PARLAMERICAS · PRE-COP31 MEETING · PARLIAMENTARY NETWORK ON CLIMATE CHANGE AND SUSTAINABILITY

Urban Mining for the Americas

How parliaments can turn end-of-life electronics into a critical-minerals industry

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Virtual · 4 November 2026



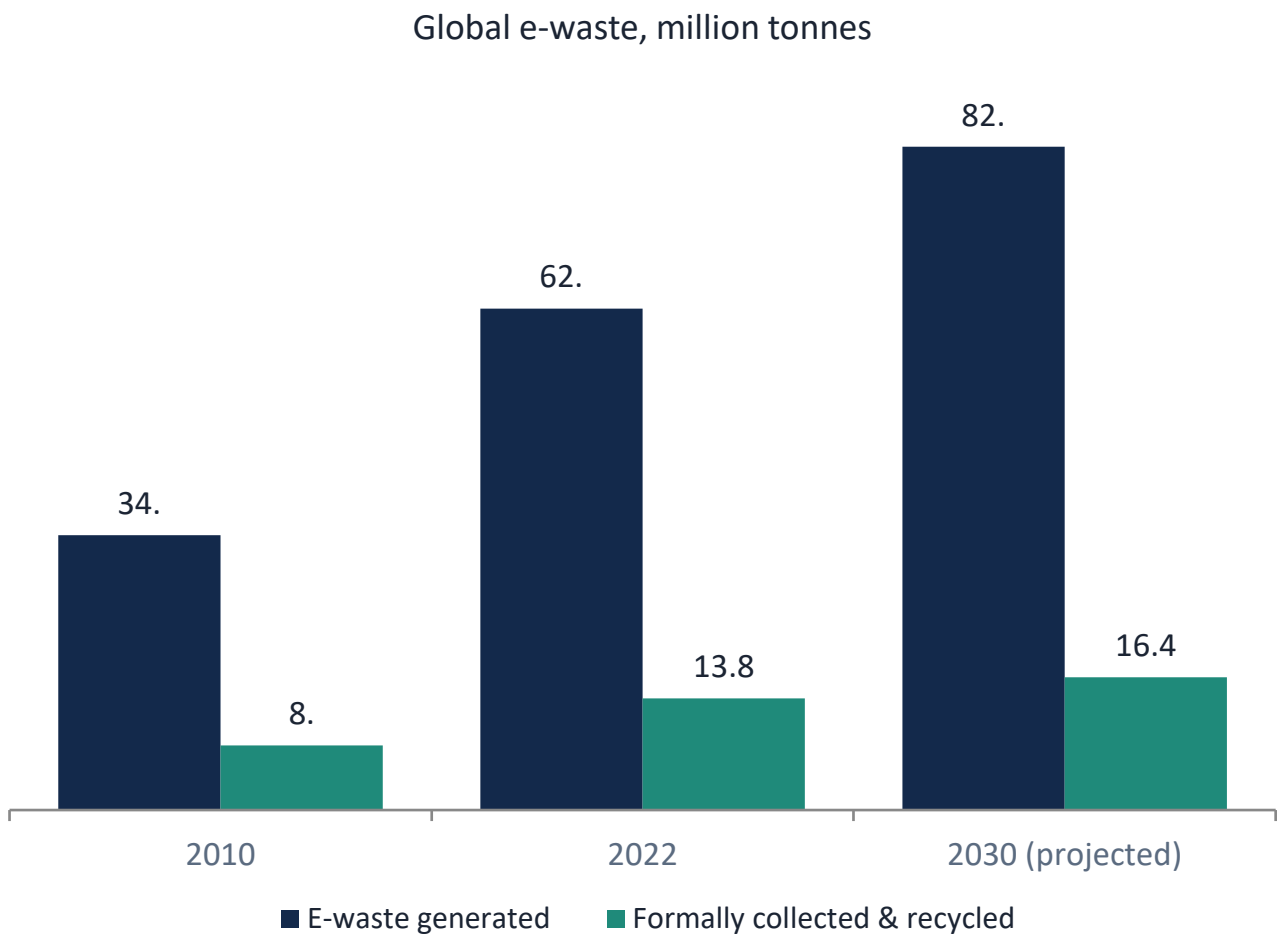
Found in every phone, laptop and battery we discard

ipcc INTERGOVERNMENTAL PANEL ON climate change

UNITED NATIONS GENEVA

SALZBURG GLOBAL

Our newest mine is above ground — and we discard it



22%

of e-waste is documented as properly recycled — generation is growing ~5× faster than recycling

US$62 bn

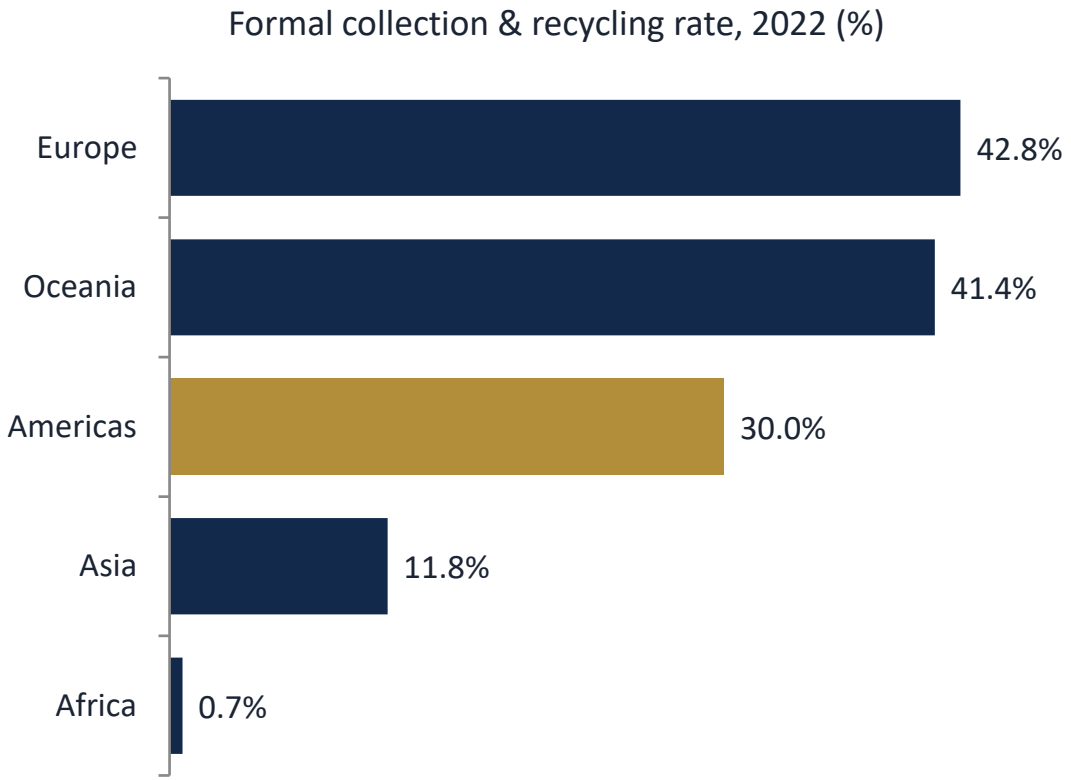
of recoverable metals lost every year, out of US$91 bn embedded in global e-waste

5×

growth in lithium demand by 2040 — copper and lithium face supply gaps by 2035

Sources: UNITAR/ITU Global E-waste Monitor 2024 (2030 recycled = 20% business-as-usual rate × 82 Mt); IEA Global Critical Minerals Outlook 2025 (Stated Policies Scenario).

Recovery follows regulation: no law, no recycling



The Americas generate 14.1 kg per person but formally recycle only 4.2 kg.

Countries with binding e-waste law

25%

Countries with none

0%

average documented collection & recycling rate

THE CARIBBEAN SIGNAL

13 kg per person per year in five island states — double the 2016 global average

US$546 M recoverable in those five islands, 2020–25 — ~54% from palladium, gold and silver

Sources: Global E-waste Monitor 2024 (UNITAR/ITU); Mohammadi, Singh & Habib (2021), Electronic waste in the Caribbean, Resources, Conservation & Recycling; Mohammadi (2020), Univ. of Waterloo — Aruba, Barbados, Grenada, Jamaica, Trinidad & Tobago.

From scrap dealing to a critical-minerals value chain



TODAY	THE MODEL WE NEED
Informal cherry-picking of copper & aluminium	**Formal, certified recovery of the full critical-minerals basket**
Raw scrap exported for others to refine	**Regional refining hubs that capture the value at home**
Sell-and-forget products	**Product-as-a-service, repair, refurbishment & leasing**

Small IT & telecom equipment (phones, laptops, routers): only 22% documented collection & recycling worldwide — Global E-waste Monitor 2024. Small markets reach scale through regional cooperation (Mohammadi et al., 2021).

Six legislative levers that make recovery a business

Extended Producer Responsibility

Producers finance collection and treatment, with binding, rising targets.

e.g. EU WEEE: 65% collection target

Design & right to repair

Eco-modulated fees; removable, replaceable batteries; spare-parts duties.

e.g. EU Batteries Reg. 2023/1542

Fiscal & market pull

Tax credits for recovery plants; green public procurement; recycled-content mandates.

e.g. 16% Co, 6% Li, 6% Ni recycled by 2031 (EU)

Regional scale

Harmonised standards and Basel-compliant movement to shared refining hubs.

e.g. Basel e-waste amendments, in force 2025

Data & traceability

Mandatory reporting, national e-waste inventories, digital product passports.

e.g. 11 Caribbean national assessments, Oct 2026

Just transition

Formalise informal collectors; skills, SME finance and safe-work standards.

Ramadhar Singh: Just Energy Transition Pathway, T&T

Sources: EU Directive 2012/19/EU (WEEE); EU Regulation 2023/1542 (Batteries); Basel Convention e-waste amendments (in force 1 Jan 2025); UNITAR/BCRC-Caribbean national e-waste assessments (Oct 2026); Sharma & Ramadhar Singh, Just Energy Transition Policy Pathway for Trinidad and Tobago; Ramadhar Singh (2025), PhD thesis, UWI.

THE ROADMAP

A five-year parliamentary roadmap from COP31

YEAR 1

Legislate

- Legal definition of e-waste
- EPR framework law with targets
- Baseline from national inventory

YEARS 2–3

Build

- License certified recyclers
- Formalise informal collectors
- Regional hub feasibility & finance

YEARS 3–5

Scale

- Recycled-content & procurement rules
- Critical-mineral recovery targets
- Shared hubs operating across borders

THREE ASKS FOR PARLIAMENTARIANS

1 Legislate the obligation

2 Finance the system

3 Regionalise the scale

"Every discarded phone is a small mine. Our laws decide whether it becomes a resource or a liability."

Thank You!
Any Questions ?

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