



Batteries initiative faces tough challenges

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Seeking to stave off new government mandates, four large makers of household consumer batteries are preparing to launch a national program to collect their spent products for recycling. But can this voluntary initiative be viable?

[Last week](#) [1], the Corporation for Battery Recycling — a nonprofit entity formed by battery makers Duracell, Energizer, Panasonic and Rayovac — announced that it was seeking a business partner to run a national recycling program for batteries.

Marc Boolish, the president of the CBR and technology manager at Energizer, told *E-Scrap News* that the single-use battery industry has long been looking into the viability of large-scale recycling of its products. What has kept these companies from initiating a battery recycling program were a series of life-cycle assessments (LCAs) that concluded recycling batteries produced a negative net environmental effect, due to the transportation impact and the amount of energy used to process them, he says. Recycling batteries also yielded low-purity materials, according to Boolish.

In 2007, Boolish says the quartet of companies began examining the North American market more closely and found that it was possible to recycle batteries on a large scale while producing a neutral, or even a positive, environmental impact. In 2010, an [LCA](#) [2] conducted by the Massachusetts Institute of Technology Materials Systems Lab found that batteries could be recycled in a way that generated a net environmental positive. The LCA was released a year later, and the CBR was formed.

Also motivating these companies was an update to extended producer responsibility [legislation](#) [3] in California that would require battery makers to manage the collection and disposal of their products. California's 2006 battery stewardship law does not currently require manufacturers to operate a collection system, but it does require them to incorporate the cost of recycling into their products.

"We wanted to get in front of [the legislation]," says Boolish, although he emphasized that the favorable LCA was one of the main drivers of the program.

This isn't the first time an industry has preempted legislation aimed at making it responsible for disposing products. According to Bill Sheehan, the executive director of the Product Policy Institute, shortly after a wave of states enacted laws establishing deposits for beverage containers, lawmakers set their sights on rechargeable batteries and passed bills that made manufacturers of these products responsible for collecting and recycling them.

In response, the Rechargeable Battery Recycling Corporation was created in 1994 by five battery companies and launched Call2Recycle, a program that collects rechargeable batteries in the U.S. and Canada for recycling. Since 1996, it has diverted 70 million pounds of rechargeable batteries from the waste stream and established a network of 30,000 public recycling drop-off locations.

But despite its successes, RBRC faces some criticism.

"RBRC has these glowing cheering reports every year, and there's always an increase in the number of pounds of batteries collected," says Sheehan. "You can make a good story about how many more pounds you collected than last year, but it doesn't cut the mustard in terms of the benefit to the environment if more and more are still being discarded."

According to Sheehan, the big problem with RBRC is that they only report the weight of what they collect for recycling and not the percentage of batteries recovered. Sheehan says that, when placed under closer scrutiny, the actual percentage of batteries on the market being collected by the RBRC is in the range of 10 to 20 percent.

Scott Cassel, CEO of the Product Stewardship Institute, says that RBRC is an "exemplary model" that has great communication and great participation by retailers. However, he also says the percentage of batteries on the market being captured by the RBRC is low.

Carl Smith, CEO and president of the RBRC, says that collection of batteries is different from other consumer goods because they are used by consumers for years at a time and devising a metric to measure recovery efforts for them gets very complex. Instead, the RBRC just seeks to collect more batteries each year than it did the previous year.

"What I think everyone can agree on is that we ought to collect more," Smith says.

During the lead up to the formation of the CBR, [a summit](#) [4] was held in Dallas last year to get feedback from manufacturers, retailers, environmental organizations and government entities on how to execute the program. Among them was Rob D'Arcy, hazardous materials program manager for the County of Santa Clara in California and then board president of the California Product Stewardship Council.

"One of the pet peeves I have, and one that's always demanded of government, is measurement," says D'Arcy. "How do you measure what you've done and what do you measure against? So one of the things I have pushed very hard for is transparency in collection goals. And you have to start from a place that tells you how much is out there."

Recycling rates don't mean anything unless you know how much is out there to collect, according to D'Arcy, and his point seems to be taken.

The CBR hopes to collect at least 20 percent of household batteries five years after the program launches in 2013 and 40 percent in 10 years, based on what's on the market using a three-year rolling average, says Boolish.

After being founded, the CBR launched six "foundation programs" in counties that have battery recycling programs to get a better sense of what's being done, according to Boolish.

Santa Clara County was one of those counties, and D'Arcy praises the CBR for complementing the work the county was already doing to collect batteries for recycling. So far, the CBR's program is projected to save the county \$50,000 a year by taking over the transportation and recycling of alkaline batteries, he says.

"I really have a good feeling that they're pursuing this for all the right reasons," says D'Arcy. However, some concerns about the CBR remain.

Cassel, while generally supportive of the effort, says that the CBR could be more transparent in the methodology and data that went into the LCA that is foundation of the soon-to-be-launched national recycling program.

"They are interested in engaging, but they are asking others to trust them with data on which they are making big decisions," he says. "One assumption can change the result [of the LCA]."

Sheehan also questions whether a voluntary stewardship program for a relatively low-value product can be effective, based on experiences with the RBRC as well as similar initiative for mercury-containing thermostats.

"We have not seen a voluntary industry-lead initiative reach the high rates of recycling that we have seen with legislative programs," says Cassel. "It's not to say it can't be done, but there's no precedent."