

**GOVERNMENT OF INDIA
ROAD TRANSPORT AND HIGHWAYS
LOK SABHA**

STARRED QUESTION NO:175
ANSWERED ON:01.12.2009
NEW TECHNOLOGY IN ROAD CONSTRUCTION
Venugopal Shri K. C.

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) whether the Government is encouraging the use of new technology and non-conventional raw materials for road construction, maintenance and rehabilitation including the use of rubberised tar and recycled plastic wastes;
- (b) if so, the details thereof;
- (c) whether the Government has made any assessment of the net savings which can accrue on account of the use of modern technology and non-conventional raw materials in road construction, maintenance and rehabilitation;
- (d) if so, the details thereof;
- (e) if not, the reasons therefor; and
- (f) the steps taken/proposed to be taken for implementing such technologies and the locations/National Highways where they are being used?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (SHRI R. P. N. SINGH)

(a) to (f) A statement is laid on the Table of the House

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF THE LOK SABHA STARRED QUESTION NO. 175 FOR ANSWER ON 01.12.2009 ASKED BY SHRI K.C.VENUGOPAL REGARDING NEW TECHNOLOGY IN ROAD CONSTRUCTION

(a) Yes, Sir.

(b) Natural Rubber Modified Bitumen (NRMB), Crumb Rubber Modified Bitumen (CRMB) and Polymer Modified Bitumen (PMB) is extensively being used for wearing course. A Committee in Indian Roads Congress which accredits new materials & techniques to be used in Construction, Maintenance & Rehabilitation of roads, has accredited 27 new Materials & Techniques. These are also allowed to be used on projects being taken up through Design Build Finance Operate Transfer (DBFOT) basis. The Concessionaire has been permitted the use of design standards and specifications of developed countries, apart from National Standards and they can use new technology/materials.

As regards use of plastic waste, this is at research stage.

(c) to (e) Studies have revealed that rubber/polymer modified bitumen, provides more durable roads by reducing susceptibility towards temperature variations and improving the desirable properties of the bitumen thereby giving overall better performance. A general assessment regarding cost saving, if any, is not possible as the saving will depend upon technology choice and will be case specific.

(f) Already replied in part (b) of the question.