

Maximizing Recovery/Reuse of Critical Materials in Scrap Populated Circuit Boards

- Scrap PCBs contain critical materials – precious metals (PM) in the chips, tantalum and aluminum in other components, and copper on the board substrate.
- Currently, whole PCBs are sent to smelters in Europe or Asia where the PM and copper are processed together in a pyrometallurgical process that destroys the chips and is environmentally problematic, using high energy and generating toxic discharges. Tantalum and aluminum are not recovered.
- IC Recovery's unique, sustainable thermofluid process – CHIP-RENEW® – is an economically and environmentally superior alternative:
 - Removes all components and solder from the substrate in one pass to concentrate the PM and improve the efficiency of separate PM refining and copper recovery;
 - Enables the recovery of tantalum and aluminum and generates a saleable solder byproduct;
 - Recovers individual chips with high reuse value and produces Certified Renewed™ chips, thereby reducing the need to source critical materials for new chips;
 - Has a minimal GHG footprint and generates no toxic discharges; and
 - Can be sited locally to process scrap already in the U.S. to protect/stabilize chip supply and minimize transportation costs.

