

Key CRM Equipment for the Development of the CEWASTE Requirements

The table below was used as the basis for drafting the first version of the CEWASTE normative requirements. These will be tested through pilot audits of WEEE management sites, therefore the content of the table is likely to change. More results on the baseline and gap/obstacle analysis of standards and regulations are available in Deliverable 1.1 in the Library section of the CEWASTE website.

	WASTE TYPE	CRMs	Required/Viable Input for End-processing	Current Business Practice
PCBs Desktop computers, professional IT Laptops Mobile phones Tablets External CDDs/ODDs, devices with internal CDDs/ODDs	WEEE	<div><div>Au⁷⁹</div><div>Ag⁴⁷</div><div>Bi⁸³</div><div>Pd⁴⁶</div><div>Sb⁵¹</div></div>	PCBs (shredded and unshredded), CuPM granulates, mobile phones w/o. batteries	✓
Li-ion BATTERIES Laptops Mobile phones Tablets Li-ion batteries in other WEEE BEV, (P)HEV	WEEE ELV	<div><div>Co²⁷</div><div>Li³</div></div>	Batteries	✓*
LEAD-ACID BATTERIES Uninterruptable Power Supplies Other WEEE (e-scooters without seats, ride-on toys,...) Cars containing LABs, other vehicles (e-scooters with seats, ...)	WEEE ELV	<div><div>Sb⁵¹**</div></div>	Batteries	✓
FLUORESCENT POWDERS Fluorescent lamps CRT monitors and TVs	WEEE	<div><div>Eu⁶³</div><div>Tb⁶⁵</div><div>Y³⁹</div><div>Ce⁵⁸</div><div>La⁵⁷</div><div>Y³⁹</div><div>Tb⁶⁵</div><div>Eu⁶³</div><div>Gd⁶⁴</div><div>La⁵⁷</div><div>Ce⁵⁸</div></div>	Fluorescent Powder	✗
Nd-MAGNETS Temperature exchange equipment (engine, compressor) Large household appliances other than temperature exchange equipment (motors/drives) Laptops (HDD) Desktop computers, professional IT (HDD) BEV, (P)HEV (electro engine)	WEEE ELV	<div><div>Nd⁶⁰</div><div>+</div><div>Dy⁶⁶</div><div>Gd⁶⁴</div><div>Pr⁵⁹</div><div>Tb⁶⁵</div></div>	Magnets	✗

BEV - Battery Electric Vehicle
CDDs - Compact Disk Drives
CuPM – Copper Precious Metal
HDD - Hard Disk Drive
ODDs - Optical Disk Drives
PCB - Printed Circuit Boards
(P)HEV - (Plug-in) Hybrid Electric Vehicle

The current business practice of recycling CRMs from the Key CRM Equipment is deemed to be achievable with current or foreseeable technologies if the economic and/or legal framework conditions for collection, sorting and treatment are adapted.

*Current business practice does not (yet) include recycling of Li
**Current feasibility refers to recycling with lead (Pb)