GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 2972
ANSWERED ON 20.12.2024

NET ZERO CARBON EMISSION

2972 SHRI BABUBHAI JESANGBHAI DESAI:
SHRI KESRIDEVSINH JHALA:

Will the Minister of RAILWAYS be pleased to state:

(a) whether it is a fact that Indian Railway has set a target for Net Zero Carbon Emission by 2030;

(b) the number of green initiatives taken by Government to reduce its carbon emissions which includes use of energy efficient technologies;

(c) whether steps are being taken by Government for enhancing use of renewable energy to reduce carbon emission; and

(d) if so, the details of number of solar plants and wind power plants commissioned by the Indian Railways so far?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)

(a) to (d) Indian Railways has envisioned to become net zero carbon emitter by 2030 for scope 1 emissions. Indian Railways have taken the following green initiatives to reduce its carbon emission:-

- Electrification of Railway network.
- Shifting from diesel to electric traction.
- Installation of solar plants (both on rooftops and on land) and wind power plants.
- Construction of Eastern & Western Dedicated Freight Corridors (DFCs).
- Introduction of 3-phase propulsion system with regenerative braking.

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- Conversion of End on Generation (EOG) trains into Head on Generation (HOG) trains to reduce noise, air pollution and diesel consumption.
- Provision of energy efficient Light Emitting Diode (LED) lighting in all Railway installations including stations, service buildings, residential quarters and coaches for reduction in electricity consumption.
- Promotion/adoption of energy efficiency practices.
- Use of star rated appliances.
- Hydrogen fuelled train set pilot project.
- Green Certifications & Environment Management System Certifications of industrial units, railway stations and other railway establishments.
- Renewable energy procurement from different power procurement modes like Round the Clock (RTC), Solar and Wind based renewable power.
- Afforestation for carbon sequestration.
- Proper waste management.

Indian Railway has planned to progressively procure renewable energy from different sources and about 480 Mega Watt (MW) of solar power plant (both rooftop and land) and around 103 Mega Watt (MW) of wind power plants have been commissioned over Indian Railways.

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