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**USE OF NATURAL RUBBER MODIFIED BITUMEN FOR ROAD CONSTRUCTION:
THE INDIAN EXPERIENCE**

This presentation summarises the findings of various lab studies and field trials conducted in India by the Rubber Research Institute of India in association with different agencies and use of natural rubber modified bitumen (NRMB) for road construction. Production of NRMB was done at the Cochin Refineries and lab studies and field trials were performed by other agencies in collaboration with the Rubber Research Institute of India. Rubberised roads were evaluated by conducting studies on skid resistance, roughness of the surface etc. Elaborate studies have shown that NRMB has improved softening point and reduced penetration than ordinary bitumen. Roads made using NRMB have less bleeding and deformation, higher ductility at low temperatures, and better penetration ratio. NRMB roads were less affected by temperature extremes and had better resistance to skidding and brittle fracture. These studies have shown that the use of NRMB resulted in pavement performance that is both long lived and economical even as riding quality, vehicle operating cost and fuel use efficiency were markedly improved, reducing carbon dioxide emission.

ABSTRACT