Top Takeaways and Outstanding Questions from the Circular Plastics Taskforce Webinar

Featuring Magali Depras from TC Transcontinental, Pascal Lachance from Danone Canada, and Maja Vodanovic, Mayor of Lachine, Quebec

Webinar took place June 10, 2020

1 It is often difficult for companies to consistently access good quality recycled resins, and many of the hard-to-recycle plastics currently go to landfill. Launched in November, 2019 the Circular Plastics Taskforce (or Groupe d'action Plastiques Circulaires) is applying 'reverse engineering' principles to specify end-market requirements (volumes, grades, quantities etc.) and then work backwards to optimize plastics management throughout the recycling value chain.

2 Currently the CPT/GAPC is working in Quebec, but the aim is to create a replicable methodology for use elsewhere in Canada. Once the methodology is established in Phase 1, Phase 2 will test best practices and equipment in real-world environments with value-chain participants. For the project to fully realize its potential it requires as many participants as possible. To learn more, or to join as an associate partner please visit: www.gapc.ca

3 With respect to currently evolving Extended Producer Responsibility (EPR) systems its important that provinces like Quebec and Ontario should be aligned and 'harmonized' to the greatest extent possible.

4 A number of partners, including Lachine, CMM, and Concordia University, are working on a pilot 'eco-district' project in Lachine to understand how to better pick-up, sort and actually recycle plastics. A specific pilot project between Lachine and TC Transcontinental is underway aiming at collecting plastic films (#4) in specific containers and educating the population to sort and recycle. The aim of which is to test ways in which it can be best recuperated within municipalities

5 A fair and comprehensive EPR system requires a national standard to benchmark and compare packaging based on a clearly defined set of criteria (e.g. reusability, recyclability etc.).

6 Until recently there were limited local markets for recycled plastic materials in sufficient volumes, as most mixed plastic bales were exported. We now see increased collaboration, like the Circular Plastics Taskforce, as well as investment in new technologies and practices to reduce contamination and improve quality of recycled plastics.

7 Following tests at TC Transcontinental extrusion facilities, TC was able to produce a 100% recycled LDPE poly bag for flyers, with 50% post-industrial and 50% post-consumer feedstock. At the MRFs it was noticed that many flyer bags would arrive with the paper flyers still inside. TC then incorporated a laser scoring on the bag to allow for easier material separation.

Outstanding Questions

PAC thanks presenters Maja Vodanovic, Magali Depras, and Pascal Lachance for the following responses to outstanding webinar attendee questions:

Maja Vodanovic

1. How do you propose to educate consumers and make sure they get accurate and consistent information?

Once the new system is in place, we need to put together a precise and fun information campaign. It needs to involve government and working parties. If the goal is clear, if people understand where their post-consumer plastics are going and what they will become, they will be happy to do the needed actions. Honesty builds trust and cohesion. Information should also be on all packaging in the form of a label that declares its environmental qualities and preferred disposal pathway.

2. Flexibles have been a challenge for collection. What do you see as the future for flexible packaging collection? Store drop off, curbside, other?

We are doing a pilot project with a collection system in schools and public buildings. Soft plastics are easy to put in a bundle and are light to carry. School children and teens can easily drop off what they accumulate in the home during a week or a month. What is certain is that mixing flexible packaging with paper, glass and all other plastics in the curbside systems does not work. We need to separate at the source. A drop off next to a beverage bottle return deposit system like in BC would be a step forward.

3. The MRFF (Material Recovery for the Future) have been working on the recyclability of flexible packaging since 2016 without any significant breakthroughs (or not enough for flexibles to be recycled today). What will be different with the Circular Plastics Taskforce (CPT) approach that could lead to success? Will the CPT efforts include updating MRF's to collect flexibles and can you talk more about flexibles as a concern for collection and recovery?

In our pilot project with TC, there are plans to work with our Montreal MRFs to see if it can be possible to achieve something there. The present contractual situation between the city and the MRFs makes that difficult.

Magali Depras

1. Can you elaborate on what you mean by "100% recyclable for in-store drop-off"? And do you have any barrier recyclable flexible packaging that can go in the blue bin?

Our new 100% recyclable, multilayer barrier stand-up pouch was originally created for the American market, where polyethylene (PE) flexible packaging, such as grocery bags, bread bags or shrink wrap isn't accepted in most municipal recycling systems and is collected through the store drop-off program available at various retailers.

Our structure was therefore approved by How2Recycle, managed by the Sustainable Packaging Coalition, as acceptable in the store drop-off program, as the compatibilizer it contains helps to break down the barrier layer so that it does not contaminate the polyethylene stream. In Canada, where most cities accept flexible PE packaging in the municipal streams, the package could be mixed with other recyclable packages in the blue bin: it then would likely end up in flexible packaging bales and sold to recyclers, where the compatibilizer would play the same role to break down the barrier layer. This technology replaces multi-material laminates and is therefore considered as a solution to reduce contamination in the PE flexible bales from recycling centers. Packages using our technology are already on the market in Quebec.

2. In developing a bag that is 100% recyclable in the Quebec municipal recycling system, what was the process for developing this compatibility and deciding on the geographical boundaries of recycling compatibility? Do you know to what degree municipalities outside of Quebec can recycle the bag?

I believe I addressed it verbally but to complement what I said: The Publisac is distributed in QC only. We have worked with Eco-Entreprises Quebec on its eco-design and we have engaged with MRFs to discuss recyclability requirements. It is 100% recyclable. The project we are working on with the CPT taskforce will help us and the MRFs in Quebec identifying how to improve processes and

technologies in the recycling facilities so we ensure these 100% recyclable PE films are 100% recycled. The CPT project next phase is to scale our project outside of QC boundaries. Part of the answer is also included in the question #1 relative to the recycling of PE in QC.

3. How can recycled post consumer plastic compete with cheaper, better quality virgin plastics?

We do see a price gap between virgin and recycled resins, especially following the recent drop in oil prices. Generally, I would say that we need to build a business case that is competitive including supply, logistics and production efficiencies. Also, we may see some government incentives come along the way in order to promote the use of recycled content in packaging. It has started in Europe already and it is being discussed in our geographies as well.

Pascal Lachance

1. How does one get involved with the Circular Plastics Taskforce (CPT)/ Groupe d'action de Plastiques Circulaire (GAPC)?

Best way to reach us is by sending an email to info@gapc.ca.
More information on the initiative is also available on the website: gapc.ca

2. How many retailers have joined CPT/GAPC as associated partners?

We are currently in discussion with many retailers. The full list of associated partners will be shown on the GAPC website shortly. Additionally, the Retail Council of Canada is a member of the advisory board.

3. A Quebec manufacturer of 100% PCR LDPE resins (and strategic partner for the supply chain solution for CPT) says they still have big challenges in terms of the market for PCR resins: 'As a processor, we are not financed by the government, and we don't have local end users to close the loop. What do you think about the short term solution for this situation? And what is the pilot project for processing facilities in Phase 2 with CPT/GAPC?

a) We are in the process identifying solutions for a better alignment of the material processors with the end markets, as far as market needs, standards and specifications. Over the next months, 4-5 solutions will be tested through simulations conducted with certain partners. Some of these simulations will address the above mentioned goal.

b) The Pilot Projects in Phase 2 will cover MRF's, processing facilities and end markets. These projects will be selected after completion of the simulations in Phase 1. The selected Pilot Projects for phase 2 will be communicated to our Associated Partners sometime at year-end or early 2021.

4. Is compostable plastic packaging accepted by municipal composting facilities?

The best way to find out is to ask the question directly to municipalities. All of them have a list of material that they accept.