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# The importance of e-waste data and statistics

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## The case of the Regional E-waste Monitor in the CIS+ Georgia

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SCYCLE - UNU/UNITAR

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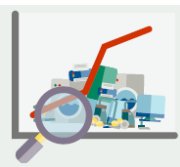
1. SCYCLE and the GESP
2. E-waste data and statistics
3. *The Regional E-waste Monitor in the Commonwealth and Independent States plus Georgia, 2021*

# SCYCLE and the GESP



# SCYCLE Work

## Quantification



- [Global and Regional E-waste Monitors](#)
- [National country studies](#)
- [E-waste statistics Guidelines](#)
- [Person in Port](#)
- [ProSUM](#)

## Capacity building and trainings

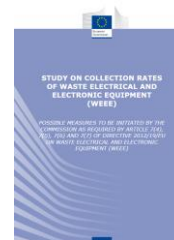
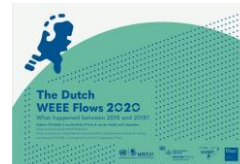


- [E-waste Academies EWAM & EWAS](#)
- [Dotcom-Waste](#) (counter illegal management of e-waste)
- [Workshops on E-waste statistics](#)

## Policy advice & Partnerships



- Studies on Article 7 & 11 and review of the WEEE Directive
- UN E-waste Coalition
- Global E-waste Statistics Partnership



# The Global E-waste Statistics Partnership (GESP)



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**ISWA**  
International Solid Waste Association



## 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 and Regional 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)

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

<https://globalewaste.org/about-us/>



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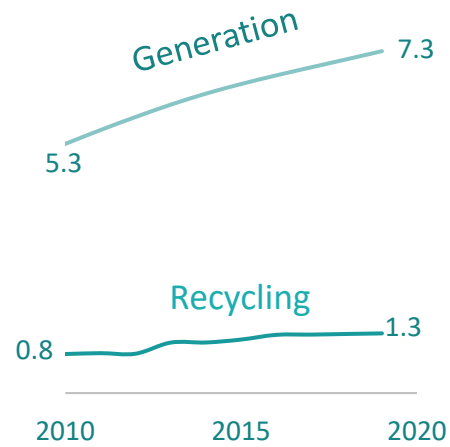


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# E-waste data and statistics



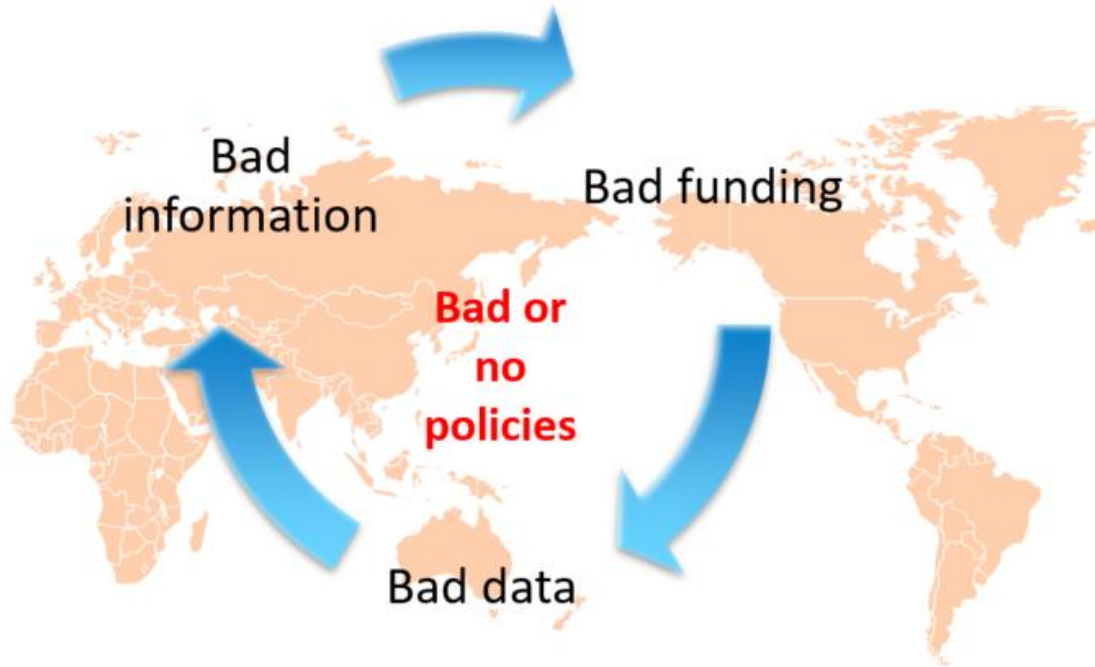




Global E-waste Statistics



# Why data are important



- Fast growing problem
- Little data
- Link to existing statistics and e-waste related data
- Needed to capture e-waste most essential features



# Why data are important

- To start addressing the e-waste challenge.
- Evaluate developments over time.
- Set and access targets.
- Identify best practices in policies.
- To improve comparability between countries.
- To serve as the basis for e-waste statistics, e-waste indicators and contribute to the SDGs.



## Data demand from SDG 11



**Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable**

**Target 11.6:** By 2030, reduce the adverse per capita environmental impact of cities by paying special attention to air quality as well as municipal and other waste management.

**Indicator 11.6.1:** *Percentage of urban solid waste regularly collected and with adequate final discharge with regard to the total waste generated by the city.*

$$= \frac{\text{municipal solid waste collected}}{\text{total municipal solid waste generated}}$$



## Data demand from SDG 12



**Goal 12: Ensure sustainable consumption and production patterns**

**Target 12.5:** *By 2030, substantially reduce waste generation through prevention, reduction, repair, recycling, and reuse.*

**SDG indicator 12.5.1:** *National recycling rate and tons of material recycled.*

$$\text{SDG 12.5.1 Sub-indicator on e-waste} = \frac{\text{Total e-waste recycled}}{\text{Total e-waste generated}}$$

**Target 12.4:** By 2030, achieve the environmentally sound management of chemicals and all waste throughout the lifecycle, in accordance with agreed-upon international frameworks, and significantly reduce their release into air, water, and soil in order to minimize their impacts on human health and the environment.

**SDG indicator 12.4.2:** Treatment of hazardous waste, and hazardous waste management, by type of treatment

# Harmonized framework to measure e-waste

Quantify the magnitude of the e-waste challenges



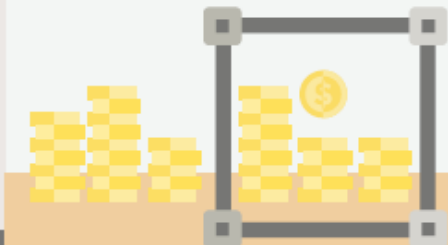
Set appropriate collection and recycling targets



National

Establish priorities for policy makers, influencing regulations, and setting policy targets

Allocate adequate financial resources



Reduce e-waste generation



Promote recycling



Global

Prevent dumping and emissions, as well as the improper treatment of e-waste



Create green jobs in the refurbishment and recycling sectors



<https://ewastemonitor.info/regional-e-waste-monitor-cisgeorgia-2021/>



# REGIONAL E-WASTE MONITOR

CIS + Georgia

— 2021



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I.C. Nnorom, O. Pecheniuk, R. Kuehr



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289.2 million  
inhabitants

Russian Federation (RUS)

Belarus (BLR)

Ukraine (UKR)

Kazakhstan (KAZ)

Uzbekistan (UZB)

Moldova (MDA)

Georgia (GEO)

Armenia (ARM)

Azerbaijan (AZE)

Turkmenistan (TKM)

Tajikistan (TJK)

Kyrgyzstan (KGZ)

# Scope and outline

Statistics

Legislation

Management  
infrastructure

## Monitor Features



### 1. What is E-waste?

Definition, product categories, disposal routes,  
key issues



### 2. Methodology

Statistics, Management Assessment,  
Sources



### 3. Regional Overview Legislation and Systems

Status, International Agreements, Stakeholders,  
Projects



### 4. Statistics

EEE POM and E-waste Generated, Categories,  
ESM



### 5. Transboundary Movement

Policies, Quantities, Issues and Impacts



### 6. Management Assessment

Comparative Performance Review



### 7. Common Issues

Five Driving Reasons

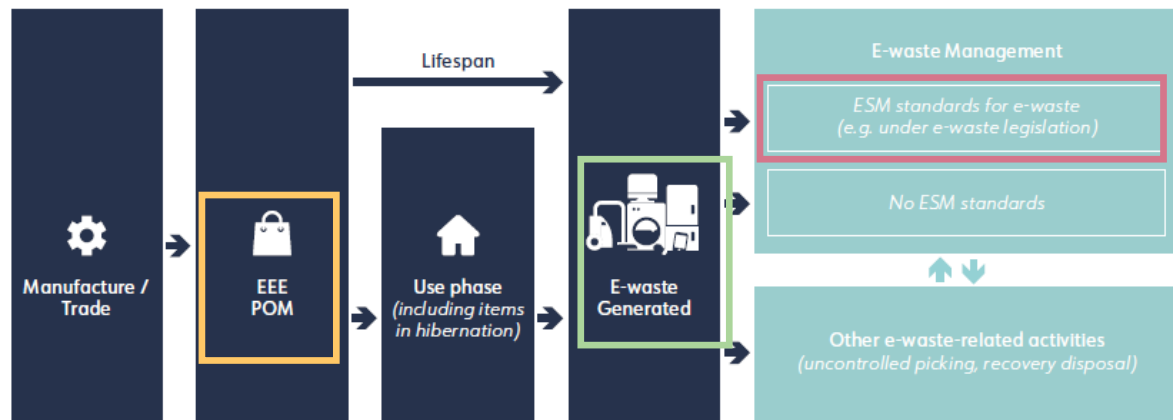


### 8. Recommendations



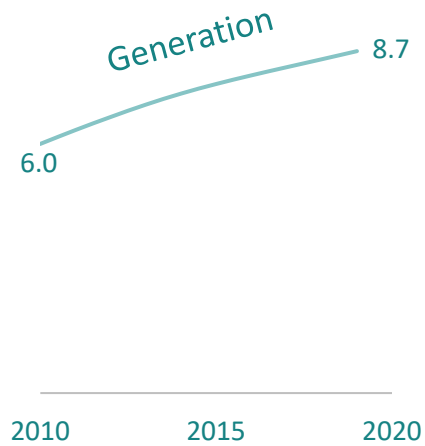
### 9. Country Profiles

# Framework and data sources



- **Indicator 1:** EEE POM.
- **Indicator 2:** E-waste generated.
- **Indicator 3:** E-waste managed in an environmentally sound manner (also referred to as e-waste formally collected).
- **Indicator 4:** E-waste collection rate (indicator 3 divided by indicator 2).

*The e-waste data are harmonised according to international standards, as per SDG 12 on sustainable consumption and production.*



## Regional E-waste Statistics



# 3.2%

e-waste  
collection rate



# Regional and country focus

Country:

## Ukraine

41.9 million inhabitants  
603,628 km<sup>2</sup>  
Borders: Poland, Belarus, Russia, Moldova, Romania, Hungary, and Slovakia  
GDP per capita PPP: \$8,510 USD  
Average household size: 2.5 members

Legislation:  
Infrastructure:  
Collection Rate:  
Unknown

- Legend:
- Advanced
  - Transition
  - Basic
  - Unknown

National legislation on e-waste:

Extended Producer Responsibility:  
National e-waste standards:  
E-waste collection target:  
Legislation product coverage in UNU-KEYS: 0 of 54  
Legislation product coverage in weight (%) on total and per category: Total: 0% of the e-waste generated in 2019



International Conventions:

	Signature	Ratification/Accession	Entry into force
Basel Convention	-	08/10/1999 (a)	06/01/2000
Rotterdam Convention	-	06/12/2002 (a)	24/02/2004
Stockholm Convention	23/05/2001	25/09/2007	24/12/2007
Minamata Convention	-	-	-

EEE POM (2019):	E-waste generated (2019):	E-waste managed environmentally soundly (2019):
365.7 kt. 8.7 kg/inh. 	324.1 kt. 7.7 kg/inh. 	Unknown 

[Source: UNU / UNITAR / UNED questionnaire, 2019. This data also contains data reported on batteries and accumulators]

Formal/environmentally sound e-waste management system in place:

About 115 organisations have licence to manage e-waste.





What's next?

# *... Regional E-waste Monitor for the Western Balkans*



## Mission of the project

- Help to improve the quality, understanding, collection and interpretation of e-waste data → start compiling **national e-waste statistics**,
- Create a basis to **implement policies**, recycling infrastructure, and regulatory instruments more efficiently,
- Plan to **setting national targets** about e-waste collection and recycling
- Contribute to the achievement of the Sustainable Development Goals (**SDG**), in particular SDG 12, to “*ensure sustainable consumption and production patterns*”.



# Thank you for your attention!



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