GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
LOK SABHA
UNSTARRED QUESTION NO. 1491
TO BE ANSWERED ON FEBRUARY 13, 2025

CARBON EMISSION FROM CONSTRUCTION INDUSTRY

NO. 1491. DR. AMAR SINGH:

Will the Minister of Housing and Urban Affairs be pleased to state:

(a) whether the Government is aware of the fact that materials used in the construction industry contribute to 25-27% of the total carbon emissions during a project's lifecycle with constructions contributing 2-3%, operations accounting for 69-70% and demolitions responsible for 2-3%; and

(b) if so, the details thereof along with the corrective steps taken/proposed to be taken by the Government considering that embodied carbon can be reduced by using low carbon materials in the construction of urban infrastructure and buildings?

ANSWER
THE MINISTER OF STATE IN THE
MINISTRY OF HOUSING AND URBAN AFFAIRS
(SHRI TOKHAN SAHU)

(a) No. However, as per 2022 Global Status report for Buildings and Construction by United Nations Environment Programme (UNEP), The building and construction sector contributed to 37% of global carbon emission, out of which 10 GtCO2 (74%) of the carbon emission is from building operations, & 3.6 GtCO2 (26%) of the carbon emission is from production of building materials (i.e. concrete, steel, aluminium, glass and bricks) during the year 2021.

(b) The Central Govt. has taken several initiatives including helping reduce the carbon emissions in the construction of buildings and urban infrastructure, the same are as under:

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(i) A new chapter on Approach to Sustainability has been introduced as part 11 of the National Building Code 2016 by BIS, which provides a comprehensive set of requirements, intended to reduce the negative impact of buildings on the natural environment.

(ii) The Bureau of Energy Efficiency (BEE) under Ministry of Power, GoI has formulated the Energy Conservation Building Code (ECBC) for commercial buildings. It has also brought out Eco Niwas Samhita (ENS)-2018, the Energy Conservation Building Code for Residential Buildings. The Part- I of ENS 2018 focuses on building envelope. Further, BEE has come out with Eco-Niwas Samhita 2021 (Code Compliance and Part-II: Electro-Mechanical and Renewable Energy Systems). These Codes primarily focuses on improving energy efficiency & reducing emissions, during the operational phase of the buildings.

(iii) CPWD has also brought out Guidelines on SUSTAINABLE HABITAT, which includes the aspects such as Architectural Design and Layout, Sustainability index and Guidelines for materials, Guidelines for selection of equipment for Electrical and Mechanical Services for sustainable buildings & Guidelines on reuse and recycling of construction and demolition waste.

(iv) Building Materials & Technology Promotion Council (BMTPC), the autonomous organization under Ministry of Housing & Urban Affairs is also working towards promotion of cost effective, environment friendly materials & technologies. A number of materials & technologies such as fly ash brick, Autoclaved Aerated (AAC) Blocks & Panels, bamboo corrugated sheet, bamboo wood applications, prefab systems for roofing & walling and other emerging technologies suitable for green buildings are being promoted by the Council through evaluation & certification, Seminar, Exhibition, Workshop and Demonstration Construction.

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