



E-waste

Statistics of largest generator of e-waste in the world- the U.S

In 2010, we (U.S.) got rid of:
384 million UNITS of e-waste
152 million mobile devices

The EPA's report shows that we got rid of
142,000 computers and over 416,000 mobile
devices EVERY DAY!!

According to the EPA

In 2013, we generated 3.14 million tons of e-waste in the U.S. Of this amount, only 1 million tons or 40 % was recycled-up from 30.6% in 2012. The rest was trashed – in landfills or incinerators.

Input of Resources for 1 computer and monitor-

530lbs of fossil fuels, 48lbs chemicals and 1.5tons of water.

The Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is the most comprehensive global environmental treaty on hazardous and other wastes.

It has 170 member countries (Parties) and aims to protect human health and the environment against the adverse effects resulting from the generation, management, transboundary movements and disposal of hazardous and other wastes.

U.S., Afghanistan and Haiti are signatories but not parties to this Convention

Seeks to minimize waste generation, sound domestic management and minimize transboundary movements. Does NOT ban movement but sets us a regime of notification/approval of shipments

Basel Action Network-NGO

In 1997, Jim Puckett creates BAN (originally a project of the Asia Pacific Environmental Exchange, which he co-founded)

BAN is a non-profit with a mission to champion global environmental health and justice by:

ending toxic trade

catalyzing a toxics-free future

campaigning for everyone's right to a flourishing environment.

Focusing on electronic waste and old ships, fulfilling the mission using interrelated policy, market solutions, and public engagement strategies that create systemic change.

Based in Seattle, WA, working nationally and internationally.



The BAN e-Trash Transparency Project / Phase 1

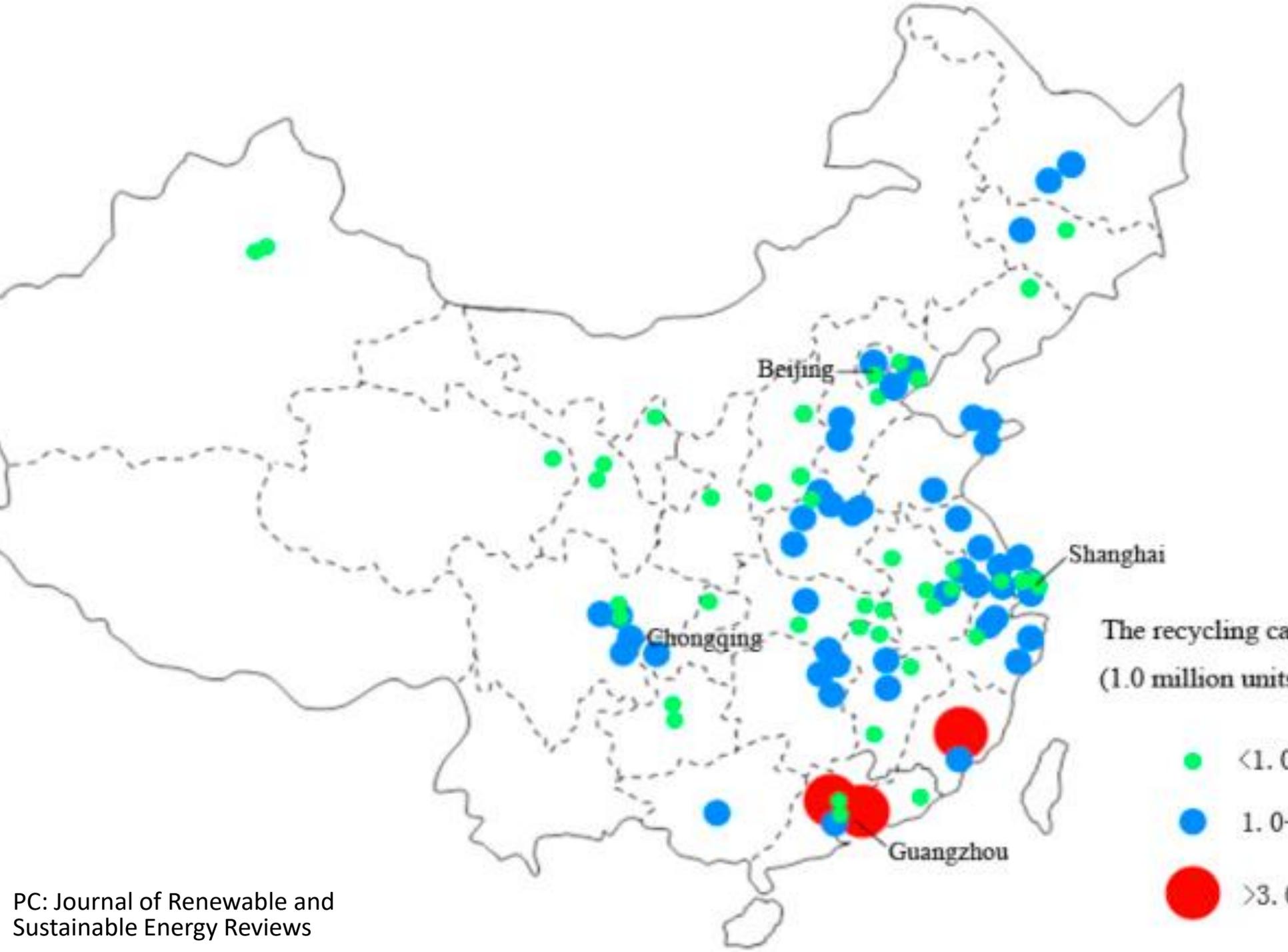
In 2016, BAN published its groundbreaking reports entitled "Disconnect: Goodwill and Dell, Exporting the Public's E-Waste to Developing Countries," (May) and "Scam Recycling: e-Dumping on Asia by US Recyclers," (September). These reports followed several years of research, development and implementation of GPS/cell phone based tracking technology. They involved placing 205 different GPS tracking devices inside of old printers, LCD, and CRT monitors, delivering them to US charities, retailers and recyclers and following them to their endpoints across the globe.

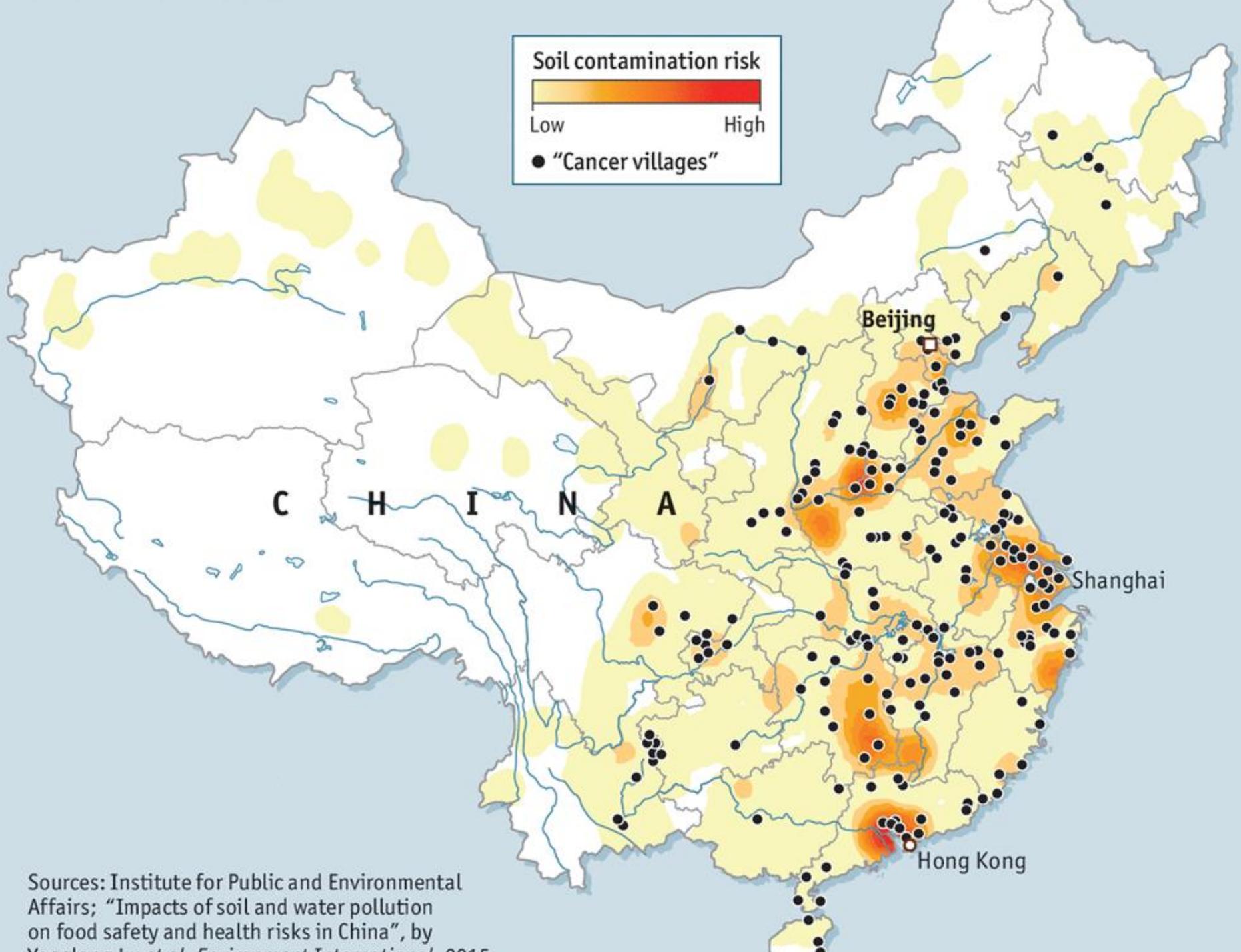
The study as summarized in "Scam Recycling" witnessed 34% of the 205 deployments moving offshore with 31% of the total going to developing countries.

Of the 152 trackers delivered directly to recyclers and not to charities, 40% were exported --significantly higher than the 15% export rate for the 53 trackers delivered to charities or retailers.



PC: Basel Action Network





Sources: Institute for Public and Environmental Affairs; "Impacts of soil and water pollution on food safety and health risks in China", by Yan, *Environmental Science and Technology*, 2015

Electronics Waste Management Interim Recommendations- VA/DEQ

Waste electronic equipment, or e-waste, has started to receive much attention. With the rapidly changing environment of computer technology, many systems become obsolete within a few years.

It has recently been suggested that some components of these consumer electronic devices *may* contain constituents that could make them subject to regulation as a hazardous waste. Certain components may contain small amounts of RCRA regulated heavy metals, including lead, silver, barium, cadmium, chromium and mercury. Although the Department has no specific knowledge of any brand of components or complete devices failing a TCLP characteristic for hazardous waste, the potential does exist. Massachusetts for example chose to ban CRTs (cathode ray tubes, or monitors) from landfills due to the presence of lead.

DEQ, in conjunction with EPA Region III, is studying the issue of e-waste and we are working as a group toward solutions to promote its effective recycling and safe management. Specific regulatory authorities or exclusions for e-waste do not currently exist in federal or state regulations.

Under Virginia's current applications, e-waste devices that are managed as commercial products for rebuilding, reuse, or remanufacture by component substitution or replacement rather than for disposal would not be considered waste under RCRA.

Virginia's Computer Recovery and Recycling Act (2008)

Legislation went into effect in 2009 to require a computer manufacturer that in any calendar year manufactured or had manufactured computer equipment in excess of 500 units which were sold (or offered for sale) in Virginia under its brand or license to implement a recovery/recycling plan for those computers at no charge to the consumer

Each manufacturer must have on file with DEQ its recovery plan in order to sell its products in Virginia after this date of the legislation.

(In 2014, Apple collected and recycled 19,588 lbs of computer equipment)





What can I do?

- First, take all old electrical appliances to a certified recycling facility (a list will follow)
- Try to extend the use of your current gadgets
- Re-consider buying the newest model and instead buy a refurbished model. Get money/trade-in your used device. E.g. www.Sellcell.com
- Raise awareness of your friends, family and colleagues to the issue
- Support the NGO Basel Action Network

E-waste Collection in Fairfax County

Fairfax County 2 x Permanent Collection Locations (7 Days a Week)

I -66 Transfer Station (4618 West Ox Road Fairfax, VA 22030)

I-95 Landfill Complex (9850 Furnace Road Lorton, VA 22079)

1,000 Tons Annually No Charge to Residents (Commercial Business
Waste Not Accepted) Cost to County-\$293,000/Annually

BAN certified recyclers-

Capitol Asset Recovery in Lanham, Md

www.Capasset.com 877-247-2616

Sage Sustainable Electronics in Jessup, Md

www.sagese.com 844-472-4373

E-stewards program

What's the e-Stewards Standard?

The e-Stewards Standard was created by the environmental organization Basel Action Network in 2009. e-Stewards recyclers are certified through annual audits to the e-Stewards Standard. The e-Stewards Certification is supported by the United States Environmental Protection Agency (EPA). EPA notes that e-Stewards is a certification that “advances best management practices and offers a way to assess the environmental, worker health, and security practices of entities managing used electronics.”

The e-Stewards certification is available all over the world, is globally accredited, and independently audited by trained auditors.

EPA recognizes two types of recyclers E-stewards and R2. But R2 companies have been found to export at higher rates to foreign countries. Labeled as re-use since U.S. is not party to Basel Convention.



PC: GreenPeace East Asia