

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1904
ANSWERED ON 05/08/2025

USE OF SOLAR ENERGY IN COLD STORAGE FACILITIES AND REFRIGERATORS

1904. SHRI GOVINDBHAI LALJIBHAI DHOLAKIA

Will the MINISTER OF NEW & RENEWABLE ENERGY be pleased to state:

- (a) whether Government is collaborating with State Governments to conduct research on the use of solar energy in cold storage facilities and refrigeration systems;
- (b) the steps taken by the Ministry, in partnership with the Ministry of Railways and other stakeholders to explore the application of solar energy in refrigerated parcel wagons; and
- (c) the measures implemented by the Ministry, in consultation with State Governments and other stakeholders, to establish a dedicated system for the disposal of waste generated from solar energy equipment?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) The Ministry has notified a comprehensive guideline on the 'Design, Performance, and testing standards for Solar Cold Storage Systems with Thermal Energy Storage backup' on dated 11th Feb. 2025, to ensure the installation of quality product in the States. The Ministry also promotes R&D in all Renewable Energy technologies including in Solar Cold storages.

(b) No such partnership has been explored as of now.

(c) No such measure has been implemented so far. However, recycling of waste generated from solar energy equipment, particularly solar PV modules are covered under the E-Waste (Management) Rules, 2022, notified by the Ministry of Environment, Forest and Climate Change (MoEFCC). These rules mandate registration of manufacturers and producers on a portal, proper storage of generated e-waste, and filing of annual returns. The rules also address the processing of waste, ensuring compliance with relevant guidelines, and maintaining an inventory of solar PV modules on the portal.
