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L E X

# WITNESS

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The logo for Epiq, featuring the word "epiq" in a lowercase, sans-serif font. The letter "i" has a blue dot, and the letter "q" has a blue tail that curves upwards and to the right.

## The New Benchmark in India's LegalTech Journey

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# New Regime On E-Waste from 1 April, 2023!

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## INTRODUCTION

Circular economy relies on reuse and recycle of waste [Figure 1]. The same can be achieved in case of e-waste with its proper collection by authorized recyclers, recycling by trained professionals and implementation of an extensive Extended Producer Responsibility (EPR).

E-waste includes different kinds of electrical & electronic waste such as computer accessories, telecommunication

equipment, electrical apparatus, health apparatus & household e-scrap [Figure 2]. The generation of huge amount of e-waste leads to the difficulty in recycling & management of this waste. E-waste may contain components made of iron, steel, plastic, copper, etc. and certain hazardous elements such as lead, cadmium, mercury, and chromium.<sup>2</sup> It might also contain certain precious metals such as gold, silver or platinum. India is the third largest producer of e-waste after China and United States.<sup>3</sup>

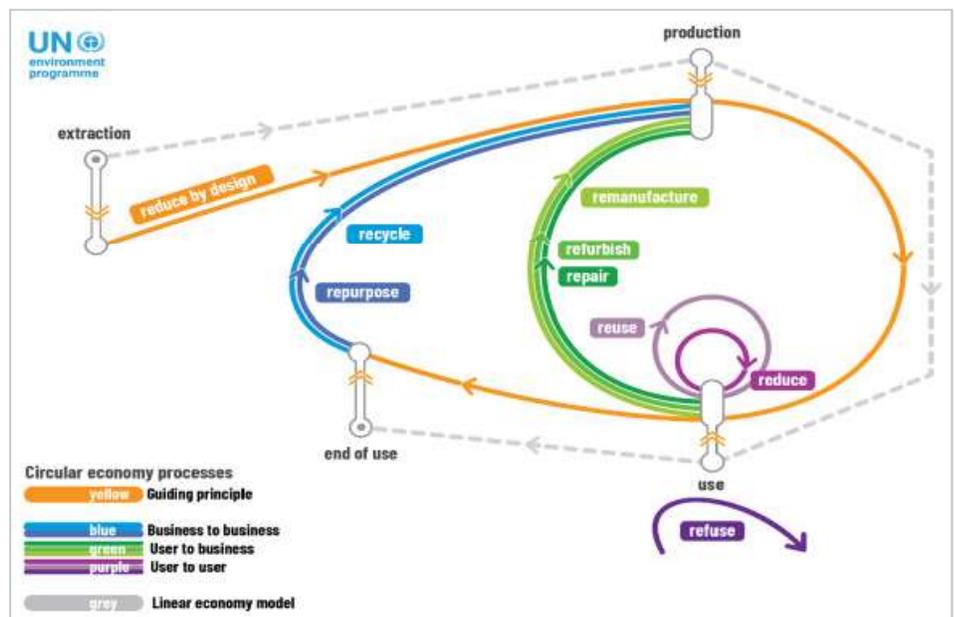


Figure 1: United Nations Circularity Approach<sup>1</sup>



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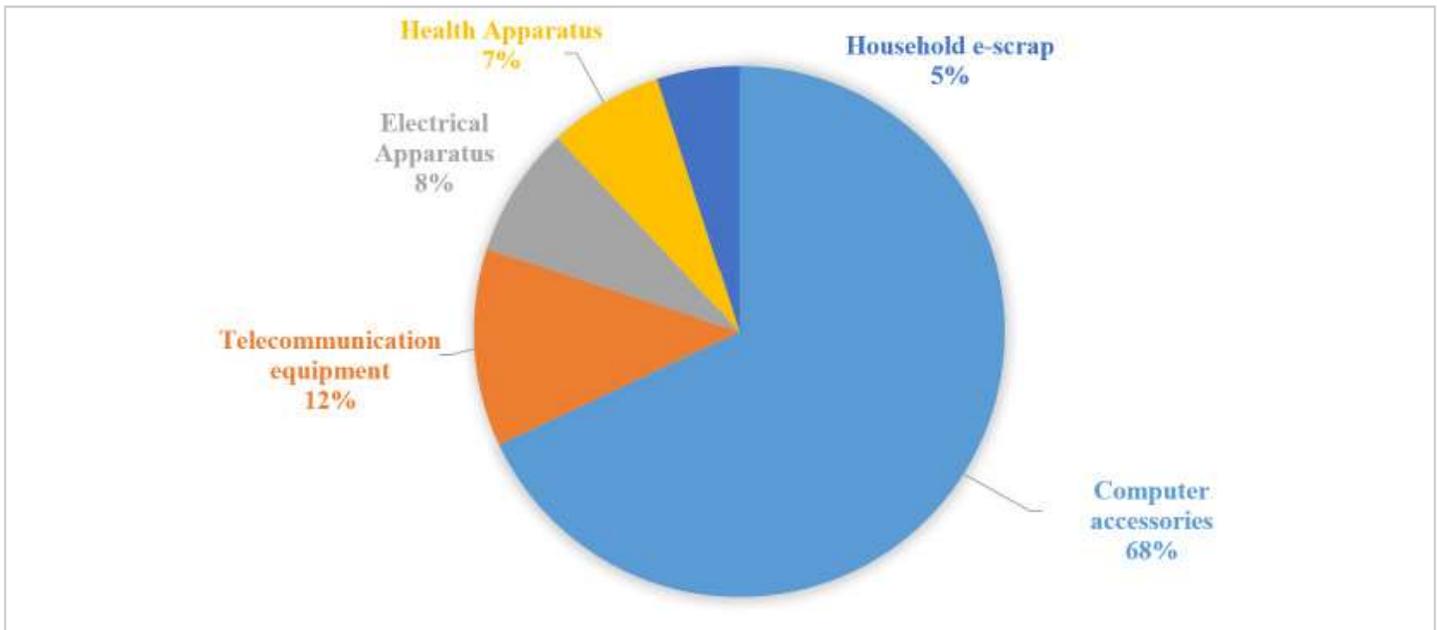


Figure 2: Sources of e-waste of generation<sup>5</sup>

Recycling of e-waste serves two purposes simultaneously, first being the removal of this massive waste from the environment & secondly, recovery of the valuable materials from the waste. In India, most of the e-waste is recycled informally in a rudimentary manner, hence, end up in landfills and remain in the environment for a very long time. Recycling of e-waste by untrained professionals at ill-equipped facilities often lead to the generation of toxic substances such as POPs (Persistent Organic Pollutants) including PCB (Polychlorinated Biphenyls), PAH (Polyaromatic Hydrocarbons), PCDDs (Polychlorinated dibenzo-p-dioxins) etc. and other heavy metals.<sup>4</sup> It also causes the loss of valuable materials which can otherwise be recovered, recycled & reused.

India generates around two million tons of e-waste every year which is increasing at an alarming rate. The Ministry of Environment, Forest &

Climate Change (MOEFCC) replaced the E-waste (Management) Rules, 2016 by the E-waste (Management) Rules, 2022 in order to better manage this waste. The major highlight of the new rule is the introduction of recycling targets for the producers under the EPR (Extended Producer Responsibility) Plan. This document provides a detailed analysis of the comparison of the E-waste Rules of 2016 & 2022.<sup>6,7,8</sup>

### SUMMARY OF E-WASTE (MANAGEMENT) RULES 2022

The major highlights of E-waste (Management) Rules 2022 includes [Table 1]:

- 1) All registrations of manufacturers, producers, collector, refurbisher, recycler, dismantler, etc. need to be done on the online portal only.
- 2) A new chapter on “Management of solar photo-voltaic modules or panels or

cells” introduced.

- 3) Another new chapter introduced having the following components:
  - a) Modalities of the extended producer responsibility Regime.
  - b) Extended producer responsibility Certificate Generation
  - c) Transaction of extended producer responsibility certificates.
- 4) New Sections introduced under “Miscellaneous”
  - a) Environmental Compensation
  - b) Prosecution
  - c) Verification and Audit
  - d) Steering Committee
- 5) Schedule I: “Categories of electrical and electronic equipment including their components, consumables, parts and spares covered under the rules” has many new inclusions of electrical & electronic equipment.

Table 1: Comparison of E-waste Management Rules 2016 & E-waste Management Rules 2022.

Section	E-Waste Management Rules 2016	E-Waste Management Rules 2022
Chapter I Preliminary 2. Application Page 21	Applicable to a) Used lead acid batteries under Batteries (Management & Handling Rules), 2001	Applicable to a) Waste batteries under Waste Management Rules, 2022 b) Packaging plastics under Plastic Waste Management Rules 2016
3. Definitions Page 21, 22	Defined authorization, CPCB, collection centre, consumer, channelization, dealer, 'deposit refund scheme', disposal, e-waste exchange, EPR-Authorisation, EPR Plan, form, Producer Responsibility Organisation, refurbishment, SPCB, transporter	Dropped these definitions Added definitions of business, portal
Chapter II EPR Framework Page 23	No Chapter on EPR Framework	Introduced a new Chapter II- Extended Producer Responsibility Framework 1. Entities should register as manufacturer, producer, refurbisher or recycler 2. If one falls in more than one category, register separately 3. No dealings with unregistered entities 4. If false info furnished, registration may be revoked or compensation levied 5. CPCB will charge registration fee
Chapter III Responsibilities 5. Manufacturer Page 24	Authorisation in Form 1 (bb) Maintenance of records of generated e-waste in Form 2 Only annual returns on Form 3	Registration on the portal File annual and quarterly returns on the portal No forms to be filled
Chapter III Responsibilities 6. Producer Page 24	Details of Framework of EPR provided Forms filled for registration & annual returns	Eliminated the details of Framework of EPR Instead of filling forms, registration on portal Also, filing annual and quarterly returns on the portal
Chapter III Page 24	Responsibilities of the refurbisher: No details of refurbishment equipment mentioned Forms need to be filled	Responsibilities of collection centres, dealers, dismantler removed  Includes details of Refurbished equipment which should be as per 'Compulsory Registration Scheme of the Ministry of Electronics and Information Technology' and 'Standards of Bureau of Indian Standards' framed for this purpose  Online registration & annual and quarterly returns to be filed on the portal



Section	E-Waste Management Rules 2016	E-Waste Management Rules 2022
Chapter III Page 24	Responsibilities of consumer/bulk consumer needs to file annual returns in a form	Bulk consumer does not need to file annual/quarterly returns
Page 25	Procedure for seeking and grant of authorisation for management of e-waste	Chapter entirely Removed All registrations to be done online on the portal
Chapter V Page 25	Mentioned the "Reduction in the use of hazardous substances"	A new Chapter V introduced It contains rules regarding: "Management of solar photo-voltaic modules or panels or cells"
Chapter VI	Miscellaneous	A new chapter introduced, 'Chapter VI' having the following components: 13. Modalities of the extended producer responsibility Regime. 14. Extended producer responsibility Certificate Generation 15. Transaction of extended producer responsibility certificates.
Chapter VII Page 27	Chapter V mentioning The reduction in use of Hazardous Substances has 11 components	Chapter V is now Chapter VII 2 new components introduced: (9) Manufacturer shall use the technology or methods so as to make the end product recyclable; (10) Manufacturer shall ensure that component or part made by different manufacturer are compatible with each other so as to reduce the quantity of e-waste.
CHAPTER VIII MISCELLANEOUS Annual Report Page 28	The CPCB shall forward the report to the Central Government before the 30th day of December every year.	The CPCB shall submit annual report to MoEFCC within one month of the end of the financial year.
CHAPTER VIII MISCELLANEOUS Transportation of e-waste Page 28	Follow the provisions under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008	Follow the provisions under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
CHAPTER VI MISCELLANEOUS Page 28	Contains a section 21. Liability of manufacturer, producer, importer, transporter, refurbisher, dismantler and recycler	This section omitted
CHAPTER VIII MISCELLANEOUS Page 30	Does not contain this section	New Sections introduced 22. Environmental Compensation 23. Prosecution 24. Verification and Audit 25. Steering Committee

Section	E-Waste Management Rules 2016	E-Waste Management Rules 2022
Chapter VIII MISCELLANEOUS Page 30 Schedule I	Schedule I	Schedule I: "Categories of electrical and electronic equipment including their components, consumables, parts and spares covered under the rules" It has many new inclusions.
Chapter VIII MISCELLANEOUS Page 30 Schedule II & III	Schedules missing	Two new Schedules containing "E-waste recycling target for Importers & Producers introduced
Chapter VIII MISCELLANEOUS Page 30 Schedule V	Responsibilities of Local Bodies (Urban & Rural) Has only two components	Two new components introduced: (3) To facilitate setting up e-waste collection, segregation and disposal systems. (4) Conducting training sessions to develop capacities of the urban and rural local bodies.
	This section not present: 5. Responsibilities of Bureau of Indian Standards/ Ministry of Electronics and Information Technology	This new section present Responsibility: To issue standards for refurbished products. Bureau of Indian Standards/ Ministry of Electronics and Information Technology shall also develop guidelines for refurbishers with respect to Compulsory Registration Scheme.



## CONCLUSION:

The new regime from 1st April, 2023 surely is in the right direction of alignment with Basel Convention, Waste Electrical and Electronic Equipment (WEEE) Directive in the European Union & Restrictions of Hazardous Substances (RoHS) Directive.

The driver for e-waste regime is changing globally. E-waste regulations in most countries is a way to protect health and environment, and then moves to creating and securing employment by conserving our scarce resources in our countries in order to create new products out of it. India over scores higher than many western countries in its efficiency in e-waste with its repair sector & collection services.



This allows less dependency on other countries who are rich in minerals. Based on some industry studies, about 1.8 million tons of e-waste arising this year in India, can establish 300,000 jobs approximately in a new market sector of more than 3 billion US\$ annually. In addition, many more jobs can be secured in the production sector because recycling precious and critical metals is the basis for manufacturing new products in India when resources are becoming scarce and more expensive. Thus, we call our high-tech wastes today an “urban mine”.<sup>9</sup>

India has one of the fastest growing IT & Telecom industries in the world. Hence, humongous amount of e-waste is generated and in addition to that,

India also imported e-waste from United States, China and in small quantities from other countries. Although, the imports have been controlled but still the e-waste generation is increasing every year at an alarming rate.

The major challenges in taking care of e-waste in India are lack of infrastructure, high cost of setting up recycling facilities, involvement of child labour in collection, segregation and distribution, ineffective legislation, lack of incentive schemes and also lack of awareness and sensitization on the issue.<sup>10</sup> Another issue is the complex nature of the waste including base materials, precious elements and many other components. Every component of e-waste has a different recycling mechanism. Hence, an advanced facility with trained professionals is required for proper handling of this waste.<sup>11</sup>

For achieving benefits of the e-waste regulatory regime, the role of the informal sector needs to be nurtured as they are very important in collection, segregation & dismantling. They need to complement the formal recyclers as supply chain partners. We are ascertained that future evolution of the e-waste regime would have clearer vision on the same. [w](#)



**Sonal Verma** leads the ESG Practice in the firm as a Partner and Global Leader – Markets & Strategy. With his crossroad working with business & laws – he brings advice & technology for effective change management in the journey of ESG. Sonal is well acclaimed for his work in regulatory & compliance programs over the last decade. He had in the past worked with 1800 plus clients in India and 61 other countries globally. He has worked with the top 3 unicorns and many Fortune 500 companies. His clients have been across different industries, viz. Automotive and OEMs, Pharma and Life Sciences, Manufacturing, Chemical Industry, BFSI, Infrastructure and Utilities (including stateowned PSUs), e-Commerce and Fintech Companies, Diversified Conglomerates etc.



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<sup>1</sup><https://www.unep.org/circularity>

<sup>2</sup>E waste in India at a glance: Current trends, regulations, challenges and management strategies, *Journal of Cleaner Production* 271 (2020), 122707.

<sup>3</sup>Evaluation of soil contamination due to crude E-waste recycling activities in the capital city of India, *Process Safety and Environmental Protection* 152 (2021), 641-653.

<sup>4</sup>E-waste management: A review of recycling process, environmental and occupational health hazards, and potential solutions, *Environmental Nanotechnology, Monitoring & Management* 15 (2021).

<sup>5</sup>E-waste Management for Environmental Sustainability: an Exploratory Study. *Procedia CIRP* 98 (2021), 193-198.

<sup>6</sup><https://cpcb.nic.in/displaypdf.php?id=RS1XYXNOZS9FLVdhc3RITV9SdWxc18yMDE2LnBkZg==>

<sup>7</sup>[https://cpcb.nic.in/uploads/Projects/EWaste/ewaste\\_amendment\\_notification\\_06.04.2018.pdf](https://cpcb.nic.in/uploads/Projects/EWaste/ewaste_amendment_notification_06.04.2018.pdf)

<sup>8</sup>[https://cpcb.nic.in/uploads/Projects/E-Waste/e-waste\\_rules\\_2022.pdf](https://cpcb.nic.in/uploads/Projects/E-Waste/e-waste_rules_2022.pdf)

<sup>9</sup><https://greene.gov.in/wp-content/uploads/2020/12/2020120916.pdf>

<sup>10</sup><https://www.legalservicesindia.com/article/2249/E-Waste-Management-Issues-Challenges-and-Proposed-Solutions.html>

<sup>11</sup>A review of the recent development, challenges, and opportunities of electronic waste (e waste), *International Journal of Environmental Science and Technology* 20 (2023), 4513-4520.