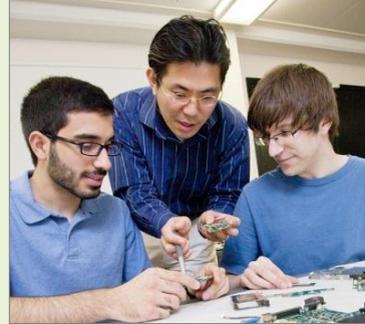


Our Mission

The Sustainable Electronics Initiative (SEI) at the Illinois Sustainable Technology Center (ISTC) is dedicated to the development & implementation of a more sustainable system for designing, producing, remanufacturing, and recycling electronic devices.

Areas of Focus:

- Research** – SEI conducts and sponsors research on sustainable electronics at UIUC and with other organizations.
- Education** – SEI coordinates webinars and conferences on sustainable electronics topics. In addition, SEI works to integrate principles of sustainability into the curricula and educational experiences of students, professionals, and the general public.



Student collaborations in the “A New Life for Laptops” project (left) and the International E-waste Design Competition (right)

Did You Know...?

- US households spend about \$1,407 per year on electronic hardware (Consumer Electronics Association, 2008).
- Only about 15% of electronic devices are recycled after they are taken out of service; the rest are disposed of in landfills (US EPA, 2008).
- In 2007, Americans discarded over 126.3 million cellular phones creating about 19,200 tons of electronic garbage (US EPA, July 2008). That equals the weight of 3,840 elephants!
- All together the parts in a Nintendo DS came from 18 different countries and travel around 228,000 miles (Loop Scoops, Teachers' Domain, <http://www.teachersdomain.org>).
- Electronic waste such as discarded computers, TVs, cameras, printers and cell phones can contain materials such as lead, mercury, gold or silver.
- A UN study found that the manufacturing of a computer and its screen takes at least 530 pounds of fossil fuels, 48 pounds of chemicals and 1.47 tons of water – more than the weight of a rhinoceros or a car (Schwarzer, Bono, et al., 2005)!



Examples of e-waste landfill (left) and recycling facility (right)

On Our Website

- SEI Resources:** Collections of online & hard copy resources grouped by subject.
- Publications:** Fact sheets comparing e-waste laws; guides to recycling programs; technical reports, etc.
- Ask an Expert:** Submit your question related to e-waste issues, sustainable electronics design, improving electronics manufacturing processes and related issues.
- RefWorks Database:** Searchable bibliographic database of resources, such as peer-reviewed journals, related to sustainable electronics & e-waste issues.
- SEI Blog:** News, resources, commentary.
- Videos/Presentations:** Lectures, presentations, news clips, documentaries.



Current Projects

- Reducing E-waste Through Purchasing Decisions
- ISTC Sustainable Electronics Seminar Series
- International E-waste Design Competition
- A New Life for Laptops

For more information see “Current Projects” on the SEI website.

Starting January 1, 2012, the following are **BANNED** from landfills in IL: TVs, monitors, printers, computers (desktop, laptop, notebook, netbook, tablet), electronic keyboards, fax machines, VCRs, MP3 players, DVD players, DVD recorders, video game consoles, small scale servers, scanners, electronic mice, digital converter boxes, cable receivers and satellite receivers.

SEI Activities



Joy Scrogum (left) discussing SEI at the 2012 Naturally Illinois Expo



2010 International E-Waste Design Competition



2010 E-Waste Collection with students from UI class



Frequently Asked Questions

Where can I recycle my electronic devices?

The SEI factsheet “Electronic Take-Back and Donation Programs,” TN10-006 has information on retailer recycling programs, manufacturer take-back programs, electronics trade-in programs, donation/charity programs and state collection programs. For locations, check out the Earth 911 web site (<http://earth911.com/>) where you can look up recycling facilities within your Zip code.

Are there laws regulating e-waste management?

Several states have proposed or passed e-waste recycling and collection laws and/or electronic disposal bans. The SEI web site, under the Law & Policy tab, has charts detailing and comparing US, State, & Local Legislation as well as links to view and download proposed or passed laws.

How do I purchase greener electronics?

Consider whether or not you really **NEED** to purchase an electronic device. If you feel you must purchase the new device, try to purchase refurbished products (used but restored to like-new condition). Many big retailers provide refurbished products as an option for online purchases. Also, look for ENERGY STAR and EPEAT labels on new products. EPEAT stands for “Electronic Product Environmental Assessment Tool.” EPEAT-registered products are manufactured with fewer toxins, like mercury, and are designed to be easily recycled. And because EPEAT-registered products meet the latest ENERGY STAR specifications, they can help you lower your energy use—and potentially your energy bill.

Educational Resources

- **Loop Scoops:** <http://pbskids.org/loopscoops/>
- **The Story of Electronics:** <http://storyofstuff.org/electronics/>
- **62 Projects to Make with a Dead Computer (and other Discarded Electronics)** by Randy Sarafan
- **Heroes of the Environment** by Harriet Rohmer: <http://www.harrietrohmer.com/>
- **Energy Star Kids:** http://www.energystar.gov/index.cfm?c=kids.kids_index

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