

Electrification

The advent of electric traction on IR dates back to 1925. Starting with DC traction system, IR introduced electrification on Single phase 25 KV system and subsequently adopted the latest 2x25 KV Auto Transformer system on a limited scale.

During the XI Plan period (2007-12), 4,556 route kilometres have been electrified against the initial target of 3,500 route kilometres which was revised to 4,500 route kilometres in mid-term review of the Plan. The Golden Quadrilateral having double line has been fully electrified except Mumbai-Chennai route where doubling and electrification work is in progress.

6,500 route kilometres have been proposed for railway electrification during XII Five Year Plan (2012-17). Upto March 31, 2012, 31.39% of the total route kilometres have been electrified.

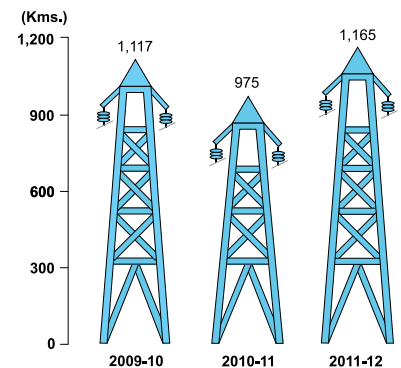
The progress of electrification on IR over the Plan periods is as under:-

Period	Route kms. electrified
Upto VII Five Year Plan (1990)	9,252
Annual Plans (1990-92)	1,557
VIII Five Year Plan (1992-97)	2,708
IX Five Year Plan (1997-02)	2,484
X Five Year Plan (2002-07)	1,810
XI Five Year Plan (2007-12)	4,556

Details of route kilometres electrified during 2011-12 is as under:

Section	Railway	Route kms. electrified
Puntamba-Sainagar Shirdi	(Central)	12
Manmad-Puntamba-Belapur	(Central)	88
Amravati Chord Line	(Central)	2
Pandabeswar-Chinpai	(Eastern)	19
Barddhaman-Balgona	(Eastern)	24
Krishnanagar-Santipur	(Eastern)	13
Muzaffarpur-Narayanpur Anant	(East Central)	3
Begusarai-Sahibpur Kamal	(East Central)	27

RAILWAY ELECTRIFICATION (ROUTE KILOMETRES)



Electric loco shed, Lallaguda, Secunderabad, South Central Railway.



Electric loco maintenance, Lallaguda electric loco shed, South Central Railway.



Electrification work in progress at the Basin Bridge yard near Chennai Central, Southern Railway.



Over Head Electrical maintenance, South Eastern Railway.



Conversion of DC to AC traction on Suburban line in Mumbai.



LED lights on platform at Guntur Railway Station, South Central Railway.



Conversion of DC to AC traction on Suburban line in Mumbai.

Section	Railway	Route kms. electrified
Nayagarh-Jaroli	(East Coast)	12
Muzaffar Nagar and Saharanpur Yard	(Northern)	4
Mohiuddinpur-Ghaziabad	(Northern)	36
Nagaria Sadat-Rampur	(Northern)	37
Chakki Bank-Pathankot	(Northern)	4
Samba-Vijaypur Jammu	(Northern)	8
Ujh-Chhan Arorian-Hira Nagar	(Northern)	15
Ravi-Kathua-Buddhi	(Northern)	13
Rohtak Yard	(Northern)	3
Sultanpur Yard	(Northern)	3
Sultanpur-Sri Krishna Nagar	(Northern)	56
Varanasi-Mondh	(Northern)	49
Ait-Paman	(North Central)	100
Paricha-PTSC	(North Central)	1
Ait-Konch	(North Central)	14
Gonda-Tinich	(North Eastern)	75
Jhaua-Katihar-Kuretha	(Northeast Frontier)	31
Kanniyakumari Yard	(Southern)	2
Kadambur-Vanchi Maniyachchi-Tuticorin	(Southern)	53
Vanchi Maniyachchi-Tirunelveli-Nagercoil	(Southern)	97
Tirukkivilur-Kaniyambadi	(Southern)	109
Tamluk-Digha	(South Eastern)	89
Kamalapuram-Yerraguntla-Kalamalla	(South Central)	22
Gooty-Rayalacheruvu-Vemulapadu	(South Central)	29
Mangapatnam-Kondapuram	(South Central)	9
Jaggayapeta Town-Mellacheruvu	(South Central)	19
Malkhaid Road-Chittapur	(South Central)	14
Hejjala-Ramanagaram	(South Western)	22
BEML Nagar-Marikuppam	(South Western)	8
Indore Yard	(Western)	1
Part of Bharuch Tham-Vagra-Dahej	(Western)	42
Total		1,165