

(b) the details thereof and along with the details of action taken in compliance to the said announcement?

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS (SHRI NITIN JAIRAM GADKARI): (a) and (b) Yes Sir, the said flyover at km 280.800 on NH-53 in the state of Chhattisgarh having a length of 3.565 km for an amount of ₹ 127.98 Cr. has been sanctioned for construction.

Assessment regarding reduction of vehicular emission

3322. SHRI KANAKAMEDALA RAVINDRA KUMAR: Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

(a) whether Government has made any assessment regarding reduction in vehicular emission after introducing and implementing various measures to control vehicular emissions which are considered as major pollutants in the country;

(b) if so, details thereof;

(c) whether Government has any proposal to augment the measures for controlling vehicular emissions in the country;

(d) if so, details thereof; and

(e) if not, reasons therefor?

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS (SHRI NITIN JAIRAM GADKARI): (a) to (e) To promote alternate fuels and to bring down pollution levels across the country, Government has taken proactive steps to promote environment friendly vehicles which are innovative, ushering in proactive use of natural resources. The Government has mandated mass emission standard for BS-VI vehicles throughout the country with effect from 1st April, 2020. There would be an expected 50% reduction in PM due to BS-VI as compared to BS-IV fuels. BS VI fuel has 5 times less sulphur content (10 ppm) as compare to BS IV fuel (50 ppm) which will help in reducing emissions from vehicles. Hydrocarbon emissions are expected to be reduced by 72% in BSVI (0.13 g/kwh) compared to BS-IV (0.46 g/kwh) in diesel based Heavy Duty Vehicles. Further, the Government has also issued various notifications specifying mass emission standards for Compressed Natural Gas, Biodiesel(B-100), ethanol (E85 or E100 and ED95), Methanol (M15 or M100 or M85 and MD 95), Liquefied Natural Gas, dual

fuel (diesel with Compressed Natural Gas or Bio-Compressed Natural Gas or Liquefied Natural Gas), Di Methyl Ether (D100). The Government has also mandated mass emission standard for BS-VI throughout the country with effect from 1st April, 2020.

Further, for promotion of electric vehicles, Government has notified for retrofitment of hybrid electric system or electric kit to vehicles and has specified the type approval procedure of electric hybrid vehicles. The Government has notified that the registration mark for Battery Operated Vehicles to be in Green background. The Government, *vide* S.O. 5333(E) dated 18th October, 2018 has also granted exemption to the Battery Operated Transport Vehicles and Transport Vehicles running on Ethanol and Methanol fuels from the requirement of permit. The Department of Heavy Industry has notified Phase-II of the FAME India Scheme [Faster Adoption and Manufacturing of Electric (& Hybrid) Vehicles in India], *vide* S.O. 1300 dated 8th March 2019, with the approval of Cabinet with an outlay of ₹ 10,000 crore for a period of three years commencing from 1st April, 2019.

Further, the National Green Tribunal (NGT) *vide* its order dated 07.04.2015 has directed that Petrol vehicles which are more than 15 years old and diesel vehicles that are more than 10 years old shall not be registered in the NCR, Delhi.

Investment required for pavement construction in hilly areas

3323. SHRI RONALD SAPA TLAU: Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) the Total amount of investments required for construction of Bitumin pavement and Reinforced Cement Concrete (RCC) pavement respectively, per km in highways in hilly areas for last 10 years;
- (b) in heavy monsoon areas, which system does Government recommend along with the reasons therefor; and
- (c) action taken by Government or needed to be taken to improve the pathetic conditions of roads/highways in the country to make those 'World Class'?

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS (SHRI NITIN JAIRAM GADKARI): (a) The cost of National Highways varies depending upon the terrain, type of pavement, width of highway, number and length of structure, availability of material