Industry Sector Profile: Computers/Electronics

Computers/ Electronics



This sector includes facilities that manufacture computers and electronic products such as semiconductors, communications equipment, and industrial controls. Compared to the other industry sectors profiled, quantities of toxic chemicals released or managed as waste are relatively low. However, this sector's high rate of reporting source reduction activities and efforts to remove lead from products is notable, so the sector is included as one of the Industry Sector Profiles.

Quick Facts for 2012

Number of TRI Facilities:875Facilities Reporting Newly ImplementedSource Reduction Activities:233

Total Disposal or Other Releases: 4.2 million lb

• On-site:	2.8 million lb
o Air:	1.3 million lb
• Water:	1.6 million lb
 Land: 	14 thousand lb

Off-site: 1.4 million lb

Production-Related Waste Managed: 96.5 million lb

- Recycled: 38.9 million lb
- Energy Recovery: 7.2 million lb
- Treated: 45.1 million lb
- Disposed of or Otherwise Released: 5.3 million lb



As shown in Figure 34 by the solid black line, the computer and electronics sector's production (represented by the Federal Reserve Board Industrial Production Index) more than doubled between 2003 and 2012. The sector's production-related waste managed followed an opposite trend, decreasing by 44% over the same time period (including large decreases in waste recycled) indicating that this sector has decreased its waste per unit of production dramatically over this time period. Likewise, the sector's total disposal or other release quantities have decreased 57% from 2003 to 2012, with decreased on-site air and water releases and quantities transferred off-site for disposal or other releases.



This sector has one of the highest rates for reporting on newly implemented source reduction activities. In 2012, 27% of facilities reported having initiated practices to reduce their toxic chemical use and waste generation through source reduction activities. Process modifications were commonly reported, which include activities such as modifying equipment or instituting recirculation within processes.

This sector has significantly reduced its lead waste in recent years driven by a shift to lead-free solder in its products, which resulted in part from the 2003 Restriction of Hazardous Substances (RoHS) Directive in the European Union. This shift to lead-free solder is evident in the sector's TRI reporting—production-related waste of lead and lead compounds in this sector decreased by 79% from 2003 to 2012. Many facilities substituted raw materials to reduce or eliminate lead and reported the change was made to comply with RoHS. <u>One</u> such facility reduced its lead waste by 88% from 2005 to 2012.

TRI's Pollution Prevention Search Tool can help you learn more about <u>pollution prevention</u> <u>opportunities in this sector</u>. And for more information about how this industry and others can choose safer chemicals visit EPA's Design for the Environment Program pages for <u>Alternatives Assessments</u> and the <u>Safer Chemical Ingredients List</u>.