### GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

# LOK SABHA UNSTARRED QUESTION NO. 3646 TO BE ANSWERED ON 02.01.2019

#### SOLAR PANELS ON ROOF TOP OF TRAINS

#### †3646. SHRI HARI MANJHI:

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Railways has installed solar-energy panels on the roof of some trains on a trial basis;
- (b) if so, the details thereof and the outcome of such trial;
- (c) whether the railways proposes to install the same type of solar-energy panels on the roofs of other trains as well;
- (d) if so, the zone-wise details thereof and if not, the reasons therefor; and
- (e) the measures being taken by the Government in this regard?

#### **ANSWER**

## MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN)

(a) & (b) Yes, Madam. Indian Railways have already provided solar panels on roof top of 19 Narrow Gauge coaches on Trains in Kalka – Shimla and Kangra Valley in Northern Railway and 23 Broad Gauge non-air conditioned coaches in service (13 coaches in 2 trains of Northern Railway, 7 coaches in 1 train of Southern Railway, 2 coaches in 1 train of Konkan Railway and 1 coach in 1 train of West Central Railway).

Solar system works during sunlight and generates battery backup of approx. 4 to 5 hours. System does not work properly during fog/rain and winter season and battery backup goes down to 2 to 3 hours depending upon weather condition.

(c) to (e) Yes, Madam. Railways have taken decision to provide solar panel on roof top of general coaches of two number of day running intercity trains in Northern and Southern Railway and 50% Narrow Gauge coaches plying on Pathankot-Joginder Nagar route in Kangra Valley section and Kalka-Shimla section of Northern Railway for conducting extended trials for one year in all weather conditions.

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