

With new electronic technology surfacing almost daily, and the e-waste crisis expected to grow by leaps and bounds over the next decade if an end to global e-dumping is not met, the founder of the Basel Action Network details the importance of its new e-Stewards certification standard, and why it should be considered the industry's true mark for e-cycling excellence.

By Jim Puckett

ecember 2001, with camera in hand, I found myself weaving along the village streets of Guiyu, China for the first time, experiencing my own kind of shock and awe you can say. I had previously known that recycling can be as dirty as any industry on earth, but the practices I was seeing were beyond being just dirty.

In India, for example, I witnessed farmers living in huts made from old car batteries, those same individuals also being employed to smelt lead in their own backyard, or melt plastic bags, extruding the material as shoe bottoms. Gagging on the fumes from such extraction processes was guaranteed. I was also aware of the nightmarish ship scrapping beaches of India, Bangladesh, and elsewhere, having stood [in 1997] in a Cambodian field of 36,000 barrels filled with toxic mercury waste that had been shipped to Cambodia as fertilizer. Before Guiyu, I thought I had seen it all.

But, with the sheer scale, the stunning weight, and the shocking incongruity of America's information technology prowess piled everywhere around me, the first sight of our tribe's technotrash midden was, in a word, chilling. The knowledge I possessed that the collective heap contained toxic substances made the picture before me as unsubtle as a nuclear ground zero. There it all lay, cast up on this foreign shore by a tide of globalization, the proudest icons of our civilization — machines that can process a billion instructions per second, send a message clear around the world with the stroke of one key, or hold a library of books in a palm-sized drive.

These relics of the information age were being subjected to Stone Age technologies – hammered, cracked, soaked in acids, melted or burned – by thousands of impoverished migrant farmers reaping a new harvest from printed circuitry, cathode ray tubes, microprocessors, disc drives, wires, cables and plastic arriving in Guiyu by hundreds of truckloads a day.

I thought to myself, "What was going on here?" As a young boy growing up in California, I was always told that if you dug a hole deep enough you would end up in China. Well, it seemed that this old fairy tale was true. The big black hole called "Away"

a place where our society disposes of things it no longer wants, was in fact a wormhole that stretches from the U.S. to China, as well as to other developing nations.

Forgetting the 4th R: Responsibility

That first journey to China made it all too clear that, despite the advent of "recycling" and neat self-congratulatory phrases like "closing the loop," "take back" and "reduce, reuse, recycle," we had forgotten the most basic of the R's: Responsibility.

We never really abandoned the motivation of all pollution since the beginning of time – make somebody else or some defenseless ecosystem deal with your waste – or as economists say, externalize the costs. Still to this day, we export the risk, harm and liability to somebody, or some part of the world, we will never have to face, or will never present us with the bill to pay for the damage done – whether from the toxic lead, the lethal mercury or the bioaccumulating flame retardants.

Today, that age-old story of pollution via externalizing costs has been made all the more easy by the new pathways of globalization, intermodal transport, and the lifting of trade barriers to make accessible, newly-available reservoirs of cheap labor in countries lacking adequate laws, infrastructure, resources and safety nets to protect themselves.

Just say no to passing the toxic buck

In the late '80s, the global community had its first initial dose of shock and awe – from the free trade in toxic waste – when wayward ships plied oceans looking for Third-World beaches to which to dump their toxic cargo.

When this practice of global dumping became epidemic, those in developing countries demanded a new treaty to ban this practice. The 1989 Basel Convention, the international treaty designed to reduce the transfer of hazardous waste from developed to less-developed countries, has been ratified by 172 countries, but not by the U.S. The 1995 amendment to the convention, which strictly forbids the export of hazardous waste from developed to developing countries for any reason, including recycling, has been implemented by 32 of the 39 developed countries to which it applies, but not by the U.S.

America: The world's waste cowboys?

Here in the land of the free, we are free to be irresponsible and free to dump our toxic wastes on some of the world's poorest communities and workers. We have been all too satisfied with letting some of the world's most desperate communities do the 3Rs of our toxic waste, no matter what the cost to them. We have blissfully diverted our toxic wastes from domestic landfills to the rice paddies of China and the swamps of Nigeria. What we have been doing is increasingly being recognized as one of the biggest environmental crimes ever perpetrated.

The good news is that all this is starting to change. The messages and images displayed by such Basel Action Network (BAN) documentaries as Exporting Harm and The Digital Dump, by investigative journalists with CBS News' "60 Minutes" and PBS' "Frontline" and by governmental watchdogs, such as the Government Accountability Office, are now reaching more and more people.

The horrors we saw in China, in 2001, which extended to Africa in 2005, are being documented as steadily worsening. According to a recent United Nations Environment Program (UNEP) report, entitled *Recycling – from E-Waste to Resources*, the e-waste crisis is expected to grow between 200 percent and 400 percent in South Africa and India, by 2020, and by as much as 500 percent in countries like India if steps are not taken to put an end to the global dumping.

For the last decade, though, the U.S. Environmental Protection Agency (EPA) has turned a blind eye to the problem of global dumping. Over that time, the EPA claimed that e-waste was not really hazardous waste, that (in their view) the Basel Convention was vague and did not necessarily include electronic equipment, and that the Basel Ban Amendment was misguided, because developing countries were just as capable of managing our hazardous waste as we are. The EPA's antagonism to the Basel Ban Amendment was a policy in lockstep with that of entrenched industrial associations that have long fought the Basel Convention. And that policy has hurt a lot of legitimate, nonexporting processors, as they are forced to compete with the cost externalizers - the waste cowboys.

R2: Band-Aid on a cancer

Nowhere did EPA's promotion of the status quo become clearer than in its influence on the development of the Responsible Recycling (R2) Practices for Use in Accredited Certification Programs, which began in 2006.

At the outset, despite the process supposedly meant to be a democratic multi-stakeholder process, the EPA (acting as super-stakeholder) placed a thumb-on-the-scales and made it clear they would veto any standard that forbid the use of prison labor, municipal landfills and incinerators or the export of toxic e-wastes to developing countries (the three most egregious forms of cost-externalization used today in the U.S.).

Nevertheless, BAN and the Electronics TakeBack Coalition entered into the negotiations because, at the outset, the export principle agreed upon was that the R2 Standard would at least require American processors to respect the laws of importing countries. We saw that as a major step forward and one worth pursuing. However, it was not to be.

Just months before finalization of the R2 Standard, the Institute of Scrap Recycling Industries (ISRI) stated that they could not accept the principle of not violating other country's laws for printed circuit boards. This was rather surprising to say the least. Not only was it a repudiation of an agreed upon principle of the negotiation, but here was a business association actually asserting that it wanted to create guidelines that would violate laws of other countries. We were certain that the EPA would rise up again as superstakeholder referee, blow the whistle and call foul. Surely, the United States of America would not go on record as agreeing to violate the laws of other countries. Unfortunately though, the EPA said nothing and the rest of the group likewise assented to ISRI's wishes with their silence. It was a slap in the face to the entire process, as well as to the environmental community stakeholders.

Creating a certification backed by industry and green groups

BAN and the Electronic TakeBack Coalition, rather than support a standard that creates illegal traffic and criminality on the global stage, withdrew from the R2 negotiations. But, instead of moping, we quickly got to work.

We explained the problem to recycling industry leaders and asked if they could assist us in funding the creation of a truly ethical, legal and responsible, third-party audited and accredited certification, to be known as e-Stewards. A dozen companies, now known as e-Stewards Founders, made significant financial contributions to the cause. Others provided technical advice to ensure that the standard would not only be principled but practical as well. With the funds, we hired the best consultants available - with expertise in both industry and environmental non-profit certifications - to help us avoid pitfalls and lead us through the obstacle course of the international verification system. This included contracting SAI Global to work with us on creating and conducting our comprehensive three-day auditor trainings.

The final product is the world's only recycling standard supported by both industry and the environmental community. E-Stewards recently received the endorsement of the Natural Resources Defense Council, an organization that has been instrumental in ensuring the success of two other major environmental certifications – those of the Forest Stewardship Council and the Marine Stewardship Council.

The only global e-cycling certification

The e-Stewards certification was designed, at the outset, as a global program to solve a global problem. Early on, we contracted with the International Standards Organization, so that we could place our e-Stewards standard within the frame of the ISO 14001 Environmental Management System and offer both certifications together anywhere in the world. We received ANSI-ASQ National Accreditation Board (ANAB) consent to provide global accreditation to certifying bodies capable of conducting audits anywhere. The e-Stewards standard itself is compatible with international law. R2 suffers in this regard, as it fails to both employ international definitions for hazardous wastes and abide by international trade rules, as required in all 172 Parties to the Basel Convention.

Promoting ethical and legal re-use

BAN remains steadfastly dedicated to promoting re-use as a priority. But, just as we discovered that recycling was not always as green as it sounds, so, too, we have discovered that exports for re-use are not always benign and increasingly have become a passport to a global shop of horrors.

As we discovered in Africa, many people claiming to export for re-use, in order to help the poor, send a lot of junk as part of the bargain. As much as 75 percent of e-waste sent to Nigeria is deemed, upon arrival, to be un-repairable, resulting in the material simply being dumped and burned. Even when repair of equipment is possible, waste is still being generated by countries lacking the infrastructure and possibility to manage it in an environmentally-sound manner. This is because modern repair and refurbishment of electronics usually involves swapping out old whole parts (e.g., a nonworking circuit board), which is likely toxic waste, and discarding it in the importing

This is true of the semi-knockdown market, where old computer monitors are turned into TV units. In this market, low-value monitor circuit boards simply become a toxic waste burden. This practice saves the exporter the labor cost of removing the negative-value boards and the costs of having a processor take them off their hands. This way, the exporter externalizes costs and harm to developing countries. Some have called exporting such equipment for re-use a form of fair trade; however, there is nothing fair about saving money by poisoning others – even if re-use is part of the bargain.

Knowing we needed to do better, the e-Stewards Standard only allows the exportation of toxic equipment to developing countries that have tested as being "fully functional." This was the position taken in a Basel Convention guideline on mobile phones. Last year, Dell, Inc. and, most recently, Hewlett Packard adopted the same position. The European Union now has an even stronger position, declaring that any electronic waste, hazardous or not, will be considered as hazardous waste, and illegal to export to developing countries, if it is not tested and proven to be functional. R2, which failed

to close this re-use loophole, is looking more like a dangerous anachronism.

We're open for business!

E-Stewards is now on the verge of official launch and, soon, we will be announcing the names of certified processors and Fortune 500 companies (e-Stewards Enterprises) that have agreed to only use e-Stewards recyclers. Already, as of this writing, processors in 38 developed countries can call one of our three certifying bodies and contract to become an e-Stewards Recycler.

Already, about 50 North American processors have signed a licensing agreement, and paid license and marketing fees, committing themselves to becoming an e-Steward Certified Recycler by September 2011. And, right now, any company or institution wishing to commit to making best efforts to using only using e-Stewards can sign onto becoming an e-Stewards Enterprise.

As we speak, the first e-Stewards audits are underway, with processors being audited by our trained auditors and ANAB observing the process to officially accredit the certifiers. With the help of the international verification system, we have created a robust accountability machine that will allow OEMs and other corporations to properly protect their brand and forego costly audits of their own. Indeed, all customers of processors, whether corporate, government, non-profits or everyday household consumers, can now at last be assured that they will be doing the right thing when they decide to recycle their old electronics. Now they can look for, find and use only those processors recognized as e-Stewards, the new global mark of ethical, accountable, e-cycling excellence. **ESN**

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