

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2468
TO BE ANSWERED ON 21.12.2022**

ELECTRIFICATION OF RAILWAY ROUTES

2468. SHRI G.M. SIDDESHWAR:

Will the Minister of RAILWAYS be pleased to state:

- (a) the current status of the 100 per cent electrification of all broad-gauge routes initiative;**
- (b) the estimated emission reduction achieved already through this shift and the cost savings which have arisen from such electrification;**
- (c) whether the Government has set up solar power generation facilities in vacant railway land as proposed previously, if so, the details thereof; and**
- (d) the details of all power procurement routes for Indian Railways to achieve the set target of 20 GW renewable energy by 2030?**

**ANSWER
MINISTER OF RAILWAYS, COMMUNICATIONS AND
ELECTRONICS & INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)**

(a) to (d) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2468 BY SHRI G.M. SIDDESHWAR TO BE ANSWERED IN LOK SABHA ON 21.12.2022 REGARDING ELECTRIFICATION OF RAILWAY ROUTES

(a) 83% of Broad Gauge (BG) network of Indian Railways have been electrified upto November, 2022.

(b) Indian Railways (IR) has aimed to reduce its carbon footprint to achieve 'Net-zero Carbon Emission' by 2030. Per thousand Gross Tonne Kilometer (GTKM) Savings on electric traction is as under:

Type of traffic	Line Haul Cost of Electric Traction (₹/Thousand GTKM)	Line Haul Cost of DieselTraction (₹/Thousand GTKM)	Diesel traction costlier by
Coaching (passenger)	222.86	502.83	2.25 times
Freight	148.47	453.60	3.05 times

(c) and (d) Indian Railways (IR) plans to progressively shift its power requirement from diesel to electric traction. To cater the future energy demand of various electrical assets in Traction and Non-traction application, IR has planned to progressively procure renewable energy from different power procurement modes. As of November 2022, about 143 Mega Watt (MW) of solar plants (both on Rooftops and on land) and about 103 MW of Wind power plants have been commissioned. Further, about 2,150 MW of renewable capacity has also been tied up.
