



# The Winning Scenario

## *Managing the Environmental Aspects of ITAD Should Not Be Your Only Concern*

Judging by the amount of times we hear and see things about “being green”, it is clear that we can no longer ignore the movement. The environmental implications of the 500 million obsolete computers in the U.S. alone are having a dramatic impact and taking up or ruining valuable worldwide real estate. The U.S. Environmental Protection Agency (EPA) has stated that in 2005, used or unwanted electronics amounted to approximately 2 million tons. Of that, about 1.7 million tons were primarily discarded in landfills, and an average of 360,000 tons were recycled.

There is a need for the IT manager to look beyond the 'Green' marketing hype of the computer vendors and get to grips with the environmental challenges being faced by the entire industry. In the past, many corporations paid little regard to the environmental aspects of the equipment they used, or the way resources are consumed in the manufacturing of that equipment. Now, sustainability issues are becoming an important consideration for IT managers and sound eco-friendly strategies are, thankfully, starting to be embraced.

But what issues and tactics should be considered as part of company's green initiative? Although it seems like recycling your outdated IT assets would be the responsible thing to do, reports from the Silicon Valley Toxics Coalition state that up to 80% of E-waste from the U.S. is exported to impoverished countries. Institutions and businesses who take their e-waste to a recycling center might be surprised to discover that most is being shipped overseas where toxic components are either openly burned, soaked in acid baths and dumped into rivers, or piled into mountains of e-waste for scrap recovery. Impoverished workers, including children, smash leaded glass tubes, breathe lead solder fumes and melt plastics with toxic flame retardants. IT equipment may contain any number of hazardous materials, including Lead, Arsenic, Antimony Trioxide, Polybrominated Flame Retardant, Selenium, Cadmium, Chromium, Cobalt, and Mercury. According to the Silicon Valley Toxics Coalition, only 10% of unwanted and obsolete computers are actually recycled responsibly.

Adding to the dismal facts about recycling are the concerns of what the manufacturing process of new equipment has on our environment. Professors Rudiger Kuerh and Eric Williams from the United Nations University in Tokyo have shown that manufacture of a single PC needs 1.7 tons of materials, including the consumption of more than 10 times its own

weight in fossil fuels. That means that manufacturing a new desktop system uses up to the weight of an SUV in materials before it leaves the factory.

This has crucial implications for business owners wanting to reduce the environmental impact of retiring their IT assets. Not only is the high energy used during the manufacturing of a new computer compounded by technology's often perceived short lifespan, but 90% of recycling is done unethically if not illegally. While most green IT efforts focus on reducing power consumption, a true environmentally sound action must take the entire product lifecycle into consideration.

### **The Win-Win Scenario**

So how does an IT asset manager meet deadlines and be globally responsible? With 75% of the environmental damage occurring during the production process of a PC, extending a PC's usable life span is the most effective option to reduce their environmental cost. Tony Roberts, chief executive of Computer Aid International was recently speaking during a web seminar on the e-waste crisis. Roberts argued there was growing evidence that the IT industry's carbon-intensive manufacturing processes meant that companies recycling old IT equipment after just three or four years could significantly reduce their environmental impact if they found their PCs a second home instead. The second home or “refreshed life” concept leads to the idea that all companies that are serious about realizing the optimal environmental path for their retired IT assets should have formal end-of-life strategies in place.

Kuerh and Williams have stated that reusing a computer is up to 20 times more effective at saving energy than recycling. By effectively doubling the working life of every PC, reuse provides a simple way for companies to reduce their environmental footprint. This is not to say companies should never purchase new equipment when it's absolutely necessary. It's simply that that new equipment should not be deployed unless there is an eco-friendly, end-of-life strategy in place for it.

### **Two common myths about retired IT assets:**

“Your assets are fully depreciated and do not have any market value.”

“No one will buy your assets, so please be advised that

*there will be a cost to dispose of them responsibly.”*

These, and other myths have been foisted upon corporations and government agencies as the e-waste from these companies and government agencies grow year by year. The organizations benefiting most from these and similar statements are the recycling companies, and not all recycling companies are above board. Which means businesses and government agencies need to be very careful to learn every step their assets may travel toward their final disposition. Chain of custody reports and proper disposal certifications need to be provided.

To fulfill a win-win scenario, IT asset managers should consider remarketing their assets and receiving a return on their investment while remaining environmentally and data security compliant. This financially rewarding solution involves having their IT assets made retail-ready and sold, with a percentage of the sale returned. The better an IT asset is refreshed, the more value it has in the marketplace and the greater the ROI. This makes sense environmentally and economically, and if the full-service IT Asset Management company selected to refresh those assets employs Department of Defense standards for data erasure, then a secure solution for data security is also realized. The monetary benefits can be seen immediately, while the global advantages continue to accumulate.



## Helping the Environment While Closing the Digital Divide

It is easy to dismiss the real issues of the Digital Divide when it is viewed strictly as it was first defined. It was a reference to the split between those who could afford to own computers and be online and those who could not. Beyond the absolute absence of technology, disadvantages to those who do have some computing option can take such forms as lower-performance computers, lower-quality, and difficulty of obtaining technical assistance.

As economic difficulties continue in the US, the demand for cost effective, powerful and functional computers is on the increase. According to a July 2007 Pew Internet & American Life report, "47% of Americans have a broadband connection at home," an increase of 5% in one year. With gas and food prices on the rise, a family with three or four grade school children will have trouble keeping up with the technology requirements of today's education.

Small business developers are also feeling the effects of the continuing digital divide. They may have less ability to generate capital locally, and may have a harder time disposing of their IT assets (due to the smaller number of large potential customers). Add to that, the burden of having to supply any number of employees with an expensive new computer that will most likely be used for standard office procedures, and the start up costs seem staggering.

## The Win-Win-Win Scenario

As any IT Manager will tell you, high end computers are expensive and an average family or small business owner can often not afford to purchase them. In such circumstances, refurbished computers are a smart alternative for those who want them for home and basic office use. Select full service computer refurbishment companies will refurbish used computers to practically new conditions with a new box, manual, new accessories, and often with extended warranties and tech support. Computers from such "remanufacturers" offer an easy solution and a chance for families and businesses to own powerful, often commercial grade computers that were considered new technology just a few years earlier.

By providing a service for original IT asset owners to have their equipment's data properly erased, refurbished, often with upgrades, and re-packaged, then made readily available for sale to both consumers and businesses, the win-win-win resolution is easily attainable. Environmental issues are lessened by the elimination of additional manufacturing resources, original IT asset owners receive a substantial ROI, while disposing of their equipment responsibly, and millions of end users are able to purchase like-new systems.

**Gabrielle Bove**  
*Director of Marketing*  
 PlanITROI, Inc.