# **E-waste Recycling**

- E-waste processing plays a vital role in resource conservation, pollution
- prevention, and the promotion of a circular economy. By recovering valuable
- materials and minimizing the environmental impact of electronic waste, e-waste
- processing contributes to sustainable waste management practices and reduces
- the reliance on extracting raw materials from the earth.

- A. E-Waste Management Rules 2016 is the primary regulation governing e-waste in India.
- B. The rules apply to electrical and electronic equipment (EEE) and their components, consumables, and parts.
- C. The rules establish Extended Producer Responsibility (EPR), making producers responsible for the collection, recycling, and safe disposal of e-waste.
- D. Producers are required to apply for authorization from the State Pollution Control Board (SPCB) for their e-waste management activities.
- E. E-waste collection targets are set for producers based on their sales volume and market share.
- F. Producers are required to set up collection centers or partner with authorized recyclers for e-waste collection.
- G. E-waste generated is to be channelized to authorized recyclers or dismantlers for environmentally sound recycling and disposal.

- H. Guidelines for the environmentally sound handling, storage, and transportation of e-Waste are provided.
- I. Authorized recyclers are required to obtain necessary authorizations and maintain records of e-waste handling and recycling.
- J. The rules prohibit the import of e-waste for disposal purposes.
- K. Retailers and bulk consumers are required to ensure that they sell or dispose of ewaste to authorized recyclers or collection centers.
- L. The rules mandate the creation of awareness programs to educate consumers about proper e-waste disposal.
- M. SPCBs are responsible for monitoring, compliance, and enforcement of the e-waste rules at the state level.
- N. Non-compliance with the rules can lead to penalties, fines, and imprisonment.

### **E-Waste Regulation In Europe**

- In Europe, e-waste regulation is governed by the Waste Electrical and Electronic Equipment Directive (WEEE Directive). The WEEE Directive was introduced to address the growing concerns regarding the environmental and health impacts of electronic waste. Here are some key aspects of e-waste regulation in Europe:
- Scope: The WEEE Directive applies to a wide range of electrical and electronic equipment (EEE), including large and small household appliances, IT and telecommunications equipment, consumer electronics, lighting equipment, electrical tools, medical devices, and monitoring and control instruments.
- Producer Responsibility: The WEEE Directive places the responsibility for managing and financing the collection, treatment, and environmentally sound disposal of e-waste on the producers. Producers are required to take back and properly manage the waste generated by their products, either individually or through collective producer responsibility organizations.
- Collection Targets: Member states of the European Union (EU) are required to set collection targets for e-waste. These targets specify the percentage of electronic waste that must be collected based on the average weight of electrical and electronic equipment placed on the market in the previous three years. The collection targets aim to ensure the proper disposal and recycling of e-waste.
- Treatment and Recycling: E-waste must be treated and recycled in an environmentally sound manner. Member states are required to establish systems for the separate collection of e-waste and ensure that it is treated by authorized facilities. The treatment processes should prioritize the recovery of valuable materials and minimize the negative environmental impact of hazardous substances.
- Reporting and Documentation: Producers and other actors in the e-waste management chain are required to maintain records and provide reports on the collection, treatment, and recycling of e-waste. This information is essential for monitoring compliance and assessing the effectiveness of e-waste management systems.
- Export and Illegal Trade: The WEEE Directive prohibits the export of e-waste from the EU to non-OECD (Organization for Economic Cooperation and Development) countries. This measure aims to prevent the dumping of hazardous electronic waste in developing countries and discourage illegal trade in e-waste.

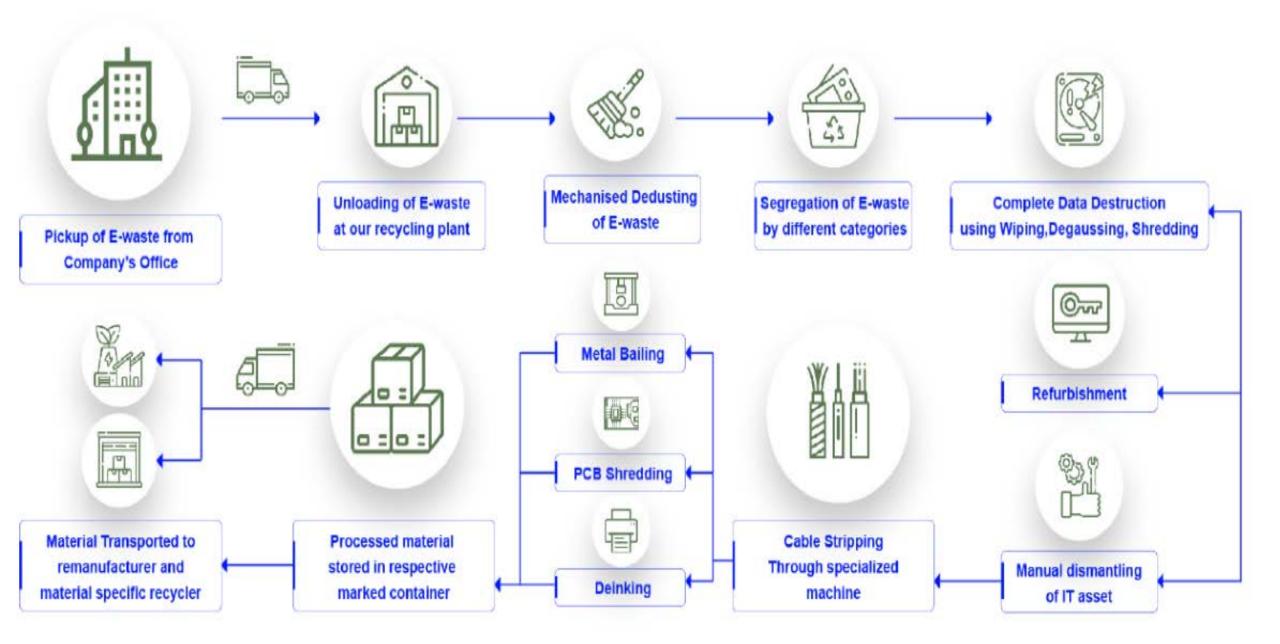
#### **E-Waste Regulation In USA**

- > In the United States, e-waste regulation is primarily governed by federal and state laws and regulations. While there is no comprehensive federal legislation specifically dedicated to e-waste, several federal and state laws address various aspects of electronic waste management. Here are some key aspects of e-waste regulation in the USA:
- Resource Conservation and Recovery Act (RCRA): The RCRA is a federal law that provides a framework for the management of hazardous waste, including certain types of electronic waste. It regulates the generation, transportation, treatment, storage, and disposal of hazardous waste, including e-waste.
- Electronic Waste Recycling Act (California): California has implemented its own e-waste recycling program through the Electronic Waste Recycling Act. It requires manufacturers to establish and finance collection and recycling programs for covered electronic devices in the state.
- State-Specific E-waste Laws: Many states have enacted their own laws and regulations to manage e-waste. These laws often include requirements for e-waste collection, recycling, and disposal, as well as provisions for producer responsibility, certification of recycling facilities, and reporting requirements.
- Basel Convention: Although the United States is not a party to the Basel Convention, which regulates the transboundary movement of hazardous waste, the country has implemented controls on the export and import of ewaste. The U.S. Environmental Protection Agency (EPA) enforces regulations to ensure that e-waste exports comply with applicable laws and prevent the illegal dumping of hazardous waste in developing countries.
- Environmental Protection Agency (EPA) Initiatives: The EPA plays a significant role in promoting responsible e-waste management through various initiatives. It provides guidelines, resources, and best practices for e-waste recycling, encourages the development of sustainable electronics design, and supports efforts to reduce electronic waste generation.
- Voluntary Programs: In addition to regulatory measures, there are voluntary programs in the U.S. aimed at promoting responsible e-waste recycling and disposal. One example is the e-Stewards and R2 (Responsible Recycling) certification programs, which set standards for environmentally and socially responsible e-waste recycling practices.

### **E-Waste Regulation In UK**

- In the United Kingdom, e-waste regulation is governed by the Waste Electrical and Electronic Equipment (WEEE) Regulations. These regulations aim to ensure the proper management and disposal of electronic waste while promoting resource efficiency and environmental protection. Here are key aspects of e-waste regulation in the UK:
- Producer Responsibility: The WEEE Regulations place the responsibility for managing and financing the collection, treatment, and environmentally sound disposal of e-waste on producers. Producers are required to join a Producer Compliance Scheme (PCS) or comply individually and fulfill their obligations, including financing the collection and recycling of e-waste arising from their products.
- Collection and Recycling Targets: The UK government sets collection targets for e-waste based on the average weight of electrical and electronic equipment placed on the market by producers in the previous three years. These targets aim to ensure the proper collection and recycling of e-waste and encourage the reuse and recovery of valuable resources.
- Design for Recycling: The WEEE Regulations encourage the design of electrical and electronic equipment that is easier to recycle and has a reduced environmental impact. Producers are encouraged to consider recyclability, material selection, and the reduction of hazardous substances during the product design phase.
- Compliance and Reporting: Producers and PCSs are required to register with the appropriate environmental agency in the UK and submit regular reports on the quantities of electrical and electronic equipment placed on the market and the amounts collected and treated. Compliance and reporting obligations ensure transparency and enable monitoring of progress toward meeting collection and recycling targets.
- Treatment and Recycling Standards: The WEEE Regulations specify standards for the treatment and recycling of ewaste. Treatment facilities must be appropriately licensed and authorized to handle e-waste, ensuring that it is managed in an environmentally sound manner. The regulations also set out requirements for the proper treatment of hazardous substances and the recycling of valuable materials.
- Export Controls: The UK has implemented measures to control the export of e-waste to non-OECD countries, similar to the Basel Convention requirements. The regulations aim to prevent the export of hazardous electronic waste to countries with inadequate recycling and environmental standards.
- Compliance and Enforcement: The relevant environmental agencies in the UK are responsible for enforcing the WEEE Regulations and ensuring compliance. Non-compliance can result in penalties, fines, and legal action.

## **E-waste Recycling Process in India**



# Wockhardt E-Waste Certificates

# E- waste Certificate FY 22-23



This certificate is proudly presented to

for the ethical collection and channelization for recycling of <u>650.00</u> kgs of E-waste.

This document certifies that all materials/equipment have been channelized for recycling under standards set down in the E-waste (Management) Rules, 2016 and amendments thereafter.

Chief Executive Officer

Certificate No. - 2701/22-23/03001 Date - 08-MAY-2023





CPCB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division

# E- waste Certificate FY 22-23

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E-Incarnation Recycling Private Limited certifies that all intellectual client data will be	
destroyed or erased properly from the hard drives and other media.	
E-Incarnation Recycling Private Limited assumes ownership, possession, title, responsibility	
and control of the materials received on 19.03.2022 ilisted in Section A of this Certification.	
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E-Incarnation Recycling Pvt. Ltd. Mardia House, 96, C. P. Tank Road, Mumbai - 400 004. Tel - 022 66251300-33. Fax - 022 23877102. E-Mail - recycle@E-Incarnation.com. Web - www.E-Incarnation.com.	1
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# E- waste Certificate FY 19-20

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# E- waste Certificate FY 16-17

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