

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2457
ANSWERED ON 13TH MARCH, 2025**

USE OF WASTE IN HIGHWAY CONSTRUCTION

2457. Ms Sayani Ghosh:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) the details of successful pilot projects that showcase the effective use of waste in highway construction;**
- (b) the total volume of waste materials such as fly ash, plastic waste and construction debris utilised in highway construction projects till date, State-wise;**
- (c) the length of highways in kilometres constructed using plastic waste and the estimated reduction in environmental pollution due to this initiative; and**
- (d) whether there are any incentives for contractors or private players to use waste materials in road construction, if so, the details thereof?**

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

- (a) Based on international best practices and outcome of indigenous research including performance evaluation of pilot projects, new standards/guidelines are framed by Indian Roads Congress (IRC) and existing standards/guidelines of IRC are amended from time to time to facilitate use of waste in highway construction. Government has also issued policy guidelines on use of such materials. A few projects where fly ash/plastic waste/ construction debris have been**

successfully used are Eastern Peripheral Expressway (EPE), Nagina-Kashipur NH-74, Udaipur-Shamlaji NH-48, and Urban Extension Road (UER-II).

(b) to (d) Adoption of waste materials such as fly ash, plastic waste and construction debris for road construction is a continuous process. National Highway (NH) Projects are generally implemented on Engineering, Procurement & Construction (EPC)/Hybrid Annuity Model (HAM)/Build-Operate-Transfer (BOT) mode where contractor/concessionaire carry out their own design in accordance with applicable manual, standards/guidelines/codes, etc. and then these are reviewed/ approved by Authority Engineer (AE)/Independent Engineer (IE) before its actual use in a NH project. Various kinds of waste materials such as fly ash, plastic waste, and construction debris are used in different NH projects in embankment/different pavement courses/different concrete items, etc. depending upon availability, suitability and feasibility of use.
