

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 2659**  
ANSWERED ON 17.03.2022

**PHOTOVOLTAIC WASTE**

2659. SHRI KOTHA PRABHAKAR REDDY

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether the nation does not yet have a firm policy on managing waste that results from used solar panels or from the manufacturing process and if so, the details thereof along with the progress made thereunder;
- (b) whether International Renewable Energy Agency (IRENA) has estimated in last December that the global photovoltaic waste would touch 78 million tonnes by 2050, with India expected to be one of the top five generators of such waste and if so, the details thereof;
- (c) whether the country proposes to ramp up its solar power capacity; and
- (d) if so, the details thereof?

**ANSWER**

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

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

(a) The E-waste (Management) Rules, 2016 under the Environment (Protection) Act, 1986 cover disposal and recycling of e-waste (defined under the Rules as electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment, and repair processes). Solar panels comprise electrical and electronic components and hence can be categorised as e-waste.

Environmentally sound management of major constituent materials of solar panels including glass, metals and silicon is covered under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Plastics/polymer fractions generated as waste from the PV panels are covered under the Plastic Waste Management rules, 2016.

(b) International Renewable Energy Agency (IRENA) had prepared a report on 'End-of-life management: Solar Photovoltaic Panels' in 2016. The report presented the first global projections for future PV panel waste volumes to 2050.

It estimated that global photovoltaic waste generation would touch 78 million tonnes in 2050, with India expected to be one of the top five generators with an estimated 12 million tonnes of waste generated.

(c)&(d)The ministry through various schemes and programmes has been supporting augmentation of solar power capacity in the country. Against the target of installing 100 GW solar capacity by 2022, a total of 50.78 GW of solar energy capacity has been installed as on 28/2/2022, 44.27 GW capacity is at various stages of implementation and 13.86 GW capacity is under bidding stage.

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