

# Green railways

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**In news-** The Indian railways is working in mission mode to become the largest Green Railways in the world and is moving towards becoming a **'net zero carbon emitter' before 2030.**

## **More information-**

- **Green certification** mainly covers assessment of parameters such as *energy conservation measures, use of renewable energy, greenhouse gas emission reduction, water conservation, waste management, material conservation, recycling* etc.
- The Indian Railways has incorporated climate change features in its own risk assessments and disaster management protocols.
- It has signed an **MoU with the Confederation of Indian Industry (CII)** in July 2016 for facilitation of Green initiatives on IR.
- Under this, 39 workshops, 7 production units, 8 loco sheds and one store depot have been **'GreenCo'** certified.
- It has **taken measures** including electrification of the railways, improving energy efficiency of locomotives, trains, and fixed installations, acquiring green certification for stations/installations, fitting bio-toilets in coaches, and switching to renewable sources of energy.
- Over 600 railway stations have been certified for implementation of the Environment Management System to **ISO:14001** in the last two years.
- It has already completed electrification of more than 40000 Route km (RKM) and has the plan to **achieve 100 percent electrification of the network by December 2023.**

- In July 2020, the railways set up a **1.7-MW solar power plant in Bina, MP**, in collaboration with Bharat Heavy Electricals Ltd (BHEL) and it is the **first solar energy plant to directly power railway overhead lines** from which locomotives draw their traction power.
- At present, **100 MegaWatt (MW) of solar plants** have been commissioned on roof-tops of various buildings, along with 900 stations.