E-waste in Eastern Europe/Caucasus/Central Asia jumps ~50% in a decade. Just 3.2% collected, treated

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REGIONAL E-WASTE MONITOR

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Electronic waste generated in the Commonwealth of Independent States + Georgia rose by 50% between 2010 and 2019, roughly the world average, but overall just 3.2% was collected and safely managed, well below the 17.4% average worldwide, according to the UN's first report dedicated to the e-waste issue in the 12 former Soviet Union countries. Credit: UNU / UNITAR

Electronic waste generated in the Commonwealth of Independent States + Georgia rose by 50% between 2010 and 2019, roughly the world average, but overall just 3.2% was collected and safely managed, well below the 17.4% average worldwide, according to the UN's first report dedicated to the e-waste issue in the 12 former Soviet Union countries.

The regional e-waste total jumped from 1.7 Mt to 2.5 Mt (an average 8.7 kg per citizen), with Russia generating the most e-waste in both absolute and per inhabitant terms.

The findings are published in the first-ever "Regional E-waste Monitor, CIS + Georgia," produced by the Sustainable Cycles (SCYCLE) Programme, co-hosted by the UN University (UNU) and the UN Institute for Training and Research (UNITAR), in partnership with the UN Environment Programme (UNEP).

According to the study, the region's e-waste spans a variety of products but three categories dominate: temperature exchange equipment (e.g. heating, air conditioning, and refrigeration units), and large equipment (e.g. washing machines or ovens) and small equipment (e.g. kitchen equipment or vacuum cleaners) account for 77%.

The annual growth rate in the region has slowed in nearly all categories

but remains positive. Only screens and monitors, and small IT equipment, show negative growth rates.

"E-waste constitutes one of the fastest growing waste streams in today's global environment and poses a significant threat to both health and sustainable development," says Ruediger Kuehr, Director of the Sustainable Cycles Programme (SCYCLE).

"However, few countries collect internationally comparable e-waste statistics, and many countries lack the capacity to collect e-waste data at both the regional and national level. We need this data to track changes over time, establish national and international policies, limit e-waste generation, prevent illegal dumping, and promote recycling."

This Regional E-waste Monitor for the CIS + Georgia is the first of its kind, reviewing e-waste statistics, legislation, and management, created with the aim of enhancing understanding and interpretation of the problem and facilitating the environmentally sound management of e-waste."

"Such a summary allows for international comparisons and contributes to the development of more effective regional e-waste management systems," he adds.

10 tons of gold

Co-author Kees Balde of the United Nations University underlines that managing e-waste could be an economic opportunity in the region by creating enterprises and thus jobs in the recycling sector.

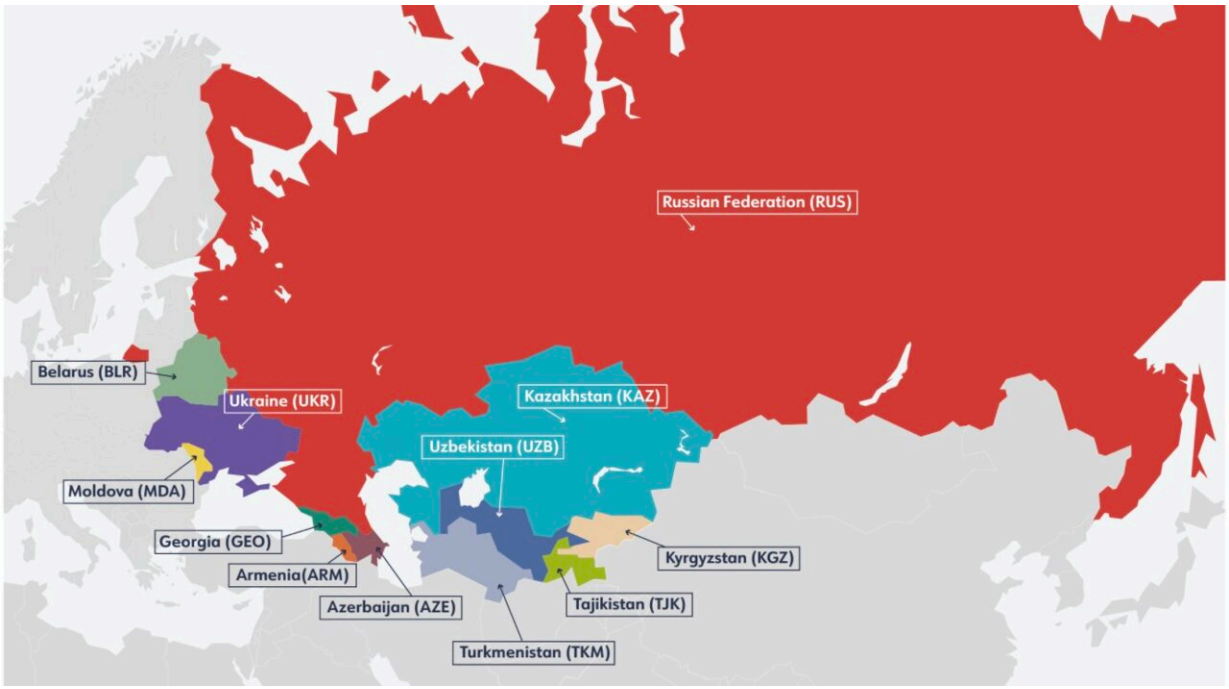
E-waste generated in the CIS + Georgia in 2019 alone contained 10 tons of gold, half a ton of rare earth metals, 1 million tons of iron, 85,000 tons of copper, 136,000 tons of aluminum, and 700 tons of

cobalt—representing a total value of US $2.6 billion in secondary raw materials.

Meanwhile, hazardous substances in the region's 2019 e-waste included at least 2.4 tons of mercury, 1.1 tons of cadmium, 8,100 tons of lead, and 4,000 tons of brominated flame retardants—threats to human and environmental health.

"E-waste collection rates need to increase across countries in the region, just as they need to increase elsewhere across the world," says Dr. Balde. "This improvement can be realized through mandatory handover of e-waste to licensed facilities. Also needed are mandatory reporting obligations for all actors collecting e-waste."

UBA president Dirk Messner emphasizes that "E-waste is one of the most challenging waste streams all over the world. The amount of electrical and electronic equipment put on the market is rising constantly and thus e-waste does. In Germany we, too, are facing the challenge to boost our collection rates to treat e-waste in the proper way. Policy makers worldwide need a comprehensive analysis of the e-waste situation—both regionally and on a national level. We are happy that through the Advisory Assistance Programme (APP) we have supported this important project. It has been a fruitful exchange and knowledge transfer for both sides."



The 12-nation CIS + Georgia region has 289.2 million inhabitants (2019). The most populous countries: Russia, (143.9 million), Ukraine (41.8 million) and Uzbekistan (33.2 million). E-waste per inhabitant was highest in Russia (11.3 kg), lowest in Tajikistan (1.4kg). Credit: UNU - UNITAR

Other key findings in the report:

- Electrical and Electronic Equipment (EEE) placed on the market in the region increased by 10%—from 2.9 Mt (10.4 kg/inh) in 2010 to 3.2 Mt (11.0 kg/inh) in 2019.
- The CIS+ countries collected and managed 79 kt (0.3 kg/inh) of e-waste in 2019—3.2% of the e-waste generated—and most of the rest ends up in landfills, with informal recyclers cherry picking some valuable components.
- Belarus and Russia have large domestic EEE production industries; the other countries mostly import the EEE placed on

the market.

- E-waste collection for environmentally sound management takes place in Belarus, Kazakhstan, Russia, and Ukraine.
- Belarus has the highest e-waste collection per inhabitant and a collection rate: 33.6% (2.7 kg/inh), followed by Kazakhstan (8.8%; 0.6 kg/inh).
- Some countries (e.g. Georgia, Kyrgyzstan) have no e-waste collection due to a lack of organized, separate collection infrastructure for e-waste (and/or lack official data).
- All 12 countries in the region have well-developed legal and regulatory waste management frameworks, but 6 have no specific legislation nor Extended Producer Responsibility (EPR) systems
- Georgia, Moldova, and Ukraine have adopted e-waste-specific legislation or regulation
- Belarus, Kazakhstan, and Russia regulate e-waste through bylaws in national legislation (i.e. specifically mentioning e-waste in their general waste law)
- Armenia and Ukraine are drafting Extended Producer Responsibility systems for e-waste, and Uzbekistan has drafted e-waste legislation
- In most countries, the Ministry of Environment is the responsible government entity. Municipalities and other waste management authorities, as well as state-owned private companies, collect e-waste for further management, mostly landfilling
- Producers/importers also collect e-waste under the EPR, but informal operators also exist in the region and focus on valuable e-waste fractions

The report notes several initiatives and campaign strategies created in the region to create awareness of e-waste collection and recycling with active participation from both the public and private sectors. In some of the 12 countries, the projects and initiatives are conceived and driven by NGOs' foreign donor funds. These projects that were mapped do not

comprise a complete overview in the region, but nonetheless focus on:

- Establishing legal measures
- National studies to map the e-waste situation
- Initiatives to increase e-waste collection points
- Initiatives to export e-waste for environmentally sound management
- Awareness raising campaigns

The report calls on the 12 countries in the region to:

- Introduce and enforce a robust legal and policy framework focused on environmentally sound management of e-waste, or
- Monitor and reinforce existing systems to make them more efficient and effective

Also called for:

- Adequate financing of the systems, monitoring, and cooperation of all stakeholders—essential for ensuring that the policies setup for e-waste management is sustained.
- Strengthened transnational cooperation to reduce the burden of large investments

The report concludes with detailed individual country profiles and elaborates on seven recommendations, headlined:

- Prevent more
- Be more aware
- Collect more
- Pollute less
- Pay adequately
- Work more safely, and

- Train more

More information: Report: ewastemonitor.info/regional-e- … tor-cisgeorgia-2021/

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