E-waste: A liability

Discarded computers and consumer electronics – so-called e-waste – represent an enormous environmental and financial liability.

- Discarded television and computer monitor CRTs are classified as hazardous waste because of their lead content.
- The National Safety Council estimates between 315 million – 680 million obsolete computers in the U.S. as of 2004. By 2006, some 163,000 computers and televisions alone will become obsolete in the U.S. ***every day***.
- The total amount of lead in today's obsolete computers is estimated at ***1.2 billion pounds***.
- New research from the University of Florida indicates that most consumer electronics (computers, cell phones, remote controls) will fail a modified version of the landfill toxicity test.
- Computers and consumer electronics contain lead, mercury, arsenic, cadmium, hexavalent chromium, brominated flame retardants, polyvinyl chloride and over two dozen other compounds with known or suspected human health impacts.
- The Wisconsin DNR estimates in excess of 350,000 obsolete televisions in the state in 2002.
- The average cost to properly recycle a computer ranges between $10 - $60. Based on conservative, best case estimates the minimum costs for proper recycling of e-waste in the U.S. will reach some ***$10.8 billion dollars*** between 2006 and 2015.

E-waste: An asset

Properly managed under a system that captures costs in the price of new products, e-waste represents an enormous asset that will drive new enterprise, create jobs, and promote local economic development.

- Computer manufacturers are starting to recognize the business opportunities from improved product design and take-back systems. **Michael Dell**, CEO of the consumer electronics firm that bears his name, stated at the 2004 Consumer Electronics show, "…by 2005 the number of computer systems that … will be retired worldwide increases to about 100 million across the world, so **there's a great opportunity and a great responsibility to ensure that those systems are recycled and disposed of properly**."

- Electronics recycling in the U.S. currently employs over 7,000 workers with total annual revenues in excess of $700 million – at a time when less than one-quarter of all e-waste is recycled.

- Electronics recycling in the U.S. is estimated to grow by a factor of 4 or 5 by 2010.

- Wisconsin is home to several electronics recycling firms, including two – Cascade Asset Management of Madison and Scientific Recycling of Holmen – that were among the first recognized for superior environmental performance.

- Transportation is the largest portion of electronics recycling costs, suggesting that e-waste collection and recycling systems are most likely to develop on a local or regional basis. Wisconsin could put its firms in a leadership position by creating the framework for a comprehensive and sustainable e-waste recycling system.

- It is estimated that every 10,000 tons of electronic waste diverted into recycling operations supports 290 recycling jobs.

- The State of Minnesota estimates that a statewide e-waste recycling program at full scale would create 400 – 500 new jobs in demanufacturing and recycling facilities.

- E-waste contains valuable commodities – components, metals, plastics, glass – that can be profitably returned to commerce. The U.S. Geological Survey estimates that one metric ton of e-waste from personal computers contains more gold than that recovered from 17 tons of ore.