附件4

DRZ 中心簡報









Dismantling- and Recycling-Centre for WEEE

Vienna, Austria

























Mission



Socio-Economic Facility supported by the Austrian Unemployment Agency



Long-term unemployed persons

Temporary job-contracts

- Occupation in DRZ-departments
- Individual coaching and training
- Workshops/ professional training
- Outplacement

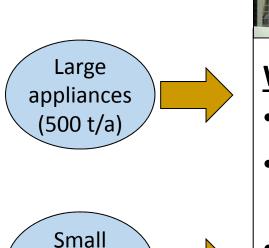
Primary ► Job-Market

"Vienna's scrap keeps us busy!"



EMAS-Certified Recycling Facility Social Enterprise for the Integration of

Unemployed Persons into the Labour Market



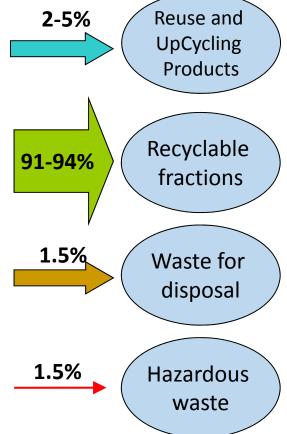
appliances

(1,000 t/a)



WEEE-Treatment:

- ReUse
- Manufacturing of Recycling Products
- Depollution and Manual Dismantling



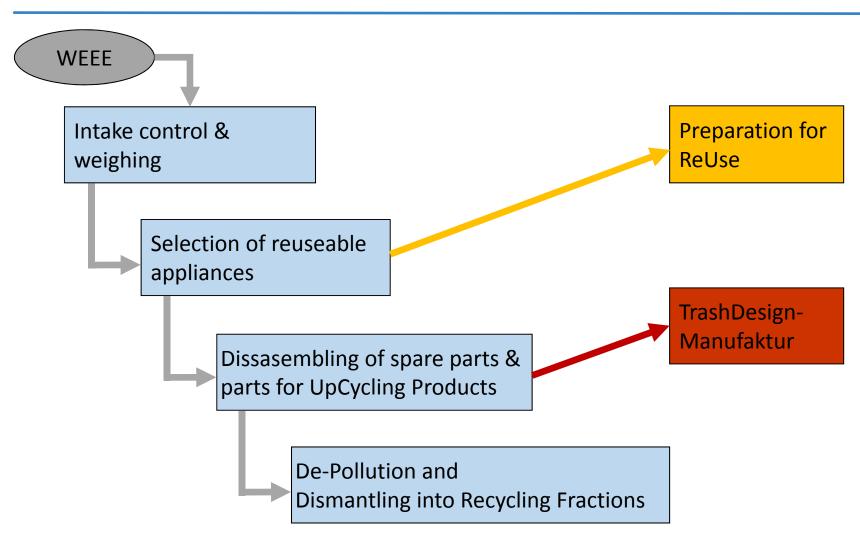
Input Mix



- All WEEE except CRT and cooling appliance
- Mixed small and large WEEE from 3 amenity sites in Vienna
- Pre-selected small WEEE with high content of contaminants (printer, scanners, Hg containing lamps, ...)
- WEEE with housings to hard for mechanical depollution ("Smasher")
- WEEE (mainly ICT) from private entities

WEEE treatment steps within DRZ





Preparation for ReUse



1. Selection of reusable appliances from input stream



2. Preparation for reuse: Cleaning, safety test, functional test



3. Sale of secondhand products





www.vhs.at/drz/reuse

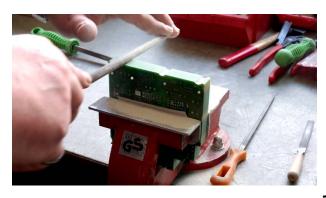
Upcycling









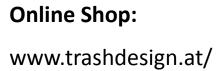












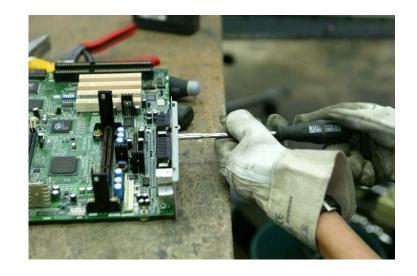


Manual Dismantling



- pure manual dismanlting of appliances
- Cleaner fractions lead to higher recyclingrates within the following treatment step compared to mechanical pre-treatment





| Devices with relevant contaminants | Housings too tough for "Smasher" |
|--|---|
| Printers Copiers Scanners Luminarias with Hg-containing lamps ICT containing lead accumulators | MicrowavesLawnmowers |

Downstream Optionen

PP





CRT-tubes

(or leaded CRT-glass and phosphor powder), Getter Platelet

Batteries

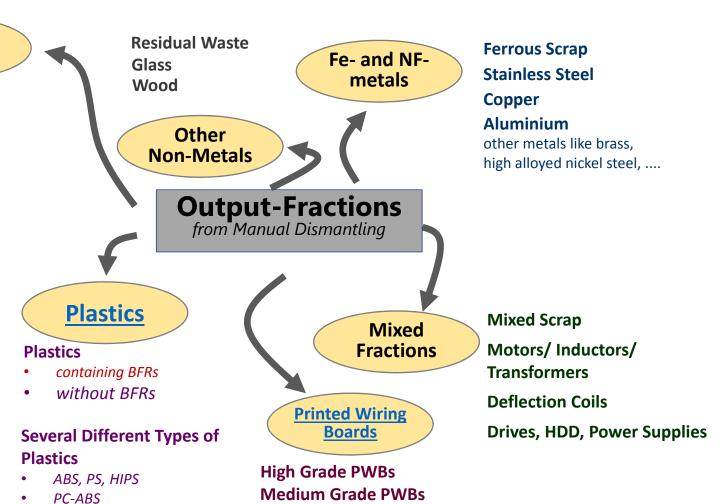
- mixed batteries
- Lead-Acid-Accumulators
- Lithium-Ion Batteries

Capacitors

Printer Cartridges

LCD-Displays

Hg-Containing Lamps



Low Grade PWBs

Research & Development



- Project partner within two EU funded projects
 - CloseWEEE: Establishment of an information platform for recyclers RIC
 - RUN: Collection and re-distribution of used notebooks
- Cooperation with universities and other research institutions in and outside of Austria
 - Activities at "Kinderuni" in Vienna
 - Active contributor to E-waste Academy for Managers in 2014 (El Salvador) and 2016 (Kenya)
 - E-Waste trainings in Cambodia, Columbia and Ghana
 - Business Plans for E-waste dismantling facilities in Uganda, Ethiopia, Cambodia
- Business Plan Calculation Tool
 - Based on 3 dismantling depth
 - Caluclates required resources (manpower, space, infrastructure etc) and break even
 - Publically available via Step website (www.step-initative.org)
- Member of the Solving the E-Waste Problem (Step) Initative, ReUse Network Austria and RepaNet

Support for int. development



- Training programmes at our facility in Vienna
- Training workshops at the location
 - Dismantling
 - Downstream processes
 - Plant layout
 - Financial planning
- Support to develop a business plan for the set-up of a manual dismantling facility taking into account national framework conditions
- Broad network of relevant stakeholder on international level (academia, private sector, NGO, IGO,...)

Thanks for your attention!



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