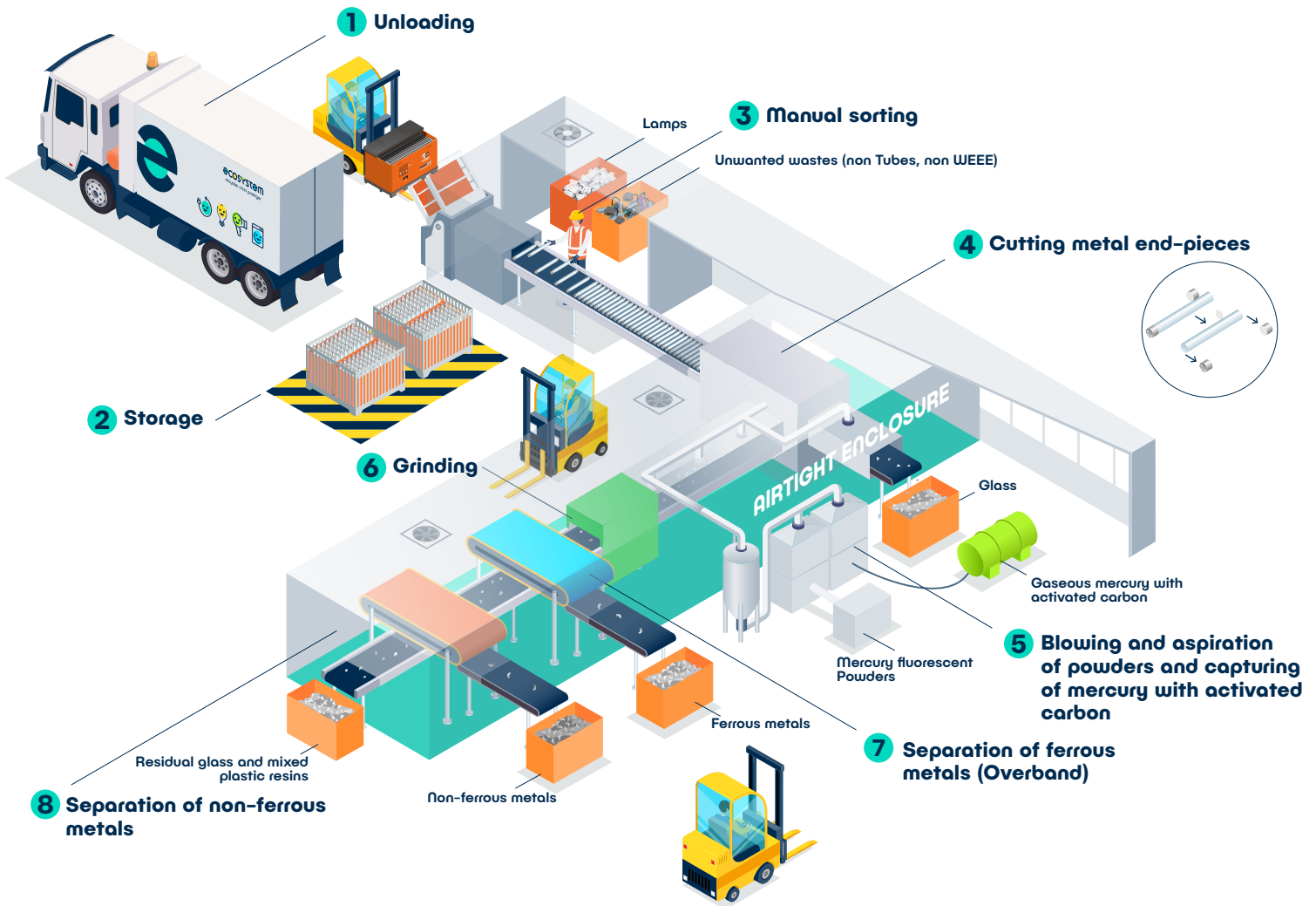


# TREATMENT OF FLUORESCENT TUBES



## 1 Unloading

Tubes are carefully unloaded.

## 2 Storage

Tubes are stored pending treatment. Storage takes place in such a way as to ensure the line is regularly supplied, and to handle the volumes to be treated. An automatic loading system is used to move the tubes to the manual sorting area.

## 3 Manual sorting

Operators manually sort the tubes on ergonomic tables in order to remove any unwanted waste (such as packaging, other household WEEE and batteries...), which is then sent to appropriate treatment facilities. The sorting area is equipped with an air renewal system to protect operators.

## 4 Cutting metal end-pieces

Cutting off the metal end-pieces provides easy access to the fluorescent powders and mercury contained in the tubes (see Step 5). It also allows a fraction of impurity-free glass to be removed and separated from other fractions.

## 5 Blowing and aspiration of powders and capturing of mercury with activated carbon

Once the end-pieces have been removed, mercury fluorescent powders inside the tubes are expelled and drawn into active carbon filters. The volatile gaseous mercury is captured using activated carbon. The powders are stored so the mercury can later be extracted.

## 6 Grinding

The end-pieces pass through a grinding machine that crushes them into smaller fractions so they are more easily sorted by the following equipment.

## 7 Separation of ferrous metals (Overband)

An Overband, permanent magnet attracts and removes magnetic fractions (ferrous metals).

## 8 Separation of non-ferrous metals

Eddy current: non-ferrous metals are separated using magnetic fields.

All extracted fractions are then treated in three different ways:

- Recycling in order to produce new materials (preferred solution),
- Energy or material recovery,
- Disposal in compliance with the relevant regulations.