

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**LOK SABHA  
STARRED QUESTION NO.356  
TO BE ANSWERED ON 18.03.2020**

**ELECTRIFICATION OF RAILWAY LINES**

**\*356. SHRI UTTAM KUMAR REDDY NALAMADA:**

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

- (a) whether the Government plans to electrify all rail lines by 2024 and if so, the details thereof;**
- (b) the length of the entire railway network in the country and the length that the Government proposes to add during the next three years;**
- (c) the details, including location and length of railway tracks that have already been electrified and that are yet to be electrified;**
- (d) the estimated cost of electrifying all railway tracks by 2024;**
- (e) the current annual consumption of electricity by the Railways and the estimated consumption once all the tracks are electrified; and**
- (f) the quantum of electricity that will be sourced from thermal power plants and from renewable sources?**

**ANSWER**

**MINISTER OF RAILWAYS AND COMMERCE & INDUSTRY**

**(SHRI PIYUSH GOYAL)**

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

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF STARRED QUESTION NO. 356 BY SHRI UTTAM KUMAR REDDY NALAMADA TO BE ANSWERED IN LOK SABHA ON 18.03.2020 REGARDING ELECTRIFICATION OF RAILWAY LINES**

(a) It has been the constant endeavour of Indian Railways (IR) to undertake electrification of Broad Gauge (BG) Railway lines. Significant progress has already been made in this regard and IR is likely to electrify all BG rail lines by 2024.

(b) Railway network of Indian railways is covering 62,891 Route kilometer (RKM) of Broad Gauge, 2,839 RKM of Meter Gauge & 1,685 RKM of Narrow Gauge; total 67,415 as on 31.03.2019.

The completion and commissioning of any New Line, Gauge Conversion & Doubling Project depends on various factors like availability of funds, quick land acquisition by State Government(s), forest clearance by officials of forest department, shifting of infringing utilities (both underground and over ground), statutory clearances from various Authorities, Geological and Topographical conditions of area, law and order situation in the area of project site, number of working months in a year for particular project site due to climatic conditions, encountering unforeseen conditions like earthquake, flooding, excessive rains, strikes of labour, orders of Hon'ble Courts, situation and conditions of working agencies/contractors etc. and all these factors vary from project to project and site to site. Due to these varied factors, it is not possible to provide any confirmed length of Railway Network; which could be added during the next 3 years.

(c) Zone-wise Route kilometers (RKM)/electrified RKM/balance RKM to be electrified (as on 1.03.2020) is as under:-

| SN | RAILWAY       | Total BG RKM | Electrified BG RKM | Balance BG RKM yet to be electrified |
|----|---------------|--------------|--------------------|--------------------------------------|
| 1  | Central       | 3,853        | 2,928              | 925                                  |
| 2  | East Coast    | 2,771        | 2,632              | 139                                  |
| 3  | East central  | 3,883        | 3,229              | 654                                  |
| 4  | Eastern       | 2,804        | 2,149              | 655                                  |
| 5  | North Central | 3,222        | 2,569              | 653                                  |

| <b>SN</b> | <b>RAILWAY</b>            | <b>Total BG<br/>RKM</b> | <b>Electrified BG<br/>RKM</b> | <b>Balance BG<br/>RKM yet to<br/>be<br/>electrified</b> |
|-----------|---------------------------|-------------------------|-------------------------------|---|
| <b>6</b>  | <b>North Eastern</b>      | <b>2,994</b>            | <b>1,677</b>                  | <b>1,317</b>  |
| <b>7</b>  | <b>Northeast Frontier</b> | <b>4,112</b>            | <b>319</b>                    | <b>3,793</b>  |
| <b>8</b>  | <b>Northern</b>           | <b>7,057</b>            | <b>4,816</b>                  | <b>2,241</b>  |
| <b>9</b>  | <b>North Western</b>      | <b>5,083</b>            | <b>1,666</b>                  | <b>3,417</b>  |
| <b>10</b> | <b>South Central</b>      | <b>6,058</b>            | <b>3,744</b>                  | <b>2,314</b>  |
| <b>11</b> | <b>South East Central</b> | <b>2,099</b>            | <b>1,863</b>                  | <b>236</b>  |
| <b>12</b> | <b>South Eastern</b>      | <b>2,713</b>            | <b>2,392</b>                  | <b>321</b>  |
| <b>13</b> | <b>Southern</b>           | <b>4,834</b>            | <b>3,381</b>                  | <b>1,453</b>  |
| <b>14</b> | <b>South Western</b>      | <b>3,566</b>            | <b>731</b>                    | <b>2,835</b>  |
| <b>15</b> | <b>West Central</b>       | <b>3,010</b>            | <b>2,496</b>                  | <b>514</b>  |
| <b>16</b> | <b>Western</b>            | <b>4,805</b>            | <b>2,445</b>                  | <b>2,360</b>  |
| <b>17</b> | <b>Kolkata Metro</b>      | <b>27</b>               | <b>27</b>                     | <b>0</b>  |
|           | <b>TOTAL</b>              | <b>62,891</b>           | <b>39,064</b>                 | <b>23,827</b>   |

- (d) **Approximate estimated cost for electrifying balance BG routes of Indian Railways is ₹30,000 crore.**
- (e) **Annual consumption of electricity for traction purpose by Indian Railways (IR) during 2019-20 (till December, 2019) is about 13.80 Billion Units and estimated electricity consumption after complete electrification of railway tracks is about 30.13 Billion units.**
- (f) **The future electricity sourcing of IR for traction purpose from thermal and renewable sources is dependent upon the energy mix of the Country at that stage.**

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