

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 3108
TO BE ANSWERED ON 19.03.2026

Disposal of electronic waste

3108. SHRI C. VE. SHANMUGAM:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether it is a fact that electronic waste is increasing unabated in the country;
- (b) if so, the details thereof;
- (c) whether toxic fluid discharged from waste batteries is released into water bodies, causing irreversible environmental and groundwater pollution;
- (d) if so, the details of monitoring mechanism in place to check the disposal of waste batteries in the country;
- (e) the details of recycling and pollution control measures that are in place; and
- (f) the steps taken by Government in this regard?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) & (b) The e-waste generation in the country has been assessed by the Central Pollution Control Board (CPCB) at national level based on the average life of 106 notified electrical and electronic equipment (EEE), as mandated under the E-Waste (Management) Rules, 2022 and countrywide sales data of respective relevant financial year of the 106 EEE as notified in Schedule-I of the E-Waste (Management) Rules, 2022, provided by the registered producers on the E-Waste Extended Producer Responsibility (EPR) Portal. As per the CPCB, status of e-waste generated and recycled in the country during the last two years and the current year is given below:

S. No.	Financial Year (FY)	E-Waste Generation [Metric Ton (MT)]	E-Waste Recycled (MT)
1.	2023-24	12,54,286.55	7,78,205.16
2.	2024-25	13,97,955.59	11,59,228.25
3.	2025-26 (so far)*	14,14,645.00	9,79,080.08

**The e-waste generation data is dynamic and will change based on increase in number of registered producers on the E-Waste EPR Portal.*

(c) to (f) Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified the Battery Waste Management Rules, 2022 on 24th August, 2022 to ensure environmentally sound management of waste batteries. The Rules cover all types of batteries viz. Electric Vehicle batteries, portable batteries, automotive batteries and industrial batteries. Further, MoEF&CC has comprehensively revised the E-Waste (Management) Rules, 2016 and notified

the E-Waste (Management) Rules, 2022 in November, 2022 and the same is in force since 1st April, 2023.

These Rules provides for managing battery and e-waste in an environmentally sound manner and putting in place an improved EPR regime for battery and e-waste recycling wherein all the entities defined under these rules are required to register on portal developed by the CPCB. The new provisions facilitate and channelize the informal sector to formal sector for doing business and ensuring recycling of battery and e-waste in an environmentally sound manner. These Rules also promote Circular Economy through EPR regime and scientific recycling/disposal of the battery and e-waste. CPCB has also developed guidelines for levying Environmental Compensation (EC) under these rules. These Rules have provided verification and audit by the CPCB or through a designated agency, to verify compliance of these Rules through random inspection and periodic audit, as deemed appropriate, so as to take action against violations of these Rules. Under these rules, State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) have also been given the responsibility to inspect/monitor compliance of EPR.

CPCB has developed guidelines for the scientific and environmentally sound management of e-waste. The guidelines detail the procedures and facilities in terms of machineries and pollution control devices required for the recycling of e-waste in an environmentally sound manner. An Action Plan for implementation of E-Waste (Management) Rules, 2022 is in place and the same is being implemented by all SPCBS/PCCs in their respective States/UTs.

CPCB has issued the Standard Operating Procedure (SOP) for lead acid battery recycling in January 2024. This SOP, aimed at minimizing environmental and health risks, mandates authorization for scrapping units, stringent packaging for transportation and emission standards. Toxic fluids, particularly from lead-acid batteries, are first carefully drained, collected, and neutralized to ensure safe disposal or repurposing for use in other industrial processes. This prevents environmental hazards such as groundwater and soil contamination.
