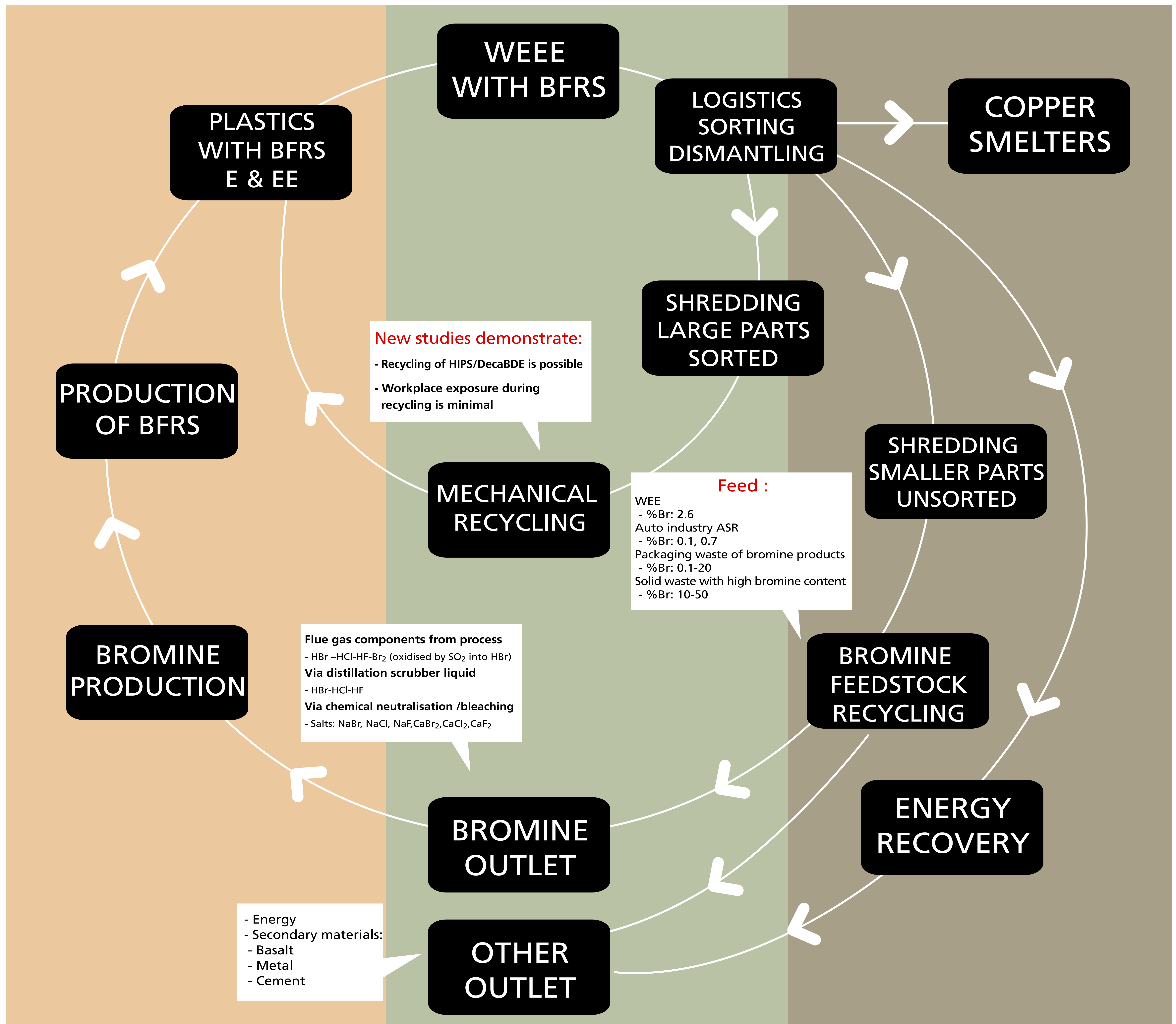


# INTEGRATED WASTE MANAGEMENT FOR WEEE CONTAINING BROMINATED FLAME RETARDANTS



## Steps Forward for Bromine Feedstock Recycling Project:

- Step 0: Pre-feasibility study thermal processes, ready by June 2000
- Step 1: Feasibility study on three selected technologies including lab and pilot tests. Start July 2000 for bromine salt production, Pyrolysis-incineration
- Step 2: Market review
- Step 3: Design and construction
- Step 4: In operation before February 2004

## Conclusions:

The European Brominated Flame Retardant Industry Panel (EBFRIP) in cooperation with the Bromine Science & Environmental Forum (BSEF) have carried out a feasibility study on the recovery of bromine from plastics waste from electrical and electronic equipment (WEEE), including epoxy resins in printed circuit boards, housings/casings and connectors.

The conclusions of the study are, that it is economically and ecologically feasible to close the bromine loop at the end of its current product life cycle. The produced bromine product will be taken back by the bromine industry to recover the bromine as raw material. This approach could be equally applicable for end-of-life vehicle (automotive) plastics which likewise contain bromine and antimony.

The project has the potential to reduce emissions of greenhouse gases in the form of CO<sub>2</sub> by more than 800,000 tons/year and to provide bromine producing companies with the opportunity of recycling a minimum of 10,000 tons of bromine annually in Europe.

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