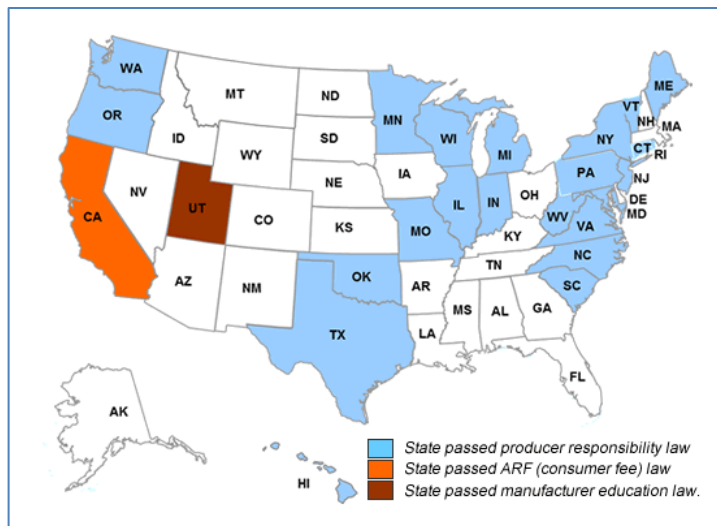


How does the California e-waste program compare to other states?

California is only state using advanced recycling fee model

Three Types of Laws

Twenty five states have passed e-waste recycling laws. There are three general categories of laws:



1. Extended Producer Responsibility.

Twenty three states have adopted the “extended producer responsibility” model known as EPR. These require the manufacturers to take financial responsibility for collecting and recycling used electronics.

2. Advanced Recycling Fee (ARF).

California, the first state to pass an e-waste recycling law, established a consumer fee model. Consumers pay a fee at purchase on covered products (video displays and portable DVD players) which go into a recycling fund

administered by the State, reimbursing recyclers and collectors.

3. Manufacturer Education.

Utah passed a law requiring only that manufacturers publicize recycling opportunities (but it doesn’t require them to do recycling themselves).

Comparing State Programs

Comparing the state laws is always challenging, since there are many differences between them, like what products are covered (called “scope of products”), whose recycling is covered - consumers, schools, business, etc. (called “covered entities”), the role of the state and local governments. But it’s still useful to look at three basic metrics:

1. Collection rates – How much e-waste is coming back?
2. Recycling quality – what are they doing with what comes back?
3. Cost to the states – how much are the States paying to administer the programs, enforce their laws, promote their programs, etc? Are these costs reimbursed by the program?

This fact sheet speaks only to the first metric: collection rates.

Comparing collection rates

California is Seventh Highest in Per Capita Collection Rates

For a fair comparison between the different states' collection volumes, we start by converting the annual total pounds collected in each state to a "pounds per capita" rate by dividing the total pounds by the state population. Some states have numbers as high as five, six, or even seven pounds per capita. Other states – particularly those with no performance measures in their laws which mandate a certain level of performance – are much lower, from less than a pound per person to just one or two pounds per person.

The states with the highest collection rates for 2012 are shown below. California ranks as number 7, with a per capita rate of 5.54 in 2012.

Figure 1: Top Ten States For E-Waste Collection – by Per Capita Collection Rate					
Rank	State	Period	Program Year	Pounds Collected	Per Capita Rate
1	Vermont	July 2011-June 2012	Year 1	4,819,602	7.70
2	Oregon	2012	Year 4	26,700,000	6.90
3	Wisconsin	July 2011-June 2012	Year 3	39,098,317	6.83
4	Minnesota	2011-2012	Year 5	35,300,000	6.62
5	Washington	2012	Year 4	43,473,738	6.30
6	Maine	2012	Year 7	7,438,861	5.60
7	California	2012	Year 8	210,790,222	5.54
8	Rhode Island	2011 (2012 data not out)	Year 3	Not published	4.55
9	New Jersey	2011 (2012 data not out)	Year 1	40,000,000	4.53
10	South Carolina	July 2011- June 2012	Year 2	4,723,723	3.92

What about other differences between these top 10 states that affect collection rates?

The states with the highest per capita collection rates don't have the same scope of products, or the same covered entities. How do the differences in these two factors impact collection rates?

Covered Entities – Who can recycle their products under the programs

Each state defines its own list of "covered entities" – meaning who can bring products back for recycling in the system for free. Most of the state laws are intended to cover consumers (usually called "households") and other entities that act like consumers when it comes to recycling, like smaller government agencies and schools. Therefore most states do not include large businesses in their programs. California is the only exception in the top 10 states, as shown in Figure 2 below.

Figure 2: "Covered Entities" In Top 10 States: Who can recycle for free?									
	State	Per Capita Rate	Households	Schools	Non Profits	Gov't Agencies	Small Business	Large Business	Other
1	Vermont	7.7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> charities		<input checked="" type="checkbox"/> < 11 employees		
2	Oregon	6.9	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> small		<input checked="" type="checkbox"/>		Any resident dropping off 7 or fewer items/day
3	Wisconsin	6.83	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
4	Minnesota	6.62	<input checked="" type="checkbox"/>						
5	Washington	6.30	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> charities	<input checked="" type="checkbox"/> small	<input checked="" type="checkbox"/>		
6	Maine	5.6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
7	California	5.54	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	Rhode Island	4.55	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					Schools: public or private, elem. or secondary
9	New Jersey	4.53	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/> < 51 employees		
10	South Carolina	3.92	<input checked="" type="checkbox"/>						

Most states don't allow big business to use recycling programs. California is one of only four states whose statewide recycling programs allow large businesses to use them. The others are Hawaii, West Virginia, and New York State. Technically, Oregon won't preclude a large business from using the system provided it dropped off only 7 or fewer items per day (but that's not how most large companies handle their e-waste).

What would California's per capita rate look like if businesses were not using the program?

- Are businesses big users of the California program?
- If they are, does that mean California's collection numbers would be lower when compared to other states for the same kinds of users?

Unfortunately, California does not track information on what kind of entity is sending covered products to the collectors. The only clue that it's used more by businesses than consumers is a 2006 report, from early in the California program, written by the National Center for Electronics Recycling (NCER) which stated that California state agency staff had "observed **e-waste from business sources as reported more commonly than e-waste from residential, government or non-profit.**"¹

Covered Products – What products are eligible for free recycling?

The second major difference between state programs that might account for differences in volumes is the categories of products they accept for recycling. California has a fairly small scope of products (only

¹ NCER Meeting with Shirley Willd-Wagner, Jeff Hunts, California Integrated Waste Management Board; Richard Parrott and Jim Van Gundy, Board of Equalization, August 3-4, 2006. [Link](#)

TVs, monitors, laptops, and portable DVD players) compared to some other states. So how might that skew the California collection numbers?

Figure 3: “Covered Products” In Top 10 States: What can resident recycle for free?

	State	Per Capita Rate	Computer	Laptop	Monitor	TVs	Printer	FAX	Scanner	Mouse	Keyboard	DVD player	VCR	Others	Monitors and TV comprise what percent of products collected?
1	Vermont	7.7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					82%
2	Oregon	6.9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									93%
3	Wisconsin	6.83	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			73%
4	Minnesota	6.62	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				Not tracked
5	Washington	6.30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									92%
6	Maine	5.6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							Games Digital frames	95%
7	California	5.54		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	Portable			Not tracked
8	Rhode Island	4.55	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									Not tracked
9	New Jersey	4.53	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								Not tracked
10	South Carolina	3.92	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								Not tracked

It appears that it probably doesn't skew California's numbers very much. When you look at the data that some states provide that break down their collection volumes by product category, as shown in Figure 3, it shows the TVs and Monitors comprise the bulk of what's coming back in states, even if they cover more products. It accounts for over 90% of the volume in Oregon, Washington, and Maine, and over 70% in Vermont and Wisconsin.

For more information on the volumes of e-waste coming back in state programs, see our fact sheet: [How much e-waste is collected in states with electronics recycling laws?](#)

For more information on state e-waste laws: <http://www.electronicstakeback.com/promote-good-laws/state-legislation/>