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Programme

E-waste statistics

Addressing the e-waste challenge: better data –
better policies

April, 2018 – E-waste statistics workshop - Zanzibar





The UN University System



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- 2 UNU-CRIS, Bruges, Belgium
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- 5 UNU-IAS, Yokohama, Japan
- 6 UNU-IIGH, Kuala Lumpur, Malaysia
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- 17 UN University Centre – Tokyo, Japan
- 18 UN University Centre – Kuala Lumpur, Malaysia
- 19 UNU Vice-Rectorate in Europe, Bonn, Germany
- 20 UNU Office in New York, New York, NY, USA
- 21 UNU Office at UNESCO, Paris, France

Key projects/ activities:

1. Policy advice

- 2007 Review of the EU WEEE Directive
- 2017 Common methodology WEEE Directive
- 2017 E-waste in Latin America

2. E-waste quantification studies

- Global E-waste Monitor (2014, 2017)
<http://ewastemonitor.info/>
- Regional Monitor South-East Asia (2017)

3. Capacity building and training

- E-waste Academies (Global, 2009-now)
- E-waste statistics (start in 2017)

4. Facilitating International Dialogue

- Hosting StEP Secretariat: Solving the e-waste problem, see: www.step-initiative.org

SCYCLE:

Global work - Methodologies

- UN Partnership on Measuring ICT for Development
 - Chair: Task Group on Measuring E-waste
- Endorsed by: ITU, UNCTAD, Eurostat, OECD, ILO, UNECA, ESCAP, UNEP-SBC, etc
- Guide countries to measure relevant parameters for e-waste
 - <http://ias.unu.edu/en/research/e-waste-quantification.html#outputs>
- E-waste Statistics Guidelines
 - First edition 2015
 - Second Edition 2018
- Chair of CES Taskforce on Waste Statistics



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SCYCLE:

Global work - Monitoring

- Policy advice by monitoring e-waste flows
 - European Commission
 - Italy, France, Netherlands, Romania
 - GMSA
- First Global E-waste Monitor 2015
- Regional e-waste monitor 2017 (South East Asia)
 - Co financed by Japan
- Second Global E-waste Monitor (Dec 2017)
 - Co-financed by GiZ
- More e-waste monitors in future



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Global E-waste Statistics Partnership

Goals

1. National and regional capacity building

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

2. Global e-waste database

- To track developments
- To inform policy makers and industry

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)

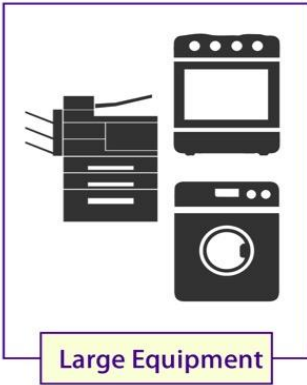
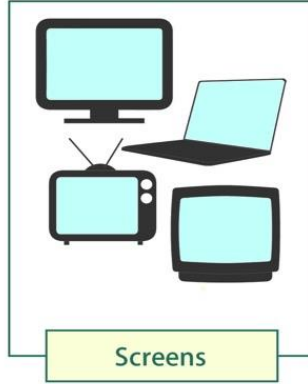
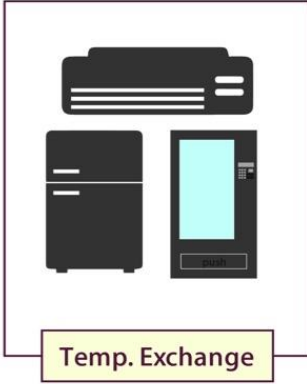


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Formed in January 2017 to address the e-waste challenge by improving e-waste data



What is e-waste



“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”

E-waste quantities:

Overview of global e-waste quantities



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4500 Eiffel Towers

9 Mt
are collected
by official take
back systems



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

E-waste global problems:



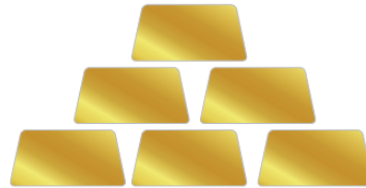
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3. Losses of valuable material

- Precious metals including gold, silver, copper, platinum and palladium
- Valuable bulky materials such as iron and aluminum, and plastics



**ESTIMATED URBAN MINE:
55 Billion €**

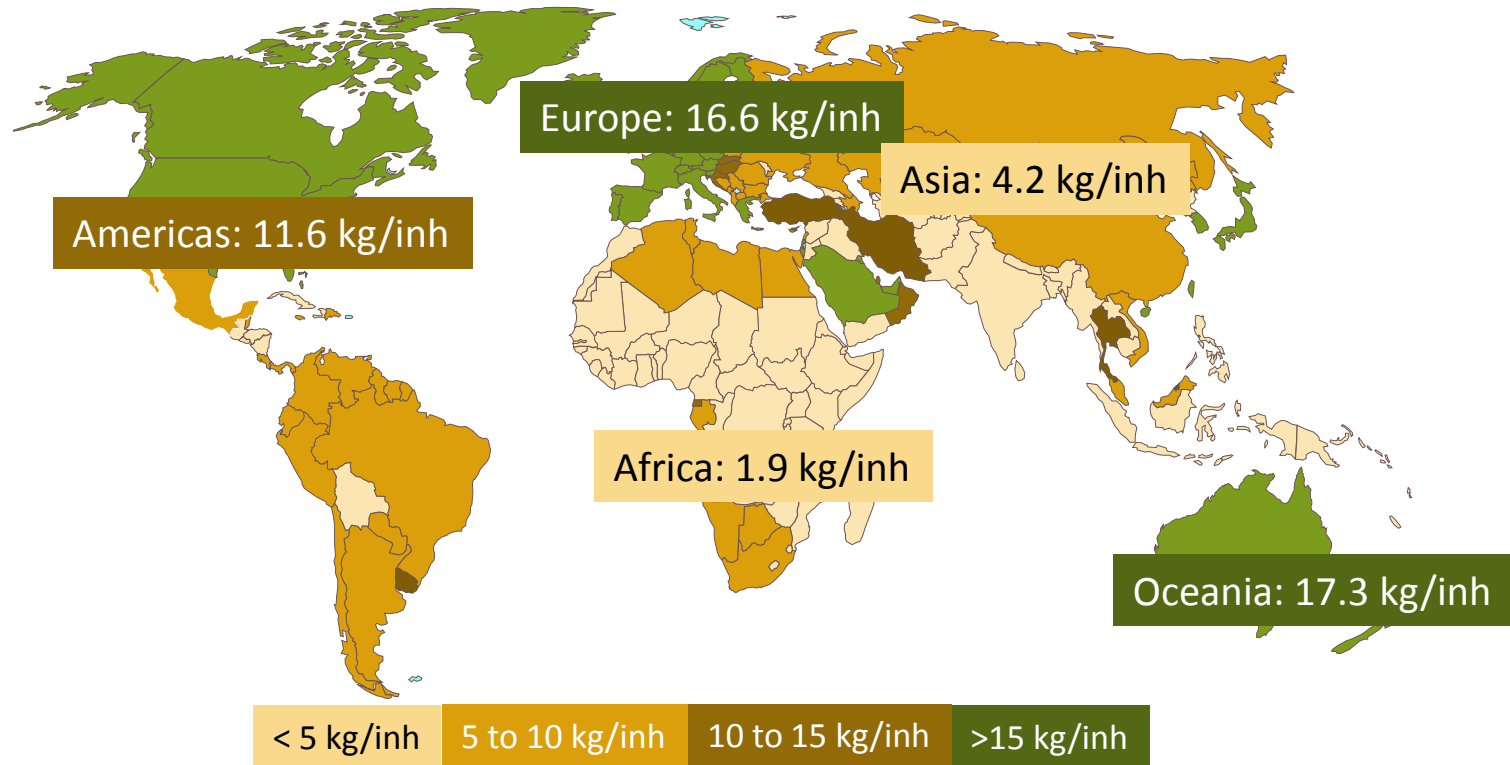
E-waste quantities:

Overview of global e-waste quantities



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

E-waste quantities:

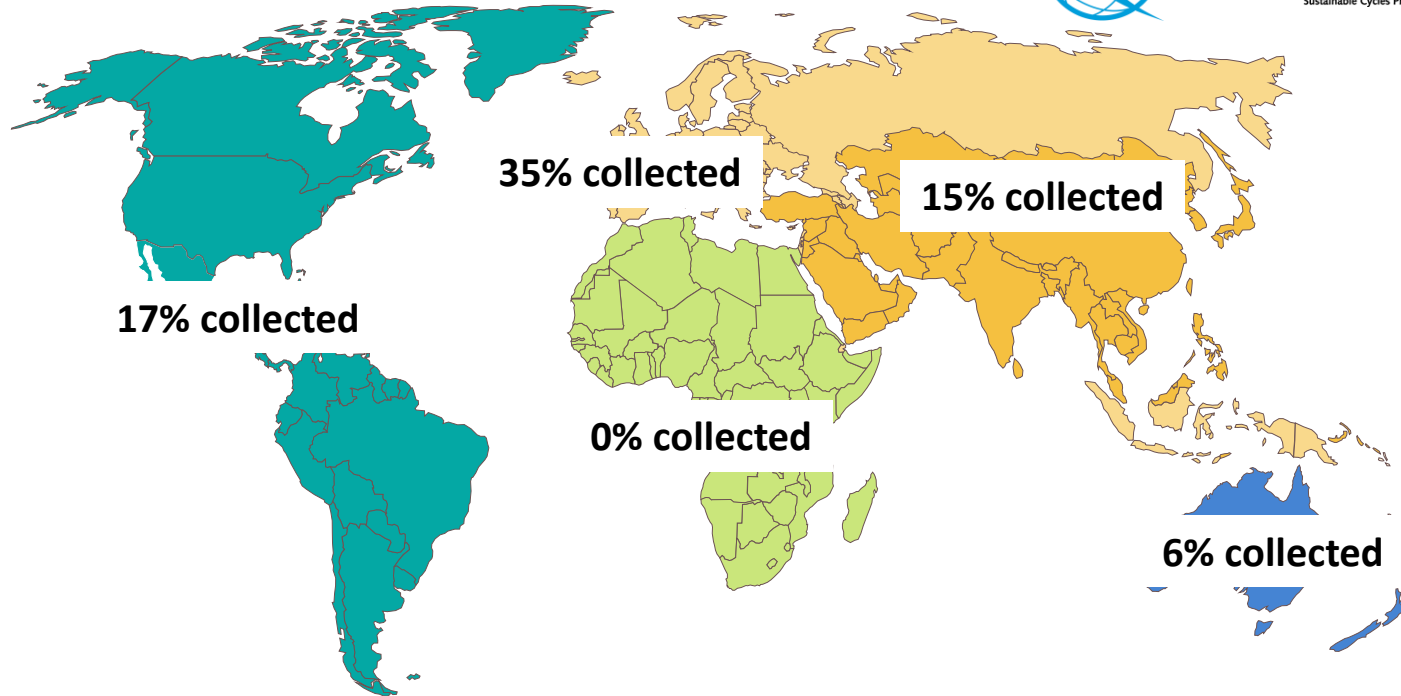
Overview of global e-waste quantities



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Statistics are not harmonized throughout the countries



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

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

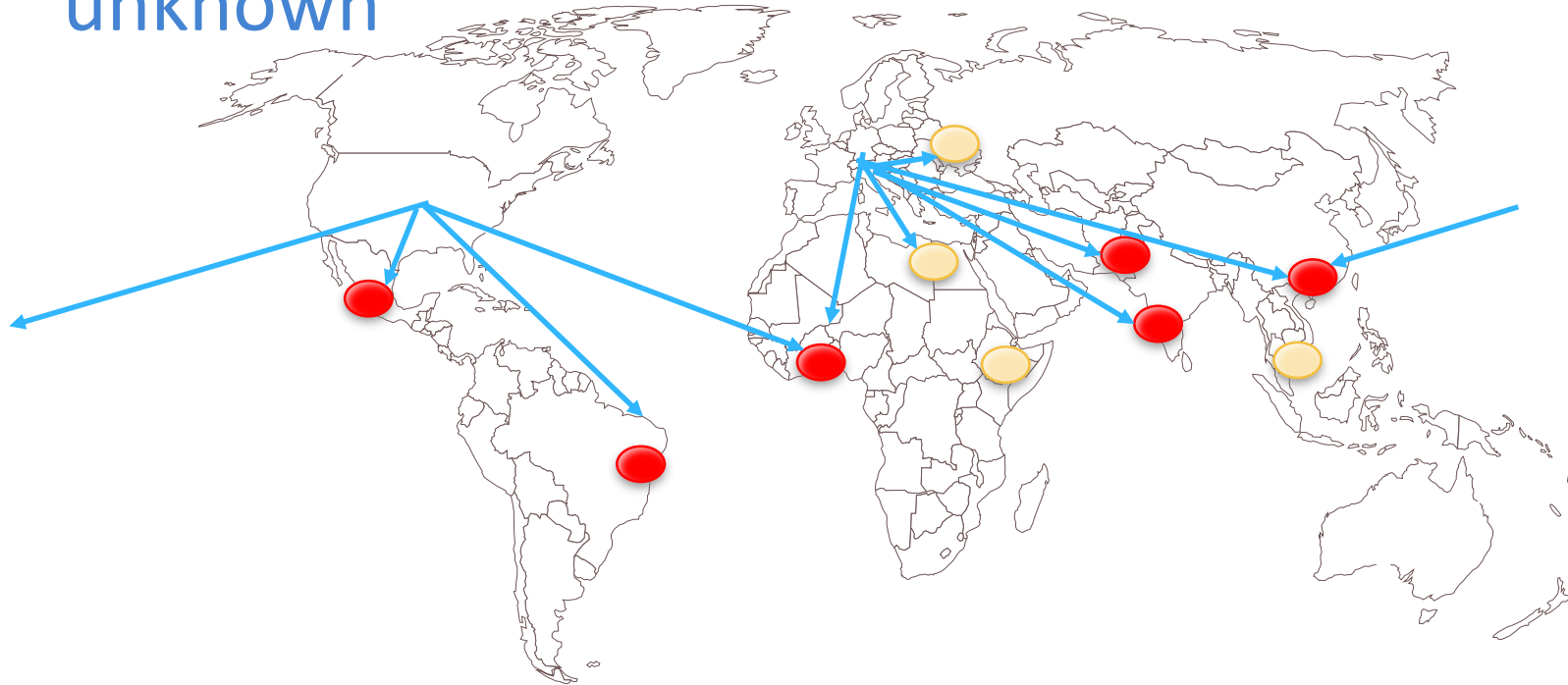




Statistics e-waste flows are unknown



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-  Known dumpsites (summary of literature)
-  Suspected dumpsites (summary of literature)

Best practices in EU

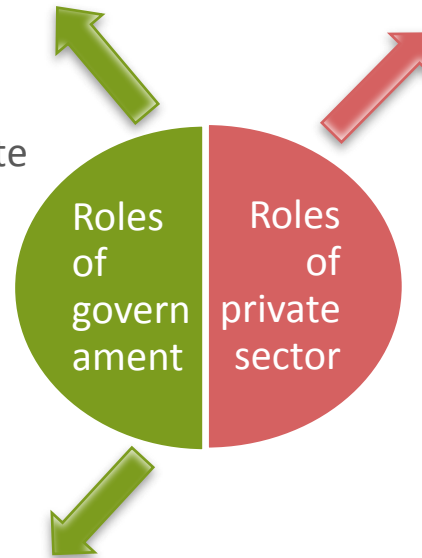


■ Ministry of Environment or ICT

- Formulate law
- Monitoring of e-waste volumes (e.g. National Statistical Institute or Environmental Protection Agency)
- Define Collection targets (e.g. E-waste collected vs. e-waste generated)
- Minimum recycling standards of collected e-waste
- Enforce

■ Environmental inspection

- Basel Convention
 - Inspection of shipments (illegal imports from OECD countries)
- Inspect on inferior recycling standards



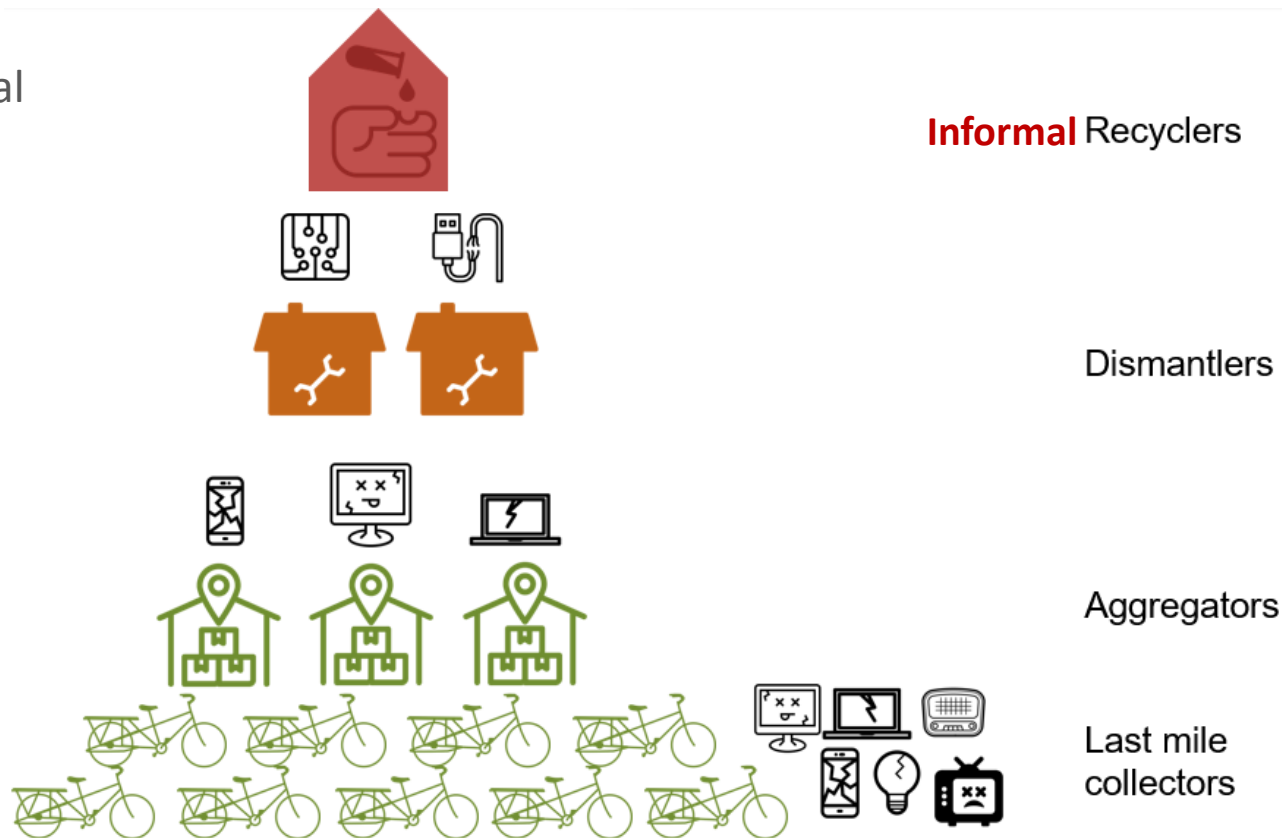
■ Extended producer responsibility

- Importer or producer is responsible for proper recycling of e-waste
- Set up collection of e-waste
- Set recycling standards
- Can be financed via visible fee upon sale reflecting recycling costs

Informal sector in developing countries



- Usually large established informal sectors





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

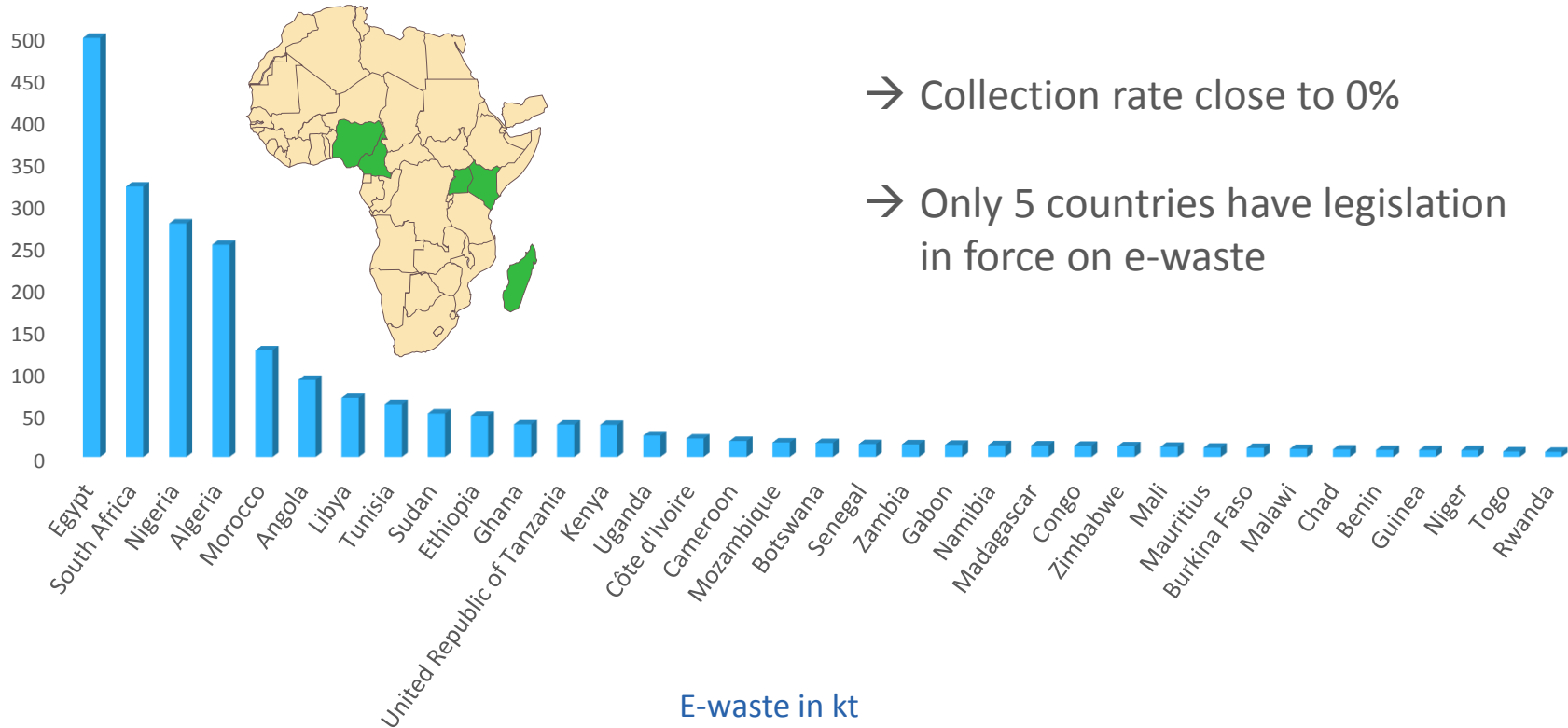


E-waste quantities: *E-waste generation in Africa*



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→ Collection rate close to 0%

→ Only 5 countries have legislation in force on e-waste

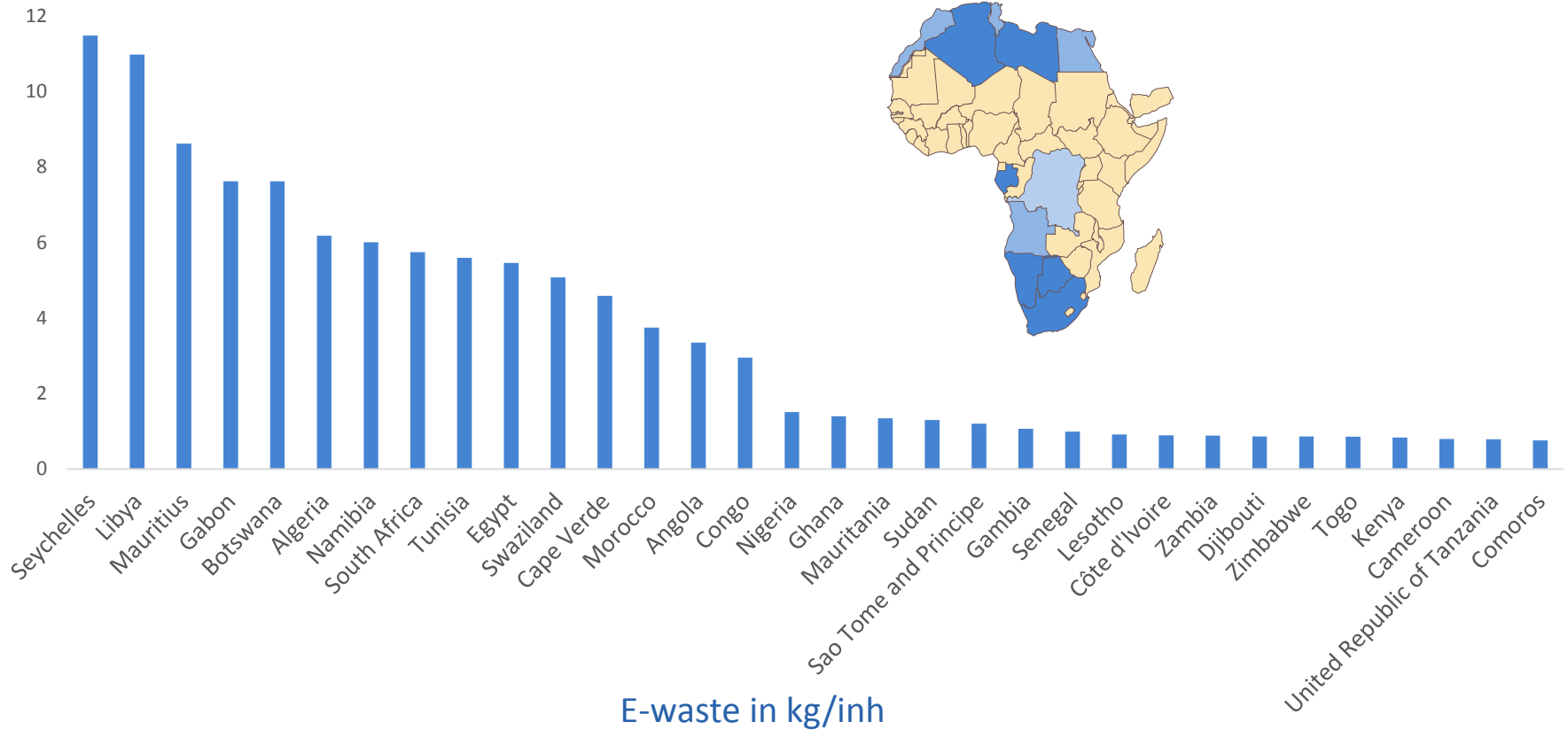
E-waste quantities:

E-waste generation in Africa



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E-waste in the Arab Region



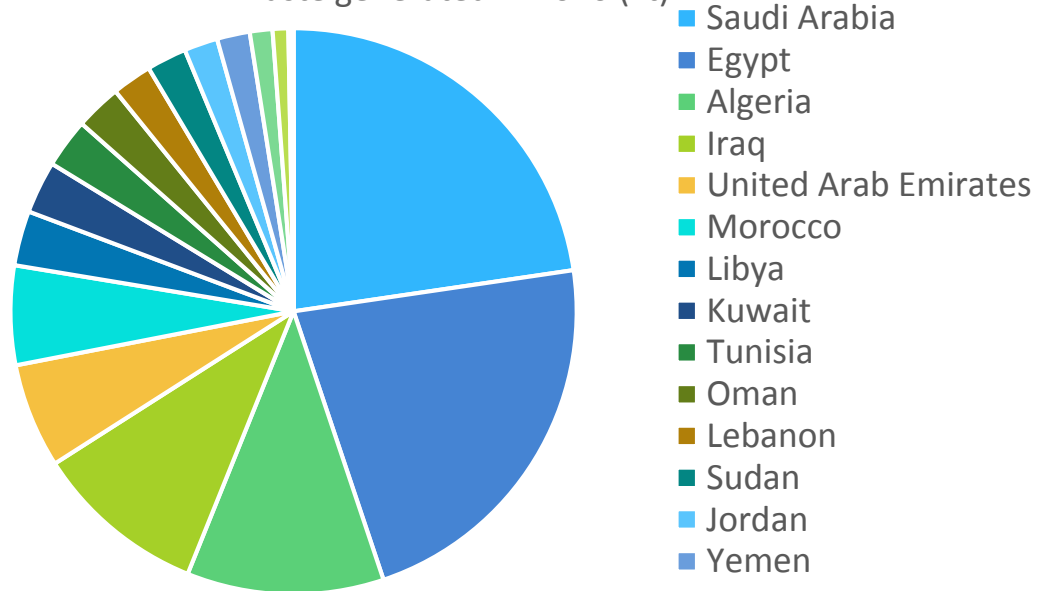
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→ 5 % of total e-waste in the world

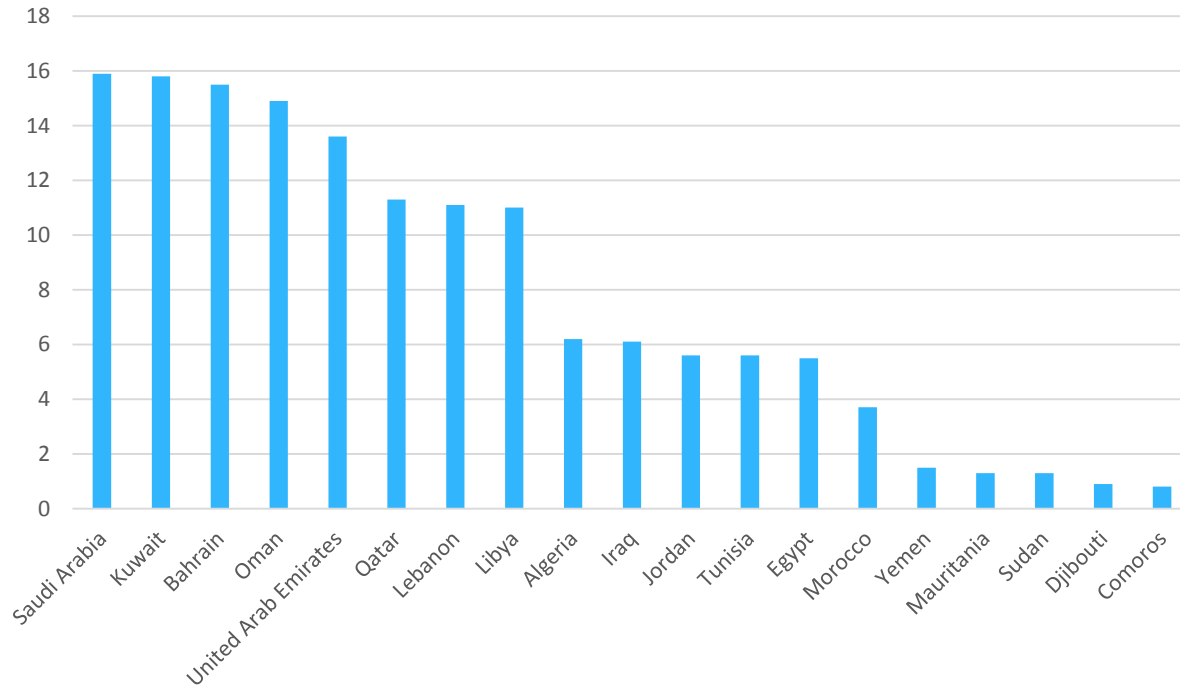
E-waste generated in 2016 (kt)



E-waste in the Arab Region



E-waste generated in 2016 (kg/inh)



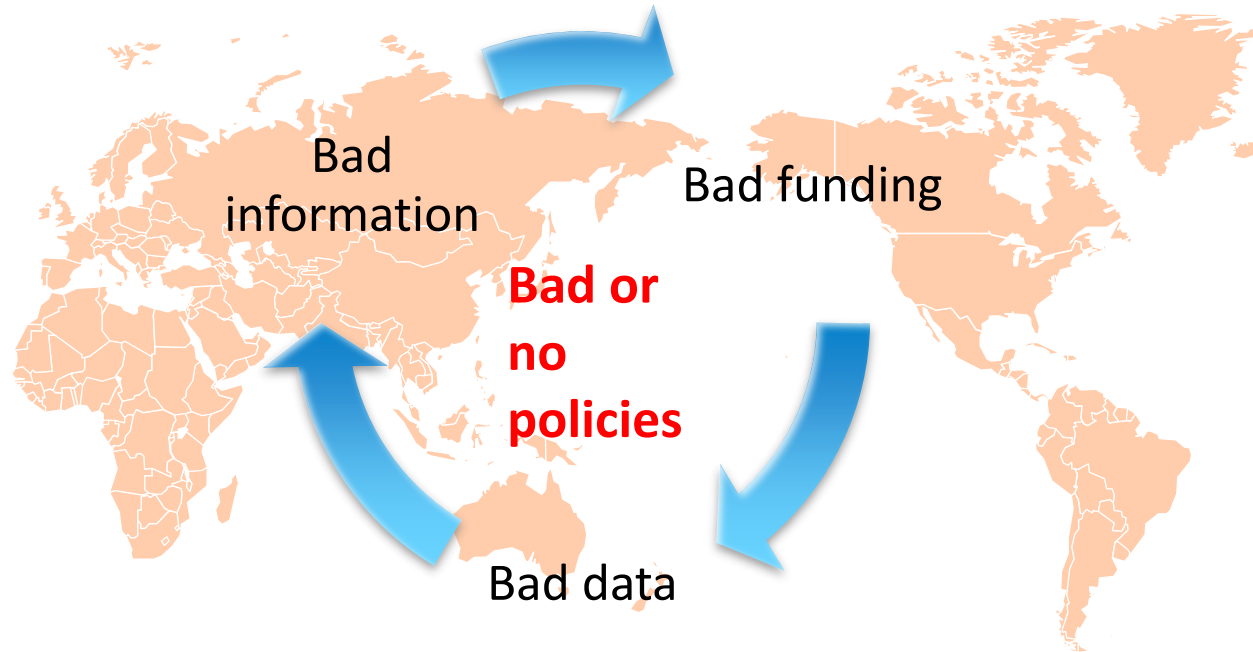
- Collection rate close to 0%
- Zero countries have national legislation in force on e-waste (in 2017)



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Bad
information

Bad funding

**Bad or
no
policies**

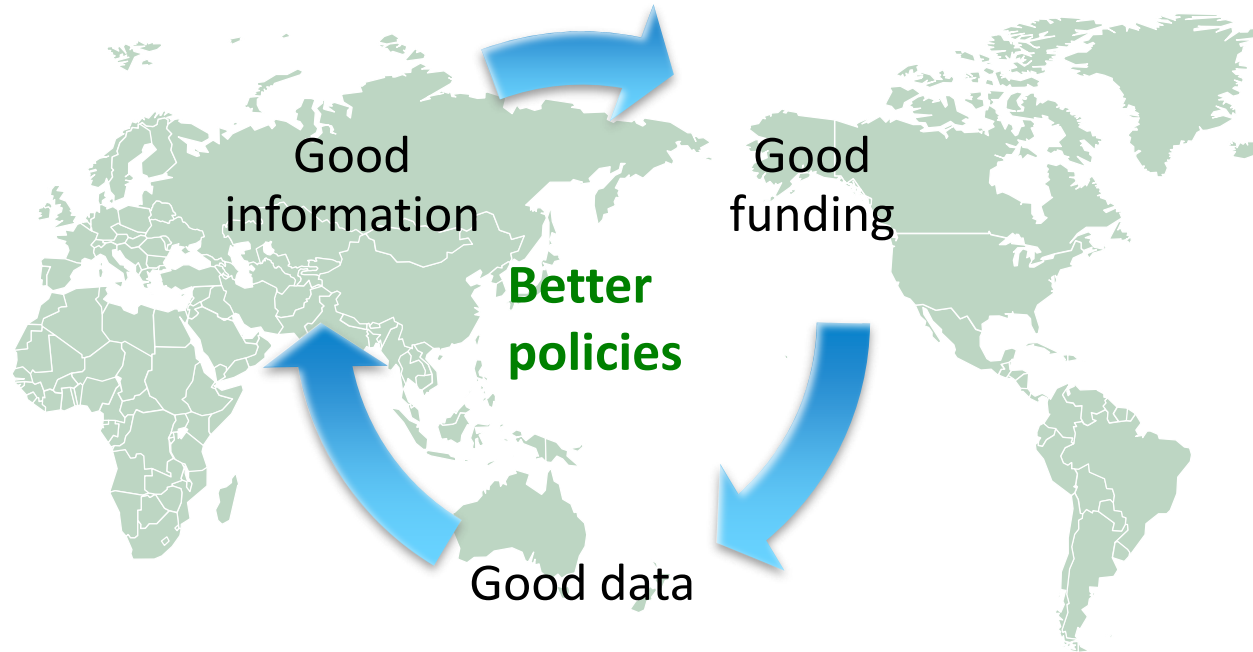
Bad data



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Thank you for your attention!