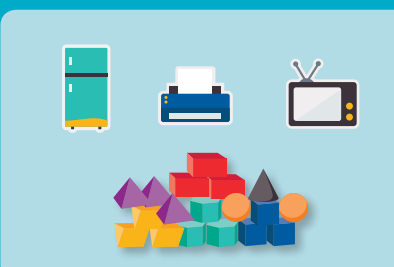



Treatment of WEEE plastics containing Brominated Flame Retardants (BFR's)

POP's regulation applies

WEEE PLASTICS





TO CHECK OR NOT TO CHECK THAT IS THE QUESTION


WEEE plastics are deemed to have restricted BFR's if no check is made showing that the WEEE plastics contain > 2.000 ppm Bromine (Br). In that case all WEEE plastics need to be delivered to specialized WEEE plastics recycling plants capable of separating BFR containing plastics.

If WEEE plastics are checked (described in the EN 50625-1 General treatment and depollution standard) and the check shows that the plastics contain less than 2.000 ppm Br, they are free of restricted BFR's.


< 2000 PPM BROMINE



> 2000 PPM BROMINE or not tested



POLYMER SEPARATION



The plastic mix that does not contain restricted BFR's above the threshold values can thus be used in advanced recycling processes. The first step is the separation of the individual polymers. The processes also have non-recyclable fractions.

SPECIALIZED RECYCLING FACILITY FOR WEEE PLASTICS



The plastic mix may contain restricted BFR's in which case the mix must be treated by specialized recyclers that separate the plastics containing BFR's from other plastics. Only 8% of this fraction contains restricted BFR's. After separation 92% of the plastics can undergo further sorting and treatment.

PLASTICS FREE OF BFR'S

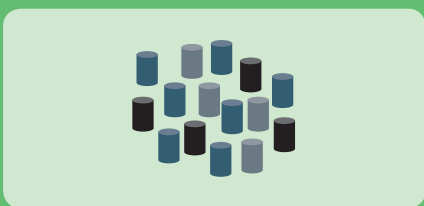
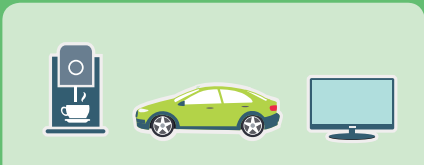


PLASTICS WITH RESTRICTED BFR'S



NON-RECYCLABLE FRACTIONS

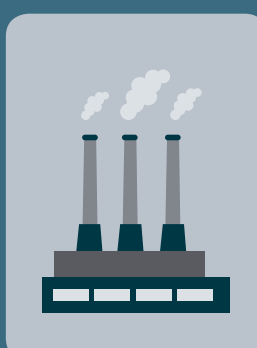
PLASTIC EXTRUSION & COMPOUNDING

The separated polymers from WEEE will then be extruded and if needed compounded. These plastic pellets are checked on conformity with POP legislation. For EEE products this is RoHs and for all other products this is REACH. Product legislation has clearly defined limit values for the presence of any legacy substances such as BFR's.

Plastics recycling saves large amounts of CO₂ emissions and energy compared to virgin plastics.

ELIMINATION OF PLASTICS



WEEE plastics containing restricted BFR's must be incinerated. Non-recyclable plastics are also incinerated. Although these substances have not been used in EEE since long, they can still be present in WEEE as legacy substances.

92%

08%