

### **What's all this toxic stuff in my laptop and cell phone?**

Right now, virtually all electronics contain toxic materials that can be harmful to people and the planet. A lot of this hazardous stuff lives in the circuit board, including lead (in the solder), mercury (in switches and relays), and brominated flame-retardants. Some electronics, like smart phones and laptops, contain heavy metals like cadmium, beryllium, hexavalent chromium, or arsenic, which have been shown to build up in our bodies and the environment.

Also, the wires and cables that run through all this stuff are often coated with PVC, which contains toxic additives called phthalates. And those big old Cathode Ray Tube (CRT) monitors and TVs contain between four to eight pounds of lead. Yikes! Recently, flat panel screens that don't contain as much lead have replaced CRTs, but many flat screens do use lamps that contain mercury. Exposure to these toxic chemicals can have serious health impacts.

### **It can't be legal to export e-waste, right?**

It's shocking, but exporting most e-waste from the U.S. to developing nations is perfectly legal under U.S. laws. This is a serious problem! We do have one U.S. regulation that addresses exports of CRTs (like old TVs and clunky monitors), but all other electronics are totally legal to export. In many cases, these exports are violating the laws of the importing countries, however. Some members of Congress are trying to change this situation and have introduced legislation to make it illegal to export toxic e-waste from the U.S. to developing countries.

### **My e-stuff ends up halfway across the globe?**

Because dealing with e-waste responsibly is so expensive, “recyclers” in the U.S. can typically make more money by shipping containers full of e-waste to developing countries, like China, India, Ghana, and Nigeria. These exporters often claim the products are slated for “reuse” (to get around import restrictions), when really they end up in backyard recycling operations where workers smash and burn them to gain access to the metals inside, which they recover for money.

This crude processing, done with little safety protection, ends up exposing workers and local residents to horrible toxics, and poisons their air and water. For example, more than 80% of the kids in Guiyu, China, where a lot of e-waste processing happens, have very high levels of lead in their blood. And residents in Guiyu have the highest levels of dioxin that have ever been found in people.

### **What’s Extended Producer Responsibility?**

Extended Producer Responsibility (EPR), also called “Producer Takeback,” is a product and waste management system in which manufacturers—not the consumer or government—take responsibility for the environmentally safe management of their product when it is no longer useful or discarded. Like Annie says, “You made it, you deal with it!” When manufacturers take responsibility for the recycling of their own products they no longer pass the cost of disposal of these toxic products to the government or the taxpayers.

Also, they will have a financial incentive to use environmentally safer materials in the production process, design the product to be more easily recycled, create safer recycling systems, and keep waste costs down.

### **Which companies are making progress?**

Many companies are moving in the right direction. Yay! For example, some companies have removed specific toxics from their products, like PVC and flame-retardants. These are great steps, but they’re still too small to really turn things around. Electronics need to be—and can

be—made much more safe and more durable. A toxics-free computer that only lasts a year isn't good enough.

Some companies are also doing a good job in taking back and recycling their old products. Check out ETBC's Electronics Recycling Scorecard to find out who's leading the way to greener electronics and who's playing catch up.

### **How can I be sure my old stuff isn't getting exported?**

**DONATE FOR REUSE**—If your product can be reused, donate it to a reputable reuse organization, that won't export it unless it's fully functional. Some good organizations include the National Cristina Foundation or World Computer Exchange. Many e-Stewards (see below) also refurbish computers.

**FIND AN eSTEWARD**—If your product is too old or too broken to donate, recycle it. But many recyclers simply export your old products, dumping them on developing nations. So your best bet is to use a recycler that is part of the "e-Steward" network; they don't export to developing nations, and they follow other high standards.

**UTILIZE MANUFACTURER TAKEBACK PROGRAMS**—If there is no e-Steward near you, then you may want to use the manufacturer's takeback program.