

















# E-WASTE MANAGEMENT IN INDIA:

THE INSIDE SCOOP

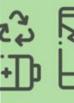




#### WEEE

- Waste Electrical and Electronic Equipment i.e. e-waste
- 3<sup>rd</sup> largest producer of electronic and electrical waste globally after USA and China

- Increase in 20% of e-waste every year on an average
- Only 5% of e-waste is recycled every year
- 30-40% of precious metals mined is used in manufacturing electronic devices
- Informal disposal of e-waste is a major contributor to pollution





















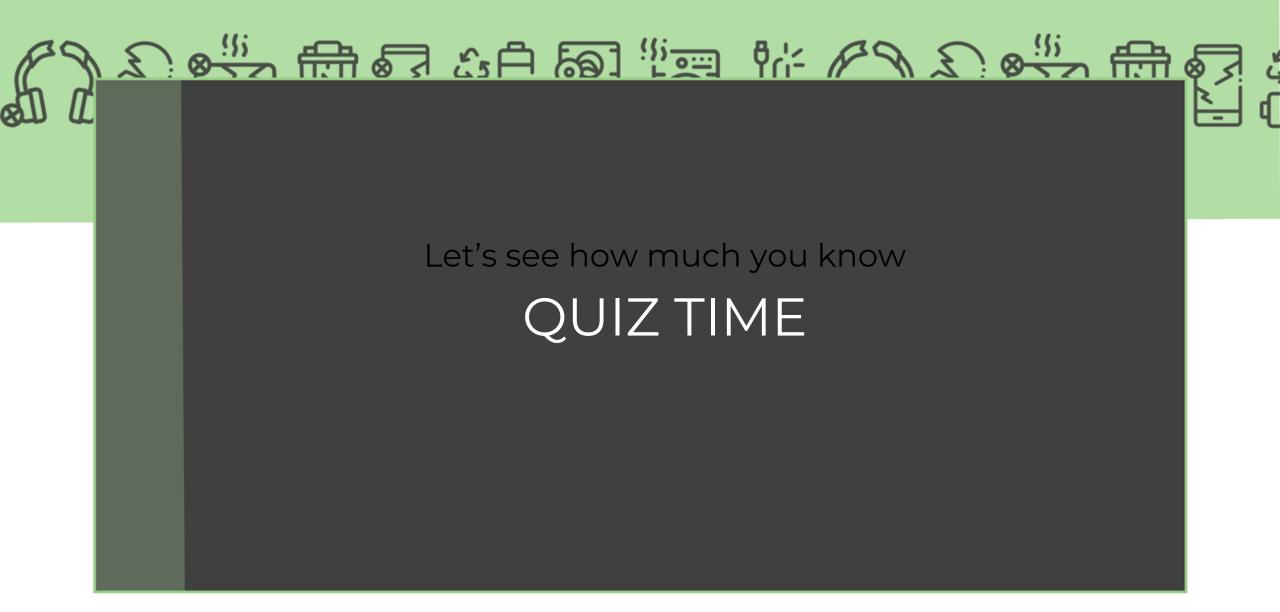












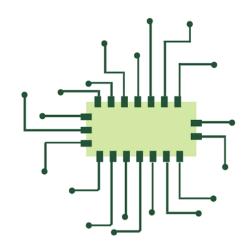


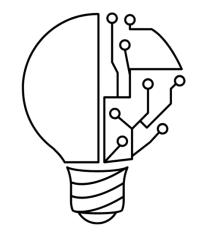


#### E-waste can be:

- A. Electric
- R Flactronic











Name an electronic device that you spend maximum time with. It comes in a rectangular shape, can be fatter or thinner. It is also foldable nowadays.





This is where you store all things tasty. It is as cold as the frigid zone. It can be of different shapes and sizes. Nowadays it can also talk?!?



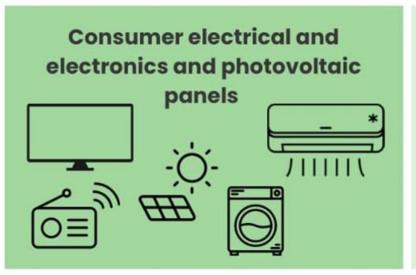


Name an electrical device that is present on top of your head. It is present in all indoor locations. Sometimes you can also have a smaller version of this device that you can carry in your pocket.

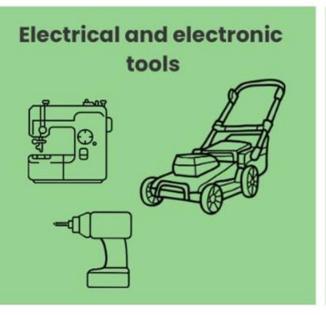


### Categories of E-Waste

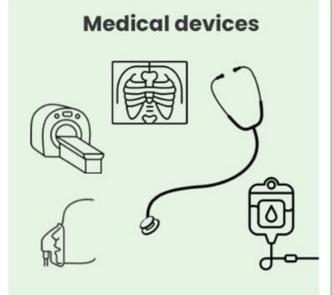
















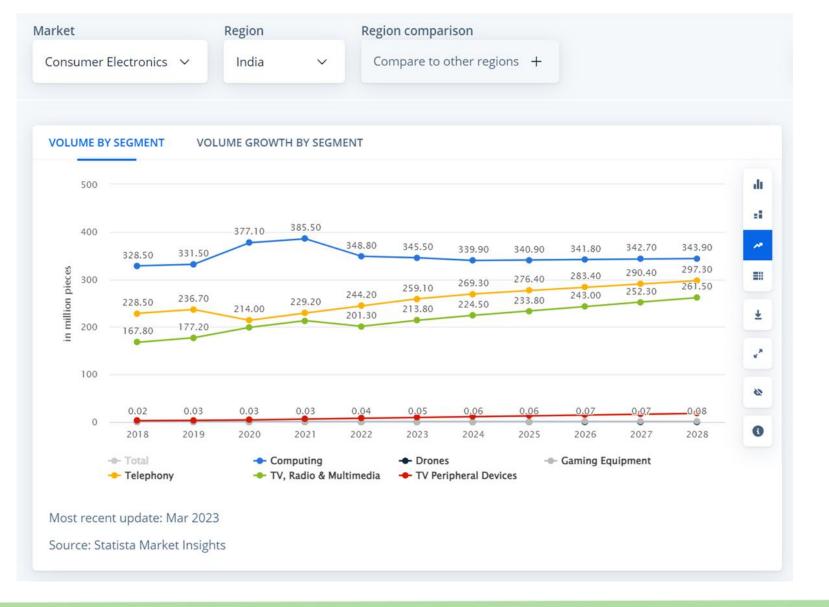










































- Increase in purchasing power
- Faster technological advancements
- Decrease in average life of devices
- Rising emphasis on using technology
- Fastest developing country in the world
- Percentage increase in population year-on-year
- Factors such as social media influence, status symbol etc. result in purchase





## Which one would you BUY? And WHY?































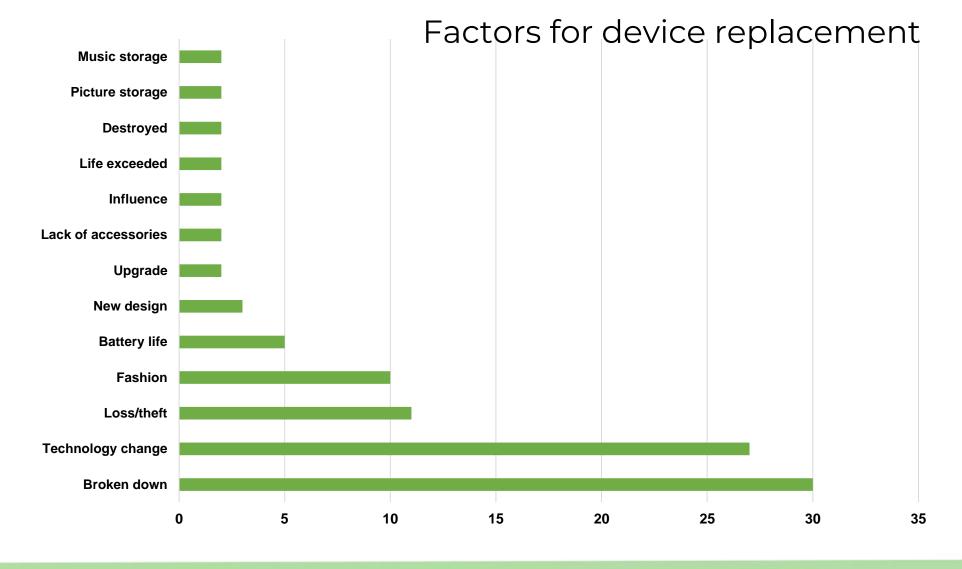










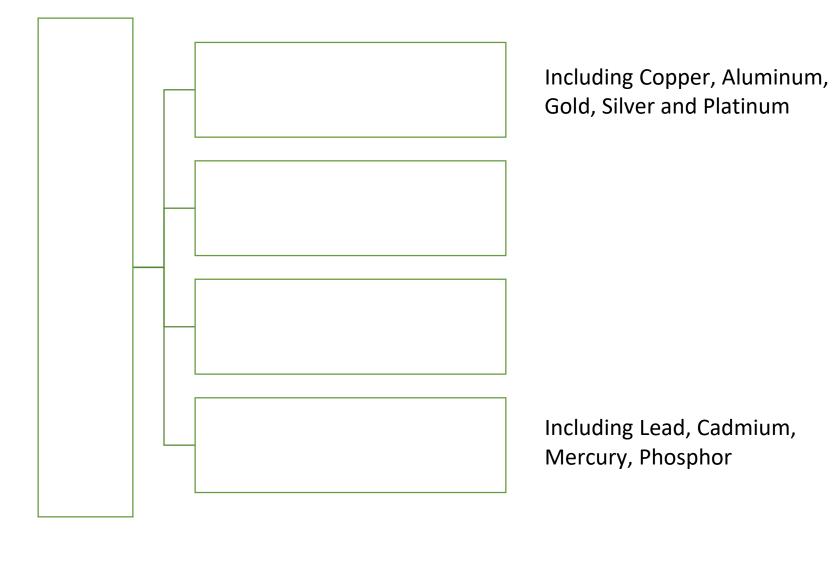








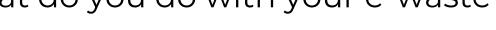








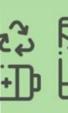
#### What do you do with your e-waste?









































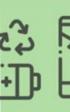
#### The Informal Sector of Waste Management

- 95% of waste is managed by this sector
- Using rudimentary techniques such as acid bath for metal recovery



































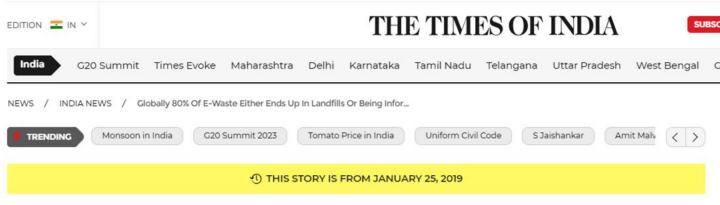




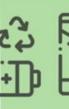


- Release of toxic gases into air, water and soil causing pollution
- Loss of resources that could have been reused, repurposed, recycled or upcycled
- One of the largest recruiters of child labor





Globally 80% of e-waste either ends up in landfills or being informally recycled, says UN agencies

























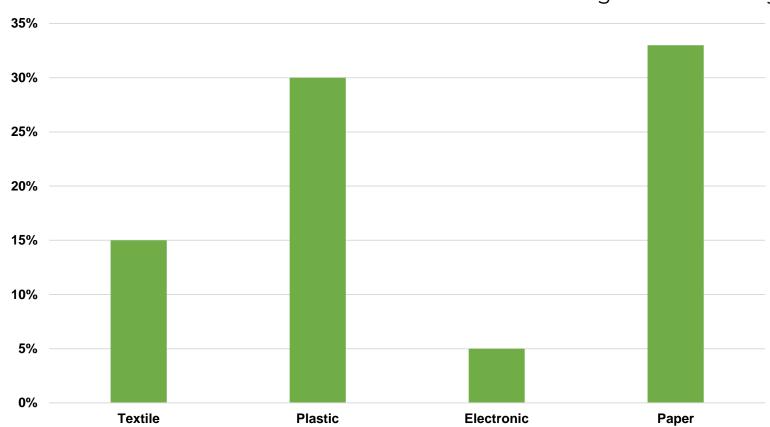






#### Percentage of waste recycled

E-waste having the lowest recycling rate





































- Inadequate infrastructure and resources
- Lack of knowledge sharing with individuals involved in segregation process
- Diverse cultural practices
- Behavioral problems
- Fractured messaging to domestic help and commercially engaged individuals
- No penalty for not complying



































- Every waste type has a different method of recycling which makes segregation a must
- Waste for some can be useful for someone else, therefore segregation helps in repurposing, refurbishment and repair
- E-waste also requires a SEPARATE BIN!





#### **Standing tall**

The strategies that enabled the forum cities, that performed well in the assessment, to manage waste better



Waste produced daily 7 tonnes

95% segregated at source

POPULATION: 15,000 (Small city)

**KEY STRATEGIES:** Generates money from waste processing; plastic bags of less than 50 microns banned; fine for violation; littering, non-segregation also fined; and, focus on awareness, training



POPULATION: 2.7 million (Large city)

**KEY STRATEGIES:** Segregation in all 85 wards: strict monitoring, heavy fines: focus on centralised processing: 850 open garbage spots removed; and awareness campaign using radio, TV, print ads



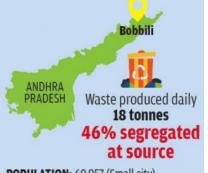
POPULATION: 2,40,000 (Mid-size city)

**KEY STRATEGIES:** Decentralised waste management in all 52 wards; most wet waste processing done in situ: under the state's Green Protocol bans single-use plastic items



POPULATION: 1,50,000 (Mid-size city)

**KEY STRATEGIES:** Banned plastic since 1997: first state to ban PET plastic bottles. styrofoam (used for insulation) in official meetings; an initiative turns dry recyclable waste into handicrafts, trains women



POPULATION: 60,957 (Small city)

**KEY STRATEGIES:** Waste segregation in all 30 wards: treated via composting. biomethanisation: 100% door-to-door collection: and one of the first cities in the state to ban polythene bags in 2011



#### Small cities win big on waste management

Down to Earth, Niti Aayog

- Vengurla, Maharashtra
- Indore, Madhya Pradesh
- Alappuzha, Kerala
- Gangtok, Sikkim
- Bobbili, Andhra Pradesh

































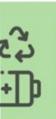






































Hulladek



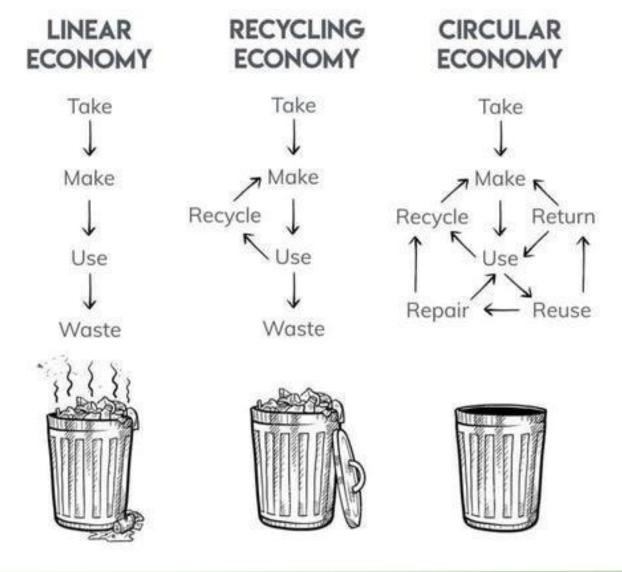


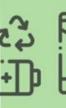




#### Moving towards a Circular Economy

A circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible.



































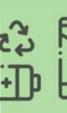
#### Create Awareness

- Knowledge is key learn, practice and then preach!
- It's never too late to learn





































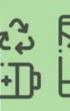
#### Dispose your waste with a formal recycler

- Item-wise segregation and proper disposal of harmful substances
- Recovering metal, plastic and glass
- Reducing carbon footprint





































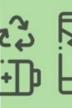
#### Install an E-waste Bin

- Place a designated e-waste bin for collection and proper segregation
- members Encourage in your friends, society, family and colleagues to dispose their e-waste in a bin
- Bins can be placed in offices, institutes and complexes







































#### Formalize the informal sector

Educate the local scrap dealers in your area to supply/sell the waste they collect to authorized recyclers instead of dismantling the items themselves

This will help prevent release of harmful chemicals as well as efficient recovery of metals







































#### Polluter-Pays-Principle (PPP Policy)

Adopted by OECD in 1972 as an economic principal for allocating the cost of pollution control

- As defined by the Ministry of Environment in E-waste Management Rules, the PIBO (Producer, Imported, Brand Owner) of electronic and electrical devices have to allocate funds for e-waste recycling as a part of PPP Policy.
- This compliance is known as Extended Producers Responsibility (EPR) wherein the producer of electronic items are held responsible for its disposal and recycling once it becomes 'waste'.





The E-waste Management Rules was formulated so that all stakeholders of the e-waste chain can be held responsible for proper waste disposal and recycling.

The most recent update has published been **]**st on November, 2022





































#### **Recycling in India: A Market in Transition**

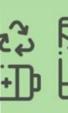


May 25, 2021 Reading time: about 6 minutes

#India #recycling #Top-News

Informal waste collectors play as big a role in India's recycling market as public institutions and private companies. The recycling rates remain low while the volume of waste is growing. The business prospects for the future are correspondingly high.

































#### Fastest Growing Industry

- Year-on-year growth in waste management businesses
- Creating employment opportunities for several individuals
- With increasing awareness, waste management organizations are attracting many investors
- The government is continuously supporting and encouraging the growth of these companies





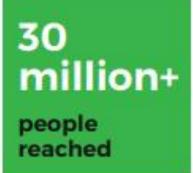
#### Hulladek Recycling

Incorporated in 2015, Hulladek is a waste management company that collects and channelizes electronic and electrical waste. Licensed by the Central Pollution Control Board, we currently operate in 20 states across the country. We have successfully recycled over 4 million kgs of e-waste in India.

Our tagline 'Hungry for E-Waste' shows our insatiable hunger for waste and is also a pun on the word 'Hungary'









250 brand collaborations

10,000 households impacted



150 bins





43









30 active collection points in 18 states

On a mission to make

# RECYCLING THE NEW COOL

















MY KOLKATA

EDUGRAPH

## The Telegraph *online*

Friday, 14 July 2023

HOME OPINION INDIA MY KOLKATA V EDUGRAPH V STATES V WORLD BUSINESS SCIENCE & TECH ENTERTAINMENT SPORTS V

Home / Business / Hulladek Recycling plans to recycle 50,000 tonnes of e-waste by 2025

# Hulladek Recycling plans to recycle 50,000 tonnes of e-waste by 2025

The company was established in 2015 by Nandan Mall, a commerce graduate from St. Xavier's College

A Staff Reporter

Kolkata

Published 13.11.21, 02:12 AM





























## SABKO BATAO, E-WASTE GHATAO

Let's take a pledge to recycle!



























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