



## In-depth Study on Metal Recovery from high-grade WEEE

<sup>1</sup>Sanghpriya Gautam, <sup>2</sup>Shailesh Kumar Tyagi, <sup>3</sup>Dr. A.K. Saxena

**Abstract:-** The use of electronic waste for the useful purposes is leading a new way for innovation and advancement. In this study of literature review based on the available data obtaining aluminium, copper,

gold, iron, nickel, palladium and silver as a recovery from high grade WEEE was modelled by LCA. The pre-treatment of metals on WEE comprise of manual sorting, shredding, magnetic sorting, Eddy-current sorting, air classification and optical sorting. This includes a metallurgical treatment resource in which Kaldo plant, a convertor aisle, a refinery anode and a valuable metal refinery.



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The treatment of metallurgy illustrated here considered a major environmental savings when credited the environmental load from avoiding production of the similar quantity of metals by mining of ore and refining of ore. In this method resource recovery per tonne is used on high grade WEE which ranges from 2g of palladium to 386 kg of iron. These benefits are presumably under refining of ore, burdens that are avoided when metals are recovered from WEEE. The connected process on WEEE pretreated seems to have slight changes in environmental effect that weigh against the metallurgical behaviour. However, merely 12 to 16 percent of silver, gold and palladium are obtained during the pre-treatment, which put forward lessening of visible losses of valuable metals such as silver, gold and palladium throughout pre-treatment of WEEE is of environmental importance.

Here our result sustains in a quantitative approach that metal recovery from WEEE should be quantified relating to the individual metals recovered and not in massiveness recovery metal rate.

### Keywords

Waste electrical and electronic equipment, electrical and electronic equipment, separation method and e-waste

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