



Extended Producer Responsibility White Paper Series: Separating Fact from Fiction

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EPR, which tasks the producers or first importers of a good with the physical and financial responsibility of managing a good at end of life, has gained significant traction in recent years. Several jurisdictions in the United States, including Maine, California, New York State, Oregon and Washington have all tabled some form of EPR legislation and are looking to fast track its adoption in response to what is perceived as a growing waste crisis.

Increasingly, a diverse range of stakeholders including local governments, packaging producers, waste service providers etc. are recognizing the role that producer responsibility can play in promoting recycling and a sustainable waste management system. Given the conceptual premise of EPR, ensuring that producers who make a product, ultimately bear the financial and/or physical responsibility for managing it at end of life, it is easy to see why EPR is being championed. EPR is often touted as a “fix” to a broken recycling system, and many proponents of EPR policy point to Canada as being an example of where producer responsibility has worked effectively.

However, not all EPR approaches are created equal – in fact, the impact (economic, environmental and social) of producer responsibility is very much contingent on how it is implemented, and how we choose to define the goals of a waste management system. This collection of papers undertakes an examination of extended producer responsibility (EPR) legislation, with a specific focus on EPR for printed paper and packaging.

While the purpose of this article series is not intended to be a commentary on the efficacy or appropriateness of EPR policy as a whole, it does examine some of the common claims that are made by advocates of EPR for packaging. Using the experiences gleaned by Canadian jurisdictions to date, this article will try and separate “fact from fiction” with respect to whether EPR policy is working as intended. The most salient findings from these studies include:

“Extended Producer Responsibility saves tax payers money”

The potential for EPR to transfer costs away from the municipal tax base and onto the producers of packaging is probably the biggest “sell” for EPR to the general public. In Ontario, when the Ministry of the environment, conservation and parks (MOECP) made the announcement that the province would transition to a 100% EPR model, it was accompanied by a press release touting increased recycling rates and lower taxes for Ontarians.

Under the proposed legislation, packaging producers will be responsible for an additional \$135 million dollars in program costs – costs that were previously the responsibility of the municipality under Ontario’s shared EPR model. The underlying intuition behind the tax savings hypothesis is that municipalities will pass this \$135 million in savings onto households, through a direct reduction in property taxes/utility rates. While this would be an optimal scenario, there is no empirical evidence to suggest that this will be the case.

Municipalities (particularly in a post COVID world) are grappling with significant budgetary shortfalls and are in all likelihood going to take the funds “saved” from transitioning to producer responsibility and re-allocate those funds to other programs and services. In British Columbia, which currently operates under a 100% producer responsibility model, there was no historical data to suggest the transition to full producer responsibility had resulted in a tax savings for households. In fact, property taxes in the

province had increased for 9 consecutive years, with no discernable change in property taxes in the period immediately following the transition to 100% EPR.

While there is an argument to be made that producer responsibility allows municipalities to reallocate funds (previously used to provide recycling services) to support other programs and services that benefit households, these benefits are indirect and do not offset the increase in packaging costs that are attributable to EPR.

“Extended Producer Responsibility does not affect the price of packaged goods for consumers”

As a tangent to the previous point, advocates of EPR often contend that there is no appreciable impact in the cost of living attributable to the transition to full producer responsibility. In a recent Newsday article discussing the potential adoption of EPR for packaging in New York State, Senator Todd Kaminsky (NY) was quoted as saying the effect of EPR on raising consumer prices was “infinitesimal, not anything anyone would notice.”

While it is unclear where this assertion originates, proponents of EPR often cite a report by RIS that found that the price of packaged goods in jurisdictions with EPR, were not materially different than package good prices in provinces without EPR (<https://www.oregon.gov/deq/recycling/Documents/rscRRSconsumer.pdf>). This ultimately led to the conclusion that the adoption of EPR had a negligible impact on product pricing – a finding that has been parroted repeatedly in conversations surrounding the adoption of EPR legislation for packaging.

However, in a review of the RIS methodology conducted by York University, it was found that the way in which the study was conducted was methodologically flawed and could not be used to provide any insights into whether EPR affects the price of packaged goods (either positively or negatively). When faced with this critique, RIS acknowledged the limitation of the study and stated that controlling for exogenous variables that affect product pricing was outside of the study scope. Unfortunately, in failing to control for the litany of variables that can affect prices, particularly across localities, then no conclusions can be drawn regarding the relationship between EPR and package pricing.

Given the confusion surrounding what role (if any) the adoption of EPR has on the of goods for consumers, York University undertook its own study examining how the adoption of 100% EPR for packaging under the proposed Blue Box legislation would affect package prices in Ontario. While the methodology and full study findings can be found at the following link: XXXXX, the key takeaways were that the adoption of EPR for PP&P is that not only are costs downloaded onto to the consumer, but the adoption of 100% EPR was shown to increase the price of packaged goods by between 5% and 12% (depending on locality). Costs borne by the consumer were both “direct” (an increase in fees directly translates into a proportional increase in packaging costs) and “indirect”(cost escalation resulting from producers passing costs onto the consumer resulting from an increase in their funding obligation).

The economic and social impacts of this are potentially enormous, as the university’s study found that lower income families are disproportionately affected by increases in packaging costs, as they purchase more prepackaged goods as part of their weekly groceries. While the ultimate intent of producer responsibility is to have stewards absorb the costs for end of life management, it is ultimately a form of regressive policy that simply transfers costs to the consumer. Alternatively, producers who choose to absorb costs without passing them along to consumers will be faced with the threat of job losses,

contraction, re-location (i.e. Heinz) or other adverse economic outcomes. In many ways, proposed producer responsibility legislation for packaging waste is an example of “robbing Peter to pay Paul”, - in an attempt to force producers to pay their fair share of end of life costs, it ultimately results in consumers picking up the tab.

Extended Producer Responsibility encourages design for the environment

One of the primary drivers behind the adoption of producer responsibility for packaging waste, in addition to being a mechanism to force producers of waste pay for the management of waste, is that it is intended to encourage “design for the environment”. By forcing producers to bare the end of life management costs (in the case of printed paper and packaging, recycling costs) and meet recycled content quotas, the expectation is that producers will design their packaging in such a way that is more readily recyclable given existing infrastructure.

Unfortunately, the goal of a waste management system shouldn't be recycling – in fact, it never has been. Referring to the principles of the waste management hierarchy – waste reduction is preferred to reuse, and reuse is preferred to recycling. When examined through that lens, the package light weighting phenomenon that is often framed as being detrimental to the environmental performance of a system, can actually be seen as a net benefit. While light weight packaging such as composite and flexible plastic packaging has been characterized as a negative due to low levels of recyclability, most life cycle analysis studies demonstrate that the “upstream” environmental savings (resulting from a reduction in material used, efficiencies in transportation and logistics and increased shelf life) significantly offsets the environmental impact of being unable to recycle those materials.

Given the proliferation of light weight packaging that has occurred over the past five years, one could argue that producers are already developing more sustainable packaging. However, the issue is that most people (both policy planners and the public) conflate recycling with sustainability – if it can't be recycled, it must be bad.

Existing and proposed EPR legislation incents recycling (and in some instances, takes punitive measures towards materials that have low levels of recyclability), but offers no credit for the waste reduction that is achieved. In many ways, the existing approach may result in an environmentally and economically perverse outcome, where producers “switch back” into heavier, but more recyclable packaging.

Also of note is that EPR legislation for packaging has not resulted in higher recycling rates over time – despite repeated claims that it has. A recent report prepared by RRS examined the relationship between EPR legislation for packaging and overall recycling rates - the study found that jurisdictions who implement producer responsibility have, on average, higher recycling rates than those that don't. British Columbia in particular was touted as being particularly successful, enjoying recycling rates well in excess of 70% for residential packaging waste. While this may seem like a

“Extended Producer Responsibility leads to higher recycling rates”

A direct increase in costs are shown in how the fee model works. Any increase in recycling system costs are re-distributed to obligated materials in direct proportion to that materials share of overall costs. In Ontario's case, the additional \$135 million dollars in program costs that stewards are now obligated for

are immediately translated into an increase in fee rates, which in turn, are built into the price of packaged goods.

Indirect costs are slightly more difficult to quantify, but are based on a log linear adaptation of an input/output model used to quantify the economic and labor impacts of waste management activities. Our adapted model attempts to isolate the specific impacts of increases in waste management costs on consumption baskets.

While the materials in the accompanying document describe this model in greater detail, increases in costs borne by producers can manifest in the following ways: 1) costs being passed directly onto the consumer in the form of increased prices or a reduction in product size 2) costs are internalized, but results in reduced investment, job losses, company contraction etc. 3) some combination thereof (most realistic outcome).

What few people seem to recognize is that the potential increase in costs borne by the consumer are multiples higher than the direct increase in the steward obligation. As an example, if producers collectively reduced their investment in the province by \$135 million dollars, the overall impact on the economy is north of half **a billion dollars in both direct and indirect costs (as per the input/output multiplier).**

An Industry owned and operated recycling system will lead to lower recycling costs (Fiction)

An argument this is made in favor of steward lead EPR programs (where producers assume responsibility for the entire system), is that they have a greater ability to control costs relative to municipalities, as they are not bound by geographical boundaries.

This is a logical fallacy for a number of reasons. The foremost issue is that there is no evidence to suggest that stewards are more efficient at operating a recycling program or containing costs. Recycle BC, which is often touted as a best practice model of steward lead EPR, has experienced the highest increase in year over year recycling system costs of any province in the country. In the past 3 years, recycling system costs have increased by more than 45%. The purported benefits of cost containment by stewards can only be achieved if there is a coordinated effort that represents the collective interests of all obligated stewards. However, due to the sheer number of participants (that vary in size, sector and locality), most stewards are largely passive participants in the Recycle BC program.

A comment made by ministry staff that “Private industry has always claimed to be more efficient than government” is a bit of a half-truth. Private companies who operate in the same space/sector as a government equivalent is often claimed to be more efficient. However, handing producers the reigns to the Blue Box is not the same thing – this isn’t a situation where the Waste Managements, Emterras and GFLs of the world are being compared to municipal waste management operators. This is a situation where we are asking major CPG companies to take control of the waste management system. By their own admission , most packaging companies have no clue how to operate an efficient waste management system. They will in all likelihood have to engage in individual contracts with waste service operators (both private and municipal) who are managing the programs now, but with the added administrative costs of having to coordinate multiple companies with multiple contractors.

There is a term in economics that we refer to as “communication externalities”. Efficiency of communication and coordination becomes more difficult as a greater number of participants enter the

system, particularly if participants are of unequal size, power or do not have access to the same information. Communication externalities are often sufficient to completely deter cooperation all together. This is a very real risk as producers take over the system, particularly because they lack a common voice or entity that represents their collective interests.

A 100% EPR program for packaging will encourage innovation and lead to new end use applications and end markets for difficult to recycle materials

There have yet to be any examples in Canada where stewards have been able to develop new end markets or viable end use applications for composite and light-weight materials. While there have been “one off” situations where producers have worked collaboratively with the waste service providers to capture and recycle a specific materials (i.e. Green Mountain and Recycle BC partnering to recycle the K-Cup).

The above example highlights the issue with this line of reasoning – in the absence of a relationship that is site and situation specific, stewards do not and should not have the ability to disrupt commodity markets. If a material inherently has value, the market will signal that this material should be captured, and that there will be an end market willing to purchase that material. If commodity markets dictate that a material has nominal or no value, then attempting to collect and recycle that material will result in a significant cost, with virtually no benefit. Unless there is prescriptive recycled content legislation that mandates the use of that material in new products (which may or may not have technical barriers), then the only use for that material will be in bespoke recycling solutions that are more novel than practical.

At present, recycling markets for composite and light weight plastics remains virtually non-existent, and it is unlikely that stewards will be able to change that in the near term.