

Solar-powered trains to be a reality soon

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NEW DELHI: The Indian Railways has initiated steps to run solar-powered locomotives on mainline routes, a move that could reduce the dependence on fossil fuels.

Since coming into power two years back, the NDA has pushed ahead with plans to utilise solar energy to light up offices, residential complexes and even train compartments but the ambitious initiative to use the energy for “traction purposes” (to haul trains) has been set in motion for the first time.

In a recent directive, the Railway Board instructed the West Central Railway to firm up a power-purchase agreement with the Rewa Ultra Mega Solar. In a breakthrough move, the railways has initiated steps to run solar-powered locomotives on mainline routes. While the Centre has pushed ahead with plans to utilise solar energy to light up train compartments, the initiative to use the energy for “traction purposes” (to haul Power Project (RUMPL) for the purchase of 50 MW of solar power for “traction needs” of the Indian Railways.

The RUMPL – a joint venture of the Solar Power Corporation of India and the Madhya Pradesh Urja Vikas Nigam that is being billed as the world’s largest solar trains) has been set in motion for the first time. Studies have estimated that solar power can meet only a fraction of the energy required to haul trains. But even if a small percentage of it can be used, the dependence on fossil fuels can be reduced to a great extent. The power project – will produce 500 MW of solar power when complete in 2019.

“We are experimenting with the ‘net metering’ system that will involve the supply of solar power to the main power grid. The Railways will make separate payment for the amount of solar power that it draws from the grid for traction purposes,” a railways official said and added that they were also exploring the option of storing solar energy in batteries for their later use.

Although the railways has set a stiff target for itself with an aim of generating 1000 MW solar power over the next five years (including 500 MW for traction purposes), departmental studies have estimated that solar power can meet only a fraction of the energy required to haul trains. “But even if a small percentage of solar power can be used, the dependence on fossil fuels can get reduced to a great extent,” a ministry official said.

The Deutsche Bahn - German Railways - runs approximately 40% of its freight trains

on solar power.