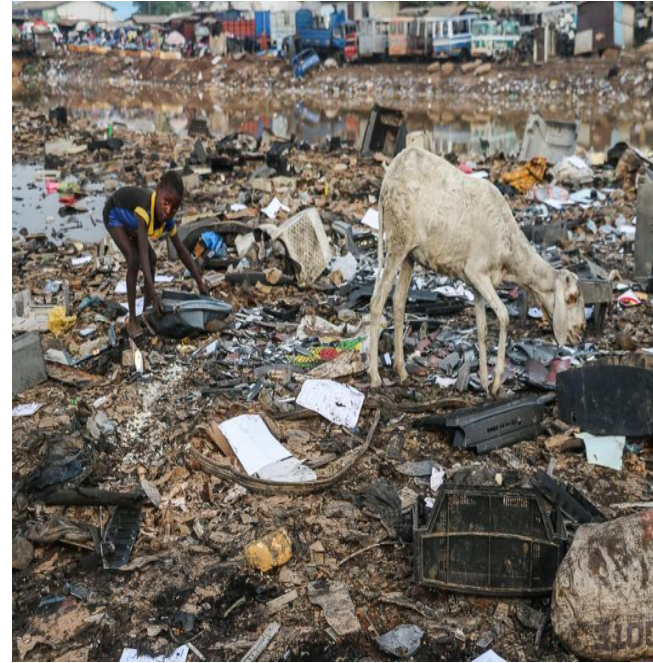


# E-WASTE MANAGEMENT BEST PRACTICES AND SUCCESSFUL CASE STUDIES AROUND THE WORLD



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# Presentation outline

- Best practices in e-waste management
- Focus of e-waste initiatives across regions
- UN and related entities active in e-waste management by sector
- E-waste initiatives by region
- E-waste treatment good practices: Overview
- Trends in e-waste management – goods and bads
- Current practices in developing countries
- Best practices in developing countries
- Way forward

# Best practices in EU and developing countries

## Comparison; EU

- Governments limited to regulations, enforcement, monitoring
- Governments **not involved** in cash flows
- Enforcement, monitoring and control **is a big challenge**
- **Strong competition** between many logistics providers, recyclers
- Competition may **affect quality**
- Competition **spurs innovation**

## Africa

- Governments tend to be involved in business
- Governments tend to be **involved** in cash flows
- Enforcement, monitoring and control is an **even bigger challenge** in some cases
- Tendency towards **single or few formal service providers**
- Lack of competition may **increase prices**
- Lack of competition **may hamper innovation**

# Best practices in EU and developing countries

## Comparison;

### EU

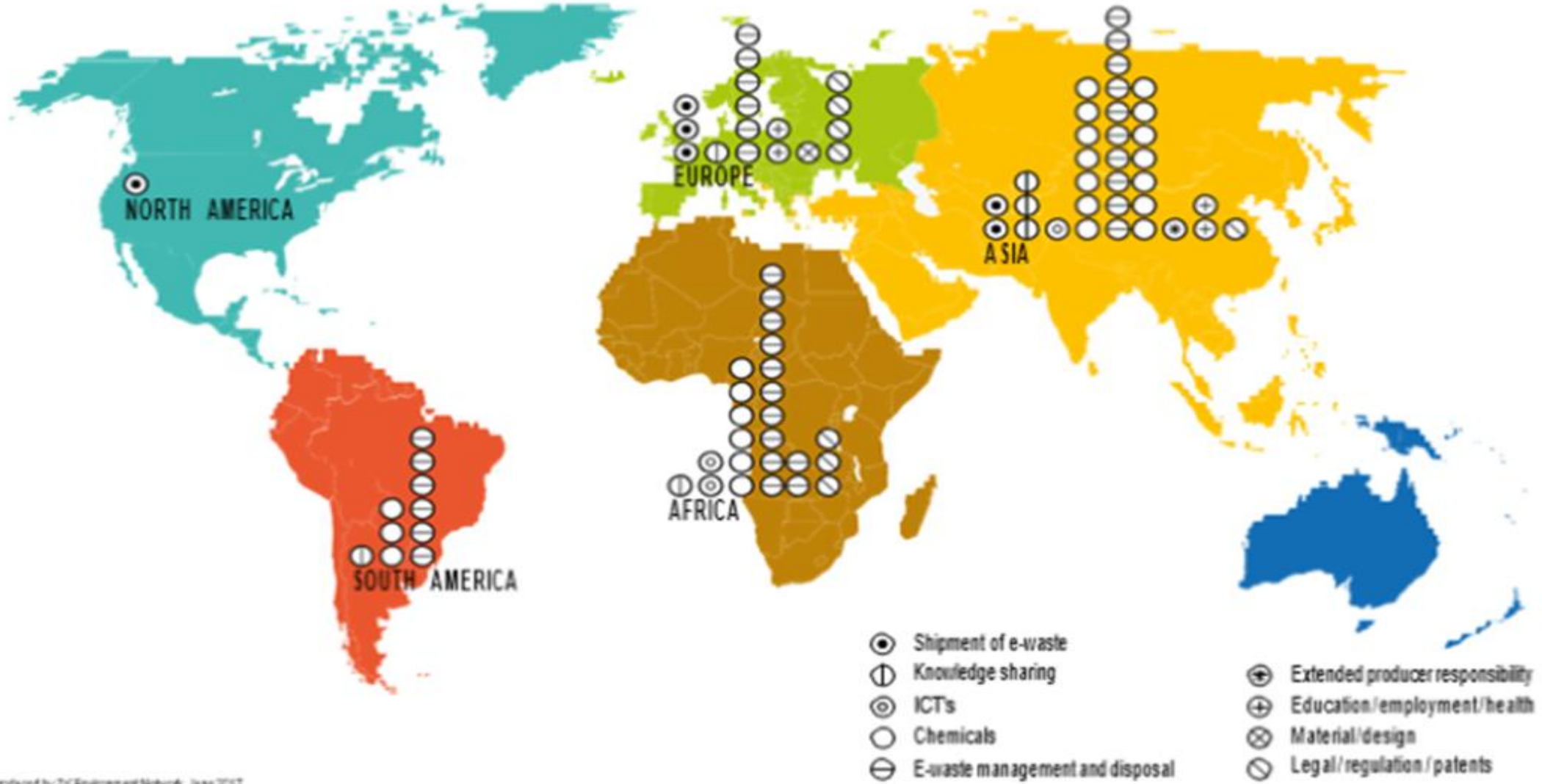
- High labor cost, focus on mechanical treatment
- Access to e-waste for free
- Proper incineration and disposal capacities available
- Sound end-processing capacities available

### Africa

- Low labor cost, manual treatment possible and economically/ecologically beneficial
- Buyout of e-waste from informal sector increases cost
- Scarce/missing, expensive exports of hazardous wastes?
- Sound end-processing capacities partially available

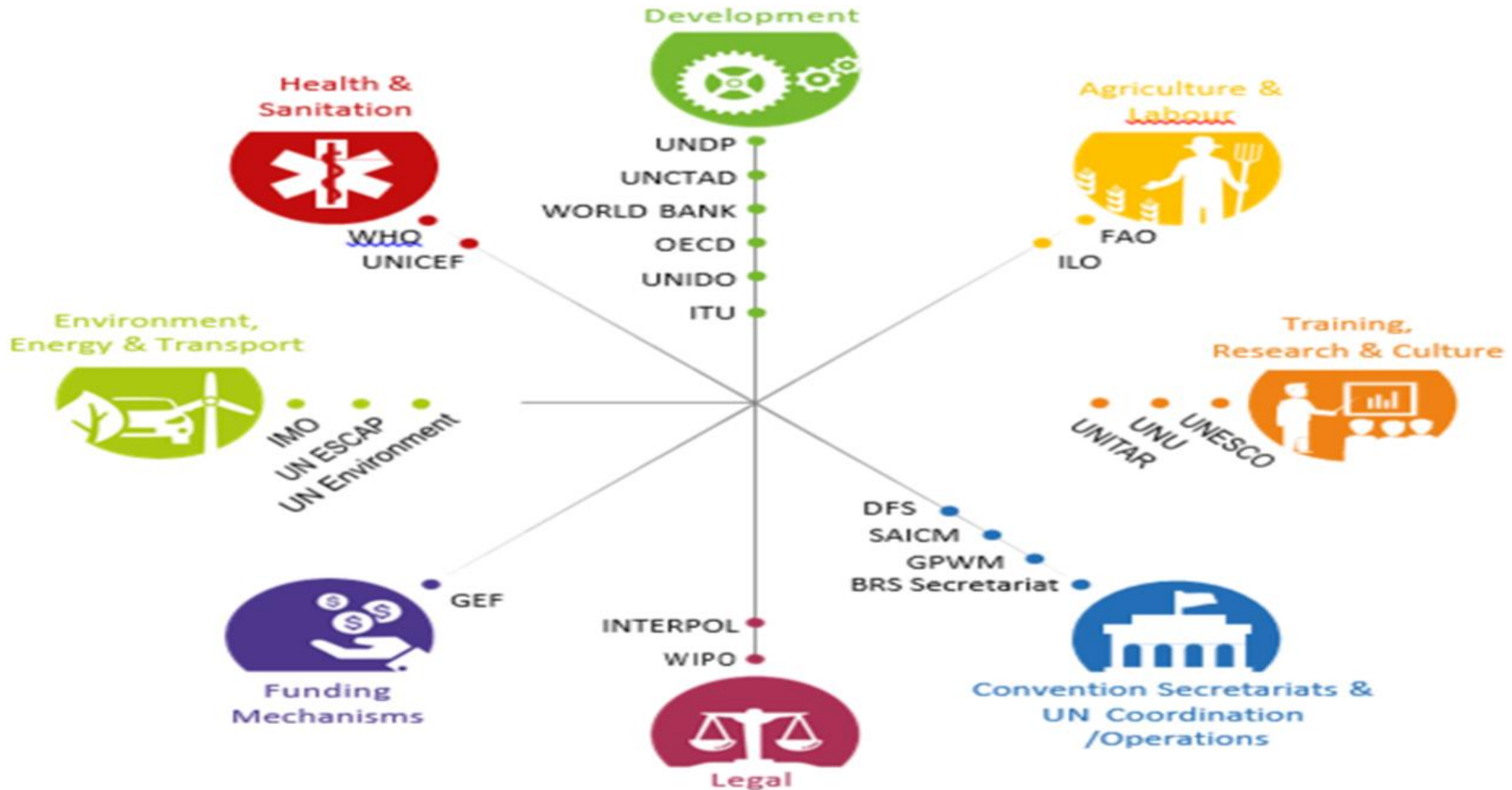


# Focus of e-waste initiatives across regions



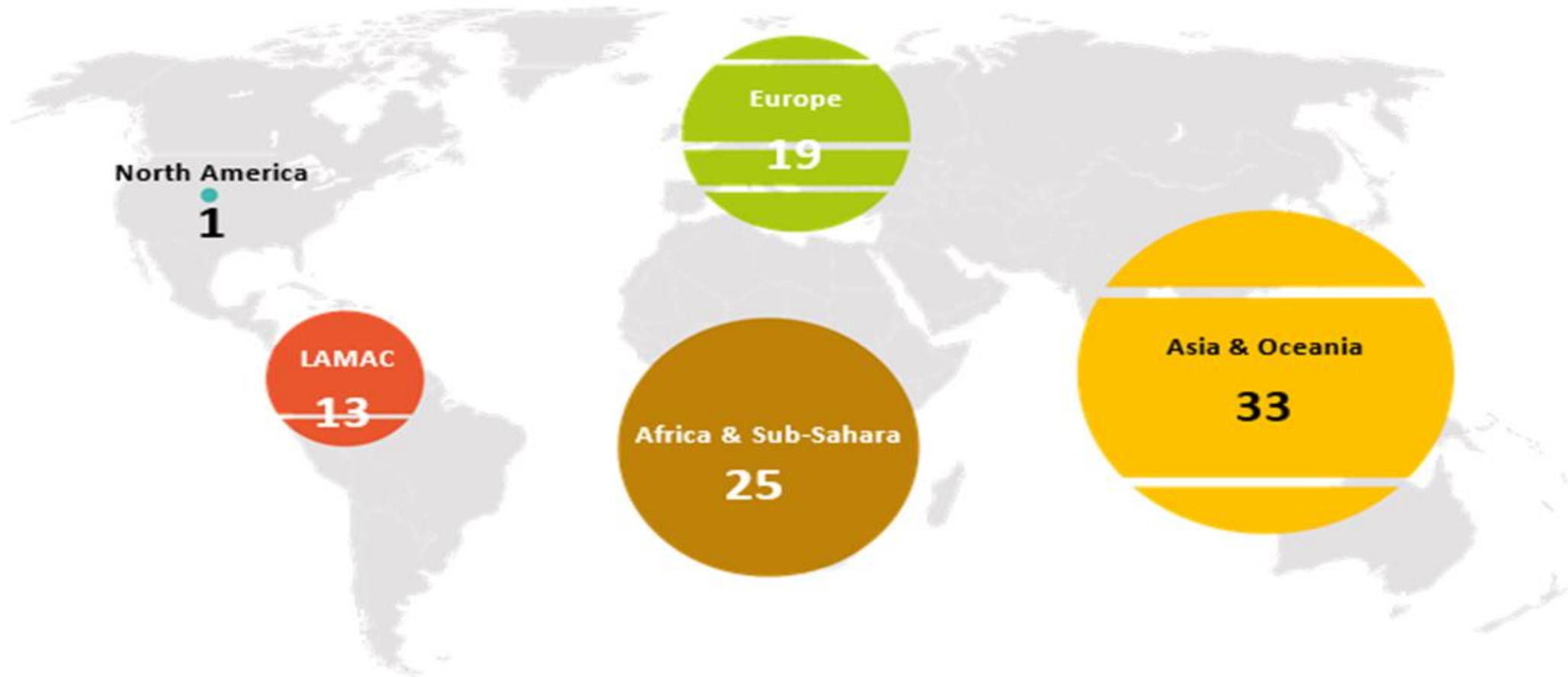
Source: United Nations Environment Management Group (2017)

# UN and related entities active in e-waste management by sector



Source: United Nations Environment Management Group (2017)

# E-waste initiatives by region

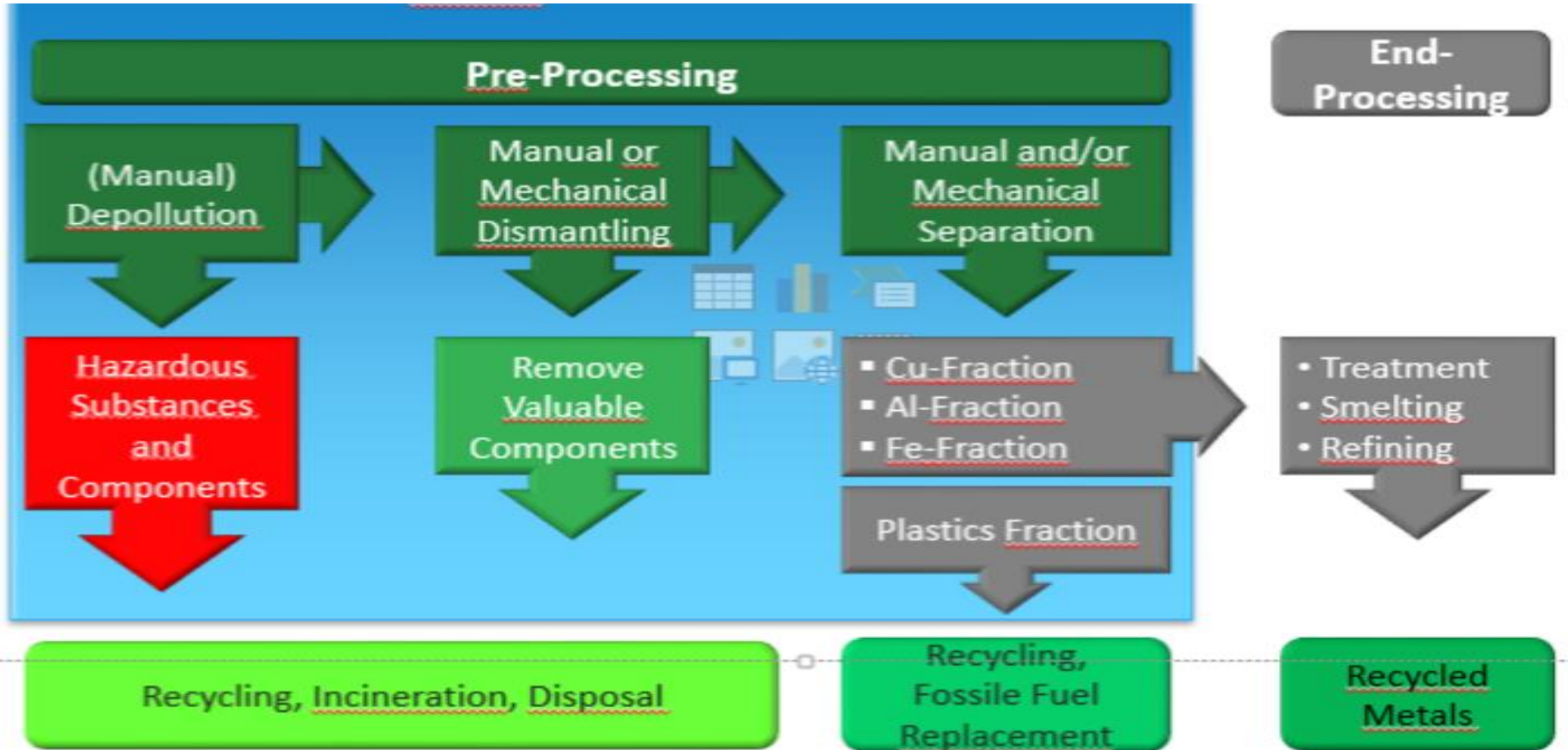


\* The number of e-waste initiatives with a global reach - 68

\* TOTAL - 154 Initiatives

Source: United Nations Environment Management Group (2017)

# E-waste treatment good practices: Overview



Source: Baldé, C.P., Wang, F., Kuehr, R., Huisman, J. (2015), The global e-waste monitor – 2014, United Nations University, IAS – SCYCLE, Bonn, Germany.



# Trends in e-waste management - goods and bads

## Comparison;

### European Union (EU)

- **Collection in the EU**
  - Around 40/50 % officially collected
  - Access to e-waste for free
- **Repair and reuse**
  - Very low repair and reuse rate
- **Pre-treatment**
  - Quality low to good (mechanical)
  - Clean
- **Final treatment/recycling, disposal**
  - Mostly very good and clean

### Ghana/Africa

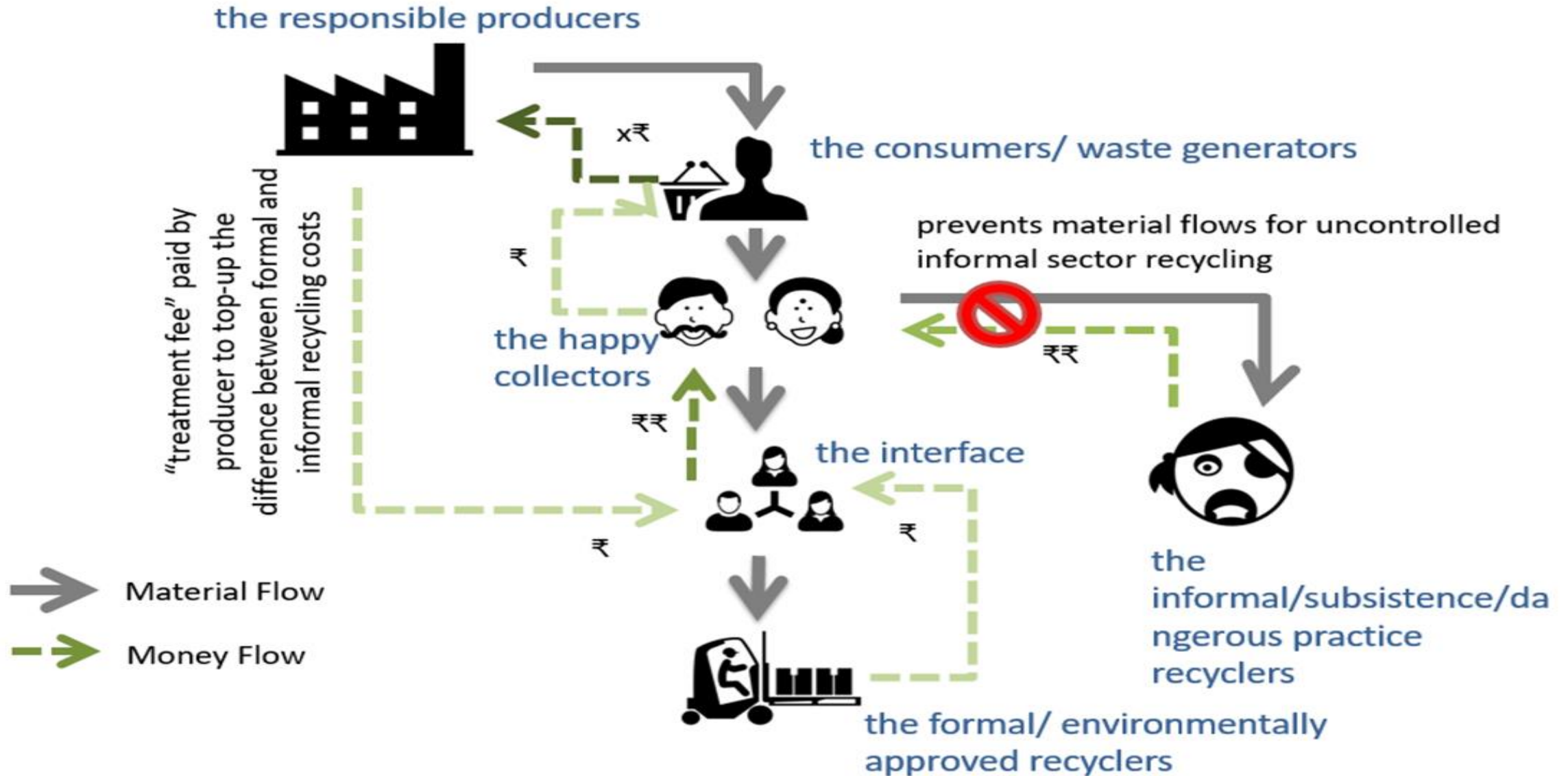
- **Collection in Ghana**
  - Very high collection rate
  - Mostly through informal sector
  - Access to e-waste not for free!
- **Repair and reuse**
  - Very high repair and reuse rate
- **Pre-treatment**
  - Good quality (manual dismantling)
  - Very high pollution by improper handling
- **Final treatment/recycling/disposal**
  - Lacking finances, knowledge, infrastructure
  - Very high pollution possible

# Current practices in developing countries

- All/Most is undocumented
- Usually large established informal sectors
- Engaging informal sector to be better at what they do well and stop doing what they do badly



# Best practices in developing countries



# Way forward

- Allocate funds to establish e-waste information hubs and modern management facilities.
- Establish EEE learning institutions and develop curriculum for e-waste management.
- Everyone has a role to manage e-waste
- Let everybody assume his/her responsibility at personal and institutional level.

**THANK YOU!**