

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2275
TO BE ANSWERED ON 12.03.2025**

TOTAL ELECTRIFICATION OF RAILWAYS BY 2030

†2275. SHRI BABU SINGH KUSHWAHA:

Will the Minister of RAILWAYS be pleased to state:

- (a) the work completed in terms of percentage so far under the Government's scheme for total electrification of Railway by 2030;**
- (b) the present status of High speed train projects by National High Speed Rail Corporation Limited (NHSRCL) along with the details of the main targets thereof;**
- (c) the main work done and future plans of Indian Railway Stations Development Corporation (IRSDC) for upgradation and development of Railway Stations;**
- (d) the improvement in road and rail safety after removal of unmanned railway crossings by the Indian Railways; and**
- (e) the present contribution and future plans of environment friendly efforts such as rain water harvesting, reforestation, and solar-power trains in the Railways?**

ANSWER

**MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND
ELECTRONICS & INFORMATION TECHNOLOGY**

(SHRI ASHWINI VAISHNAW)

(a) At present, about 98% of the total BG network of the Indian Railways has been electrified. Electrification carried out during 2014-24 and before 2014 is as under:

Period	Route Kilometer
Before 2014 (about 60 years)	21,801
2014-25 (upto Feb, 25)	45,922

The electrification works in the balance sections have been taken up.

(b) Presently construction is going on the Mumbai-Ahmedabad High Speed Rail (MAHSR) Project. The MAHSR Project is passing through the States of Gujarat, Maharashtra and Union Territory of Dadra & Nagar Haveli. The length of the project is 508 Km with 12 stations planned at Mumbai, Thane, Virar, Boisar, Vapi, Billimora, Surat, Bhaurach, Vadodara, Anand, Ahmedabad and Sabarmati.

Entire land (1389.5 Ha) has been acquired for the project. Till now, 373 km Pier Construction, 307 km of Girder Casting and 274 km of Girder Launching have been completed. The work of undersea tunnel (approx. 21 Km) has also started.

Bullet train project is a very complex and technology intensive project. Considering the highest level of safety and associated maintenance protocols, Bullet train project has been designed with the support of Japanese railway. It is customised for Indian requirements and climatic conditions.

Timelines for the completion of the project can be reasonably ascertained after the completion of all associated works of Civil Structures, Track, Electrical, Signalling & Telecommunication and supply of Trainsets. The execution of MAHSR Project is monitored/reviewed regularly.

(c) Indian Railway Station Development Corporation (IRSDC) had completed and commissioned redevelopment work of Rani Kamalapati Railway Station in the State of Madhya Pradesh and Gandhinagar Capital Railway Station in the State of Gujarat. In addition to this, IRSDC had also done planning for station redevelopment of more than 60 Stations.

However, since the activities performed by both IRSDC and Rail Land Development Authority (RLDA) under station development/redevelopment programme were overlapping, a need was felt that one of the two bodies should be identified as the sole functioning entity and given full responsibility. Accordingly, it was decided that IRSDC be closed and the works assigned to IRSDC be transferred to concerned Zonal Railways and RLDA vide Railway Board letter dated 18.10.2021.

(d) All Unmanned Level Crossings (UMLCs) on running lines of Broad Gauge network of Indian Railway have been eliminated by 31.01.2019. This has improved safety of train operation & road users.

(e) Railways are environment friendly and energy-efficient mode of transportation. The alignment for new line projects is decided so as to have minimum impact on forest life and if it is still unavoidable, mitigation measures like afforestation, etc are undertaken. Installation of Rain Water Harvesting (RWHs) structure on railway premise is a continuous process. 7692 nos of RWH systems have been installed in Railways up to March' 2024.

Indian Railways (IR) has planned to progressively procure renewable energy from different renewable power sources to reduce carbon emissions. Till January, 2025, about 494 Mega Watt (MW) of solar plants (both on Rooftops and land) and about 103 MW of Wind power plants have been commissioned over Indian Railways (IR). In addition, 100 MW of renewable power under Round the Clock (RTC) mode has also started flowing.

Railway has made following environment friendly efforts for energy conservation:-

(i) Introduction of IGBT based 3-phase propulsion system with regenerative braking in Electrical Multiple Unit (EMU) trains, Mainline Electrical Multiple Unit (MEMU) trains, Kolkata Metro rakes and Electric Train Sets.

(ii) Conversion of End on Generation (EOG) trains into Head on Generation (HOG) trains to reduce noise and air pollution at stations and in trains. It is also expected to significantly reduce the diesel used in power cars.

(iii) Provision of energy efficient LED lights in coaches for better illumination.

(iv) Provision of 750V external power supply at washing/sick lines for maintenance and testing of LHB coaches
