

Rlys cut carbon emission by 400 cr kg in 10 yrs

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IN a step towards environmental sustainability, the Indian Railways has saved over 600 crore litre diesel over the past decade, resulting in reduction of more than 400 crore kg of carbon dioxide (CO₂) emissions. According to the ministry of railways, this much CO₂ reduction is roughly equivalent to planting 16 crore saplings.

"This has been achieved, showcasing Indian Railways' dedication to sustainability and reducing its carbon footprint ahead of becoming net zero by 2030," a senior railway official said, adding that the Railways is quickly becoming the most environment-friendly and energy-efficient mode of national transport.

"Over the past 10 years, the railways has saved more than 640 crore litres of diesel and cut CO₂ emissions by 400 crore kilograms through initiatives aimed at achieving the goal of becoming the nation's net-zero emission transport provider. The reduction of 400 crore kilograms of CO₂ emissions is equivalent to planting 16 crore saplings across the country,"

ELECTRIFICATION ON FAST TRACK

At present, about 96% of the total Broad Gauge network of Indian Railways has been electrified

Railways envisions to become net zero carbon emitter by 2030



Till January 2025, around 494 MW of solar energy (both rooftop and land) and around 103 MW of wind power commissioned by Railways



the official said.

"The Railways has made substantial progress in electrification of rail routes, having electrified 45,922 km of tracks over the past 10 years, compared to just 5,188 km done between 2004 and 2014. This has significantly contributed to fuel savings and emissions reductions, making railway transport more sustainable," the official said.

Officials said eco-friendly initiatives in water conservation, such as the installation of rain water harvesting (RWH) systems on railway premises, have been implemented.

"7,692 RWH systems had been installed by March 2024, and In-

dian Railways plans to progressively procure renewable energy from various power sources to further reduce carbon emissions," officials said.

Railway Minister Ashwini Vaishnaw has set a mission to transform the entire railway network into a net-zero emission transport system by 2030.

The official quoted above provided figures, noting that 494 megawatts (MW) of solar power (from both rooftops and land-based plants) and 103 MW of wind power have been commissioned by the Indian Railways as of January 2025 as part of this net-zero push.

"The Indian Railways has in-

duced several energy-saving measures, such as converting end-on-generation (EOG) trains into head-on-generation (HOG) trains, which reduce noise and air pollution at stations and on-board, as well as significantly lowering diesel consumption in power cars," the official said, adding that the electrification of routes has been instrumental in reducing carbon emissions, saving diesel, and cutting associated costs.

Minister Vaishnaw had told the Lok Sabha that the Railways is advancing the electrification of broad gauge railway lines at a mission-driven pace, achieving approximately 97% electrification of its total broad gauge network.

The minister noted that around 45,200 km of the broad gauge network have been electrified since 2014-15. He highlighted a significant increase in the pace of electrification, from approximately 1.42 km per day during 2004-14 to about 19.7 km per day in 2023-24.

He emphasised that electric traction is not only more environmentally viable but also nearly 70% more economical compared to diesel traction.