



Stakeholder Workshop

Informing a Strategic Approach to Data Collection & Reporting for Canada's Plastics Packaging Value Chain

WORKSHOP PRE-READ

WORKSHOP OVERVIEW & OBJECTIVES

The Canadian consumer packaged goods (CPG) industry faces data challenges and gaps as it strives to achieve reductions in overall packaging waste alongside carbon emission reduction goals. Reporting on plastics usage, disposal, and the ensuing environmental impacts is increasingly cost and time-consuming, driving the industry to explore best practices and a strategic approach to plastics data collection and reporting.

In November 2023, the Canada Plastics Pact (CPP) and Circular Economy Leadership Canada (CELC) produced a Discussion Paper focused on [*Improving Data Collection, Reporting & Transparency within the Plastics Packaging Value Chain*](#).

The objectives of this 90-minute virtual stakeholder workshop, taking place on **April 11, 2024**, are to:

- Present the highlights of this Discussion Paper
- Discuss the key issues and findings from various perspectives across the plastics packaging value chain
- Discuss the important considerations for advancing a strategic plan for addressing the challenges and key issues

The virtual workshop will be split into two parts:

- **Part 1** will seek to understand whether the issues have been framed correctly by engaging with different stakeholders and perspectives of the plastics value chain. It will also provide a platform to hear feedback on any nuances that may have been missed by the Discussion Paper and need to be considered.
- **Part 2** will include a presentation by Policy Integrity sharing findings and gaps from their recent data study, which is connected to plans by CPP and other stakeholders to develop a data strategy aimed at addressing some of the issues and challenges identified in the discussion paper. Part 2 will also include a breakout session to explore how we can advance the conversation and find solutions.

BACKGROUND INFORMATION

Plastics packaging data are being collected by stakeholders across the value chain for different purposes ranging from understanding how much plastic packaging is supplied, collected, and ultimately recycled at a macro level; monitoring the health and safety of plastics use; litter sources and deposits; local waste management system effectiveness; and internal environmental, social, and governance (ESG) goals, including reducing GHG emissions.

While there is a myriad of data being collected, it isn't being collected and compiled in a way that provides stakeholders with a systems level view of how various forms of plastic packaging flow through the economy. As a result, it is difficult to use the data to fully understand plastic packaging sources and sinks, as well as specific issues and opportunities for their improved management. It is even more difficult for actors along the chain to use the data to inform strategic decisions that could improve plastics packaging management, from packaging design to program and policy design.

Policy Integrity has identified five significant gaps – underlying the issues CPP and CELC identified in their Discussion Paper – that hinder Canada's ability to understand the success and short-comings of plastic packaging management Canada-wide.

The section below provides a summary of these gaps, along with a few examples of tools and/or solutions that could be used to fill these gaps. The CPP, CELC, and Policy Integrity are seeking input from participants at the April 11 virtual workshop on the following 2 questions:

1. **Are there any significant data gaps** (in addition to the list below) that have not been identified and/or additional context that may be missing to explain some of the root problems associated with data management?
2. **What solutions** (e.g., technologies, standards, and/or processes) should be explored to fill the identified gaps? Consider solutions that may be relevant to **one or more** specific data gaps (specific or general / over-arching).

SIGNIFICANT DATA MANAGEMENT GAPS & EXAMPLES

GAP 1: Lack of Systems to Enable Chain of Custody for Data Flow ([see also Appendix A](#)).

There are two key limiting factors governing the flow of information in Extended Producer Responsibility (EPR) systems:

- For both downstream and upstream material management, the flow of information moves under contractual agreements (i.e., contract to contract). In all cases, the entity with verifiable recyclability/recycling related data (i.e., the upstream data regarding material composition or final downstream data regarding the post-consumer recycled resins manufactured and marketed) is not the Producer Responsibility Organization (PRO). Further, the entity with verifiable upstream data on the packaging's material composition might not even be the regulated producer. For the PRO to access this information, there must be information that flows through a cascade of contracts. For packaging with more than one component (e.g., body, label, and attachment), then the cascade of contracts would need to be in place to track each of these materials to their source / final disposition.

- For downstream material management, loads of recyclables originating from different sources are not processed separately. Instead, materials collected from different feedstocks or sources are mixed together at reprocessing facilities as they move through various processing lines. This provides economies of scale and homogenizes feedstock inputs in the manufacturing of PCR. Once combined, the relative recyclability of one feedstock versus another becomes significantly more difficult if not impossible to track.

Examples of Potential Solutions: Tools that enable chain of custody of material specific information across contracts. For example, for food grade packaging, tools akin to that required to obtain a Certificate of Compliance for Food Grade Packaging.

GAP #2: Lack of Data Validation and Verification Requirements and Processes Available Along the Value Chain

Regardless of whether it is a producer collecting upstream manufacturing information about the 'recipe' for the packaging, or a PRO collecting downstream reprocessing information, the flow of information crosses borders. There are different legal systems governing how data is measured, managed, and how it can be shared. Producers and PROs might be able to negotiate auditing of their Tier 1 (or immediate) contractual relationships, but it would be unlikely they would be able to negotiate the right to audit data held by others along the value chain who are not directly contracted to them (i.e., Tier 2, 3, and 4 data holders). As a result, producers and PROs are challenged with how to verify the data they are required to report (e.g., recycled content).

Examples of Potential Solutions: Tools that enable data validation and verification along the plastic packaging value chain, such as data validation standards that are adopted into law. For example, the proposed CSA R117 Plastics Recycling: Definitions, Measuring, and Reporting Standard, Government of Canada's proposed labelling law, and the proposed BNQ Standard for certified compostable plastics.

GAP #3: Lack of Mechanisms to Normalize and Report on Verified Plastic Packaging Data.

It is common knowledge that provincial and territorial laws vary in both the products and packages included in programs (i.e., definition of designated materials). What is less commonly understood is that program operators across Canada managing similar materials also vary reporting based on:

- 'how much' of any packaging must be tracked (e.g., body, label, and attachments);
- allowable exemptions to designated materials (i.e., de minimis factors or specific product/packaging exemptions) that restrict what is reported as supplied but does not change what is available for collection;
- who is considered the producer (e.g., for service packaging – the filler or the manufacturer) and that entity's ability to report information required;
- allowable deductions on what is included in supply e.g., materials supplied directly to non-eligible sources (e.g., ICI sources) or removed from eligible sources at the time of delivery (e.g., distribution centres);
- the estimated contribution of free riders to supply;
- the estimate a producer makes about how much material it is supplying into a specific province or territory (e.g., a producer may sell to a retailer at their distribution centre, and the retailer may then send that material across borders to different stores); and

- the conversion factors used to convert units supplied into weights, which affects reporting of collection rates and recycling rates (e.g., automotive plastic container program operators and beverage container program operators across Canada may use conversion factors despite managing the same types of containers).

The end result of all these estimates and conversions is that they affect the determination of the amount reported as supplied into a jurisdiction by a PRO. The lower the amount supplied versus the actual amount, the higher the collection and ultimate recycling rate will be, and impact is likely significant. For example, industry experts estimate common de minimis requirements in packaging legislation reduce supplied data by at least 10%; however, this has not been well-studied.

Examples of Potential Solutions: Tools such as the Government of Canada's proposed plastics registry focussed on plastic packaging specifically; accepted national standards on reporting for plastic packaging supply and attributes; an accepted Canada-wide definition for 'plastic packaging' (e.g., sizes, single-use plastics, packaging like products); and an accepted Canada-wide standard for what qualifies as reusable packaging.

GAP #4: Limited Feedback Loops Related Packaging Composition Decisions

EPR as a policy mechanism was built using the "polluter pays principle". The purpose of polluter pays policies is to create a link between a polluter and the direct costs associated with cleaning up the pollution they emit, providing a financial incentive for that polluter to avoid those costs by preventing that pollution.

In an EPR framework, this means linking the costs an individual producer pays to the specific cost of collecting and recycling the packaging they have placed into the marketplace. In theory, this should create financial and legal liability that encourages design for the environment (e.g., source reduction, fully recyclable packaging). However, the practical reality is that in the plastics packaging value chain, 'like packaging' (e.g., a PET bottle) is reprocessed with 'like but not identical packaging' (PET bottles with different labels, attachments, glues, and fillers), and so the end-fate of an individual package, and the downstream costs associated with managing its end-fate, are difficult to determine once those packages are comingled in a collection system.

Examples of Potential Solutions: Tools such as pre-market recyclability assessments, additional eco-modulation considerations related to recycling disruptors, or standardized recycler residual audits and reporting.

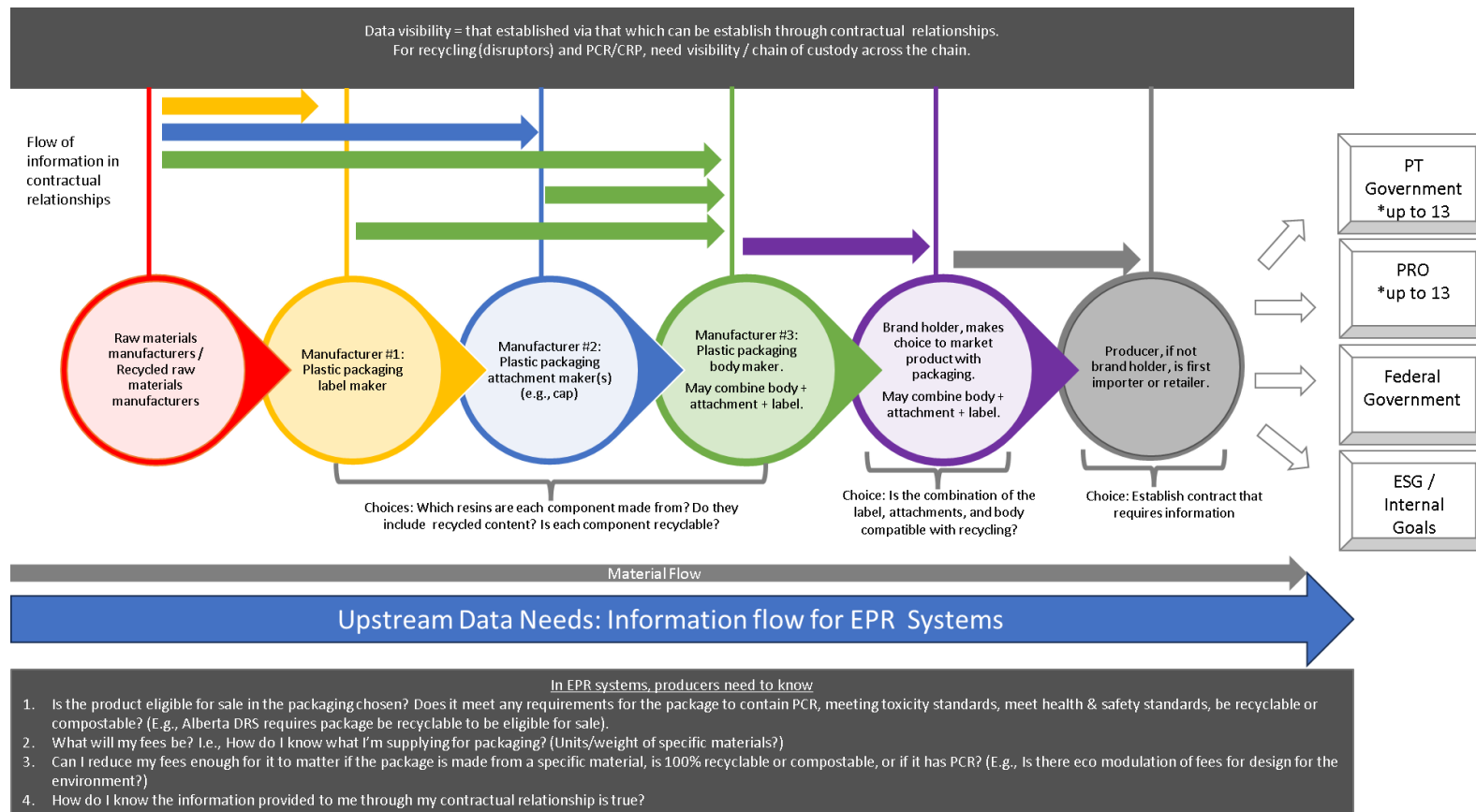
GAP #5: Lack of requirements to compel waste management system actors to make specific data available in specific forms to regulatory authorities.

Haulers and recyclers are not legally compelled to provide mass balance information to regulatory authorities, or data on the specifics of packaging that ends up as residual. When data is provided it is often not in a form that provides information in a useable form.

Examples of Potential Solutions: Tools such as establishing publicly accessible information and standardized reporting requirements. For example, waste generation reporting and billing could be standardized much in the same way as energy or water usage bills, including reporting on performance over time. Standardization enables natural feedback loops to help businesses test and observe how system design changes improve performance.

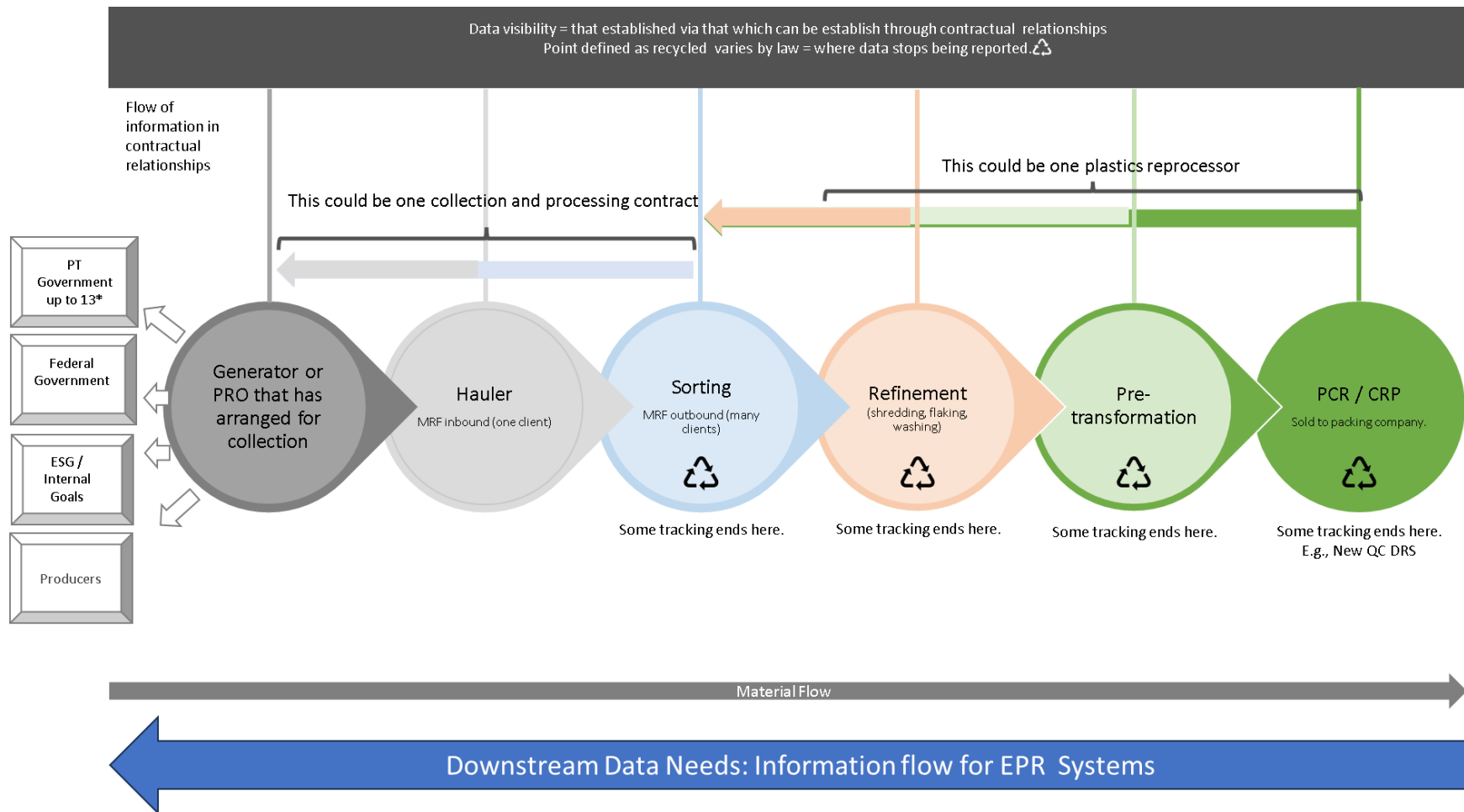
APPENDIX A: SYSTEMS DIAGRAMS

Figure 1 and **Figure 2** illustrate the complex web of contracts that are in place to manufacture and fill a package and to process that same package at end-of-life. Each contract along each chain would require reporting on the same set of variables to enable reporting on material content for producers reporting on supply, or PCR manufacturing to enable PRO reporting on end-of-life management.



*The 'up to 13' is for residential PPP only. There would be an equal number of PROs for each DRSs managing plastic beverage containers, automotive fluid containers, HSP containers, agricultural plastics, etc.

Figure 1: Simplified flow of material and its data as a plastic package is manufactured and filled.



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Figure 2: Simplified flow of material and its data as a plastic package collected, sorted, and reprocessed at end-of-life.