



**ISRI President Robin Wiener Remarks  
A&WMA/EPA Colloquium  
May 14, 2015**

I am honored to be here at the 1<sup>st</sup> Annual A&WMA/EPA program, and I am especially pleased to be part of such an interesting panel. The issue of Sustainable Materials Management, or SMM, is a very important – and popular – topic these days, with recycling playing a particularly critical role, providing economic benefits through job creation while at the same time conserving natural resources, avoiding landfilling, and reducing greenhouse gas emissions.

And recycling – and its benefits - goes far beyond the bin at the end of the driveway. The scrap recycling industry in the US recycles more than 130 million tons of scrap metal, paper, plastics, glass, textiles, rubber and electronics each year, worth more than 80 billion dollars annually and supports nearly 470,000 good paying jobs. Last year the scrap commodities produced by the recycling industry were purchased by steel mills, foundries, paper mills, refiners, smelters and other industrial consumers in 160 different countries around the world, all in the form of specification grade feedstock.

Scrap satisfied 35% of global copper needs, 40% of Aluminum, 30% of zinc, and 60% of stainless steel requirements globally. Imagine the jobs that could be created and the additional environmental benefits that would result if we could increase those rates even higher?

Now, I have been asked to speak this afternoon specifically about the issue of electronics recycling. But before I do I want to thank the organizers of today's conference for having framed the discussion of SMM and this panel around the title "Rethinking Resources" ... not rethinking waste ... or rethinking the recycling of wastes ... or rethinking waste management alternatives.. but as Rethinking Resources.

Why is this so important?

Because it shows that the paradigm has indeed shifted and there is a recognition that the materials that we are talking about here today are indeed valuable resources and an integral part of the global supply chain. They are not used by manufacturers as a means of getting rid of something, but instead because they are valuable and sought as a natural part of the manufacturing process – and have been for many, many, many years. And the recycling industry is grateful to Mathy Stanislaus and all those within EPA for recognizing this important concept when it finalized the DSW rule, published earlier this year. Thank you.

Now, turning to electronics...

Electronics recycling is the fastest growing segment of the recycling industry. The latest figures show this segment of the industry provides a boost of more than \$21 billion annually to the U.S. economy (up from less than \$1 billion in 2002), employs more than 45,000 full time employees (up from 6,000 in 2002), and recycles over 4.4 million tons annually (up from less than 1 million).

Used electronics available for recycling are collected from both consumers and businesses ... evaluated for their value ... and then classified as either working electronic products and parts to be refurbished and resold, or as non-working goods to be recycled into scrap commodities either in the United States or abroad. The commodity metals, plastics, and glass produced from the recycling process are then sold as raw materials in manufacturing ... while the circuit boards are sent to smelting facilities to recover gold and other precious metals.

The overwhelming majority of used electronics collected for recycling in the US are recycled in the United States. The December 2013 MIT/NCER study funded by EPA found that more than 90% of used electronics collected domestically are recycled in the US. Similarly, a 2013 report from the US International Trade Commission found that 93% are being reused and recycled in the US. And of the 7% that are being exported, only a small amount is being sent overseas for disposal. The vast majority are tested then exported for reuse into secondary markets, helping to bridge the digital divide, or shipped for repair through warranty programs or tracked distribution networks.

Currently, the market within the US for electronics recycling is driven by used electronics collected from businesses and commercial interests. This stream of high quality, uniform equipment comprises about 75% of the UEPs being recycled.

The remaining market is from residential sources. Unfortunately though, EPA estimates that only 25% of used electronics available for recycling in households and residences are actually collected for recycling, with most remaining in homes or sent to landfills. This is despite the fact that the consumer market is the largest market for new electronic products. Based on these numbers, we estimate that there is another 3 million tons or more of household UEPs still moving to landfills or remaining in our closets, basements, and garages.

Thus, it is clear that the largest opportunity that exists for increasing the recycling of electronics in the US is through increasing the amount of household recycling and preventing UEPs from being disposed of in landfills. One of the biggest challenges and opportunities here is in raising consumer awareness about how to responsibly recycle their used electronics.

A 2013 Harris Interactive Poll found that consumers lacked knowledge about recycling of used electronics. The Harris survey found nearly 70% of American adults have recycled at least one type of small electronics product in the past, such as ink or toner cartridges, cell phones, desktop monitors, laptops, printers, computers, keyboards, and a mouse. But, that still leaves nearly 75 million Americans who have never recycled UEPs, primarily because they did not have the right information. This figure includes 39% of younger adults ages 18-34 who have never recycled any small electronics. Among the reasons given for not recycling --

- 26% did not know where to recycle electronics;
- 16% did not know how to recycle them securely;
- 14% did not know their device(s) could be recycled;
- 12% thought it was too much trouble to recycle; and
- 6% thought the device(s) were supposed to be disposed of in the trash.

Based on this data, ISRI has initiated several collaborative effort to increase consumer awareness on how to responsibly and safely recycle electronics.

We are working with Earth911 on a public awareness campaign called Project Reboot , which aims to bring together businesses, corporations, and civic groups to educate the public on not only the need to recycle electronics, but the importance of doing so responsibly. Emphasis is placed on recycling electronics through a certified recycler who operates in accordance with strict environmental, health, and worker safety standards, and guarantees secure destruction of all personal data. We are also conducting quarterly polling to gather data on the public's view of recycling to see if the needle is actually moving. We welcome the participation of EPA and others in these efforts.

One of the other projects we are working on which I am personally very excited about is the development and distribution of a standards-based school curriculum to help teachers and students understand both the importance of recycling and the recycling industry. This effort, in partnership with Jason Learning – a nonprofit focused on STEM education and founded by the Oceanographer Bob Ballard who discovered the Titanic - includes age-appropriate K-12 lesson plans based on the life cycle for each commodity; interactive Web-based experiences; hand-on activities; classroom posters; and strategies for school visits to recycling facilities. The Jason Learning program was launched this year through three pilot programs – 1 in Baltimore, 1 in Kalamazoo, MI and 1 in Staten Island, NY. Having 2 young girls myself, I am very excited to part of an effort that inspires children to improve their world and their environment and at the same time shows them how a career in science, technology or engineering can be put to use in the most practical way to make things that people need while conserving our natural resources. Something I am sure everyone in this room agrees with as well.

I would like to use my last few minutes to talk about the importance of Design for Recycling. When manufacturers design their products for recycling, they provide valuable renewable resources for the manufacture of new products and prevent landfill dumping. ISRI's Design for Recycling® (DfR) efforts encourages manufacturers to think about the ultimate destiny of their products during the design-stage of a product's development so that at the end of their useful life they can be recycled safely and efficiently. There are also several market based programs that have demonstrated success in improving the design of UEPs, such as US EPA's Environmentally Preferable Purchasing (EPP) Program, the Electronic Product Environmental Assessment Tool (EPEAT®), and the EPA's Design for the Environment (DfE) Program.

Collectively, these programs encourage, and have already spurred, the design, manufacture, procurement, and use of greener electronics, as well as the recycling of used and end-of-life electronics. ISRI welcomes the opportunity to further work collaboratively with EPA and others to develop a market-based approach to greening the life-cycle of electronics.

In conclusion, I would just add that I have mentioned the importance of responsible recycling a number of times this afternoon. Enforcement plays a very Key role in responsible recycling. Efforts to promote SMM through increased recycling must include penalties for those who violate the law. The way to reward companies that are committed to playing by the rules, is by punishing those who don't. And that means that before any of us contemplate the need for new laws, we need to commit resources and dollars to enforce existing laws.

Thank you.