

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 3174**  
ANSWERED ON 28.03.2023

**SOLAR WASTE MANAGEMENT**

3174. SMT. RANJEET RANJAN  
SHRI K.C. VENUGOPAL  
DR. AMEE YAJNIK

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether there are measures in place to appropriately discard end-of-life photovoltaic hazardous waste, if so, the detail thereof;
- (b) if not, the reasons therefor;
- (c) whether Government plans on reducing the cost of recycling infrastructure in order to incentivise recycling rather than disposal, if so, the details thereof; and
- (d) if not, the reasons therefor?

**ANSWER**

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER**

**(SHRI R.K. SINGH)**

(a) to (d) The Ministry of Environment, Forest and Climate Change has notified the E-Waste (Management) Rules, 2022 on 2<sup>nd</sup> November, 2022. Management of solar PV modules /panels/ cells has been added in Chapter V of the said rules. As per these rules, every manufacturer and producer of solar photo-voltaic modules or panels or cells shall:

- i. ensure registration on the portal;
- ii. store solar photo-voltaic modules or panels or cells waste generated up to the year 2034-35 as per the guidelines laid down by the Central Pollution Control Board in this regard;
- iii. file annual returns in the laid down form on the portal on or before the end of the year to which the return relates up to year 2034-35;
- iv. ensure that the processing of the waste other than solar photo-voltaic modules or panels or cells shall be done as per the applicable rules or guidelines for the time being in force;
- v. ensure that the inventory of solar photo-voltaic modules or panels or cells shall be put in place distinctly on portal; and
- vi. comply with standard operating procedure and guidelines laid down by the Central Pollution Control Board in this regard.

Further, Recycler of solar photo-voltaic modules or panels or cells shall be mandated for recovery of material as laid down by the Central Pollution Control Board in this regard.

MNRE has also called for Research & Development proposals for recycling of solar PV modules.

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