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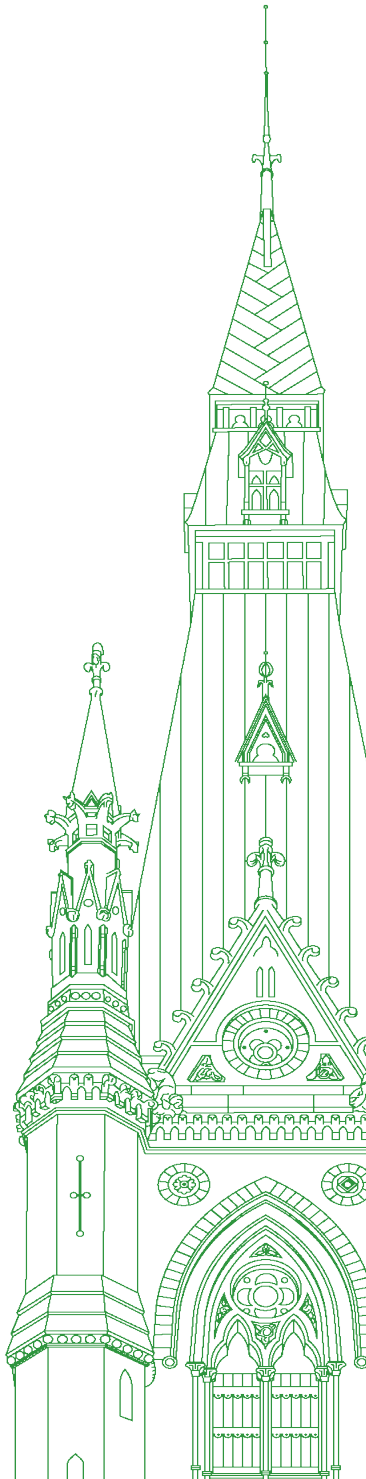

Chair: Mr. Francis Scarpaleggia

Standing Committee on Environment and Sustainable Development

Monday, April 12, 2021

● (1525)

[*Translation*]

The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): I now call to order meeting number 24 of the Standing Committee on Environment and Sustainable Development, and our first order of business is to welcome our new clerk, Ms. Angela Marie Crandall. I would also like to welcome a great poet, Mr. Bachrach, who read us his poem about Mr. Bittle as part of this committee's sound check tradition.

As you know, this is our first meeting on the single-use plastic items study, but first I would like to ask that someone move the adoption of the steering committee report. Indeed, everything that follows is anchored in that report, if it is approved.

I saw two raised hands.

Mr. Bittle, you have the floor.

[*English*]

Mr. Chris Bittle (St. Catharines, Lib.): Mr. Chair, I have a very brief point of order, after which I will turn it over to Mr. Longfield to move the report, if that's why he's raising his hand.

Before we get started, I wanted to briefly address a mistake made by our office. This morning the steering committee motion was shared with parliamentary officials and other exempt staff. This was done to ensure that we had the appropriate departmental officials scheduled to respond to the requirements of the steering committee motion, including for our meeting on Wednesday, in the event it was adopted. This was an error, and I've reminded staff that the steering committee motions are confidential until passed.

As parliamentary secretary, I'm accountable, and I apologize to members of the committee for this error. I've spoken to the staff and they have apologized to me for this error, and I apologize to the committee. I want to assure you that this won't happen again.

The Chair: Thank you, Mr. Bittle.

Go ahead, Mr. Longfield.

Mr. Lloyd Longfield (Guelph, Lib.): Thanks, Mr. Bittle, for the clarification, but I would move that we accept the report.

The Chair: Is it unanimous?

Mr. Dan Albas (Central Okanagan—Similkameen—Nicola, CPC): Yes, and so is accepting the apology.

The Chair: Okay. That allows us to move forward with the first meeting of our plastics study.

I see some witnesses who are familiar to us. They've been here recently, so they, and I imagine all the other witnesses, know the routine. We ask you to remain on mute until it is your turn to speak. That's essentially it. It's pretty much common sense, but it's worth mentioning.

Of course, you can speak in either official language and you have three options to listen—the floor feed, the English interpretation and the French interpretation.

We have with us today Dr. Chelsea Rochman from the University of Toronto. From Canada Plastics Pact, we have George Roter and Usman Valiante. From the Chemistry Industry Association of Canada, we have Mr. Masterson, who is familiar to us, and Ms. Elena Mantagaris, who is also familiar to us. From Husky Injection Molding Systems, we have Mr. John Galt. Finally, from RECYC-QUÉBEC, we have Madame Sophie Langlois-Blouin.

Each group of witnesses has five minutes to present. We should be able to get three rounds in. If not, if it's a question of another five minutes, which I don't anticipate it will be, we'll just go to 5:35 or 5:40 at the latest. However, I don't think that will be a problem. I think we'll finish on time.

We'll start with Dr. Rochman for five minutes, please.

● (1530)

Dr. Chelsea M. Rochman (Assistant Professor, University of Toronto, As an Individual): Thank you so much for inviting me to present to this committee. I'm thrilled to have the opportunity to share my expertise and facilitate the use of scientific evidence in forming policy.

My name is Dr. Chelsea Rochman. I'm a professor in ecology at the University of Toronto. My research program is globally known for work on method development, contamination of microplastics in the environment, exposure to wildlife and humans, and ecological effects. We study plastic debris across the world, including locally in the Great Lakes, at the IISD Experimental Lakes Area, and in the Canadian Arctic.

Currently I am the scientific delegate to Canada for the UNE working group on plastic pollution. I'm also advising ECCC on the addition of plastic as a subindicator of Great Lakes health under the Great Lakes Water Quality Agreement. I'm leading an international working group in California to advise on a monitoring method and a threshold for risk in both wildlife and humans relevant to microplastics.

Today I want to speak specifically to plastic waste and single-use plastic items, followed by commenting on the negative consequences of plastic pollution in general.

In a recent study, we estimated that 24 million to 34 million tonnes of plastic waste was emitted into aquatic ecosystems in 2020. If we continue business as usual, that number may triple by 2030. There's no time to waste. Unless growth in plastic production and use is halted, a fundamental transformation of the plastic economy is essential. We need to shift to a circular economy, where end-of-life plastic products are valued rather than turned to waste. Because of this, I support goals under the Canada-wide strategy on zero plastic waste and the proposal to manage plastics under CEPA. I was pleased to see Canada adopt a truly integrated approach with policies relevant to managing single-use plastics, establishing performance standards and ensuring end-of-life responsibility.

Each of these pathways is important, including the reduction in our reliance on unnecessary single-use plastics in order to bend our linear plastic economy toward a more circular one. Reducing single-use plastics that are common environmental pollutants, that are not reusable or recyclable and that have a substitution, is an important part of this transition. I applaud the decision to ban certain single-use plastics as early as this year.

I also agree with each item on the list. This is because these items are commonly found in the environment, are not essential, and do not have a practically sustainable end of life. I also suggest that we think critically about how to define “plastic” under this regulation. If compostable or biodegradable plastics are to be considered for exemption, they need to be truly compostable beyond an industrial compost facility, and/or biodegradable in a relatively short time scale in the environment, meaning less than six months. To the best of my knowledge, there are no products currently on the market that meet these criteria.

I want to spend my last minutes discussing the effects of plastic once it becomes pollution.

My research mainly focuses on the small stuff. The term “microplastic” incorporates a large diversity of plastic types, including degraded bits of larger plastic products, such as single-use items. My research demonstrates that microplastics are ubiquitous in the environment, including in our Arctic and in seafood and drinking water extracted from the Great Lakes.

My research also demonstrates that microplastics can be toxic to fish and invertebrates. There have been many studies testing the effects of microplastics on organisms. Although results are variable, there's irrefutable evidence that microplastics can impact organisms at concentrations that are already present in some places in the environment. Although we do not yet fully understand how they affect human health, we know that we are exposed, and further research is necessary.

When it comes to large plastic debris, we have no doubt there is an impact on wildlife. Studies report contamination via entanglement or ingestion in hundreds of species. This contamination can lead to laceration of tissues, death of an individual, declines in population size and changes in community assemblages. The weight of evidence for how plastics impact wildlife once it becomes debris in the environment suggests that the time to act is now.

As you know, there's no one-size-fits-all solution. Instead, we need a tool box of solutions that include those that help us build a circular economy. One of these is the reduction of unnecessary single-use plastics. In Canada, we have demonstrated leadership in this space, and I thank you. We should continue by building a circular economy, reducing emissions of plastics into our environment, and cleaning up what has become pollution.

● (1535)

I envision diverse policies working in tandem, and these should include those currently on the table, which include expanded and harmonized EPR, or extended producer responsibility; the implementation of standards that increase the use of recycled content in new products; and the elimination of problematic single-use plastics.

I want to thank you again for this opportunity, and I'd be really happy to answer any questions today or in the future.

Thank you.

The Chair: Thank you very much, Dr. Rochman.

We'll go Mr. Roter, who will be speaking on behalf of the Canada Plastics Pact.

Mr. George Roter (Managing Director, Canada Plastics Pact): Thank you so much to the honourable members for inviting us as witnesses today.

I’m pleased to join you as managing director of the Canada Plastics Pact, and I’m joined by my colleague Usman Valiante.

The Canada Plastics Pact is tackling plastic waste and pollution at source. We're a member of the Ellen MacArthur Foundation’s Global Plastics Pact network and an independent initiative of The Natural Step Canada, a national charity with 25 years of experience in fostering a strong and inclusive economy that thrives within nature’s limits.

[*Translation*]

Ms. Monique Pauzé (Repentigny, BQ): I apologize for interrupting you, Mr. Roter.

Mr. Chair, I am not receiving the interpretation because the sound quality is not good.

Is Mr. Roter's microphone in the right place?

The Chair: Could the clerk check with the interpreters to see if there is a problem?

If I understand correctly, you can't hear anything, Ms. Pauzé. There was no interpretation. Is that correct?

Ms. Monique Pauzé: That's right. The interpreter said that the sound quality was not good enough for him to be able to interpret what Mr. Roter was saying. I don't know if the microphone's position should be adjusted.

The Chair: Possibly.

[*English*]

Mr. Roter, you have the mike that was sent to you by the committee, I would imagine.

Mr. George Roter: Yes. I'm not sure if this is good enough so that everybody can hear me just fine.

The Chair: Sometimes it helps if you raise the mike a bit, as opposed to lowering it.

Madam Clerk, is that better?

Mr. George Roter: Is the audio okay?

The Clerk of the Committee (Ms. Angela Crandall): They're saying that the sound is very muffled.

Mr. George Roter: Is this better?

The Chair: Yes, a little bit.

The Clerk: Is it not a House of Commons headset, Mr. Roter?

Mr. George Roter: No, it's not, but I tested this last week with the group, and they said it was just fine. I can switch headsets if you would like.

● (1540)

The Chair: That would be better. Why don't you do that?

Mr. George Roter: Sure.

The Chair: In the meantime, we'll go to Mr. Masterson. Then we'll come back to you, Mr. Roter.

Mr. Masterson, go ahead, please, for five minutes.

Mr. Bob Masterson (President and Chief Executive Officer, Chemistry Industry Association of Canada): Thank you, Mr. Chair and members of the committee, for this opportunity.

I'm pleased once again to be joined by my colleague, Elena Mantagaris.

As we mentioned the last time we spoke just a few short weeks ago, Canada's chemistry and plastics industry does share Parliament's and Canadians' concerns and views that plastics have no place in the natural environment. Our industry accepts its shared responsibility for addressing the issue of post-consumer plastics. We're designing products for recyclability. We're using recycled content. We're advancing industry-led producer responsibility programs from coast to coast, investing in technology infrastructure, and taking action to address marine plastic litter, especially in developing countries.

Our industries do believe that a circular economy for plastics is possible and achievable within a relatively modest time frame. Once again—and I'm sure Mr. Roter will reinforce this—our customers are demanding it.

One purpose of this study is with regard to the economic impacts of the federal government's proposed approach to listing plastic manufactured items on CEPA's schedule 1 list of toxic substances and banning certain single-use plastics. I'd reinforce that it's important to recognize that the chemistry and plastics industry is very heterogeneous, but for the purpose of trying to simplify this for you, I'll just talk about two distinct components.

First, we have the large upstream resin manufacturers. These are very large global multinationals with massive facilities in Ontario, Alberta and Quebec.

Second—and these companies will be impacted very differently—we have the downstream plastics product manufacturers. They take the resins and convert them into the plastic products that we all use in our lives every day. These downstream companies are widely dispersed. There are nearly 2,000 of them across Canada. Eighty-six per cent of them are small and medium-sized enterprises, and the vast majority of those are family-owned companies. Many of those companies specialize in single products, such as plastic bags, or a small suite of products. The ban will disproportionately harm these companies and their employees and, in some cases, close off domestic markets entirely.

Moreover, Canada is a relatively small country in terms of the number of people and the size of markets. Like most Canadian industries, these companies, to remain profitable and to operate at scale, serve both domestic and export markets. One thing that's proposed or discussed in the federal government's approach is a ban on the export of plastic products, even to economies that don't have bans similar to what Canada is proposing. Those companies will be left with no choice but to either relocate or shut down entirely, because it won't be feasible to produce products if there's no export market either.

I think, however—and you've heard me say this on past occasions—that the biggest economic impact that will arise from the proposed federal actions will be the effect on future investment opportunities. Canada is a global-scale, low-carbon-producing plastics producer. We're the third-largest manufacturer in Canada. We're a top-10 global plastics resin producer. This industry is expanding globally, as I've said, at twice the global GDP. We think it sends a very negative signal to the global industry to list all plastic manufactured items as CEPA-toxic. It sends the message that Canada is ambivalent at best, if not actually in opposition, to growth and investment in this sector.

We cannot achieve a circular economy and we cannot achieve the investments necessary for a circular economy without attracting that global investment here. It will come out of the sector we already have.

Canada has a great opportunity. You've heard me say that we've seen $300 billion of investment in the United States in the last six years. Canada should have seen $30 billion of that in its own chemistry sector. We have largely become a flyover destination for chemistry sector investment, and a toxic designation and the listing of all plastic manufactured items as toxic will exacerbate that problem.

We see our largest provinces—Alberta, Ontario, Quebec and British Columbia—all prioritizing economic growth, partly based on recovery through the COVID pandemic and partly on the basis of new chemistry investments. As we did with the COVID epidemic, we need the federal government and the provincial governments working hand in hand with industry and other stakeholders in a consistent and integrated manner.

Thank you.

● (1545)

The Chair: Thank you.

We'll go now back to Mr. Roter.

Mr. Roter, I think you have the right headset, but we can't hear you and I don't think you're on mute. We'll go to Mr. Galt and then we'll come back to Mr. Roter.

Mr. John Galt (President and Chief Executive Officer, Husky Injection Molding Systems Ltd.): Thank you, Mr. Chair, for giving me the time to represent my viewpoints on this critically important subject.

I see three key gaps in the proposed CEPA legislation.

The first one is that plastics are not toxic, especially when the alternatives are considered.

The second one is that dealing with the root cause of the environmental issue, Canada's hopelessly outdated and ineffective waste management practice, isn't addressed to the extent it needs to be.

Finally, there are the economic and employment impacts.

On the first one, in terms of why plastics are not toxic, plastics are not toxic in any traditional sense of the word. They are extremely stable chemically and do not interact easily with other substances. They are one of the most commonly used materials within the medical industry. Fully 73% of medical disposables on a worldwide basis are made from plastic. Plastic is medical grade. Compared to aluminum or glass, when broken into smaller pieces, plastics do not cause the same level of cutting hazard that either of those materials do. The combination of medical-grade qualities and unbreakability is exactly why plastics have displaced other materials in food and beverage packaging. Plastics deliver products safely, they minimize food waste and they are well suited for transportation.

Aluminum, unlike plastic, is chemically very reactive. That's why every aluminum can produced is supplied with a plastic liner.

Paper is also a wonderful material, but its application is highly limited. Paper-based products cannot perform in applications involving liquids like water or oil without additives or multi-layer structures, including plastic linings. Many polycoated pulp packaging containers use perfluorinated chemicals, PFAS. PFAS do not decompose.

The uncontrolled release, therefore, of waste into the environment is at the core of the toxic argument, and addressing that is something I agree with completely.

When we talk about putting an end to the outdated concept of the linear economy and why the circular economy is key to protecting our natural resources, I would like to offer the following on plastics.

The term “single-use plastics” is a misnomer. The only things keeping the majority of plastics in use today from being used repeatedly are updating Canada's waste management policies into a resource management policy focus, incentivizing investment in recycling, and establishing minimum recycled content standards for all articles, plastics or otherwise.

Nationally, the beverage industry recycles close to 75% of all plastic containers. The technology to recycle PET plastic, the one used in those containers, is mature. It's effective and it needs to be expanded.

Recycling and reuse are a proven solution, but the legislation falls short in addressing this critical issue to the extent I believe it should.

Finally, when we think about the environmental impacts, plastic has the lowest melting point of any packaging material and therefore requires less energy to produce or recycle. Relative to the PET plastic used in a beverage container, paper composites have 1.6 times the carbon footprint, aluminum 1.7 times, and glass 4.4 times the carbon footprint.

PET plastic does also not require deforestation or open-pit mining the way paper and aluminum do.

In terms of jobs, Husky is part of Canada's $35-billion plastics industry, which employs directly and indirectly 370,000 people, most, as has already been stated, in small or medium-sized businesses, a segment that has been devastated by the COVID lockdown structure.

Husky, as part of that, employs roughly 1,100 people in Canada and 4,000 globally. We invest $60 million annually through 190 different suppliers that employ 10,000 Canadians. Over the last 10 years, Husky has paid out over $1.8 billion in Canadian payroll. We are a world leader in Industry 4.0 and on a three-year basis are on track to invest $190 million in our Canadian operations while upscaling our workforce for digitalization. Our goal is to ensure that our Canadian operations can compete with any in the world.

However, since this legislation has been tabled, Husky, and many of our customers and co-suppliers to the industry, have put our investments in Canada on hold.

The right solution, in my opinion, is to engage our industry and its 1,700 small and medium-sized businesses in the solution. The development of the circular economy will create jobs.

In summary, the era of take, make and toss, otherwise referred to as the linear economy, is over, and I think we can all agree with that. We—and I mean all 7.8 billion people on this planet, each striving for a better standard of living—have passed the point of no return. We simply extract more from mother earth far more quickly today than she can hope to replenish. Through public-private partnership, we can consider turning what we call waste today into the resources we use tomorrow over and over again.

● (1550)

Plastics represent a family of materials that are ideally suited to a circular economy. Many plastics are infinitely reusable. They are purified and sanitized during the recycling process.

The Chair: Your time is almost up, Mr. Galt. Perhaps you could take five minutes to wrap it up.

Mr. John Galt: I'm just wrapping up. I'll just take a few seconds on the last couple of points.

Fundamentally, plastics have the lowest carbon footprint and recycle well relative to the alternatives.

Finally, I think in the time it's taken so far in the last year and a half to debate this, a public-private partnership could have been established and meaningful inroads could have been made in establishing Canada as a leader in the circular economy. What's unique is that Canada has the opportunity on a global scale, as we're a global company that deals with customers everywhere.

Canada actually absorbs more carbon than it produces—

The Chair: We're going to have to stop it there, Mr. Galt. There will be ample time to provide information during the Q and A period.

Mr. Roter, how are we doing?

Mr. George Roter: Maybe the third time is a charm. What do we think?

The Chair: I think you're going to get the thumbs-up on this one. I'm just looking at the clerk.

Mr. George Roter: I'm just going to continue talking, and then we'll make an assessment as to whether the volume is good. I think that I'm now on the correct interpretation channel, so we can make sure that's going through.

The Clerk: It's good.

The Chair: Perfect.

Go ahead, Mr. Roter. Take it from the top, as they say.

Mr. George Roter: I'll take it from the top. Third time's the charm.

Thank you so much again for your patience.

I'm very pleased to join you as the managing director of the Canada Plastics Pact.

The Canada Plastics Pact is tackling waste and pollution at source. We're a member of the Ellen MacArthur Foundation's global Plastics Pact network and an independent initiative of The Natural Step Canada, a national charity with 25 years of experience in fostering a strong and inclusive economy that thrives within nature's limits.

Over 50 leading organizations are part of the Canada Plastics Pact, all taking action to achieve a circular economy for plastics. This is a growing network with expertise ranging from chemical and resin manufacturers to packaging and consumer goods producers to retailers, collectors, sorters and recyclers. It includes for-profit, not-for-profit and public sector organizations. This is the only network that brings together all of Canada's plastics value chain under one roof.

We recently completed a study showing that about 1.9 million tonnes of plastics packaging is produced in Canada each year. Of this, 88% ends up thrown away in landfills, burned in incinerators or lost to the environment. Just 12% is recycled.

That 88% represents waste, not just garbage. It's a wasted economic opportunity, a wasted chance at investing in innovation and industrial development and wasted greenhouse gas emissions.

If the question is how to address the make, take, waste reality of plastics today, the answer is with a circular economy—as we've heard from the other speakers—in which we keep plastics in the economy and out of the environment. This would mean eliminating the plastic packaging we don't need while innovating to ensure the plastic packaging we do need is reused or recycled. A circular economy for plastic turns waste into tens of thousands of jobs and billions of dollars in economic value while stimulating innovation and benefiting the environment.

A 2019 Recycling Council of Alberta report identified that increasing recycling in that province alone could generate $700 million per year in economic value and nearly 6,000 jobs. This is also true elsewhere in Canada, where a circular economy for plastics can produce high-quality, future-fit jobs. Imagine well-paid, safe, and secure jobs in sorting, recycling and industrial facilities from Kelowna to Kitchener, coast to coast to coast, in urban, rural and remote areas.

For the petrochemical sector, this poses an opportunity to develop world-leading innovation. Take, for example, a recent partnership between B.C.-based Merlin Plastics and Calgary-based NOVA Chemicals to turn recycled polyethylene into food-grade plastic resin.

Canada has an R and D infrastructure in place, supported by leading academic institutions, that is already driving this type of innovation in established companies and start-ups. More is possible.

The environmental benefits are also clear. Keeping plastics out of landfills and incinerators benefits our communities and animal and human health. Recycling plastic reduces greenhouse gases by over two-thirds compared to making resin from fresh, virgin resources.

If the early stages of the Canada Plastics Pact have proven anything, it's that industry is highly invested in bringing about a circular economy for plastics in Canada.

The involvement of all levels of government is also key. Bans on single-use plastic items are one possible tool on the menu of options available to governments. While partners in the Canada Plastics Pact have a range of views on this topic, our signatories have committed to designing out plastic packaging that is problematic for collection and recycling supply chains.

I would, however, like to shine a light on some additional approaches that the federal government can consider.

First, there's a clear role for the federal government in coordinating an effort to collect and share plastics data. Currently, data is inconsistent and insufficient on what plastics are flowing through the system and where they're ending up. Simply, you can't manage what you can't measure.

Second, there's an opportunity for the federal government to establish an industrial policy agenda for a circular plastics economy. Specifically, it can create national definitions in performance standards for the collection and recycling of plastics; support the provinces as they set out performance-based regulations, such as extended producer responsibility; and establish national recycled content standards while using public procurement to drive demand. These supply- and demand-side policies will set the basis for technological innovation in the circularity of plastics.

Third, no one part of the plastics value chain can address the challenge of waste alone, so it's important for governments to invest in the multi-stakeholder platforms for collaboration that are crucial for driving holistic systems change.

● (1555)

To conclude, let me be clear that the Canada Plastics Pact members do not speak with one voice on the proposed bans. What we are agreed on is that there is a broader agenda and a set of policies that the government will need to put in place to realize the benefits of, and position Canada as a leader in, the essential transition to a circular plastics economy.

Thank you.

The Chair: Thanks.

First of all, I'd like to thank our analysts for putting together such an interesting panel. A lot of discussion and debate are going to be generated..

We'll start the question period with Mr. Albas for six minutes, please.

Mr. Dan Albas: Thank you, Mr. Chair.

I'd also like to pass on my thanks to all the good work that's been going on to make sure we have these great witnesses today.

First I'd like to address Mr. Masterson. Would you say this action of declaring plastics—

The Chair: I'm told—

I'm so sorry. Madame—

Mr. Dan Albas: Did we miss someone?

[*Translation*]

The Chair: Yes, and it's entirely my fault.

You are to hear from the representative from RECYC-QUÉBEC. This is very important. I was wondering why we were ahead of schedule, but I understand now.

I apologize, Ms. Langlois-Blouin. You have the floor.

Ms. Sophie Langlois-Blouin (Vice-President, Operational Performance, RECYC-QUÉBEC): Thank you.

As I will be presenting in French, if I may, I would like to make sure that the interpretation into English is working well.

Is it working?

The Chair: For my part, I can hear you just fine. I imagine everything is fine for the interpreters as well.

Madam Clerk tells me that this is the case.

Ms. Sophie Langlois-Blouin: Good afternoon, everyone.

Thank you for inviting me to appear before your committee.

I am Sophie Langlois-Blouin, vice-president of RECYC-QUÉBEC. I am responsible for operations.

RECYC-QUÉBEC is a government corporation that reports to the Minister of the Environment and works every day to reduce, reuse and recycle as much material as possible by guiding both citizens, municipalities and businesses in the adoption of responsible production and consumption practices. Our vision is to make Quebec a waste-free society.

You are studying the issue of plastics and single-use products. This is an issue in which RECYC-QUÉBEC has been very active for many years. All of our interventions, whether for plastics or other materials, are essentially based on the 3RV hierarchy, which you may be familiar with. So our main actions touch on reduction at source and reuse.

Over the past year, RECYC-QUÉBEC has offered financial support to concrete projects that reduce plastics and single-use products. Ten projects were selected last February, in 10 regions of Quebec, for just under $900,000.

I would say that there is genuine enthusiasm on the part of citizens, businesses and municipalities, who want to make the transition and reduce plastic or single-use products at the source. These can be completely eliminated by raising awareness. There is a buy-in to this kind of initiative. It is very important for us to continue to support and document this. We are also working to promote reuse, which is the transition to sustainable products. It's about moving away from single-use and disposable products. We've prepared different information sheets on that.

We've also done outreach in the past to show that not only are there environmental benefits from reducing plastic or single-use products and using reusable products, but also economic benefits. It's important to talk about this. Businesses and merchants that make the transition to sustainable products can quickly see savings, especially in their acquisitions.

More and more new companies and business models are emerging. The Quebec example I want to talk about is La tasse, created by the organization La vague. It's a visually recognizable blue mug that has been adopted by many retailers and cafés in many cities. It allows consumers to pick up the mug at one location and take it back to another. It's really this kind of initiative that we want to support and roll out on a larger scale in different regions of Quebec.

When it comes to plastics and single-use products or packaging, there are two things that our work has led us to pay particular attention to.

First, reducing plastic products is good, but we must be careful not to create a rebound effect, especially when we want to reduce food packaging. We know that packaging can play a role in preserving and extending the shelf life of food. It is possible to reduce both packaging and food waste, but it must be done in an informed manner. In particular, RECYC-QUÉBEC participated in a study by the National Zero Waste Council that focused specifically on the link between packaging and food waste reduction.

Second, when looking for solutions to replace single-use plastics, we need to be careful about the impacts of those solutions. In the past, we conducted a life-cycle analysis of shopping bags. We looked at reusable bags and single-use bags, and found that the single-use plastic bag had the least environmental impact over its entire lifespan. It is often said that replacing one disposable product with another disposable product is not the best solution. You should first look at whether you can reduce their use or even switch to sustainable products.

In closing, I would like to point out that RECYC-QUÉBEC is also very active in the field of transitioning to the circular economy. This is a set of strategies to achieve our goal. Recycling is part of it, but, for us, it is one of the last strategies to look at.

● (1600)

In Quebec, we are working to update and modernize our recovery and recycling systems, particularly selective collection and the refundable deposit system. Last March, legislation was passed to modernize both of these systems under an extended producer responsibility approach. Deposits will also be expanded to include all types of beverage containers. So we are talking about an expanded and modernized deposit.

In summary, source reduction and reuse are our priorities.

The Chair: Thank you, Ms. Langlois-Blouin.

We can now move in good conscience to the question and answer period.

Mr. Albas, you have the floor for six minutes.

● (1605)

[*English*]

Mr. Dan Albas: Thank you, Mr. Chair.

Thank you again to all the witnesses.

Mr. Masterson, would you say this action of declaring plastics toxic is going in absolutely the wrong direction and increasing uncertainty for industry?

Mr. Bob Masterson: Absolutely that's true, and I think you've heard that from Mr. Galt as well.

Mr. Albas, I want to be clear. Our industry is not against government action in this area. In fact, we encouraged the Government of Canada and Minister Wilkinson to look at the right tools to do this. The issue was that the Canadian Environmental Protection Act is not the right tool.

We all know that the last Parliament did support a private member's bill for a national framework for zero plastic waste. We support that, and we think Parliament should introduce the right tools, but the CEPA schedule 1 list of toxic substances is not the primary tool that will effectively [*Technical difficulty—Editor*].

Mr. Dan Albas: [*Technical difficulty—Editor*] tool. That's interesting, because during the Bill C-204 debate, MP Bittle opposed the bill by arguing it would increase the level of uncertainty and MP Longfield argued that the bill was bad because industry was saying we were going in the wrong direction.

Mr. Masterson, you represent industry. Why do you think they are ignoring your claims in this case?

Mr. Bob Masterson: I think I started by saying society and Parliament demand action in this area, and we agree. I'm not sure why the government is making the choices it is; it is expeditious to act quickly with the tools you have rather than to develop new ones. There are also issues around the role of the provinces versus the role of the federal government. We have not seen the federal government actively involved in post-consumer materials, except for the import and export of hazardous wastes.

It's a whole new area. It would obviously be time-consuming to develop new legislation, but, sir, that's a question better left for Minister Wilkinson, I believe.

Mr. Dan Albas: Fair enough.

Are the chemicals that are going to be declared toxic and harmful important in the production of certain things?

Mr. Bob Masterson: I think this is a key question; that's the whole point here. The Canadian Environmental Protection Act's schedule 1 is meant to address chemical substances. We think of things like asbestos. Someone mentioned PFAS earlier. It's meant to look at those kinds of things. What is being proposed right now is to take a whole group of consumer products [*Technical difficulty—Editor*] There is no other precedent for saying a group of consumer products, like all plastic manufactured items, would be listed on CEPA's schedule 1.

Mr. Dan Albas: Again that is interesting, because in opposing Bill C-204, MP Saini's reason was that the chemicals at play are important in the production of things. If the government declares all plastics are toxic, will that result in the loss of jobs?

Mr. Bob Masterson: I tried to talk about two levels of impact, one definitely, and the list is a precursor to that. The bans will definitely impact the smaller companies. The question of listing plastics as toxic, however, does send a signal about the ambivalence at best, as I said, of Canada as an investment designation for circularity.

We have a low-carbon plastics economy. We have global leaders here. We have companies that will make the investment, but they need to be welcomed and worked with. I think someone has talked about public-private partnerships. We all want to get to the same place. How do we work together to do this? Declaring plastics toxic is not a solution that engenders good co-operative relationships.

Mr. Dan Albas: Then I would expect that MP Bittle, who said "It's a potentially dangerous piece of paper if it's going to cost jobs at the expense of not being enforceable", will join us in opposing the government's harmful toxic designation.

Mr. Masterson, will this designation and ban hurt Canadian businesses? You mentioned a flyover economy. Can you elaborate more on that?

Mr. Bob Masterson: I'll talk very briefly about the investment, but I think Ms. Mantagaris can talk more about the impacts on the business.

Again, our industry has seen $300 billion of investment in the U.S. in the last seven years. That's half of all manufacturing investment. Most of that has been in the area of plastics. The low-carbon economy demands more and more plastics. That investment is taking place. Canada is already an investment flyover destination. We've seen very little of that investment here. We should have seen more. Does this do anything to help us attract more investment? I think the answer is clearly “no”.

As for impacts on the companies themselves, the Huskys and other plastics companies, if there's time, please follow up with Ms. Mantagaris.

● (1610)

The Chair: Ms. Mantagaris, did you want to say anything?

Ms. Elena Mantagaris (Vice-President, Plastics Division, Chemistry Industry Association of Canada): Yes. Thank you.

In terms of specific examples, there's no question that many of our members have indicated that this type of approach will affect their businesses and the future of their operations. I recently met with MP Maloney with just two of our members who represent 600 jobs in the Etobicoke North area. There are dozens and dozens of plastics companies in that area. They both indicated that jobs would be at risk.

I spoke with another company out of Montreal that recycles plastic bags, the item that's being proposed to be banned. If this moves forward, they'll likely move their locations to the U.S. Why would they choose to be in a jurisdiction where their product is being declared toxic and where the investment they've made in recycling infrastructure is not valued? They'll go where it's valued.

Certainly, to build on Bob Masterson's point, I think many of our members are questioning whether future investments in this country are feasible, whether in the recycling system or just in the plastics production sector in general.

The Chair: Thank you.

We'll go to Ms. Saks now. Ms. Saks, you have six minutes.

Ms. Ya'ara Saks (York Centre, Lib.): Thank you, Mr. Chair.

I hope my sound is okay now. Can I perhaps get a thumbs-up from the clerk?

Ms. Ya'ara Saks: Wonderful.

Thank you to all the witnesses who are here today. This is a really wonderful start to our plastics study.

Professor Rochman, I'd like to start with you, if I may, to highlight the research that you mentioned you've been conducting. Since my colleague Mr. Albas talked about toxicity, I'd like to open by getting a clarification.

When we're talking about toxicity, we're talking about the impacts on biodiversity and on health, both of those aspects. In exploring that in relation to CEPA, we're really looking at the agility to be able to protect our biodiversity. With regard to the environmental risks of plastic pollution on the ecosystem, particularly microplastics, can you highlight for me and for this committee a little bit more about the organisms, species and wildlife that are impacted by the microplastics and the toxicity potentially related to it?

The Chair: You got the thumbs-up.

Dr. Chelsea M. Rochman: Sure, I would be happy to. Thank you for the question. I'll start with wildlife, and then I'll answer the question about human health.

When it comes to wildlife, there's no doubt that organisms are exposed. This includes animals at every level of the food web. In Lake Ontario, for example, where I live, we sometimes find fish with more than 100 pieces of microplastics in their gut contents. They're exposed, and in certain locations, they're exposed to a high concentration.

A number of laboratory studies have looked at the effects on organisms. This includes zooplankton, organisms at that lower level of the food chain, and from molluscs like mussels and clams and oysters all the way up to fish. If people synthesize that work and put it together, they can look at the risk to the species. For example, if I put this information together, what is the concentration that harms 5% of the species within the environment? That concentration is around 100 to 120 particles per litre. That concentration is found in some parts of our Great Lakes already.

When it comes to microplastics, we still have a lot to learn in terms of the different types of plastics out there, but we know that the concentrations we find in nature in high concentrations can be toxic to freshwater and marine species.

When it comes to human health, we know that there are microplastics in our drinking water. We know that there are microplastics in the seafood we eat as a result of microplastics leaving the gut and going into parts of the organism that we eat. We don't yet know how it impacts human health. That's still a bit of a black box.

Ms. Ya'ara Saks: I'd like to just [*Technical difficulty—Editor*]. Do we know where these plastics in the environment are coming from?

Dr. Chelsea M. Rochman: We don't know perfectly for everywhere, but I can talk to you about some of the different pathways.

One, when we do cleanups or we have Seabins, for example, on our waterfronts, we know that for large plastics, some of these single-use plastic items are what we commonly find. In the case of microplastics, broken-down bits of things we can't recognize might be from there.

I'll be honest and say that a lot of what we find are microfibres from textiles and bits of tire rubber from cars. There certainly are different sources. Single-use plastics are one pathway. There are a lot of pathways when it comes to microplastics.

● (1615)

Ms. Ya'ara Saks: I'd like to slip in here, because I know my time is limited.

In terms of the single-use plastics that we're discussing now and the six classes of items that we're proposing, I do know that about 256,000 tonnes of plastic was recovered and recycled last year, but nearly 20 times that much was produced in virgin resin, which goes into many of these single-use plastics.

Do you think that the government is going in the right direction now with this initial ban of the six classes of items in our first proposal to come at the end of this year?

Dr. Chelsea M. Rochman: I do agree with it. Because we see these items commonly in the environment, the criteria were right: They're common in the environment; they may cause harm; they're not practically recyclable—I understand that they can be recycled, but the markets aren't necessarily here—and they're replaceable or can be replaced with reusable products.

I agree with it. We have to build a circular economy that includes recyclables for sure, but for items that are hard to recycle, that aren't being recycled and that are unnecessary, I do think the government is moving in the right direction.

Ms. Ya'ara Saks: Thank you.

Chair, I think my time is nearly up. Can you check for me, please?

The Chair: You have a minute and fifteen seconds.

Ms. Ya'ara Saks: I'd like to go a little bit further into this. We've already tested the waters, if I may say, on the impact on aquatic life with the ban on microbeads in 2017. That was a first step. As we're looking at microplastics now, as you mentioned before, how pervasive is the proliferation in our environment and what do we need to consider in balancing it out? We discussed a circular economy, but what we're seeing is that much more is being produced than we're recovering. One of our witnesses, Mr. Roter, even mentioned that the statistics on recovery are inconsistent across the country. We don't know, really, how much we're successfully recovering and recycling.

Could you go a little bit more into the steps that we need because of the impacts of microplastics? I would be grateful.

The Chair: You have 20 seconds.

Ms. Ya'ara Saks: Oh, I'm sorry, but I need a quick answer.

Dr. Chelsea M. Rochman: Okay, the quick answer is that the ban on microbeads worked. We see less of it in the environment. Every little bit counts. Single-use plastic items are one of them. Next, let's put filters on washing machines and rain gardens on storm drains.

The Chair: That's pretty concise. I like that. It's a very interesting topic.

[*Translation*]

Ms. Pauzé, you have the floor for six minutes.

Ms. Monique Pauzé: Thank you, Mr. Chair.

Ms. Langlois-Blouin, I am familiar with RECYC-QUÉBEC, as this organization works with unions in the education field to make schools environmentally responsible. It reminds me of my other life.

You mentioned extended producer responsibility. We are familiar with that principle, but can you tell us how that plays out in your organization?

Ms. Sophie Langlois-Blouin: As I mentioned, the bill was passed last March. The next step will be the adoption of regulations that will make it all happen, which is how extended producer responsibility will work in Quebec.

In the case of the refundable deposit and selective collection, all companies will market containers, packaging, printed matter and newspapers. We are talking about paper, cardboard, plastics, glass, metal and returnable beverage containers. The companies will be responsible for the entire chain, in other words, both what they market and, more importantly, the end-of-life management of products.

Ms. Monique Pauzé: This is indeed the principle of extended producer responsibility. But, what about your organization?

I'm trying to determine what is the responsibility of Quebec and the provinces and what is federal.

Ms. Sophie Langlois-Blouin: As I mentioned, RECYC-QUÉBEC is a government corporation. In Quebec, we oversee extended responsibility programs. The regulatory framework includes monitoring and annual reporting. It is RECYC-QUÉBEC's role to ensure that the organizations responsible for implementing effective measures to achieve the objectives set by the government do so and report annually.

When targeted results are not achieved, there are penalties and an obligation to reinvest, including in the system.

● (1620)

Ms. Monique Pauzé: Can you tell me what the needs of the recycling industry will be in the short and medium term?

What are the most productive initiatives that would enable the sector to move more quickly into the circular economy?

We know that subsidies are provided upstream. How can we achieve this shift to the circular economy quickly?

Ms. Sophie Langlois-Blouin: There are three components. First of all, there must be investment in local packaging or recycling capabilities, whether in Quebec or in Canada. These are some of the solutions that have a leveraging effect.

Then, we need to encourage the integration of recycled content in products, perhaps even make it mandatory. By having our markets in Quebec and Canada, we make sure the loop is as short as possible.

Finally, products that are better designed and incorporate recycled content should be favoured in government or other procurement practices. It's about making sure that we not only close the loop on recycling and incorporating recycled content into products, but also that those products are favoured over those that don't have recycled content.

Ms. Monique Pauzé: Thank you, Ms. Langlois-Blouin.

My next questions are for Ms. Rochman.

First, thank you, Ms. Rochman, for your studies on today's topic. I am thinking particularly of microplastics in the food chain, which we just discussed with Ms. Saks.

Do you think it would be appropriate to include more single-use plastic items in schedule 1 of the Canadian Environmental Protection Act?

I'm thinking, for example, of plastic cups, plates and packaging.

[*English*]

Dr. Chelsea M. Rochman: Thank you for the question. I'm sorry that I have to respond in English.

I can think of a couple of extra items, which I think I put in my longer testimony. There are a couple of others: plastic wet wipes, maybe, or—sorry to say this—plastic tampon applicators. We know replacements already exist for these things, and they don't have a sustainable end of life.

When it comes to understanding microplastics in a food web, I think we should put together a working group to do risk assessment to really understand what concentration is too much for humans and better understand it for wildlife, and use that information in thinking about what our next steps should be for policy.

[*Translation*]

Ms. Monique Pauzé: We know that new solutions are emerging. This is the case with some bioplastics. There is a Quebec company, BOSK Bioproducts, that produces bioplastics from pulp and paper sludge.

In your opinion, how soon could we see these products take a dominant place in the market?

[*English*]

Dr. Chelsea M. Rochman: I don't know how long it takes. It's a bit outside my expertise to know how long it takes for these to be adopted, but I can tell you that we've tested some of them in our research. For filters on washing machines and rain gardens or as bioretention cells for storm drains, they work. They're products on the market. I think that if we adopt them on a wider scale, that could be relatively quick, whereas some of these new recycling technologies might take longer to get to market. However, I could be told that I'm wrong about the pace of those things.

[*Translation*]

The Chair: Unfortunately, your time is up, Ms. Pauzé. Thank you for your questions.

Mr. Bachrach, you have the floor for six minutes.

[*English*]

Mr. Taylor Bachrach (Skeena—Bulkley Valley, NDP): Thank you very much, Mr. Chair, and thank you to all of our witnesses for their presentations so far.

I'd like to continue with some questions for Ms. Rochman, if I may.

First, as it stands, I was surprised that the government's proposed ban on the six single-use plastics covers only a fraction of 1% of the total plastic products we use. I know that many environmental organizations are calling for the list to be expanded considerably to include additional problematic plastic items, resins and material types.

In your opinion—and you may have answered this a bit in your response to Ms. Pauzé—are the six items sufficient to address the scale of the plastic pollution problem that we're facing?

Dr. Chelsea M. Rochman: Thank you for that question.

No, I don't think the items are sufficient to address the scale of the issue that we're creating, but I think every law that's put in place is a bit of a gateway for more policy to come in and increase our mitigation strategies. I think it's a good start.

I think we should look critically at different products on the market, and as new technologies come into place, think about what could be phased out and what could be phased in. If we continue with business as usual, the amount of plastic going into the environment may triple in less than 10 years, so we have quite a lot of work to do. Decreasing plastic waste is one way, and reducing production of some items is also a way to get there. I think it's a great start. I don't think it's the full answer.

● (1625)

Mr. Taylor Bachrach: Some of the items that are not currently on the proposed ban list, such as hot and cold drink cups and lids, plastic-stemmed cotton buds, cartons for eggs and produce, and lightweight produce bags have either already been banned in other jurisdictions or are similar to those on the list. If these items are also problematic from the perspective of environmental health and ease of recycling, is there any scientific rationale for not banning these items as well?

Dr. Chelsea M. Rochman: No, I don't have any scientific rationale for it. I will remind you that I'm an ecologist, but I don't have any scientific rationale for it.

Mr. Taylor Bachrach: Thank you, Ms. Rochman.

Does the government's current risk-based approach for banning plastics adequately consider an item's presence and persistence in the environment, its toxicity, its necessity and whether it is easily recyclable? Are we adequately considering those criteria in creating the list?

Dr. Chelsea M. Rochman: I agree with how the list of proposed reasons, which you just mentioned in terms of how we assess products, are being assessed. I think persistence, toxicity and ubiquity are important. It's how we address persistent and ubiquitous chemicals. They persist in organic pollutants or priority substances.

As for things that are unnecessary or unsustainable to end of life, for sure I agree with those criteria. I think what you're asking me is whether we've assessed all of the products correctly and are actually using those criteria. For that, I would look to the government and ask whether we should be looking closely at other products.

Mr. Taylor Bachrach: If I understand you correctly, in your opinion, the framework is a decent framework to work with and the approach is a good approach from a policy perspective, but you have questions about whether it's being applied broadly enough and whether enough products are being assessed using those criteria. Is that a fair characterization?

Dr. Chelsea M. Rochman: I think so. I think we've made a good start. We should start somewhere. We should continue to assess items and we should think about whether more should be brought onto the list, which I think could include some items on the list you mentioned earlier.

Mr. Taylor Bachrach: Thank you, Ms. Rochman.

Materials that are known to be particularly harmful to the environment or human health, including oxo-degradable plastics, all forms of polystyrene, polyvinyl chloride and multi-material packaging, are also not included in the proposed ban.

Can you speak as a scientist to the harmful effect that these plastics have on the environment and human health?

Dr. Chelsea M. Rochman: I think part of the reason those products have been left off is that they're not easily substitutable. That's my guess. Food packaging, for example, is a tricky one.

Right now, from what we know about the toxicity of plastics and from the risk assessments in place, the risk has to do with the size and quantity of the microplastics in the gut of an organism. There is some evidence, though, that certain plastic types can be more toxic than others. For example, you mentioned polystyrene and PVC. Tire dust is another example. In the case of tire dust, we understand that it might be more hazardous than a polyethylene. As for PVC and polystyrene, while there are chemicals in them that can make them more toxic than other types of plastics, I don't think there's enough evidence yet to suggest that they're leaching at a rate that could harm organisms.

Right now, it's microplastics in general, as a mixture, that should be kept out of the environment, regardless of material type.

Mr. Taylor Bachrach: Thank you very much.

Mr. Chair, do I have a few more seconds?

The Chair: You have 30 seconds for the Qs and As.

Mr. Taylor Bachrach: I'll make it very quick.

Obviously, provincial governments have a lot more tools in their tool box to address the regulation of the plastics problem. One tool that the federal government does have is listing these products under CEPA. However, as we've heard at today's meeting, industry has been lobbying hard against this approach.

How important is it that this listing be done as quickly as possible?

● (1630)

Dr. Chelsea M. Rochman: I think it's important that we take care of this issue as quickly as possible. As I said, the concentrations in the environment or the amount going out may triple in just a decade. I think people should also recognize that the word “toxic” under CEPA does not mean the same thing as a toxicologist might assume it to mean. It means it may cause harm. When I read the definition in the law, I don't think we're going against its meaning. I think it's the word.

The Chair: Thank you.

We'll go to our second round, which is essentially a five-minute one.

We'll start with Mr. Seeback for five minutes, please.

Mr. Kyle Seeback (Dufferin—Caledon, CPC): Thank you, Mr. Chair.

John, I wanted to quickly jump back to you. I know you didn't get to finish your opening statement. Do you have anything that you wanted to quickly add or finish up with before I go to my questions?

Mr. John Galt: The only key points I wanted to make were around the alternatives.

I think everyone here agrees that keeping plastics out of the environment is the right issue. The fundamental concept I wanted to get across is to say that if we move to an alternative material, let's make sure that it's not going to have a larger environmental impact in production, that it's not going to have a larger environmental impact in collection and reuse, and finally, let's make sure that when it does break down and finds its way into the environment, it isn't going to represent an even more hazardous substance. Fundamentally, those are the three points we've been debating here, but I don't know that we've integrated them.

The final point I was going to make on this, and then I'll close, concerns my observations from visiting waste management companies and from other things we've done to try to understand this issue. We're rather pitting one side against the other here. My final point was that I think doing so is a mistake. Nobody's going to win in doing so.

There have been salient and good arguments made by many people that we have to control plastics finding a way into the environment. I'm not arguing with any of those fundamental principles. The concern I have is that when we talk about how we do this, how do we make sure that not only plastics but all waste doesn't find its way into the environment? What does it mean to identify materials that can be reused? What does it mean to have waste management bring enough of it back to make it economic to reprocess and reuse effectively?

Those are the closing comments. It's a system-level problem, and I find we're looking at it in too many small pieces, rather than together. That's probably my most significant comment.

Mr. Kyle Seeback: It's rather like a win-lose right now. What you're saying is that there actually is a win-win.

In that sense of a win-win, are there other countries that are doing it like a win-win [*Technical difficulty—Editor*] very good for the environment and good for recycling?

Mr. John Galt: Absolutely, and because we're a global company, we have the opportunity to work around the world with various countries.

I'll talk about Germany and Norway, because they're the gold standard in the collection and reuse of plastics today. Both countries claim and deliver a 97% recovery and reuse rate today. That's today. As a matter of fact, Germany alone recovers and recycles three times the amount of plastic materials that Canada in its entirety uses annually. They have, then, proven solutions.

What we did was look at what the formula was for success. The formula for success included such things as minimum recycled content requirements on all containers. That creates demand.

The second thing was much more convenient and effective waste control systems.

I lived in Europe, in Luxembourg, for five years of my life, and starting 20 years ago, systems existed such that I could place the materials in an appropriate location conveniently. In Canada, in the 15 minutes between my farm and Husky, the way of collecting materials differs. That's the second element of it that was to me absolutely crucial.

The third thing is incentivizing industry by way of investment in the recycling infrastructure. That's a significant part of the German equation today.

Finally, I think the gold standard is putting value on it. What I mean by that is—and a lot of people have different opinions, including within my industry—through a deposit. If you look at a deposit system, you see that what's really powerful about it is that whether the individual returns the container for the deposit or throws it into the environment, the deposit system incentivizes somebody to collect it and recover it before it can find its way through our streams, into our lakes and out into our oceans, so [*Technical difficulty—Editor*] globally that we're good.

Quite frankly, there are 300 member companies in the plastics recycling association in Germany. [*Technical difficulty—Editor*] so it's also really good for employment and business.

Mr. Kyle Seeback: John, I want to quickly go back to employment and business.

You said you had a three-year plan to invest $190 million. I'm sure many companies across Canada have similar plans for investment that lead to employment and all kinds of economic activity.

What do you see happening if the bill goes ahead as it is, as opposed to what would happen with alternatives such as you're proposing?

● (1635)

The Chair: You have 30 seconds, please.

Mr. John Galt: I can tell you right away what did happen. A company that's been recycling PET bottles for more than 10 years and producing 100% recycled containers had a plan to introduce a new recyclable food service container and put a recycling plant up for it. They were also putting a bag recycling plant up. They put both of those investments on hold.

Many other investments by companies in recycling infrastructure that would have dealt with the issue of the root cause and created value for this material have been stopped. At Husky—we have many operations worldwide—we'll simply make those investments and expand our capabilities where the markets are receptive to them, where they're looking for a recycled solution.

Then the last one—

The Chair: We'll have to stop there.

We'll go to Mr. Longfield for five minutes, please.

Mr. Lloyd Longfield: Yes, the clock is always against us.

Could you please finish your sentence, Mr. Galt?

Mr. John Galt: Another key thing, which I know a lot of people aren't thinking about, is the medical devices industry. When I mentioned the point that 73% of medical devices use plastic, and we've just gone through a pandemic, Canada is almost wholly dependent on foreign nations for the supply of critical medical devices. I have the import data here.

Mr. Lloyd Longfield: Right. I can't go too much farther than that. We do have some data, and we do have that. You can submit it to us as well.

Mr. John Galt: Perfect.

Mr. Lloyd Longfield: I have visited your plant in Luxembourg and I've visited your plant in Bolton many times, working with the plant development people on the hydraulics and control systems.

One of the areas I wanted to explore was the use of recycled plastics in your feedstock. We just finished debating Bill C-204, and it sounded like we were starting to debate it again today. The recyclers in both British Columbia and Alberta said that you're going in the wrong direction. Limiting the travel of product actually cuts this off at the knees by eliminating the supply chain opportunities.

In the case of your feedstock, are you able to specify amounts of plastic recycled material that can be used on your injection presses?

Mr. John Galt: We can handle up to 100%. There are three fundamental technologies for recycling plastic in use worldwide: mechanical recycling, chemical recycling and waste-to-energy. All are developed. All of them we are capable of producing. As I mentioned, one customer has been producing containers from 100% post-consumer material now for over 10 years.

Mr. Lloyd Longfield: The regime in Europe is quite different. In fact, definitions are quite different when we talk about toxicity. In the EU they talk about it as hazards-based, and in Canada we talk about it as risk-based. I've also worked with one of your major competitors in Austria. There is a very strong global plastics machine manufacturing industry in Europe, where their standards are, I would argue, more stringent than ours. Could you compare where we're going with this legislation with the position of the EU?

Mr. John Galt: The new EU regulations, which will take effect by the end of 2024, are much more aggressive than what we have here. They've followed that framework that I talked about earlier, imposing a higher percentage of recycled content across all products and mandating tethered closures so that when the closure is removed, it doesn't separate and can come back and be recycled and reused.

They've set a framework of a three-year program to increase recycled content, they've increased certain design aspects on the packages to make sure they don't separate and find their way into the environment, and they've mandated that you can't sell a product if you're not compliant with these regulations.

Mr. Lloyd Longfield: Right, so user responsibility is another key that needs to be embedded in what we're discussing.

Mr. John Galt: Absolutely. You have to get the brands that want to deliver the product together with the people producing and recycling it.

Mr. Lloyd Longfield: Thank you.

I want to switch over to Mr. Roter. [*Technical difficulty—Editor*] organization has come to Guelph. In fact, [*Technical difficulty—Editor*] our mayor and I were talking about The Natural Step program and how that applies to the different orders of government. Again, Bill C-204 , which we were debating, is pushing some requirements on municipalities to stop shipping plastics that will end up in landfills.

Could you talk about how The Natural Step works with the three orders of government to try to coordinate with us, and maybe how you're working with the Canadian Council of Ministers of the Environment, if that's an organization that you're familiar with and working with?

● (1640)

Mr. George Roter: Yes. Thanks for the question.

With the Canada Plastics Pact, which is an initiative of The Natural Step Canada, we have a broad range of partners. Right now that includes municipalities, which need to be part of this system and the system changes. It also includes Environment and Climate Change Canada [*Technical difficulty—Editor*] circular economy with plastics. We have had in the past some engagement with the CCME, and I think we welcome more engagement with the provinces as we go forward.

Mr. Lloyd Longfield: I think that's one of the key missing pieces for us as we're trying to put effective legislation in place.

Germany and others in the EU, cross-nationally, have good collaboration, and we all need to be working together. I think setting up an “us versus them” isn't helpful for any of us to get to where we need to get to.

Mr. George Roter: Yes, I think we see something very similar.

One thing that we're in the midst of right now is talking to the various corporate and commercial members of the Canada Plastics Pact, and one of the things that has come up in these conversations is how difficult it is sometimes to work all across Canada without a set of standards, without harmonization. I talked about data to know what's going on, and there really is a role for the federal government in bringing some of that together.

The Chair: Thank you very much.

[*Translation*]

Ms. Pauzé, you have the floor for two and a half minutes.

Ms. Monique Pauzé: My questions will be almost on the same topic.

I'm surprised we haven't talked about subsidies yet.

Mr. Roter, in your appearance before the committee in May 2019, you mentioned that manufacturing companies had to bear the burden of collecting recycling and that those that produce plastics receive 30 times more subsidies than recycling companies.

Do you agree that the recycling sector, which is under provincial jurisdiction, should receive the same consideration as the production sector and receive equivalent subsidies?

The Chair: To whom is your question addressed?

[*English*]

It's to Mr. Roter.

Mr. George Roter: Thank you for the question. I think the question was whether or not companies producing the plastics, materials and products that we put into plastic packaging should have responsibility.

At the Canada Plastics Pact, we do believe in that. We believe that there needs to be accountability with those producers. The producers themselves are interested in being able to do that, because then they can really have the opportunity to—

[*Translation*]

Ms. Monique Pauzé: Mr. Roter, my question was more about subsidies.

A lot of subsidies are given to plastics producers, while the recycling sector, which is under provincial jurisdiction, does not receive equivalent subsidies.

Would you agree that this industry should also receive subsidies?

[*English*]

Mr. George Roter: Maybe I'll hand it over to Mr. Valiante.

Mr. Usman Valiante (Technical Advisor, Canada Plastics Pact): Thank you. That's a great question.

Under extended producer responsibility, we make manufacturers of products that are using plastics or plastic packaging responsible. Really, the funding in the investment—

[*Translation*]

Ms. Monique Pauzé: Mr. Valiante, excuse me for interrupting. I am not talking about producer responsibility, I am talking about subsidies.

A lot of subsidies are given to the production sector. On May 1, 2019, Mr. Roter told the committee that companies that produce plastics garner 30 times more subsidies than recycling companies.

Shouldn't recycling companies also receive significant subsidies?

[*English*]

The Chair: Basically we're talking about fossil fuel subsidies at the production end.

[*Translation*]

Is this correct, Ms. Pauzé?

Ms. Monique Pauzé: No.

The Chair: Are you not talking about fossil fuel subsidies?

Ms. Monique Pauzé: No. I'm talking about subsidies to companies that produce plastics.

[*English*]

Mr. Usman Valiante: It is true that there are subsidies for companies producing plastics, but when we talk about the funding of recycling systems, it is the manufacturers that choose plastics for their packaging or any other purpose that should be—I wouldn't use the word "subsidizing"—investing in systems to collect and recycle that material.

The subsidies for the plastic manufacturing sector are a separate discussion from the investments that product manufacturers need to make in collecting and recycling systems. Those investments need to come from the private sector companies that are using packaging. They need to pay for the systems to collect and recycle that material and the investments in innovation and technology.

● (1645)

The Chair: We are going now to Mr. Bachrach.

[*Translation*]

Ms. Monique Pauzé: Mr. Chair, since there was some confusion related to interpretation, would you allow me to ask another question?

The Chair: In fact, the four minutes have already run out.

Maybe we'll give you a little flexibility next time.

[*English*]

We'll go to Mr. Bachrach for two and a half minutes, please.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

I have a few questions for Mr. Galt.

If I understand correctly, in your presentation you took issue with this idea of plastics being listed as toxic under the CEPA definition.

I read the CEPA definition. I am somewhat new to it, not being a permanent member of the committee. I struggle to see how these plastics don't fit the definition to a T. It talks about having "an immediate or long-term harmful effect on the environment or its biological diversity; [constituting] or may constitute a danger to the environment on which life depends; or constitute or may constitute a danger in Canada to human life or health."

I am curious whether it's that you don't feel plastics fit that definition or whether you don't feel that definition is appropriate. Could you explain?

Mr. John Galt: It was more to the extent of the definition being appropriate and singling out plastics [*Technical difficulty—Editor*] 34 million tonnes of municipal waste per year, and plastic packaging, which seems to be a big part of this dialogue, represents 5% of that.

As I mentioned earlier, I look at the relative toxicity to the environment of the other compositions of that 34 million tonnes, and I see that plastics on a relative scale have far less environmental impact than others. That was the context of my comment.

Mr. Taylor Bachrach: Arguably, it would also be an argument for listing those other components of municipal waste as also being regulated under CEPA, but I'll move on.

The other question I had relates to the public polling that showed that 95% of Canadians—and I'm sure you're familiar with this—are concerned about the impact plastic pollution has on our oceans. Two-thirds said they support expanding the proposed ban to other harmful plastic products, including hot and cold drink cups, cigarette filters and all forms of styrofoam.

How does the plastics industry justify its opposition to the ban that's being proposed in light of the massive public support for precisely that type of regulation?

Mr. John Galt: Over the course of last year we hired a professional polling company also, so we did our own poll, and we introduced information. You're correct that initially the response to plastics was negative.

We introduced two fundamental concepts to that same group of people going through that polling process. The first was that plastics are medical grade and an essential part of delivery of medical services in Canada, and because the materials used in those medical-grade components are exactly the same as the materials used in common environments, the impact will be on the potential supply of those materials.

Second, we introduced a recyclable, and the result was a complete change in polling of those people, so at that point in time, there was a complete reversal. In the poll, only 30% of the people still believed that plastics were toxic. Over 70% of them believed recycling and reuse of these valuable materials was the better solution.

The Chair: Mr. Jeneroux, the floor is yours for five minutes, please.

Mr. Matt Jeneroux (Edmonton Riverbend, CPC): Thank you, Mr. Chair, and thank you, witnesses, for being here today. It is a truly interesting panel that we have here.

I'd like to get a quick question out to every panellist before we get started. We seem to be kind of dancing around whether we support CEPA labelling plastics as toxic or not, so I'll just put a question to each panellist: Are you for or against this labelling as toxic?

Let's start with you, Mr. Masterson.

Mr. Bob Masterson: I am against. As proposed, it is not six items. It is all plastic manufactured items. That is completely inappropriate, and there's no risk assessment that supports it under the CEPA process.

Mr. Matt Jeneroux: Thank you.

Mr. Roter, would you comment?

● (1650)

Mr. George Roter: In our case, we have a range of opinions from our members, so I'm unable to express an opinion one way or the other.

Mr. Matt Jeneroux: I have a quick statement, which I'll read to you in just a second, Mr. Roter, but I do want to finish this question to everybody.

Mr. Galt, are you for or against?

Mr. John Galt: I'm against the designation.

Mr. Matt Jeneroux: Dr. Rochman, I guess I just want a "for" or "against" here. I know you've kind of been asked this question a little bit already.

Dr. Chelsea M. Rochman: I'll just say that in terms of the way "toxic" is defined under CEPA, I agree with it.

Mr. Matt Jeneroux: Great.

I do want to get back to you, Mr. Roter, just very quickly. Obviously, we've seen and asked the minister this same question. I think there have been over 300 notices of objection to labelling plastics as "toxic" under CEPA. When you say that your members are neither for nor against, would you say that some of your members have weighed in on this in terms of a notice of objection?

Mr. George Roter: I'm not aware of the details of what [*Technical difficulty—Editor*]. I do know that we have members who are in support and those who are against, and I think that's what I can say.

Mr. Matt Jeneroux: Maybe let's find common ground here. If I were to say the use of a "toxic" designation by government on PET creates an inherent conflict between the perception of material as toxic while simultaneously creating an economic ecosystem acknowledging its value, would that kind of fit the majority of your members?

Mr. George Roter: Yes. As I come back to it, I would say there's a range of opinions from our members. What I will say is that there's a lot of alignment from our members that there need to be efforts that are much broader than this conversation in order to be able to create this circular economy for plastics within Canada.

Mr. Matt Jeneroux: Mr. Galt, we see a lot of the impact this would have not just here in Canada, as you mentioned, but as I was watching some of the testimony take place today, I was thinking about the impact this would possibly have on trade agreements, particularly with down south. In your position, I'm sure you've dealt with a number of businesses down south—in the United States, to be accurate.

Is there that kind of uncertainty about what this means to some of those businesses when it comes to international trade?

Mr. John Galt: Absolutely, there is. I think you may be aware of the fact that already the U.S. has cited concerns over trade today and— [*Technical difficulty—Editor*]

Something is going on there.

The Chair: I'm afraid I can't control that at this end, but it seems to be gone.

Mr. John Galt: I'll try again.

So yes— [*Technical difficulty—Editor*]

Will I try to speak over that and just keep going?

The Chair: Let's see if it stops.

[*Technical difficulty—Editor*]

Mr. Chris Bittle: On a point of order, Mr. Chair, perhaps we could suspend for a minute or two, if we can't....

The Chair: It seems to be corrected.

Mr. Chris Bittle: Thank you.

The Chair: Go ahead, Mr. Jeneroux.

Mr. Matt Jeneroux: I'll turn it back to Mr. Galt to finish his comments.

Mr. John Galt: You may be aware that already the U.S. has launched a concern regarding the concept of the trade agreement between the U.S., Canada and Mexico, and the fact that this unfairly influences importers of goods—plastic articles—from the U.S. into Canada. I'll leave that out of there, because that's not my area of expertise.

What I can say is it adds a significant level of complication to things such as the importation of, let's say again, those medical devices. The U.S. is our biggest trade partner in medical devices. We're most reliant on the U.S. At this point in time, syringes, test kits and all of these devices for which we supply manufacturing equipment and that are produced in the United States and shipped into Canada will now have the difficulty of dealing with a toxic designation. What does that mean for cross-border transportation? What does it mean in terms of complications of that? These are some of the things people are concerned about that we don't feel have had the time to be discussed yet.

● (1655)

Mr. Matt Jeneroux: Great.

Mr. Chair, could I sneak one more in?

The Chair: Yes, given the interruption we had, but very briefly, and with a very brief answer, .

Mr. Matt Jeneroux: We have such a generous chair, witnesses. He's being very kind.

Over the scope of the pandemic, I think we've seen an increased use in things like single-use plastic. I'm wondering if there's a.... Maybe I'll turn it over to Mr. Masterson or Ms. Mantagaris to comment on what a ban would mean right now and on where we are in terms of the pandemic.

The Chair: Be very brief, please.

Mr. Bob Masterson: The government has not proposed to ban any personal protective equipment [*Technical difficulty—Editor*] that society's appreciation for plastics through the COVID pandemic means they are less certain in their determination to solve the plastic waste issue.

We have to solve this problem. We can and we will, very promptly, create a circular economy for plastics. We need a much more robust process than what currently has been tabled by the Government of Canada.

The Chair: Good. Thanks.

We'll have to move on now.

Go ahead, Mr. Saini.

Mr. Raj Saini (Kitchener Centre, Lib.): Thank you very much, Mr. Chair.

Thank you to all the witnesses. This is such great information. I think we're all learning a lot.

Ms. Rochman, I'd like to start off by asking you some questions. I'm going to reference the 2018 scientific paper that you wrote. I want to look at the human side of this issue [*Technical difficulty—Editor*] from bioaccumulation of microplastics and nanoplastics making their way into the marine food chain.

You mentioned that toxicity levels vary depending on the chemicals associated with different plastics and their sources. I'm also going to reference something else. As you will recall, there was a 2016 UN report which stated that over 800 animal species were contaminated with plastic via ingestion or entanglement. [*Technical difficulty—Editor*] not only as an industry, but recognize that's 6.7% of the world's protein.

Are you able to identify what sources of microplastics provide the greatest threats to both marine and human health? How best can we mitigate this threat?

Dr. Chelsea M. Rochman: There's a huge increase in the amount of literature that comes out every year. We're learning a lot more every year about the risk of microplastics to [*Technical difficulty—Editor*] comes to seafood, which is, I think, what you are asking me about.

We know these microplastics can get into the fillet or the parts of the fish we eat. We have numbers even for Lake Simcoe in terms of how much we see in the fillet and how that may matter in terms of exposure. Right now, as I said, there is some literature.

You mentioned before that certain plastics may be more harmful than others. I'm working right now on a risk assessment for the State of California for both humans and wildlife. Even though I think that as we learn more, we might change our minds, for the purpose of this risk assessment we are saying that microplastic is microplastic is microplastic. We're not differentiating between the different types. We're saying that what matters is the concentration and the volume. It has to do with the size of the particles and the number of particles.

For that matter, there are lots of different sources of microplastics coming into the environment. I can't tell you which one is the most important in terms of which type is the most toxic. I can tell you that I recognize that seafood is really important. I think the amount humans are exposed to from seafood is probably much smaller than from drinking water or dust. We don't have enough evidence right now to tell people how or what to consume based on what we know about human health and exposure from seafood. Right now places are trying to start to do that for drinking water first.

Mr. Raj Saini: The research is still evolving, as I understand, but do you see an issue with marine animals being affected by microplastics?

Dr. Chelsea M. Rochman: Yes. Right now the concentration that we know will affect 5% of species is found in certain parts of the marine environment and also in certain areas of fresh water, including the Great Lakes.

Mr. Raj Saini: I also want to refer you to some research that was done last year out of Utah State University. I think you provided a commentary for that article. I don't want to say I found it interesting, but it was interesting in one way.

One of the things the article said.... I know the research is emerging also. We talk about ocean microplastics and we talk about landfills, but there's recently been some research suggesting that there is widespread airborne microplastic pollution that could pose a risk to human health and has already polluted even the remotest corners of the earth. I think you mentioned the Arctic. They have some studies that found particles there also.

How big a cause of concern do you think this is, and how do we address it?

● (1700)

Dr. Chelsea M. Rochman: You're talking about the paper by Brahney et al. in Science Magazine last year, understanding and basically showing us that microplastics cycle in the water cycle and cycle in the global dust cycle. We're starting to understand how that relates to the carbon cycle.

What this says to me is that microplastic is ubiquitous and persistent enough that it's getting into these fundamental planetary cycles. Then you ask what it means and what we can do about it.

I think there's urgency to do something. I think there's a tool box. I see the plastic issue as similar to the climate issue, in the sense of there not being one solution. We need to use many levers at the same time, one of which is reducing the amount of plastic waste we produce, which is what we're talking about here today.

Others are filters on washing machines, filters on dryers, stormwater retention systems like bioretention cells and thinking about how to make Operation Clean Sweep even stronger so that we're not losing pellets into the environment. It's these types of things.

I don't have a favourite solution, unfortunately. I think they're all important and, as with carbon emissions, we have to tug on a little bit of everything.

Mr. Raj Saini: How much time do I have, Mr. Chair?

The Chair: We're over by a good 15 seconds.

Mr. Raj Saini: Okay. Thank you very much.

The Chair: We'll head into our last round, and I think we're going to end on time.

Mr. Albas, you have five minutes, please.

Mr. Dan Albas: Thank you, Mr. Chair. What an engaging panel this has been.

I'm going to go to Dr. Rochman. First of all, thank you for your presence and the work you do.

When you speak about microplastics, particularly in ocean aquatic settings, you have observations and you've also done some testing. Where is this plastic is coming from? Is this Canadian plastic that has been released into the oceans, or is it just too difficult to tell?

Dr. Chelsea M. Rochman: I appreciate that question. Unfortunately, it's too difficult to tell. People have tried to think about ways you can trace it.

The best information we have is the paper from Jenna Jambeck et al., trying to say how much is coming from each country, but it doesn't take into account waste that's shipped overseas.

Unfortunately, when it comes to microplastics, it's pretty difficult to know where it comes from. We do better at knowing whether it's tire dust or whether it's coming from washing machines, etc., and identifying the different pathways.

Mr. Dan Albas: I find that a lot of the best measures require made-in-Canada solutions. For example, Megan Leslie, the former deputy leader of the NDP, proposed a ban on microplastics, particularly in hand creams and whatnot. That was something that the Harper government agreed [*Technical difficulty—Editor*] a lot of microplastics from getting into fresh water. Now we have Scot Davidson, a Conservative MP from near Lake Simcoe, who is a big champion for that. He has proposed to actually ban exports of plastic waste for final disposal because he believes that Canada needs to take responsibility and that Canadian companies, Canadian governments and Canadians themselves can recycle and keep a lot of these things away from the ocean or from our lakes. Do you agree?

Dr. Chelsea M. Rochman: Are you asking if I agree with the change in our exports of plastic waste?

Mr. Dan Albas: Yes. Do you think that's an important step?

Dr. Chelsea M. Rochman: Is it to stop our export of plastic waste, full stop?

Mr. Dan Albas: Yes, sending it outside of Canada for final disposal. As you mentioned, some of it, from certain jurisdictions, is dumped plastics that are impossible to trace.

Dr. Chelsea M. Rochman: I will say that I'm not an expert in this, so it's hard for me to just give you a yes or no. I agree that made-in-Canada solutions are great and that we should learn how to take care of our waste at home, but I don't feel that I have the expertise to really comment on the shipping of plastic waste.

Mr. Dan Albas: Okay.

I'd like to go back to Mr. Galt.

Mr. Galt, you were mentioning that the manufactured plastic designation in the CEPA schedule is causing all sorts of issues reputationally for your industry, which may see investment deferred away. You talked about how, given COVID-19, we're using so much single-use plastic for medical applications. What is the scientific...? Are the molecules in a single-use plastic that would be used in a medical application the same ones that may be used in any of these six items that the government seems to have chosen, based on its own criteria? Are they the same molecules?

Mr. John Galt: The answer is yes. Fundamentally, that's the issue. Yes, you have hybrids and you have mixtures of materials and additives. However, if we look at the primary plastics, what most people maybe don't understand is....

Let's look at this model, at PET. Well, heart stents, things that are used in arteries for over 60 years [*Technical difficulty—Editor*] gets complicated. If you look at a family of medical devices and you look at commonly used plastics, you see that they are the same material. When you think about this regulation and this issue of toxicity, you can imagine the challenge that it represents: life-giving products and waste, both captured under the same designation.

● (1705)

Mr. Dan Albas: Canada prides itself as a country under the rule of law. If there are potential Criminal Code charges that could be laid in violations of CEPA, does having this ambiguity—by including manufactured plastic as a general category—not create a tremendous amount of uncertainty? Doesn't that then bring in arbitrary situations, one-offs?

Mr. John Galt: That's exactly what it does. It's uncertainty. We talk about the issues of jobs and investment; it's the uncertainty that's driving that investment out of Canada. What it means is that we're going to remain dependent on imported goods. As we've seen, I think, in difficult times, Canadians can be second-class citizens if we don't have a made-in-Canada supply chain. That's exactly what it's doing.

Mr. Dan Albas: Ms. Mantagaris, you were mentioning that in Etobicoke—Lakeshore, and I think it was Etobicoke you mentioned, that there were certain jobs at risk. Can you give us more of a broad idea of where some of these job losses might occur if there's this level of uncertainty?

The Chair: We're at five minutes, but I see that Mr. Albas has another question coming up, I believe. Perhaps he could be provided with the answer in that second segment.

You're up again, Mr. Albas?

Mr. Dan Albas: Yes. I was also going to ask Mr. Galt if he could share with the committee the poll that he mentioned to Mr. Bachrach.

The Chair: Okay, thanks. We'll get back to you, Mr. Albas.

Mr. Bittle, you have five minutes, please.

Mr. Chris Bittle: Thank you very much, Mr. Chair.

I'll go to Mr. Galt first.

When you were talking about the gold standard [*Technical difficulty—Editor*] pushing those gold standards or if your company was lobbying against them. I can appreciate that you may not know that, so if you don't know, you can get back to our committee.

Mr. John Galt: No, I've been with this company forever. I started in the print room and worked my way up to CEO. I have lived in Europe and travelled abroad, so I'm very familiar with the history of Husky. We've always been strong advocates for the reuse of a reusable material.

Yes, I—

Mr. Chris Bittle: I'm sorry, Mr. Galt. I appreciate that your company is in favour of that. I meant in terms of the increased standards that Europe was bringing forward. Was your company supportive of those European standards, or was your company lobbying against them?

Mr. John Galt: We were actually supportive. As a matter of fact, to bring industry together, we chaired the committee that came up with the standards on the new closure, because we saw we were stumbling individually. We chaired a committee to bring forward the new standard of a tethered closure and a new lighter-weight design that uses less plastic. We found a common standard that we could all support.

Mr. Chris Bittle: Thank you so much. I apologize that in the background there may be a two-year-old screaming, but it is that time of day.

To Madame Langlois-Blouin from RECYC-QUÉBEC, would you be able to outline some of the steps Quebec has taken to position itself as a leader with regard to extended producer responsibility?

[*Translation*]

Ms. Sophie Langlois-Blouin: Off the top of my head, I would say that extended producer responsibility has been in effect since 2011 in Quebec. Initially, five categories were covered. This year, appliances were added. I believe that we're among the first, along with British Columbia, to have added this category. As I said, there's a major reform under way with respect to recycling and deposits. The mindset is a little bit different from the mentality seen in other provinces, particularly in terms of two aspects of recycling.

Regarding the first aspect, we would like to see a single program in place. On the business side, it won't be about individual responsibilities. A single organization will represent businesses that market containers, packaging, printed materials and newspapers.

The second aspect is the partnership with the municipalities. We want to build on what we already have in place. Recycling is available to about 99% of Quebec households. We'll need to cover more multi-unit buildings. The municipalities must remain committed, even if we shift towards extended producer responsibility. This applies in particular to all aspects of collection, transportation and services to the public. It also affects the information provided to people in order to help them recycle properly and make the right choices.

● (1710)

[*English*]

Mr. Chris Bittle: Thank you.

To Dr. Rochman, we know that the Global Commitment 2020 Progress Report, which was published by the Ellen MacArthur Foundation and UNEP, stated that EPR is essential to reach a high rate of recycling. Could you explain a little bit more how that shift would improve recycling rates in Canada?

Dr. Chelsea M. Rochman: I'm not an expert on EPR. I will tell you that. I'm an ecologist. However, from my understanding, you can use extended producer responsibility to incentivize recycling or the use or production of more sustainable items and to deincentivize those that are not sustainable. By using an extended producer responsibility scheme, you can increase recycling.

Again, I think I might ask this question to Mr. Valiante, because I'm an ecologist, not an economist.

Mr. Chris Bittle: If that's the suggestion, then I will pose that question.

The Chair: Mr. Valiante, you have 30 seconds.

Mr. Usman Valiante: Could you just repeat it super-quickly?

Mr. Chris Bittle: How would a shift towards the EPR improve recycling rates?

Mr. Usman Valiante: [*Technical difficulty—Editor*] supply-side policy, so when you make producers responsible for collecting and recycling materials, they then invest in systems to do so. We've seen that in British Columbia. We've seen that in Quebec. Quebec is now reforming its laws to make them even more ambitious in terms of producers investing in those systems. That creates the supply of plastics that feed into the recycling systems that would go to companies like Husky to produce the next cycle of products. That's really what it drives.

The Chair: Thank you.

Madam Pauzé is next.

[*Translation*]

Ms. Monique Pauzé: I want to thank the witnesses.

We know that the petrochemical industry will grow. However, the industry receives significant government support.

Would you approve of a significant proportion of this government assistance—and I'm talking about subsidies here—being allocated to adapting production so that truly biodegradable materials are used? Subsidies could be a way to gently steer the industry towards biodegradable materials.

The Chair: Who is your question for?

Ms. Monique Pauzé: It's for Mr. Masterson.

[*English*]

The Chair: Go ahead, Mr. Masterson.

Mr. Bob Masterson: Thank you. I have a quick two-part answer.

First, the federal government has provided support to three new proposed investments in the chemistry and plastics area through the strategic innovation fund. In every one of those, the investment from the federal government was tied into sustainability and recycling objectives, research activities, partnerships with universities, etc. I think the government's lens is on the right part of that. They are focused on that part.

Second, on the question of biodegradability, I would encourage you to go back to Professor Rochman and please note her area of caution around the terms of biodegradability, bioplastics, etc., because it is not a solution to the problem as it currently is envisioned.

[*Translation*]

Ms. Monique Pauzé: Since this industry receives a large number of subsidies, I wanted to know whether you think that the industry should redirect some of the subsidies towards biodegradable products.

I have another question for you, Mr. Masterson. You were talking about the investments made in the United States and you were bemoaning the investment situation in Canada. Yet we need to boost investment in ambitious circular economy projects.

Couldn't investments in virgin plastic resins, which are highly polluting, be redirected to the circular economy instead?

[*English*]

Mr. Bob Masterson: Absolutely. The entire industry is focused on circularity, but it will require a lot of capital to get there. The biggest challenge is the recovery of post-consumer materials and making them available as feedstock. As Mr. Valiante said, that's the key contribution of extended producer responsibility. We can collect these materials in a harmonized manner and at scale.

Mr. Roter talked earlier about NOVA Chemicals recovering its plastics in British Columbia and putting them back into their traditional infrastructure in Alberta to make recycled content plastics. We see all our leading companies invest in this area today. It is the future.

● (1715)

The Chair: Mr. Bachrach, you have two and a half minutes, please.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

Ms. Langlois-Blouin, I think a lot of people are surprised—I'm surprised—that only 9% of our plastic waste is recycled. Our recycling systems today can't handle the volume or the complexity of the materials on the market. Some products still aren't designed to even be recyclable.

To what extent do plastics producers and recyclers engage with each other on the topic of recyclability of plastic products?

[*Translation*]

Ms. Sophie Langlois-Blouin: Good question.

Our figure in Quebec is a little higher, but you're right. Losses occur in the collection and recycling chain, especially at home, because people don't know how to differentiate between the types of plastic. The concept of labelling or [*Technical difficulty—Editor*], which involves guidance from the Competition Bureau of Canada, also constitutes a potential solution to make sorting easier for people and to reduce or even eliminate plastic materials directly at home.

Steps are being taken and networking workshops have been held in Quebec, particularly with regard to fibres. There's more and more collaboration. For example, in Quebec, the Circular Plastics Taskforce, or CPT, is a group of companies that market plastic products. The taskforce has made investments and conducted research to cover all aspects of the issue and to assess the needs not only of sorting facilities, but also of packers and recyclers, in order to prevent one part of the chain from blocking the process. It's important to work on all the parts, meaning the products put on the market and the sorting instructions for people, but also the optimization of the sorting and recycling process.

[*English*]

Mr. Taylor Bachrach: Thank you for that.

The last question is about the balance between recycling as a strategy for reducing plastic waste and something like banning plastics using CEPA. I understand that if we want to achieve zero waste, we have to reduce plastic waste by 3.3 million tonnes. Even under the best-case scenarios, if we project forward, recycling is only going to get us about 45% of the way there.

Do you feel that recycling and banning plastic products are complementary strategies for reducing plastic waste?

[*Translation*]

Ms. Sophie Langlois-Blouin: Yes, indeed. It's important to work on reducing plastic products at the source and to focus on sustainable alternatives. In our view, it isn't just about plastic, but about all single-use products that have a sustainable alternative. Certain practices and policies can be explored to encourage this use.

The Chair: Mr. Albas, it's your turn. I believe that you were waiting for an answer from Ms. Mantagaris.

[*English*]

Ms. Elena Mantagaris: Before responding about the specific job losses, I'm concerned that we're creating this [*Technical difficulty—Editor*] caught here between single-use plastics and other plastics. If we were to invest in a circular economy, we would no longer have this notion of a single-use plastic. I'd urge us to think about the implications of this trajectory of banning things when the right investment would actually change the entire frame of reference.

Specifically, when we look at what it means to jobs in the economy, if we were to look at all single-use plastics and if there were bans in this country on single-use plastics writ large, we would probably be talking nationally of something between $6 and $7 billion in annual sales being at risk.

Those sales represent anywhere from 13,000 to 20,000 direct Canadian jobs. Indirect jobs are two for one, so you're looking at about 26,000 to 40,000 more jobs that would be at risk in introducing bans on single-use plastics. However, if we turned that around and invested in the circular economy, which you're hearing from everyone around the table, we would no longer have this debate and this risk introduced economically.

To answer Mr. Albas' question specifically, those jobs are across the country. Almost 2,000 companies are in almost every single riding in this country, roughly 60% of them in Ontario and another 25%-30% in Quebec, and the rest are scattered in Alberta and British Columbia, with a little bit in some of the other provinces. Every single riding has some of these small and medium-sized enterprises making these plastic products that we benefit from, that we have used extensively for decades.

The issue is not the use of the plastics; it's the waste management around them, or, quite frankly, redesigning all of this so that it's a resource and reused. If we were to focus on that problem rather than on banning the product, we would not be having this debate.

● (1720)

The Chair: Mrs. McLeod, please go ahead.

Mrs. Cathy McLeod (Kamloops—Thompson—Cariboo, CPC): Thank you. This has been a really interesting panel.

In many ways, in terms of recognizing the importance of plastics in our lives, we have more in common than we have in our opposition. Quite frankly, we'll have some challenging economic times, and we need to look at the solutions that both maintain the jobs and our economy and also protect the environment. We can't afford to head too far in one direction. It can be done, and it's really important.

I am a former nurse. We had protective equipment and we had syringes that changed from glass to plastic. That was important for us. It was important for infection control. I am concerned as I hear about [*Technical difficulty—Editor*] in terms of what it will do for other products [*Technical difficulty—Editor*]. The low-carbon economy will demand more and more plastics.

Can you talk a bit more about that particular aspect?

Mr. Bob Masterson: Look at the automotive sector. If we want to lighten our vehicles and make them more fuel efficient, if we want to electrify them, they need to be lightweight, and that means more plastics.

In any car on the road today, there's a lot more plastic than there was in the vintage you were speaking of earlier with regard to the nursing sector. In the automotive sector, you're seeing the same transformation you saw there. You're seeing it in the aerospace sector.

Why are you seeing it? You're seeing it because they want to lighten the weight. Companies like Air Canada, prior to the pandemic, phased out all of the glass on the airplanes and put in plastic, because by losing even that little bit of extra weight on every flight, they had lighter aircraft with lower emissions.

There's no question I could go on and talk about the penetration of plastics as a lightweight energy-efficient material in all sectors of the economy. There is none, believe it or not, more important than the food and beverage industry, because the packaging often is much more valuable than the product itself, and can often weigh more if you choose the wrong materials. Absolutely, plastics are, for most sectors, a key contributor to the low-carbon economy.

Mrs. Cathy McLeod: We talk about the circular [*Technical difficulty—Editor*] Tell me what this will look like. Take us through the recycle process in Germany, as an example, and how it actually works. I don't know if it's Mr. Galt or Mr. Masterson.

Mr. Bob Masterson: I wouldn't go that far, Mrs. McLeod; I'd look in your own province of British Columbia. It is the North American leader in extended producer responsibility, and it is driving much farther ahead. That's the model that Quebec, Ontario and the other jurisdictions need to go to. We could talk separately about all the advantages of the B.C. approach to recycling and the circular economy.

● (1725)

The Chair: Excellent.

We go now to Mr. Baker, who's batting cleanup. Mr. Baker, you're the last questioner today.

Mr. Yvan Baker (Etobicoke Centre, Lib.): Thanks very much.

I'm going to ask somebody to bat cleanup for the cleanup hitter, so I'm going to ask one question to Dr. Rochman and then I'm going to pass it on to my colleague Mr. Longfield, who will use the remainder of my time, if that's all right, Chair.

Dr. Rochman, I wanted to ask a question about the ban on single-use plastics. I think many of my constituents in Etobicoke Centre understand some of the harms that plastics can cause to the environment and human health, but could you articulate what you believe the benefits are of the government's proposed ban on single-use plastics?

We have probably about a minute and a half or two minutes max for your answer; I'll say a minute and a half.

Dr. Chelsea M. Rochman: Sure.

As I said before, there's no doubt that plastics big and small bring measurable risks in the environment, and from that, we know we have to do something now. We've done assessments to try to estimate how much plastic is going into the environment every year, and from that we have a number of about 20 million to 30 million metric tonnes. We know that if we continue business as usual, it may as much as triple.

In order to reduce it, we've done exercises to figure out how hard we need to pull on just the waste management scheme, just the reducing plastic scheme or just the cleanup scheme. If we do just one thing, we have to do an immense amount of work, and that includes in all economies across the world, which is why I think reducing plastic waste is a big part of it. I understand that if we switch to a circular economy, we are also reducing plastic waste, but we need to act quickly. We have been talking about recycling for decades, and it hasn't worked yet. I like recycling, but it hasn't worked yet to the extent that we need it to work.

I do think, based on what I see in the environment, that reducing single-use plastic products on the market will reduce what we see in the environment, will reduce the amount of microplastics we see in the environment, which will protect wildlife and then eventually human health, once we better understand those risks. It worked with microbeads, and I feel that this is another next step in order to reduce more of what's out there before we take another step.

I don't know if that answers your question.

Mr. Yvan Baker: It does. Thanks, Dr. Rochman.

I'll pass the rest of my time to Mr. Longfield.

Mr. Lloyd Longfield: Great. Thank you. Thanks for sharing time.

I had two follow-up questions for Mr. Masterson.

We have received incredible briefing notes from the Library of Parliament. They always do an amazing job, but this briefing note in particular was just gold star. In our briefing notes, they talked about the opportunity for chemical recycling versus mechanical recycling and how early-stage that is. From the chemical industry, it seems like there's a large opportunity for us if we look at the circular economy to be implementing things like chemical recycling.

Maybe the second piece for me, coming from Guelph, is that the University of Guelph is working on bioplastics and the use of bioplastics instead of petroleum-based plastics as another opportunity. Maybe you could speak to either one of those for our study.

Mr. Bob Masterson: Sure. On the first one, I'm going to defer to Ms. Mantagaris. She's even more passionate about the issue of advanced recycling than I am.

Ms. Elena Mantagaris: I think the opportunity for investment in advanced recycling is tremendous. Getting plastic back to its molecular level so it can be reused indefinitely in the economy is essentially the Holy Grail that we're all aiming for, but we have work to do in this country to actually achieve that goal, and it's not about more ingenuity, because we have lots of innovators in this country. The gap we're facing is that all of these pilots and innovation activities happening have a challenge in getting to commercialization, and they need to go elsewhere, outside the country, to actually help realize that goal. That's what we're seeing happening.

If I can almost tie in a response to you with Madame Pauzé's question earlier, we need to see more investment by industry and governments to help realize these types of solutions. Quite frankly, every government, federally and provincially, has identified recycling as a priority. We should be seeing this as essential infrastructure across the country and making the appropriate investments in these technologies.

Mr. Lloyd Longfield: Thank you. I think you'll see that Industry Canada, through our government, has been investing in this area in Alberta, as an example, where there could be a centre of excellence that could really take us to the next level. It's the scale-up opportunity on either of those technologies that really is where we need to get provincial, industry and international capital working on this for Canada.

● (1730)

Ms. Elena Mantagaris: Absolutely. I would just add that industry is here to be a partner with government in helping realize that goal. We're not objecting to a circular economy. In fact, we're at the forefront of investing in it and want to do so with governments.

Mr. Lloyd Longfield: There are exciting opportunities.

Thank you, Mr. Chair.

The Chair: Thank you.

That takes us to 5:30 and the end of our round.

Thank you to all the witnesses for a very interesting discussion from different points of view, in many cases. We have all come out with an understanding of this issue.

Colleagues, as you know, we have a meeting on Thursday. It will start a bit later because of all the votes. We'll be using that meeting to launch our study of Bill C-230. On Monday, April 19, we don't have a meeting. That's because of the budget. We will get back to things on the 21st.

Thank you again to our witnesses and thank you, members, for your excellent questions.

Thank you to the analysts for putting this together and to the clerk for managing this process.

Have a good evening, all. I'm sure we'll see each other at some point to discuss the different kinds of issues that come out of this. Thank you very much.

The meeting is adjourned.