a fast track process by the concerned State Government.

- These LHPs shall serve as LIVE Laboratories for different aspects of Transfer of technologies to field application, such as planning, design, production of components, construction practices, testing etc. for both faculty and students, Builders, Professionals of Private and Public sectors and other stakeholders involved in such construction.
- Six Technology providers have been selected through rigorous online bidding process for the construction of Light House Projects (LHPs) at six different locations in six states.



Salient features of LHPs

- LHP, shall mean a model housing project with approximately 1,000 houses built with shortlisted alternate technology suitable to the geo-climatic and hazard conditions of the region. This will demonstrate

and deliver ready to live houses with speed, economy and with a better quality of construction in a sustainable manner.

- The minimum size of houses constructed under LHP shall be in accordance with the prevailing guidelines of the Pradhan Mantri Awas Yojana (Urban).
- Constructed housing under LHP will include on site infrastructure development such as internal roads, pathways, common green area, boundary wall, water supply, sewerage, drainage, rain water harvesting, solar lighting, external electrification, etc.
- Houses under LHP will be designed keeping in view the dimensional requirements laid down in National Building Code (NBC) 2016 with good aesthetics, proper ventilation, orientation, as required to suit the climatic conditions of the location and adequate storage space, etc.
- Convergence with other existing centrally sponsored schemes and Missions such as Smart Cities, AMRUT, Swachh Bharat (U), National Urban Livelihood Mission (NULM), Ujjwalla, Ujala, Make in India shall be ensured during the designing of LHPs at each site.
- The structural details shall be designed to meet the durability and safety requirements of applicable loads including earthquakes and cyclone and flood as applicable in accordance with the applicable Indian/International standards.
- Cluster design may include innovative system of water supply, drainage and rain water harvesting, renewable energy sources with special focus on solar energy.
- The period of construction will be maximum 12 months from the date of handing over of sites to the successful bidder after all statutory approvals. Approvals will be accorded through a fast track process by the concerned State/UT Government.
- Technology Providers successfully completing the construction of LHPs within the stipulated 15 month's

period of the contract (including 3 months for preparing relevant drawings and taking all statutory approvals from various agencies in State followed by 12 months period for actual construction) will be rewarded with USD 20,000 each.

- A further incentive for early completion is being provided wherein technology providers who complete LHPs in less than 12 months will receive an incrementally higher bonus of USD 2,000 for each month less than stipulated period of 12 months.
- For the subsequent allotment of constructed houses under LHPs to the eligible beneficiaries in States/ UTs, procedures of existing guidelines of PMAY (U) will be followed.

Accelerator Affordable Sustainable Housing Accelerators- India (ASHA-India) initiative

ASHA-India aims to promote domestic research and entrepreneurship by providing incubation and acceleration support to potential future technologies. Under ASHA-India initiative, five ASHA-India Centers have been set up for providing incubation and acceleration support. The potential technology winners under acceleration support will be announced by the Prime Minister. The technologies, processes and materials identified through this initiative will provide a major fillip to young creative minds, start-ups, innovators and entrepreneurs.

PMAY-U Mission Pradhan Mantri Awas Yojana (Urban) Mission

- It was launched on 25th June 2015 which intends to provide housing for all in urban areas by year 2022
- The Mission addresses urban housing shortage among the EWS/LIG and MIG categories including the slum dwellers by ensuring a pucca house to all eligible urban households by the year 2022, when Nation completes 75 years of its Independence.

- PMAY(U) adopts a demand driven approach wherein the Housing shortage is decided based on demand assessment by States/Union Territories.
- State Level Nodal Agencies (SLNAs), Urban Local Bodies (ULBs)/ Implementing Agencies (IAs), Central Nodal Agencies (CNAs) and Primary Lending Institutions (PLIs) are main stakeholders who play an important role in implementation and success of PMAY(U).
- The Mission covers the entire urban area consisting of Statutory Towns, Notified Planning Areas, Development Authorities, Special Area Development Authorities, Industrial Development Authorities or any such authority under State legislation which is entrusted with the functions of urban planning & regulations.
- In order to recognize the outstanding contribution by States, UTs, Urban Local Bodies and beneficiaries, the Ministry of Housing and Urban Affairs has introduced annual awards for excellence in implementation of PMAY-Urban.