

STRUGGLING STATE-BY-STATE

IT'S NO SECRET THAT A NUMBER OF STATE-MANDATED ELECTRONIC SCRAP RECOVERY PROGRAMS ARE ENCOUNTERING ROUGH WATERS. A POLICY EXPERT LAYS OUT WHERE THE STATE PROGRAMS WENT WRONG AND HOW THEY MAY BE ABLE TO RIGHT THE SHIP. **BY RESA DIMINO**

At the dawn of the 21st century, managing scrap electronics became a critical policy issue, particularly at the state level. Fifteen years later, with half of U.S. states having programs in place to collect material, some are struggling to keep pace with the changes in the e-scrap landscape. Concern among state officials is growing and talk is turning to the need to update those programs to meet today's challenges. In the worst cases, states are seeing e-scrap collection networks shrink, raising questions about program viability.

Most concerning, community collection programs are finding themselves at risk. "If we don't fix it in 2015, we are going to have to stop collecting e-waste next year," said one Illinois county-level solid waste director.

What led us to this spot? And what are the specific proposals to deal with the complex issues facing state efforts?

The birth of programs

Around 2000, states began to recognize end-of-life electronics as a fast-growing, costly and sometimes-toxic portion of the waste stream – a portion that would require an approach different from that taken to manage conventional waste streams. When the Product Stewardship Institute (PSI) asked states to name their biggest waste problem in 2000, respondents consistently put electronics at the top of the list.

From 2003 to 2010, 25 states passed laws to encourage the recycling of scrap electronics. Although firm before-and-after statistics are not available, these laws have clearly sparked a surge in scrap electronics recycling in the U.S. They have also fostered the development of an extensive retail take-back

network at national chains like Best Buy and Staples as well as at nonprofit entities like Goodwill and Salvation Army. State laws vary as to the types of electronic products they cover and the way they structure collection. However, 23 laws rely on electronics manufacturers to fund the recycling infrastructure for products at end-of-life – a model known as extended producer responsibility, or EPR. (The two states relying on alternative systems: California, which adopted a consumer-funded advanced recycling fee, and Utah, which focused on education.)

Many of the state EPR laws don't include detailed program requirements for manufacturers, and these states are among the poorest performers, as measured by pounds of e-scrap collected per capita (see chart on page 16). The states that do have detailed requirements tend to rely on one of two approaches.

States that use *convenience standards* require manufacturers to operate enough collection sites in the state to meet a specific standard of convenience for consumers wanting to properly dispose of their electronics (e.g., one site per county and one for every community with a population greater than 10,000). In these programs, government typically ensures accountability and coordination by contracting for the management of a statewide collection network, paid for by the manufacturers. The contractor is required to manage the collection network, arrange for the recycling of all electronics collected by the network and then distribute the costs among manufacturers. The contractor must also provide recycling services at no cost to the collectors. In most states with convenience-based systems, manufacturers can “opt out” by creating their own robust network, but most companies do not.

States that use *performance standards*, on the other hand, provide each manufacturer with a target of how much e-scrap it must collect, and this figure is usually expressed as a number of pounds, based on either a percentage of the manufacturer's sales or its share of a statewide goal. In states with performance goals, a manufacturer's main obligation is to pay for the collection of its assigned amount of e-scrap, although the laws are not always clear whether the manufacturer is required to cover the full cost of collection and processing. Policymakers intended for performance goals to provide an incentive to manufacturers, either

working individually or in groups, to support a robust and convenient collection network.

As programs have matured, some have enjoyed smooth sailing. The most stable and effective programs – in Oregon, Vermont and Washington, for example – are driven by convenience standards. These programs, in which government plays a strong role in contracting for recycling services, tend to support a robust infrastructure with year-round financial support, regardless of the volumes collected.

Some states that rely solely on performance standards, however, are experiencing turbulent seas. They include Illinois, Minnesota, New Jersey, New York, Pennsylvania and Wisconsin.

The problem with pounds

To put it simply, in states relying on performance standards, manufacturer funding has not covered the full cost of e-scrap recycling.

Instead of supporting robust collection networks through open-ended arrangements, manufacturers often pay for the collection and recycling of only the amount of e-scrap they are required to collect. Sometimes they pay contractors enough to cover the full cost of collection and processing, but sometimes they do not. Once manufacturers meet their goals, which is sometimes midway through the year, their financial support for e-scrap collection dries up, hurting both local governments and the e-scrap firms that service them.

What's causing that situation? One issue is that in some performance-standard states, manufacturer quotas are based on the weight of electronics sold, and new products are getting lighter every year. So while the weight of e-scrap collected in a state may fall only slightly (old electronics aren't getting any lighter), the performance target is falling fast.

Take Wisconsin as an example of what a weight disparity can look like. In the program year ending in June 2014, the manufacturer target in the Badger State was 28.4 million pounds – nearly 10 million pounds less than the amount of e-scrap collected. This means increased costs to consumers and local governments as they attempt to pay for e-scrap disposition.

Lightweighting is only part of the conundrum, though. The CRTs found

in obsolete TVs and monitors typically make up 60 to 80 percent of the weight of e-scrap returned through state programs, and they are extremely costly to manage responsibly because previous markets for recovered CRT glass have dried up as manufacturers have shifted to LCD and other technologies.

“It's a perfect storm,” explains Walter Alcorn, the Consumer Electronics Association's vice president of environmental affairs. “The CRT markets and peak CRT returns, combined with struggles between the local recyclers, who typically service local government collectors, and the national recyclers, who provide compliance services for manufacturers, put enormous stress on the system.”

Many states have experienced instability in their CRT efforts and e-scrap collection systems. And recycling companies have incurred a wholly unexpected cost that is getting passed on to local governments and other collectors, and, in some cases, to the public.

According to E-Cycle Wisconsin's annual program report for 2014, “Unless manufacturer recycling targets are updated, the collection and recycling system funded by manufacturers will no longer meet the electronics-recycling demand of Wisconsin households and schools, particularly in rural areas of the state.”

Reduced access for residents

The lack of funding in some performance standard states has translated to reduced access to collection sites, and as the Wisconsin report indicated, rural areas are most vulnerable because they garner low volumes that must be transported long distances to collection and processing facilities. “With fewer manufacturer dollars in the program,” says Sarah Murray, Wisconsin E-Cycle program manager, “all the electronics out there are not getting covered.”

Wisconsin is not alone. “Somewhere along the way the program dynamics – between collectors and recyclers, and recyclers and manufacturers – changed,” says Walter Willis, executive director of the Solid Waste Association of Lake County in Illinois. “When the program began, we had interest from multiple recyclers, and no-cost or revenue-generating year-to-year contracts,” he explains. “This year, my agency will spend 10 percent of

our reserves to keep the program going. If we don't fix it in 2015, we are going to have to stop collecting e-waste next year."

Since the players in e-scrap EPR programs – local governments, collectors, processors and manufacturers – have different needs and interests, coordinated implementation of collecting and recycling scrap electronics is challenging. Finding straightforward fixes to program problems also becomes difficult.

"Manufacturers tend to manage their recycling obligations in these states like they manage their supply chain – tight controls, few vendors, maximum efficiency," says CEA's Alcorn. They seek out national recycling firms that can provide broad, multi-state compliance services. Meanwhile, local governments and collectors often work with smaller, regional players with whom they have long-standing relationships.

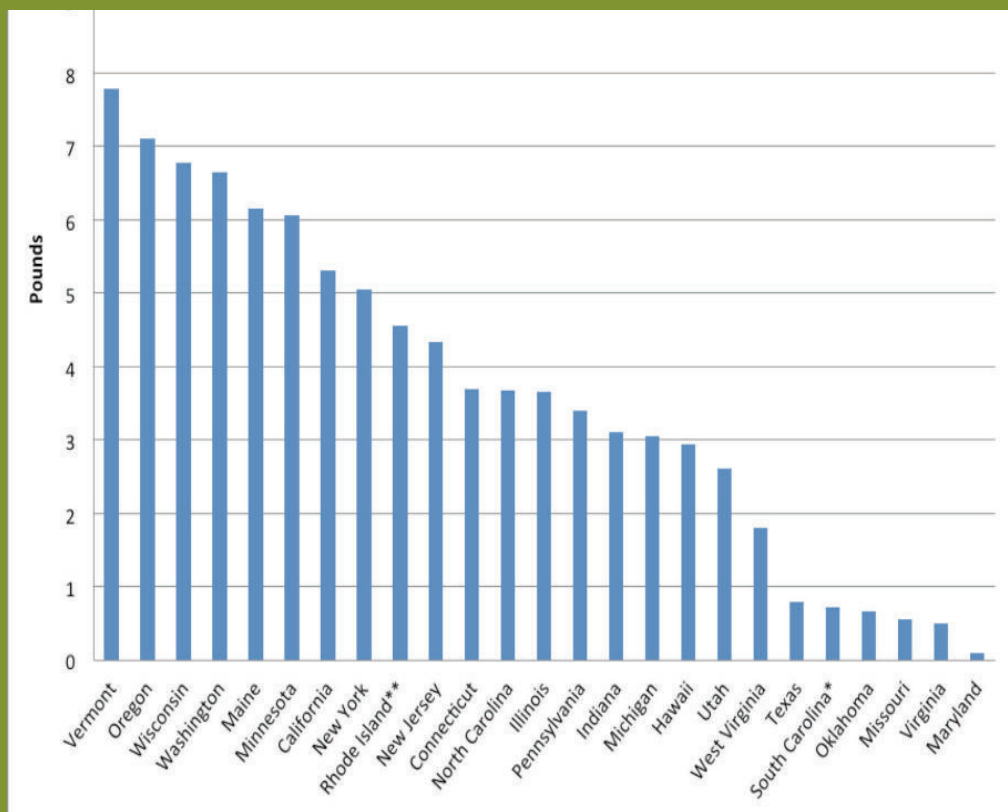
But some industry voices have raised concerns about that model.

"One of the risks of EPR programs is that they can force the recycling market into a few players' hands, limiting competition and encouraging monopolistic action," notes Eric Harris, director of government and international affairs for the Institute of Scrap Recycling Industries. "Most small- and medium-sized companies are being displaced as manufacturers gravitate toward larger, regional recyclers."

The larger recycling companies that have manufacturer agreements aren't always interested in servicing some community collection sites. And the small, local recycling companies that have traditionally served these communities are no longer being funded by manufacturers, so they are now charging fees to local governments and other collectors, which squeezes collection efforts that were built on no-fee approaches.

Many states reported initially robust

E-scrap collection volumes per capita in states with recycling laws, 2013



Note: This chart presents available data on program collections performance, but does not provide an "apples to apples" comparison as the covered products and covered entities (residents, businesses, schools, etc.) vary from state to state.

Source: Electronics Recycling Coordination Clearinghouse

* 2012 data

** 2011 data

collection networks developing at no or low cost to local governments at the time their laws came into place. No more: Collectors in New York, Illinois and other states are still bidding out e-scrap recycling services, but the bids they are getting are coming with a significant price tag. "We are willing to take on our share of the costs – providing collection sites," explains Willis of Lake County in Illinois. "But we expect the EPR program to provide no-cost recycling services."

Officials have confirmed collection networks are shrinking and public access to e-scrap recycling is being sacrificed.

"The number of collection sites has gone down," says Wisconsin's Murray, "and we are seeing fewer events." The same dynamic is playing out in Illinois and New York as e-scrap firms drop collection sites.

Charting the waters

Most stakeholders agree that, at least in Illinois, New York and similar states, the storm is raging. The debate now is how to best weather that storm and which policy options offer the best chance at smooth sailing as markets evolve and dynamics change. The issue at hand is trying to figure out who pays for what when it comes to program improvements.

Some state laws, like those in Illinois and New York, explicitly state that consumers should have free e-scrap recycling, with manufacturers expected to foot the bill. But those laws don't say that local governments and other collectors are necessarily free from chipping in to the costs of collection and processing. Local governments are arguing that the intent of the laws is for manufacturers to fund the costs of recycling end-of-life electronics.

Recycling companies and manufacturers argue that end-of-life fees, whether assessed to collectors or consumers, should stay on the table, at least until the CRT crisis has subsided.

“EPR programs put a downward cost pressure on the market, making it tough for recyclers to make a profit,” argues ISRI’s Harris. “Take New York as an example. Recyclers are collecting more CRT glass than OEMs are willing to pay for, and they [recyclers] are prohibited from charging [consumers and businesses] to make up the difference. Are we really saying that recyclers should be the ones to take a loss and pay for consumers and businesses’ recycling cost?”

One possibility would be to write legislation or enact policies that demand more from manufacturers. Boosting manufacturers’ performance targets should increase manufacturers’ funding of the collection system. While they may not solve all of the issues, such increases will help alleviate the immediate financial pressures and give states and stakeholders time to consider broader structural fixes. But electronics industry representatives say their pockets are only so deep.

“Historically, [the consumer electronics] industry has been viewed as a piñata,” says CEA’s Alcorn. “Whack us with some legislation and the candy comes out.” But today in the TV and IT business, sales are declining. “We’re running low on candy, so we’re not playing that role anymore.” He adds electronics makers spend \$100 million per year on EPR programs in the U.S. While critics may say that is not enough, Alcorn says such a price pill is tough to swallow when sales are down.

Some observers would like to see more government oversight in the states that rely on performance standards, to avoid some of the cost shortfalls that are being reported. “One of the biggest misnomers within state and local governments is that EPR programs require less oversight and enforcement,” says ISRI’s Harris. “This is absolutely incorrect. By statute, we’ve required the fox [OEMs] to guard the henhouse [collection and recycling]. Now we need policymakers to bring the farmer [government] back in with the shotgun to straighten this out.”

Deal with CRTs first?

Since CRTs are creating the major stress points on the e-scrap recycling systems,

maybe states need a CRT specific solution. Recycling companies and manufacturers argue that the costs and challenges of managing CRTs are so different from other electronics that they warrant a different approach. States like North Carolina, South Carolina and Texas all have programs that treat TVs and IT equipment differently. The current debate in those states centers on whether EPR is even needed for the cost-neutral or valuable products in the stream. “Moving forward,” says ISRI’s Harris, “we shouldn’t be afraid to ask the following: If the used electronics device has a positive value, like laptops, CPUs and game consoles, and a recycler can handle it at no charge, do we even need EPR, or anything more than a disposal ban?”

On the other hand, government stakeholders and recycling advocates question whether some products’ positive value is enough to cover their collection and transportation costs. And they point out that markets are variable; what has a positive value today may be negative five years from now.

Wisconsin’s Murray asks a question many of her colleagues in other states are also grappling with: “How do you craft a law that stands the test of time, as market conditions change?”

Finally, of course, there’s the question of political will – once the right path is defined, will it be implemented? Some are encouraging policymakers to look at EPR more broadly, noting that manufacturer take-back is one of many possible approaches to EPR, and that eco-fees (consumer fees paid at point-of-sale) and other options should be considered.

States begin to set the course

In Michigan, New Jersey, Pennsylvania and Wisconsin, state agencies have convened stakeholders to discuss the challenges they face and potential solutions. Michigan and Wisconsin are still early in their processes. Pennsylvania’s Department of Environmental Protection, meanwhile, has issued “Guiding Principles” for the program. Collectors and recycling companies are reportedly pursuing legislative solutions in New Jersey. And Minnesota has introduced legislation to effectively increase its performance goal.

In Illinois, the Illinois Product Stewardship Council has championed legislation to increase the performance

goal (from 50 percent of the weight of a manufacturer’s prior year’s sales to 80 percent) and ensure that local governments are offered cost-neutral collection (i.e., not subject to fees for service) by recycling companies working on manufacturers’ behalf.

Stakeholders in New York, convened by the New York Product Stewardship Council and facilitated by PSI, are exploring mechanisms for increasing the state performance target and tightening up convenience standards and better regulating CRT management. The working group includes representatives from local governments, ISRI, CEA and the Natural Resources Defense Council.

The NYPSC/PSI work group has made several short-term recommendations. One is for New York’s Department of Environmental Conservation (DEC) to clarify manufacturers’ responsibilities and the state’s expectations related to compliance. To that end, DEC recently issued a letter to manufacturers with obligations in that state that reads, in part:

“A manufacturer’s annual acceptance standard, provided by the Department, sets the minimum acceptance standard amount a manufacturer must collect to avoid a surcharge. Stopping acceptance once this minimum acceptance standard is met, contracting with program partners to collect only this minimum acceptance standard amount and then ceasing collection, or purchasing weight indiscriminately from electronic waste recyclers/brokers to meet this minimum, is not consistent with the intent of the Act, and fails to meet the Act’s requirements of providing a continuous and convenient collection program.”

This shot across the bow can certainly be read as a warning. It’s unclear whether New York will take enforcement action or be challenged by manufacturers that interpret the law differently. What is clear is that DEC wants to see things change.

Can we cooperate?

At the end of the day, most state and local governments are not ready to let the e-scrap EPR ship sink. Yet few seem interested in the major structural changes needed to transform performance-target programs into ones that resemble the more centrally managed, convenience-centric models. Such changes often involve greater government involvement, and policymakers in performance standard

states are largely standing by their original aims to avoid high levels of government engagement.

The most likely outcome in the short term is that performance goals will be increased and CRT management will be placed under greater scrutiny through stronger regulation of CRT movement and transparency into CRT management practices. In the long term, states may look to more government-intensive, convenience-driven centralized approaches to EPR.

Finding the best course through this storm and toward smooth seas will require continued dialogue, like the NYPSC/PSI work in New York, to identify solutions that facilitate efficient and effective e-scrap collection. Coordination among states would be wise, since their problems are similar, and would benefit manufacturers and recycling interests as well. **ESN**

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