

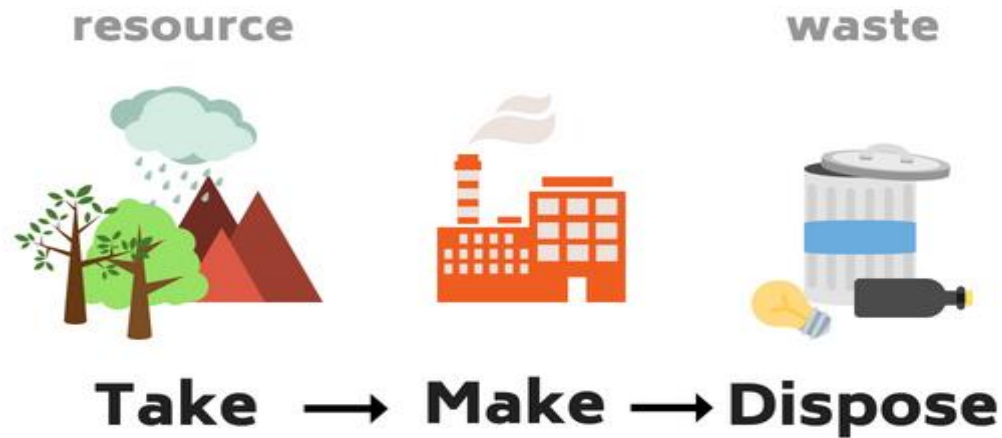


CIRCULARITY IN E-WASTE HANDLING

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WHAT IS CIRCULAR ECONOMY?

- A model of **production** and **consumption** which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible thus extending the life cycle of the product



Reducing waste to a minimum OR if possible **producing no waste or pollution**



WHAT IS E-WASTE?

- Is a term for electronic products that have become unwanted, obsolete, and have essentially reached the end of their useful life
- Electronic waste is the fastest growing category of waste in the world thus a **concern for all of us.**



E-WASTE HANDLING

(REDUCE WASTE AT EVERY STAGE OF THE VALUE CHAIN)

- Collection & Transportation
- Dismantling
- Recycling
- Disposal



PRE E-WASTE STAGE

Mindful and responsible purchasing

- Buy only if you must
- Consider remanufactured products
- Support companies that are dedicated to eco-friendly practices
- Encourage urban mining of resources and tapping of green energy



Manufacturing

- Smart product design
 - To reduce resource consumption and energy use - *Design with environment in mind*
 - Facilitate reuse of product components - *Design with reuse/recycling in mind*
 - Eliminate the use of toxic chemicals/materials – *Design with reparability in mind)*

E-WASTE PRE-PROCESSING STAGE

- **Collection & Transportation**

- Provide appropriate incentives for collection e.g. discounts on products
- Designate accessible places for disposal and collection
- Create awareness among the users and provide knowledge required about benefits of disposing off in designated collection centers



- **Dismantling**

- Depollution
- Proper separation for non hazardous from hazardous
- Recovery of expensive and scarce materials

E-WASTE PROCESSING STAGE

- **Recycling**

Waste = Resource/Raw material

- Reparability, remanufacturing, reuse
- maximize the reuse of discarded equipment containing valuable resources
- Proper safety measures
- Use latest appropriate technology in recovery of metals
- EPR implementation



POST – PROCESSING

Disposal

- What you cant process, **sale** as usable raw materials for the production of new electronics or other products
- Dispose hazardous substance in an environmentally sound manner
- Dispose only that which has no value.

Conclusion

- The future of e-waste in the circular economy has the potential to increase jobs, efficiency and decrease the damaging environmental impact from rare earth metals.
- As we continue to reuse more of our old devices and using its different components with new products we will start to see the benefits of a circular economy.

*Thank
you*



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