

**GOVERNMENT OF INDIA  
MINISTRY OF HOUSING AND URBAN AFFAIRS**

**LOK SABHA**

**UNSTARRED QUESTION NO.1752**

**TO BE ANSWERED ON JULY 29, 2021**

**PROMOTION OF ENERGY EFFICIENCY AND COOLING IN HOUSING FOR  
ALL PLAN**

**NO. 1752. SHRIMATI MAHUA MOITRA:**

**Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:**

- (a) whether the Government is taking any steps to promote energy efficiency and cooling in its Housing for All/Affordable Housing Plan and if so, the details thereof;**
- (b) whether the Government has been promoting the Sustainable Cooling Action Plan through the Ministry of Environment, Forest and Climate Change and if so, the details thereof; and**
- (c) whether its largest impact would be on energy efficiency of buildings and if so, the details thereof?**

**ANSWER  
THE MINISTER OF STATE IN THE  
MINISTRY OF HOUSING AND URBAN AFFAIRS  
(SHRI KAUSHAL KISHORE)**

**(a): Yes, Sir. The steps taken by Ministry of Housing and Urban Affairs (MoHUA) to promote energy efficiency and cooling in Housing for All/Affordable Housing Plan include the following:**

- i. Under Pradhan Mantri Awas Yojana – Urban (PMAY-U) scheme, a Technology Sub-Mission (TSM) has been set up to facilitate adoption of modern, innovative and green technologies and building materials for faster and quality construction of houses. TSM facilitates for preparation and adoption of layout designs and building plans suitable for various geo-climatic zones. It also assists States/Cities in deploying disaster resistant and environment friendly technologies.**

- ii. **Under Global Housing Technology Challenge-India (GHTC-India) initiative which was initiated by MoHUA in 2019, 54 innovative and alternate technologies from across the world were shortlisted in six broad categories. Technologies shortlisted include Sandwich panel system, Glass Fibre Reinforced Panel System (GFRP), Expanded Polystyrene (EPS) Core Panel System, Light gauge steel structure with insulated panels which have good thermal insulation property leading to operational energy saving during service life of buildings. Further, Light House Projects (LHPs) are being constructed using the shortlisted six distinct innovative technologies in six States namely Gujarat (Rajkot), Madhya Pradesh (Indore), Tamil Nadu (Chennai), Tripura (Agartala), Jharkhand (Ranchi) and Uttar Pradesh (Lucknow) with about 1,000 houses and related infrastructure. These LHPs address the requirement of Thermal Comfort/Cooling and green rating by Green Rating for Integrated Habitat Assessment (GRIHA) of Tata Energy Resource Institute (TERI). Energy efficiency is one of the important parameters of GRIHA rating.**
  - iii. **Central Public Works Department (CPWD) has brought out “Guidelines for Sustainable Habitat” to evaluate use of sustainable technologies and choice of material based on sustainable index. The objective of this guidelines is to help the Architect/Engineers while taking decisions on choice of architectural design/materials/machines/equipment.**
- (b): Yes, Sir. India Cooling Action Plan launched in March 2019 seeks to reduce cooling demand across sector by 20% to 25% by 2037-38 with benefits of thermal comfort for all provisions for cooling for Economically Weaker Section (EWS) and Low Income Group (LIG) housing. Under PMAY-U, use of thermal and energy efficient building materials and construction practices are being promoted along with use of passive architecture, which will help in reducing cooling demand in affordable housing sector.**
- (c): Yes, Sir. The Cooling Action Plan promoting passive architecture will impact on energy efficiency of buildings by reducing the need for active cooling in buildings, which will substantially reduce the energy demand.**

