
Over 25 Million Pounds of Electronics Trash Gets New Life!

Connecticut creates 37 new jobs and saves over a million dollars!

The Connecticut Department of Energy and Environmental Protection ("DEEP") is pleased to present the first annual program update on the successful implementation of the state-wide electronics recycling ("E-Waste") program. Information reported to DEEP by the E-Waste recyclers tracking the tons of electronics recycled, jobs created and benefits to municipalities shows that Connecticut continues to be among the nation’s leaders in extended producer responsibility ("EPR") programs for consumer electronics recycling.

Connecticut’s E-Waste law requires electronics manufacturers to pay for the collection, transportation and recycling of residentially generated Covered Electronic Devices ("CEDs") which includes computers, monitors, printers, and televisions. This E-Waste recycling program has no direct cost to consumers or municipalities. Recyclers are approved by DEEP to ensure responsible recycling practices are being used. Towns are only responsible to provide for the convenient and accessible collection of CEDs for their residents. Most towns have chosen to use an existing transfer station or regional waste collection as their collection points, while other towns use special collection events, or designate specific businesses as a drop off location.

After two and a half years, DEEP’s electronics recycling program has transformed the collection and recycling of unwanted CEDs in Connecticut. The result is thousands of tons annually of unwanted electronics getting new life as new products, creating new jobs, keeping toxics materials out of the environment, and over a million dollars saved in avoided disposal fees by Connecticut’s municipalities. It’s an equitable and efficient system since the manufacturers that make the products are now financing the system that recycles them. Connecticut’s program is one of only 26 states, and was the "4th" state in the U.S. to have an E-Waste recycling program financed by electronics manufacturers.

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1 Based on collection statistics and operational benefits from the first 2.5 years of the program (i.e., from the start of program collection in February, 2011 through June 30, 2013, the end of the latest reporting period).
2 Connecticut Law History: P.A. 07-189 became effective on July 1, 2007, but was revised substantively by P.A. 08-35 in 2008 and P.A. 09-3 in 2009 and then again in 2011 by P.A. 11-80. Connecticut’s implementing Regulations of Connecticut State Agencies [RCSA sections 22a-638-1 and 22a-630(d)-1] became effective on June 1, 2010 but were revised on November 13, 2012 with minor revisions in recycler performance standards.
A summary of some E-Waste recycling program benefits, successes, challenges and future considerations from the first two and a half years of program operation is:

**On-going Benefits:**

- **No fees for consumers and no disposal costs for municipalities.** Before the establishment of Connecticut’s program, consumers often paid for recycling with limited availability to recycling even if they wanted to. For residential E-Waste thrown away, most Connecticut municipalities would be charged for disposal [up to $90 per ton].

- **Convenience and accessibility.** There are now over 141 approved collection locations statewide, one of the most comprehensive collection networks in the country. Each town must have a collection plan approved by DEEP, so check with your town for locations and drop off times. Currently, there are 120 municipal transfer stations and 13 regional collection plans approved to cover all of Connecticut’s residents. Other approved collection locations include various retail stores such as Savers, not-for-profit drop off centers, and several businesses specializing in E-Waste recycling (Green Monster e-Cycling LTD located in West Hartford, and Take 2 Inc. located in Waterbury). In addition, the electronics manufacturers have established 116 retail collection sites currently in Connecticut (Best Buy, Goodwill, and Staples).

- **Responsible Recycling and Disposal.** Recyclers are approved by DEEP to ensure that CEDs are recycled in a responsible manner. Connecticut is one of only a few states that evaluate recyclers to ensure E-Waste is actually recycled and is not abandoned or dumped into international markets.
The E-Waste regulations require recyclers and all of their downstream partners to have safeguards including: facility and data security, insurance coverage for pollution releases and financial assurance to protect taxpayers from paying for cleaning up illegally dumped or abandoned materials.

Program Successes:

- **Over 25 million pounds (over 12,500 tons) of CEDs collected in the first two and a half years of Connecticut’s program.** That works out to a per capita rate of 3.62 pounds in 2012. Televisions accounted for the majority of the volume - over 75% of the reported weight. Monitors were the next highest product type, consisting of between 12-14% of the weight, and the remaining weight was computers, printers and other components.

- **Municipalities collectively saved over $500,000 annually in avoided disposal costs, a savings that is expected to increase in future years.** Manufacturers are now responsible for these costs and the manufacturers have paid a total of more than $7.6 million for responsible recycling in the first two and a half years.

- **Recycling means jobs!** Recyclers reported that 37 full time jobs were created in Connecticut as a result of the Connecticut E-Waste program. Recyclers project the number of additional new jobs created may double by the end of 2014. In addition, there is additional job growth outside of Connecticut that further contributes to the regional economy.

- **Over one million pounds of CEDs collected in 2013 by electronics manufacturers that recycle their products or partner with retail stores for collection.** This is based on reports from 7 manufacturers that run mail-back programs or have additional local collection points such as Best Buy stores, Goodwill stores through Dell’s Reconnect Program, and Staples stores working with Hewlett Packard.

- Recyclers have reported that approximately 98% of material collected is sent for recycling into new products, placing valuable materials back into commerce.

- An estimated 1.8 million pounds of lead recycled from televisions alone, significantly reducing the amount of lead released in the environment.

Program Opportunities / Next Steps:

- In 2012, Connecticut’s program collected a rate of 3.62 pounds per capita based on CER and manufacturer’s annual reports. This rate is comparable to other states with similar E-Waste recycling programs, although it is lower than DEEP’s internal goal. DEEP anticipates that with

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3 In 2013, the CERs reported a total of 37 Full-Time-Equivalents (FTEs) located in Connecticut. CERs are also projecting 67 more jobs created in Connecticut by the end of 2014. Connecticut’s job numbers slightly exceed those in the report by EPA and the Institute for Local Self Reliance suggesting that 36 jobs are created per 10,000 tons of waste recycled.

4 The weight is cumulative and includes all CEDs reported by CERs as well as manufacturers that have take back e programs.
additional public education and outreach, consumer participation rates will increase or exceed DEEP’s per capita goal. DEEP plans to continue to assess the suitability of this measure and decide to use it or recommend replacing it in out years.

- DEEP has not yet assessed in detail the information submitted by recyclers or municipalities to determine if each is meeting DEEP’s internal program convenience and accessibility goal of 4 pounds per capita\(^5\). DEEP plans to do so after data is available from 3 full years of collection (end of 2013).

- Data verification is an ongoing need. While every town has an approved collection plan, some towns have reported zero or very little CEDs collected. DEEP plans to assess in 2014 whether these are reporting errors or collection lapses.

- Public Awareness can improve participation E-Waste recycling collection program. A preliminary assessment performed by DEEP and anecdotal information suggests a high percentage of Connecticut residents were not aware of Connecticut’s E-Waste program. DEEP has since developed a YouTube video which was launched in the winter of 2013, and plans to launch a public campaign in 2014 to improve public awareness. See link to video [here](#). DEEP also plans to continue to publicize and improve public awareness that the Connecticut program provides for the free collection of additional devices: laptops, tablets, e-readers and certain game consoles that meet the law’s definition of “computer”.

- While there is currently no federal recycling program in place, DEEP has engaged in interstate collaboration. DEEP has partnered with the [Northeast Recycling Council](#) and the [Electronics Recycling Coordination Clearinghouse](#) to better harmonize the state’s program with other states to help streamline the program and improve the E-Waste recycling infrastructure/system.

- DEEP plans to assess the development of new or additional program measures like consumer awareness, carbon footprint and greenhouse gases emitted as a result of the program.

- DEEP plans to work with stakeholders to increase recycling rates including possibly expanding the scope of collection by including schools (K-12), municipal CEDs, colleges and universities and small businesses and revisit the regulations. Such expansion is consistent with numerous other states among the 26 with programs.

- Visit [www.ct.gov/DEEP/e-waste](http://www.ct.gov/DEEP/e-waste) for more information or to find a drop off location near you.

\(^5\) In 2007, DEEP set a convenience and accessibility goal of 4.0 lbs/ capita for each town / region.