

CRT Recycling

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Cathode Ray Tubes (CRTs) are not a very profitable business from a materials reclamation point of view, but could be very profitable if collection and tipping fees are available. Most cities are offering generous tipping contracts for safe disposal of old television and computer monitors.



Today, CRTs make up the largest portion (estimated by the EPA at 43%) of the American e-waste stream¹. End-use markets for CRT glass recycling are limited due to the lack of demand for CRTs and restrictions on landfilling CRTs. As a result, many recycling processors have little choice but to stockpile CRTs. It is estimated that significant quantities (6.9 million tons or 232 million units) of CRTs remain to be recovered from homes and businesses in the U.S. The vast majority of these

CRTs (85 percent) are projected to be collected and require management over the next 10 years. An additional 330,000 tons (or 12,000,000 units) is reported to be currently stockpiled. About 30% of the weight of CRT glass is toxic leaded glass.²

With the advent of flat screen technologies, CRT manufacturing will soon cease (the world's only remaining CRT manufacturing plant is currently in India). Without this production base, the recycled glass-to-glass market (where old CRT glass is used to manufacture new CRTs) is also culminating. The EPA has described this situation as potentially "catastrophic" and "dangerously constricted" from an environmental point of view. 25 states ban landfilling of CRTs, often requiring manufacturers and retailers to take back their toxin-containing used electronics for free from consumers and recycle them. Consequently, the market opportunity is huge with potentially tens of millions of old TVs and PC monitors with nowhere to go.

eCyclingUSA offers a CRT glass recycling system that can process 50 to 60 CRTs per hour. For larger quantities can use disassemble the TVs or computer monitors, thereby reclaiming valuable metals and plastics, and ship the CRTs to new state-of-the-art CRT processing facilities that have the capacity to process more than 200 million pounds (100,000 tons) of CRT glass per year via large furnaces that operate at 2,000 degrees to smelt the glass and extract the lead. The lead is marketable and the remaining material can be used in construction material or landfilling.



¹ EPA defines e-waste as computer and TV-related consumer electronics and does not include eCyclingUSA's definition that includes e-waste, large and small appliances, industrial electrical devices, C&D related electrical equipment and cabling, and other electric-powered products (e.g., larger medical equipment to small power tools).

² Recycling Today, 2013, An Analysis of the Demand for CRT Glass Processing in the U.S., <https://www.recyclingtoday.com/FileUploads/file/An%20Analysis%20of%20the%20Demand%20for%20CRT%20Glass%20Processing%20in%20the%20U%20S.pdf>