

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**LOK SABHA  
UNSTARRED QUESTION NO. 1664  
TO BE ANSWERED ON 09.12.2015**

**CARBON FOOTPRINT**

**1664. DR. P. VENUGOPAL:**

**Will the Minister of RAILWAYS be pleased to state:**

- (a) whether it is a fact that the Railways contributes substantial reduction of carbon footprint than roadways;**
- (b) if so, the details thereof;**
- (c) the steps being taken to strengthen the rail transport to increase its intermodal share in freight traffic in the next 15 years;**
- (d) whether the Railways is considering to reduce emission intensity by 32% in the year 2030 over the year 2005 by improving rail traction fuel and energy efficiency by 8% to 14% over 2013; and**
- (e) if so, the details thereof?**

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF RAILWAYS  
(SHRI MANOJ SINHA)**

**(a) to (e): A Statement is laid on the Table of the House.**

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 1664 BY DR. P. VENUGOPAL TO BE ANSWERED IN LOK SABHA ON 09.12.2015 REGARDING CARBON FOOTPRINT**

**(a) & (b): Yes Madam. Railways contribute to substantial reduction of carbon footprint than Roadways as evident from the report on 'Low Carbon Strategies for Inclusive Growth', published in the year 2014 by Planning Commission, the relevant extract of which is given below:**

**Emissions from Rail and Road sector in 2007**

<b>Transport Sector</b>	<b>GHG Emission(in Million tons of CO<sub>2</sub> equivalent)</b>	<b>Share of GHG Emission out of total</b>
<b>Total</b>	<b>142.04</b>	<b>100%</b>
<b>Road</b>	<b>123.55</b>	<b>87%</b>
<b>Rail</b>	<b>6.84</b>	<b>4.8%</b>

**As compared to this, the share of Passenger & Freight traffic carried by Rail & Road sectors in 2010 out of the total traffic is as under:**

<b>Transport Sector</b>	<b>Passenger Traffic</b>	<b>Freight Traffic</b>
<b>Road</b>	<b>84.69%</b>	<b>58.29%</b>
<b>Rail</b>	<b>14.60%</b>	<b>41.69%</b>

**(c) The strategies for strengthening the rail transport to increase inter modal share in freight traffic in the next 15 years includes-**

- (i) Operationalising Eastern & Western Dedicated Freight Corridors;**

- (ii) Substantial Capacity Augmentation and Network expansion;**
- (iii) Upgrading the existing network including Electrification;**
- (iv) Augmentation of rolling stock with High Horse power Electric & Diesel locomotives and better design wagons with higher pay load to tare ratio.**

**(d) & (e): Railways has planned to reduce emission intensity by nearly 32 % in the year 2030 over the year 2005 by improving rail traction fuel and energy efficiency in freight traffic by 8 % to 13 % over 2013 and other efforts. Technological interventions for improving rail traction efficiency inter-alia include-**

- (i) Use of High Horse Power three phase Electric locomotives and Electric Multiple Units (EMUs) with regenerative breaking features;**
- (ii) Modifications to the existing fleet of Diesel Locos to improve fuel efficiency;**
- (iii) Fitment of Hotel Load Convertor on electric and diesel locomotives to supply to the utilities in trains;**
- (iv) Use of energy efficient designs of electric & diesel new locomotives;**
- (v) Use of alternate fuels in traction such as Compressed Natural Gas (CNG).**

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