



REGULATING PLASTIC WASTE IN CANADA

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SEA CHANGE CONFERENCE

Jasper, October 5th, 2019

Good morning

Borough Mayor in Montreal-Lachine (new recycling plant to open in november in my borough with exciting pilot project surrounding it aimed at fostering the circular economy)

CMM (greater montreal region) executive board

Commission on the environment – review of CMM Waste management plan (50% Quebec)

I am here as a member of the National Zero waste council –and as co-chair for the council's plastic advisory panel. –

The National Zero waste council was Founded in 2013 by Metro Vancouver in collaboration with the Federation of Canadian Municipalities,

It is a leadership initiative that brings together governments, businesses and non-governmental organizations to advance waste prevention in Canada and the transition to a circular economy.

While local and provincial governments are primarily responsible for managing solid waste in Canada, they have little leverage to implement the needed legislation that has the power to create a different market place or that can drive down waste and the use of virgin plastics

The Council is an example of a collaborative approach that connects leaders from different sectors and stakeholder groups together in promoting actions in Canada that align with global initiatives in design change, policy innovation, and behaviour change.

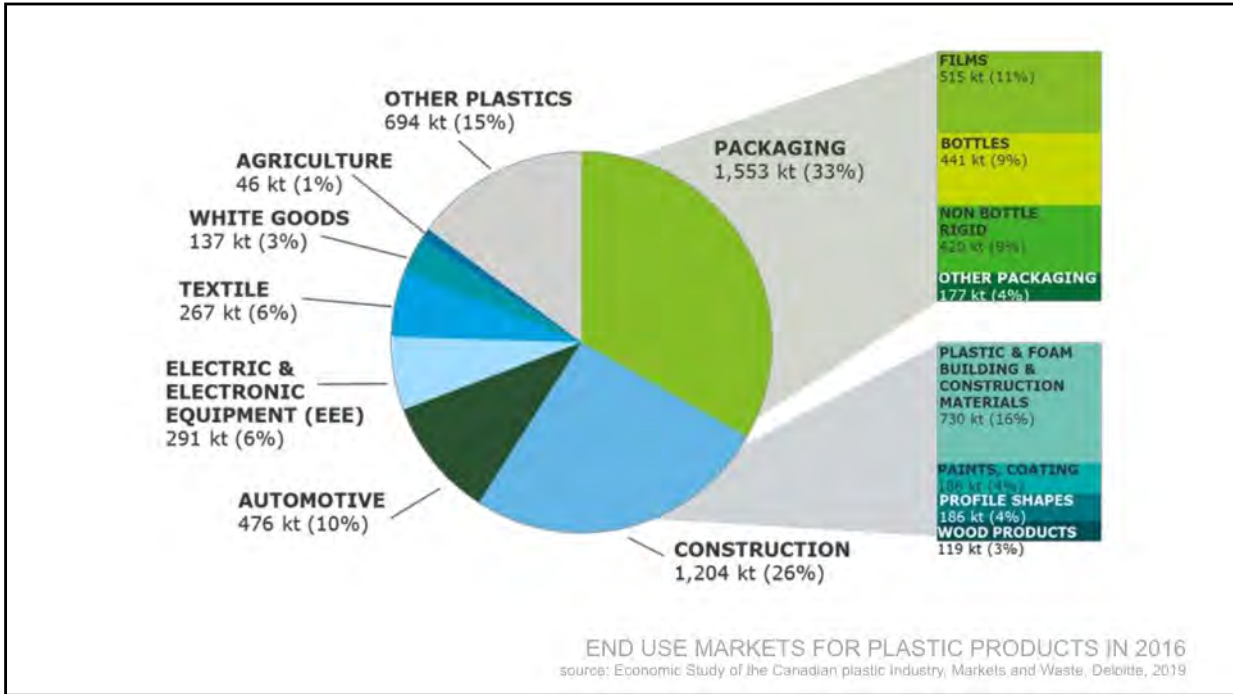


Jugoplastika: a first experience with the plastic industry both playful and ominous.
Pellets on ground and tv with snow



The plastic industry was so big in my home town of split that our local basketball team was call jugoplastica. When they won the european chmpionship in th 90s they were nicknamed goldenplastic

Jugoplastica no longer exists



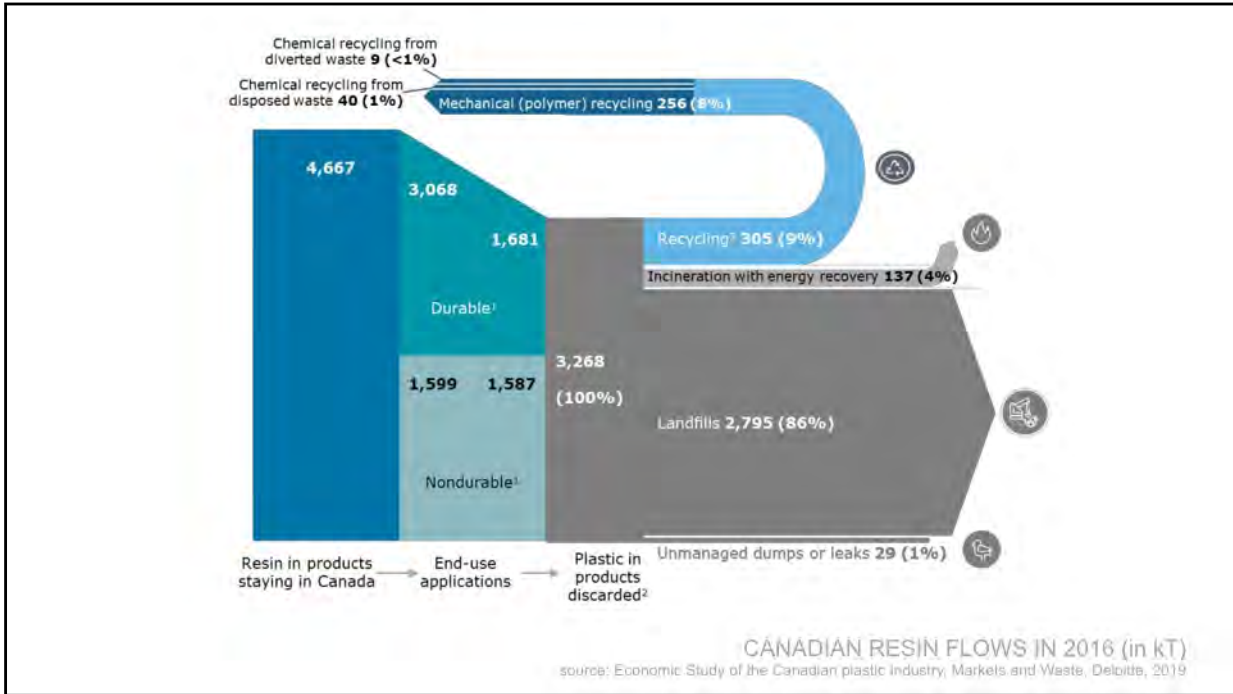
But Canadian plastic is a large and growing industry

In 2017, 87 Canadian companies employing 4000 people produced over 4 million tons of plastic resins, worth 10 billion dollars.

And the manufacturing of plastic goods is an annual 25 billion dollar industry, supporting 89 000 jobs. It is the fastest growing manufacturing activity in Canada, growing 5.5% every year since 2012.

It produces, 116 kg of plastic, per person, per year.

The growth of this industry relies on oil and on an abundance of low cost shale gas as feedstocks. This growth has been supported by government intervention, such as the 2.1 billion dollars Alberta announced to the petrochemical industry, which contributes to keeping virgin plastic prices, very low.



While there have been efforts to reduce and recycle plastics:

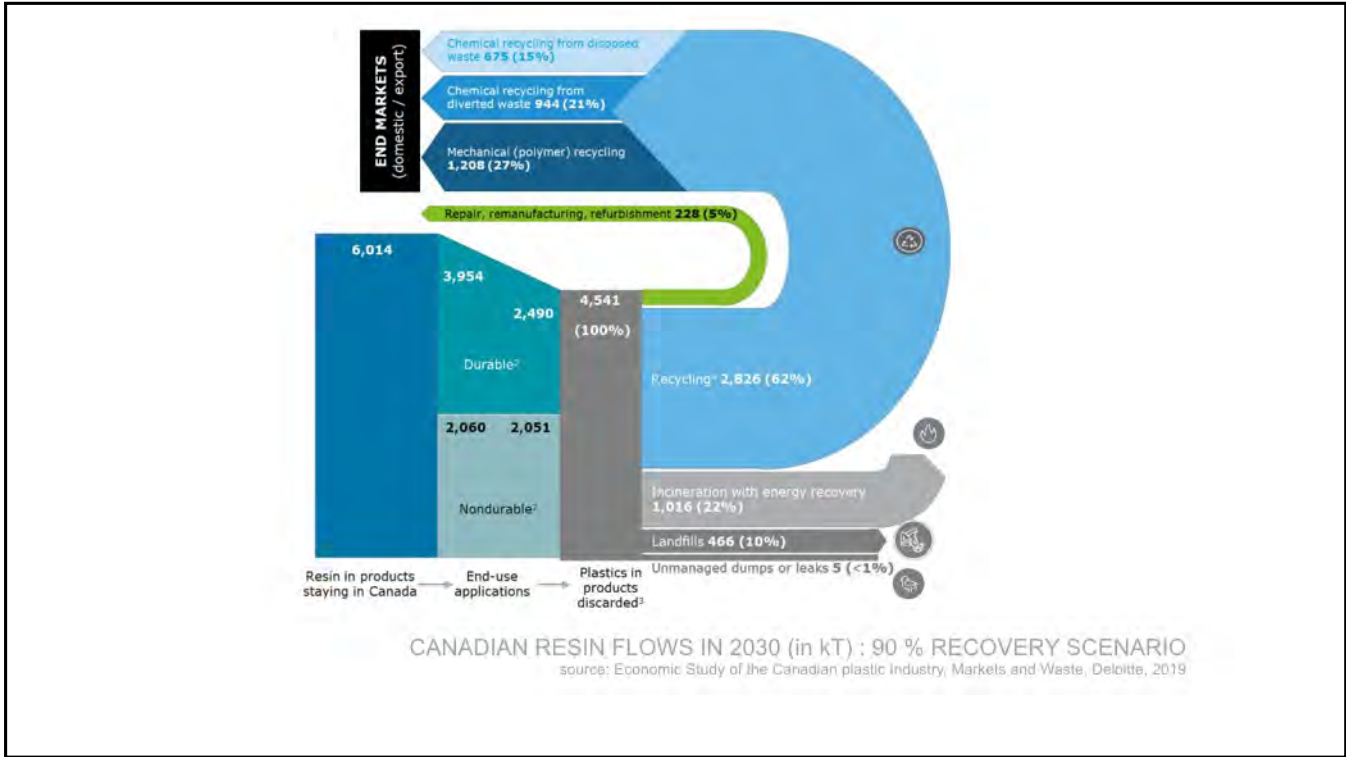
still 47% of our waste comes from packaging

only 25 % of our total plastic waste are collected for recycling
 and only 9 % of the grand total is actually recycled.

Which means that 86% of plastics are sent to landfill or worse, end up in our environment. This is about 2 800 000 tons of plastics every year.

This plastic waste has an estimated worth of 7,8 billion dollars.

Now if this plastic could be reused and put back into the value chain instead of polluting our environment we would finally be moving in the right direction.



Last year, Canada and 21 other countries signed the G7 Ocean Plastic Charter. In this, we committed to making plastics that are 100% reusable or recyclable by 2030, . We also committed to increasing recycled content in plastic objects by at least 50 %. And that no later than 2030.

Knowing that we through out 86% of all plastics, and that basically all our plastic products are made with virgin resin and contain 0% recycled content. IF we intend to respect our commitment, in a short 10 year span, we need to join forces, lobby together for strong and brave government legislation.

Last year, Environment and Climate Change Canada commissioned Deloit to study and analyse the present situation of plastics in Canada a report which was released in June of this year. It states that zero plastic waste can only be achieved with concurrent, strategic interventions by government, industry stakeholders and the public across each stage of the plastic lifecycle and targeted sectors”.

AS municipalities we can individually impose **bans on disposable** products like Montreal did last year and its surrounding cities with the thin single use **grocery bag**. Montreal like Vancouver also plans to ban in the near future some **other notorious single use plastic wear** we see littering the world, but we all know here, by now that we need, serious engagement from higher government bodies to get to the real and lasting solutions for plastics.



NATIONAL ZERO WASTE COUNCIL | PLASTICS ADVISORY PANEL

Regulatory Approaches for Priority Plastic Wastes

MAY 7, 2019



Plastic advisory panel members

Maja Vodanovic, Montreal (Co-Chair)
Andrew Marr, Vancouver (Co-Chair)

Christina Seidel, RCA
Etienne Angers, Recyc Québec
Jason Gale, Cascades
Matt Gemmel, FCM
Michel Allaire, CMM
Mikhael Metauro, Cascades
Monica Kosmak, Vancouver
Sophie Langlois-Blouin, Recyc Quebec

Our plastic advisory panel produced a document titled "Regulatory Approaches for priority Plastic wastes". It was a collaborative effort bringing together **quebec, BC and alberta**, the amazing Christina Seidel, Matt Gemmel from **FCM**, two members of **Recycle Quebec**, Cascade and Andrew Marr my co-chair from metro Vancouver. We focused on how best to control and manage such diverse and problematic articles as shopping bags, beverage bottles, tires or clothes made from synthetic fibres. We then proposed for each product regulations which have proven to be most effective in reducing waste. These regulations include imposed recycled contents, deposit systems, eco fees and Extended producer responsibility, or EPR.

1	2	3	4	5	6	7
PETE	HDPE	PVC	LDPE	PP	PS	OTHER
polyethylene terephthalate	high-density polyethylene	polyvinyl chloride	low-density polyethylene	polypropylene	polystyrene	other plastics, including acrylic, polycarbonate, polyacetic fibers, nylon, fiberglass
soft drink bottles, mineral water, fruit juice containers and cooking oil	milk jugs, cleaning agents, laundry detergents, bleaching agents, shampoo bottles, washing and shower soaps	trays for sweets, fruit, plastic packing (bubble foil) and food foils to wrap the foodstuff	crushed bottles, shopping bags, highly-resistant sacks and most of the wrappings	furniture, consumers, luggage, toys as well as bumpers, lining and external borders of the cars	toys, hard packing, refrigerator trays, cosmetic bags, costume jewellery, audio cassettes, CD cases, vending cups	an example of one type is a polycarbonate used for CD production and baby feeding bottles
						

RESIN IDENTIFICATION CODES
source: <https://sustainablepackaging.org/2017/resin-identification-codes/>

In order to get the to the solution it is important to understand the nature of plastics. As you certainly know not all plastics are equally recyclable, some like PETE no1 (beverage containers, oil bottles) and HDEP no2 (milk jugs and detergents) have good value in the secondary market but others like PVC and particularly no7 have no real value.

The tendency, in the industry, is unfortunately more and more to produce products that have various layers of plastic within them and sometimes even layers of different materials like in tetra packs. These products become more and more impossible to recycle.

The caps and labels of Beverage containers for instance should ideally be made of the same resin in order to facilitate their recyclability.

The id code for plastic resin tells us that plastics are not all equal and that they should not be mixed up. Yet in our province of Quebec we do just that we through literally all plastics together, combined with paper and glass in the blue box and then struggle to separate and find markets for the contaminated materail.

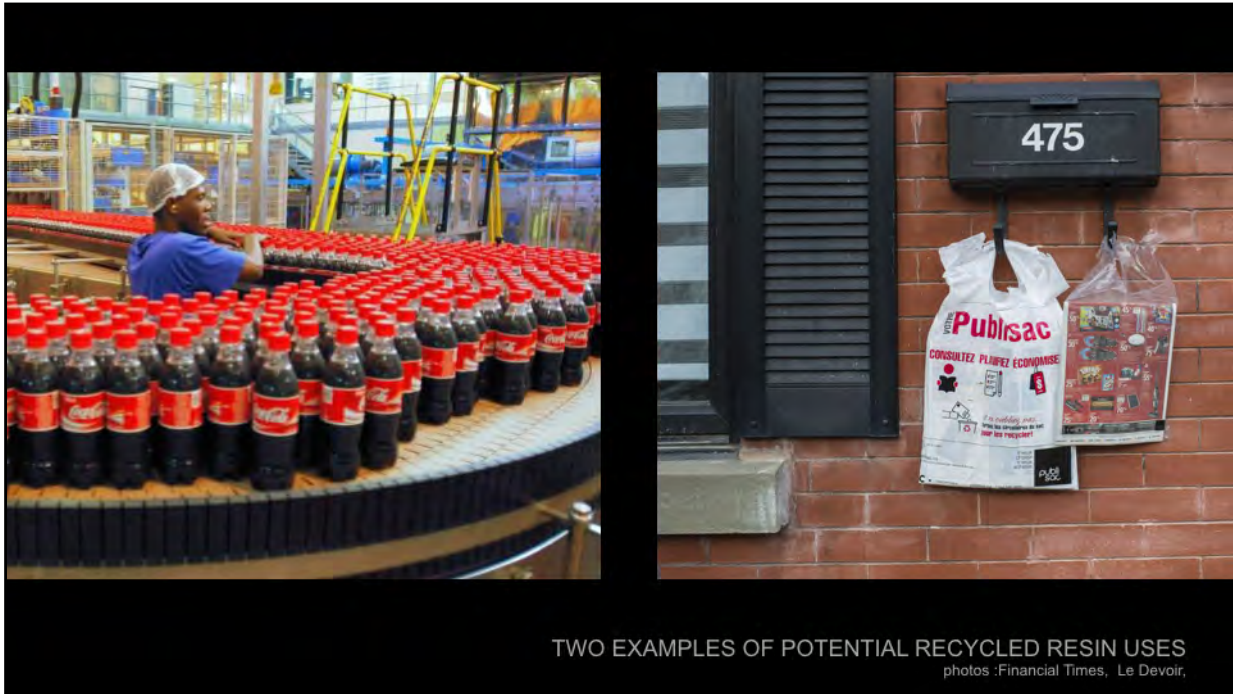


PURITY OF RECUPERATED PLASTICS
photo : Blackbridge investments

Currently, plastic recycling generally means downcycling, taking a plastic with a high purity and controlled qualities, and making it into a plastic which is less pure, with less demanding specifications.

This is because plastics are contaminated during their useful life, but also during the recycling process. Single stream curb side collection, in particular, makes it difficult to keep the different types of plastics clean and separated. This is also because mechanical recycling has a limited capacity to purify the recuperated plastics. This downcycling makes it hard to reintroduce post-consumer plastics back into the value chain.

While chemical recycling is far better, for it can reduce post-consumer plastics back to its pure molecular state, it is still in the development phase. More and more Quebec startup companies like Loop industries (not same as Loop) and Polystivert (styrofoam) have had success, but the quantities they produce are not yet on an industrial level.



TWO EXAMPLES OF POTENTIAL RECYCLED RESIN USES
 photos :Financial Times, Le Devoir,

A representative of the large soft drink company (not to mention COKE) told me that they could be making bottles from recycled PETE but that the amount presently available on the market would only allow them to include all of 10% of recycled content.

Trans continental, a large Quebec packaging cie, (recently faced with a potential ban on its 3.3 million weekly door to doo distribution business) started producing a bag made from 100% recycled content. TC just a few days ago told me that they are having hard a time getting the needed supply of no 4 post-consumer plastic, because the recycling plant in our city mixes up into the same bundle all plastics ranging from 3 to 7. This makes the labour cost involved in sorting the mixed and dirty material too high.

Naya, a Quebec company, was the only one that for some years, put on the market a water bottle made with 100% recycle content. It recently cessed to do so because it was not competitive enough

These technical difficulties combined with low virgin resins prices due to the abundance of low cost shale gas and government subsidies makes recycled resin non competitive.

By imposing recycled content in plastic packaging, governments can help create the needed stable, viable market for the recycled resin. This will in turn foster investments and innovation in the recycling business.

If billions are given by the government to foster the oil and plastic industry, shouldn't they also give an equal amount of billions to foster chemical recycling?

Just a few millions promised now wont do.



I mentioned that plastic recuperation rates and recycling rates are low. One way to improve both rates is to adopt a deposit system. This is a system that has proven its efficiency over many decades. If the deposit price is high enough it produces the highest recuperations rates of all, with percentages often above 90 %.

This approach also helps to reduce contamination, which also greatly helps the recycling process.

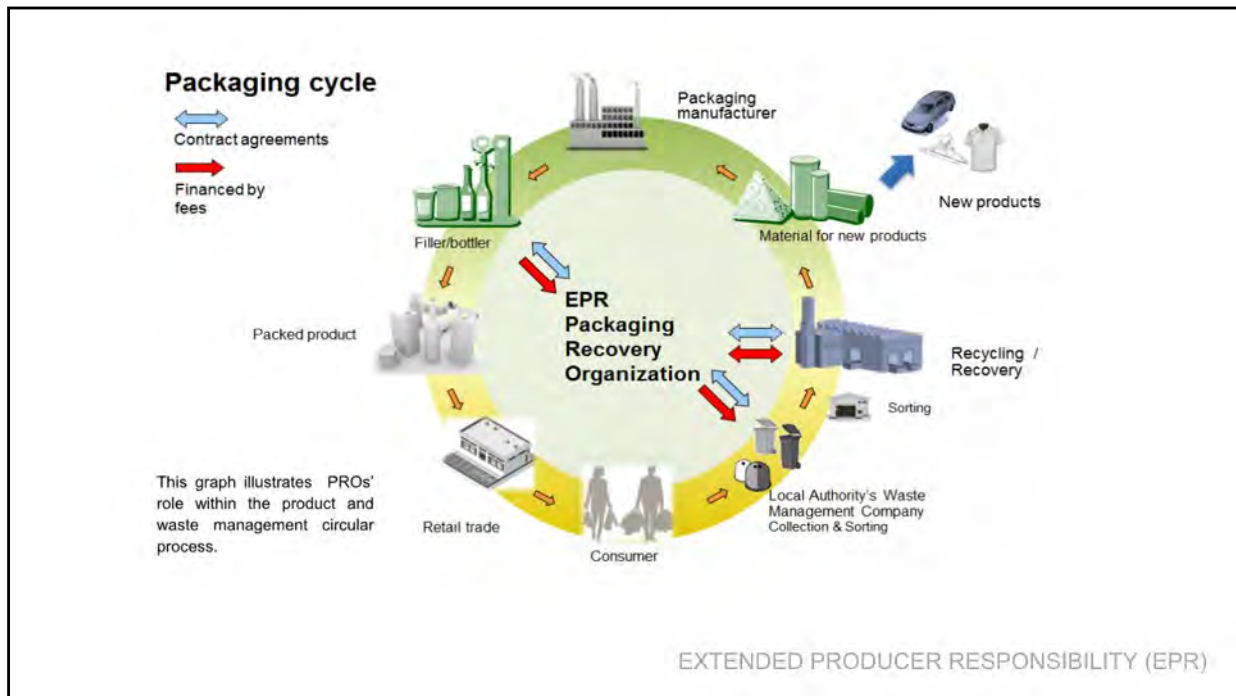
The Greater Montreal region is lobbying the Quebec government now to expand our existing deposit system. Presently in Québec only soft drinks have a deposit return. The price of the deposit that has not been changed since the 1980s must this be increased and we want the list of accepted containers widened to include all beverages.



DEPOSIT SYSTEMS

In Quebec, water bottles are not covered by the deposit system. Yet, Quebec produces 1 billion plastic bottles every year, and 700 millions of these bottles are lost to landfills or littered. It is a waste of very recyclable PET.

More and more people want us do to do something about all this waste.



But we can ask ourselves why should cities be responsible to manage all the discarded plastic objects? Extended producer responsibility, or EPR says that the initial producer should be responsible to design, manage and pay for the end of life of their products. This gives them a strong incentive to design objects that are easily recuperated and recycled.

EPR is a system where the government sets the rules, responsibilities and goals, but the implementation is left to the private sector.

British Columbia is a good example of this. Two non-profit organisations controlled by the producers, Recycle BC and Encorp, manage the entire recycling activity. Recycle BC manages the curb side recycling and Encorp manages the deposit and return . BC presently has some of the highest recycling rates in Canada.

Quebec has a partial EPR system where the producers pay for the curb side collection and sorting facilities but They do not however design nor manage the system. This limits their capacity to optimise the system.

The greater Montreal region recently updated its waste management plan and recommended to the Quebec government to adopt a more complete EPR approach

inspired by BC.

Because Canada has many **large businesses** that operate nationwide it would truly be best to harmonise their responsibility throughout the provinces and territories in order to create the most efficient system that could benefit everyone.

ECO FEES

When EPR systems are in place it becomes possible for the government to impose a disposal fee, on bad packaging, that is not recyclable or that contains no recycled content. It can also encourage good packaging.

Around the world studies have shown that dissuasive fees have the best results to change undesired behaviour.

Charging a fee for single use plastic items is shown to be the most effective way to reduce waste.



All These different actions require the participation of the federal, provincial and municipal governments, producers as well as the recycling industry and Nation zero waist brings them togethe.

The government coordination is currently happening at the Council of Canadian Ministers of the Environment which unites the federal and provincial governments.

This Council adopted earlier this year an action plan that wants to influence plastic product design to promote recycled content and to create a nation standard with targets and timelines for increasing recycled content, with update standards for measuring and reporting this recycled content.

In sync with these orientations the Packaging industry represented by the Packaging Association of Canada which has more than 2 300 members has been working on its “PAC NEXT” program aimed at creating a national standard for the industry that will help us differentiate a good package form a bad package.

I am happy to be a part of these discussions in which the industry with its partners is looking at how best to incorporated recycled content in its packaging. It is very exciting because I do think it will work.



The 27th of September Greta Thunberg came to Montreal. Inspired by her arrival, the youth movement against climate change, organised the largest march in Canadian history. 500 000 people gathered in the streets of Down Town Montreal. The subways were free that day, cars were kept out of the down town core, and people swarmed the streets. It felt incredible.

Montréalers are proud of their mayor Valerie Plante who was invited that week to the UN' world summit on Climat Change in New York. She was the only world mayor invited to speak.

Montreal is presently working on an ambitious Energy Transition plan and part of that plan are bans on some single use plastics. Yet in order to achieve our common goal we must work together to call for federal legislation to implement recycled content in plastics entering the canadian market and lobby our provincial governments to implement and harmonise EPR thought the land to ensure a cohesive, agile and efficient system.

Together we can be leaders in the creation of a new world economy because we Canadians are world experts in plastics. We know how to turn waste and pollution into a resource, save money, create jobs and reduce the environmental impact of the plastic industry. Canadians expect us to rise to this challenge. And together we will.

Thank you.

604-Trash-It A&W Food Services of Canada Inc. Alberta Food Processors Association Bank and Vogue
BASF Canada BC Bottle and Recycling Depot Association BC Ready-Mixed Concrete Association
Beyond Food Inc. BNAC Environmental Solutions Inc. Bokashi Living Inc. Brantwood Consulting BSIbio
Burnaby Board of Trade Canadian Manufacturers & Exporters Canadian Plastics Industry Association (CPIA)
CanBim Carton Council of Canada Cascades Recovery C-Change LabsCIAL Group Immacutec
Systems Technologies Inc. Interface Keurig Canada Lafarge Canada Inc. London Drugs Metro Inc.
Micron Waste Technologies Inc. MZ Consulting NADA Naturally Crafted Contracting Ltd.
Nature's Path Foods NewSpring Energy Oklin Composting Technology Ltd. Partners in Project
GreenPolicy Integrity Inc. Quupe Recovering Recyclables Recycling Alternative Renewi Canada
Retail Council of Canada Circular Supply ChainsInc. Clean Foundation ConnectivitywerxCraft GrainDell
CanadaEco Guardian ECODAS Ecoinspire EcoMed Services Canada Ecowaste Industries Ltd.
EcoZero (an EarthWorks Recycling Company) Elements Society Genpak Flexible Green Chair Recycling
Green Spark Group Green Standards Ltd. GreenomicsHP CanadaHSR Service
Richvan Holdings (2006) Ltd. Shape Property Management Shaw Industries SJMConsults
Small Business BC Soapstand Sobeys Inc. SodexoSPUD (Sustainable Produce Urban Delivery)
Strathcona Business Improvement Association Stuart Olson Surrey Board of Trade SymbiAudit Inc.
The Delphi Group Tradle Value Village Virtue Canada Walmart Canada West Coast Reduction Ltd.s

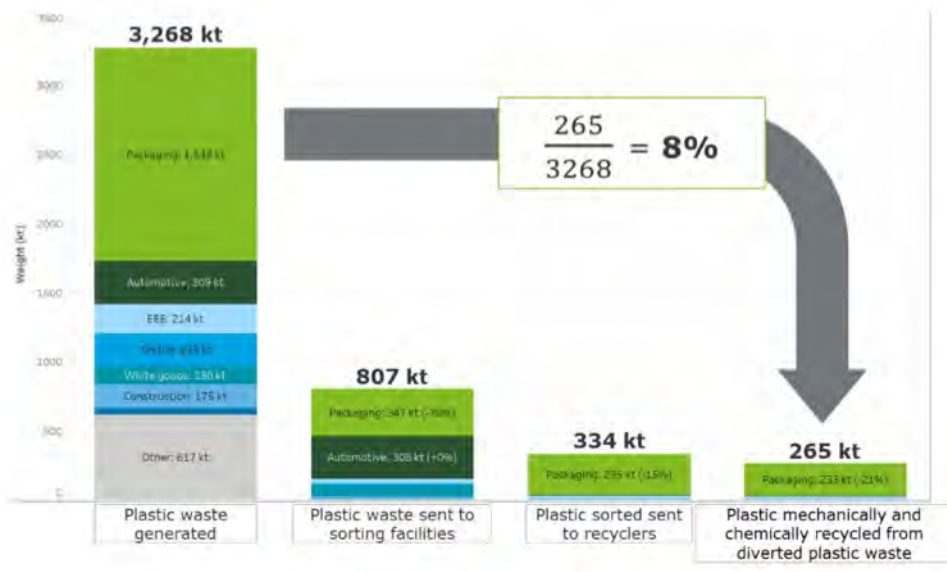
CORPORATE MEMBERS OF THE NATIONAL ZERO WASTE COUNCIL

The National Zero Waste Council brings together numerous communities, businesses and government in order to for us to work together toward this complex and ambitious goal of plastic reduction and market transformation.

Join us. We are stronger together.







PLASTIC AT DIFFERENT STAGES OF THE WASTE LIFE CYCLE, PER SECTOR IN 2016
 source: Economic Study of the Canadian plastic Industry, Markets and Waste, Deloitte, 2019