

First-Mile Circular Logistics for Consumer Electronics

From devices in drawers to reuse, repair and refurbishment

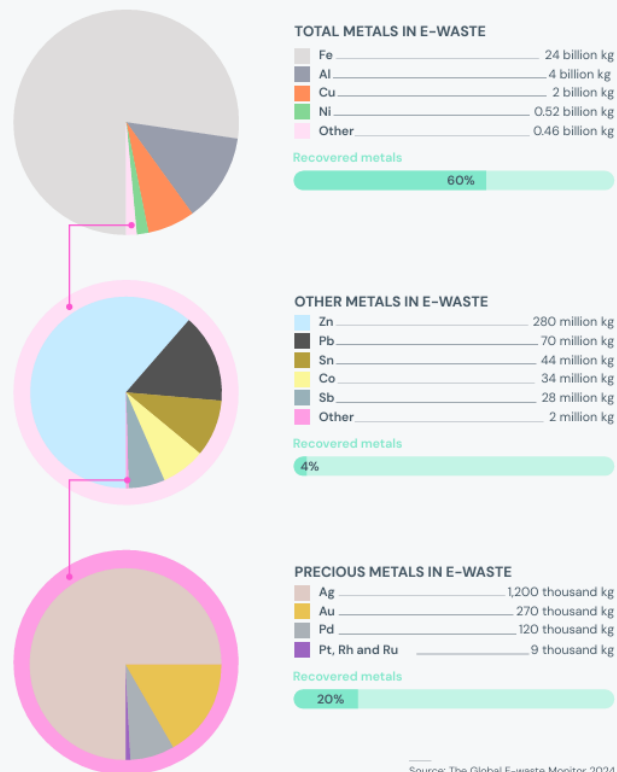
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We have a repair problem... and ...we have a release problem

Figure 18. Recovered and Non-Recovered Metals in E-waste with Current E-waste Management Practices



a's
n



In the Netherlands, more than 7 billion kilograms of raw materials are contained in electrical and electronic devices that are currently in use or stored. Almost 764 million kilograms of this consists of strategic and critical raw materials.

Source: Stichting Open

apparaten
in gebruik

106

per woning

846
miljoen

in NL

apparaten
ongebruikt

22

per woning

178
miljoen

in NL

apparaten
kapot

3

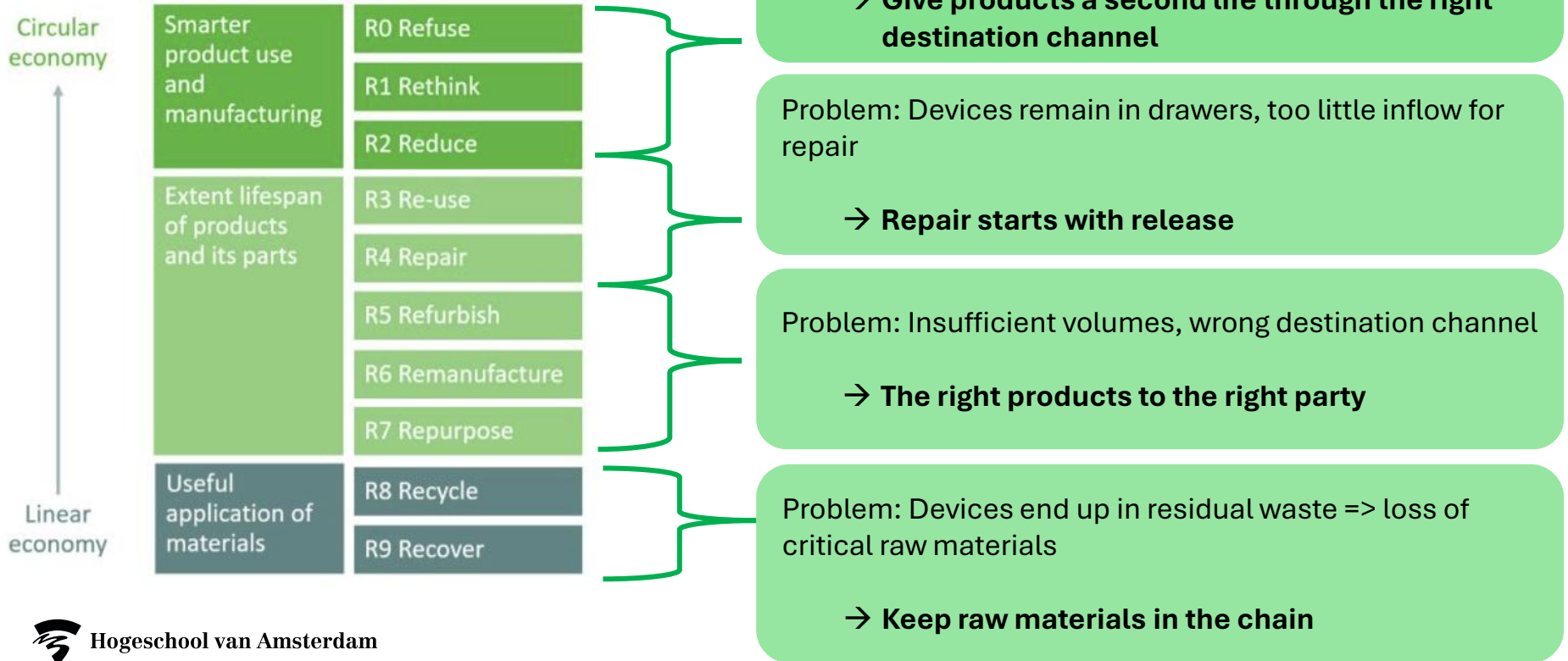
per woning

21
miljoen

in NL

Source: Device Ownership Survey

Every R-strategy starts with the right first mile



Why don't devices return to the right circular chain?

Behavior

Why do devices stay at home?
Which barriers matter?
Which incentives work?

Our research

- Representative survey
- Interviews
- Release incentives

Ecosystem

Which bottlenecks hinder the collection chain?
Where is value lost?
Which roles and collaborations are missing?

Our research

- Ecosystem analysis
- Stakeholder interviews
- Roles & Collaboration

Logistics

Which first-mile design works best?
Individual or collective collection?
Which route delivers the highest value?

Our research

- Individual vs. collective collection
- Micro-pilots
- Costs, volumes & quality

jafix

≡elemental

DROPPIE



stichting
OPEN

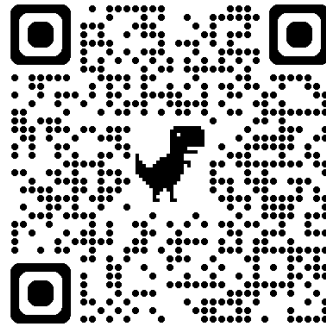
RACE
AG/INST
WZ ← STE

**Building a
better first
mile together
Current
partners**

Thank you!



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Research Group City
Logistics