Profitable recycling programs have historically relied on robust secondary markets for growth. The resale of aluminum, paper and plastic has driven recycling success. Today, another factor has entered this formula – product stewardship – or, as some have put it, you must “take back what you make.” Government-mandated product stewardship affects the whole value chain in recycling, from education to pricing, from collection to processing. Recent developments in consumer batteries serve as one example on how product stewardship has changed these dynamics.

The Rechargeable Battery Recycling Corporation (RBRC), known as Call2Recycle, has voluntarily been collecting, sorting and processing used rechargeable batteries since 1994. The rechargeable battery industry set up RBRC as a way to take responsibility for the end-of-life of batteries while keeping unnecessary costs out of the process. It has worked, and more than 60 million pounds of batteries have been collected and recycled. But now a transformation has occurred from what was first a purely voluntary program, and then to a government-mandated solution and, now, to product stewardship. The transition has not always been easy. This article will speak to the effect mandates for products stewardship has had on the Call2Recycle program and what this ever-increasing trend might mean to similar recycling efforts.

Is it a commercial enterprise?
The best processors of recyclables have been spawned by entrepreneurship – very bright and ambitious people committed to a successful business. While product stewardship mandates encourage more recycling, it may not be on the terms most familiar to processors.

For several types of materials, prices charged to consumers and payments to processors are regulated. Advanced deposit fees (ADFs) are often a negotiation with state legislators or regulators. For example, Stewardship Ontario, a private non-profit organization, sets fees for transport and recycling of batteries and not the open marketplace. Also, many e-scrap laws in the U.S. often specify how much consumers may be charged for recycling services.

But recyclers must openly operate. In almost every instance of a government-mandated product stewardship program, the state or province requires program audits, en-
Environmental compliance audits and annual reports. Some of the information required is often considered confidential by the recycler, although many jurisdictions are willing to find ways to preserve some confidentiality. British Columbia has recently developed a program intended to focus reporting and audits on outcomes, yet the cost of compliance is still not trivial.

For a voluntary product stewardship program, Call2Recycle has had to develop more internal administration functions to meet the myriad of reporting and auditing requirements. Paperwork is commonplace for programs and processors yet the inexorable move to product stewardship has redefined the relationships that they have had with stakeholders. Pricing, operations and performance are much more public and political.

Educating the consumer
Most product stewardship programs invest heavily in developing and establishing the required infrastructure to capture, sort, transport and process materials. Collection programs and the manufacturers that sponsor them have considerable expertise in the reverse logistics and compliance requirements of waste diversion.

But the well-kept secret behind product stewardship policies is that collection and recycling infrastructure is by no means the most critical part of a program. Collection performance depends heavily on educating consumers and changing their behavior. Infrastructure alone rarely equates to recycling performance without aggressive education. Without an educated consumer, performance goals cannot be attained, which often means more government scrutiny and, in some jurisdictions, penalties for non-performance.

At Call2Recycle, we spend approximately 30 percent of our revenue on education activities ranging from special collection events to educating retailers. We’ve learned that mass communication is not cost-effective nor is imposing details of collection onto consumers. Any education won’t do. It has to be highly-targeted, embarrassingly simple and attached to broad environmental considerations. The recent trends to product stewardship have often overlooked the importance of public education.

Even when the consumer knows that a material ought to be recycled, behaviors don’t necessarily change. The vast majority of consumers know that newspapers and aluminum cans should be recycled, but a great percentage of consumers still don’t.

The performance of product stewardship programs (and recycling efforts in total) will always be constrained by the ability to compel change in consumer behavior.

The impact on product design
Ardent supporters of product stewardship believe that placing financial responsibility on product manufacturers to ensure disposal of their products will inspire manufacturers to redesign products with disposal in mind. The evidence to support this belief is mixed.

Certainly, many product manufacturers have focused on reducing the amount of packaging included in the shipment of product but the strategy often saves them money along with conserving resources. Domestic battery manufacturers almost entirely eliminated mercury from its products in the 1990s, but were not prompted by product stewardship mandates.
As long as the product stewardship mandates do not change producer fees based on the design of the product, product stewardship programs will not have a great impact on product design. Yet, rating the environmental sensitivity of product design is a very bumpy road that few if any want to travel.

Too much noise in the marketplace

The Internet age has brought us the ability to communicate about almost anything, to anyone, at any time. Environmental messages surround and engulf us. Product-specific recycling messages are often lost in the cacophony of related messages, particularly when they include specific guidance on how best to take back or recycle specific products or materials. In the midst of all the noise, product stewardship programs are organized by specific materials and products, and must continuously fight each other to capture the mind share of consumers.

The way in which product stewardship has been organized tends to muddy communication. First, there has to be a unifying, overall messaging strategy under which product-specific education can occur. This is often lacking in the marketplace. Second, there are often opportunities to create messaging synergies amongst products and materials that are collected and recycled. An example is batteries and its relationship with the products that they power. Finally, product stewardship programs are often so fixated on their own collections that they have difficulty simplifying messaging on what behaviors must be adopted.

This issue will only become worse as more and more materials are required to be recycled. And there is little prospect that the issue will garner much attention.

Leadership from municipalities

Local government budgets are terribly stretched, exacerbated by the recent economic turmoil that has caused budgets to be cut. Yet the amount and diversity of materials that local governments have been mandated to collect is increasing at a rate much greater than they can absorb.

One of the most persuasive arguments for product stewardship is that it can relieve some of local governments’ huge financial burden of managing collection and recycling. As such, the priority of materials designated for product stewardship programs are most often the materials that show up at local municipal household waste streams, and not necessarily the ones that most need to be recycled.

In those cases where product stewardship has been implemented, municipal governments have had the tendency to divorce themselves from not only their financial responsibility, but also other related roles that are critical to product stewardship success. Local governments remain the most credible resource of information on waste management – abdicating this role impedes success of product stewardship. Local governments also must decide how best to collect materials within their jurisdiction. Their knowledge of their communities can never be fully replaced by any manufacturer-driven program.

The necessity of continuing a “shared responsibility” approach to product stewardship falls particularly on municipalities which simply cannot transfer authority to obligated stewards and expect the program to run effectively.

Product stewardship forces public/private partnerships in the design of programs and education of consumers in order to optimize results. These relationships should be distinguished from most traditional forms of municipal waste management which are built on a regulatory model. The concept of “zero waste” – central to most product stewardship efforts – is new, exceptionally difficult to achieve and there is little understanding of how to maximize results. The nature of product stewardship simply requires collaboration, which relatively few jurisdictions have thus far embraced.

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