Total recycling units in India reach 295; highest in UP, followed by K'taka

These recycling facilities aim not just to manage the vast quantities of electronic waste generated annually but also to foster a circular economy

India has 7,226 producers of electrical and electronic waste. The country needs these facilities to address the rise in e-waste generation | (Photo: Shutterstock)

Nitin Kumar | Delhi

India now has a total of 295 recycling units spread across various states, as efforts to manage and recycle electronic waste (e-waste) intensify. Uttar Pradesh leads the charge with 82 units, followed by Karnataka with 45, Maharashtra with 43, and Haryana with 32. Other contributors include Gujarat (29 units), Telangana (15), and Tamil Nadu (13). Rajasthan and Madhya Pradesh have 10 and 6 units, respectively, while several other states, including West Bengal, Andhra Pradesh, Punjab, Uttarakhand, Assam, Chhattisgarh, Himachal Pradesh, Jharkhand, and Kerala, host 1 to 6 units each.

These recycling facilities aim not just to manage the vast quantities of electronic waste generated annually but also to foster a circular economy, where valuable materials are recovered and reused. The term "e-waste" refers to discarded electrical and electronic equipment, including solar photovoltaic modules and panels, as well as rejects from manufacturing and refurbishment processes.

In a major push towards addressing the growing e-waste problem, the government implemented the E-Waste (Management) Rules, 2022, which replaced the earlier E-Waste (Management) Rules, 2016. The updated rules, notified on November 2, 2022, apply to manufacturers, producers, refurbishers, dismantlers, and recyclers involved in the manufacture, sale, transfer, purchase, refurbishment, dismantling, recycling, and processing of e-waste.

These rules aim to promote responsible e-waste management and establish a recycling target for manufacturers, set at 60 per cent of the e-waste generated by FY25, depending on the sector.

India has 7,226 producers of electrical and electronic waste. The country needs these facilities to address the rise in e-waste generation.

E-waste contains a variety of valuable materials, such as plastics, iron, glass, aluminium, copper, and precious metals like silver, gold, platinum, palladium, and rare earth elements like lanthanum and neodymium. However, it also contains hazardous substances, including lead, cadmium, mercury, and other toxic chemicals, which pose environmental and health risks if mishandled.