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Chair: Ms. Valerie Bradford



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• (1105)

[*English*]

The Chair (Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.)): I call this meeting to order.

Welcome to meeting Number 94 of the House of Commons Standing Committee on Science and Research.

Before I begin, I'd like to ask all members and other in-person participants to consult the cards on the table for guidelines to prevent audio feedback incidents. Only use an approved black earpiece. Please keep your earpiece away from the microphone at all times, and when you're not using the earpiece, put it face down on the sticker placed on the table for this purpose. Thank you all for your co-operation.

Today's meeting is taking place in a hybrid format, and I'd like to make a few comments for the benefit of members.

We don't have anyone on Zoom right now. That's a rare treat, so that's great. The clerk and I will manage the speaking order as best we can. We appreciate your understanding in this regard. Also, as a reminder, all comments should be addressed through the chair.

I would like to welcome MP Dreeshen to our committee. You're filling in today, so thank you for joining us.

We also have Dave Epp, from Brantford.

Mr. Dave Epp (Chatham-Kent—Leamington, CPC): I'm from Chatham—Kent—Leamington. It's more south.

The Chair: Yes, that's southwestern Ontario, in the heart of the country. Thank you for joining us.

Pursuant to Standing Order 108(3)(i) and the motion adopted by the committee on Thursday, May 23, the committee commences its study of innovation, science and research in recycling plastics.

It's now my pleasure to welcome, from the Department of the Environment, Dany Drouin, director general, plastics and waste management directorate; and Thomas Kruidenier, executive director, substance prioritization, assessment and coordination division.

Up to five minutes will be given for opening remarks, after which we will proceed with rounds of questions.

Mr. Drouin, I invite you to make an opening statement of up to five minutes.

Mr. Dany Drouin (Director General, Plastics and Waste Management Directorate, Department of the Environment): Good morning, everyone. Thank you for the invitation to appear

before you to discuss innovation, science and research in recycling plastics.

As the chair said, my name is Dany Drouin, and I'm from Environment and Climate Change Canada. I'm joined by my colleague Thomas Kruidenier, executive director of the substance prioritization, assessment and coordination division, also at Environment and Climate Change Canada. We're pleased to be here as part of your study, and we appreciate the committee's interest in this issue.

[*Translation*]

The evidence is clear. Plastic pollution is everywhere, and it harms wildlife and habitats.

[*English*]

ECCC, in partnership with Health Canada, published a science assessment of plastic pollution in 2020. This report underscores that plastic pollution poses a significant threat to terrestrial and aquatic ecosystems.

[*Translation*]

Emerging science continues to show that people are exposed to microplastics in the air, water, soil and even the food they consume.

[*English*]

The majority of our country's plastic waste follows a very linear path, where we manufacture, use and dispose of plastics, mostly in landfills. This valuable resource is not being managed sustainably. That leads to economic losses and plastics pollution. Action is needed to improve the management of plastic waste and to improve the circularity of plastics in Canada. Recycling alone will not solve this problem.

[*Translation*]

Tackling plastic pollution requires a comprehensive, life-cycle approach to prevent and reduce plastic waste.

[English]

That is why the government is implementing an ambitious and comprehensive plan to reduce plastic waste and pollution and move towards a circular plastics economy through a range of complementary actions across the life cycle of plastics. The agenda is grounded in a strong foundation of science and evidence. The government advances Canada's plastics science agenda by conducting and investing in science, including by working to harmonize scientific methods, further detecting and characterizing plastic pollution, and assessing socio-economic, environmental and potential human health impacts.

To further build the knowledge base, the government announced the creation of a federal plastics registry a few weeks ago. The registry will require producers to report annually on the quantity and types of plastics they place on the Canadian market, as well as how these plastics are managed at the end of their life. This information, along with the annual reporting by Statistics Canada, will play a critical role in collecting data, monitoring progress, identifying gaps in areas for further action and communicating with Canadians.

The plan recognizes the importance of advancing solutions in key sectors. Important work has been completed in sectors such as packaging, agriculture, automotive, construction and health care. Investments are also supporting research and innovation in the industrial, commercial and institutional sectors, as well as the restaurant, beverage, and textile and apparel sectors.

• (1110)

The government is also supporting the advancement of innovations in key areas that are important for businesses and stakeholders. This work focuses on advancing reuse innovations to replace single-use plastics and improving the collection and sorting of plastic film and flexible packaging.

In addition, Canada works collaboratively with the provinces and territories through the Canadian Council of Ministers of the Environment to support the advancement of comprehensive extended producer responsibility programs and to develop guidance intended to improve consistency across Canada. Important progress is being made there. It is expected that by 2027, over 90% of Canadians will live in a jurisdiction with an EPR program in place for plastic packaging. This is one important tool that helps to make producers responsible for the plastic waste their products generate.

[Translation]

While we work diligently to implement initiatives and engage partners at the national level, plastic pollution does not respect international borders. This is a global problem that requires urgent and immediate attention.

[English]

Canada continues to—

The Chair: That's the time for your opening statement, but I'm sure that with our questions, we'll get to some comments you would have made. Thank you for the remarks.

Now I'm going to open the floor to questions. Be sure to indicate to whom your questions are directed.

We'll begin our first round with MP Tochor for six minutes.

Mr. Corey Tochor (Saskatoon—University, CPC): Thank you very much.

I have a couple of technical questions before we get to the bulk of my work today.

Can you please explain to the committee the key differences between something biodegradable and something that can break down through an industrial process?

Mr. Dany Drouin: Thanks for the question. It's an important one.

The science shows that biodegradable products can break down and biodegrade in very specific temperature and humidity conditions. Those conditions are usually in an industrial setting. The problem the literature and the research show is that when those biodegradable products end up in the environment, especially in the Canadian environment, they behave the same way as the normal—

Mr. Corey Tochor: What about actual processes, though? What are the differences and challenges that come with those two?

Mr. Dany Drouin: Can you repeat the question? I'm sorry.

Mr. Corey Tochor: What is the difference between something biodegradable and something that can break down through an industrial process, like chemical recycling? There are challenges for each one. Is that correct?

Mr. Dany Drouin: Yes, correct.

Mr. Corey Tochor: I guess the latter would make the rest of the waste stream clog up because it's processed differently. Is that correct?

Mr. Dany Drouin: There are multiple questions in your question. I'll try to answer them clearly.

First, in reference to chemical recycling, there are multiple technologies that aim to break down plastic, from the polymer to the monomer—the individual resin. Then you can reintroduce it into a new product. That process is not called biodegradation. It's chemical recycling.

Mr. Corey Tochor: We'll probably have to get some written responses to some other questions—

Mr. Dany Drouin: Okay.

Mr. Corey Tochor: —because I'm going to run out of time. I'm sorry.

From a technical or building blocks perspective, can you distinguish between virgin resin and chemical depolymerization?

Mr. Dany Drouin: I can provide you with details on the specific technology you referred to.

When we're talking about virgin resin, it's about extraction. The use of natural gas or other materials will create the new plastic resin, which is then a building block for any plastic product.

For depolymerization, I'll give you a detailed response in writing.

Mr. Corey Tochor: All right.

What efforts is the government advancing to support chemical recycling?

Mr. Dany Drouin: Chemical recycling is a technology that, in the context of the Canadian environment, will likely be needed, because mechanical recycling alone will not provide all of the capacity needed. The industry is investing heavily in multiple technologies, and the federal government has supported science research or, in some circumstances, the technology itself.

Colleagues at Innovative Solutions Canada at Economic Development Canada, through their funding program, would have a specific example of where the government has invested to support the early advancement of this technology.

• (1115)

Mr. Corey Tochor: Along those lines, why aren't we looking to adopt standards like those of the ASTM, the American Society for Testing and Materials? Can you explain why we wouldn't want established standards that are linked to our largest trading partner?

Mr. Dany Drouin: In general, to set up performance requirements, standards are usually easy to incorporate in control measures or regulations. What they allow for is a clear understanding among stakeholders—the businesses—of which standards apply to a control measure in order to demonstrate performance.

Mr. Corey Tochor: Why wouldn't we want the same standards as our largest trading partner?

Mr. Dany Drouin: Usually, in all our regulatory work, there's harmonization with other jurisdictions, like our largest trading partners. Sometimes it's with those that are advanced, the leaders across the world. They're the key input into our regulatory development, and that leads to harmonization among countries.

The Chair: Thank you.

Quickly, is there something you'd like the witness to send?

Mr. Corey Tochor: Yes.

What would happen to the cost of living if we didn't have the same standardization as the States? Would it increase or decrease our price of living?

That can be in written form.

The Chair: You can send that in written form. Thank you so much.

Now we will turn to MP Kelloway for six minutes.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thank you, Chair.

Hello, colleagues and witnesses. Thanks for coming today.

I'm a bit of a newbie to this committee. I usually deal with fish and marine life, but I find this a very fascinating study from a whole host of perspectives.

I'm going to focus on three questions. If we have time, Mr. Drouin, maybe you can finish your opening statement.

I'm wondering if you can elaborate on how Canada's policies on the recycling of plastics have evolved over the last 10 to 15 years. What I'm getting at, I suppose, is this: Are we in a better position today to deal with plastics and waste management? That would be number one.

In your opening statement, you talked about the circular plastics economy. I'm wondering—for me at least, and for people watching at home—what you mean by that. Can you unpack the circular plastics economy? That's the second question.

The third question is about getting plastics out of landfills. We often talk about the environmental importance of that. Obviously, we should, but I'm wondering if you could speak to the health benefits of doing that and the socio-economic possibilities. What results from that? It may tie in with your circular plastics economy definition.

It's over to you. If you have enough time, you can finish off your opening statement.

Mr. Dany Drouin: There are a lot of plastics in the oceans, and fishery stocks are being impacted, so you're not far from the issue when you're in the other committee.

We are in a better place than we were 10 to 20 years ago in Canada because of both the policies and the technologies used to sort and recycle. We're still far off from a full circular plastics economy, with only 8% to 9% of our plastics being recycled and about 40,000 tonnes of plastics leaked permanently into the environment each year. We're far off, but we're in a better place than we were.

The circular economy, in a sense, recognizes that the value of the products is so important that you need to keep them in the economy as long as possible through the reusing, refilling, repairing and refurbishing of the products. Then when you come to their real end of life, recycling puts the resource back in the economy. That's what we mean by a circular economy. You try to avoid the end of life. That's linked to the socio-economic aspect you were talking about.

Thank you for allowing me to finish my introductory remarks.

• (1120)

Mr. Mike Kelloway: Do you mind if I ask you one more question?

Mr. Dany Drouin: Yes, of course.

Mr. Mike Kelloway: You talked about marine litter, which is obviously important in the Great Lakes, on the west coast, on the east coast and in the Arctic. Can you very briefly, because you have a bit of time, highlight for me the landscape of where we were and where we are? I'm guessing it's similar to what you mentioned in your answer to my first question—that we're doing better—but we have a long way to go.

Mr. Dany Drouin: That's correct. You find plastics in the Canadian environment everywhere—on every shore, in every park, in the Arctic and in the water. It is worsening in some ways because the influx of pollution is greater than the progress toward the circular economy I was referring to. That has an important implication for birds, animals and ecosystems.

Mr. Mike Kelloway: When it comes to marine, the trend line would be a little different than, say, on land.

Mr. Dany Drouin: Not necessarily. It's worsening. What I was saying at the beginning is that recycling is better than it was 30 years ago.

Mr. Mike Kelloway: Okay.

Mr. Dany Drouin: The problem is that we produce more and more plastics that end up in the environment. That is a bit different from the recycling of plastic, which is improving because of technologies and the EPR in the provinces and territories. This is exactly—

Mr. Mike Kelloway: I'm a man of my word. I want to make sure you finish your statement.

Mr. Dany Drouin: Your point is exactly why the international community is working together to develop an international, legally binding treaty. We hosted in Ottawa not long ago the fourth session. The treaty is supposed to be agreed to in 2025. There's still a lot of work to do. The aim is to level the playing field across the world.

Mr. Mike Kelloway: Okay. Thank you.

The Chair: Do you want to finish your statement? You have 43 seconds left.

Mr. Dany Drouin: I finished it. I think we're okay.

The Chair: That's wonderful.

Mr. Mike Kelloway: That's very clever. It was within the answers. Thank you.

The Chair: We will now turn to MP Blanchette-Joncas for six minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ): Thank you, Madam Chair.

I'd like to welcome the witnesses who are with us today.

Mr. Drouin, I read Statistics Canada data and a study conducted in 2019. From what I read, Canada produced or imported 7.1 million tonnes of plastic in 2020, which is a 28% increase over 2012. This is no trivial matter. Packaging accounted for nearly one third of the plastic used, and construction plastics accounted for one fifth. That same year, nearly five million tonnes of plastic were thrown into landfills. About a sixth was recycled, but the data doesn't show how much was actually recycled or how much ended up in the landfill.

That same study, done for the federal government, found that less than one tenth of plastic waste in Canada is recycled. That's one in ten. In school, that kind of mark does not pass muster.

What has the federal government done to address this deplorable situation?

Mr. Dany Drouin: Thank you for your question.

You're referring to a report that analyzed the status of plastics in the Canadian economy. That report laid a bit of a foundation for understanding the problem and finding potential solutions discussed with the provinces and territories.

The figures you have are the same as the ones I mentioned earlier when I mentioned that approximately—

Mr. Maxime Blanchette-Joncas: Mr. Drouin, I really like numbers, but I prefer actions.

What has your department done to counter this situation, as illustrated by the deplorable figures in the report I just quoted to you?

Mr. Dany Drouin: It has done a number of things.

First, the Government of Canada has invested in science and data collection in order to validate the figures you mentioned over time. That work is being done.

Then, more data will be collected and entered in the recently announced registry, which will provide the information needed for concrete action.

Draft regulations have also been put in place, one of which aims to prohibit six single-use items that will join 140 others elsewhere in the world, including in the provinces.

We also have draft regulations for recycled content and labelling.

Since 2021, we have also controlled the export of plastic waste. You need a permit to be able to export that waste. The permit is only issued if the receiving country wants the plastic.

So a lot has been done, and that's just at the federal level. The provinces are doing a lot as well.

• (1125)

Mr. Maxime Blanchette-Joncas: It's the federal side that interests me, and that's what concerns you, Mr. Drouin.

How do you rate your goal of achieving zero plastic waste by 2030, on a scale of 1 to 10?

Mr. Dany Drouin: In fact, it's a common goal, and it was set as part of the Canadian strategy adopted by the Canadian Council of Ministers of the Environment, or CCME. The federal, provincial and territorial governments are working together to achieve this objective, which isn't just a federal one.

Mr. Maxime Blanchette-Joncas: Okay.

As far as you're concerned, on a scale of 1 to 10, what would you say about the achievement of the objectives of the Department of the Environment and the federal government?

Mr. Dany Drouin: In fact, the examples I gave you are a good example of the federal government's contribution at the pan-Canadian level under the CCME. There are others as well, such as the measures that have been taken to remove ghost fishing gear from the ocean.

In terms of achieving zero plastic waste by 2030, let me start by saying that progress has been made. For example, the single-use plastics ban regulations will remove about 3% of pollution and 5% of waste. So there's an upward trajectory.

We still need to adopt more measures, if that's your question.

Mr. Maxime Blanchette-Joncas: Mr. Drouin, I don't understand one thing.

In a February 2024 report, the Commissioner of the Environment and Sustainable Development said the following:

... led by Environment and Climate Change Canada began implementing activities to contribute to the Canada-wide goal of reaching zero plastic waste by 2030.

What's important is that he goes on to say:

However, they still had not gathered all the information needed on plastic waste and had not yet fully established the targets and monitoring systems to track their progress against the goal. Until this is done, they will not know whether they are on track to meet the goal.

So I understand that we have invested in something, but we don't know if it's good. We aren't able to measure it. That's what the report tells us.

You're telling me that progress has been made, but an independent report tells us that you don't have a complete picture that would allow you to measure the achievement of your objectives. This is serious.

Mr. Dany Drouin: The department responded to the commissioner that it agreed with the proposed recommendations that more details on the measures taken were necessary.

Some things are already in place. For example, there was the announcement of the federal plastics registry, which the commissioner called a step in the right direction. Statistics Canada's annual reports also provide us with information. Work is also under way to prepare a progress report.

Mr. Maxime Blanchette-Joncas: I have a simple question for you.

Is the federal plastics registry mandatory?

Mr. Dany Drouin: Yes.

Mr. Maxime Blanchette-Joncas: Who is responsible for monitoring to ensure that all businesses in all economic sectors do so?

Mr. Dany Drouin: The registry—

[*English*]

The Chair: I'm sorry. I'm afraid that's a bit over our time. Perhaps in the next round—

[*Translation*]

Mr. Maxime Blanchette-Joncas: I would like a written answer, Madam Chair.

The Chair: Okay.

[*English*]

We'll now turn to MP Cannings for his six-minute round.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you to the witnesses for being here with us today.

I've met with the plastics industry once a year for, I would imagine, the last six or seven years. I remember that before the new environmental protection act came into place, they were very concerned about the measures for plastics. They said they didn't need this; they could set up a circular environment where plastics would be recycled and reused.

I'm looking at a paper, "Canada's Zero Plastics Packaging Waste Report Card", which came out last fall. It was submitted to Environmental Defence Canada. It's pretty depressing. Looking out to 2030—and I think Monsieur Blanchette-Joncas mentioned some of these numbers—if we keep doing what we're doing, even with the improvements you talked about, we will still be throwing out two million tonnes of plastics every year in Canada. About 88% of the plastics used in Canada will literally be thrown away.

You mentioned co-operation with the provinces. You mentioned extended producer responsibility and what the industry is doing. How is that going? Let's start with the industry. What role do you think the industry should be playing here? I think British Columbia has some EPR regulations and has a system in place. How are the rest of the provinces doing in that regard?

● (1130)

Mr. Dany Drouin: EPR is being rolled out across the country. British Columbia has the more mature system in place, but there's also Quebec, Ontario, Alberta, Yukon and the Atlantic provinces. There's quite a lot of development on EPR, which is essentially about transferring the responsibility and cost of managing the end of life of a product from the communities to the private sector.

An expansion of the EPR programs across the country is happening. There are two gaps. One gap is in harmonization. They do not all look the same. For the industry, that makes it more difficult for them to comply with different sets of systems. That's what we're working on with the CCME. The other gap is the geographic gap in the types of products covered.

The industry has an important role to play. They do control important levers that will make plastics easy to manage. They are recognizing it through, for example, the Canada Plastics Pact. In terms of reducing the complexity of plastics packaging so that it's easier to recycle, sometimes it's multi-layered or has a lot of additives. That makes it very hard to recycle.

The report, which my colleague from Environmental Defence Canada will be able to speak more about afterwards, shows that voluntary actions alone won't work. There's a need for jurisdictions to mandate some requirements.

Mr. Richard Cannings: I noticed that too. I'm from British Columbia. I end up filling half my suitcase with plastic when I go home from Ottawa, because I can recycle it at home and can't recycle it here. However, even when I'm recycling at home, I wonder about it. We seem to have a good plastics recycling thing in British Columbia. A lot of it is voluntary, but they try to make it as easy as possible. I wonder how much of it is being recycled. You hear all sorts of horror stories about recycling going to landfills.

How is that system working there? How could we improve the whole recycling ecosystem?

Mr. Dany Drouin: Landfilling is a real issue because it's an economic loss happening on a large scale. The pollution is important. The federation works through shared jurisdiction. Municipalities operate the landfills and, on top of that, the provinces and territories legislate the EPRs and the operations. The federal government has some role or is sometimes best placed to, for example, set recycling content mandates, which is an incentive to recycle more. That will drive investment in the recycling facility.

What is currently happening with the extended producer responsibility programs has a lot of promise, and jurisdictions are learning from each other as well. B.C., as I mentioned, being one of the more mature systems, is a key contributor. Quebec is launching a new plan. Learning from them and looking at ways to make it easier for industry to comply, without a patchwork of systems in place, could be very useful for the country.

• (1135)

The Chair: That's your time. Thank you very much.

For the second round, we'll begin with MP Tochor for five minutes.

Mr. Corey Tochor: Thank you very much.

Is the problem with plastic or is it with how consumers are utilizing the plastic?

Mr. Dany Drouin: It is somewhat unfair to put the problem on the shoulders of Canadians when, for example, it's very hard to understand what they buy and what they can do with it. Should it go in the garbage? Should it go into the recycle bin? Can it be reused?

Mr. Corey Tochor: Stop there for a moment. Whether it goes into the garbage bin or the recycling bin, if plastic ultimately ends up right now in those two bins, that's not the plastic causing problems in the environment. Is that correct?

Mr. Dany Drouin: There are leakages across the recycling stream or the waste stream. When you put something in your blue box, there's going to be wind and water, so some of the bags will fall off the truck. There will be other leakages as well. When you get into the recycling facilities, there are a lot of plastics around them because the bales are being washed out by rain or wind. At the end of the day—

Mr. Corey Tochor: I'm going to cut you off here, but we can get back to that.

Isn't it just that we need better policies on the transportation of waste and its handling at the waste sites, then? Wouldn't that fix the problem versus banning?

Mr. Dany Drouin: The transportation is one problem, but then there's a lack of sorting in the recycling facilities. Something you put in your blue box that gets to that point will go to a landfill if they have trouble sorting it and separating where it should go. The big problem—

Mr. Corey Tochor: I'll stop you there.

What's the problem if it ends up in the landfill, though? I want to recycle that molecule as many times as possible, but in the examples you gave about plastics in the environment from transportation and processing facilities, it seems like if we just had better quality control, we wouldn't have a problem. Wouldn't that be a common-sense approach versus trying to change the whole system of plastics?

Mr. Dany Drouin: The root of the issue that you're after is the economic value of this material. The higher the value, the more incentive there is for the industry to recycle it. That's the purpose of the EPR program and the recycled content mandates, which will give more economic value to the recycled resin. That is the biggest issue we face in the plastics economy.

As to when plastics get into a landfill, in 2019 alone there was an economic loss of \$8 billion. There's a lot of opportunity in putting that \$8 billion back into the economy. There's also pollution coming from landfills. You see birds and animals going into landfills, and they can choke by ingesting pieces of plastic, for example.

Mr. Corey Tochor: It appears that processes can be improved, and there are ways of minimizing the leakage into the environment. No one wants to see plastics out there.

How did you come up with 40,000 tonnes of plastics being in the environment every year?

Mr. Dany Drouin: The 40,000 tonnes is an estimation of what is not recycled, of what doesn't go into the landfill and of the residual that has been validated a few times.

• (1140)

Mr. Corey Tochor: There's no way of knowing that's accurate, because another concerning statement—for me, at least—you made is that there are plastics everywhere, that everywhere you look in Canada, there are plastics. That's not the case. If you want to see plastic pollution, there are pictures on the Internet of oceans with blobs of plastic, which is a problem. That plastic is a problem. I don't see plastic in our environment everywhere I look.

It casts doubt on the 40,000 tonnes number, because I don't think everyone who goes to the beach this weekend is going to see plastics littered everywhere. It is a problem, and we should be addressing the problem. There are some issues with municipalities deciding to remove garbage cans or recycling depots throughout the country, which is causing people to litter or not have another solution.

I know my time is almost up. I am very encouraged by some of the testimony that I heard today. I think we should be working towards making Canada a superpower of plastics recycling, and to your point, there's a lot of value, still, in the material we're putting in the ground.

I have one last question on the plastic in the ocean. The majority is ghost gear. Is that correct?

Mr. Dany Drouin: There are also a lot of microplastics.

Mr. Corey Tochor: I mean the majority of the weight. There are different studies out there.

The Chair: We're quite a bit over time on that. A written answer would be great.

Thank you, Mr. Tochor.

We'll now turn to MP Jaczek for her five-minute round.

Hon. Helena Jaczek (Markham—Stouffville, Lib.): Thank you, Madam Chair.

Thank you, Monsieur Drouin.

You have alluded to the federal government's responsibilities in collecting data and advancing solutions. When we look at some of the Stats Canada data collected on, I presume, a national level of the percentage of plastics going to landfills and not being recovered in any way, do you break that down?

As we've already heard, there are so many jurisdictions involved: provinces, territories and regional municipalities. Where I come from, in the region of York, there is local municipal collection. Do you break things right down to the municipality responsible for the recycling of these plastics? Do you report that back in any fashion directly to those municipalities?

Mr. Dany Drouin: I will have to get back to you on the breakdown to municipalities. There is, however, a breakdown to provinces and territories. We also communicate the information back to them because it's essential for their own policies and for how they establish and monitor them. We do have that level of sharing of information.

Hon. Helena Jaczek: That would be very valuable because how can people improve if they don't understand what's happening on the ground in their local area? As many people have said, consumers are very responsible for putting stuff in their blue boxes, but then they disappear.

On extended producer responsibility, you've said there is an economic issue and that, essentially, money is being lost because the product is going into landfills. I would understand that if producers had some ability to collect the waste themselves, but it doesn't work that way; it goes to the municipal landfill. How do you, in any way, calculate the dollar value that the producer needs to provide to offset the cost to the municipality for recycling? I don't understand how you would calculate the dollar value.

Mr. Dany Drouin: If you look at any given EPR legislation—for example in Ontario or B.C.—for each category of product it covers, whether it's packaging or a TV, there is a fee associated with it that the provinces set themselves. It is sometimes by weight and sometimes by unit, so one TV would equal a fee of.... That is how the

fees and costs for the EPR programs are set up to offset municipal operations.

In many cases, what we see in Canada is that the industry will group itself as a producer responsibility organization, and sometimes they can operate the facilities in a particular municipality. Other times the municipality keeps operating them and then collects the fees from the producer responsibility organization.

There are a few ways that it's being done in Canada at least.

• (1145)

Hon. Helena Jaczek: Are there any penalties that you're aware of if a producer refuses to participate?

Mr. Dany Drouin: I would have to get back to you on that, but I would think that every province or territory's legislation on EPR does have consequences for non-compliance.

Hon. Helena Jaczek: It just strikes me that they would need an army of people inspecting facilities and counting the number of TVs being deposited. It seems like an extraordinarily bureaucratic exercise. Could you relieve me of this apprehension?

Mr. Dany Drouin: The purpose of the federal plastics registry, which was launched recently, is to—

The Chair: Give a quick answer, please.

Mr. Dany Drouin: It is for mandatory reporting that is meant to be transparent, and it's available to authorities and the public.

The Chair: Thank you very much.

Now we'll turn to MP Blanchette-Joncas for two and a half minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Madam Chair.

I'll continue with Mr. Drouin.

You spoke to us about the importance of the new federal plastics registry program. As you know, Canada has not reinvented the wheel with this initiative. The EU created a similar registry in 2018, Japan in 2021, and Australia in 2021. So we're three to five years behind the countries I've just named.

In your opinion, is it due to a lack of vision or a lack of political courage?

Mr. Dany Drouin: I'll let you answer that.

However, in the federal government, we observed that there were a few provincial registries, but that there was no harmonization and that it wasn't covered in the same way. That's what prompted us to implement one for the entire country.

Mr. Maxime Blanchette-Joncas: Mr. Drouin, I think I know the answer to my next question. However, I'd like to hear yours, since you're the expert.

You advise the government on public policy and then on problem solving. Your reports say that plastics are a threat to ecosystems, that they aren't being managed sustainably. In Canada, one tenth of plastic products are recycled.

I just named some countries that are three to five years ahead of us. You don't want to answer the question. What advice did you give the government? You've seen the list of those countries, though. Do you have Internet in your department?

Mr. Dany Drouin: In fact, what we advise the government to do is part of a process to which we bring a perspective, but there are others too.

Mr. Maxime Blanchette-Joncas: Mr. Drouin, the important question is this. When did your department first advise the federal government to implement a plastics registry?

Mr. Dany Drouin: I can't answer questions about the internal policy development process, as I am bound by a code of ethics. However, I can tell you that, in 2018, the provincial, territorial and federal ministers met and realized that we needed a Canadian plastics strategy. They all agreed on that.

Mr. Maxime Blanchette-Joncas: Mr. Drouin, I would still like an answer, in the interest of transparency for the general public, who pays your salary and the salaries of the employees in your department. If this is important, amazing advice, why shouldn't the public know about it?

Mr. Dany Drouin: During the policy development process, the department provides advice on a regular basis. This advice is based on science and is intended for the government.

Mr. Maxime Blanchette-Joncas: Okay.

[English]

The Chair: We're a bit over the time.

Now we'll turn to MP Cunnings for two and a half minutes.

Mr. Richard Cunnings: Thank you.

There's a mantra in the recycling space: It's not just recycling. It's more important, perhaps, to reduce the use and manufacture of these items, to reuse them where possible and, if necessary, to recycle the rest.

Is there anything in your overall strategy that sets out targets for those three streams?

• (1150)

Mr. Dany Drouin: There are actions across the waste hierarchy, which is what you outlined with reduction and so on, but the targets are set by provinces for those.

The federal government invests in public awareness to incentivize reduction and reuse, with public media campaigns and public education. We also support sectors in the economy so they can look at reuse and refillery. For example, there are grocers currently testing pilots to allow you to bring in a reusable container for what you buy so you can go back and refill it.

Those all have an impact on the reduction of plastics, for sure.

Mr. Richard Cunnings: You mentioned targets. Where are we in setting targets? We can't get anywhere if we don't set targets, but

it seems very few provinces have set real targets for this. I'm just wondering where we are at. Can we get somewhere by 2030 if we don't set targets?

Mr. Dany Drouin: The targets for recycling are being set by the provinces. Anywhere there is EPR legislation, there will be targets for the collection and recycling of the materials covered.

As I mentioned, we will need more measures across the country to get to zero plastic waste by 2030. That is a fact.

Mr. Richard Cunnings: According to this report, it seems that British Columbia, Ontario and Quebec are the only provinces anywhere near setting enough targets. What can the federal government do to encourage the rest of the provinces to get behind this?

The Chair: That's our time. If you would like to submit that in writing, I think we'd all like to see it.

We're going to have two and a half minutes each for a third round. We'll start with MP Lobb. Then that will be it for this panel.

Mr. Ben Lobb (Huron—Bruce, CPC): Thank you for being here today.

You mentioned the plastics registry. I was curious. Is there an estimation of how much it's going to cost to operate the plastics registry on an annual basis?

Mr. Dany Drouin: The registry is being built currently. The IM-IT platform is being built, so I don't have the cost of that registry currently.

Mr. Ben Lobb: Is there a risk that there could be duplication between what a province is doing and what you're doing? How are you preventing that duplication?

Mr. Dany Drouin: That's an excellent question.

We have had discussions with the provinces that have registries in place. There are two ways we have looked into reducing potential duplication. One was to, as much as possible, follow the CCME guidance that we have collectively so we—

Mr. Ben Lobb: That's fair enough. I'm going to run out of time. You're working on it.

My last question is regarding Amazon, Canadian Tire and Walmart. All of these companies bring in stuff from China. It's wrapped in cardboard packages and styrofoam. There's plastic all over it. At what point do you bring them in for a conversation as part of this and say they have to stop and that if they're going to keep bringing this stuff in, they have to start meeting some targets to reduce what's on their shelves and the packaging being brought in? Where is that at?

Mr. Dany Drouin: Another way we've reduced duplication is to allow for bulk uploading from a provincial registry to the federal registry. That reduces the administrative burden. The e-commerce marketplace is covered by the plastics registry, so they will need to report on the amount of plastic they put on the market.

Mr. Ben Lobb: Have you had talks with companies like Amazon, Canadian Tire and Walmart—these companies that export everything—about what their numbers look like? Do you know what their numbers are currently for plastic?

• (1155)

Mr. Dany Drouin: That is what the registry will give us. That will be there in the data.

Mr. Ben Lobb: I go to the dump and do dump runs, and I'll tell you, when you go there and look, you see plastic chairs and plastic toys. I won't call it junk, but all the stuff you see on the shelves in the spring is what ends up in the landfill in the fall. That's just a reality.

The Chair: Thank you very much.

We'll wrap up this round with MP Diab for two and a half minutes.

Ms. Lena Metlege Diab (Halifax West, Lib.): Thank you, Madam Chair.

Let's continue on that theme for a moment. In 2018, the CCME, or council of FPT ministers, which you talked about, set the priority for plastic waste management. I think you talked about remanufacturing, refurbishing and recycling.

As to the federal plastics registry, what information can the government draw from establishing it, and how can it contribute to the goals of the strategy on zero plastic waste?

Mr. Dany Drouin: The granularity of the registry will be very useful in the context of understanding, from the life cycle of any product, the amount and types of plastic put on the market and what happens at the end of its life. In and of itself, that data will be extremely important for identifying gaps in measures, whether federally or provincially. That information will be available to the public and to industry.

For example, industry is looking at the registry to get more granular data and, perhaps, to find ways to better manufacture and design plastics. Right now, they might be doing that because they've done it like this for decades, but they say that through the registry, they might find ways to reduce the complexity of plastics.

That's the type of information—

Ms. Lena Metlege Diab: You say they could promote some innovation and research in—

Mr. Dany Drouin: It's innovation and research, and with innovation comes investment.

Ms. Lena Metlege Diab: How would the federal government work with the provinces and territories on this?

Mr. Dany Drouin: Do you mean on the registry or—

Ms. Lena Metlege Diab: Yes. Is it simply about sharing information?

Mr. Dany Drouin: Yes. One important opportunity for the provinces will be to look at the federal registry data and compare it with their own data to see if there are discrepancies. They can then perhaps look at additional measures on their end as well.

Ms. Lena Metlege Diab: Good. Thank you very much.

How does Nova Scotia fit into all of this? I'm a Nova Scotian MP.

Mr. Dany Drouin: In Nova Scotia, as in many Atlantic provinces, the issue is close to home, so it's an extremely collaborative and positive conversation. It already has a plastic bag ban, for example. I would say it's quite avant-gardist.

Ms. Lena Metlege Diab: We're pretty advanced, are we?

Mr. Dany Drouin: Yes.

Ms. Lena Metlege Diab: Thank you.

The Chair: Thank you to both of our witnesses. That wraps up this round.

We appreciate Dany Drouin and Thomas Kruidenier for their testimonies this morning and their participation. You may submit the additional comments that you didn't get a chance to finish through the clerk.

We're going to suspend briefly now to do a sound check with the witness on our second panel.

• (1155)

(Pause)

• (1205)

The Chair: I call the meeting back to order. We had an initial problem with the sound check, but I think we have our witness all ready to go.

We want to welcome Karen Wirsig, senior program manager of plastics at Environmental Defence Canada.

At the bottom of your screen, Ms. Wirsig, you have the option for interpretation of floor, English or French.

Those of you here in the room are well familiar with that process.

We will give you up to five minutes, Ms. Wirsig, for your opening remarks, after which we'll start with our round of questions. You may begin.

Ms. Karen Wirsig (Senior Program Manager, Plastics, Environmental Defence Canada): Thank you very much for inviting me today.

Success in plastics recycling has proven elusive even after more than 40 years of promises to improve it, and while the role of science in addressing plastic pollution is crucial, I caution against focusing the scientific and research effort on recycling. The latest Statistics Canada data indicates that approximately 8% of the more than four million tonnes of plastics discarded each year in Canada is recycled. The needle has not actually moved in 40 years, and it's not for lack of trying.

The problem lies not in recycling itself, but in the proliferation of material types and uses of plastic that make it extremely difficult to collect, sort and process in any safe, effective and economical way. As a result, we see troubling levels of plastic waste leakage, concerning especially because of the threat this leaked plastic poses to ecosystems and wildlife. Once in the environment, this plastic never really goes away. Plastic is a persistent and bioaccumulative pollutant.

While improvements to product design, collection, sorting and processing could reduce this post-use leakage, it is highly unlikely to make a significant dent in the amount of plastics in the environment. This is true especially if plastic production and use continue to grow at the pace at which they are growing today, which is much faster than the rate of GDP growth, for example. At this rate, we will be running in place even if recycling improves.

What's more, plastics—or more specifically microplastics—are being found in every part of the human body, including lungs, blood, brain, testicles and placenta. While scientific research is still in development on the main pathways and impacts of this extremely pervasive plastic poisoning, we know enough to know that our bodies are collectively being used as the world's biggest laboratory and that we should proceed with every caution when it comes to addressing plastic production, use, recycling and disposal.

We know that microplastics in our bodies are more likely related to the use phase of plastics than the disposal phase. Plastic is in the air, in water, in household dust and in the food we eat. It migrates from packaging and products as we use them, so recycling is not going to address the urgent issue of protecting human health from plastics. The same is true for so-called bio-based, biodegradable or compostable plastics. They all contain unknown chemical additives, and recent research has shown they all act quite the same as conventional plastics when leaked into the environment.

How did we get here? One of the main drivers of plastic pollution is profit-motivated chemistry, which has largely shown disregard for the public interest, even if it has produced some applications that have an undeniable social utility. Everything you can imagine is made out of plastic, as well as a huge number of things you never imagined and probably don't need. What's more, this plastic is a chemical soup of substances that are largely unidentified and unstudied from a safety point of view. Earlier this year, researchers identified 16,000 chemicals used in plastics. Of those, only 4,200 have been identified as hazards, while a whopping 10,000 have no hazard information at all. This is because profit-motivated chemistry does not readily make their formulations known, even to regulators and researchers.

The study I referenced also found that more than 400 chemicals of concern can be found in each plastic type, including food packaging, and that every material they tested leached hazardous chemicals. That's why focusing scientific research on recycling is absolutely the wrong public policy approach at this time. Public science desperately needs to catch up to private chemistry and prioritize the protection of the public and the environment. That must be the priority for Canada's science and research agenda.

Furthermore, governments should not be subsidizing plastic producers for recycling, which only amounts to a subsidy to continue

business as usual. EPR is an approach supported by all levels of government in Canada. It is meant to ensure polluters pay the full cost of their activities, including those that have been externalized onto the environment and our health. If these producers, including those that make the plastic and those that use it in their products and packaging, believe it makes sense to invest in improved plastics recycling, they can and should do it. The government's job is to make sure these activities are safe, are without undue risks to the environment or human health, and are actually effective in achieving regulated requirements to address plastic pollution.

Throwing government time, money and intellectual effort at plastics recycling simply allows the businesses at the root of plastic pollution to continue overproducing and underperforming, at least when it comes to the environment and our health. It also lends credence to the corporate greenwashing that insists recycling can get us out of this mess.

Thank you.

● (1210)

The Chair: Thank you for those opening remarks.

We'll now start with our first round of questioning. We'll kick it off with MP Tochor for six minutes.

Mr. Corey Tochor: Thank you, Madam Chair.

Thank you to our witness online. Hopefully we'll have an opportunity over the summer to spend some more time together to ask some questions about plastics.

We are entering an almost three-month shutdown of the session. As everyone knows, I put a motion on notice a couple of days back that we should sit a couple of times over the summer. As Canadians are working through their summer, we should be working in committee as well.

I will move the following motion, the notice of which was given on Tuesday, June 11, 2024:

That, given the large workload the committee has on the docket, the committee instruct the chair to book five meetings between July 8 and September 13, 2024, to deal with unfinished business and pressing matters facing Canadians, including the study on innovation, science, and research in recycling plastics, and the study on the distribution of federal government funding among Canada's post-secondary institutions.

I'm moving that motion right now, Madam Chair.

The Chair: We have a speaking order.

First in the speaking order is Mr. Longfield.

Mr. Lloyd Longfield (Guelph, Lib.): Thank you, Madam Chair.

Thank you, Mr. Tochor, for the motion.

We have a witness in front of us whom I would like to hear from. We have committee business scheduled for the second hour, so I move that we adjourn debate until we're in committee business.

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): On a point of order, there is no committee business scheduled.

Mr. Lloyd Longfield: I'll move to adjourn debate, then.

The Chair: Does anyone want a recorded division on that?

Mr. Corey Tochor: Yes, Madam Chair, we'd like a recorded vote on this.

I don't think we're asking for too much in asking for a few meetings to be held over the summer. With all the challenges we're facing, we're adjourning debate. We should have a vote on the motion, and—

• (1215)

The Chair: There's no point in debating now. We're going to call a vote.

(Motion agreed to: yeas 7; nays 4)

The Chair: The motion to adjourn debate is carried.

Ms. Lena Metlege Diab: We'll continue, though, with the witness. Is that right? That's the point.

The Chair: That's right.

Mr. Tochor, you have two and a half minutes left in your time with the witness.

Mr. Corey Tochor: Thank you, Madam Chair.

I apologize to the witness, but it is very important, obviously, that the committee work over the summer. I'm sure that with the work you do, you'll be working over the summer. Hopefully, we're all trying to find a better environment for all Canadians. Some of the work you're doing with plastics would have benefited from the committee work we would have done over the summer. Unfortunately, the motion did not pass. We're only going to hear from a handful of witnesses, and then we're going to break for three months, which is unfortunate. There should have been some time over the summer for us to hear more about how to become a superpower in recycling in Canada.

I'm pretty much done with my time, so I would like to thank you for being online today.

I'll cede my time to the next member.

The Chair: Thank you.

We will now turn to MP Longfield for six minutes.

Mr. Lloyd Longfield: Great. Thank you.

Thank you to our witness for being here.

I'm looking at the motion we're studying right now on innovation, science and research in recycling plastics. You said in your testimony a few times that you don't think we're studying the right thing. Briefly, what should we be studying? Then I'd like to go back to our study. I have some questions for you there.

Ms. Karen Wirsig: Actually, the research agenda in Canada is quite strong at the moment in studying microplastics from both a health and environmental point of view. We are collaborating on a project at the University of Waterloo looking at the Grand River watershed, for example, and trying to identify and quantify the pathways and the amounts of microplastics in that watershed.

Canada is largely on the right track. Should there be more money going to research on plastics, the impact of plastics pollution and how to avoid plastics pollution? Absolutely. In terms of funding the right types of research right now, including on the human health impacts of microplastics, for sure there needs to be more money, but we're on the right track.

Mr. Lloyd Longfield: I'm looking at what solutions we can be researching. You mentioned the Grand River watershed, which is obviously close to home for me. The University of Guelph has the Bioproducts Discovery and Development Centre, which is using oil from plants rather than petroleum to create plastics. They've had some really good results that they're using in automotive parts now. The parts are of lighter weight, higher strength and lower cost. You don't usually get those three things in the same sentence.

Bioplastics are something we see a future in and that we're researching. You commented that you don't think bioplastics are a viable solution. What's your alternative?

• (1220)

Ms. Karen Wirsig: I think bioplastics can be a solution for the kinds of plastic products that have a social use and that we will require, especially the durable types of products you're talking about. I would caution, though, that even bioplastics require all kinds of additives to make them functional. We always have to be aware and careful about those additives, because they will leach out when we're using those products and certainly when we throw them away.

Mr. Lloyd Longfield: I'll just interrupt you there. On the additives they're using, they're using a carbon black that comes from plants. Their supply chain for plastics is not going into the petroleum supply chain.

I'm pushing back a bit on that. I think science could be looking at ways of not creating microplastics by creating alternate forms using bioproducts.

Ms. Karen Wirsig: I mentioned additives. I would be very cautious about what types of additives are needed to make that plastic functional, because they will likely be similar to the additives that are needed to make petroleum-based plastics functional.

Secondly, those plastics will act the same way in the environment as any other petroleum-based plastic. That's why I say it's helpful if those things are used for durable products that can be collected at end of life. If we're using them for packaging, we know right now that a certain amount of packaging ends up leaked into the environment, where those bioplastics will end up doing the same type of damage, likely, as petroleum-based plastics.

We're very supportive of the research on durables. We obviously recognize at Environmental Defence that we have to get away from reliance on oil and gas, but it's not going to be the full answer for the kind of plastic pollution we see today.

Mr. Lloyd Longfield: We're looking at the science in this committee. I sit on the environment committee, and we've done a few studies in the last couple of years on plastics. We had Environmental Defence there as part of that, so thank you for that input as well. We're trying to keep the discussion within the science and the opportunities that science brings, material science.

Plastics are used because of their low cost and ease of forming. Do you know of any other packaging solutions being researched that could be part of our study?

Ms. Karen Wirsig: As Mr. Drouin mentioned earlier, probably the biggest answer to the problem of packaging-related pollution is to get away from single-use packaging altogether. It's less of a material question than an infrastructural system question.

What concerns us about continuing to use plastic for packaging is the chemicals I mentioned and the propensity to create microplastics. Reuse and refill systems can use any other type of material that exists today, but the big challenge will probably be more of a process engineering type of challenge than a material science type of challenge, I suggest.

Mr. Lloyd Longfield: When I open up a package now, I'm seeing a lot of cellulose versus styrofoam. I'm seeing a lot of combined packaging, where one package is being used instead of several packages.

Circular Materials is a group of users of plastics that has been formed across Canada with cross-governance. Do you see any opportunity for researchers in working with groups like Circular Materials?

Ms. Karen Wirsig: Where the usefulness would be is on process engineering, trying to figure out, with respect to product design, how we can design things to be, first, reduced, then reused and repaired, and then recycled. There could be some research there. Again, though, I'm not sure this is a question of material science so much as it is of process engineering. Really, we'll need to see investment from companies to change the pathway of their products and to change the value chain they are using right now to get those products to market.

The Chair: Thank you. That's our time.

We'll now turn to MP Blanchette-Joncas for six minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much, Madam Chair.

I would like to welcome our witness who is joining us for this second hour of our study.

Ms. Wirsig, my first questions are going to be quite broad. We are talking about plastics management. I know that, in your organization, you're fighting for a green transition. As we know, Canada is the fourth-largest oil producer. Recently, it used our tax dollars to buy a lovely \$34-billion pipeline to produce more oil.

If we produce more oil, petroleum-based products are bound to increase too. The government is talking about achieving zero plastic waste by 2030, but it's doing the complete opposite.

I always think I'm in a nightmare, but that's actually the reality.

I'd like to know what you think of this situation, as an expert.

• (1225)

Ms. Karen Wirsig: Thank you for the question.

I will answer you in English, because it will be more efficient.

[*English*]

Right now in Canada we are at a crossroads. We have collectively subsidized the pipeline you mentioned and have also collectively subsidized an increase in plastic production, notably at the Inter Pipeline plant in Alberta, at the Dow Chemical plant in Alberta and at the Nova Chemicals plant in Ontario.

In our view, if we're going to get to zero plastic waste, we have to stop subsidizing pipelines and plastic production. What I believe will happen with the new pipeline is that some of the heavy oil from Alberta will be shipped overseas. It will likely be shipped to China for the production of plastics there, which will be sent back on container ships for products that will end up back in Canada.

We really need to look at what we call the upstream problem of plastic, which is how it is made, how much of it is made and what we use it for. Obviously, subsidizing the oil and gas industry and the pipeline industry is not going to get us in the right direction of eliminating this pollution, whether we're talking about greenhouse gas emissions or plastic pollution.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much.

A little earlier, you mentioned that we need to reduce our dependence on oil and gas. However, we have a government that's doing the opposite: It produces more oil and buys a pipeline to export oil to other countries.

Quebec has banned oil and gas exploration and development throughout its territory. Okay, we're privileged, and we can look to other types of savings. We're empathetic and stand in solidarity with other provinces that could make this transition.

Based on science and your expertise, how can we explain to decision-makers, to elected officials, that they are completely at odds with what science is saying and that they are leading us straight into a wall?

[English]

Ms. Karen Wirsig: We agree with you that we need a real just transition away from a linear economy that right now is very much based on fossil fuel extraction and waste production. We have the means and ways to do it. Quebec is a leader in this area. There is no question in my mind that Quebec is a leader. We should be taking lessons across the country from the kinds of transitions that Quebec is already looking at.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you.

Earlier, I put a question to the representatives of the Department of the Environment. The Auditor General, through the Commissioner of the Environment, says that the Commissioner is unable to determine whether his measures are producing results. He tells us that investments are being made, but we don't know if it's working.

I would like to know what you think about that. What concrete recommendations would you make to the government to change the situation and speed up the pace of plastics management?

[English]

Ms. Karen Wirsig: The federal government needs to keep doing what it's doing. Ideally, it probably should move faster and further.

There is the problem that industry is challenging federal government regulations on plastics right now, and that does slow things down. When there are court challenges, it means we have to stop putting our energy into improving policy to stop plastic pollution and have to hire lawyers and fight industry in court. This is unfortunate.

As to where the federal government is going, the leadership it has been showing at the international level is important, and we can't stop now. Really, we need global coordination. We need to globally see a commitment to reducing the amount of plastic made around the world, because even if we don't make it here, it will be made somewhere else and will come back to our shores either as products or as waste, but eventually as products. This requires a commitment to moving forward both globally and domestically at every level of government.

Am I sometimes frustrated with the pace of progress? Absolutely I am frustrated, but as long as we keep moving forward and keep identifying things we don't need to use anymore, like single-use plastics, we are heading in the right direction

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you very much.

You talk about coordination at the international level, but there isn't even coordination at the national level. There's one province

that produces oil and another that produces hydroelectricity. Each province has completely different geographic characteristics and natural resources.

You talked about leadership. The government bought a pipeline with public funds at a cost of \$34 billion.

Do you think this is setting an example and encouraging the provinces to make a real energy transition?

• (1230)

[English]

Ms. Karen Wirsig: We would definitely support a real energy transition and a real transition for workers and communities away from a single-use society and a one-way linear economy toward a regenerative and just economy that we can all profit from and collectively [*Technical difficulty—Editor*].

The Chair: Thank you. That's our time.

Now we'll turn to MP Cannings for six minutes.

Mr. Richard Cannings: Thank you to Ms. Wirsig for being with us today.

I thought I'd start with this. One of the themes I've heard from the Conservatives today about the plastics issue is that all plastic is being properly put into landfills. We don't see it lying around on the streets, so what's the problem?

I know you touched on it in your opening remarks, but could you, just for a minute, go over the impacts that plastics have on Canadians directly, as in out of sight, out of mind? Conservatives say we don't have to worry about plastics in the ocean, that it's the ocean so it's out of our jurisdiction and we really don't see it much. What are the impacts on our health and our well-being, and why do we have to do this?

Ms. Karen Wirsig: Very quickly, there is about an equal concentration of microplastics in the Great Lakes, where I live, as there are in the ocean garbage patches, so it is very much right where we live. Wherever we are making and using plastics, it is entering our environment, and when we're using plastics, it is entering our bodies. The communities that live closest to production and disposal sites for waste and plastics are feeling the biggest brunt of that. Also, when litter gets into the environment—and it does, as about 1% of all that is made every year ends up as waste litter in the environment—it never goes away. It breaks down into smaller and smaller pieces, perhaps, but it does poison ecosystems. It affects animals, and when it's in our bodies, it is definitely having impacts on our bodies.

This is where the research needs to be topped up. We need to figure out exactly what those pathways and impacts are on our health, and figure out how we can stop making that happen.

Mr. Richard Cannings: From what you were saying earlier, you feel that we have to reduce our use of plastics, which is the first part of reduce, reuse and recycle. One of the other Conservative themes here is that the cost of living is going to go up if we cut down on plastics.

I'm wondering if you could comment on the impacts that cutting down on plastics would have on our cost of living.

Ms. Karen Wirsig: We have to look at this as an opportunity to change the way the economy works. This is why we talk about a circular economy. I'm not a believer in the term "circular economy" for plastics because I think the circular economy is a much broader concept. However, take reuse systems, for example. Over time, we've seen, in studies from around the world, that it doesn't take long to recoup the investment in reuse systems. That's because for companies it's actually cheaper and more effective to use packaging over and over again—wash it out, refill it and use it again—than it is to constantly rely on a source of virgin materials, which then have to be thrown away. Sometimes the costs of throwing things away are externalized onto others, like municipalities or even communities and individuals. However, we all bear the cost in our single-use society right now.

If we're thinking about the cost of living, there is a way of shifting that. Look at grocery companies. Grocery companies right now are wildly profitable. If they invest some of those major profits in improving environmental outcomes around single-use plastics by investing in reuse systems, it shouldn't at all affect the cost of goods. What it should do is, over time, reduce the cost of packaging and waste management for those companies.

Mr. Richard Cannings: I'm looking at your report "Canada's Zero Plastics Packaging Waste Report Card". If we thought we could go down the recycling route and cut down on plastic waste, it's a sobering document. For the first conclusion on whether we can lower the waste gap by 2030, the answer is "fail". All the other ones are "needs drastic improvement".

I'm wondering if you could comment on that report. Aside from the very sensible conclusion of reducing our use of plastics, if we have to use them while we're moving in that direction, what things do we need to do? What can the federal government do to reduce plastic waste?

• (1235)

Ms. Karen Wirsig: The federal government needs to move faster and more deeply towards eliminating harmful and unnecessary single-use products from our lives. You can ban more single-use products. Then work with every level of government to ramp up reuse systems to replace single-use. To me, those would be the top two priorities for government policy.

When it comes to the science and technology agenda, we need to get a better hold on the pathways of plastic pollution and the impacts on our health. The federal government should definitely be focusing on that so that we can know ultimately, when it comes to prioritizing, which plastics have a social use. I'm not somebody who says we're never going to have plastics anymore. We will probably still have plastic, but we need to decide when the benefits outweigh the costs. We are nowhere near doing that now.

The low-hanging fruit is obviously single-use plastic packaging. Let's start there. The government has done a very good job of starting there. It's just that we need to go faster and further to get to the goal of zero plastic waste.

The Chair: Thank you. That's your time.

We'll now start the second round with MP Rempel Garner for five minutes.

Hon. Michelle Rempel Garner: Thank you, Madam Chair.

I want to pick up on some of the questions my colleague Mr. Longfield brought up with regard to substitute goods.

It sounded like you weren't supportive of finding substitute goods for some of these products. I'm wondering why you would push back on looking at, especially, research into substitute goods for certain types of plastics.

Ms. Karen Wirsig: From our point of view, the real issue is that right now we live in a throwaway society where most of our goods are not durable and repairable. They're not designed for reuse. They're not designed for a long life, so—

Hon. Michelle Rempel Garner: To be clear, though, I think my colleague was asking about looking at alternative goods for things that could be reused. Does your organization focus at all on that? Do you have specific recommendations around what substitute goods would be acceptable?

Ms. Karen Wirsig: What we're looking at more are substitute systems. At the moment, what we're looking at is really—

Hon. Michelle Rempel Garner: What I struggle with is that there is a huge policy gap here, which I think Mr. Longfield was trying to get at. We have organizations like yours telling people they can't have any plastics and you want them banned. As a public policy-maker, I get letters at my constituency office about people having to get their french fries in their hands at a drive-through.

Shouldn't we be looking at transitional products as opposed to just jumping into a ban? Doesn't that make sense to you?

Ms. Karen Wirsig: We have replacements for single-use plastics today. What we're hoping is that we don't end up with another single-use type of product.

Hon. Michelle Rempel Garner: Let's talk about that.

Ms. Karen Wirsig: What we'd really like to end up with is a reuse system so that when you get your fries from the takeout, you get them in a container that can be returned, washed out and given out again. That's why I say it's at a systems level.

I think what Mr. Longfield was talking about was more durable products. We're not opposed to research on the kinds of things that will need to go into durable products, but we need to make sure that those products are safe, that they're designed to be repaired and that they're designed to be disassembled so that each component can be recycled afterwards.

Hon. Michelle Rempel Garner: I don't disagree that at some point—it's very laudable—we want to get to this circular system you're talking about. The problem is that we've now enacted bans without having those systems or products in place, so people are getting their french fries in their hands, which is problematic. We're also banning potential transitional products, like the Calgary Co-op's compostable bag.

Don't you find it problematic that we're missing a step and that the public now sees this single-use plastics ban as highly problematic? There's not a lot of public buy-in for it.

Why isn't your group addressing the reality of public policies? Yes, we want to get to this transition, but we need transitional products right now. McDonald's is not going to wash out a plastic french fry cup right now. It's just not. How do we—

• (1240)

Ms. Karen Wirsig: It is. McDonald's is doing that. McDonald's is—

Hon. Michelle Rempel Garner: Is that at every McDonald's across Canada? Is a single mom who is going through the drive-through and needs some french fries for her kids going to get a reusable french fry cup that's going to be washed out for her without any additional cost?

Ms. Karen Wirsig: McDonald's could be doing that. It's doing it in France. It should be doing it.

Hon. Michelle Rempel Garner: It could be doing it. Okay. Now we're making progress.

You agree that the transitional step is expensive to the public. What should the committee be recommending to the government so that a single mom with the screaming kids in the back doesn't have to get the french fries in her hands?

Ms. Karen Wirsig: I have not heard of this problem.

Hon. Michelle Rempel Garner: I have.

Ms. Karen Wirsig: I think french fries are often given out in paper that's not paper—

Hon. Michelle Rempel Garner: I think that's the gap here. When people have to pay two dollars to Loblaws for a reusable bag, that is essentially a tax on their groceries, which have a million times more plastic than anything else. Then there's a mound of them under everybody's sink across the country. It's because groups like yours have not recommended a transitional process. It's always just a ban.

I'm not saying we don't want to get to a point where we have everything you've talked about, but wouldn't you recommend that, as a committee, we should look at that transitional step so that we can get buy-in again?

Ms. Karen Wirsig: We have always recommended that the real alternative to single-use plastics is reuse systems that need to be

scaled up. The federal government and all the provincial governments have a role to play. At the moment, not a single—

Hon. Michelle Rempel Garner: You've also advocated for bans without having that in place, so we've lost the public, and the public can't afford this right now.

How do we get back to sanity? If we want to get to a ban, how do we do the transition first?

The Chair: Okay. That's our time—

Ms. Karen Wirsig: I'm sorry. I don't believe we've lost the public on this. I believe the public still supports the action on plastic pollution and is finding other ways to deal with replacing single-use plastics.

The Chair: Thank you.

We'll now turn to MP Chen for five minutes.

Mr. Shaun Chen (Scarborough North, Lib.): Thank you very much, Madam Chair.

Thank you, Ms. Wirsig.

Just to continue this conversation about holding french fries in your hands and going through McDonald's drive-throughs, you mentioned in your testimony that it doesn't take long for industry to recoup investments in reuse systems. My understanding is that people aren't necessarily holding fries in their hands. They're being put in biodegradable packaging, such as paper packaging, which, of course, is still considered single-use. However, it's a step forward from plastic single-use packaging.

Do you have an example that you could share of a success story—perhaps in the restaurant industry—where investments were made in a reuse system that has enabled the industry or a particular business to address environmental concerns and, at the same time, recoup their investment?

Ms. Karen Wirsig: There is a study from Upstream, which is a reuse advocacy organization in the United States, that has looked at exactly this question of restaurants replacing single-use products with reusables and how quickly it took them to recoup their costs. Individual restaurants often already have a dishwasher, because they already have certain reusable dishes in their kitchen that they need to wash, so there's often very little additional cost involved in switching to reusables. Other restaurants require some retooling of the way they run their businesses, so it takes a little longer.

I'd be happy to share that study afterwards about how businesses have recouped their investments in reuse. We're hoping to look more carefully at grocery stores to ensure that this can also be done for other types of products, as opposed to just restaurant products.

Mr. Shaun Chen: That's fantastic to hear, and I would appreciate getting more information about it. It really shows that it can be done and is being done. Hopefully, it can be scaled up and industry and governments can recognize the importance of investments in reuse systems. That will ultimately have a very positive impact on the environment.

You also touched on plastics as being very problematic. Once they're in the environment, they never go away. You mentioned the concern around the impact on human health. There is also, as you mentioned, a very notable impact on ecosystems, on marine wildlife and on soil, groundwater, rivers and oceans.

Could you speak to some of the impacts on biodiversity and wildlife that plastics are having?

• (1245)

Ms. Karen Wirsig: Sure.

The federal government produced a science assessment before proceeding with listing plastic manufactured items as a toxic substance on schedule 1 of CEPA. That assessment looked at all of the various ways in which both microplastics and macroplastics are impacting the environment, wildlife in particular. That's where the science is strongest at the moment. There is evidence of animals strangling themselves on plastic or basically feeding on plastics and starving themselves of real nutrients. Those are some examples of how macroplastics have affected and killed or maimed wildlife.

On microplastics, the research is evolving every day, but already the federal government science assessment has found evidence that microplastics can change the gene expression of small aquatic organisms. That means we're changing life in our food webs and ecosystems. Plastics are effectively changing ways of life in those small organisms. There's no reason to believe that this will not impact other organisms, including larger ones and mammals, although that research is still being done.

These are two examples in the science assessment.

More recently, microplastics were found in humans in the arteries of people who had suffered heart attacks: There are microplastics in their plaque. People who had more microplastics had worse outcomes from heart disease. This is very concerning. Is there a one hundred per cent cause-and-effect out of that study, which was published in the *New England Journal of Medicine*? No, there is not, but this is where we need a bit more research.

We just need to proceed with caution. We know the damage is happening. We know the prevalence of plastic. This is why we're urging the focus to be on how we reduce plastic at its source and how we make sure that our products and packaging are reused and repaired as much as possible to stop the loading of all of this plastic into our environment and our bodies.

The Chair: Thank you.

We will now turn to Mr. Blanchette-Joncas for two and a half minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Madam Chair.

I'll continue with you, Ms. Wirsig. I want to understand, in concrete terms, what the federal government can do to try to convince the industries to sign on to the various changes. Right now, we have multinationals that believe they're above federal law. They tell us about their economic interests; when it comes to environmental interests, that's not their priority.

So we have a government that's failing to enforce the regulations. Some countries have actually implemented concrete solutions. I would like to hear your opinion on that.

What should the federal government do? Right now, the train is going by, and we're going off the rails.

[*English*]

Ms. Karen Wirsig: First of all, we are hoping the government wins the appeal of the case against the listing of plastic manufactured items as toxic under CEPA. That appeal is scheduled to be heard next week. That's one thing they need to do well and win, and then stay the course and work with international partners in coordination. Canada is not the only country that has run into roadblocks from the chemical industry. There are examples of court cases in other countries. There was one in Mexico to try to stop the refilling of beverage containers, if I'm not mistaken.

There are other challenges around the world. We just need to persevere. We need to recognize that public health, environmental health and public interest need to come ahead of profits in this case, because we can't have both an extremely strong plastics industry and a safe environment. That has not proven to be the case in the last 20 years. As the amount of plastic has been increasing in the world and profits are going up in that industry, it is not conducive to the future of the planet and the future of our health.

We really need to take a look at that, and the government needs to take it seriously. We need to stop subsidizing plastic production, stop subsidizing pipelines—I fully agree with you there—and focus on environmental protection.

• (1250)

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much.

[*English*]

The Chair: Thank you.

We will now turn to Mr. Cannings for two and a half minutes.

Mr. Richard Cannings: I just want to wrap up by talking about the plastics treaty process that we're in on a global scale. We had meetings here in Ottawa recently, and the plans are to have a finalized treaty done by the end of this year, with another meeting in South Korea.

I'm wondering if you could comment on, first of all, what you would like to see that treaty look like, where global co-operation should bring us and what your concerns may be if we come up with a very watered-down treaty that leaves everything voluntary and says to do more waste management. Where do you think that's going, and where should it be going?

Ms. Karen Wirsig: I'll start with where it should be going. All of the environmentalists involved in that treaty process as observers, and some of the member states as well, are very clear that we need a global, legally binding treaty with measures that limit the production of plastics worldwide and limit trade in plastics in favour of other types of trade practices that are supportive of healthy economies. That would include bans on the most problematic products, which Canada has started with, and on the most problematic chemical additives in plastics, and a scientific committee that can help lead us through the development of measures over time as we get more information and as our economy hopefully shifts away from the linear, throwaway society that we have today.

What we have right now is a bit of a roadblock with a small group of countries that seem highly connected to industry, whether it be their own national industries or private industry, led largely by multinationals out of the United States, which are also present in Canada, that are trying to block efforts for international co-operation on plastics. To get over that hump, we need to think about what we've done before in Canada, which was host a Montreal protocol. That managed to phase out ozone-depleting substances. It didn't start with all the countries signing on. It started with the committed countries signing on and it built over time. The other countries saw the wisdom in it, and we managed to phase out those chemicals.

We need to do the same for plastics—keep our eye on the prize, sign a treaty with the countries that are most committed to it and work with science and indigenous leaders to figure out a way through that is fair to everyone, that follows evidence and that gets international co-operation to ensure that our planet will be healthy for generations to come.

The Chair: Thank you very much for that.

Mr. Richard Cannings: Thank you.

The Chair: I think we have time, as we did on the previous panel, for a final two questions of two and a half minutes.

We'll start with MP Lobb.

Mr. Ben Lobb: Thank you very much, Madam Chair.

I want to thank our witness here for the last panel of the day.

My first question is about the comment you made about a throwaway society and throwaway consumption. It's a term I've used before too.

What role do you think the Walmarts, the Canadian Tires and the Amazons—and I'm not picking on them; they're the ones that come to mind—have in this plastic mess out there? I'm not against plastic. I understand it has a role and it makes sense in some cases, but they have a big role in this whole thing, don't you think?

• (1255)

Ms. Karen Wirsig: I very much agree with you. Thanks for the question.

Big retailers are very much peddling a lot of single-use throwaway packaging and even products. They are at the heart of the supply chain. They take those products from manufacturers and get them to us, so they're key in this. They're the ones we know and see every day, along with their practices. They should be doing much more to eliminate single-use plastics from their own supply chains

and should help us with reverse logistics so we can get things back to them and those things can be repaired, cleaned, reused and put back on the market. We believe retailers will play a very big role in that, and they need to come to the table ready to do more than just pretend to recycle their plastics.

Mr. Ben Lobb: There's one other thing, and anybody who's recently had young children, like grandparents and parents, will know what I'm talking about when I say this. After your kids reach a certain age and no longer play with all their plastic toys, you wonder what the hell you're going to do with all of them. What are people supposed to do with all the toys that kids have? Nobody wants them. Most of these toys are really single-use toys. What are people supposed to do with those things right now?

Ms. Karen Wirsig: Unfortunately, those are largely landfilled. That is the big problem.

There are lots of groups now looking at the idea of sharing so that not everybody has to buy. Every time you have a kid, you have to buy your own fleet of toys or clothing, and clothing is another big source of plastic pollution. It's the idea of sharing so that your child for this stage of development likes these toys and needs this clothing. You're going to use them and make sure these products are durable and can be washed, sanitized and passed on to somebody else.

We need systems for that kind of reuse and repair, and we don't have those today. There are some Facebook groups making that happen or other types of community bulletin boards through which some of the sharing happens. A toy library, for example, would be a fantastic thing for a community. People could share toys just as we share tools sometimes today or share books.

The Chair: I believe they have that in Toronto, so there you go. Go Toronto.

We'll ask MP Kelloway to bring it home for us for two and a half minutes.

Mr. Mike Kelloway: There you go. I'm bringing it home.

Some hon. members: Oh, oh!

Mr. Mike Kelloway: I'm bringing it home to conclude the committee.

A lot of great questions have been posed to you over the last hour. Being the only witness and taking questions without a break is a challenging feat. Thank you for your answers.

At some point we're going to have a report. Let's just say in the future you're going to open up the report. What are three recommendations you would like to see in it?

Ms. Karen Wirsig: Increase the focus of science on microplastics and human health and on plastics additives and human health. In a science and research agenda, that needs to be underscored. Work through NSERC and SSHRC. Support the development of an independent science and indigenous knowledge panel globally that can help steer the implementation of a global plastics treaty that is evidence-based and that addresses the need for global co-operation in science. Urge, on the policy front, a focus on systems redesign as opposed to material redesign. Although I understand that some material redesign will be important, with our bigger problems today, the priority really needs to be on systems redesign.

Mr. Mike Kelloway: I have just a few more seconds left here, but—

The Chair: You actually have a minute.

Mr. Mike Kelloway: Okay.

You talked about what you would like to see in the report. What wouldn't you want to see in the report?

Ms. Karen Wirsig: I hope the report doesn't reflect that there's some way, with plastics recycling research, that we can solve the plastic pollution problem if we are much more innovative in plastics recycling. I really hope this conclusion doesn't get drawn in this study, because history has shown that this is not a good use of our time and effort at this time.

Mr. Mike Kelloway: Thanks very much.

Hopefully I brought it home, whatever that means.

The Chair: Yes, you did.

Mr. Lloyd Longfield: You also used common sense.

Mr. Mike Kelloway: I used some common sense too, so I think we all learned.

The Chair: Thank you.

Thank you so much, Ms. Wirsig, for your expert testimony. I'm glad we were able to persevere and get your sound issues sorted out. If you had additional comments you wanted to make, feel free to submit them through the clerk. We would welcome them.

I see people packing up. I just want to remind the committee that we'll need to plan for our next study. With the practice of this committee, that means after the plastics study, the order would be the NDP, the Bloc, the Liberals and the CPC. If you can, give that some thought over the summer, because we don't have anything lined up in the queue after this study.

I want to thank you all for working co-operatively. I so much appreciate how this committee has functioned.

I wish you all a happy, busy summer back home with the people who have elected us to serve them. Thank you very much.

Do we have a motion to adjourn?

• (1300)

Ms. Lena Metlege Diab: I so move.

The Chair: Okay, so be it.

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