Factsheet Electronics & Reuse

FAIR RESOURCE FOUNDATION

SAVED FROM THE SHREDDER: HOW CAN WE INCREASE REUSE OF ELECTRONICS?

Almost 97 per cent of the e-waste collected in the Netherlands is destroyed, which means thousands of still-usable appliances end up in the shredder. This is a wasted opportunity. This factsheet aims to explore the reuse of e-waste and its potential. We take a closer look at the world of (preparing for) reuse: where does it fall short, and where are the opportunities?



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Reuse
Any operation in which products or components that are **not classified as waste** are reused for the same purpose for which they were originally intended.[1]

Preparation for reuse
Inspection, cleaning or repair, whereby products or components that are **classified as waste** are prepared for reuse.[1]

Recycling / shredding / destruction
The materials in electronic devices are sorted into streams, including plastics, critical raw materials and iron, after which they can (partly) be reprocessed into new products.[2]

PRODUCTION, COLLECTION AND RECYCLING FIGURES FOR 2025 IN THE NETHERLANDS[3]

610.074.000 kg electronics placed on the market

The category with the highest volume (40%) is large appliances.

271.084.000 kg collected e-waste[4]

A 5.7% increase compared with 2024. Municipalities collect the largest share: 31.5%.[5]

3,58% is prepared for reuse [6]

A 9.7% increase in the volume of appliances prepared for reuse in 2024.

Preparing for reuse makes sense

Reuse extends the lifespan of appliances that often still work perfectly well or, with a minor repair, can last for years to come. The benefits are threefold:

1. Social value
Preparing items for reuse creates meaningful work, including for people who are distanced from the labour market. And it makes reliable electronic appliances affordable, appliances that would otherwise be destroyed.

2. Resources
Electronics are full of valuable materials: lithium, cobalt and other rare-earth elements. Recycling keeps these in circulation and reduces the demand for, and impact of, new mining.

3. Climate
Around 80% of an appliance's environmental impact stems not from its use, but from its production.[7] Every appliance that is given a second life prevents precisely that stage.

The role of (municipal) waste collection sites

Municipalities account for the largest share of e-waste collection, much of which takes place at municipal waste collection sites.

Unfortunately, the collection system is not yet optimally organised for the reuse of electronics, as – particularly small – electronic items are collected in bulk in containers, which causes unnecessary damage to the devices. In addition, there is a risk of damage during storage and transport.

Various pilot schemes at municipal waste collection sites have shown that there is potential for the reuse of e-waste from these sites. However, none of these pilot schemes has yet been institutionalised. This needs to change.



Collection container where there is a high risk of damage

HOW IS (PREPARATION FOR) REUSE EXECUTED?

Using two examples of electronics that are frequently reused, we outline the process from sorting to the creation of a reused appliance.

A WASHING MACHINE

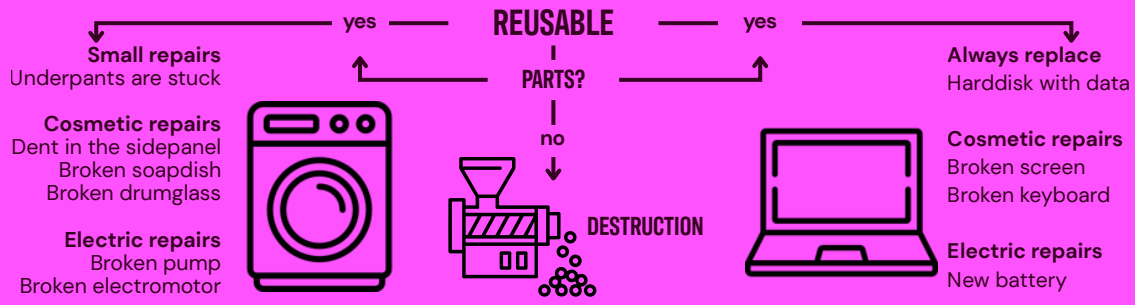
Carry out checks, like:
Brand (premium & secondary) ✓
Visual: complete, what is broken? ✓
Damages, rusting ✓
Is the drum connected? ✓
Plug test ✓
Reading error codes ✓
Is it worthwhile?[8] ✓



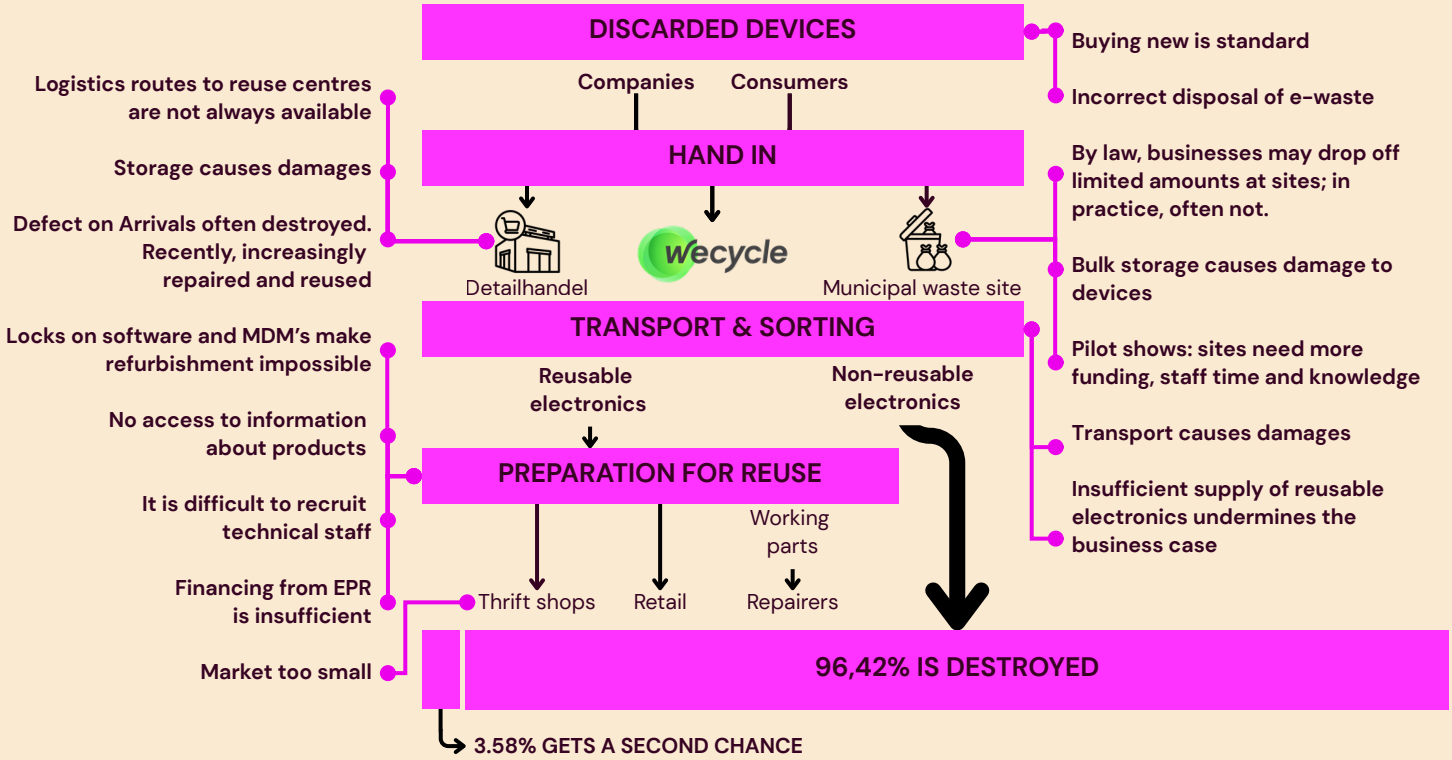


A LAPTOP

Carry out checks, like :
✓ Brand (premium & secondary)
✓ Visual: complete, what is broken?
✓ Age
✓ Type and speed processor
✓ Battery
✓ RAM
✓ Is it worthwhile?[8]



WHAT IS HOLDING BACK ELECTRONICS REUSE?



PROJECT REBOOT

With project Reboot, we save electronics from the shredder. We remove practical barriers to preparing for re-use (especially at municipal level) and propose policies that promote reuse. This is made possible by Zero Waste Europe's Zero Waste Cities project. Want to know more? Feel free to get in touch!

FOOTNOTES

1. Source: Min. IenW, Handreiking hergebruik en voorbereiden voor hergebruik
2. Source: Min IenW, Handreiking advalstof of niet afvalstof
3. Source: NWR, Rapportage 2025
4. 72% of the generated e-waste (WEEE-generated)
5. Source: Stichting OPEN, Jaarverslag 2025
6. 9.670.000 kg vof the total waste electrical and electronic equipment processed
7. Source: Pamminger et al., 2021, Modelling of different circular end-of-use scenarios for smartphones
8. If it takes more than an hour to fix, the business case won't be viable.