GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 5072
TO BE ANSWERED ON 02.04.2025

USE OF SOLAR ENERGY IN RAILWAYS

5072. SHRI NARESH GANPAT MHASKE:
SMT. SHAMBHAVI:
SHRI RAVINDRA DATTARAM WAIKAR:
DR. SHRIKANT EKNATH SHINDE:

Will the Minister of RAILWAYS be pleased to state:

(a) the details of railway stations and train coaches equipped with solar panels so far since 2020, State-wise and year-wise;

(b) the details of the initiatives taken by the Government to promote the use of solar energy in Railways to achieve energy efficiency;

(c) the details of the Public-Private Partnership (PPP) models being explored to accelerate solar energy adoption in train coaches and railway stations;

(d) the details of the challenges faced by the Government in implementing solar energy solutions across railway stations and train coaches, and the steps taken to tackle them;

(e) whether the Government has data on the expected long-term financial savings for the Railways through increased solar energy usage, if so, the details thereof and if not, the reasons therefor; and

(f) whether the Government has detailed plans/roadmap for transitioning Railways to a more renewable energy-based system, if so, the details thereof?

ANSWER

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

(a) to (f): Indian Railways is making all endeavors to promote solar energy in line with the Government policies to proliferate renewable

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energy, environmental sustainability and to achieve long-term financial savings. The transition to renewable energy is an ongoing process.

Indian Railways has planned to progressively procure renewable energy through different power procurement modes for Round The Clock (RTC) power, which is hybrid solution for renewable power includes solar and wind etc. Most of the work of setting up of solar plants is undertaken by Railways through Power Purchase Agreement under developer mode.

During implementation of solar energy, many challenges like regulatory constraints, power evacuation and connectivity issues were faced by the railways. To tackle these issues, State Governments and Transmission Utilities were pursued on regular basis.

So far, about 209 MW of solar plants on 2249 Railway stations and service buildings across the country have been provided. State-wise and year-wise details are as under:

S.No.	State	Railway Stations Provided with Solar Plants (in Nos.)		
		2014-15 to 2019-20	2020-21 to February, 2025	Cumulative upto February, 2025
1	Rajasthan	73	200	275
2	Maharashtra	43	213	270
3	West Bengal	12	222	237
4	Uttar Pradesh	78	93	204
5	Andhra Pradesh	33	126	198
6	Karnataka	86	60	146
7	Madhya Pradesh	49	74	134
8	Odisha	30	103	133
9	Gujarat	11	96	112
10	Telangana	35	60	95
11	Bihar	25	42	81
12	Assam	27	48	78

Contd.3/-

S.No.	State	2014-15 to 2019-20	2020-21 to February, 2025	Cumulative upto February, 2025
13	Tamil Nadu	42	31	73
14	Jharkhand	10	35	47
15	Haryana	9	23	36
16	Punjab	19	11	30
17	Uttarakhand	1	17	18
18	Himanchal Pradesh	1	16	17
19	Tripura	15	1	16
20	Chhattisgarh	10	5	16
21	Kerala	12	1	13
22	Delhi	4	3	8
23	J & K	2	4	6
24	Nagaland	0	2	2
25	Meghalaya	0	1	1
26	Manipur	0	1	1
27	Chandigarh	0	1	1
28	Puducherry	1	0	1
	Total	628	1489	2249

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