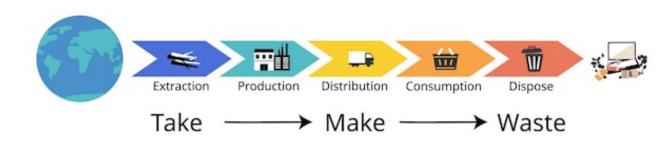


# Circular Economy in Action:

Transforming E-Waste Recycling in the *Philippines* 



#### The Linear Economy



#### **Environmental impact!**

- Extraction of virgin materials
- Improper waste disposal
- Only 17% recycled

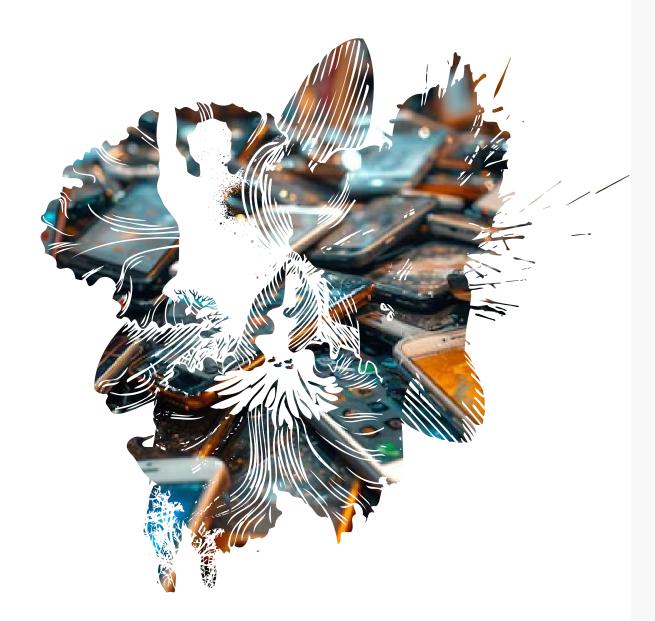
## What is a circular economy?



#### New way of thinking!

- Redesign for easy repair and recycling
- Refurbish, remanufacture, and reuse
- Recycle





Where does e-waste fit into this concept?

Dependence on electronics

- 15 billion mobile devices 2025
- 9 billion mobile subscriptions

Mining rare earth metals

- 1/3 global deforestation
- 7% of carbon emissions globally

#### Hazardous waste

- Environmental and health impact
- Lead, mercury, and arsenic



## E-waste statistics

## Global

- 62 million tons 2022
- 1.5 million trucks, enough to circle the globe
- Only 22% documented as recycled
- 1% rare earth metals demand met

## Philippines

- 537 thousand tons 2022
- One of top SEA producers
- Few registered TSD facilities for e-waste
- With only 5 registered R2v3 facilities
- Most of the e-waste is processed by the informal sector in the Philippines



The largest electronic waste dump in the world, located in Ghana.



Collecting and dismantling e-waste remains a way to put food on the table in lowincome communities such as barangay Longos where Joanna is from. –Ecowaste Coalition

Circular Economy













#### History

- The original HMR company
- 40 years of electronic recycling
- HMR is now an end to end reverse logistics company
- Proxy to 30 global recyclers

#### Services

- E-waste management and disposition
- Assured destruction of assets
- Onsite data destruction
- Treatment, storage, and disposal
- Hazardous waste transportation
- Property reinstatement
- Environmental impact and Carbon abatement certificates





TRCO2 VERIF

IT & Business Process Association



ESG HMR group last 10 years:

- Prevented 140,000 tons of waste going into landfills
- Stopped 52,280 tons of CO2 from going into the atmosphere
- 5,000,000 electronic items refurbished and reused.
- Over 8,000 tons of consumer returns refurbished and resold every year.





## Education

- TEP The e-waste project
- Skills development (TESDA)
- Integrating informal into formal

## Collection

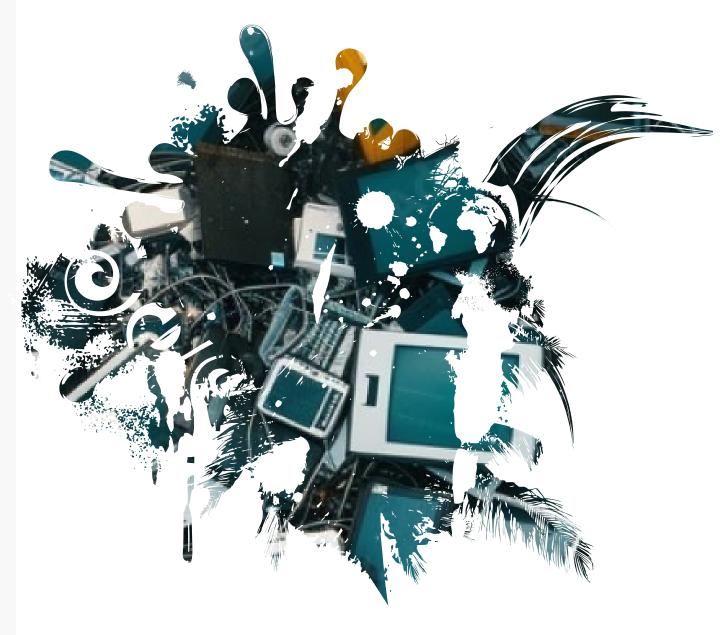
- Proper segregation
- Incentives
- Storage and logistics

## Technology

- Processing technology in country
- Refurbishing and remanufacturing

## Policy enforcement

- Existing laws





## Philippines - Japan

### Japan is a leader in recycling technology and policy

- » Technology and infrastructure development
- » Policy and regulatory support
- » Public awareness and education
- » Research and innovation
- » Business partnerships and investments
- » Establish a Regional E-waste Management Hub



As the Japanese proverb says, **'Nana korobi ya oki'**—fall seven times, stand up eight.'

Let this remind us that the journey toward sustainability may have challenges, but with determination and partnership, we can keep rising and transforming our world.

The responsibility is ours, and the time is now.

Thank you

