

## QUESTIONS & ANSWERS

### PRE-WEBINAR SURVEY QUESTIONS

1. **Question: What are the most significant barriers to having the CSA implement meaningful changes that would promote sustainably made products in Canada? Where are there models that can be looked to in this regard, and can the CSA incorporate similar practices and policies?**

**Answer:** The development of standards to drive meaningful change in the sustainability space is a tool, that organizations and policy makers can utilize to implement best practices for sustainable purposes. Other tools, such as regulations and policy are equally important to improving sustainability requirements and practices. Sustainable products are made in Canada and globally, and the requirements to meet sustainable practices may vary by region. Global harmonization on standards can help to ensure a level playing field, to maintain and improve sustainable models across sectors and across borders.

2. **Question: Are these standards endorsed and going to be adopted by the ECCC?**

**Answer:** CSA Group cannot comment on behalf of ECCC. ECCC is, however, an active member of the committee for CSA R117: *Plastics Recycling: Definitions, Reporting, and Measuring* and is aware of the content and timelines of this important standard project.

3. **Question: How can you help advance circularity as a medium-sized company based in Canada that ships products across North America? Are there other solutions besides a take-back model (that comes with its own issues like increased transportation carbon emissions, etc.)**

**Answer:** When looking to embrace circular business models, it's important to consider the total impact of the changes you are seeking to implement to determine whether they are truly climate-smart, and this is something where the best path forward may vary on a case-by-case basis. Some exciting [research](#) has been conducted in this space, particularly with regards to Food Loss and Waste, by Ivey Business School. Their LCA-based study analyzed various food waste reduction or diversion mechanisms to determine how factors such as transportation distance, energy consumption during reprocessing, and quality of upcycled products impacts overall GHG reductions. It is likely that additional research is needed to better understand other key supply chains as well. CSA Group is currently working with Ivey

Business School to study construction and demolition waste and textile waste circularity using a similar approach.

4. **Question: Do federal or provincial governments mandate the use of standards through legislation, or are standards developed by the CSA group optional for use by various industry sectors who choose to adopt them? Or is it a combination - some mandated, some optional?**

**Answer:** Standards are voluntary upon publication, however they can become mandatory when they are referenced in regulations, legislation, or in contracts. For example, about 65% of CSA Group's standards for the built environment are mandatory because they are referenced in Canada's Model Codes, which are enforced through regulation across the provinces and territories. In many cases however, industry members will voluntarily embrace the use of standards as a tool for improving efficiency, improving their ability to compete in the marketplace, improving quality, reducing risk, demonstrating due diligence, and building trust with consumers, regulators and investors.

## PLASTICS RECYCLING

1. **Question: Would you say that the recycling standard is a must have before advancing into standards such as those that are more material specific such as rPET?**

**Answer:** Based on our research and engagement with the sector and regulators, we do believe that a critical challenge is the lack of consistency across Canada in the field. Recycling is a global supply chain, and efforts to support Canadian leadership internationally are hampered by the lack of consistency in our understanding, measuring, and reporting of the efforts of our plastics and recycling sectors. That is why we have chosen to begin our work with this foundational standard (CSA R117: *Plastics Recycling: Definitions, Reporting, and Measuring*), to both support the sector by providing a shared resource that can be applied by all interested parties, as well as providing a strong base for subsequent standards to build on, including material- and application-specific standards.

2. **Question: Will it also show an energy and material balance to show the inputs required (and possibly other impacts from that such as with use of chemicals and any ensuing waste or pollution)?**

**Answer:** Currently, the draft standard aims to clarify the definitions, measuring, and reporting of recycling plastic. This does include discussion of ‘plastic waste generated’, a calculation point where material is deemed ‘recycled’, and measurement of the relevant mass inputs to and outputs of the recycling process. While specific energy and material balance are, of course, integral to the functioning and economics of the system, this would edge towards life cycle assessment of the system and/or value chain and it is therefore out of scope of the current work. We have heard and noted the concern though for future evaluation in other potential documents.

**3. Question: Are there standards for evaluating regulatory policies alignment with circular economy principles?**

**Answer:** The principles of the circular economy are certainly on our radar as critical avenues for exploration across industries, however currently their intersection with regulatory policies are still emerging. Standards are in development internationally to provide common, consensus-based resources on definitions and application of circular economy principles, with CSA Group providing support for the Canadian committee contributing to the International Organization for Standardization (ISO) efforts. The first three ISO circular economy standards will be foundational standards and useful tools for development of further and perhaps more specifically targeted standards. CSA R117 is similar in nature as it will serve as a foundational standard providing a strong base for subsequent standards to build on, including material- and application-specific standards. Currently, there are no Canadian standards for evaluating regulatory policies alignment with circular economy principles.

**4. Question: Is there any conversation happening regarding health impacts of incorporating recycled plastic into food and beverage containers?**

**Answer:** This is a very important discussion to the recycling sector and one that we are aware of as a major challenge. Health Canada recently published a report in February 2023 called *Guidelines for using recycled plastics in food packaging: Considerations for secondary recycling processes* (linked below) that aims to assist recyclers, manufacturers and sellers of plastic materials in determining the acceptability and use of post-consumer recycled (PCR) plastics in food packaging applications. CSA Group is on CPP’s Circular Plastic Taskforce that has been working to develop a roadmap aimed at systematizing the process for reaching compliance of recycled

plastics with food contact regulations and for obtaining letters of non-objection for the use of recycled resins in food contact applications, while maintaining the high level of quality and performance standards required.

**[Link: Guidelines for using recycled plastics in food packaging: Considerations for secondary recycling processes](#)**

**5. Question: Are there strategies for automobile plastics?**

**Answer:** As of now, our standard is sector-agnostic, meaning its definitions, measuring, and reporting guidance could be applied to all plastics available to be recycled. We have heard from technical experts that automobile plastics do have particular challenges and should be evaluated for their specific characteristic, but we have not commenced a sector-specific project as of yet. We are happy to engage further in this discussion moving forward.

**6. Question: There are a lot of different plastic types. Are we increasing facilities to tackle the different plastics or are we increasing responsibility to the private companies to take it back and have them be responsible of them?**

**Answer:** CSA Group cannot speak to the number or operation of facilities or private companies. As a foundational standard, our work has been aimed to be available as a tool to all members of the plastics and recycling sector, including recycling facility operators and private companies in the space. This standard should help support recyclers in their efforts to more consistently report their recycling and recycling rates across Canada.

**7. Question: How does this team see the difference between plastics recycling and circular plastics as we know a recycling economy and circular economy are different.**

**Answer:** The circular economy is a key strategic focus for CSA Group, including through efforts of the Environment and Climate Change program. In our work, we maintain a shared understanding that in the 'hierarchy' of circular economy principles, recycling should be a lower-tier than, for instance, redesign, reduction, and reuse strategies. However, recycling is a key challenge for Canada and its national efforts and we are pleased to help provide support for the sector as it seeks to be part of the transition to the circular economy. We are also

currently engaging in a number of diverse efforts to support additional circular economy principles beyond recycling. These include management of the Canadian mirror committee to the International Organization for Standardization (ISO) Technical Committee on Circular Economy (TC323), exploration of the development of National Standards of Canada on reuse, a recent publication on Repair through the CSA Research program, and more.

**8. Question: Were plastics that are harder to recover (i.e. black plastics) considered in research? If so, how are they addressed? If not, what are the limitations?**

**Answer:** These issues with recyclability did emerge in the initial research reports completed by the CSA Research program and they were flagged as potential areas for further evaluation and development. Currently, the draft National Standard of Canada focuses more on how recycling should be measured. It's clear recyclability does affect recycling rates, however that issue is out of the scope of current work. We do not have a recyclability-specific project as of yet but we are happy to engage further in this discussion moving forward.

**9. Question: Would there be a potential outcome of this to standardize and provide this calculation for general use and enable companies to utilize a plastics calculation in their considerations of Procurement for goods and materials?**

**Answer:** Providing a broad calculation method of recycling of plastics for general use is very much in line with the intended use case of the draft Standard. We would envision companies to use this calculation to report recycling rates, inform on supply chain decisions and design, and provide transparency for those seeking to make decisions based on elements of sustainability, circular principles, recycling, etc.

## CONSTRUCTION QUESTIONS

*All questions were answered live.*

## FOOD LOSS AND WASTE

**1. Question: Please provide a description of the [Food Rescue & Waste Diversion] project [in Alberta] and contact info.**

**Answer:** [The Food Rescue & Waste Diversion Project](#) managed by Circular Innovation Council is currently operating in [Guelph-Wellington County](#) (Ontario) and [Westlock & Strathcona County](#) (Alberta).

To connect with us about these pilot, please reach out to the Pilot Manager, Katie Motta, at [katie@circularinnovation.ca](mailto:katie@circularinnovation.ca).

**2. Question: Do you have standards to increase the shelf life of food?**

**Answer:** No, we currently don't have any standards on this topic, however we are aware of new technologies being developed that aim to address this need. If there are specific aspects that would require standardization in this case, we would be more than happy to discuss further.

**3. Question: Is there a plan to incorporate non-food agricultural waste?**

**Answer:** Yes, CSA Group is planning to include residues and non-edible parts as part of our standard development work in FLW. We are also advancing standardization in support of the Canadian bioeconomy, and we are exploring the need for standards to address forestry, agriculture as well as aquaculture residues.

## POST-WEBINAR SURVEY QUESTIONS

**1. Question: In terms of international cooperation, does the CSA provide technical assistance to developing countries Standards Organizations to support the development of similar CE standards?**

**Answer:** CSA Group supports the development of international standards in two ways:

We manage Canadian Mirror Committees that monitor the work of ISO Technical Committees, and contribute directly to the development of international standards, as well as their adoption into Canada. Good examples of this are the Mirror Committees for ISO/TC 323 Circular Economy, and ISO/TC34/SC20 Food Loss and Waste.

In some cases, we take on the role of international committee managers and directly manage ISO committees, subcommittees or working groups, (on behalf of the Standards Council of Canada). Working with groups of international experts following the ISO standard development process to develop ISO standards also support

developing countries. Some good examples of CSA International leadership include our management of ISO/TC 6 *Paper, board and pulps*. Our work supports various sustainability topics including Cellulosic Nanomaterials, Identification of Organizations - Environmental Issues, Recycling (focused on pulp and paper industry), Lignin Analyses and Environmental Documents. We provide secretary management as well for ISO/TC 6 Working Group 16 *Lignin Analyses*, where we support advancing the use of lignin to produce bio-based products. Additionally, two lignin standards from our CSA portfolio are currently being adopted at the international level within ISO/TC 6/WG 16, including: (1) CSA W206 *Kraft Lignin – Glass transition temperature by differential scanning calorimetry*, and (2) CSA W207 *Kraft Lignin – Determination of thermal stability by thermogravimetry*. By directly supporting the secretariat functions of ISO committees, Canada, and CSA Group, continue to indirectly support developing countries as well who will be able to adopt and utilize these important international standards.