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## Session 5 Policy relevance of E-waste

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# Products contain valuable materials



# Importance of materials to economy

3



18/07/18

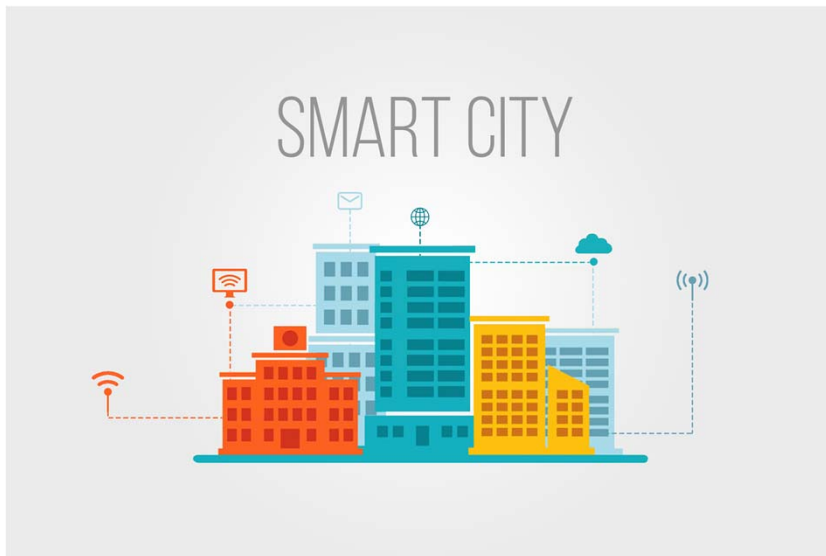


# Toxics can cause environmental pressure





# Need for the materials !



# Where are those materials in our economy? Urban Mine !





# Global E-waste Statistics Partnership

## 1. National and regional capacity building

- Producing reliable e-waste statistics
- Guiding countries to collect national data

*Formed in January 2017 to address the e-waste challenge by improving e-waste data*

## 2. Global e-waste database

- To track developments
- To inform policy makers and industry



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 **ISWA**  
International Solid Waste Association



## 3. Communicate data

- Via the Global e-Waste Monitor

## 4. Map recycling opportunities and health effects

## 5. Identify best practices of global e-waste management

## 6. Inform on Sustainable Development Goals (SDG)

# March '18 – UN E-waste Coalition



**UNU, UNEP, ITU, ILO, UNITAR, UNIDO, SBC**



# Global Political Targets

## Current Connect 2020

- Target 3.2: Volume of redundant e-waste to be reduced by 50% by 2020

## NEW Draft ITU 2023 Targets include:

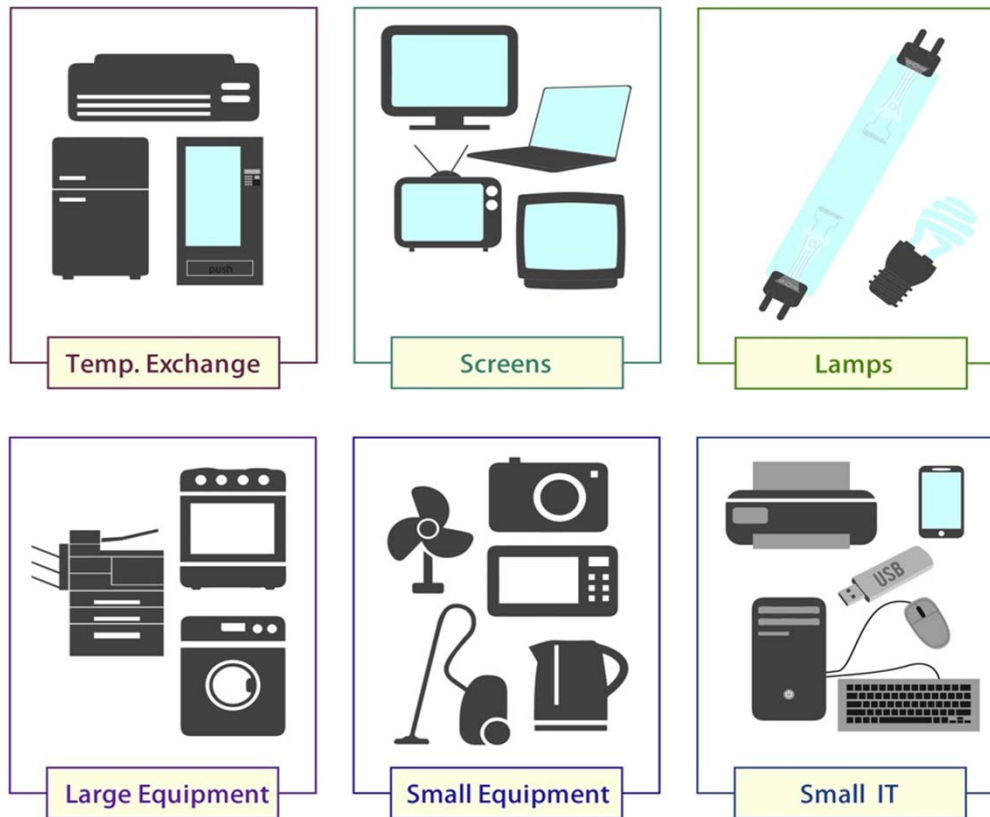
- Target 3.2: by 2023, increase the global e-waste recycling rate to x%
- Target 3.3: by 2023, raise the number of countries with an e-waste legislation to x%

Links to many SDGs



# What is e-waste

3



*“E-waste, refers to all items of electrical and electronic equipment (EEE) and its parts that have been discarded by its owner as waste without the intent of re-use”*



# Global Work - Monitoring

11

- Policy advice by monitoring e-waste flows
  - European Commission
  - 10 countries in EU, e.g. Italy, France
  - GMSA – Latin America
- Two Global E-waste Monitors 2015 and 2017
- Regional e-waste monitor 2017 (South East Asia)
  - Co financed by Japan
- More e-waste monitors in future
  - Subject to funding
  - Latin America, Arab States, EAC, CIS



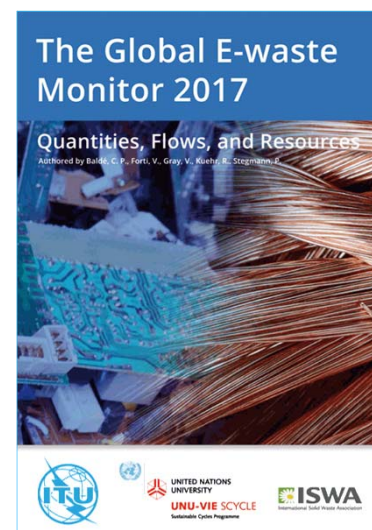
# Key drivers for growth of e-waste

- More people joining the information society
- Product lifecycles become shorter
- Many designs do not support repair or reuse



# Global E-waste Quantities

Source: The Global E-waste Monitor-2017 (UNU, ITU, ISWA)



**44.7 Mt**

Of e-waste  
generated in 2016

=



**4500 Eiffel Towers**

**8.9 Mt**

Is documented to be  
collected and recycled



**2 Mt**

end up in waste  
bins

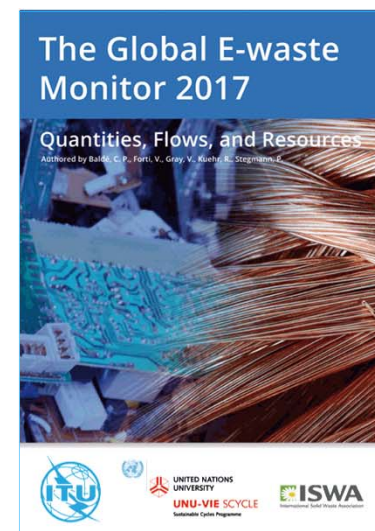


Outside official  
take-back systems

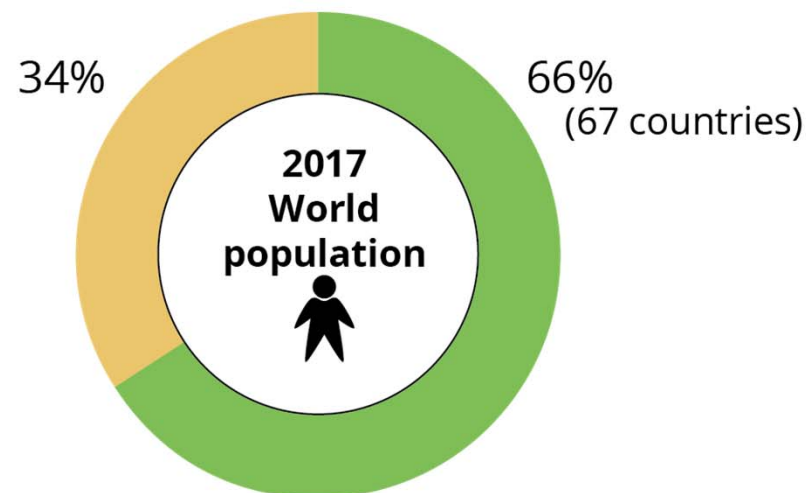
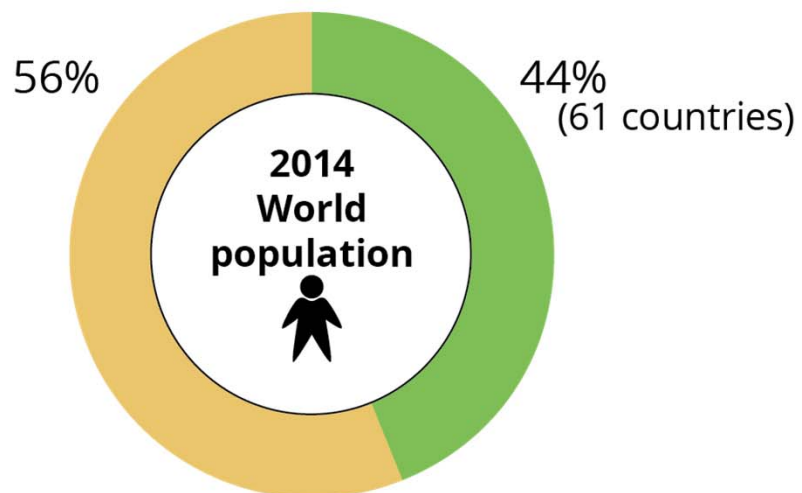
1. Collection outside official take-back systems in developed countries is still unknown
2. Transboundary movement is still unknown
3. Informal collection systems in developing countries are still unknown

# Legislation

- 67 countries have e-waste legislation



- Covered by legislation
- Not covered by legislation



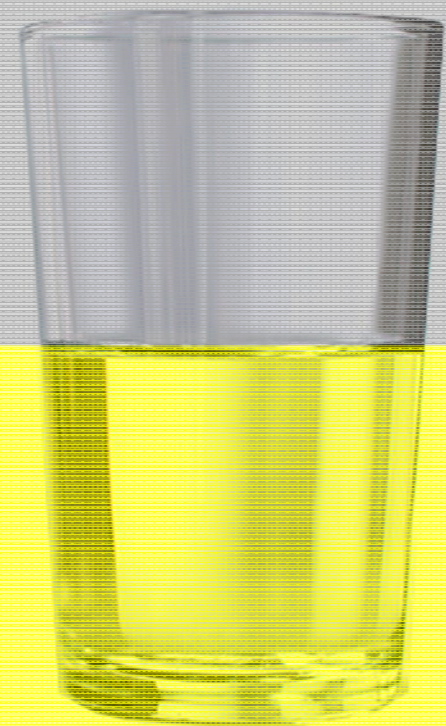
# Challenges vs. opportunities in emerging economies for e-waste

- Lack of investment and technology
- Lack of formal collection system
- Lack of financing schemes
- Lack of national e-waste legislations
- Presence of the informal sector
- Growing e-waste streams (domestic and import)

## Challenge

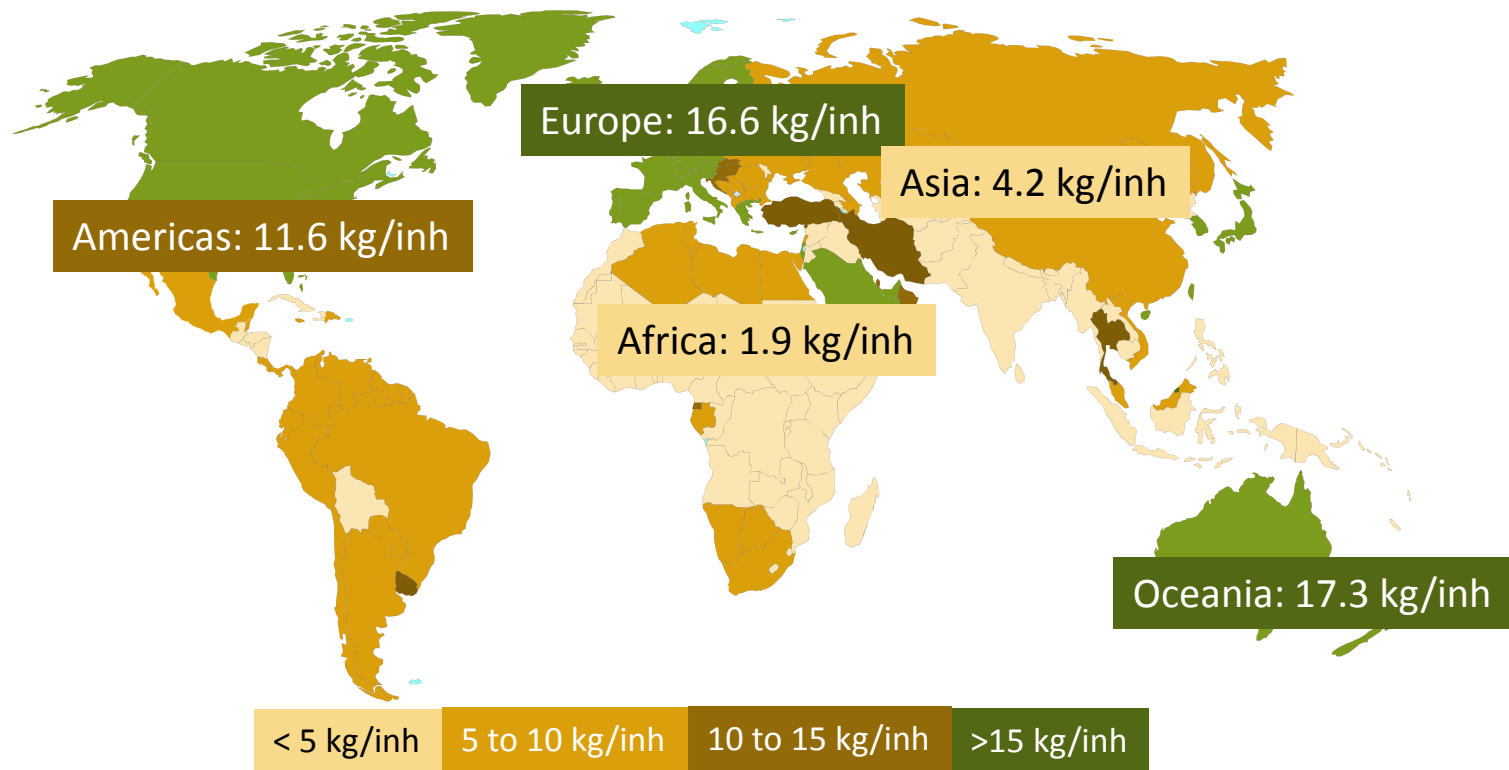
## Opportunity

- (Relative) low labor cost
- Available technological know-how and management experience
- Create jobs + create revenue



# Global E-waste Quantities

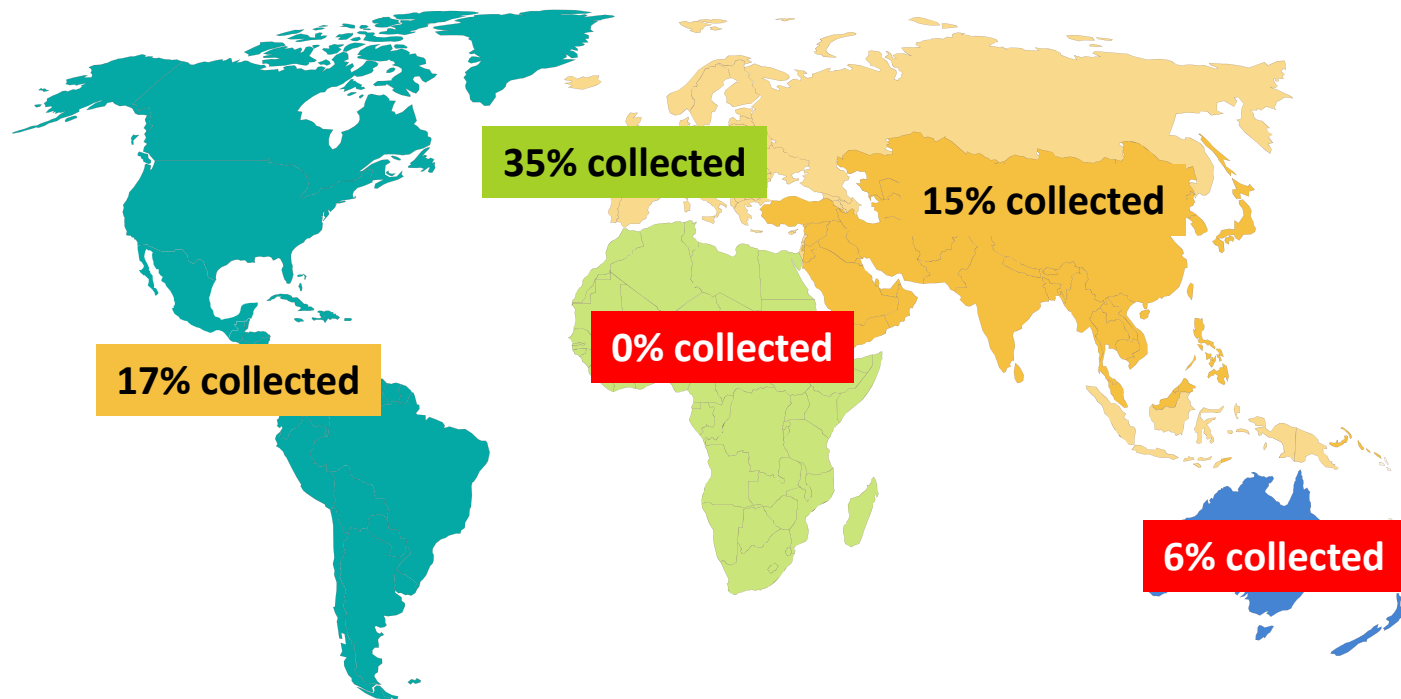
Source: The Global E-waste Monitor-2017 (UNU, ITU, ISWA)





# Global E-waste Quantities

Source: The Global E-waste Monitor-2017 (UNU, ITU, ISWA)



Statistics are not harmonized throughout the countries

Only **41** countries in the world collect international statistics on e-waste

Informal recycling techniques exist

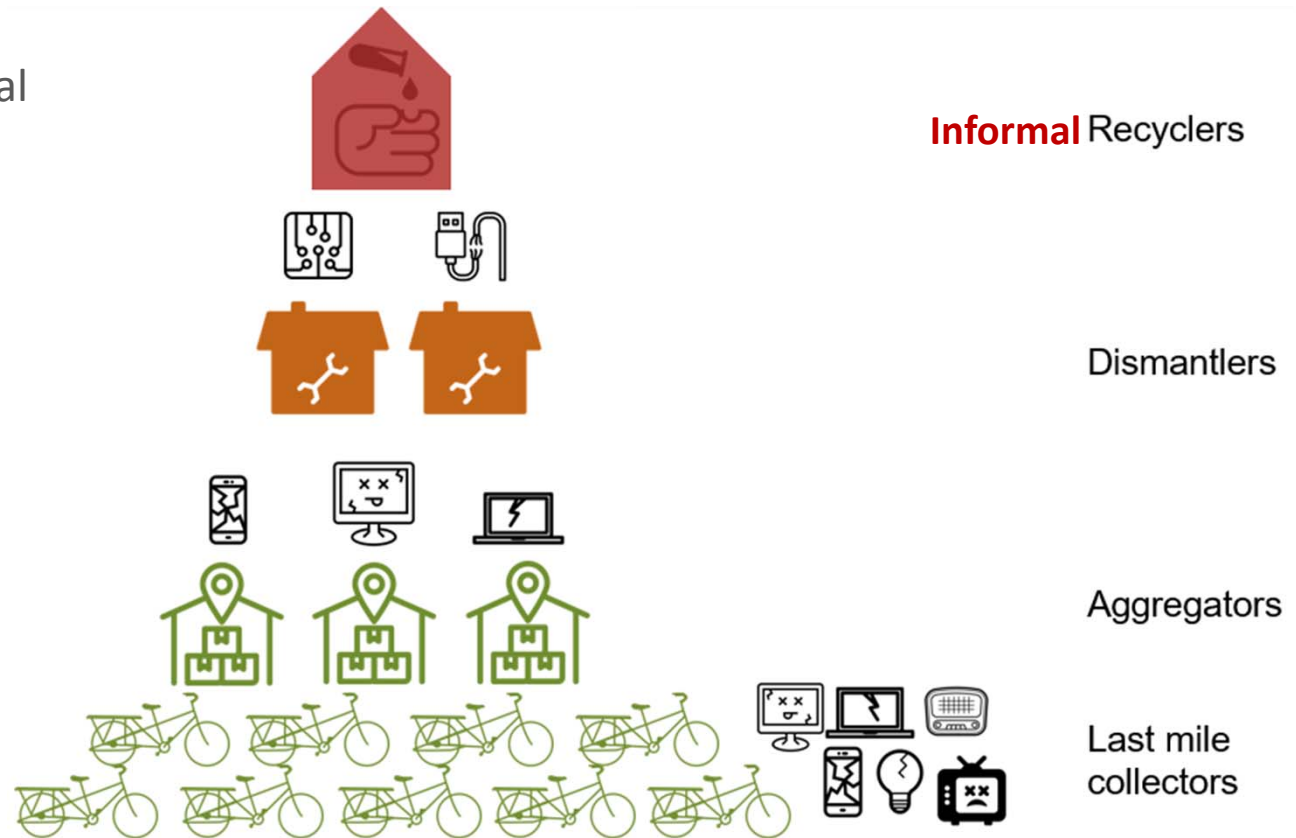






## Large informal sector in developing countries

- Usually large established informal sectors







## Good practices in developing countries – informal sector

- Engaging informal sector to be better at what they do well and stop doing what they do badly



# Global Work- Workshops

22

- Statistics

- November 2017 – Arusha with UNSD
- April 2018 – Zanzibar with ITU
- April 2018 – Sao Paolo with Brazilian government

- Policy Makers / e-waste management

- Several in EU pre 2017 (WEEE Directive)
- May 2018 in Bangkok
- Several in Fall 2018+2019 in Latin America

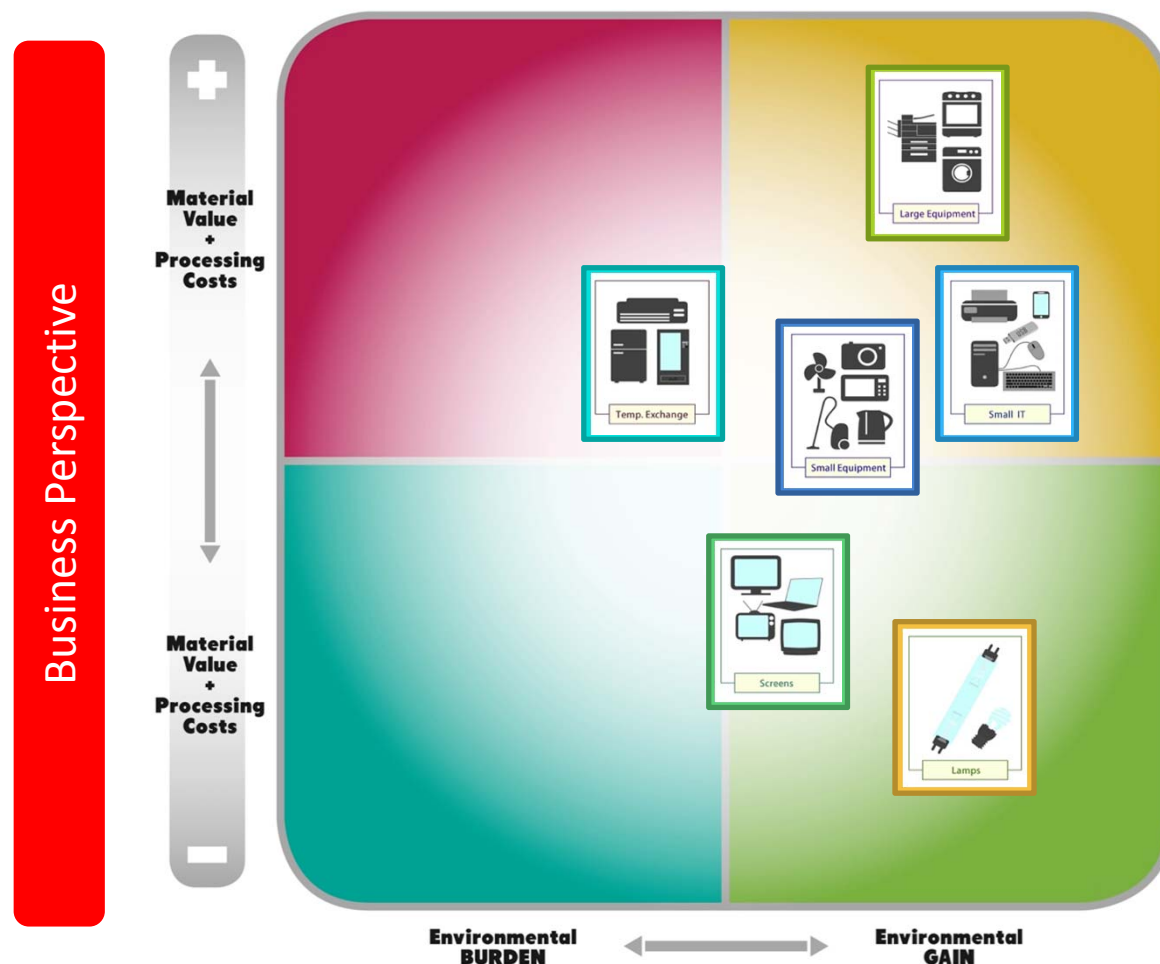
# E-waste and priority

23

Category	Policymakers / legislation focus		Business focus
	Weight / size	Environmental /health	Material value
1. Cooling & Freezing (CFCs)	High	High	Medium
2. Screen	High	High	Medium
3. Lamps (with mercury)	Low	High	Low
4. Large household appliances	High	Low	Medium / High
5. Small household appliances	Medium	Low	Medium
6. IT and Consumer Equipment	Medium	High	High
7. Solar (Grid/Off-Grid)	High/Low	Medium	Low

# WEEE Flows and Priority

24



Even within the same waste stream, NOT ALL PRODUCTS are equal:

- C&F: Fridges (negative) vs AirCon (positive)
- Mixed WEEE: Mobile phones (very positive) vs small appliances (slightly positive) vs Desktop (very positive) vs Laptop (slightly positive)
- Screens: CRT (negative) vs FPD (close to zero)



# Summary

25

- E-waste is coming more on the global political agenda
- More countries are developing legislation
- Monitoring of e-waste increasingly important to measure progress
  - Results of the pilots of UNSD/UNECE/OECD have been used in Global E-waste Monitor 2017
  - Addition data was needed (literature research)
- Website soon to be released
- 2018 Data of UNU/UNEP questionnaire used in the Global Monitoring of e-waste in 2019
- Your input is needed to improve data coverage
- UNU can follow up individually