

Recycle British Columbia's Extended Producer Responsibility for Packaging and Paper: An Assessment of Its Impact



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Executive Summary

Extended producer responsibility (EPR) is a mandated form of product stewardship under which producers are responsible for the post-consumer recovery and recycling of a product. Theoretically, an EPR program shifts the cost of residential recycling from taxpayers to product manufacturers. In response, advocates believe manufacturers would create more easily recyclable and less toxic packages and products.

In the United States, most EPR laws cover products that are hard to recycle or have hazardous constituents or both. However, interest exists to extend EPR to traditional residential curbside recyclables such as packages and paper products. Much of this interest is prompted by current negative market conditions for many of these recyclables and the existence of a program in the Canadian province of British Columbia.

This white paper looks at how EPR for packaging and paper products works in practice and focuses on the experience in British Columbia. Packaging and paper products are the most diverse of all products potentially subject to EPR laws. The number of manufacturers and retailers, the types of products in the marketplace, the multi-material nature of many of those products, the supply chain with differing distribution channels and the evolving impact of e-commerce all create a particularly challenging form of EPR. What appears to be a relatively simple concept is highly complex in its execution.

Recycle British Columbia (RBC), the British Columbia packaging and paper producer responsibility organization, reports high recovery rates at a modest cost. However, a lack of transparency makes it hard to evaluate those claims. Recovery data is inflated because free-riders — those who are not paying to participate in the RBC program, including some e-commerce companies and small generators — are not included in the universe of available recyclables, even though their products are collected for recycling. In addition, no tonnage data is provided for any type of recovered recyclables.

Cost data is similarly underestimated and lacks transparency. Instead of paying 100% of a local government's recycling collection costs, RBC pays an incentive fee covering what it estimates is a reasonable recycling cost. As a result, its cost data fails to include local governments' actual recycling collection and administrative costs. Local governments are upset over this failure and the lack of transparency in calculating that fee. RBC cost data also fails to include the costs incurred by packaging and printed paper companies to comply with RBC's fee structure and reporting costs. Those costs are simply passed on, without notice, to consumers. The impacts of these extra costs fall most heavily on lower income citizens. And finally, as in Europe, the British Columbia program has had no impact on packaging design.

March 2019

Introduction

Extended producer responsibility (EPR) is a mandated form of product stewardship under which producers are responsible for the post-consumer recovery and recycling of a product. In Europe, EPR is widely used to manage electronics and packaging. In the United States, 33 states have passed 86 EPR laws, most of which cover products with hazardous constituents such as mercury, or are hard to recycle, or both. No state has imposed EPR on traditional curbside recyclables such as packaging and paper.¹

In Canada, by contrast, over 120 provincial EPR programs exist with only one province, Alberta, having none. British Columbia has the most EPR programs with 19 stewardship agencies managing 22 stewardship plans.² British Columbia is also home to Recycle British Columbia (RBC), originally known as Multi-Material British Columbia. RBC is the only EPR program under which producers cover the “full” financial and managerial responsibility for residential recycling of packaging and printed paper.³ Four other provinces have EPR programs for packaging and paper under which companies and local governments share the cost of recycling.⁴ Advocates of EPR programs for packaging and paper products in the U.S. point to RBC as the model for EPR in this country.

The remainder of this paper will focus on EPR for packaging and paper, using the RBC program as the primary example. The word “package” will generally be used to cover both packaging and paper products.

Why EPR?

EPR advocates often cite the Organization for Economic and Cooperation and Development (OECD) for the “why” behind EPR. According to the OECD, EPR shifts the responsibility from the municipality and general taxpayer towards the producer. Theoretically, because it is now responsible for those additional costs, the producer has incentives to incorporate environmental considerations into the design of its products,⁵ though OECD’s 2015 review of EPR did not find this to happen in practice.⁶

How Does EPR Work?

EPR laws require producers to take “responsibility” for the end-of-life management of their products. In all cases, this responsibility applies to their collection, processing and recycling. Individual producers can assume “individual” responsibility or join together for “collective” responsibility.

In the individual responsibility model, each company directly manages the end of life of its product. This approach has inherently higher costs and a higher environmental impact due to the number of small, individual programs and their inability to achieve economies of scale. As a result, it is rarely used. However, it has the advantage of directly assigning responsibility to individual producers with a better chance that EPR goals will be met.

The high cost of individual responsibility causes producers to opt for the collective approach. In this case, they join a producer responsibility organization that is responsible for managing the collection, processing and sale of their discarded products. This collective approach allows costs and the environmental impact of collection and processing to be shared among a wide array of producers. In some cases, this is based on the company’s market share or a similar factor. In other cases, a fee is levied upon each producer based on an assessment of the cost to recycle that company’s packaging and paper products.

Theoretically, consumers will notice higher costs for products under EPR and will change their purchasing decisions to reward products with lower stewardship costs. However, in practice, those costs are simply hidden in the purchase price of the product, making it impossible for consumers to compare environmental costs among different products.

What is Unique about EPR for Packaging and Paper?

EPR laws in the U.S. cover products such as mercury thermostats, automobile switches, mattresses or carpet. They are easily defined and have a limited number of “obligated parties,” such as manufacturers and retailers. These products lack both a robust collection and processing infrastructure. By contrast, while packaging and paper products have a robust collection and processing infrastructure, they are an extraordinarily diverse universe of thousands of different packages and products that vary by type, composition, weight and volume and that have a very large number of “obligated parties”. As a result, packaging and paper product companies join a producer responsibility organization that will manage recycling for them.

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What Does a Producer Responsibility Organization Do?

Under the collective responsibility model, a producer responsibility organization arranges for the collection and processing of the covered materials. For curbside recyclables, the organization determines what it believes to be a reasonable collection cost. It then contracts for the processing of the collected recyclables. Marketing the recyclables is usually the processor’s responsibility. This organization is usually responsible for recycling education and promotion.

The product stewardship organization also defines each specific package and paper product along with its different components. It then assesses a collection and processing cost for each of them. Those costs are determined by consultants hired by the producer organization. The producers in turn, pay that cost.

What is Recycle British Columbia?

Recycle British Columbia is the packaging and paper producer responsibility organization for British Columbia, as authorized by the Ministry of the Environment in April, 2013. At the time, RBC was known as Multi-Material British Columbia.⁷ RBC does not actually recycle anything, instead it arranges for the collection and processing of residential recyclables.

Is RBC an Independent Organization?

No. RBC is a not-for-profit Corporation⁸ governed by a four person Board of Governors.⁹ RBC, however, is effectively a subsidiary of another organization, the Canadian Stewardship Services Alliance (CSSA), which appoints the RBC Board of Directors.¹⁰ As noted in RBC’s Annual Report, “The Organization’s board of directors consists of 50% (2016 - 67%) who

are also members of the CSSA board of directors and CSSA has the ability to elect board members; therefore, the CSSA board of directors has control over the Organization.”¹¹ In other words, even though RBC is incorporated as an independent non-profit, it has always been under the control of a third party. This use of the same directors by separate organizations creates an interlocking directorate through which one organization can control another seemingly independent organization.

CSSA, is “a national, not-for-profit organization, founded in 2012 to provide efficient administrative and management services that are common to all stewardship programs.”¹² As part of this relationship, RBC entered into a Management Service Agreement with CSSA for administrative and technical support and other services. In 2017, RBC paid CSSA \$6.3 million for these services (note: all dollar references in this paper are in Canadian dollars). CSSA also manages the packaging stewardship programs in Manitoba, Ontario and Saskatchewan through its provincial subsidiaries along with an Ontario program for several household hazardous wastes and a national program for oil filters, empty oil containers and antifreeze and empty antifreeze containers.¹³

Why is RBC the Primary Packaging and Paper EPR Organization in British Columbia?

RBC argues that bigger is better because it gives economies of scale and economical efficiencies. The British Columbia Ministry of the Environment appears to agree. In 2016, the Ministry rejected an application from a potential competitor in part over concerns about the impact of competition on the existing organization.¹⁴

This raises an obvious question: Is Recycle British Columbia too big to fail? This organization controls all aspects of residential recycling in the province. In essence, the province put all of its recycling eggs into one basket.

In a narrow sense, RBC is not the province’s sole organization managing curbside recyclables. Beverage containers are subject to a deposit and specifically excluded from EPR. Encorp Pacific (Canada) is responsible for managing those containers.¹⁵ The Brewer’s Recycling Container Council manages the recovery of beer-related packaging and printed paper such as cardboard cases sold with glass bottles and boxboard cartons sold with metal cans.¹⁶ Most of them are returned by consumers when they redeem their container deposits.¹⁷

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In addition, the province recently authorized News Media Canada as the stewardship organization for newspapers.¹⁸ This decision resolved a conflict in which the newspaper industry refused to participate in RBC on the grounds that its costs would drive smaller papers out of business and could prove a crippling cost for larger newspapers. Instead of paying a fee, newspapers provide in-kind advertising. Just as happened before this decision, newspapers continue to be collected and processed by RBC as mixed paper.

RBC’s monopoly status in British Columbia is not unique. Most countries with nationwide EPR packaging laws have a single collective responsibility organization in charge of recycling those products. A few countries, preferring not to have a sole producer responsibility organization and a desire to encourage competition, have more than one organization.¹⁹

Who are RBC's Members?

RBC members are “organizations that supply packaging and paper to BC consumers, as defined by the Recycling Regulation. These obligated materials generally encompass the materials that are provided to consumers and are taken home for recycling or disposal.”²⁰

1,290 companies are either registered (“an organization or company that is resident in BC and is either a brand owner, first importer or franchisor that supplies obligated packaging and/or paper products to residents (household consumers)”²¹ or voluntary (“a brand owner not resident in British Columbia who supplies packaging and/or paper product into the province and has elected to assume responsibility for its material.”²²) Registered status is by far the most common.

Originally, EPR was to apply to all BC companies that supplied packaging and paper. However, an uproar from small businesses led to the creation of an exemption for businesses that have less than \$1 million in annual revenues, or supply less than 1,000 kg (one tonne) of packaging and paper product to BC residents, or operate as a single point of retail sale and are not supplied or operated as part of a franchise, a chain or under a banner, or are a registered charity.²³

What are RBC Members Required to Do?

Members, or “stewards” as they are often referred to, are required to “report the quantities of obligated materials they supply into the BC marketplace each year and pay fees based on supplied quantities.”²⁴ Then they are required to send quarterly checks to cover the cost of collecting and processing those materials. “Low-volume” stewards that supply less than 15,000 kg a year can pay one of four flat fees ranging from \$600 to \$6,000. If they choose, however, those stewards can instead submit what RBC calls its “detailed annual report.”²⁵

How Much Do Members Pay in Fees?

RBC reported \$83.4 million in revenue from fee payments in 2017.²⁶ The 2019 budget estimates fee revenue will be \$98 million.²⁷ The increase is driven by higher supply chain, promotion and education costs.²⁸ The supply chain cost increase is probably driven by the collapsed value of markets for residential mixed paper due to the market turbulence provoked by the Chinese ban on their importation.

Paper and glass products pay less on a cents per kilogram basis, while plastics pay more. Packages with plastic laminates pay the most.²⁹ Paper and glass products are likely to pay more on a per unit basis because of their heavier weight. Moreover, given the very lightweight nature of individual plastic products compared to that of printed paper and glass, the difference in total payments is unlikely to cause a switch in products. Countries with packaging EPR programs continue to see increases in flexible packaging with plastic laminates, in spite of the seemingly higher fee. The reality is that savings in production and transportation of those products, along with extended shelf life, easily outweigh the additional costs of EPR fees.

The amount of detail required for each specific package and paper product leads to hairsplitting distinctions between elements of a product. An item as seemingly easy to define as newspaper offers an insight into the complexity of defining the different types of products and the difficulties in reporting this data. Newspapers might seem to be the daily paper delivered to the house or bought in a store. For purposes of compliance with EPR in British Columbia, however, “newspaper” subject to the law is defined as “the main body of a newspaper comprising the news and other sections” which includes “advertising printed within these sections. Printed paper may also include magazine type paper.” But, the newspaper producer is not responsible for “flyers or other inserts that are separate from the newspaper itself” or for “samples, merchandise, or other promotional

items which may be distributed alongside or within a newspaper.” The former are the “direct responsibility of the owner or licensee of the trademark under which the flyers are circulated (i.e. the advertiser)” while the latter are the direct responsibility of the advertiser or brand owner.³⁰ It is understandable that one producer does not want to pay for another producer’s product. Nonetheless, defining specific packages and paper products, and assessing collection and processing costs, is a highly complicated procedure.

How Do Members Pay Their Fees?

First, a company determines if it is an obligated company and, if so, how much to pay. To help them, RBC has a 77 page manual (located on the CSSA website)³¹ which lays out who is eligible to be a steward, what products are covered and how to figure out the fee. Instructions for figuring out the fee cover a mere 20 pages while the list of “national products” (for the four provincial programs that are CSSA subsidiaries) runs 24 pages. Companies are also responsible for the cost of reporting. For a large retail or national consumer product company, preparing and then maintaining a complete list of packages and paper products by size, weight and composition will be costly. Even for a smaller company, this is an additional expense. The company pays for audits performed by CSSA, justifying disputed packaging classifications with CSSA and reporting changes to the composition, number, size and weight of its packages. These compliance costs are not included in RBC’s calculations of the cost of its program, yet they are a very real and hidden cost of EPR to consumers.

If a company qualifies to be a steward, it must sign a “voluntary” agreement that designates RBC as its agent.³² If the company chooses not to join RBC, it becomes the responsible steward for its designated products. To date, no companies have exercised this option.

Do All Obligated Companies Participate in RBC’s Program?

No. Like all EPR programs across the globe, RBC has an ongoing problem with so-called “free riders.” These are companies subject to the EPR requirement that either purposefully or accidentally don’t participate in the program and do not pay their EPR fees. To combat free riders, RBC’s web site requests information on unregistered stewards.³³

Most of the data on this problem arises from longer-established EPR programs for electronic products. A recent OECD report “Extended Producer Responsibility (EPR) and the Impact of Online Sales” highlights this problem. The report notes, “One of these issues is free-riding of producers or retailers, which the fast expansion of online sales in recent years has been exacerbating. Online sales are creating new free-riding opportunities as consumers are able to buy more easily from sellers in other countries. These sellers often have no physical, legal entity in the country where the consumer resides, and are not registered with national or local EPR schemes. The consequence is that they avoid producer and retailer/distributor obligations and costs.”³⁴ It further estimates that free riders produce 5-10% of the electronic products covered by OECD country EPR laws.³⁵

Do Members have Input into the Operation of RBC?

No. When people think about EPR, they often imagine a group of producers working together to find better ways to manage the recycling of their products. This might actually be the case in an industry with a small number of producers such as mercury thermostats. However, RBC has almost 1,300 stewards. Getting them into one room to discuss how to improve recycling would be a daunting challenge. Instead, CSSA hosts a yearly Annual Stewards Meeting via webinar for its four packaging and paper EPR programs, including RBC.³⁶

RBC has an Industry Advisory Committee which “serves as a forum through which BC stakeholders with an interest in the success and performance of Recycle BC’s program are kept informed about program developments and through which they can be consulted for advice and feedback.” The Advisory Committee has nine members. It meets up to four times annually. Two of the members represent nongovernment organizations, three represent local governments and four represent business.³⁷

For all practical purposes, a member’s relationship to RBC is to calculate and pay their fees. They write their check and pass the cost of the fee along with other costs of generating data and undergoing audits to consumers who have no idea they just paid for recycling.

Which Packaging and Paper Products Does RBC Collect?

RBC collects most but not all packages at the curbside. British Columbia has a 10 cent beverage container deposit law that covers soft drinks, juice, water, wine, coolers and spirits. Encorp, the corporation responsible for collecting the containers, claims a 75.8% return rate in 2017.³⁸ The deposit law provides the advantage of keeping glass beverage bottles out of RBC’s collection and processing materials.

RBC has two options for non-deposit glass containers. Those bottles can be taken to drop-off depots or placed in a separate bin for separate collection from other recyclables (if that service is offered). RBC cites the contamination of paper and other recyclables by broken glass as the reason for this decision.³⁹

Plastic bags and expanded polystyrene packages are also collected at depots instead of at curbside.⁴⁰ Nonetheless, they still end up in recycling bins, causing contamination problems.⁴¹

Like most recycling programs, RBC does not collect all paper products. Paper towels, tissues and napkins, along with paper bags with a foil or plastic layer and cardboard boxes with wax coating, such as empty boxes made available for residents to transport their groceries home in, are not accepted.⁴²

How Does RBC Provide for Collecting Recyclables?

RBC supports curbside and multi-family residential service for 71% of the British Columbia population and depot access to 98% of the province.⁴³ It prefers dual stream collection but some municipalities continue to use single stream collection. All programs are required to collect the same types of recyclables.

For single-family housing, RBC uses curbside collection and depots. Local governments can collect curbside recyclables or hire a private contractor. This is by far the most common approach. Thirteen communities, including Vancouver, receive service directly from contractors hired and paid for by RBC.⁴⁴ Local governments or private contractors collect from multi-family housing. Finally, local governments, non-profits and private companies can operate depots.⁴⁵

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How are Packages and Paper Recyclables Processed for End Markets?

RBC contracted with a newly formed company, Green by Nature, to manage its post-collection system. Green by Nature was formed by Merlin Plastics, Cascades Recovery and Emterra Environmental.⁴⁶ Thirty-three facilities receive, consolidate and transfer packaging and paper to eleven pre-conditioning facilities that prepare paper products for end markets.

Essentially, all paper collected by RBC is sold as mixed paper, the lowest value market for paper. Paper from dual stream programs is not sorted at the consolidation facilities but instead is baled and shipped to markets. This is done to save sorting time and money.⁴⁷ This is an unusual strategy given that dual stream MRFs in the United States routinely sort through paper to eliminate contaminants. Claims by RBC that its mixed paper has “comparatively low contamination rates”⁴⁸ cannot be verified.

Paper collected in single stream programs is sorted to eliminate contaminants. In addition, pre-conditioning facilities can sort paper from single stream programs to pull out old corrugated paper if market prices justify additional screening and if the facility has screens for old corrugated containers.⁴⁹ The reliance on mixed paper markets has created financial problems for RBC as its contracted processors scramble to find end markets.⁵⁰

The receiving and pre-conditioning facilities are operated by contractors to Green by Nature. Containers from the pre-conditioning facilities are sent to a container recycling facility owned by Merlin Plastics (a partner in Green by Nature) where they are sorted into eight different categories including aluminum, steel, aseptic and five grades of plastic.⁵¹ The container recycling facility has a capacity of more than 33,000 tons (or 30,000 tonnes).⁵² RBC states that 70% of the tonnes collected by the program are in the paper category.⁵³

Who are RBC’s End Markets?

RBC does not reveal its end markets by name. In its 2017 annual report it states, “While the vast majority of Recycle BC’s plastics are directed to end markets in the province of British Columbia, our mixed paper, including paper, boxboard, newspaper and cardboard, has historically been sold to Chinese markets.”⁵⁴ At the 2018 Annual Steward meeting, held four months after the annual report was issued, CSSA noted “the reduced demand for commodity materials and significantly reduced prices and affected program revenues.”⁵⁵ In its 2017 Annual Report, RBC says it continues to ship paper to overseas markets, plastics are sold to end markets in BC (except polystyrene foam to China and Spain), glass also goes to BC end markets and metals mostly go to end-markets in Ontario, with the rest either remaining in BC or going to end markets in the United States.⁵⁶ RBC does not provide any information about tonnages of recyclables sold. Claims that all collected residential mixed paper goes to end markets cannot be verified.

The Chinese ban on imports of mixed paper and mixed plastics has had a negative impact on Canadian and American recycling markets. Markets in the United States, however, will be benefitting from increased domestic markets for these materials. To date, seventeen paper mills have announced plans to expand capacity to use recycled paper. This expanded capacity is in the United States and northern Mexico.⁵⁷ Similar market expansions have not been announced in Canada.

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Does RBC Cover the Full Costs of Collection?

No. RBC claims to be the first fully funded residential packaging and paper product recycling program in Canada.⁵⁸ Advocates of this type of EPR program say the cost of recycling is transferred from local governments to producers. This is only partially true.

In order to “transfer costs from taxpayers to producers,” RBC pays an “incentive” fee to local governments that covers what it believes is the reasonable cost of collection. The fee is calculated by RBC’s consultants based on their analysis of collection costs. The fee is paid on a per household basis to local communities. Local governments with higher costs than the incentive fee pay the difference. For instance, testifying in favor of EPR at the August 30, 2016 hearing of the Connecticut Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste, the Cariboo Regional District noted that its incentive payment lowered but did not eliminate its recycling costs.⁵⁹

Thirteen local governments have completely turned over recycling collection to RBC. In those cases, RBC hires and pays a contractor. In the same Connecticut hearing, the City of Vancouver stated that it turned its collection service over to RBC because its costs were outpacing RBC payments by \$4 million.⁶⁰

The failure of the incentive fee to cover the true cost of recycling is a sensitive topic for local governments in British Columbia. RBC is currently preparing a plan to be reauthorized as the sole provincial packaging and paper stewardship program. The organization noted in its summary of the October 2018 stakeholder consultation discussions held with stakeholders in advance of preparing its five-year reauthorization bid, “local governments expressed dissatisfaction with the incentive rates provided for depot and curbside collection, stating that they are not sufficient to adequately cover their operating costs as required by the Recycling Regulation. They also contend that Recycle BC does not provide a transparent methodology for calculating the incentive rates as required by the Ministry in its recent guidance document”.⁶¹ In response, RBC agreed to have the next cost study overseen by its Advisory Committee and to conduct it in 2020, not 2021.⁶² It did not say when new fees might take effect.

None of this should be a surprise. Producer groups, whether in Europe or North America, don’t cover the “full” cost of a recycling program for a simple reason. They want to keep costs down. As a result, they will decide what a reasonable cost is and pay accordingly.

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fee. Fewer collection points in multi-family housing lead to a lower per household fee. Finally, depot collection is paid to local governments, not-for profits and private companies on a per tonne basis.

Cities that use taxes to pay for residential recycling are not required to lower taxes when they receive incentive payments. As a result, their residents pay twice. First as consumers, then as taxpayers.

RBC claims an overall cost of \$414 per tonne and \$39 per household.⁶³ This does not include the costs incurred by local government that are not covered by the incentive fee. Nor does it include compliance costs for RBC members. Therefore, the true cost of recycling and processing in British Columbia is higher when local government and producer compliance costs are included. In addition, a transparent model where residents can see recycling costs on a monthly waste services bill, is now a nontransparent model of hidden costs. Moreover, the impact of these costs falls disproportionately on lower income residents.

Does EPR Achieve its Recycling Goals?

Measuring recycling rates between countries is very difficult. Even in the United States, measuring between states and cities is an “apple to oranges” comparison. Different countries have different laws regulating what constitutes municipal solid waste, what should be recycled, which sectors are covered by recycling requirements (e.g., just residential or also commercial), what constitutes packaging, etc. Generally speaking, European countries tend to have higher packaging recycling rates than those found in North America.⁶⁴

But those recycling percentages do not include printed paper. Rates are higher in northern European countries and lower in eastern and southern Europe. RBC claims a 75% recovery rate.⁶⁵

Plastics have proven challenging to collect and recycle under EPR. RBC reports a 41% recovery rate for plastics in 2017 with a 50% goal for 2025. The organization notes that achieving that goal will require “intervention,” such as increased targeted education or innovations in processing techniques or new end markets.⁶⁶ However, without increased consumer participation, the new technology and markets will likely be for naught. European countries are also struggling with plastic recycling. The European Commission recently issued a report, “Advocating a New Strategy for Plastic in a Circular Economy” that decried the amount of plastic litter and marine debris generated in Europe and urged better and more harmonized separate collection and sorting with the goal that plastic packaging achieve similar recycling rates as competing packages by 2030.⁶⁷

Are EPR Recycling Rates Accurate?

Recycling rates are notoriously hard to calculate. Accurate rates require both an accurate numerator (the amount of recyclables collected) and an accurate denominator (the amount of generated recyclables subject to collection). Any EPR producer organization should not have a problem tracking the amount of materials it recycled. However, all EPR organizations base their recovery rate on the tonnage of generated products reported by its stewards. Unless every single producer belongs to the organization and accurately reports its generation data, this will not be the actual amount of products generated. Instead, the recovery rate will be inflated due to an inaccurately low amount of reported generated materials.

Every RBC annual report has defined the amount of packaging and paper products generated in British Columbia as “the amount reported by stewards.”⁶⁸ That number is the denominator. In 2017, that was 234,847 tonnes.

Yet, the 2017 Consultation Report included comments made at a two-day workshop in November of that year. The “Three Years of Recycle BC Data — Workshop Feedback” included the comment that “Analysis of the single family and multi-family garbage streams suggest 30kg per capita of residential PPP could be misplaced in garbage stream each year. If Recycle BC is recovering 40.7kg of residential PPP per capita, the recovery rate could be as low as 57%, rather than reported 78% rate. This information should be reviewed to determine what additional materials could be recovered.”⁶⁹ The report noted that this comment received several votes of agreement at the workshop. If correct, it implies the free rider and e-commerce problem is severe and that a considerable amount of packaging and paper products are being generated but not reported.

CSSA is sufficiently concerned with this issue to raise a red flag in its 2018 Stewards Annual Meeting report. Addressing this issue, CSSA stated, “While programs everywhere struggle with this issue, it is important to explore viable options for reducing the financial burden on resident companies” and noted it is seeking “preliminary recommendations for achieving greater compliance in Canada and identify economic and legal experts who could develop and assess potential options.”⁷⁰ For example, Amazon is a registered steward with RBC, yet what about its third party sellers and other e-commerce companies?

What Does RBC Leave Out of its Recycling Reports?

EPR programs often fail to provide complete transparency on their tonnages. RBC, for instance, does not divulge the percentages or tonnages of package type, resin type or paper products collected or recycled. Instead, tonnages for all materials are consolidated into one recovery number in its Annual Reports. This lack of transparency hinders the ability to analyze its collection and processing efficiency and undermines confidence in the accuracy of the recovery reporting.

RBC, for instance, does not divulge the percentages or tonnages of package type, resin type or paper products collected or recycled. Instead, tonnages for all materials are consolidated into one recovery number in its Annual Reports. This lack of transparency hinders the ability to analyze its collection and processing efficiency and undermines confidence in the accuracy of the recovery reporting.

RBC’s recent submission of its five-year reauthorization request includes some detail on what it recycles. According to the report, paper is its most recycled material (87%), followed by glass (72%) and metals (66%). Rigid plastics have a 50% recovery rate and plastic film 20%. Plastic packaging is not broken down by resin type or product. “Metals” lumps together aluminum and steel packages. “Paper” does not differentiate between newspaper and other types of paper. No tonnages are supplied.⁷¹ This information must be known by RBC because Green by Nature claims to “precisely monitor the details and movement of each of the twelve material types tracked in the system.”⁷² Since the container recycling facility sells five different types of plastics along with aluminum, steel and aseptic packages, the data for those materials, along with mixed paper, should be easy to produce.

This issue was raised by stakeholders during the recent consultation process. RBC reported that, “Widespread support was expressed for Recycle BC’s proposal to report more detailed material-specific recovery rates

including recovery rates for paper, plastics, metal and glass, as well as the plastics sub-categories of rigid plastics and flexible plastics. However, some stakeholders requested further disaggregation in material-specific performance reporting.⁷³ RBC gives no reason for its lack of transparency.

Another failure of transparency in this area lies in its reporting of revenues and expenses. In its 2017 Statement of Operations, RBC lists two revenue sources: member fees totaling \$83.4 million and investment income of \$76 million. No revenue from sales of recyclables is shown. By far the biggest expense is “material management” costs of \$61.3 million.⁷⁴ Note 8 in the Notes to the Financial Statement describes these costs as “all costs related to the collection, transportation and processing of materials managed through the program, net of credits for indexed value of commodities processed.”⁷⁵ No other mention is made in the report of revenues from the sale of recyclables. No discussion is made of the “indexed value”, what it is based on and how it fits into the Green by Nature contract. The note implies that RBC’s costs of collection and processing fall \$61.3 million short of the revenue its processor generates from the revenue generated from the sale of recyclables.

Does EPR Lead to More Recyclable or Less Toxic Packages?

No. The collective responsibility model stifles any need to make a package more easily recyclable or less toxic. This fact is conceded by EPR advocates. For instance, as noted in a report from the organization EPR Canada, “from its beginning over 20 years ago, EPR has been viewed as an environmental policy instrument that would provide incentives for producers to improve the environmental footprint of their products throughout the product life cycle. However, the OECD’s review of EPR in 2015 sadly confirmed that design for the environment improvements attributable to EPR have been few in number and anecdotal at best.” The authors

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go on to note that one of the challenges facing EPR in this area is companies that simply pass on the cost of EPR to their customers as a cost of doing business. In most cases, these costs are never seen by the consumer and do not differentiate products based on their end-of-life-recyclability or over all environmental performance.⁷⁶

The irony of the last comment is that packaging EPR laws, in fact, fail to differentiate products based on recyclability and overall environmental performance. In fact, they actively discriminate against lightweight products that are hard to recycle but still have a lower environmental footprint than their recyclable competitors. EPR is simply a recycle-or-die approach to materials management that is uninterested in sustainable materials management and achieving the lowest environmental footprint.

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British Columbia may well be too small to influence packaging recyclability. If BC were a part of the United States instead of Canada, it would be the 25th largest state in population, between Alabama and Louisiana. Even the population of the three west coast states is far less than that of the European countries with EPR laws. Yet, as noted above, EPR has not improved the recyclability of packages in the European Union, whose population is almost 200 million more than the United States.

As for toxics, the Toxics in Packaging Law banned the intentional introduction of lead, mercury, cadmium and hexavalent chromium into packaging. This law was developed in 1989. Because packaging is an interstate business and this law was adopted by nineteen states, including Washington and California, it has a national impact. The European Union followed the lead of these states and Connecticut and eighteen other states and adopted this law.⁷⁷

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Conclusion

EPR can be successful for hard to recycle products and those with hazardous constituents. Packaging and printed paper, however, are far more complex materials. EPR programs for these commonly recycled materials fail to meet the anticipated goal of product redesign. While some costs are transferred from local government to manufacturers, many local governments find their full costs are not covered by the EPR program. In addition, taxpayers often end up paying twice, both as taxpayers and as consumers, with the burden of this double payment falling most heavily on low income consumers. Establishing a producer responsibility organization in a state, province or country, that is exempt from anti-trust laws and fails to be transparent in its operations, creates more problems than it resolves.

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About the Author

Chaz Miller's career in waste and recycling spanned four decades with stints at the US EPA Office of Solid Waste, the Glass Packaging Institute and the National Waste and Recycling Association. He testified on waste and recycling issues at Congressional and state hearings and spoke at conferences throughout North America. He was a plenary panel speaker at the UN Zero Waste Conference in Tokyo and spoke at a paper recycling conference in China. His paper, "From Birth to Rebirth: Will Product Stewardship Save Resources" was named Best Paper at the 19th Fall Meeting (2011) of the American Bar Association Section of Environment, Energy and Resources.

Although he is now retired from full time work, he consults and continues to write his award-winning column "The Circular File" for Waste360 and to speak at waste and recycling conferences in the United States and Canada. He is a member of the Board of Directors of the Maryland Recycling Coalition. He is also Chair of the Montgomery County, Maryland, Aiming for Zero Waste Task Force.

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