Regional E-waste Monitor for the Western Balkans - The importance of e-waste data and statistics

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November 3rd, 2022
Table of contents

1. E-waste issues and opportunities
2. Why e-waste data are important
3. Project background
4. Project activities
5. Project mission and potential achievements
6. Successful stories
7. Promotional and awareness campaign & launching event
What is e-waste?

**EEE**: Electrical and electronic equipment (EEE) includes a wide range of products almost any household or business are with circuity, or electrical components with power or battery supply (Step Initiative 2014).

**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 environmental issues

Community exposure
- Exposure through food, water, air
- Home-based workshops

Environmental contamination
- Dumping acid used to remove gold into rivers
- Leaching of substances from landfills or stored electronics
- Particulate matter, dioxins, furans from dismantling electronics
- Contaminants entering the water system and food system through livestock, fish, and crops

Occupational exposure
- Inhaling fumes from burning wires and cooking circuit boards
- Pregnant women working as recyclers – exposure of fetuses

Children
- Ingesting contaminated dust on surfaces
- Playing with dismantled electronics
- Children and adolescents working in collection, dismantling, and recycling
3. Losses of valuable material

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

$57 billion USD (2019)
Global E-waste Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Generation (kg/inh)</th>
<th>Recycling (kg/inh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5.3</td>
<td>0.8</td>
</tr>
<tr>
<td>2015</td>
<td>7.3</td>
<td>1.3</td>
</tr>
<tr>
<td>2020</td>
<td>1.3</td>
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</tbody>
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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 (11, 12).
What’s next?

... Regional E-waste Monitor for the Western Balkans
Project background

• Internationally comparable e-waste statistics and information on e-waste management in the Western Balkans is limited

• Provide technical assistance to 5 Western Balkan countries to assess e-waste statistics

• Implementation by ITU Europe Office, UNEP Europe Office & Vienna Office and UNITAR-SCYCLE, as well as respective administrations and statistical offices of the beneficiary countries.
Project activities

Supporting NSOs to produce a regional e-waste data set for the Western Balkans.

Validating country data directly with NSO focal points.

Online Training

Project Kick-off
Kick-off call with National Statistical Offices (NSOs), Ministries and Regulators.
Development of questionnaires and desktop study.

Research, Questionnaires & Interviews
Assessment of the status of e-waste legislation and e-waste management.

Data Validation

Regional E-waste Monitor and awareness campaign
E-waste awareness raising webinars, publishing a Regional E-waste Monitor and launch event.
Scope and outline

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
What’s next?

... Five country profiles
Examples of country profiles

**Kazakhstan**

- Population: 18.7 million inhabitants
- GDP: 12,712 mln USD
- Income: US$ 5,950
- Life expectancy: 72 years
- Infant mortality: 18.5

**National Legislation on e-waste**

- **Extended producer responsibility**
  - 90% of e-waste generated

**International Conventions**

- Basel Convention
- Rotterdam Convention
- Stockholm Convention

- **Extended producer responsibility**
  - 90% of e-waste generated

**Key performance indicators**

- **Recycling rate**
  - 25.4% (2019)
- **E-waste generated (2019)**
  - 1.8 kg/inhab.
- **E-waste managed environmentally soundly (2019)**
  - 1.1 kg/inhab.

**Note:**的关键内容是通过电子废物管理系统进行处理的电子废物的回收利用，该系统包括一个电子废物收集点和一个电子废物转移中心。
Some of the project key results

RESULT 1: FIVE COUNTRY PROFILES ELABORATED, WHICH INCLUDES AN ASSESSMENT OF THE STATUS OF E-WASTE LEGISLATION AND E-WASTE MANAGEMENT USING DESKTOP RESEARCH, QUESTIONNAIRES AND FOLLOW-UP INTERVIEWS.

RESULT 2: FIVE NATIONAL STATISTICAL OFFICES (NSO) TRAINED TO PRODUCE A REGIONAL E-WASTE DATA SET FOR THE WESTERN BALKANS, INCLUDING ESTIMATES WHERE DATA MAY NOT BE AVAILABLE.

RESULT 3: VALIDATED PROFILES FOR THE FIVE COUNTRIES BY NSO THROUGH ONLINE ONE-TO-ONE FOLLOW-UP WITH EACH OF THE FIVE COUNTRIES.

RESULT 4: REGIONAL E-WASTE MONITOR FOR THE WESTERN BALKANS REPORT FEATURING COLLECTED DATA AND PUBLISHED ON THE WEBSITE OF THE GLOBAL E-WASTE STATISTICS PARTNERSHIP.
Project aims and objectives

Project aims to collect statistics, map the situation of e-waste management and legislation in the beneficiary countries as well as build subregional capacities in the field of e-waste monitoring and reporting.

The project has the following objectives:

• **Train NSOs** to produce e-waste data for *monitoring of SDG 12.5.1.*

• Contribute to the development of *internationally comparable e-waste statistics.*

• **Inform** policy makers, industries, and business about regional e-waste data.

• Support the development of national and regional counter-measures through policies, regulations, awareness raising and industrial response.
Potential achievements

Some examples

- Improve the reporting under the Basel Convention
- Introduce more regulatory tools (e.g. E-waste collection categories, targets, etc.)
- Create a national baseline for monitoring e-waste over time
- Comply with the requirements of the EU Directive 2012/19/EU
- Progressing towards the SDGs indicators
Successful stories

The outcome of the project contributed to the development of the National E-Waste Statistics Report (2019), the first-ever analytical report on e-waste in Tanzania – *National Bureau of Statistics*

E-waste study was published on the government website, and a law was developed to include guidelines on e-waste management, and introducing the EPR and the concept of circular economy.

Successfully calculated national e-waste data in accordance with the requirements of Directive 2012/19/EU and the Council of July 4th 2012 on Waste Electrical and Electronic Equipment – *Agency of Statistics*

Uses the results from the project for Basel Convention and Stockholm Convention (POPs) reporting, and OECD surveys.

ARGENTINA

URUGUAY
Previous Regional E-waste Monitors

https://ewastemonitor.info/gem-2020/


Promotional and awareness campaign & launching event

**National Awareness raising workshops** (April-July 2023)

**Focus:** Providing a deep dive into the country’s situation by showcasing the findings of the project.

**Objectives:**
- Lay the basis for **concrete follow-up** at the country level;
- Presentation of the **key national and sub-regional trends** as well as potential initiatives to be leveraged related to e-waste;
- Discussion on the **outstanding challenges** in order to priority areas to be addressed
- Identification of the type of support needed and expertise to be leveraged for potential future assistance or initiatives.

**Audience:** National stakeholders relevant to the e-waste sector: Ministry of ICTs, Ministry of Environment; National Statistical Office; the private sector, including recyclers and operators; others.
Thank you for your attention!

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