

Railways' clean energy initiative yet to gather steam

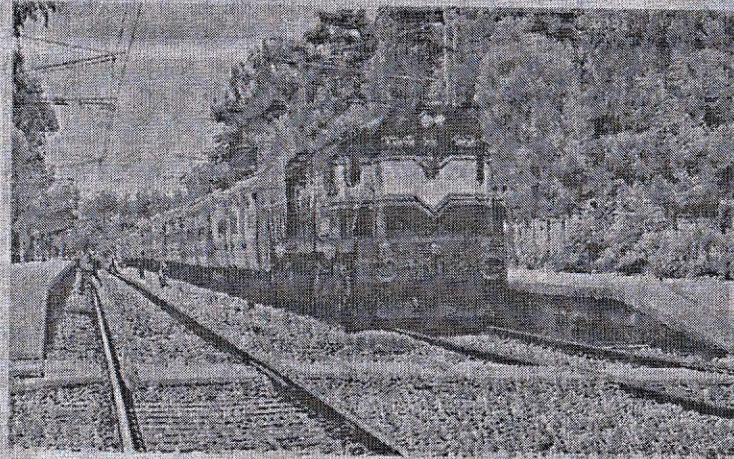
Bloomberg

Indian Railways, a sprawling network that ranks among the world's largest, is a long way from generating the amount of clean energy it needs to become net carbon neutral by 2030, its own stated goal.

The organisation had installed renewable capacity of 142 MW of rooftop solar and 103.MW of wind energy as of August, according to a statement dated October 7 and recently uploaded to its website.

"The Railways will attempt to reduce its carbon footprint primarily through sourcing of its energy requirements from renewable energy sources," the statement said. "By 2029-2030, the expected requirement of installation of renewable capacity would be about 30 gigawatts."

COAL DEPENDENT
However at 245.4 megawatts



ON SLOW TRACK. At 245 MW of renewable energy capacity, the Railways has set up just 0.8 per cent against the targetted 30 GW by 2029-2030

currently, that's just 0.8 per cent of the way there.

A representative for Ministry of Railways wasn't immediately able to provide any more up-to-date figures or comment further.

Ramping up clean energy for rail electricity needs is a tall order considering that India relies on dirty coal to generate over 70 per cent of its

power. However it's crucial for the country to curb greenhouse gas emissions from trains to meet Prime Minister Narendra Modi's pledge to become net zero by 2070.

MULTIPRONGED PLAN
Railways' statement that other strategies toward becoming a net zero emitter include "taking a multi-pronged

approach of electrification of routes, shifting from diesel to electric traction, promotion of energy efficiency, construction of dedicated freight corridors and green certification of railway establishments."

The Prime Minister Modi is seeking to modernise the ageing Railways, in part by banking on low-cost loans from Japan to build the country's first bullet train and inviting investments from private firms to operate passenger trains for the first time.

Railways has said it will achieve 100 per cent electrification by 2023 and become a net zero carbon emitter by 2030 but hasn't publicly laid out a full plan about how that will be done.

The massive rail network, which carries about as many passengers a day as Taiwan's entire population, makes it difficult to increase clean sources of energy at the same pace as the soaring demand.

In its statement, Railways said it has electrified 52,508

route-km out of a total broad-gauge network of 65,141 route-kms, or about 80.6 per cent. After Railways electrifies 100 per cent of its routes, electricity demand will surge 243 per cent to 72 terrawatt hours in the 10 years through 2030.

It also said it plans to offset 60 million tonnes of emissions by 2030 using various measures including planting trees on vacant railway land, reducing water consumption and building waste-to-energy plants.

Other measures include: Setting up dedicated freight corridors to transport 45 per cent of land-based freight by 2030, up from 36 per cent, with the first phase of freight corridors reducing emissions by about 457 million tonnes over 30 years. Using 5 per cent of blending-biofuels in traction diesel fuel. Setting up waste to energy/compost/biogas plants/material recovery facility at more than 250 stations.