

Results for the thirteen countries participating in  
project UNIDO-GEF 5554

## **1<sup>st</sup> Regional E-Waste Monitor for Latin America 2022**

### **E-waste Academies for Managers (EWAM) 2019 & 2022 and Scientists (EWAS) 2022**

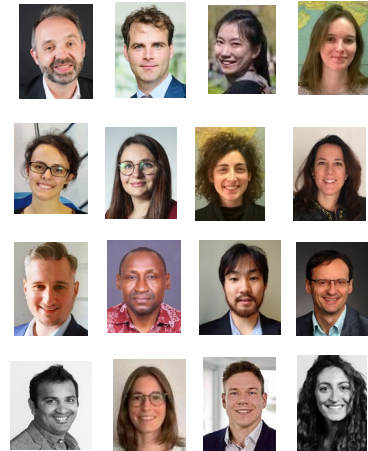
PREAL Closing Event, Panama 23 May 2024

Prof. Dr. Ruediger Kuehr  
UNITAR-SCYCLE Programme



# SCYCLE Programme

- Sustainable Cycles (SCYCLE) Programme is based in Bonn (Germany) and joined UNITAR after transitioning from the United Nations University (UNU) in 2022
- 20 years of research, policy advise, training and capacity building
- Electronics, Batteries, Plastics, Automotives, Textiles



# 1<sup>st</sup> Regional E-waste Monitor for Latin America

- Published in early 2022 in English and Spanish
- 271 pages incl. specific chapters for each country
- downloadable from [www.ewastemonitor.info](http://www.ewastemonitor.info)

But, the most recent Global E-waste Monitor (GEM) 2024, jointly published by UNITAR, ITU and Fondation Carmignac has the latest regional data. Therefore, this presentation will focus on the data from the GEM.



## REGIONAL E-WASTE MONITOR

for Latin-America, results for the 13 countries participating in project UNIDO-GEF 5554

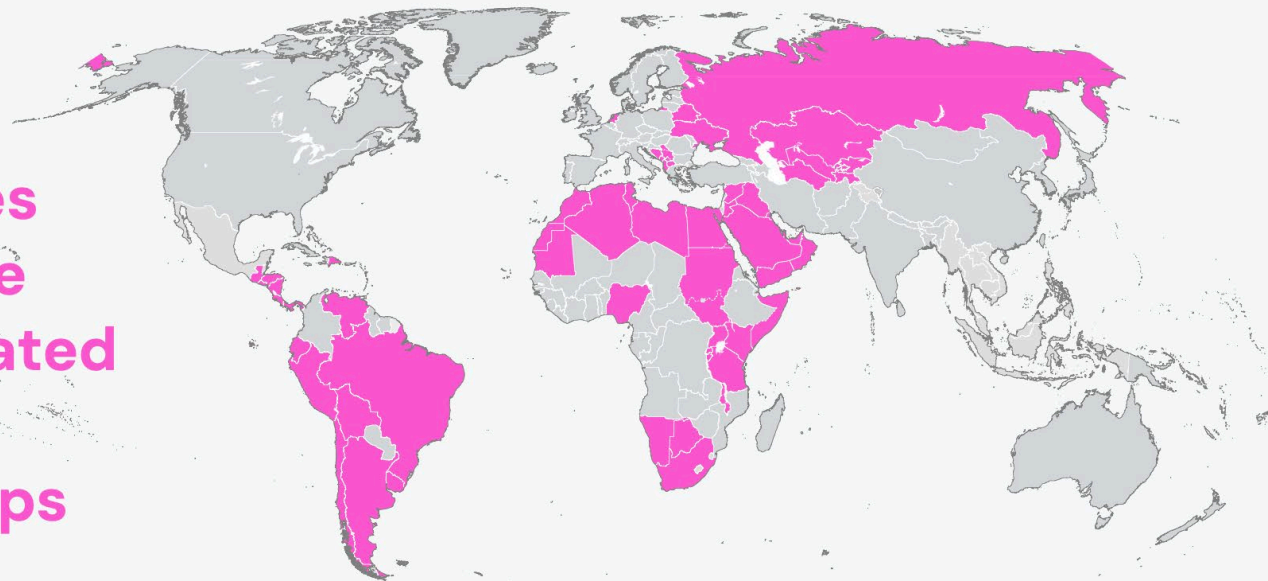
— 2022



# Global E-waste Statistics Partnership (GESP)

GESP provides an open-source portal ([www.globalewaste.org](http://www.globalewaste.org)) for e-waste data.

**Countries  
that have  
participated  
in GESP  
workshops**



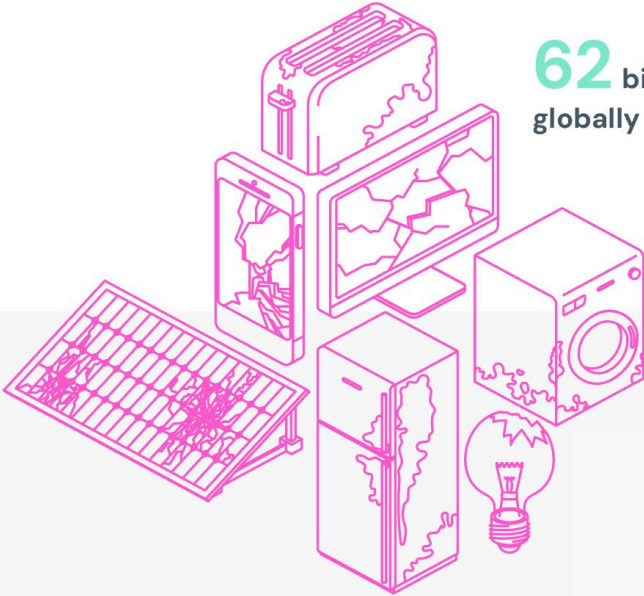


# THE GLOBAL E-WASTE MONITOR 2024

**Authors:** Cornelis P. Baldé, Ruediger Kuehr, Tales Yamamoto, Rosie McDonald, Elena D'Angelo, Shahana Althaf, Garam Bel, Otmar Deubzer, Elena Fernandez-Cubillo, Vanessa Forti, Vanessa Gray, Sunil Herat, Shunichi Honda, Giulia Iattoni, Deepali S. Khatriwal, Vittoria Luda di Cortemiglia, Yuliya Lobuntsova, Innocent Nnorom, Noémie Pralat, Michelle Wagner

Image: Muntaka Chasant for Fondation Carmignac

# Status of E-waste Management Globally in 2022



**62** billion kg of e-waste generated globally in 2022.

**7.8** kg per capita.

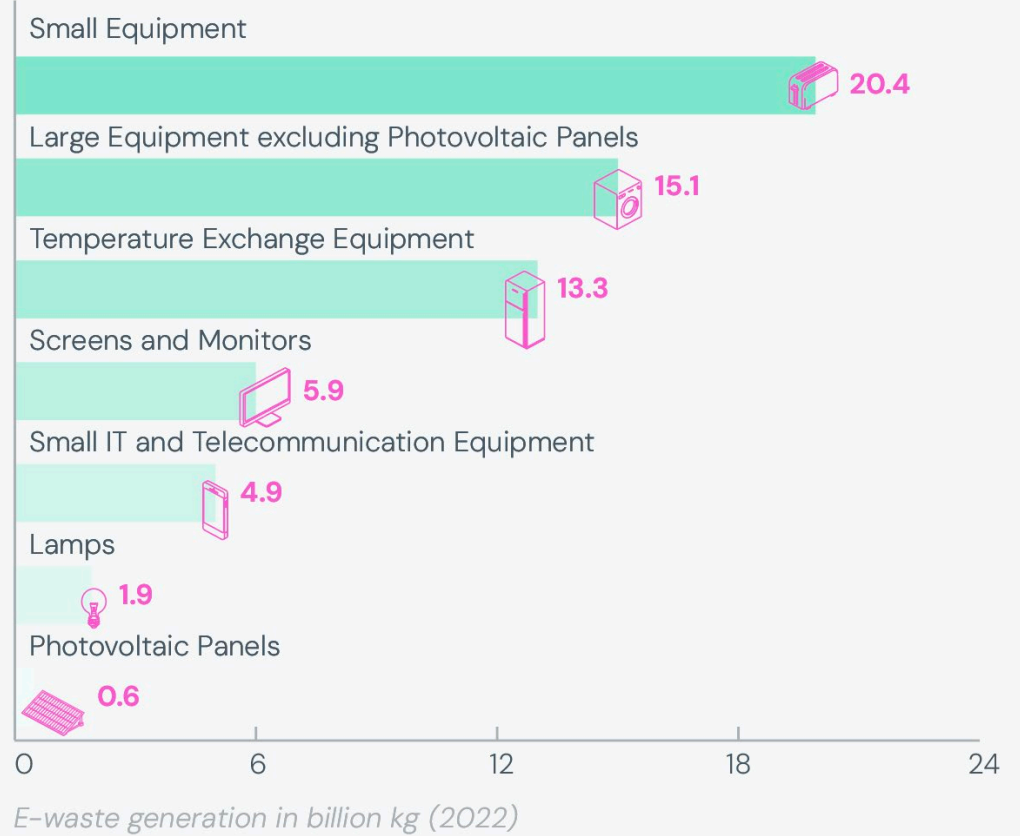
**22.3%** of this e-waste was documented as formally collected and recycled in an environmentally sound manner.

Source: The Global E-waste Monitor 2024

# E-waste Generated Per Type



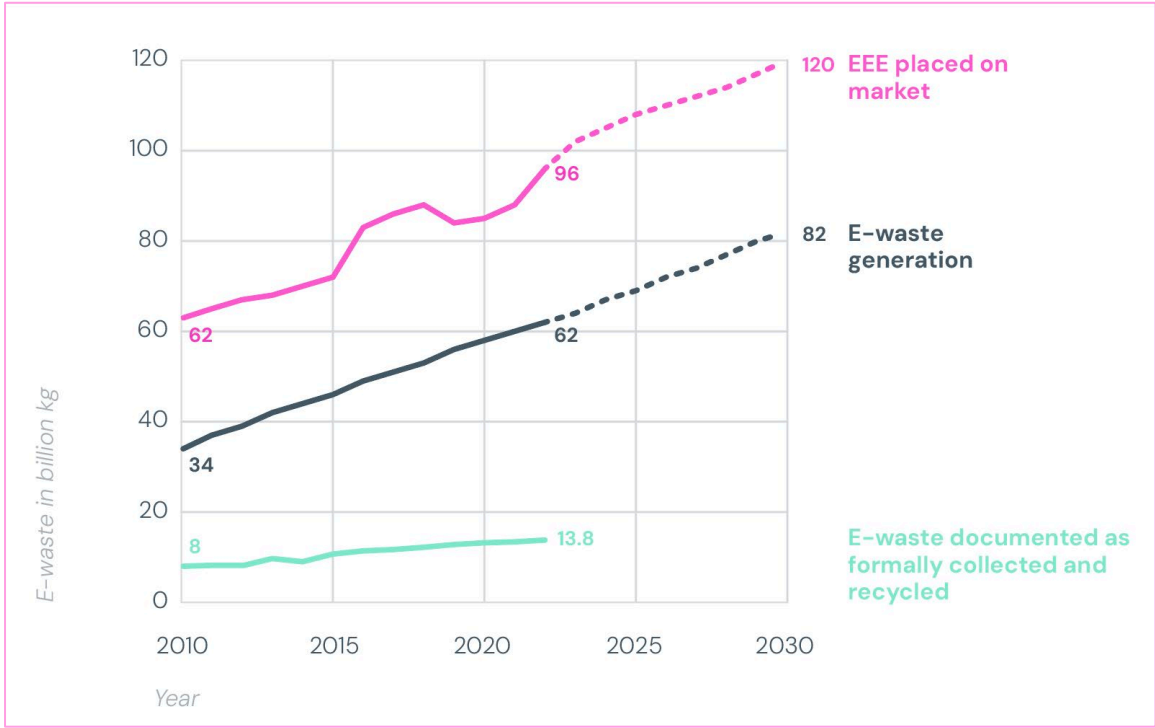
Bénédicte Kurzen / NOOR for Fondation Carmignac



Source: The Global E-waste Monitor 2024

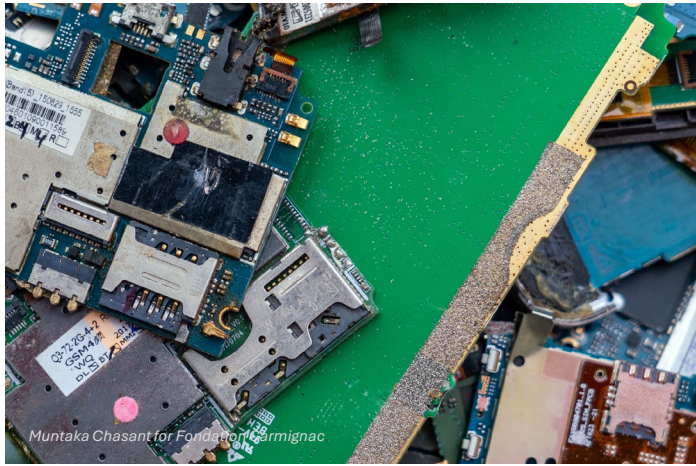


# Global E-waste Trends



Since 2010, the growth of e-waste generation is outpacing the formal collection and recycling

**by almost a factor of 5.**





# Trends in Latin America

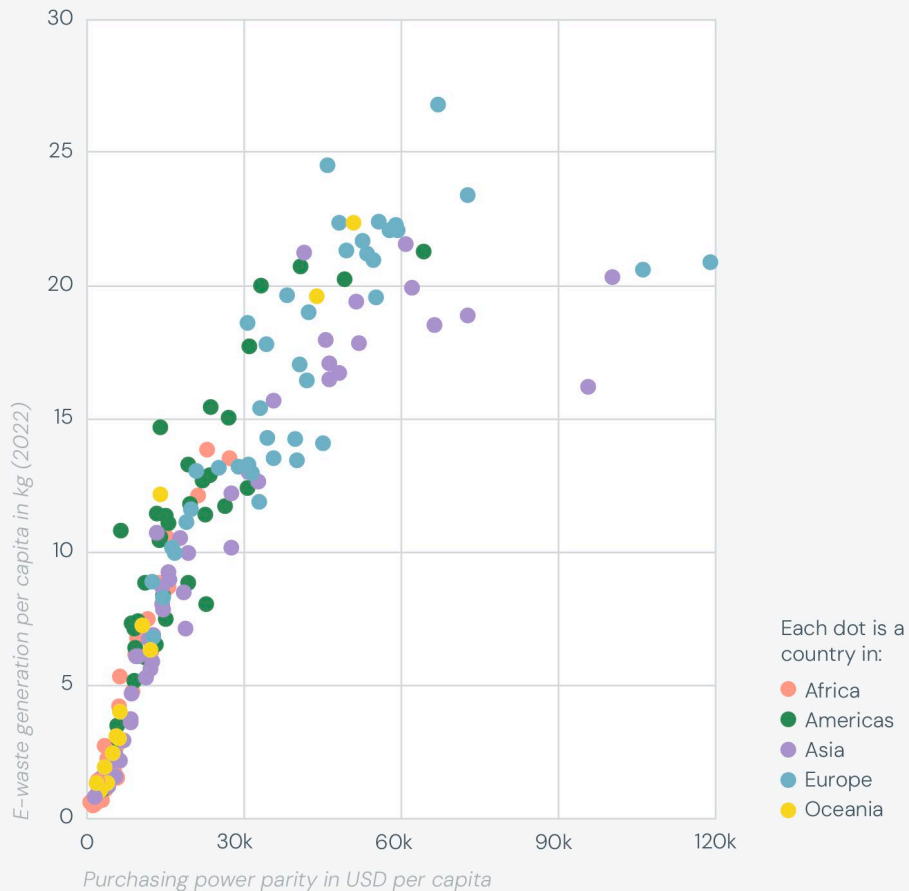
- South America

	<b>2022</b>	<b>2018</b>	<b>Growth</b>
E-waste Generated	4.413 million metric tonnes	3.859	>14%
Per Capita Generation	10.1 kg/capita	9.1	>11%

- Central America

	<b>2022</b>	<b>2018</b>	<b>Growth</b>
E-waste Generated	1.811 million metric tonnes	1.534	>18%
Per Capita Generation	10.2 kg/capita	8.9	>18%

Source: Global E-waste Monitor 2024



Source: The Global E-waste Monitor 2024

## Linking Economy to E-waste Generation

Initial linear but levelling off correlation between size of purchasing power parity (size of economy per capita adjusted for cost of living) and e-waste generation.



# Hotspots e-waste generation in Latin America

- South America

1.	Brazil	2.400 million metric tonnes
2.	Argentina	0.520
3.	Colombia	0.390

- Central America

1.	Mexico	1.500 million metric tonnes
2.	Guatemala	0.092
3.	Costa Rica	0.066

Source: Global E-waste Monitor 2024

# Transboundary Movement

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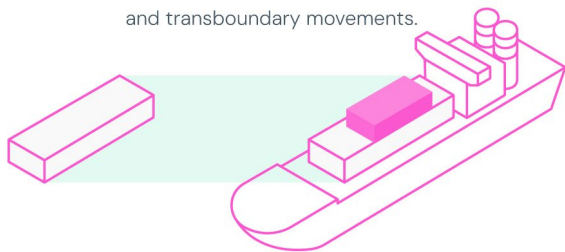


**5.1 billion kg**  
of e-waste is shipped  
across borders.

65%

**3.3 billion kg**  
of e-waste is shipped through  
uncontrolled and undocumented  
and transboundary movements.

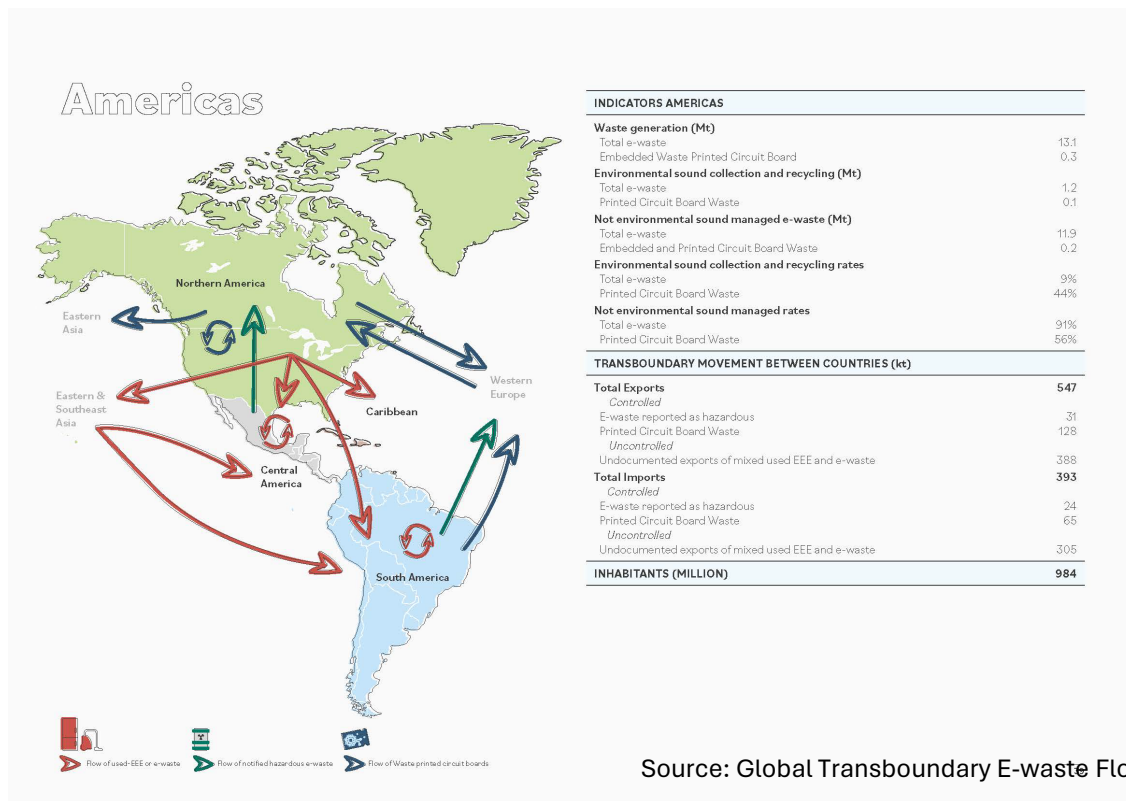
**0.8 billion kg**  
shipped uncontrolled from high  
income to middle- and low-income  
countries.



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# Transboundary e-waste movements in Americas



Source: Global Transboundary E-waste Flows Monitor 2022

# Americas - Transboundary Movement

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0.393 million metric tonnes <b>IMPORTS</b>	89 controlled	305 uncontrolled	
0.547 million metric tonnes <b>EXPORTS</b>	159 controlled	388 uncontrolled	

# Overview thirteen Latin America countries

Country	E-waste generated (million kg)	E-waste generated (kg/capita)	E-waste formally collected & recycled (million kg)	E-waste legislation/ policy/regulation in place	EPR for e-waste	Collection Target	Recycling Target
Argentina	517	11.4	14.4	YES	YES	NO	NO
Bolivia	89	7.3	2.4	YES	YES	NO	NO
Chile	230	11.7	7.3	YES	YES	NO	NO
Costa Rica	66	12.7	5.8	YES	YES	NO	NO
Ecuador	108	6	3.3	YES	YES	YES	NO
El Salvador	41	6.4	0.5	NO	NO	NO	NO
Guatemala	92	5.2	1.1	NO	NO	NO	NO

Source: Global E-waste Monitor 2024

# Overview thirteen Latin America countries

Country	E-waste generated (million kg)	E-waste generated (kg/capita)	E-waste formally collected & recycled (million kg)	E-waste legislation/ policy/regulation in place	EPR for e-waste	Collection Target	Recycling Target
Honduras	36	3.5	0.1	NO	NO	NO	NO
Nicaragua	21	3	0.1	NO	NO	NO	NO
Panama	54	12.4	0.1	YES	YES	NO	NO
Peru	221	6.5	3.4	YES	YES	YES	NO
Uruguay	44	12.9	1.3	NO	NO	NO	NO
Venezuela	303	10.8	1	NO	NO	NO	NO

Source: Global E-waste Monitor 2024



# E-waste Academy for Scientists (EWAS)

27 August – 4 September 2022

University of Limerick (Ireland)

The E-waste Academy – Scientists Edition (EWAS) was a unique program that brought together select researchers from social and physical sciences to look at e-waste with a truly interdisciplinary lens. PhD students, post-docs and early career researchers from around the world came together for an intensive 8-day program that includes expert lectures, hands-on workshops, field visits and group work.



# E-waste Academies for Managers (EWAM)

19 – 23 March 2019  
San José (Costa Rica)

23-26 May 2022  
*virtual*



The EWA – Managers Edition (EWAM), organized twice in conjunction with this project, was a global forum for stakeholders involved in the practical design and implementation of e-waste management solutions. Policymakers, government officials and representatives of small- and medium-sized enterprises, such as recyclers, refurbishers and collectors, came together for a 4-day intensive workshop. EWAM offered a platform to exchange best practices, discuss existing challenges among practitioners and support better informed decision-making.

# E-waste Academies for Managers (EWAM)

The EWAMs provided a regional forum for different stakeholders, including representatives of governments, policy makers, industry managers etc., to offer practical skills in the design and implementation of e-waste management solutions. The EWAMs' participants had the unique opportunities to exchange existing practices, discuss challenges and develop a better informed decision-making process in this field.

With presentations from renowned international e-waste experts, participants learnt about:

- Basic foundations and principle of e-waste, policy management and legislation
- Foundation and knowledge on EPR and financing systems
- Compliance and enforcement (regulatory approaches to enforcement of national and international legislation, including transboundary shipments and integrating the informal sector)
- Identification of critical/hazardous and common fractions obtained from e-waste.

[www.scycle.info](http://www.scycle.info)

[www.ewastemonitor.info](http://www.ewastemonitor.info)

[www.academy-ce.info](http://www.academy-ce.info)

[www.globalewaste.org](http://www.globalewaste.org)

Prof. Dr. Ruediger Kuehr  
Senior Manager & Head  
UNITAR-SCYCLE Programme  
[ruediger.kuehr@unitar.org](mailto:ruediger.kuehr@unitar.org)

