



IMPROVING DATA COLLECTION, REPORTING & TRANSPARENCY WITHIN THE PLASTICS PACKAGING VALUE CHAIN

FRAMING DATA COLLECTION AND REPORTING CHALLENGES AND
OPPORTUNITIES TO DRIVE PLASTICS PACKAGING SYSTEM CHANGE

PREPARED FOR:



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The Canada Plastics Pact is spearheading Canada's response to the escalating plastic crisis. We exist to eliminate plastic waste by accelerating and scaling the solutions that will keep plastics in the economy and out of people, animals, and the environment. Through fostering innovation and collaboration, our 98+ Partners from across the plastics value chain are taking meaningful steps to eliminate unnecessary and problematic plastics, redesign packaging and bolster their usage of recycled plastic. CPP is a member of the Ellen MacArthur Foundation's Global Plastics Pact Network and operates as an independent initiative of The Natural Step Canada.

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EXECUTIVE SUMMARY

The Canadian consumer packaged goods industry faces several plastics data gaps and challenges as it strives to achieve reductions in overall packaging waste – plastics and other single-use materials – alongside carbon emission reduction goals. This includes meeting evolving regulatory reporting requirements into extended producer responsibility (EPR) programs, expanded deposit return system (DRS) programs, as well as requirements under the federal government's Zero Plastic Waste Agenda.

Meeting these commitments will require efficient and effective plastics data collection and reporting. However, plastics data collection and reporting are currently a daunting challenge for Canadian industry. Reporting on plastics usage, disposal, and the ensuing environmental impacts is increasingly cost and time-consuming, driving the industry to mitigate risk through the adoption of plastics data reporting best practices. Benchmarking plastics waste management activities and their effectiveness to increase plastics circularity and reduce leakage into the environment against international trends is also a growing challenge.

Additional challenges and barriers include: regional variances in reporting requirements; variances in terms of plastics items in scope; varying levels of data quality; a lack of common data structures to enable scalability and traceability; concerns with data ownership and sensitivity; a lack of sufficient internal or external incentives; concerns with regulatory dissonance; distributed governance, and data collection not linked to strategic business decision-making – and its impact on transitioning the plastics system in Canada.

Although these barriers and challenges at first glance appear distinct and even divergent, they arise from a small number of select root cause issues, notably: business and government drivers for plastics data collection vary considerably and are highly localized; there exists an overall absence of a systems-based approach to plastics data collection and reporting; and, plastics data collection is not structured with a focus on serving strategic outcomes.

It is also important to note that while this Discussion Paper focuses on plastic packaging, many of the data collection and reporting challenges are relevant to a broader suite of areas, including other types of packaging, as well as other material streams in sectors such as construction and consumer goods.

It will be important to convene with industry, governments, and other key stakeholders as a next step to validate the insights in this Discussion Paper and identify important, strategic next steps that will strengthen the data and reporting efforts across Canada's packaging value chain.

BACKGROUND & INTRODUCTION

The Canadian consumer packaged goods industry faces several data gaps and challenges as it strives to achieve reductions in total packaging waste – plastics and other single-use materials – alongside carbon emission reduction goals, as well as regulatory requirements related to responding to evolving extended producer responsibility (EPR) programs, expanded deposit return system (DRS) programs, along with evolving requirements related to the federal government’s Zero Plastic Waste Agenda.

Furthermore, these domestic pressures are being shaped by Canada’s commitment to global priorities such as UN and other global agreements on plastics pollution reduction – commitments with direct impacts on global value chains. This growing series of overlaid commitments and ensuing requirements is creating a complex array of regulatory and reporting challenges with significant risk to brands and retailers in Canada.

Reporting on plastics usage, disposal, and the ensuing environmental impacts is an increasingly cost and time-consuming activity which industry is seeking to mitigate through the adoption of a plastics data reporting best practice as outlined in this Discussion Paper. This is an important and daunting challenge for Canadian industry –including for brand owners, producers, retailers, and the broader waste management and recycling industry.

To inform this discussion and help shape an approach that can effectively and efficiently collect, summarize, and report plastics-related data, this Discussion Paper summarizes the needs and challenges with respect to obtaining high quality plastics data within the plastic packaging value chain in Canada, with a focus on the consumer goods and retail sector. It is worth noting that although the observations and insights outlined in this Discussion Paper are focused on plastics packaging, they have applicability to other forms of packaging – including paper and alternative packaging materials – and may prove valuable in addressing data collection related to wider sustainable packaging opportunities.

The Discussion Paper outlines the current plastics data challenges, obstacles, and risks and identifies underlying root causes which should be addressed if harmonized and cost-effective data collection and reporting approaches are to be established. The Discussion Paper also outlines opportunities and recommendations, including a proposed Roadmap and activities to develop effective plastics data collection and reporting going forward.

A Note on IC&I Sector: This Discussion Paper focuses on data and reporting efforts related to plastic packaging in the residential (or consumer) sector where the current regulatory and legal requirements are driving a need for increased data reporting and transparency in Canada (related to EPR programs for example). However, it is recognized that significant challenges also exist with respect to data collection, reporting, and transparency within the institutional, commercial, and industrial (IC&I) sector.

EPR programs do not currently exist for much of the packaging placed on the market within the IC&I sector, with a few exceptions, such as with agriculture sub-sector packaging in a few Canadian provinces. The collection, sortation, and recycling infrastructure also vary depending on the sub-sector, as do the packaging resins and formats.

This Discussion Paper does not examine the IC&I sector data challenges and opportunities given the unique nature of the sector and the need for specific strategies for addressing the issues. However, the IC&I sector may become a future focus for deeper investigation as it relates to the data challenges and issues, based on outcomes from recently completed and forthcoming research on the topic.

Box 1 | Current & Proposed Commitments Towards Plastic Pollution Reduction

The following sample of the current and proposed commitments (and example targets) illustrate the growing demand and related risk on Canadian industry:

Global Commitments

- UN Global Treaty (UNEA 5.2) (proposed for 2024)
- Ocean Plastics Charter (signed 2018)
 - 100% reusable, recyclable, or, where viable alternatives do not exist, recoverable, plastics by 2030)

National Commitments

- Canada-wide Strategy on Zero Plastic Waste / Action Plan (approved by CCME 2018)
 - 50% PCR content by 2030
 - recycle 55% packaging by 2030
 - recycle 100% by 2040
- Federal Government's single-use plastic bans (first iteration effective 2022)
- Minimum recycled content regulations for plastics (regulations by 2024)
 - 20% in Rigid by 2026-27; 40% by 2028-29; 50% by 2030
 - 10% in Flexibles by 2026-27; 15% to 30% by 2028-29, 30% to 50% PCR Content 2030 (depending on thickness)
- Pollution prevention notice requiring the preparation and implementation of pollution prevention plans as an alternative instrument to address primary food plastic packaging (anticipated 2024-25)
- Federal labelling rules for recyclability and compostability (proposed for 2026 onward)
- Federal Plastics Registry (Phase 1 proposed for June 2025, with increasing reporting demands by 2028)
- Reuse frameworks for secondary packaging

Provincial and Territorial Commitments

- Extended producer responsibility (EPR) requirements (see the following for a summary of EPR activities and requirements by province as of January 2023: <https://gowlingwlg.com/en/insights-resources/articles/2023/canadian-product-stewardship-epr-2022-review/>)

Municipal Commitments

- Multiple recycling, reuse, and compostability rules and bylaws
- Multiple home waste management initiatives (e.g., garbage tag systems), landfill bans, and related fees
- Meeting these commitments will require efficient and effective plastics data collection and reporting. Consequently, plastics data collection is becoming an increasingly important discussion within Canada's plastics industry, and the market segments who depend on plastic products. Harmonized and reliable data is especially critical for Producer Responsibility Organizations (PROs) who increasingly support obligated parties in operating and reporting on the effectiveness of waste collection and recycling systems and in line with expanding EPR programs.

LEADING CHALLENGES & BARRIERS TO EFFECTIVE PLASTIC PACKAGING DATA COLLECTION & REPORTING

The collection of relevant, dependable, and valuable plastics data faces several challenges, ranging from commonly recognized issues such as regional differences in collection and recycling systems, to more complex challenges such as mitigating concerns about data confidentiality. Through a series of targeted interviews with retail and plastics industry stakeholders, the leading challenges and barriers were identified (as outlined in Box 1) and are summarized below.

Regional variation with respect to measuring performance

The collection of plastics-related data is significantly complicated by the diversity of collection systems, authorities, and policy priorities across the country – at the provincial and municipal levels. For example, producer responsibility organizations and stewardship agencies across Canada report recycling performance based on different measures, such as collected tonnes (collected for recycling but before sorting) versus marketed tonnes (sold to an end market). Both measures track performance with respect to diversion, but measure at different points. In addition, the anticipated introduction by the federal government of plastics data collection and reporting requirements by way of a federal plastics registry¹ will introduce either an added level of reporting complexity or help address key gaps in the current province-by-province reporting approach.

The lack of a common and harmonized framework across jurisdictions in Canada can result in data collection and reporting that creates additional administrative and financial burden on industry – with the expected reporting burden likely to increase as additional data is required. The current lack of harmonized policies, standards, and approaches across Canada and beyond is considered a leading risk to effective and efficient data collection and reporting.

Box 2 | Leading Challenges and Barriers to Plastics Data Collection & Reporting

- Regional variances in reporting requirements
- Variances in terms of plastics items in scope
- Varying levels of data quality
- Lack of common data structures to enable scalability and traceability
- Concerns with data ownership and sensitivity
- Lack of sufficient internal or external incentives
- Concerns with regulatory dissonance
- Distributed governance
- Data collection is not linked to strategic business decision-making – and its impact on transitioning the plastics system in Canada

¹ <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/consultation-proposed-registry-producers-plastic-manufactured-items.html>

Variation in terms of plastic items in-scope

At present, there is no harmonized approach to defining what is in scope in terms of reporting in Canada. This includes base information (e.g., resin types, PCR content, etc.), as well as industry-critical information such as plastic product applications, industry segments or sectors, or other contextual information. The lack of national sustainability attributes for plastics creates a piecemeal approach, resulting in a lack of

“...there is no harmonized approach to defining what is in scope in terms of reporting across various regions in Canada...”

- Canadian industry association

transparency and traceability for select products, sectors, or applications, as well as a lack of national comparability and perspective – a view important for those with operations across the country.

Varying levels of data quality

There is a general lack of reliability, consistency, or confidence in the currently collected data, resulting in a lack of high-quality data to support not only accurate reporting but informed business decision-making. Examples of current issues in data quality include consolidation of data across material types (e.g., resins 1 and 2 merged, resins 3 through 7 merged), as well as a lack of information about data error margins and a lack of confirmation of disposition. Current waste audit practices vary considerably, as do the auditing methods, resulting in a wide range of data quality which can hinder analysis and decision-making capabilities.

Lack of common data structures to enable scalability and traceability

An increasing number of differing reporting requirements is introducing a complexity in data collection which significantly increases risks related to data accuracy and, ultimately, its value. This is compounded by the lack of a common data structure, which results in diverse reporting requirements – many being met through manual data collection, aggregation, and entry. Consequently, there is little if any capacity to support scalable and flexible product data models which could provide efficiency gains, while also supporting more complex business decision-making.

There is also a lack of data traceability linked to the plastics items in question. Although such data traceability throughout the supply-chain is technologically challenging, it is considered by some as essential to providing the necessary form and quality of data to inform critical decision-making for various applications (e.g., primary; secondary; industrial, commercial and institutional versus residential), as well as in regard to critical features (e.g., PCR sources and composition, food-grade PCR assurances, ethical source of materials, etc.).

“...EPR data collection is not aligned with key policy and priority drivers such as the Golden Design Rule-related framework...what is being advocated is not being measured...”

- Leading Canadian food brand

Compounding the issues outlined above, current data structures are not aligned with leading industry guidance and priorities. One example is the fact that common EPR data collection is not aligned with industry efforts and priorities such as the Golden Design Rules-related framework. For example, while data may be collected on PET, PE, and PP rigid containers, details such as whether the resins are clear or have coloured dies are not considered (i.e., GDR 5 suggests “using transparent and uncoloured, or transparent

blue or green PET”). In many instances, *what is being advocated for is not being measured*. If no one is tracking important attributes as part of standardized data reporting, it will be challenging for industry to ensure that guidance (such as the GDRs) are being actioned and implemented.

Concerns with data ownership and sensitivity

Fragmented and increasingly proprietary approaches by company, industry sector, or jurisdiction, driven by growing commercial interests to lock-in customers with unique technology solutions related to data collection and management (based on proprietary intellectual property), are growing barriers to enabling scalability and effective collaboration across supply chains.

“...these barriers adversely impact not only the sharing of data between suppliers and customers but can hinder the sharing of data beyond direct transactional relationships...”

- Leading Canadian retailer

Important business barriers, including legal and contractual arrangements, hinder, if not prevent, data sharing. For example, waste haulers will often not share detailed information and data with their customers or the public given concerns about their competitors gaining insight or advantages when negotiating future contracts. This is often driven by concerns over the unintended use or reverse engineering to gain competitive insights, driven in large part to the proprietary nature of some of the packaging information. These barriers adversely impact not only the sharing of data between suppliers and customers but can hinder the sharing of data beyond direct transactional relationships (i.e., supplier – vendor data exchanges). As a result, concerns with data confidentiality are a major barrier to data sharing across the supply chain. Risk mitigating approaches such as data anonymization or other techniques do not appear sufficient to address concerns of industry at the moment.

Lack of sufficient internal or external incentives

Although industry is seeking to mitigate the environmental impacts of plastics, related activities increasingly fall within broader corporate efforts to reduce their environmental impacts. Consequently, reducing the environmental impacts of plastics may not be, or ever rank as a top priority for all industries. As such, efforts to collect and report on plastics-related data remains largely administrative (versus strategic), despite being and a heavy resource burden on organizations.

The current lack of incentives to voluntarily collect plastics-related data, combined the emerging set of non-harmonized regulatory reporting requirements, produces what can only be framed as a “*feed the beast*” scenario, rather than one where data collection is considered a critical business activity in the understanding of a firm’s contribution to the current and evolving state of the plastics system.

Consequently, the current lack of incentives is insufficient to promote and drive the desired behavior change, both in terms of plastics data collection, but also the related business decision making.



Concerns with regulatory dissonance²

Multiple levels of government in Canada (i.e., federal, provincial, and territorial, as well as large municipal governments) are increasingly seeking to collect and report on plastics use and disposal to assess and validate their respective initiatives, policies, and regulations. A growing and diverse array of regulatory requirements is driving industry to commit financial resources to respond to and report on varying types of plastics-related data.

"...the risks and impacts to industry are compounded by the likelihood that regulatory agencies within various jurisdictions will develop their own requirements, producing an increasing lack of regulatory harmonization..."

- Canadian industry association

The risks and impacts to industry are compounded by the likelihood that regulatory agencies within various jurisdictions will develop their own requirements, producing an increasing lack of regulatory harmonization. As is the case in many other domains with regulatory actors across multiple jurisdictions, regulatory dissonance is a growing material risk for plastics data collection and reporting.

Distributed governance

The current governance of data collection and reporting of plastics data is distributed and non-centralized. Given the current lack of sufficient national coordination, plastics data collection is piecemeal and not necessarily aligned with a national goal of reducing the environmental impacts of plastics.

"...given the lack of sufficient national coordination at the moment, data collection is piecemeal and not necessarily aligned with a national goal of reducing the environmental impacts of plastics..."

- Canadian industry association

Currently, numerous actors (e.g., EPR organizations, regulators, etc.) – some audited, others not – may have a direct role in defining requirements for and collecting plastics data. Furthermore, these same agents may not be collecting forms of plastics data which may be important or even critical when developing policy, regulations, or making business decisions (e.g., imports-related plastics data for key markets).

Data collection is not linked to strategic business decision-making

Currently, plastics data collection introduces undue financial and reporting burdens on industry, while not necessarily providing value in terms of strategic decision-making (e.g., considering new material types, incorporating PCR content, etc.). At present, there is arguably a significant lack of guidance in terms of what constitutes "must have" data (i.e., data required to make informed business and policy decisions) and "nice to have" data (i.e., data that provides some insights but are not necessary to make informed business or policy decisions).

² **Definition:** Regulatory dissonance is the occurrence of divergent or 'dissonant' multiple regulations being applied to industry at the same time, with two forms of dissonance being commonly observed. The first, jurisdictional dissonance, occurs when divergent or differing regulations seeking to control similar behaviours or outcomes are applied across different jurisdictions – federal, provincial, municipal, as well as international. This is the leading risk factor for plastics data reporting. The second, transverse dissonance, occurs when two or more regulations applied simultaneously are incompatible or conflicting. An example for plastics packaging is the potential for emerging minimum PCR content regulations to conflict with existing safety regulations for food packaging.

This presents an opportunity for plastics data collection activities to produce high value plastics data, helping support one or more of the following outcomes:

- Identifying and measuring “problematic” plastics.
- Assessing what sustainability pathways are improving or declining, as well as which pathways are emerging based on the dynamics of “push” (i.e., upstream capacity “pushing” downstream demand) or “pull” (i.e., downstream demand “pulling” upstream capacity).
- Informing and supporting business decision-making to collectively move towards desired plastics system change.
- Aligning with EPR and ESG reporting requirements (including various ESG indicators such as plastics waste mitigation, circular economy development, and GHG emissions reduction).
- Informing other ESG-related reporting (i.e., ethical sourcing, etc.).
- Enhancing overall transparency with key stakeholders, including customers.

Given plastics data collection is currently not considered a strategic activity in support of business decision-making, the following challenges are reinforced and opportunities are lost:

- A lack of incentive to collect or share data beyond minimum regulatory and reporting requirements.
- Retailers and brands have the opportunity to better measure the effectiveness of their sustainability strategies by having standardized, consistent, and comparable data.
- Consumers are left insufficiently informed, or misinformed, about a product or package’s overall sustainability and environmental impact without reliable data from brands, potentially adversely impacting their purchasing decisions.
- Business decision-making becomes transactional and localized, and not linked to supporting the desired regional and national plastics system-level changes.
- Lack of quality data to help develop innovative approaches and solutions to achieving sustainability outcomes (e.g., supporting gamification of consumer behaviour by using quality data to influence where consumer behaviours regarding plastic use are problematic³).

The current context results in a lack of quality plastics data designed and harmonized for system-wide comparability, making it difficult to identify areas of greatest opportunity for business innovation, public and private investment, as well as public policy intervention.

Lastly, the lack of quality data hinders or fully prevents businesses, policymakers, regulators, and consumers from distinguishing authentic sustainability leadership and action from greenwashing and hype, eroding trust, confusing the marketplace, and making it challenging to know where to invest or what correct actions to take.

“...the lack of quality data hinders or fully prevents businesses, policy makers, regulators and consumers from distinguishing authentic sustainability leadership and action from greenwashing and hype...”

- Recycling industry organization

³ Gamification for sustainable consumption, Abrunhosa et al., 2022 (https://www.researchgate.net/publication/358469004_Gamification_for_sustainable_consumption)

Although the above barriers and challenges are varied, the stakeholder interviews revealed a set of underlying root issues which could help reframe the discussion regarding the collection and reporting of plastic packaging data across consumer goods and retailer value chains.

The following outlines the suggested underlying root causes, providing the basis for a revised framework for defining, collection, and reporting plastics-related data.

UNDERLYING ROOT CAUSES TO KEY CHALLENGES

Although the barriers and challenges identified in the previous section are generally recognized by both the plastics industry and wider packaging industry stakeholders, it is proposed that three underlying root causes underpin them:

- Drivers for plastics data collection vary and are highly localized.
- A systems-based approach to plastics data collection and reporting is largely absent.
- Plastics data collection is not structured and governed to align with and serve strategic outcomes and a systems-based approach.

Each of these proposed underlying root causes are summarized below.

Drivers for plastics data collection vary and are highly localized

To effectively frame the plastics data collection discussion and develop an effective approach to plastics data collection, the following question should be considered and answered:

“Why is the plastics data being collected?”

The purpose and context for plastics data collection can vary significantly, but can be summarized in terms of three strategic outcomes:

- **Strategy:** Plastics data collection supports individual company ESG, sustainability, and circular economy goals and related decision-making.
- **Confidence:** Plastics data collection contributes to building customer, consumer, and stakeholder confidence about the actions and decisions being taken.
- **Compliance:** Plastics data collection helps meet reporting compliance obligations in every jurisdiction across Canada.

Currently, there is a focus on compliance with a risk that the other strategic outcomes of strategy support and building confidence will not be served. Furthermore, drivers for plastics data collection are primarily set within a localized or regional context, rather than from the perspective of how actions and decisions can help support and drive the desired change in the plastics system at a national and regional level, all the while accounting for international developments and drivers.

“...plastics data is collected to achieve three things: strategy, confidence and compliance...”

- Leading data industry expert

The absence of a plastics systems-based approach is thereby considered the second underlying root cause.

Lack of a systems-based approach to plastics data collection and reporting

After answering why plastics data is being collected, the following question should be addressed:

“What plastics packaging system-level changes are we seeking to achieve and measure?”

A 2021 analysis of systems-based approaches to address concerns with plastics confirmed that a systems-based approach is not only desired but is required to tackle the problem of plastics waste and pollution⁴. Although plastics system change is frequently mentioned as a desired policy or business outcome, a systems-based approach has yet to frame and define the activity of plastics data collection.

In the absence of a common set of strategic outcomes and a systems-based approach, the plastics data requirements will increasingly vary and differ between jurisdictions and stakeholders, significantly undermining the ability to achieve the desired changes in the plastic packaging system⁵.

“...although plastics system change is frequently mentioned as a desired policy or business outcome, a systems-based approach has yet to frame and define the activity of plastics data collection...”

- National circular economy organization

Stakeholders interviewed for this Discussion Paper agreed that the desired changes to the plastics packaging system can be summarized in the following outcomes:

- An overall reduction in the use of virgin plastics material;
- An increased use of recycled content; and
- A measurable reduction in plastic waste being directed to landfill and discarded to the environment as plastics pollution.

Plastics data collection and reporting plays a critical role in achieving these plastics system-level outcomes, and must therefore provide the following insights as well as support the following activities:

“... the desired changes to the plastics system includes:

- *reducing the use of virgin material,*
- *use more recycled content, and*
- *sending less plastic to landfills...”*

- National circular economy organization

1. Confirm the state of the plastics packaging system (e.g., mass flows of plastics).
2. Assess the state of change of the system (e.g., changes in mass flows).
3. Inform decision-making within the system (to support businesses along the value chain).
4. Permit accurate reporting on the state of the system (through regulatory reporting or other forms of reporting).
5. Provide insights into the state of sub-systems within the broader system, including both regional and industry sector perspectives.
6. Identify leading barriers or challenges within the system (i.e., sectors, products, or others).

⁴ “Over 80% of industry stakeholders agreed that tackling the challenge of plastics pollution cannot be done without taking a systems-based approach”. Source: Mitigating Plastics Pollution – The Need for a Systems-based Approach. Presentation and Summary Report to the National Research Council Canada. Daniel Duguay, Senior Associate, Tactix. June 2021

⁵ Plastic pollution requires an integrative systems approach to understand and mitigate risk. Courtene-Jone et al., 2022 (<https://doi.org/10.1042/ETLS20220018>)

7. Inform public sector policymakers and regulators on what appropriate instruments to consider to drive the desired change in the plastics system⁶.

“...a lack of harmonization in plastics data attributes which will further hinder the collection of the necessary plastics data to permit analysis of the plastics system, and by extension inform plastics decision making...”

- Major Canadian retailer

Lack of a strategic focus to plastics data collection and reporting

In the absence of commonly defined strategic outcomes and a systems-based approach, the type and form of plastic data collection will be largely defined by jurisdiction and markets. This will result in a lack of harmonization in plastics data attributes which will further hinder the collection of the necessary plastics data to permit analysis of the plastics system and, by extension, inform plastics decision-making.

To effectively shape the plastics data collection exercise, the following question should be considered:

“Is the plastics data framed by a systems-based approach and does it serve the strategic outcomes?”

Plastics data requirements should be aligned with and serve the strategic outcomes (e.g., strategy, confidence, and compliance), framed by a systems-based approach, thereby providing the necessary information to both understand the state of the plastics packaging system while serving the strategic outcomes.

Conclusion

These underlying root causes underpin the leading barriers and challenges to effective and efficient plastics data collection and reporting. Going forward, a data framework should be developed that identifies the key priorities for plastic packaging data collection and reporting with considerations that include:

1. Plastic packaging data collection and reporting frameworks should look to leverage existing standards and solutions. Implementation may wish to consider four interrelated and important aspects:
 - **Global Standards:** Global standards level the playing field for businesses at all scales and are used to enhance business processes across the value chain.
 - **Community management:** Brings together representatives from all points along the value chain to identify common business process issues, determine global standards, and develop industry solutions that meet the needs of all businesses of all sizes.
 - **Education:** Access to practical information and tools that guide the integration of global standards and best practices into business processes.
 - **Implementation:** Leveraging neutral, non-proprietary solutions that enable industry to meet Canadian information sharing needs and requirements at the lowest possible cost to industry and without additional burden.

⁶ Government policies combatting plastic pollution, Knoblauch et al.
<https://www.sciencedirect.com/science/article/pii/S2468202021000619?via%3Dihub>

2. Harmonization is increasingly recognized as central to achieving the desired changes in the plastics packaging system. This includes addressing the various activities, priorities, and decisions at local, provincial, national, and international levels.

With individual EPR policies introducing a varying range of requirements applied to plastics data collection, data harmonization is increasingly important, if not critical, for being able to understand and compare the evolving state of the Canadian plastics ecosystem. This, in turn, will support enhanced business decision-making and inform policy and regulatory activities at multiple levels of government across Canada.

