e-waste

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What is e-waste?

- used electronics that are nearing the end of their useful life, and are discarded, donated or given to a recycler.

Impact

- Remains contain harmful elements to human health and the environment if not handled properly

- The reused units or recycled parts can contribute to less production and pollution. It could also be a great resource for closing the gap of digital divide around the world.
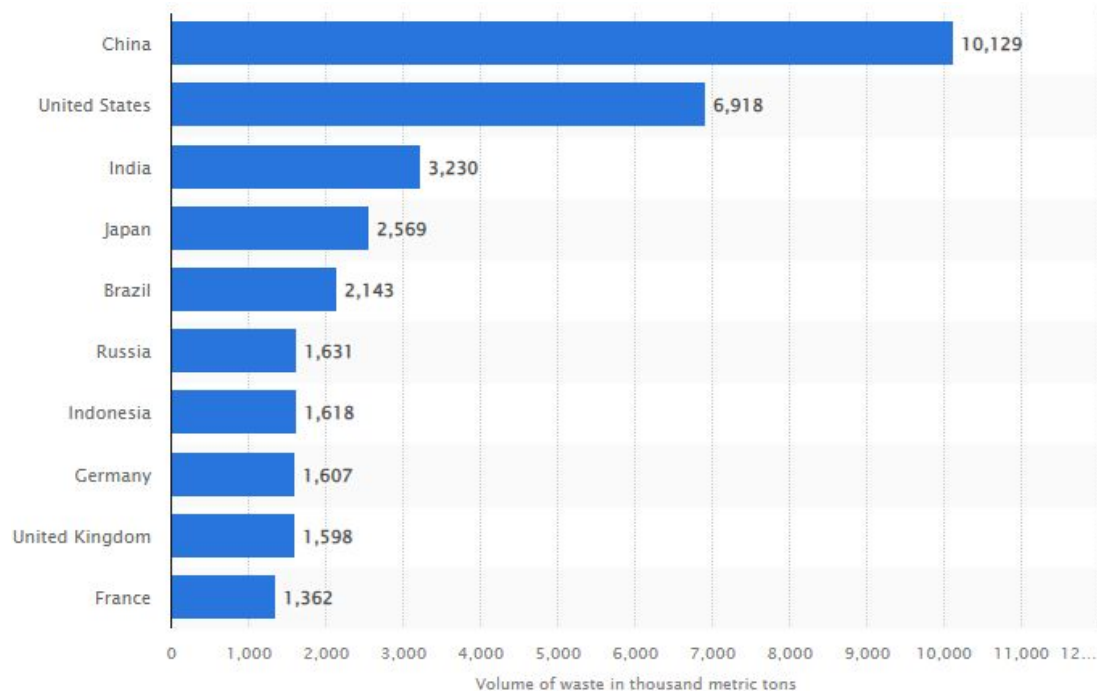
Related Articles:

Soaring e-waste affects the health of millions of children, WHO warns

TES Partners With Close The Gap To Help Bridge The Global Digital Divide with E-Waste

Code Sample Demo

Leading countries based on generation of electronic waste worldwide in 2019

Country	Volume of waste in thousand metric tons
China	10,129
United States	6,918
India	3,230
Japan	2,569
Brazil	2,143
Russia	1,631
Indonesia	1,618
Germany	1,607
United Kingdom	1,598
France	1,362

Volume of waste in thousand metric tons

Ethical Issues

- ## Where do they go?

  An undetermined amount of used electronics is shipped from the United States and other developed countries to developing countries that lack the capacity to reject imports or to process these materials appropriately

- ## Mining e-waste

  e-waste brings profit but more responsibilities come after the trade.

Research & Article:
Electronic Waste Dumped in the Global South: Ethical Issues in Practices and Research
E-Waste Offers an Economic Opportunity as Well as Toxicity - The New York Times

Ethical Issues

- What's left on these "junks"?

  Concerns are raised in terms of the data and information left on the e-waste units. Some of the consumers' behaviors can still be analyzed from these electronics even thought the data from them are considered "wiped clean".

  Research: An investigation of used electronics return flows: A data-driven approach to capture and predict consumers storage and utilization behavior

How to Deal with the Issues

- Reuse, Refurbish and Recycle appropriately
- Building Capacity in Developing Countries and Sharing Best Practices

The International E-Waste Management Network (IEMN) is a network of government officials that come together annually to exchange best practices and learn from experts how to improve management of used electronics in their own countries.

- Multilateral Cooperation:

Solving the E-waste Problem (Step): a multi-stakeholder initiative and a global platform addressing the e-waste problem. Step develops scientific papers to help members address e-waste issues within their own organizations and provides global, objective and scientifically-based information relevant to addressing the global problem of e-waste.

Resource: Cleaning Up Electronic Waste (E-Waste) | US EPA

Resources

Cleaning Up Electronic Waste (E-Waste) | US EPA

Quantitative Characterization of Domestic and Transboundary Flows of Used Electronic Products

E-waste Country Study Ethiopia

An investigation of used electronics return flows: A data-driven approach to capture and predict consumers storage and utilization behavior

Electronic Waste Dumped in the Global South: Ethical Issues in Practices and Research

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