

## E-Waste

### The Problem

Every year over 120 million electronic devices are purchased each year in California alone. [U.S. PIRG estimates](#) that Californian household throw away 1.5 tons of e-waste every single minute. The components of e-waste often contain hazardous heavy metals, such as lead and mercury. According to the [EPA](#), 70% of all the heavy metals found at municipal solid waste landfill come from e-waste. When improperly disposed, e-waste can cause these heavy metals to leach into our soil and water supply, causing adverse health effects, particularly in developing children and fetuses.



Photo credit: Geneva Environment Network

However, e-waste can often be easily repaired or refurbished for resale. Retailers, electronic stores and organizations, such as [Fixit Clinic](#), provide services to repair, refurbish, and resale damaged electronics. In the event the device is not fixable, it is likely highly recyclable. Electronics contain valuable metals and minerals, such as gold, copper, and silica, which can be extracted from unwanted electronics to be recycled into raw materials for reused.

### Covered Electronic Waste (CEW) Recycling Program

California passed [SB 20 \(Sher\)](#) in 2003 which established the [Covered Electronic Waste \(CEW\) Recycling Program](#) to provide Californians with convenient electronic waste collection and recycling. The program requires consumers to pay a fee for certain electronic devices at point of purchase to encourage e-waste collectors and recyclers. The fees are:

- \$4 on a screen more than four inches but less than 15 inches;
- \$5 on a screen more than 15 inches but less than 35 inches; and
- \$6 on a screen measuring 35 inches or more.

The CEW program has aided the establishment of over 600 recycling locations across the state, with over 30 approved e-waste recyclers. CalRecycle's 2018 [Future of Electronic Waste Management in California](#) report, they report over 2.2 billion lbs. of e-waste has been recycled since the passing of SB 20.

On September 16, 2022, the CEW was updated for the first time since its establishment with the passing of [SB 1215 \(Newman\)](#), which add covered battery-embedded products to the CEW program. Covered battery-embedded product means a product that contains a battery that is not designed to be easily removed with no more than a common household tools. The bill requires consumers, on and after January 1, 2026, to pay a covered battery-embedded waste recycling fee in an amount established by CalRecycle upon the purchase of a new or refurbished covered battery-embedded product.

## Safely Disposed of Your E-Waste

- [CalRecycle](#) – Statewide
- [E-Recycling of California](#) – Statewide
- [Complete Electronic Asset Recovery](#) – Statewide
- [Earth 911](#) – Nationwide

## Research & Relevant Articles

- [Multiple Actions Taken to Address Electronic Waste, But EPA Needs to Provide Clear National Direction](#) – U.S. EPA, 9/1/2004
- [E-Waste Policy Paper](#) – SOMO, 12/1/2009
- [Quantitative Characterization of Domestic and Transboundary Flows of Used Electronics](#) – UNU-StEP, December 2013
- [Formal recycling of e-waste leads to increased exposure to toxic metals: An occupational exposure study from Sweden](#) – Environment International, 12/2014
- [Quantitative Characterization of Domestic and Transboundary Flows of Used Electronic Products](#) – CEC, September 2016
- [A World of Minerals in Your Mobile Device](#) – USGS, 9/2016
- [A New Circular Vision for Electronics: Time for a Global Reboot](#) – World Economic Forum, 1/2019
- [The Impact of E-Waste on Human Health](#) – Human-I-T, 5/20/21
- [The Hazard of Electronic Waste in “Rage Rooms”](#) – DTSC, 9/2022

## Links

- [SB 1215 Covered Battery-Embedded Products](#) – CalRecycle
- [Electronic Waste Management](#) – CalRecycle
- [R2 Standard](#)
- [National Strategy for Electronics Stewardship \(NSES\)](#)
- [Cleaning Up Electronic Waste \(E-Waste\)](#) – EPA
- [Basic Information about Electronics Stewardship](#) – EPA