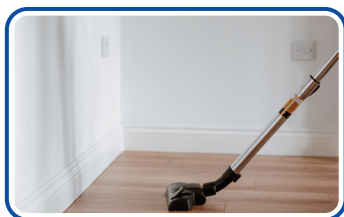




Cordless vacuum cleaner



Cu

Cordless vacuum cleaner



Li

Photovoltaic panels



Si

Copper

Electric engines must be separated. Inside engines, reels are made by copper that is recycled.

Recycling



Cu

Lithium-ion battery

The lithium-ion battery is removed before shredding to be separated and to avoid fire.

Recycling under study



Li

Silicon

Element present in photovoltaic cells.

Recycling under study



Si



Electric scooter



Smartphone



Smartphone



Electric motor metals

Electric motors are separated before shredding, inside them there are elements like copper, aluminium and iron sent for recycling.

Recycling



Lithium-ion battery

Smartphone lithium-ion battery must be removed before shredding to avoid its burning during the process. It's recycled to extract metals.

Recycling under study



Rare-earth elements in the screen

Screens contain rare-earth elements with specific functions (for example they caused screen colours).

Recycling under study





Toaster



Printer



Printer



Iron, aluminium, copper

Metals obtained from product shredding process.

Recycling



Plastic

Plastic printer structure must be separated during the treatment.

Recycling



Toner

Toner must be removed before shredding to be recycled or reused.

Recycling or reuse





Personal computer



Fluorescent lamps



Fluorescent lamps



Hard disk (with CRM)

Hard disks (HDD) must be removed and separated before shredding to be sent to specialised plants for recovering metals.

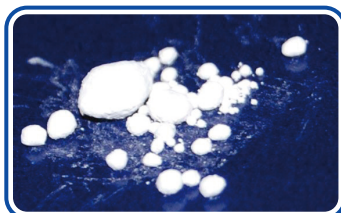
Recycling



Powder with mercury

Powder used in lighting tubes. It contains mercury that must be removed because it is dangerous for human health and environment.

Landfill disposal



Glass

Lamp glass. It is cleaned from powders with mercury and separated during the treatment.

Recycling

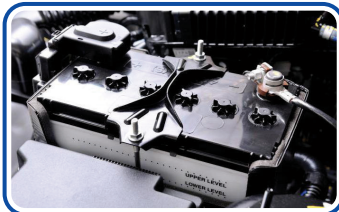




E-bike battery



Vehicle lead battery



Alkaline battery



Lithium-ion battery

Lithium-ion batteries for driving vehicles. They are separated and sent to specific recycling plants, to recover internal components like cobalt, nickel, lithium, graphite, iron.

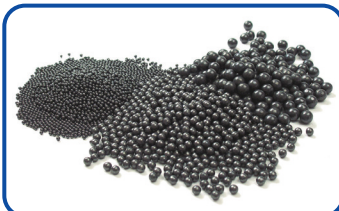
Recycling under study



Lead

Lead batteries are used for starting motor vehicles. They are sent to specific lead plants to recycle the lead.

Recycling



Copper

Alkaline batteries are shredded in specific plants to recover cadmium, zinc, mercury, iron and copper.

Recycling





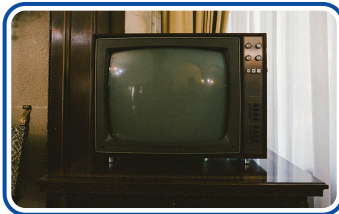
CRT TV



Pb



CRT TV



CRT TV



Cone glass

Used in old TV, it contains high levels of lead oxide. It could be recycled in the ceramics industry.

Recycling



Pb



Fluorescent powders

Fluorescent powders are present in old TV's glass. They contain hazardous substances, they are divided and disposed of properly.

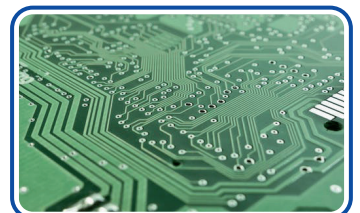
Landfill disposal



Printed circuit boards

Printed circuit boards are divided during the treatment to be sent to special plants for recovering precious materials.

Recycling





Flat TV



Hg

Flat TV



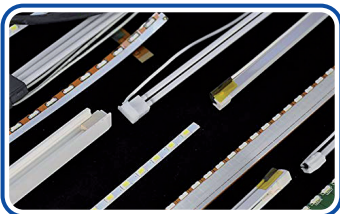
Washing machine



Mercury lamp

It is in LCD TV used for back-lighting monitor containing mercury powder. It must be removed to properly eliminate the mercury.

Sent to subsequent operations



Hg

Brominated plastics

Plastics containing brominated flame retardants. They must be separated from recyclable ones.

Thermal disposal



Detergent tank in plastic

Plastic component removed after the shredding process.

Recycling





Washing machine



Washing machine



Dishwasher



Concrete counterweight

Counterweight used to deaden vibrations.
Recycling



Steel drum

Steel component removed after the shredding process.
Recycling



Electric cable

Made by copper cable and insulating plastic, they are divided with special machine.
Recycling





Fridge



Fridge



Fridge



Polyurethane foam

Polyurethane foam is a plastic material with excellent insulating properties. It is used in the fridge to maintain the temperature.

Energy recovery



CFC/HFC

The coolant is used in compression cooling cycles. It is situated in cooling mechanism and compressor.

Thermal disposal



Plastic drawer

Plastic component removed during the shredding process.

Recycling





Fridge



Fe

Al

Cu

Fridge



Fe

Al

Cu

Fridge



Fe

Al

Cu

Iron, aluminium, copper

Metals used to make compressor, casing and coolant circuits.

Recycling



Fe

Al

Cu

Iron, aluminium, copper

Metals used to make compressor, casing and coolant circuits.

Recycling



Fe

Al

Cu

Iron, aluminium, copper

Metals used to make compressor, casing and coolant circuits.

Recycling



Fe

Al

Cu