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# Standing Committee on Environment and Sustainable Development

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Chair: Mr. Francis Scarpaleggia





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• (1430)

[Translation]

**The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)):** Welcome to meeting number 33 of the House of Commons Standing Committee on Environment and Sustainable Development.

Today we are studying Bill C-12, the Canadian Net-Zero Emissions Accountability Act. I won't go over all the procedural rules because they are quite obvious.

I ask witnesses to address the committee through the chair. When you are not speaking, your mic should be on mute.

This afternoon, we have five groups of witnesses with us. We have, as an individual, Robert McLeman, professor in the department of geography and environmental studies at Wilfrid Laurier University; from Climate Action Network Canada, Caroline Brouillette, policy analyst; from Équiterre, Marc-André Viau and Émile Boisseau-Bouvier; from Mothers Step In, we welcome Dr. Kelly Marie Martin and Laure Waridel; and from Pulse Canada, we have Corey Loessin and Greg Northey.

Each group will have five minutes for its opening remarks. Then there will be two rounds of questions from the members of the committee.

I will be following the order on the list I have here.

Mr. McLeman, you have the floor for five minutes.

**Prof. Robert McLeman (Professor, Department of Geography and Environmental Studies, Wilfrid Laurier University, As an Individual):** Thank you very much.

Good afternoon, ladies and gentlemen

I'll be making my presentation in English but will be able to answer questions in French.

[English]

Thank you.

First of all, I would like to thank the committee and the committee members for this opportunity to address Bill C-12, which is probably one of the most important public policy initiatives to be undertaken by the Government of Canada in many years. I hope that my comments and the written brief that I provided earlier will be of some help in further refining the bill and will lead to its adoption and implementation.

I am an environmental scientist by training, but from 1990 until 2002 I was a Canadian foreign service officer. I served at Canadian embassies and consulates in the former Yugoslavia, India, Hong Kong, Seattle and Vienna, so I have some practical experience of how federal policies are acted upon once they're implemented.

I left government about 20 years ago and I have since been a researcher and a professor, specializing in the study of the human impacts of climate change. I was at the University of Ottawa before, and now I am at Wilfrid Laurier.

In particular, I specialize in studying how climate change affects human migration, displacement, and what is often referred to in the popular media as “environmental refugees”. I was nominated by the Government of Canada and am currently serving on the Intergovernmental Panel on Climate Change, where I am a coordinating lead author for a team of 13 scientists from around the world who are currently assessing the impacts of climate change on human health, well-being, migration and conflict. What I am going to say now reflects that.

Decisions taken by governments today, including through this bill, will have a tremendous influence on both our well-being and our economic prosperity for decades to come, and failure to achieve net-zero emissions by 2050 will have consequences for our children—including my own—and grandchildren—yet to come, I hope—which can truthfully be described as catastrophic. Just allow me to give a few brief examples.

We're currently entering into a drought spring in western Canada, with all the challenges that presents for farmers and for urban municipal watershed managers and so on. If we do nothing to control our greenhouse gas emissions, the current trajectory of what we will see in the second half of this century is an up to 500% increase in the frequency of those severe droughts that we've seen in the Prairies every 20 to 30 years—the big ones—in western North America.

For every degree Celsius that we warm the planet from today, we increase by about 50% the risk of severe or catastrophic flooding, which affects many of the constituencies represented in this group today. The World Bank has estimated that by the year 2050, a business's usual emission scenario could lead to as many as 140 million people displaced from their homes, primarily in sub-Saharan Africa, Central America and South Asia. To give you some context, right now the annual number of people displaced worldwide is about 21 million people, so we're looking at a sevenfold increase by 2050.

Last year I was approached by the community of Tuktoyaktuk for advice and assistance on planning the relocation of that community, because by 2050 the town site will no longer be viable because of flooding, permafrost loss and erosion.

The point is that these are not hypothetical risks. These are things that are happening or that will happen. The good thing is that they are avoidable if we take action, such as through Bill C-12.

I wish to draw the committee's attention to three specific points in the brief I submitted.

First, with respect to clause 16 of the bill, there is no consequence for failure to achieve the emissions reductions targets that the minister sets. Essentially what happens is that the minister is told to formulate a plan for reducing greenhouse gas emissions; if that plan fails, then the minister is instructed to make a new plan. That is how governments in this country have dealt with greenhouse gas emissions policies since we signed the UN Framework Convention on Climate Change in 1992. We set targets; we make plans; we miss them; we come up with new plans, and the circle repeats itself. I think committee members will recognize that we need to avoid that situation in this bill.

Second, there are now specific milestones with respect to emissions reduction targets in the bill. It simply says, here are some years for which the minister shall set some milestones and move forward that way. We already have targets set by the Government of Canada. We already know what the final destination is. It's 100% reduction in current emissions by the year 2050, so I think it's quite simple at this point to put the targets right in the bill and proceed quickly to making the actual action plans.

Finally, just to wrap up my presentation, what is missing from Bill C-12 is a formal mechanism to ensure that the provincial governments and the territorial governments are actively involved in the formulation of plans and in the implementation and execution of those plans. Consultation is not enough. We've seen that. I am not naive. I recognize that simply getting the provincial governments and the federal government to agree to something, let alone act upon it, is a big task, but the fact that it's a big task doesn't mean to say that we should not be attempting it and insisting that it be done.

I also recognize that the challenges to reducing greenhouse gas emissions will fall more greatly on certain provinces and sectors than on others. At the same time, the benefits of a transition to a green economy in terms of the innovations, the technologies, the economic benefits and the general improvements in well-being will also fall disproportionately to those sectors and provinces that have the greatest accomplishments.

The reality is this: The world is transitioning to a low-carbon economy, and Canada is either going to be left behind or it's going to be a part of it, and I encourage us, through this bill, to be a part of it.

Thank you.

● (1435)

[*Translation*]

**The Chair:** Thank you, Mr. McLeman.

Now we will hear from Caroline Brouillette, from Climate Action Network Canada.

Go ahead, Ms. Brouillette

**Ms. Caroline Brouillette (Policy Analyst, Climate Action Network Canada):** Mr. Chair, ladies and gentlemen, thank you for having us.

Today I am speaking from the unceded lands of the Kanien'keháka people.

I represent Climate Action Network Canada, which is a network of more than 130 organizations, including labour, development, faith-based and indigenous groups, as well as the key national and provincial environmental organizations working on climate change across the country.

[*English*]

Canada has been setting climate targets for decades and has failed to deliver on every single greenhouse gas emission reduction commitment it has ever made. Canada is the only G7 nation whose emissions remain well above 1990 levels and whose emissions have continued to rise since the signing of the Paris Agreement in 2015. If we missed target after target, it wasn't because those targets were too ambitious or unattainable—quite the contrary. It is because of the critical lack of climate governance in this country.

[*Translation*]

Bill C-12 is a chance for us to rectify the situation, but it has to be amended. Working with our members and colleagues from Ecojustice, West Coast Environmental Law and Équiterre, we have submitted a briefing note to the committee that outlines, under five headings, recommendations to reinforce Bill C-12 and to make it a more robust piece of climate accountability legislation. Those headings are: ambitious short-term action, medium- and long-term certainty, credible and effective plans, accountability and science and expert opinion.

On Monday, you heard my colleagues discuss a number of those headings, all of which are equally important. Today I will focus my remarks on ambitious short-term action and accountability.

To limit global temperature rise to 1.5 degrees Celsius, the critical threshold beyond which we expose ourselves to the most disastrous and irreversible impacts of climate change, we must completely decarbonize the economy by 2050. This long-term objective is important, but so is the path we take to achieve it. To reach this temperature-related objective, we must flatten the curve of greenhouse gas, or GHG, emissions as soon as possible, and that means we must start work now. To borrow an analogy that committee members will remember, studying in advance rather than cramming the night before the exam is the right strategy for better results.

Consequently, the lack of an interim target for 2025 is troubling. Bill C-12 should at least establish a control point before 2030, provide that plans include modeling that reflects emissions for every year, including 2025, and require regular reports on progress achieved starting in 2023.

• (1440)

[English]

While carbon budgets were not the approach chosen by the drafters of this bill, international examples have clearly shown the benefits of a budgeting approach to facilitate choices that have an impact on emissions. CAN-Rac still believes Canada would benefit from such an approach, but in the absence of carbon budgets, Bill C-12 must at the very least require plans to show annual emissions projections if it is to come close to having the efficacy of the international examples.

[Translation]

Now let's talk about accountability, an essential component of responsibility. Legislation elsewhere in the world clearly defines who is responsible for meeting targets and how those targets are to be met. As in any financial undertaking, someone must be ultimately responsible for ensuring that all measures adopted to meet commitments are adequate.

This element is still missing from Bill C-12, and the minister should be required to demonstrate that, taken together, the measures outlined in the plans will make it possible to achieve targets. The choice of words is also important in describing legal obligations. The language chosen should avoid references to obligations "to try" and instead establish obligations "to achieve" results.

[English]

To conclude, a strengthened Bill C-12 has the potential to end our cycle of broken climate promises and forge a path for Canada towards a future that is healthier, more resilient and more just, and that prioritizes abundance and well-being for all. We ask all parties to work together to strengthen and adopt Bill C-12 quickly. If you, committee members, and your colleagues in the House rise to the challenge, history will remember you as the parliamentarians who ushered in a new era of climate accountability in this country.

[Translation]

Thank you very much.

I will be pleased to answer your questions.

**The Chair:** Thank you, Ms. Brouillette.

Now we have the two representatives from *Équiterre*.

Gentlemen, will you be sharing your five minutes or will one of you be making the presentation?

**Mr. Marc-André Viau (Director, Government Relations, *Équiterre*):** We will be sharing our time, Mr. Chair.

**The Chair:** That's fine.

You have the floor, Mr. Viau.

**Mr. Marc-André Viau:** Good afternoon, Mr. Chair and distinguished members of the committee.

My name is Marc-André Viau, and I am the director of government relations at *Équiterre*. I will be sharing my time with my colleague, *Émile Boisseau-Bouvier*, who is our climate policy analyst.

First, I would like to say a few words about our organization. We have been in existence for more than 25 years, and we have more than 150,000 members and supporters. We have expertise in climate and energy policy, mobility and food and consumption systems at both the Quebec and federal levels.

Together with the Quebec Environmental Law Centre, from which you'll be hearing when the next panel of witnesses takes our place, we recently defended, before the Supreme Court, the position that the federal government has jurisdiction over the carbon pricing system in a manner consistent with the jurisdiction of the provinces.

We thank you for this opportunity to discuss Bill C-12. I will begin with a brief reminder. The first climate accountability bill was introduced nearly 15 years ago. For all kinds of wrong reasons, the bill that the House of Commons passed at the time, Bill C-311, didn't receive royal assent in 2010. Consequently, one might say we've already missed the first milestone set forth in that bill, which was a 25% reduction in greenhouse gases from 1990 levels by 2020.

I hope we don't miss our rendezvous—

**The Chair:** I think we've lost you, Mr. Viau.

• (1445)

**Mr. *Émile Boisseau-Bouvier* (Analyst, Climate Policy and Ecological Transition, *Équiterre*):** Mr. Chair, I can continue if my colleague is having problems.

**The Chair:** All right. We had stopped the clock.

Then I turn the floor over to you, Mr. *Boisseau-Bouvier*.

**Mr. *Émile Boisseau-Bouvier*:** Thank you very much.

I'll continue where my colleague unfortunately left off.

This time, we hope we don't miss our rendezvous with history. Some changes will have to be made to ensure that's not the case.

The purpose of our presentation is precisely to propose improvements to Bill C-12 to guarantee that better mechanisms are put in place to achieve our targets.

We have submitted a brief together with our colleagues from Ecojustice, West Coast Environmental Law and Climate Action Network Canada. We invite you to consult it for more details.

As you heard on Monday, we have established that five pillars are needed to firm up Bill C-12. First, we must act quickly and have ambition. Second, we need medium- and long-term predictability. Third, we must draft credible plans and reports. Fourth, we need robust accountability mechanisms, and, fifth, planning must be guided by the advice of experts and the best available scientific data.

We wish to draw your attention to the last two pillars.

The fourth pillar is very important because of our unfortunate tendency to fall short of our targets. The accountability mechanisms provided for under Bill C-12 as drafted are weak, even nonexistent. For example, the bill establishes no obligation to align the measures proposed in the plans with the necessary reductions to achieve the targets. Consequently, we believe that, to solve this part of the problem, the government must focus mainly on absolute GHG emissions reductions, not on carbon credits or future technologies.

This doesn't mean we shouldn't conduct research and development, but rather that we should base our decisions on what currently exists, not on what we would like to see in an ideal world.

In our brief, we ask that Bill C-12 ensure that 90% of efforts to achieve carbon neutrality focus on absolute reductions and that there be a demonstrable alignment between established targets and measures proposed in the climate plans.

The fifth pillar is equally important. Canadians must be confident that decisions are based on the best available scientific data, not on political compromises.

Science helps remove politics from decisions, which can at times be emotional and polarizing. The result is better governance. For example, the United Kingdom's climate change committee, which was established under its climate legislation, is wholly independent and bases its decisions on the most recent scientific evidence. It works. The committee's opinions are respected by all parties, despite changes in government, and the United Kingdom is in a better position than Canada to achieve its GHG emissions reduction targets.

More specifically, it is essential that the targets and plans provided for under Bill C-12 be based on the best available scientific information. Clause 8 of the bill currently provides that the minister must merely take into account the best scientific information available in setting targets.

Relying on science also means that the advice provided by the advisory body must be based on the best available scientific data concerning credible paths to achieving carbon neutrality and meeting Canada's commitments under the Paris Agreement.

Yesterday the International Energy Agency announced that no new fossil energy projects can be authorized if we want to limit global warming to 1.5 degrees Celsius. That's the kind of information that is essential to the credible decision-making that must be considered and conveyed by the advisory committee.

In conclusion, Bill C-12 has the potential to become the structural legislative framework necessary to achieve Canada's climate ambitions and targets. To ensure this actually happens, we invite parliamentarians to accept the amendments we have just discussed,

which complement those proposed by our colleagues from other environmental organizations that have testified before the committee.

Thank you for your attention.

I will be pleased to answer your questions.

**The Chair:** Thank you, Mr. Boisseau-Bouvier.

We will now hear from the two representatives of the Mothers Step In organization.

Ladies, will you be sharing your speaking time or will only one of you make the presentation?

[*English*]

**Dr. Kelly Marie Martin (Doctor and Epidemiologist, For Our Kids Montreal, Mothers Step In):** It is I, Dr. Kelly Martin, who will be speaking. Dr. Waridel will answer questions.

**The Chair:** Okay. Go ahead, please.

• (1450)

**Dr. Kelly Marie Martin:** I am here today on behalf of tens of thousands of mothers, fathers and grandparents across Canada, represented by two national networks, Mères au front and For Our Kids. For Our Kids is across Canada from coast to coast, and Mères au front is in many provinces, with tens of thousands of people who are asking for climate change action.

We are here to ask you, no matter what your political party is, to take courageous action on the climate crisis. We desperately need a climate accountability act in Canada that will protect our children from the climate emergency, but Bill C-12 is not ambitious enough and we have concrete proposals to make it the bill our children need.

First and foremost, you must know that our population and our children are already dying from the effects of climate change. For instance, a 2021 publication from the Harvard School of Public Health shows that close to 900 babies die annually in North America as a result of particulate matter in our air, which is a direct result of burning fossil fuels. The evidence shows that increasing temperatures, heat waves and the emissions from burning fossil fuels not only exacerbate child respiratory illness and death but cause them.

If you have any excuses in your mind for not taking bolder action on the climate crisis, I invite you to let me walk you through one of the many cases I've seen in our pediatric emergency, of a perfectly well baby losing their life because they cannot breathe.

As wildfires rage through many of our provinces as we speak, droughts threaten our food security and farming livelihoods, and deaths from extreme heat events become more common, we as parents feel strongly that it is our job to be sure that you protect our children. This is why we are here before you today. We feel very strongly that four aspects of Bill C-12 must be improved if this bill is to protect current and future generations.

First, a key aspect is that our kids need a climate accountability act with real accountability to ensure that the incremental targets are met. This means an impartial advisory committee. The majority of this committee must be experts in climate science and exclude industry representatives. The committee, as it exists, must be reassessed. The U.K.'s climate accountability law, as one of the previous speakers said, is working. They have an arm's-length, truly expert-led advisory committee that can take action when government decisions threaten the commitments to targets.

Second, Bill C-12 must be a race to carbon neutrality. We need to go faster than what is proposed in this bill. The science about this is very clear. Reset the first target to 2025, with a clear plan from now until then. Canada is already 30 years late in meeting its climate goals, so deferring until 2030 sets us up to fail.

Third, Bill C-12 must be modified to ensure that every decision taken by the government goes through a climate test in order to evaluate how policies will impact our reduction targets. Because greenhouse gas emissions transcend jurisdictions and sectors, we need to ensure that all government decisions are in harmony with our climate goals.

Finally, it is the responsibility of the government, and that is you, to ensure intergenerational equity and to take actions that protect future generations. Our children cannot vote, but it is they who will be impacted the most by a bill whose present target would result in a rise in temperature of 3°C in their lifetimes. We are asking you to remember your obligation to their future as you work to change these targets to match the science.

This is the fight for our children's lives. The COVID-19 pandemic has shown us what happens when we put short-term economic benefits ahead of their lives and the long-term economic success of Canadians. The climate crisis is not different.

I believe that all of you, as members of different political parties, care about the future of our kids and your kids, and understand that our industry and economy have to change rapidly to compete internationally, given the reality of the climate crisis. Our kids are looking to you to ensure a livable planet and jobs in the new or the green economy that will sustain their generation in the future.

We are not asking for more than Canadians want, nor are we asking you more than you can deliver. Our children deserve your action and your protection. They need you to act as courageous politicians in this crisis to ensure them a livable future.

● (1455)

Thank you.

**The Chair:** Thank you, Dr. Martin.

We'll go to Pulse Canada, for Mr. Loessin's opening remarks.

**Mr. Corey Loessin (Farmer and Chair, Pulse Canada):** Good afternoon, Mr. Chair, and thanks for the opportunity to speak to the committee on behalf of 30,000 Canadian pulse growers. I am Corey Loessin. I farm with my wife and son northwest of Saskatoon. We grow peas, lentils, canola, wheat, oats and barley. We've farmed here for 30 years. My family has farmed on the same land for 125 years.

For the past year I've served as chair of the board of Pulse Canada. Pulse Canada is the national organization that represents growers, traders, processors and exporters of Canadian pulses, including peas, lentils, chickpeas, dry beans and fava beans. Our membership consists of grower organizations across the country, from Alberta, Saskatchewan, Manitoba and Ontario, and also the Canadian Special Crops Association, representing over 100 processors and exporters of pulses.

Canada is the world's largest exporter of pulse crops. Our pulse industry is well established and continues to grow in terms of acres seeded and domestic and international demand. We export pulses to over 130 countries around the world, with priority markets in China, India, the EU and the United States.

In 2017, the pulse industry established a "25 by 2025" objective, an industry-wide goal seeking to provide 25% of our Canadian production into new, diversified markets and new end uses by the year 2025. Our strategy is to create new demand for Canadian pulses while finding efficiencies in the trade environment and continuing to keep existing markets open.

Pulses are very well positioned to take advantage of emerging global food trends that emphasize healthy and sustainable diets and food products. While sustainability may not be the leading factor influencing consumers' food choices, we believe it's going to become increasingly important as the world finds a way to feed a growing population with nutritious food from sustainable food systems.

At Pulse Canada we have two goals that drive our sustainability work. Number one is to create conditions so that growers, processors and exporters can seize high-value market opportunities resulting from global sustainability commitments. Number two is to establish the Canadian pulse sector as a leader in providing food and ingredient solutions that drive Canada's carbon reduction targets and demonstrate our industry as a global leader in fighting climate change.

With reference to Bill C-12, of course, if Canada is to capitalize on the tremendous opportunity in front of us, it must show some leadership at the policy level. Pulse Canada fully endorses policy that creates market-driven conditions for growers, processors and exporters to monetize commitments being made to global environmental sustainability. Pulses and pulse ingredients are some of the most sustainable foods around, due to their capacity to fix nitrogen, their water-use efficiency and their contribution to soil health. Thanks to the world-leading stewardship practices of our producers, Canadian pulses are a leader among sustainably grown crops.

As the conversation around sustainability grows, so does the expectation of Canadian pulse growers and the trade to realize and monetize the opportunity that exists. With Bill C-12, the government is seeking to outline Canada's path to achieving net zero by the year 2050. Canada's pulse industry will play a key role in achieving those targets.

There's real economic opportunity in meeting the global food demand for ingredients produced in a sustainable manner, and this demand has been created by the marketplace. Market-driven solutions are the way Canadian businesses will be able to remain competitive. It is important to each and every farmer who has the opportunity to meet this growing global demand on his or her terms as a small business owner.

To ensure that Canada's path to net zero is market driven, Pulse Canada is advocating for seats on advisory bodies to be allocated to Canadian agriculture—both farmers and representatives from the broader agriculture value chain. Government should look to the expertise our industry has already gained from having been involved in lowering emissions for the past several decades.

I can tell you that on our own farm we've seen tremendous gains being made in soil conservation in particular, and soil health.

- (1500)

Finally, please note that in Canada we export about 85% of the pulse crops we grow. There's more than one way to meet climate targets, and the correct path forward must take a broader look at how Canada meets its targets by supporting and expanding free trade. By investing in trade-enabling infrastructure and supporting agricultural exports, the government can ensure that Canada continues to be a key player in the world's net-zero solution.

In closing, I'd like to re-emphasize that the agriculture sector, and specifically the Canadian pulse sector, will be a major contributor to Canada's success on the path to net zero. Thank you.

**The Chair:** Thank you, Mr. Loessin.

We'll go to our rounds of questioning. We start with our six-minute round, which will be led off today by Mr. Redekopp.

**Mr. Brad Redekopp (Saskatoon West, CPC):** Thank you, Mr. Chair. Welcome to all the witnesses. I thank you all for being here and sharing your thoughts and knowledge with us today.

I just want to pick up right from there, with Pulse Canada. I know that Saskatchewan is a huge producer of agricultural products, including pulse crops, like you mentioned. Mr. Loessin, we are very well aware of a company called Flexi-Coil. I spent 20 years at that company. One thing the company did was to innovate

in air drill—air seeder technology—which allowed the zero tillage change to come to agriculture. It essentially was a market-driven approach to innovation that had all kinds of advantages, many of them environmental.

I guess I'd like to ask you just to reinforce or explain the importance of market-driven solutions to reducing emissions in the farming sector.

**Mr. Corey Loessin:** That is a great analogy. The move to zero till—through my career, really, over the last 30 years—has just been a tremendous benefit in western Canada. Soil erosion has gone from catastrophic, I would say, in the early 1980s, to almost non-existent today. That's all been market-led, as you mentioned. Farmers embraced that change in farming systems, really, as a result of technology being available and the market enabling them to adopt that technology.

I should also add that on our farm, in that same time period, our fuel consumption has dropped by approximately 50%, just because we are not using tillage to work the land anymore, so we make much fewer field passes, if you like.

Any time you can see an example like that, where there has been technology and market pull coming together to enable a system to adapt, and farmers embrace that system and employ it, it's just a success story. The same thing can happen, is happening and can happen further with regard to how emissions and crop rotations can further enhance the drive to get to a net-zero position in the future.

**Mr. Brad Redekopp:** Thanks. Your group has been very vocal for free trade agreements, to opening foreign markets. As you say, pulses are almost all exported out of Canada.

Buyers need certainty. I guess one thing I've seen that the Liberals have been really good at is adding uncertainty to businesses in Canada: for example, changes to the regulations on the natural resource development programs we've seen in the country.

Recently, the Liberals shifted the environmental goalposts on a few things. Carbon tax, for example, is now three or four times what it was originally supposed to be. Then, just recently, emissions targets have gone from 30%, to 36%, to 45%. Do these shifting goalposts cause problems for farmers? Does this lack of certainty cause problems for your overseas customers?



**Mr. Corey Loessin:** There are two points I could add there. Farming, farm business, is a long-term enterprise, so you have to plan for the long term. Many of the practices we employ are put in place for the long-term benefit. In our case, it's mostly about the soil. Preserving the soil is so important, so we have long-term strategies and methods to do the best we can over that period of time.

When things change, yes, you have to adapt, but when costs increase suddenly or dramatically, essentially the effect is that it restricts your ability to adapt. A lot of the adaptation to, say, zero tillage, like we mentioned before, did require considerable investment on behalf of farmers. If cost increases restrict the ability to adapt as needed, it slows that process down, I would say.

The second point about reliability to export customers, is that it's absolutely critical. We have a number of pieces of our export chain, if you like, that experience problems from time to time, and that always concerns our export customers. The more reliable a supplier we can be to huge markets like India and China, and I should add quality markets like the EU, the better off the whole industry is in both the short and long run.

• (1505)

**Mr. Brad Redekopp:** I have one last question I want to ask you here. Canada is very diverse in terms of agriculture in different provinces. In Saskatchewan we grow a lot of lentils and peas; in Manitoba, sunflowers, etc. If we had the opportunity to strengthen this legislation through an amendment such as forcing the government to consider regional economic impacts, do you believe that would benefit farmers?

**Mr. Corey Loessin:** It would. In fact, it's really necessary. There are regional differences between my farm in Saskatchewan, a farm in Manitoba and a farm in Ontario. There needs to be ability to manage that on a regional basis to the best of the farmers' ability and the needs of the environment that you operate in. I think regional adaptation is absolutely critical.

Thank you.

**The Chair:** Thank you.

We'll go to Mr. Bittle for six minutes.

**Mr. Chris Bittle (St. Catharines, Lib.):** Thank you very much, Mr. Chair.

I'd like to pick up on that a bit. I get concerned with talk that's critical of more ambitious climate goals.

I was wondering if I could turn to Professor McLeman.

You talked about—sorry if I misquote you—a 500% increase in droughts in western Canada. What's the regional economic impact for that, if we're being critical—if certain witnesses are being critical—of a more ambitious policy? Are you able to quantify what that consequence would be in terms of regional economic devastation for the Prairies?

**Prof. Robert McLeman:** I have a couple of thoughts. One is that it is a worst-case scenario. That is the case where we continue to essentially follow the trajectory we're on in terms of taking coal, oil and natural gas out of the ground as quickly as we can and burn-

ing it as quickly as we can. Hopefully we don't go down that pathway. It's what scientists refer to as an RCP 8.5 scenario.

Yes, water scarcity is an ongoing challenge in western North America. There will be localized variations in that.

In terms of the economic impacts of a 500% increase in drought severity or frequency in western Canada, I don't think anybody studied the agricultural economics of that, but I think it's fairly easy to calculate, if one wanted to, in terms of just looking at the insured crop losses that will occur, say, over the next five-year period. From that you can make some extrapolations. Plus, then you have the urban impacts. A city like Edmonton, for example, needs to have a certain amount of surface water in the river in order to accept waste water for treatment and to provide drinking water and so on. These are quantifiable. Obviously, you can assume, in very simple math, that a 500% increase in frequency or severity of droughts would have a corresponding economic cost.

Then again, I've also studied historical droughts such as the ones of the 1970s on the Great Plains. There's often a cascading effect. The drought is just the start of an economic crisis. If you look at the 1970s and 1980s, droughts on the Great Plains coincided with a period of rising interest rates. Many farmers found that the drought put them into a position where they were borrowing money to get through the drought, and then interest rates rose. That helped trigger the farm crisis in the United States in the 1980s.

All this is to say, Mr. Bittle, that yes, it's quantifiable, and it's obviously something we would want to avoid.

• (1510)

**Mr. Chris Bittle:** I appreciate that.

I'll go back to your testimony on clause 16, about there being no consequences. What's your recommendation going forward if there were to be consequences for a government?

**Prof. Robert McLeman:** I would not want to venture too far into recommendations here, because I'm not a policy-maker; I'm not a government official. However, I would look to other pieces of federal legislation for what happens when government agencies fail to follow through on their obligations under the law. In some cases that involves actual legal obligations and penalties, financial or otherwise, for agencies that fail to comply with the law of the land. I won't make any specific recommendations, but maybe other witnesses have some specific ones.

A law that says, "If you fail, that's okay; try again" is really not helping. I would put it in these terms. I give my students assignments in school, and if my first-year students don't turn in an assignment, I don't say, "Oh, that's too bad. Here's another assignment; try doing this one." If they don't turn it in, there's a consequence. For this law to be meaningful, it has to have a consequence for inactivity.

**Mr. Chris Bittle:** I appreciate your comments.

I'll go to Équiterre. Clause 23 of the bill creates a new obligation for the Minister of Finance to:

prepare an annual report respecting key measures that the federal public administration has taken to manage its financial risks and opportunities related to climate change.

Would you agree that having this kind of disclosure is important for strengthened climate governance? If so, why?

[Translation]

**Mr. Marc-André Viau:** Can you hear me now?

**The Chair:** Yes.

**Mr. Marc-André Viau:** Would it be possible to repeat the question?

**The Chair:** Mr. Bittle, would you please repeat the question?

[English]

**Mr. Chris Bittle:** Yes, no problem. We're 15 months into this crisis and we'll all eventually figure out this Zoom thing. I find myself in the same boat quite a bit, so I appreciate that.

Clause 23 of the bill creates a new obligation for the Minister of Finance to:

prepare an annual report respecting key measures that the federal public administration has taken to manage its financial risks and opportunities related to climate change.

Would you agree that having this kind of disclosure is important for strengthened climate governance?

[Translation]

**Mr. Marc-André Viau:** The short answer to your question is "yes."

Being more transparent in all circumstances is a good approach, but accountability mustn't be limited to transparency. To guarantee as much transparency as possible, we'd like to see the advisory committee's opinions systematically made public.

[English]

**Mr. Chris Bittle:** I'll move along to Climate Action Network Canada.

Clause 20 provides for the creation of an expert independent advisory body. In my view, it's an important measure to ensure that Canada can count on the best advice possible on the path to net zero.

Do you agree that having an expert independent advisory body is important, and if so, could you explain why?

**The Chair:** Be very brief, please.

[Translation]

**Ms. Caroline Brouillette:** Thank you.

Yes, it's very important to have an independent advisory committee that would be responsible for providing the government with advice on selected plans for achieving fixed targets and on the targets themselves. There also has to be project accountability.

For that purpose, however, I would say that the component linked to the committee's scientific expertise can definitely be reinforced by demanding, for example, that members appointed by the committee have expertise in certain fields.

**The Chair:** Thank you.

I now turn the floor over to Ms. Pausé or Ms. Michaud.

• (1515)

**Ms. Kristina Michaud (Avignon—La Mitis—Matane—Matapédia, BQ):** Thank you, Mr. Chair.

It will be me.

**The Chair:** Go ahead, Ms. Michaud.

**Ms. Kristina Michaud:** First, I would like to thank the witnesses for being with us and sharing their expertise. We are very grateful to them for that.

I'll go first to Ms. Brouillette.

Ms. Brouillette, we were discussing greenhouse gas emissions reduction targets. The present version of the bill contains none. Clause 7 provides that the minister will set the target within six months after the act comes into force.

When he appeared before the committee yesterday, the minister assured me that his new target range, a 40% to 45% reduction in GHG emissions, would be added to the act. However, some of the projections of the Department of the Environment show a shortfall. Even the measures announced in the 2021 budget indicate that we'll achieve a reduction of approximately 36%.

Do you think this new target range would be adequate, even if it were added to the act?

How could this bill be amended to firm up the targets set for 2030?

**Ms. Caroline Brouillette:** Thank you for your question.

It's important to note that it's a good thing the target is periodically revised. That's part of the process for increasing contributions under the Paris Agreement whereby the parties normally review their targets every five years. We take a positive view of the government's new target. However, it's still not enough to represent Canada's fair share of the global effort to limit the temperature increase to 1.5 degrees Celsius.

We at Climate Action Network Canada have determined that a target that would represent a fair share would be an approximately 60% reduction from 2005-level emissions by 2030, which means an 80% reduction in funding to support the fight against climate change in southern countries.

However, Bill C-12 should reflect the Paris Agreement by enabling us to revise our targets only upward in order to increase contributions.

As you mentioned, clause 7 should ideally be amended to permit that.

Earlier I heard someone mention market certainty. One of our recommendations is that targets and plans be established 10 years in advance precisely in order to provide markets and investors with that element of certainty. When targets must be revised along the way, as required under the Paris Agreement's process for increasing contributions, it is possible to reduce the gap because action will be taken much more in advance.

**Ms. Kristina Michaud:** Thank you.

Earlier you said that this bill often refers to "trying" to reach targets rather than "compelling" the government to meet them. In that connection, even though the bill expresses some lofty ambitions, I wonder whether it wouldn't be better to add a minimum greenhouse gas emissions reduction target such as the one stated in the Paris Agreement.

That might afford an additional legal guarantee in the event we fall short of our targets. This could happen if the measures announced by the government aren't all introduced, or if a new government comes to power in a few years, for example, and they aren't yet in place.

Should we establish that guarantee by adding a minimum target to the bill?

**Ms. Caroline Brouillette:** I think it's a good idea to add the target to the bill. However, my colleagues and I really view Bill C-12 as a governance framework. Consequently, we feel it's somewhat less important that the bill include the exact figure.

However, we want to have assurances that the government is accountable within the framework of all the mechanisms and processes. To ensure that's the case, it must be clearly stated who is responsible for meeting the target and how it will be met. The language must also be clear, as you mentioned.

I'm not a lawyer. I did a minor in law and that was enough for me. However, what my lawyer colleagues and experts in the field tell us is that language is very important. So we should prefer words like "shall" and "meet" over others such as "try" and "permit."

**Ms. Kristina Michaud:** Thank you.

Yes, in our discussions with the minister and an assistant deputy minister yesterday, the nationally determined contributions mechanism, the NDC, came up several times in the context of meeting targets. Canada will soon be required to submit its contributions under the Paris Agreement.

How should Bill C-12 and the NDC mechanism work together? They seem to be two mechanisms that should normally be interrelated.

What's your opinion on that?

• (1520)

**Ms. Caroline Brouillette:** Yes, those mechanisms should be interrelated.

The Paris Agreement doesn't impose targets on the signatory parties. Instead it's the targets themselves that determine what are called the NDCs.

The Paris Agreement states that, every five years, countries must communicate their new NDCs under the United Nations Framework Convention on Climate Change. Under the agreement, countries must regularly report the progress they've made in implementing their NDCs.

The mechanisms provided for under Bill C-12 should indeed be synchronized with Canada's NDCs. That would increase our responsibility in the fight against climate change because both follow

a similar contributions cycle that requires Canada to present more ambitious targets every five years.

Progress reports are a minimum requirement from an international standpoint. That's why we recommend that Bill C-12 include corrective measures where the government fails to meet its targets. Interim reports should require the minister to specify the measures that will be taken to rectify the situation where a target isn't or won't be met.

**The Chair:** Go ahead, Mr. Bachrach.

[English]

**Mr. Taylor Bachrach (Skeena—Bulkley Valley, NDP):** Thank you very much, Mr. Chair.

Thank you to all of our witnesses.

Ms. Brouillette you spoke about near-term action and its importance. I'm curious about this. I wonder why we should expand our ambition on near-term actions as opposed to focusing on strategies that might take longer to spool up and don't kick in until the final years of the decade, leading to 2030.

Why is short-term ambition and short-term action so important?

[Translation]

**Ms. Caroline Brouillette:** Thank you for your question.

Near-term ambition is important. According to the Intergovernmental Panel on Climate Change, the IPCC, we will have to achieve carbon neutrality by 2050 if we are to limit the temperature increase to 1.5 degrees Celsius and thus avoid the catastrophic and irreversible effects of climate change. However, the path we take to do that will be just as important. We'll have to flatten the GHG emissions curve. We're all familiar with the expression "flatten the curve" since we've often heard it in the context of COVID-19.

Canada is a rich country whose level of responsibility has remained high over the years. Consequently, it must do more than the global average established by the IPCC, which is a 45% reduction in GHG emissions by 2030.

The transformation we must make in order to reduce our GHG emissions in such draconian fashion is so complex that we won't be able to do it if we don't attack the problem starting today and if we fail to plan by adding an accountability control point before 2030. In particular, we have to ensure that we model GHG emissions annually. We can't postpone the measures we need to take to meet the 2030 target.

[English]

**Mr. Taylor Bachrach:** Thank you for the response.

Moving on, the International Energy Agency came out with a big report yesterday, modelling out a pathway to 2050. I'm sure you're familiar with it. I wonder if you could speak to what the committee should take from that report in the context of Bill C-12. What lessons does that report hold for the importance of this accountability legislation in guiding Canada's progress over the next decade?

[Translation]

**Ms. Caroline Brouillette:** That's a good question.

The International Energy Agency's report suggests many ideas for specific public policies. Ultimately, the agency informs us on the role that science plays. That's the aim of the agency's report: to demonstrate scientifically what we must do to reduce our GHG emissions in order to stay below the critical threshold of 1.5 degrees Celsius.

I could tell you about a lot more things, in particular the need to stop expanding the oil and gas industry, the need to stop selling gasoline-powered vehicles by 2035 and the fact that the liquefied natural gas sector will have to be capped relatively soon.

So we have many findings, but Bill C-12 must reflect the findings of science, with the aid of various mechanisms, and apply them in the specific context of Canada to ensure the country meets its set objectives.

• (1525)

[English]

**Mr. Taylor Bachrach:** Thank you, Ms. Brouillette.

Mr. Viau, you mentioned a couple of things that I found very interesting. One was the focus on a 90% absolute reduction in emissions. Now, the question around offsets is a very important one. I know that Mark Jaccard, who's done a lot of policy work in British Columbia, has a very strong view on this. He asserts that we should be allowing only the offsets that either sequester carbon underground or directly capture it from the air, and that these more loosey-goosey arrangements should not be part of our climate commitments.

Could you speak to what that other 10% could include and why it's so important that we focus on absolute reductions?

[Translation]

**Mr. Marc-André Viau:** Thank you for that question.

We actually recommend opting for absolute reductions. In the past, we've tried to use compensatory systems and untested technologies. However, we have to rely on what exists in order to draw a roadmap that works. As my colleague said, the reductions we can plan are the existing reductions.

We can nevertheless continue conducting research and development to discover technologies for sequestering carbon. We could also come up with nature-based solutions. Earlier, and at Monday's meeting, we actually discussed nature-based solutions at length, agriculture-based solutions in particular. However, if we rely on nonexistent technologies, we're relying on probabilities, not on anything tangible. What we want is to make sure we can reduce our current emissions, not the ones we'll eventually make.

[English]

**The Chair:** Thank you.

We'll go into our second round, which is the five-minute round, starting with Mr. Jeneroux.

**Mr. Matt Jeneroux (Edmonton Riverbend, CPC):** Thank you, Mr. Chair, and thank you, witnesses, for all joining us today virtually.

I want to address some questions to Pulse Canada. My opening comment is to Mr. Northey. We won't hold it against you that you're in the province of Manitoba today. The NHL playoffs are starting, but hopefully we can get good, collaborative responses regardless of who wins here.

It seems to me that nobody seems to really be that happy with Bill C-12, regardless of where they are on the political spectrum, for a variety of reasons. However, some of the criticisms we've heard are based on the advisory panel. The panel has already been created before the bill has even had royal assent. I want to get your and Mr. Loessin's comments. Are you feeling there's a voice from your industry on this panel in particular? What would you like to see by way of revisions perhaps to where the panel will focus in the months and years ahead?

**Mr. Greg Northey (Vice-President, Corporate Affairs, Pulse Canada):** Thanks a lot for the question.

Obviously we approach a bill like this from the standpoint that it's not in the abstract. We're going to set these huge targets for the country. This is going to involve an incredible mobilization of Canadians and Canadian industry. We need to understand how the targets we're setting are going to be reached by the agriculture sector and pulse growers, and the kinds of innovations that need to go into that, and what impact it's going to have on growers in Canada. The bill contemplates an advisory council. We've seen an advisory council formed already. The net-zero advisory council was formed in February. There's nobody on that who represents agriculture, who can understand agriculture, who can understand the realities of a farmer like Corey, and the many other businessmen and businesswomen across the country who are farming, and how they're going to help reach these targets. We would really suggest that to make it viable, to make it so that everyone is trying to meet these targets together, that the input from those on the ground who are going to be essential to meet the targets are included on any kind of advisory panel like that.

• (1530)

**Mr. Matt Jeneroux:** Great.

Corey, from your perspective as a farmer, what would a farmer, or someone from the industry, bring to that advisory panel so that we could perhaps make that amendment or recommendation to the minister?

**Mr. Corey Loessin:** To add to what Greg said, the industry needs to be involved and to adapt, certainly. One of the things that was mentioned previously was about soil sequestration of carbon. You can look at the progress that has been made, particularly in western Canada. In fact, right on one of the government's websites it shows the increase in soil organic matter across western Canada over the last 10 years. We need to have agricultural representation on the advisory panel to show how things are evolving and what can happen into the future specifically with respect to soil sequestration and how that will enable the country to meet its targets.

Quite frankly, the country can't meet its targets without agriculture, and that's just the reality of the situation. Why not have those involved who are actually doing it and find ways to perhaps do it better? The reality is that the country can't meet the targets without agriculture's being involved, so why not have them involved at the decision-making level and at the advisory level?

**Mr. Matt Jeneroux:** I only have about 30 seconds left, but I do just want to reiterate that I think you're absolutely right. I know we've heard from others that having those stakeholders at the table will make a huge difference in seeing a successful piece of legislation going forward.

With that, Mr. Chair, I'll turn my time back.

**The Chair:** Thank you, Mr. Jeneroux.

Mr. Longfield.

**Mr. Lloyd Longfield (Guelph, Lib.):** Thanks, Mr. Chair, and thank you to the witnesses for a very good discussion this afternoon, and to my colleagues for the questions that are coming forward.

I want to start with Mr. McLeman from our neighbouring riding. I know that you are also a graduate and proud alumnus of the University of Guelph.

You've done a lot of work on the securitization theory, the theory about the human impacts of climate change, and from that the engagement by citizens in environmental science where the human dimensions are considered. I'm looking at clause 10 of the bill where the goals are being set. Clause 10 has to do with the emissions reduction plan, and then clause 20 has to do with the advisory body that would be reporting on that. Could you comment on how important it is to include the human impact of climate change in our bill, as well as on any international obligations that we might have towards climate change impacts around the world from a human level?

**Prof. Robert McLeman:** Yes, I love Guelph, Ontario, and enjoyed my time greatly at the university there. It's one of the greatest agricultural schools in the world as far as I'm concerned.

Yes, I think we've been talking a lot about the economic impacts of what we need to do to move to a green economy. This is the type of discussion that you see at these conferences of the parties to the UN Framework Convention on Climate Change, which I've attended and where you will see the Kingdom of Saudi Arabia saying forget about the impacts of climate change: What about the impact on our economy? I hear the conversation is revolving around that dimension, which is very real—don't get me wrong. Even though I don't farm pulses in Saskatchewan, my pension plan probably bene-

fits from a lot of the agricultural industry that's based in Saskatchewan, and so on.

Nonetheless, at the same time there are human impacts. I mentioned in my talk the community of Tuktoyaktuk where, by 2050, they will have to move. That's a big deal for people, especially indigenous people, who have lived in the same place for a long time and who are told that because of actions they bear no responsibility for, they must now leave and move their homes, families, schools and so on. It's a small microcosm of the risks that we face if we do not implement this bill and move quickly towards actually achieving net reductions in greenhouse gas emissions.

Dr. Martin spoke earlier about the health impacts, and that's something I've been working on with the IPCC in our reporting right now, which is looking at not just the health impacts, but also the co-benefits to human health by addressing greenhouse gas emissions, because, of course, four million people each year worldwide die because of air pollution. If we reduce greenhouse gas emissions that are not only just causing climate change but also causing urban air quality problems and child health issues and so on, we can actually have win-win situations. Those cascading risks that we create for ourselves by not addressing greenhouse gas emissions, we can reverse in the other direction.

To circle back to your initial point, you're right: It is an economic conversation, but it is also a conversation about who we are as people and the quality of our life and our broader well-being beyond just our pocketbooks.

• (1535)

**Mr. Lloyd Longfield:** Near the end of your testimony, you mentioned provincial jurisdictions and the governance issues there. You said we might want to include that in our bill in some way or another.

I know you said you weren't a policy writer, but is there an idea you had in mind there?

**Prof. Robert McLeman:** If you look at Canada's greenhouse gas emissions over the last two decades, you'll see that the greatest public policy decision to reduce them was the Ontario government's decision to eliminate coal from its electrical generation plants. That, again, had the human health benefit of reducing air pollution and air quality problems in southern Ontario. It's a perfect example of how having that kind of decision, which must be made at the provincial level, built into the steering of this particular piece of legislation will be essential to achieving the long-term goals.

**Mr. Lloyd Longfield:** I think it's a challenge that maybe the U.K. doesn't face to the same extent as us, but we have had some comment on that.

I'd like to go over to Dr. Martin.

Mention was made of the Nanticoke plant closing down. I have asthma, but I don't have as much difficulty now that the coal-fired plant is gone.

A nod towards not only our generation but future generations should be included in some way. Is that what you're suggesting to us?

[Translation]

**The Chair:** Please answer the question briefly.

[English]

**Dr. Kelly Marie Martin:** Yes. We're talking about two things. You have asthma, and one is that adults are certainly affected, with increased death from cardiac and respiratory events. We know that. I've been working in the emergency department for 30 years, and while we once had only a handful of kids, now it is no exaggeration to say that our resuscitation bays are full of kids who can't breathe. Our hospitals are full of kids.

My family was in the lumber business. They are all conservatives and have been for many generations. We did clear-cutting because we were following the market economy, and we have really lost our business. Conservatives are not interested anymore in discussions that don't include climate change. They know that it has affected their lives, their businesses and their children.

Yes, we are seeing an impact in the hospitals. Honestly, in the last two months I've had a child of six months and one of nine months die in front of me. They had no genetic history. They had no family history. They were perfectly well babies. We have high levels and—

**The Chair:** Thank you.

**Dr. Kelly Marie Martin:** —they couldn't breathe. My family depends on the lumber business and we care, but this matters—

**Mr. Lloyd Longfield:** The chair is ringing the gong on us. Thank you for that.

**The Chair:** Thank you.

[Translation]

We now go to the round of questions allocated to the Bloc Québécois.

**Ms. Kristina Michaud:** Thank you, Mr. Chair.

I'm going to speak once again, and my questions are for Ms. Waridel from Mothers Step In.

Ms. Waridel, I carefully read your brief, in which you say that climate action must involve a restrictive, cross-sectional and whole-of-government approach resulting in a "climate test" applicable to all major government decisions.

You suggest that Bill C-12 should provide that all government decisions must be put to that "climate test" in order to assess their impact, as the government is already doing on gender and racism issues, for example.

Could you explain to us how the "climate test" might take shape in Bill C-12?

**Dr. Laure Waridel (Co-Instigator, Eco-sociologist, Adjunct Professor at Université du Québec à Montréal, For our Kids Montreal, Mothers Step In):** Thank you for your question, Ms. Michaud.

Thanks as well to all the members for their remarks.

You can see from a cursory consideration of the scientific news the extent to which humanity has come to a crossroads. The win-

now is closing on the possibility for us to take action and prevent runaway climate change and all the known harmful consequences for the health and safety of populations. That's also what we've heard today.

We know that all the measures put in place to date have looked more like good intentions and haven't helped us meet greenhouse gas emissions reduction targets. Starting now, all our decisions must be closely examined for the impact they may have on climate. When we say we're at a crossroads, that means we have to ask ourselves whether every decision, policy, regulation and tax measure will have the effect of reducing or increasing GHG emissions.

That's the question that all federal government decision-makers should ask. As far as possible, we must then determine how that will affect relations with the provinces and various stakeholders, as well as the policies that are introduced in the provinces and all those who interact with the federal government. This seems essential because, as long as we have no such mechanisms, we'll keep saying we want to reduce greenhouse gas emissions but will still subsidize the fossil energy sector, when we know it's the heart of the problem.

We're currently funding rising greenhouse gas emissions. Some \$30 billion of public funds has been allocated to this sector since the pandemic began. We know the Trans Mountain project will cost more than \$12.6 billion. A "climate test" would prevent us from heading in that direction and would encourage us instead to subsidize the people who depend on the fossil energy sector to encourage them to engage in the transition.

We must not abandon workers in the fossil energy sector. We must support the people of Alberta, Newfoundland and Saskatchewan. I think it's essential. We have to make this transition together, but from this moment on all our decisions must be closely examined to determine the impact they'll have on the climate and our children's future.

• (1540)

**The Chair:** Thank you.

Go ahead, Mr. Bachrach.

[English]

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

I'll pick up where I left off, Mr. Viau. You talked about the connection between measures and targets and the failure of the bill, as it's currently written, to directly connect those two things. Why is that so important? What is the risk if we don't amend the bill to strengthen the connection between the measures and the targets?

[Translation]

**Mr. Marc-André Viau:** Thank you for your question, Mr. Bachrach.

As we've seen in the past, we've missed our targets because the plans don't include measures that would help us meet them.

If we don't establish a direct connection in Bill C-12 between the measures outlined in the plans and the targets, if we don't demonstrate that connection, we'll wind up back in the same situation.

So we have to establish that connection both in reality and in the bill so the targets are met based on the measures set forth in the plans.

[English]

**Mr. Taylor Bachrach:** Thank you for that response.

Ms. Brouillette, I have a question about carbon budgets, which you mentioned in your introductory comments. We've had quite a bit of discussion about these two different approaches. We heard from the government. We heard from the minister at our previous meeting that he didn't feel it was the right approach for Canada.

Do you feel that the carbon budget approach would work in Canada, given the way the federation is structured, and why is that?

[Translation]

**Ms. Caroline Brouillette:** First, I'm going to speak briefly about the carbon budget. A carbon budget provides a clearer picture for the purpose of making decisions on regulations and infrastructure, for example, which have an impact on our GHG emissions.

Here's an analogy. If I want to cut my spending by 40% to 45% over the next nine years, I have to know how much money I have in my bank account and how much I can spend on periods shorter than nine years or else I won't be able to do it.

I repeat that, in Climate Action Network Canada's view, this is still an appropriate approach for Canada, even though the government hasn't opted for it. We believe it's possible within the federation because the federal government has tools at its disposal such as regulations, tax policy and the spending power.

However, if we want to ensure a minimum degree of transparency in plans and progress reports in the absence of a carbon budget, the bill should absolutely be amended to provide for annual modeling of GHG emissions in the plans.

The advisory group of the Canadian Institute for Climate Choices could look into that issue in future.

• (1545)

**The Chair:** Thank you.

[English]

Ms. McLeod.

**Mr. Taylor Bachrach:** Do I have more time, Mr. Chair?

**The Chair:** No. I'm sorry, Mr. Bachrach, you were actually given much more time than is normally indicated, but it was a good question with good answers.

We'll go to Ms. McLeod.

**Mrs. Cathy McLeod (Kamloops—Thompson—Cariboo, CPC):** Thank you, Chair.

Thank you to all of the witnesses. Again, we're having what I think is a really important dialogue.

I have two things that I hope to accomplish in my five minutes. One is just a quick follow-up in terms of the net-zero advisory body. I find that perhaps the government should have waited for this legislation to pass, because we're having some good dialogue about what an advisory panel would look like. We had one person here who said it should absolutely just be scientists, with no industry involvement. Of course, Mr. Loessin talked about how industry could add so much to the debate. If you look at the current component of the advisory committee, it's a bit.... Although they're all very knowledgeable people, I'm not sure the government waited for the best advice possible.

My personal perspective is that we can get further when we include industry, because we understand the challenges, but we can also understand what they can accomplish. I think we can all agree on the importance of pulses to our diets, not just in Canada but worldwide. The diets of more and more people are increasing in terms of pulses.

Perhaps I could get Mr. Loessin to quickly address that issue again. I hope to go to some more generic questions after that.

Thank you.

**Mr. Corey Loessin:** Yes. Just to reiterate, pulse crop farmers are farmers, and they include other crops in their rotation for necessary reasons, certainly. However, pulse crops have been a growing and very beneficial component in our crop rotation in Saskatchewan for 30-some years.

Having farmers, or at least industry representation, on an advisory committee that could help, as you say, shape the direction forward and what more can be achieved would make complete sense. The industry can help point out what can be done to enable that improvement going into the future, so I think farmers would be a completely logical addition to such an advisory panel.

**Mrs. Cathy McLeod:** Thank you.

We had the Cattlemen two days ago, and of course, what I didn't know—and I live in ranching country—is the important contribution to the grasslands, the health of the grasslands and sequestration made by that particular industry.

Over the last five years, I've been focused on the indigenous file, so of course I'm a rookie to the environment file. For those who are much more knowledgeable, I would really appreciate.... This bill is clearly process. It's about a process, and we hear from all people who have been before us that it's even flawed in terms of what their process would be.

When we talk about net zero, maybe Prof. McLeman would be the best.... Canada was basically shut down in a significant way last year. How much impact did that have in terms of our emissions? How much did that bring us towards our goal, and how can you tell Canadians who might be listening what a future would look like in terms of whether it would be like last year, when no one was getting in their cars and no one was flying? Could you tell us a bit about that so that Canadians who are listening might understand better what Canada is trying to achieve?

**Prof. Robert McLeman:** Yes, the increase in greenhouse gas emissions in Canada did essentially stop over the last year because, you're right, people did stay home and work closer to home, and industry was shut down. I don't think that's what's being advocated for here.

I think what we're looking for is economic growth. It's based on an energy-based economy, where oil and gas are not necessarily the basis of the energy source.

That's one of the things I think we need to look at in the future. No one is projecting that net zero means we go back to horses and buggies. In fact, the reason we got rid of horses and buggies was not that we ran out of hay to feed the horses; it was that better technology came along. We are at that threshold now in society technologically, where the reason we are getting away from gasoline-powered automobiles, other devices and things that run on fossil fuels is not that we're running out of fossil fuels in the short term; it's that there are better technologies in place.

One thing we should take away from the report that came out from the International Energy Agency yesterday is that the necessary technologies and innovations to achieve net zero already exist, so the science bit has already been done. The key is how we make the transition to an economy that's based on those new technologies and innovations.

It's possible, I think, which is the message I would ask all members of this committee to take away. You're right, this legislation is a question about process, but it's important because the government sets the process that helps the economy transition to this new technology.

• (1550)

**Mrs. Cathy McLeod:** I think we've clearly heard that agriculture is going to continue to be important, so to not have—

**The Chair:** Sorry, Ms. McLeod, I was saying that your time had been reached, but I was on mute, so it was like a tree falling in the forest, and nobody hears it.

Last, but by no means least, is Mr. Saini.

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

Thank you very much to all the witnesses for coming out today. It's been a very interesting conversation.

Dr. McLeman, I want to start with you first, because you mentioned something in your opening comments that I think we have not really drilled down on. We've neglected this aspect, and that is in terms of the importance of the global refugee crisis.

As we've seen in the past, the refugee crisis has created an element of xenophobia and certain amounts of extremism that are currently playing out in the Western world.

How do you expect the refugee crisis [*Technical difficulty—Editor*] moving forward, if we don't achieve net zero?

**Prof. Robert McLeman:** That's a very good question.

I should start by saying my wife is an immigrant and my mother is an immigrant, so you can figure out that I'm pro-immigration on this. Different pathways.... I did a study for the Migration Policy Institute in Washington, D.C., last year, and decisions such as this bill here and the greenhouse gas trajectories between now and 2050 changed the landscape dramatically. If we get to zero emissions globally and nationally by 2050, we can actually reduce the number of people a year who are annually displaced from their homes. Right now about 21 million people worldwide are displaced each year by floods, storms, droughts and so on. We can actually reduce that number by hitting zero emissions.

Conversely, if we go the way we're going, we're looking at hundreds of millions of people being displaced. Canada as a refugee- and migrant-receiving nation will feel pressure from the international community, and source countries of Canadians who are here now whose family members experience the risk will be putting pressure on the government to do something. I think that with failure to implement these sorts of bills now, we'll see pressure from sources you may not have expected previously.

**Mr. Raj Saini:** I want to raise another issue. I'm glad you raised that point, because I think that's something we don't really reflect upon in terms of the refugee crisis. The other aspect of that is—and you talk about internal displacement—when we look at certain countries, water is going to be a huge, critical issue. You can look at the central Asian countries and at southeast Asia, and Iran has a huge water problem. How do you see that impacting global stability?

**Prof. Robert McLeman:** It's a great concern to people who work in security agencies, both within the Government of Canada—the Canadian Security Intelligence Service—and in the United States and others. They see it as a threat multiplier, which is the language they use. It's that you already have economic, social and cultural conditions that can create political tensions within countries and now you want to layer on top of that extreme heat events and water scarcity, which affects food supplies and food production around the world.

This would include if there's a drought in Canada, which is a food-exporting nation. That would raise global food prices and lead to political instability in countries that import food, like Egypt and others. It's interconnected, so that's yet another good reason to take action now to prevent this sort of threat-multiplier scenario from emerging.

• (1555)

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



I will turn my final few moments to Madam Brouillette. I'm aware that your executive director, Madam Catherine Abreu, was appointed to the net-zero advisory body. Could you provide some comments and your thoughts on the advisory body, particularly regarding the value that such a diverse selection of individuals will bring to inform the work our government does?

[Translation]

**Ms. Caroline Brouillette:** Thank you for your question.

First of all, it's important to make a distinction here: Catherine Abreu sits on the committee in a personal capacity, and I'm here today to present the remarks of Climate Action Network Canada. We've been working this way with our members and allies for many years, by which I mean that we recommend that a committee of independent experts be established. It's important to note that the committee the government has organized is a committee of stakeholders, whereas we recommend a committee of independent experts.

Today I heard several witnesses ask that such and such an industry be represented. The idea is actually to appoint individuals who have expertise relating to scientific issues, traditional indigenous knowledge and various types of social sciences. That may include knowledge of the way climate change will affect agriculture or employment. The issue of a fair transition is an important one. There has to be an independent committee, but the issue of scientific expertise on that committee could be expanded upon.

I would add a final point. Ms. Abreu definitely has the climate change expertise we have in mind, which is different from any expertise associated with the representation of an industry's financial interests, for example.

**The Chair:** Thank you.

Thank you, Mr. Saini.

That concludes the first part of our meeting today, which was reserved for the first panel of witnesses. I would like to take this opportunity to thank the witnesses, who made some very interesting comments. We know that a committee appearance requires considerable preparation, and we are grateful to them for taking the time to prepare for their appearance today.

We will now take a short, five-minute break to allow the second panel of witnesses to connect to the meeting. It is now 3:57 p.m. I will be back at 4:03 to welcome the second panel of witnesses.

Thank you once again to the first panel of witnesses. As they know, next week we will proceed with amendments to the bill, and their interesting ideas will fuel our discussions.

● (1555) \_\_\_\_\_ (Pause) \_\_\_\_\_

● (1600)

**The Chair:** We are now prepared to resume.

Welcome to our second panel of witnesses. I would like to acknowledge the presence of Paul Fauteux, who will testify as an individual.

[English]

We also have, from the Canadian Association of Petroleum Producers, Shannon Joseph.

From the David Suzuki Foundation we have Dr. Sabaa Khan.

From the Quebec Environmental Law Centre we have Geneviève Paul.

From The Transition Accelerator we have Professor James Meadowcroft of the School of Public Policy at Carleton University.

I think you probably all know the format, which is that every group of witnesses gets to make a set of opening remarks for five minutes, and then we move on to questions.

Please keep your mike off when you're not speaking, and address the committee members through the chair.

We'll start with Maître Fauteux, for five minutes.

● (1605)

[Translation]

**Mr. Paul Fauteux (Attorney and Accredited Mediator and Arbitrator, As an Individual):** Thank you, Mr. Chair.

Hello and thanks to everyone for giving me this opportunity to contribute to your work.

I worked for the Government of Canada as a diplomat and senior official from 1980 to 2010. Among other things, I directed Environment Canada's Climate Change Bureau and led the Canadian delegation in negotiations on the implementation of the Kyoto Protocol.

The bill you are currently studying is a step in the right direction, but it is clearly inadequate to address the imperatives of the climate emergency. I believe that many improvements need to be made. Given the time constraints, I will mention six.

First of all, the title of the bill betrays its lack of ambition. While the carbon neutrality objective for 2050 is legitimate, it should not be used to camouflage the failure of the current Canadian emissions trajectory. The Paris Agreement clearly establishes that achieving carbon neutrality by mid century will first require establishing a global ceiling for GHG emissions as soon as possible. Canadians expect their government to achieve these reduction levels quickly. This ambition should be reflected in the title, which of course assumes that the wording of the bill will be improved.

Second, the states that are leading in terms of combating climate change, like a number of our G7 and other partners, are including specific GHG emission reduction targets to be achieved in their laws. Their general goal is to make governments responsible for their climate action and to avoid repeated emissions reduction failures like Canada's.

There are lessons to be learned from Germany's recent experience. Bill C-12 should at the very least include, and thereby make mandatory, the 2030 emissions target announced by Prime Minister Harper in 2015 to reduce its GHG emissions by 30% from 2005 levels; or as an alternative, include the 40% to 45% target announced by Prime Minister Trudeau on April 22. The bill should also provide interim targets as of 2025, and every five years thereafter. A climate act like Bill C-12 without any targets is, in my view, useless.

Third, Bill C-12 does not establish a credible accountability mechanism. The only obligation imposed on the minister in this respect is to report on, or in other words evaluate, the minister's own work. The bill should instead provide that the government's action plan and measures be examined by an independent authority. This could be the environment commissioner, who could then be made an officer of Parliament to strengthen the commissioner's independence.

Fourth, Bill C-12 establishes an advisory body to provide the minister with advice; the minister establishes the advisory body, and may determine and amend its terms of reference at any time. The climate emergency and the rapid reduction in emissions required in Canada should instead call for experts to be consulted to provide advice on short-term goals, interim targets and the 2030 objective. The bill should therefore be amended to include the establishment of an independent scientific council consisting of university and research experts whose mandate would be to identify policies likely to promote the achievement of Canada's emissions reduction targets.

Fifth, the progress report mentioned in Bill C-12 is required every five years, even though emissions data are available every year. To make it possible to evaluate progress or the lack thereof at each intermediate phase, the bill should be amended to require an annual report.

Sixth, Bill C-12 does not state that measures should be evaluated as a function of their ability to enable Canada to comply with its commitments under the Paris Agreement. There is therefore nothing to make sure that the targets established by the department will do that. The bill should be amended to specify that the environment commissioner's role would be to determine whether the planned measures would enable Canada to meet its targets, and whether doing so would bring it into compliance with its Paris Agreement commitments.

To conclude, I would say that a Canadian climate act worthy of the name would have to ensure the population and the international community that Canada will at the very least be meeting its own commitments, even though they may not be adequate to achieve the Paris Agreement objective, which is to limit the temperature rise over pre-industrial levels to 1.5°C.

In its current form, Bill C-12 in no way ensures that Canada will meet its climate commitments. Compliance requires that the bill be amended to establish a mandatory target, in addition to interim targets every five years beginning in 2025, to establish accountability mechanisms and to bring in the required expertise.

Thank you for your attention.

• (1610)

**The Chair:** Thank you very much, Mr. Fauteux.

[English]

We'll go now to Shannon Joseph from the Canadian Association of Petroleum Producers.

**Ms. Shannon Joseph (Vice-President, Government Relations and Indigenous Affairs, Canadian Association of Petroleum Producers):** Thank you very much.

My name is Shannon Joseph, and I am the vice-president of government relations and indigenous affairs for the Canadian Association of Petroleum Producers or CAPP.

CAPP represents the upstream oil and natural gas industry in Canada. We would like to thank the committee for the opportunity to appear and to be part of its study of Bill C-12.

This legislation and Canada's work to fulfill its climate change commitments are important to all industries and all Canadians. CAPP and our member companies are strong supporters of and investors in environmental performance and innovation. We want to work with the federal government to achieve its climate change goals. That said, we would highlight for the committee that the pathway to net zero that Bill C-12 sets out is also intended to create economic opportunities for Canada.

We took note of the Prime Minister's comment, particularly on the occasion of the April 22, 2021, climate summit, that our climate change response can be "our greatest economic opportunity." As members can appreciate, you manage what you measure, hence the inclusion in the bill of milestone climate change targets towards 2050 performance measurement requirements. If the path to net zero is to create growth, investment and jobs, then as well as environmental performance, we need economic targets, and economic performance metrics must be built into this legislation as well.

Beyond this, pathways to net zero are going to look different in the diverse regions of our country as we pursue this agenda. This fact must also be integrated into the bill in the ways that the strategies are developed and evaluated. This should be done in close collaboration with provincial and territorial governments and their climate change strategies and policies. Canada is an exporting country, and oil and natural gas are our number one export.

We contribute more than \$1.1 billion annually to Canada's economy. We employ over half a million women and men in well-paying, skilled jobs coast to coast, including 63,000 jobs in Ontario and 18,000 in Quebec. Our national supply chain outside of Alberta includes over 2,700 different firms with annual purchases of over \$4 billion. In addition, we purchase over \$2.4 billion annually from indigenous-owned businesses representing about 11% of our procurement in the oil sands. We are one of the largest employers of indigenous Canadians and are committed to our important role in reconciliation.

I highlight these points because this industry is an important part of Canada's economic and social fabric and we have played and want to continue to play a role both in both supporting Canadian prosperity and helping Canada and the world achieve their environmental objectives.

An important way we will play that role is through innovation. One of your other speakers talked about technologies being available, but many still need to be developed. According to a 2018 study by Global Advantage Consulting Group conducted for the Clean Resource Innovation Network, or CRIN, about 75% of all clean technology investment in Canada comes from the natural gas and oil industry.

Not only will our leadership in innovation help to reduce emissions here at home but through technology sharing and export, Canada can help reduce global emissions around the world. An example of this is carbon capture utilization and storage. The Weyburn-Midale project in Saskatchewan is one of the world's largest and longest running. We hope to see more of these projects.

Our emerging liquefied natural gas industry in British Columbia also has a role to play in reducing global emissions and in generating internationally traded mitigation outcomes or carbon credits for Canada under the Paris Agreement.

China alone is adding one new large coal-fired power plant to its grid every two weeks. Coal-fired generation is also continuing to grow in India and southeast Asia, all with a focus on improving living standards for their citizens. If these facilities ran on Canadian natural gas, they would generate significantly lower air pollutants and significantly lower GHG emissions, as Ontario experienced when we switched power sources.

We cannot afford, either environmentally or economically, to take a narrow view of what climate change mitigation can look like in Canada. Bill C-12 should articulate the role that economic sectors and other stakeholders will play in the development of plans and in achieving targets. It should ensure that expertise in the technologies and opportunities available to different sectors and regions are brought to bear on Canada's advisory panel and overall decision process.

• (1615)

We recommend a greater role for the Governor in Council, and in particular the Minister of Finance, in the development of targets, plans and supportive policies under the act, especially given their potential effects on the whole of Canada's economy and society. We don't think it is appropriate for all of that to rest with one minister.

By working together, industry and government can accelerate innovation and develop technologies that reduce emissions while delivering responsibly produced energy to meet global energy demand. We hope our recommendations to the committee can support Canada in this process.

Thank you.

**The Chair:** Thanks very much.

Next is Dr. Sabaa Khan from the David Suzuki Foundation.

Go ahead, Dr. Khan.

**Dr. Sabaa Khan (Director General, Quebec and Atlantic Canada, David Suzuki Foundation):** Thank you, Chair.

Dear members, I appreciate the invitation to appear before the committee today.

Climate change laws, such as Bill C-12, are a key governance tool in the quest to achieve net-zero emissions by 2050. In order to be effective, not only does this legislation need to pass, it also needs to incorporate the necessary amendments that will enable it to meet its ultimate objective of achieving—

**Mr. Chris Bittle:** On a point of order, Mr. Chair, I'm getting the French translation through the English channel.

**The Chair:** We'll just stop there for a second, Dr. Khan.

**Mr. Lloyd Longfield:** The French translation is also on the French channel.

**The Chair:** The wires got crossed somewhere.

**Mr. Lloyd Longfield:** We're getting two French channels instead of one English.

**The Chair:** I see.

Madam Clerk, could you look into that for us?

**The Clerk of the Committee (Ms. Angela Crandall):** I'll check.

**The Chair:** It happens from time to time. I don't know why.

**The Clerk:** We should be good now, sir.

**The Chair:** Thank you, Madam Clerk.

Go ahead, Dr. Khan.

**Dr. Sabaa Khan:** Thanks.

National legislative approaches to climate policy have become imperative to achieving the goals of the Paris Agreement. Not only do they have the potential to reflect authoritative and transparent state commitments, but they may also significantly facilitate and accelerate economy-wide decarbonization by providing predictable cross-sectoral regulatory and investment environments.

Canada's climate legislation will not exist in a vacuum. It will form part of an emerging global network of national climate laws, all of which are driven by the common global legal objective to tackle anthropogenic climate change. While no two national climate laws are the same, their frameworks draw on some common key requirements, obligations and procedures.

Our submission to the committee draws on international examples in the area of national climate legislation to inform substantive and procedural amendments to Bill C-12, which would give this draft legislation the specificity, concreteness, transparency and accountability standards necessary to effectively map, monitor and reduce Canada's emissions.

While Bill C-12 in its current form embodies all core elements common to most climate laws, it falls behind international best practice in several respects. We understand that the government's intention is to require science-based targets, but we are concerned that as currently drafted, Bill C-12 leaves open the door to sidestep IPCC science and recommendations. In establishing targets and crafting mandatory climate plans, an independent scientific body is mandated to play an advisory role. However, under the current provisions, this body's composition, resources, capacity and functions remain loosely described.

A robust Canadian climate law could trigger the rapid collective transformation that is needed within the public and private sectors to mitigate the worst impacts of climate change, strengthen adaptation efforts, and enhance resilience across the country. Climate legislation should foster greater public transparency, ensure government accountability, and provide a clear, quantifiable and practical vision of how Canada intends to reduce economy-wide GHG emissions.

A robust legal framework for climate change can guarantee a leading role for independent science in determining Canada's climate ambition and ensure that this ambition never regresses. It can also ensure that Canada's plans of action to achieve periodical emissions reductions targets on the path to net zero do not deviate from the latest scientific recommendations of the IPCC.

Some climate laws go so far as to call for the explicit alignment between federal budget policy and climate policy, assign emissions reduction obligations for certain sectors to specific ministries, and even mandate the government to produce a global climate strategy related to imported goods, bilateral co-operation, and international climate finance. In the best cases, climate laws mandate independent scientific bodies to play a strong role in advising and monitoring government actions on climate change, and oblige the government to respond publicly to their advice, recommendations and reports. These mechanisms ensure that climate policy-making is not led by electoral cycles, but by the long-term objective of net-zero emissions by 2050.

We have before us today an opportunity to ensure the passing of robust climate legislation, which would propel us securely and collectively into the era of economy-wide decarbonization. It is essential that our climate legislation bind the relationships between climate science, government actions, and public engagement if it is to make a meaningful contribution to achieving net zero by 2050, and the end-of-century objective of the Paris Agreement.

In order for Bill C-12 to become a catalyzing force for change, target setting, plan rollouts, reporting obligations, monitoring procedures and the accountability framework must be significantly strengthened.

The issue of offsets should also be clearly addressed. In this respect, the David Suzuki Foundation supports the amendments recommended by Ecojustice and West Coast Environmental Law to the committee on Monday, which would help bring Bill C-12 up to the international standard of the Paris Agreement, in terms of accounting for anthropogenic emissions and removals in a manner that promotes environmental integrity, transparency, accuracy, completeness, comparability and consistency.

I strongly encourage members to work to strengthen the bill in line with international best practice, and to approve it.

Thank you.

● (1620)

**The Chair:** Thank you, Dr. Khan.

[*Translation*]

We will now move on to Ms. Geneviève Paul, the Executive Director of the Québec Environmental Law Centre.

Ms. Paul, you have the floor.

**Ms. Geneviève Paul (Executive Director, Québec Environmental Law Centre):** Thank you, Mr. Chair.

I'd like to thank the members of the committee for having invited me to testify.

The adoption of a climate act is urgent and necessary, and we welcome the tabling of this bill. However, if the act is to have the means to achieve its ambitions, we believe that the bill must be improved. The bill would provide a much-needed roadmap. We propose the addition of a compass and the necessary landmarks so that we can arrive at our destination without getting lost along the way.

Here, then, are our five main recommendations.

Firstly, we believe that it is essential not to make the advisory body multipartite, but rather an independent body with the required expertise, something that is not guaranteed by the current provisions. As Quebec has just done with its advisory committee on climate change, we must draw inspiration from international best practices that have proven their worth.

We therefore propose that the selection process be independent. Members could be recommended by a diverse selection committee that would include indigenous representatives appointed by the Governor in Council. These members need to be independent, meaning that they ought not to have any relations or interests that could be harmful to the achievement of the committee's mission, as is already the case in Quebec.

We strongly recommend that scientists make up the majority on the advisory body, as is the case in France, the United Kingdom, New Zealand, and Quebec, among other jurisdictions. We propose that its terms of reference be clarified and broadened, and that they not be subject to the discretion of the Minister of the Environment, as is currently the case. For example, the body should be consulted on major issues such as setting interim targets.

To ensure that science guides our actions on climate issues, we suggest that the body be empowered to issue advice to all government entities. Such advice should be made public, and the body's annual report should be presented to Parliament, not the minister.

To improve subclause 22 (2), which is already a step in the right direction, we propose that the Minister of the Environment and any other minister who decides to disregard scientific advice from the advisory body be obliged to justify this decision, as is currently the case in the United Kingdom. Because the issues are so important and changing at such a rapid pace, the Commissioner of the Environment and Sustainable Development should report every two years rather than every five.

To support the government in this admittedly complicated task, we propose the compulsory use of a climate analysis grid to be developed by the advisory body. This grid would help analyze government and administrative decisions on the basis of their impact on climate and on their achievement of targets to ensure that the actions of the entire state apparatus remain coherent.

In addition to a strong advisory body, the bill must also provide for interim targets and five-year federal carbon budgets. The bill mentions that one of the objectives is to ensure compliance with Canada's international commitments. This means that the act should refer directly to the Paris Agreement's flagship standards by setting normative benchmarks for GHG emission reductions and providing for means-based obligations, in addition to a milestone target as early as 2025 rather than 2020, as provided for in the Paris Agreement and on the basis of the best available scientific data. Furthermore, the act should include a performance obligation to ensure compliance with targets. Quite simply, we can no longer afford to miss the targets we set for ourselves because we have some catching up to do.

We felt reassured earlier this week to hear that there was a desire to strengthen accountability in the bill, and we hope that this will be reflected in the amendments.

Last but not least comes public participation. The bill falls short of Canada's international obligations concerning rights related to participation in public affairs and access to information, which must amount to more than an opportunity for the public to comment. In addition to making it obligatory to consult the provinces, as is the case in other legislation, we would like to see the act pro-

vide mechanisms for public engagement, awareness, training, and education. If we are to withstand the climate crisis, everybody must rally to the cause.

The Minister of Environment and Climate Change said this week that saving the planet shouldn't be political, and that it was rather a matter of believing or not believing in science. The goal of our proposals is to make science central to the bill while ensuring that the necessary guidelines are in place to fully address the crisis. It is in everyone's interest, and we are counting on both chambers to do what is required. We are submitting proposed amendments to you in the appendix to our brief and remain available to provide the legislator with guidance and support so that we can respond as required to the greatest threat currently facing humanity.

Thank you for your attention.

• (1625)

**The Chair:** Thank you, Ms. Paul.

Professor Meadowcroft, now, from the Transition Accelerator.

[*English*]

Professor Meadowcroft, you have five minutes to make opening remarks.

[*Translation*]

**Prof. James Meadowcroft (Professor, School of Public Policy, Carleton University, Transition Accelerator):** In French we say "accélérateur de transition".

**The Chair:** "Accélérateur de transition", okay.

[*English*]

**Prof. James Meadowcroft:** I'm from the Transition Accelerator, which is a national non-profit organization focused on building transition pathways in regions and sectors across Canada.

We issued a recent report called "Pathways to net zero: a decision support tool", which we will send to the committee. I would urge you to look at. It goes into quite a lot of detail about concrete steps in various sectors to move toward net zero.

I'm going to talk about a few of the high-level findings of this report. I'm not proposing particular amendments to this piece of legislation; I'm sure members have a whole series of propositions before you. Really, my comments are focused more on the background and on how we should understand net zero.

The first thing I want to say is that net zero, from our point of view, changes everything. Once it is formally adopted as a goal, it changes the way the climate problem is framed. Net zero means balancing any residual emissions with removals, and since most of the negative emissions technologies are highly uncertain as to their outcome, permanence and cost, what that really means is driving down emissions towards actual zero in all sectors of the economy.

Why does it change everything? Essentially it's because it means that the climate issue is no longer about reducing emissions by a certain percentage before a certain point, but simply about stopping producing greenhouse gases; that's to say, absolutely squeezing them out of the economy.

For years our argument has been about how we find low-cost emissions to get to  $x$  percent. Forget that. What we need are new systems that simply don't emit greenhouse gases. The only way to get rid of these GHGs is for the large social systems of provisioning—transport, the way we move goods, the way we move people, the way the agri-food system works—have to go towards net zero. This means large-scale changes to those systems. Those systems, however, are already changing in response to all sorts of disruptive currents. Think about autonomous cars, which are pushing the boundaries of what transport systems will look like.

The task, then, is not to get rid of some emissions from the ways we're doing things now, but to engineer new systems that will be better in many respects and also be low carbon. This means the electricity system, the way we build buildings, transport and agri-food have to go through major changes.

One implication of thinking about it this way is that the focus should be on sectors and regions. Why? It's because the problems in agri-food are not the same as those with buildings or transport, and one policy instrument cannot drive these changes. There are different obstacles and different enabling factors. The same is true when we think about Canada's regional identity and differing regional political economies. Pathways will thus be regional and sectoral.

We also need to think about what the system will look like when we get to net zero and planning function of that. This will allow us to avoid some dead-end pathways.

An example I'll give you is blending ethanol with gasoline, which Canada has proudly been doing for more than a decade and which is not advancing us toward net zero, even though it may secure some incremental reductions, because the world is headed toward an electrified personal vehicle transport system. Industry has already opted that way, and there's not enough land anyway to create biofuels everywhere.

What we need is an analysis that looks at what these pathways to net zero are at the system level, not at sets of policies that encourage incremental emissions where they look fanciful, or where they look promising, if you like, because we will waste enormous amounts of investment building infrastructure that turns out to be useless a decade later because it isn't actually on a pathway to zero.

The last thing I would say is that it's great that Canada is moving toward a net-zero understanding of the climate problem, but what

we really need is a strategic vision now about what the pathways are to get us there.

For a long time, the tendency has been to do a little bit of everything, to finance this and finance that. There are a few big things that make a difference, and we should be putting as much investment into these as possible: electrifying personal transport, decarbonizing buildings and driving the remaining carbon out of the electricity system. These things are big. We have the technologies. We know how to do them now.

• (1630)

Many other things like aircraft emissions are important and will have to be done, but they are not the priority now. There we need R and D, and we need experiments to identify solutions that can be rolled out at scale.

Thank you.

**The Chair:** Thank you, Professor Meadowcroft. That's very interesting.

We'll go to our first round of questioning, the six-minute round. I believe for the Conservatives it's Mr. Jeneroux, but correct me if I'm wrong.

Yes, Mr. Jeneroux, go ahead.

**Mr. Matt Jeneroux:** Yes, you are correct, Mr. Chair, and thank you.

Thank you, panellists.

I don't know about you, Mr. Chair, but I have yet to hear a panelist who says they like this bill. It seems to be across the board. I guess maybe the minister liked the bill. Outside of that, it seems that everybody is pointing out what appear to be flaws with the bill.

That said, I want to address most of my questions to CAPP.

Ms. Joseph, thanks for your presentation. In your remarks you mentioned the lack of economic targets and lack of accountability. I'm hoping you can expand on some of that. The question for you is, would you then agree that there needs to be a tracking system for those economic targets?

• (1635)

**Ms. Shannon Joseph:** Thanks very much for the question.

Yes. When we first saw this bill, one of the things we thought was where the economic aspect of this was, because we know that the environment and the economy need to go together. They need to be thought of together.

We put forward amendments that were really about integrating those goals, looking at an economic target that goes alongside of what we're trying to achieve with net zero. Specifically, we think that if the goal is to create new jobs, etc., we should be measuring whether those jobs are being created. How does that look regionally and nationally? Are we attracting investment? How is that looking regionally and nationally? Is our real GDP increasing? How is that looking regionally and nationally? We ask these questions because, ultimately, a healthy economy and investments are going to be needed by industries, not just ours but manufacturing and others, to do the type of innovation that's needed.

If the government is only measuring its performance based on emissions reductions and not looking at this other side of the equation, it's potentially going to pursue solutions that are inefficient and cause unintended problems. If you look at them both together, you're going to find optimal solutions, especially when you put on that regional lens. We think having that built into the legislation in terms of the targets and reporting is critical.

**Mr. Matt Jeneroux:** You touched on some of that regional piece. I hope you can expand a bit on that—about the provincial and territorial roles. I think a major issue with not just this bill but also multiple other pieces of legislation by this government has been the failure to respect other jurisdictions, as well as the introduction of redundant regulations, instead of having that collaborative piece with other provinces.

Is there any part here of Bill C-12 that you would find redundant when it comes to the other provinces and territories?

**Ms. Shannon Joseph:** The issue is just a lack of consideration. There is nothing in the bill that requires the federal government, in its planning process, to explicitly take into account the measures that provincial and territorial governments are taking, and how their measures interact with federal measures.

We think that is very important. Our companies operate in multiple jurisdictions across the country. When we look at our experience with a policy like methane regulation, we're happy today that we have, in British Columbia, Alberta and Saskatchewan, equivalency agreements with the federal government. Before we had those agreements, we were very concerned about double management of the same molecules of CO<sub>2</sub> and how that was going to work—the costs it would impose and what that would mean for our ability to operate, innovate, to employ people.

There are consequences from operating without consideration of these policies. The more the bill reflects the fact that those other policies being implemented provincially must be considered by the federal government, I think the more we can avoid double policies and inefficiency.

**Mr. Matt Jeneroux:** Great. That will be helpful, too, in terms of potential amendments to the bill, Ms. Joseph.

It's my last minute here before the chair jumps in. You touched a little bit on the panel. Just out of curiosity, we've had other testimony to the effect that there shouldn't be any industry involvement on the panel at all. I'm just curious as to what the perspective of CAPP would be when it comes to the composition of the panel.

**Ms. Shannon Joseph:** I think it would be unfortunate if the panel does not include the expertise of the people who know how to do things.

As for some of the comments made earlier by other panellists about cement-making, steel-making, oil and gas and mining, all of these industries have very specific expertise and are highly technological. You can't just have a committee of climate scientists deciding what the pathway to net zero is; you need all of these other experts.

I'll speak about the business sector experts. I agree that there need to be other types who can speak about the best technologies right now, the opportunities available regionally based on energy mixes available, how to pursue those to reach our emission reduction goals and do that in a way that still preserves companies' ability to be healthy and continue to operate.

We think that is critically important. We think what would help is ensuring that there is a role for cabinet in deciding the terms of reference of this group, who sits there, and also defining in the act the role that those sectors will play, especially when there are sector-related plans established under this legislation.

• (1640)

**The Chair:** Thank you.

Is it Mr. Baker from the Liberal side? Am I correct?

**Mr. Yvan Baker (Etobicoke Centre, Lib.):** That sounds good to me, Mr. Chair.

**The Chair:** Okay, go ahead.

**Mr. Yvan Baker:** Thanks very much.

Thank you to all of the witnesses.

[*Translation*]

I'd like to ask everyone some questions, but unfortunately, I won't have enough time. I hope the witnesses will understand.

[*English*]

Mr. Jeneroux, on multiple occasions today, has suggested that nobody likes this bill. On my part, I kind of see this process as the process that legislation should go through, which is one where the government puts forward a proposal, and then people provide their input to make it better.

That's not how I read the room, but I want to recanvass the room, because I want to make sure that I understand where you're all at. I won't be able to ask all of you because it will take too long.

Mr. Fauteux, are you opposed to this bill's passing?

[*Translation*]

**Mr. Paul Fauteux:** I am definitely not against Bill C-12. As I said at the outset, it's a step in the right direction. But I feel, as do others here, that it's inadequate. It's not bad, but it simply needs to be enhanced and improved.

**Mr. Yvan Baker:** Thank you very much.

Do you think it's urgent to adopt this bill, with or without amendments?

Is it urgent to adopt a bill like this one?

**Mr. Paul Fauteux:** I believe that the required amendments are important enough for us to take the time to debate them. It would be a bad idea to forge ahead and adopt the bill too hastily.

There really is a climate emergency. The United Kingdom passed a climate act in 2008. Canada is trailing behind. It's one of the laggards in the G7, perhaps the worst in terms of climate leadership. We have some catching up to do, but this will be our first climate act, and it will be there for decades. Let's take the time to get it right.

**Mr. Yvan Baker:** If I've understood you correctly, you're saying that it's urgent, but that it's urgent to do it properly.

**Mr. Paul Fauteux:** Exactly.

**Mr. Yvan Baker:** Okay.

Ms. Paul, I'll ask you the same question.

Do you oppose the adoption of Bill C-12?

**Ms. Geneviève Paul:** Thank you for your question, Mr. Baker.

We are categorically not against the adoption of this bill, and we agree entirely with Mr. Fauteux.

As we pointed out, this bill is essential. We have to develop a legislative framework in response to the climate emergency, but if we are going to legislate, we might as well do it right. It's clearly our job to make proposals.

As Mr. Fauteux said, there are some key, and very clear, amendments, based on proven best practices. This process is therefore useful. We may be lagging behind, but we can learn from what other governments are doing, after they have tested these mechanisms and proposed amendments. The federal government is perfectly capable of including these amendments in the current bill.

I agree with you that it's urgent to take action, and especially urgent to pass a good act that will get us back on track.

**Mr. Yvan Baker:** I understand what you're saying. Honestly, I think that every member here, and probably everyone sitting in the House of Commons has a different idea of what would constitute a good bill to combat climate change. That's why we're all here today to hear your opinions. You are experts with different backgrounds, and differing points of view. I believe that it's important for us to listen to what you have to say so that the changes we make to Bill C-12 will make it as good as it can possibly be.

Ms. Paul, people in my riding and from across Canada are watching us on television right now. I have about a minute and a half left. Could you briefly explain why it's urgent to adopt a good bill?

• (1645)

**Ms. Geneviève Paul:** There are several reasons why it's urgent to adopt a good bill, including the fact that if the government does nothing to address climate issues, it will be harmful to Canada and

all Canadians, and come at a very high price, not to mention the repercussions that our inaction might have internationally. It's therefore up to Canadians and the government to adopt a framework climate law.

What's a good climate framework law? It's one in which we mark out the guidelines needed to arrive at our destination, as we mentioned earlier. What's interesting is that you are consulting numerous experts, whose proposed amendments to Bill C-12 are converging to help us get there.

The repercussions on our fundamental rights are extremely important. You've also heard from experts who agreed on that too. It's not only the greatest threat being faced by humanity, but also, as the United Nations High Commissioner for Human Rights said, "The world has never seen a threat to human rights of this scope." There is no longer any need to demonstrate the urgency of taking action with respect to climate change. It benefits everyone, including the various economic sectors.

**The Chair:** Thank you.

**Mr. Yvan Baker:** Thank you very much.

**The Chair:** Is it Ms. Michaud's turn?

**Ms. Monique Pauzé (Repentigny, BQ):** It's my turn, Mr. Chair.

**The Chair:** Go ahead, Ms. Pauzé.

**Ms. Monique Pauzé:** It's my turn to thank all our witnesses for being here today.

Mr. Meadowcroft pointed out that all kinds of ideas have been suggested for potential amendments.

My first question is for you, Mr. Fauteux. This is the second time you've appeared before the committee. In your opening address, you discussed what is happening with climate legislation elsewhere in the world. Then, in response to Mr. Baker, you spoke about Great Britain.

Could you tell us about what has happened in other countries?

It's not necessary to name them, because I have other questions for you.

**Mr. Paul Fauteux:** Of course.

I spoke briefly about Great Britain. I'll now say a few words about Germany, which has been in the news recently. It had a climate law for a number of years, and it included a specific target, as I was recommending with respect to Bill C-12. The law was struck down by the German Constitutional Court because it did not go far enough and only provided for reductions in greenhouse gas emissions to the year 2030. Now 2030 is only nine years away. On the geological scale, it's the day after tomorrow.



I fully agree with what Ms. Paul said with respect to human rights. The German law was struck down because of human rights. It placed a disproportionate burden on future generations. In other words, as Professor Meadowcroft was saying, everything needs to be changed. Achieving carbon neutrality by mid-century requires a radical transformation. An enormous effort is therefore going to be required to get there, and the effort needs to be equitably distributed over several generations. Thus we can't say that we're going to do only a little to deal with the situation and leave the task of coping with the problem to our children, our grandchildren, and their children.

That's why the law was struck down, and a new law was just adopted by the German cabinet, which will be ratified by its parliament next month. Germany is therefore making significant advances.

**Ms. Monique Pauzé:** That's definitely very interesting.

In March, when you appeared before the committee, it was suggested that the Commissioner of the Environment and Sustainable Development might become an officer of Parliament. It's not the case now, and there doesn't appear to be the desire to do that. Bill C-12 establishes a role for the commissioner and the advisory body.

You have decades of experience in government. Don't you think there should be a link and collaboration between the commissioner and this body in Bill C-12?

**Mr. Paul Fauteux:** Absolutely. I mentioned earlier that the important thing was independence. If the commissioner were to become an officer of Parliament, it would definitely strengthen that independence.

A little earlier, Ms. Paul mentioned the need to make the advisory body established in Bill C-12 independent, which it is not. At the moment, the minister appoints members, and may determine and amend the terms of reference of, the advisory body.

I agree with what Ms. Joseph said. Industry representatives need to be involved. Some private sector experts have the required expertise, but they can be brought together on an independent committee made up mostly of scientists with input from industry experts.

**Ms. Monique Pauzé:** Thank you, Mr. Fauteux. Your comments are always interesting.

I'll continue on this subject with a question for Ms. Paul this time.

Ms. Paul, many people would like to appear before the committee, including farmers and representatives of the oil industry, and probably the plastics industry too.

Do you think that the terms of reference and functions of the advisory body, including the selection criteria for membership, should be included in the bill?

• (1650)

**Ms. Geneviève Paul:** Thank you for your question, Ms. Pauzé.

It is indeed essential to specify in the bill the terms of reference of the advisory body, as well as the selection criteria and the re-

quired expertise. There have been proposals about this, for example in an amendment to subclause 21(2), which is based on other climate laws in force around the world.

It's important to avoid making the advisory body's terms of reference dependent on the discretionary authority of the minister, and in particular, to steer clear of the pitfalls of a multipartite body. Based on what I've heard, that's something I find worrisome, and here's why.

We all clearly agree that climate change affects everyone. It's partly for this reason that the CQDE, the Québec Environmental Law Centre, also came up with amendments to strengthen public participation, including all the stakeholders. It's important to hear everyone's voice, including industry players, because if we want to reach our goal, we have to move forward together. There are ways of doing so. For example, a variety of forums could be used to increase participation by the public and stakeholders when the act is implemented.

However, it's important not to turn the advisory body into a group of several stakeholders if we are to avoid the underlying pitfalls of that approach. It's absolutely essential for science to guide our decisions. We need to face up to this emergency now because we didn't listen closely enough to what the scientists were saying before. One of the keys to success will be the fact that we could analyze laws adopted as long as 10 years ago, and more recently.

It's therefore critical that the act should specify the need for the advisory body to be independent and that most of its members be from the scientific community. Expertise should also be multidisciplinary.

**The Chair:** Thank you.

**Ms. Monique Pauzé:** Thank you.

**The Chair:** Go ahead, Mr. Bachrach.

[English]

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

I would like to begin with a couple of questions for Ms. Paul on the topic of the advisory body.

Do you know how other jurisdictions that have similar advisory bodies and that focus more on scientific credentials define those scientific credentials? Are you aware of any of the approaches they utilize? It seems to me to be a tricky thing to put your finger on: What is a scientist, and how much of a scientist does someone have to be?

**Ms. Geneviève Paul:** Thank you, Mr. Bachrach, for this excellent question. Yes, I think we can build on some of the best practices that we have been looking at in other jurisdictions.

I would say there are two—perhaps more, but at least two—main criteria we can look at and should include in the legislation. The first one is the criterion of independence. How do we define that? I alluded to that in our introductory remarks. One way to do it is to make sure that the person holding the mandate does not have any interests that could affect his or her ability to fulfill the mandate. When we start looking at that, it reduces the number of possible candidates quite quickly, to be frank, but then we come down to really making sure the person would be independent and would make recommendations addressed to all political parties with a view to putting science first.

We made a recommendation for a suggested amendment with regard to the second criterion. It's based on what we've seen in other jurisdictions. We list some of the disciplines that should be part of the committee. Of course, the first one that comes to mind is climate change science. We have also seen that it's quite interesting to make sure that we have people who are able to assess the different impacts, in terms of vulnerable populations and regions, that climate change has and will continue to have. There's also public policy, for instance, and social science as well, but mostly, of course, it's with climate science in mind.

I hope that answers your question.

• (1655)

**Mr. Taylor Bachrach:** Thank you. I appreciate your response.

Mr. Fauteux, I found your remarks at the beginning very interesting. I believe you have an interesting view on this challenge, having worked within government for so long and watched our various stumblings over the years. Could you describe briefly what has gone wrong? What have been the key failings and problematic behaviours within successive federal governments that have led us to such dismal results on the climate front?

**Mr. Paul Fauteux:** Thank you for that very important question. It calls for a brutally frank answer.

Ms. Joseph spoke of the importance of the Canadian oil and gas and coal industry—coal less so, but oil and gas more so. That's the reason. Canada is a petro state. Canada exports fossil fuels. Fossil fuels generate an enormous amount of economic activity.

As a result, Canada's climate policy has had, in effect, in reality, as a main objective, the protection of Canada's oil and gas industry. It has not been truly designed to protect the climate. The proof of that is that after all of these years of climate policy, emissions keep going up. Emissions from oil and gas in particular keep going up.

We talk about carbon capture and storage. We have a wonderful demonstration project in Weyburn, Saskatchewan. It is a world leader in this technology. As the professor who spoke earlier said—I'm sorry, but his name escapes me—this technology is completely unreliable in effectively sequestering carbon at an acceptable cost, at scale, in order to meet the needs of the climate emergency. The professor was quite right. We need radical change.

That in a nutshell is why Canadian climate policy has failed. Its real objective was not to protect the climate, but to protect the oil and gas industry.

**Mr. Taylor Bachrach:** Thank you for that response, Mr. Fauteux.

Is the current bill enforceable? To what degree can Bill C-12—if we amend and strengthen it—account for some of those factors, the intrinsic factors within our governance structures, that seem to undermine our efforts? How effective is this as an accountability measure?

**Mr. Paul Fauteux:** Currently it's not, but it can be made so. This is a once-in-a-lifetime chance. Canada is about to finally adopt a climate law. It has never done so and I can bet you it's not going to do so again for a very long time. These things are meant to last. With these things, as Madame Paul- was saying, you put a framework for the transition. We need an energy transition like the world has never known.

The International Atomic Energy Agency, which works under the aegis of the OECD, just put out a report a few days ago on the path to net zero. The professor was talking about that. That path to net zero requires that oil and gas that is not in production now never comes into production. The only way that the world, including Canada, can get to net zero is if all of the planned increase in production of oil and gas is shelved. Let's keep production at the current level. That is one way this law can be a turning point. It has the potential to become so.

• (1700)

**Mr. Taylor Bachrach:** Thank you.

**The Chair:** We'll go to our second round.

We have Ms. McLeod kicking off the second round, which is a five-minute round.

**Mrs. Cathy McLeod:** Thank you, Chair, and again thank you to the witnesses for the really important dialogue that we're having. I'm going to make an observation and then I'll ask my question.

Mr. Baker, from the government side, talked about the importance of this process to make legislation better. There's been significant discussion about what the panel should look like. In this regard, I do want to note that the government did not wait to listen to our important reflections on what this panel should look like, and has already appointed it. That, of course, has diminished our opportunities to influence it, despite some of the good dialogue we have had on that.

We just had a comment made about our oil and gas sector. I'm going to use an example first and then I'll perhaps go to Ms. Joseph. The government has banned six plastics without doing any sort of analysis of the impact. You ask them what companies in Canada produce plastics, what's the impact going to be, do we import them, where do we get our straws from, and the government hasn't done any analysis of that. I think many of us agree it's important, but the analysis of the impact is also important.

Ms. Joseph talked about an economic analysis. I've heard many witnesses say that as we make this transition we're going to have lots of jobs—albeit just different ones. I don't know what the fear would be about having an economic analysis done that looks at that as part of this particular piece of legislation. We've talked about other sort of benchmarks.

I would open it up for you to perhaps comment on some of the things that have been said on oil and gas, but also on the importance of an economic analysis. If this transition creates more jobs, we should be transparent about it.

Could you go ahead, please.

**Ms. Shannon Joseph:** Thank you very much.

First, I would say that it's absolutely critical for us to have an economic lens on the way we pursue net zero and what it changes for the affordability in all aspects of the economy. You don't hear that spoken about in the IEA's report and we haven't heard that from some of the other witnesses, but it is important for people, it's important for businesses, and it needs to be part of how we assess the pathways that we are on.

In terms of the contribution of the oil and gas industry to emissions, our emissions intensity has gone down by 21% and our operational changes can bring it down further. Part of the challenge is the demand for energy here and around the world. The cars that are driven, the planes that are flown, the factories that need our energy, the population that goes up, all of that increases the total demand. Whether that demand is met by Canada or Saudi Arabia makes a difference because of how we produce our energy and the commitments that our companies have to how they produce that energy. I think it's disingenuous to blame our failure to meet certain targets on just one sector.

**Mrs. Cathy McLeod:** When you're asking for some economic analysis, that's not to diminish the importance of Canada's working towards its emissions goals.

**Ms. Shannon Joseph:** Not at all. Canada has to pursue its international commitments. All industries, including mine, are committed to that. My members are some of the top producers of hydrogen. We are seriously looking at all types of technology and all forms of energy as we look at our own operations in a way that will transform those things over time.

In order for these things to happen, and for us to deploy large-scale changes, we need to be able to attract investment. That means policies need to be designed in such a way that investing in innovation remains cost-effective. If those policies are not designed with economics in mind, and if we don't measure the economic outcomes we want to see happen as we transition to net zero, there will be negative consequences as well, and public resistance in other issues. We have to advance these things together.

I think we've heard similar things from other witnesses, but that's the key point behind our amendments.

**Mrs. Cathy McLeod:** Chair, do I still have some time?

• (1705)

**The Chair:** You have 25 seconds for a comment, I guess.

**Mrs. Cathy McLeod:** What we're mostly focused on today, of course, has been the reduction of emissions, but what we also haven't talked about is the other side of the equation, which is planting the trees and recovering the grasslands. I hope at some point we also have those conversations, because there are a few sides to the equation.

Thanks.

**The Chair:** Thank you.

Is it Ms. Saks next on the Liberal side?

**Ms. Ya'ara Saks (York Centre, Lib.):** It is, Mr. Chair.

**The Chair:** Okay. Go ahead.

**Ms. Ya'ara Saks:** Thank you so much.

I want to thank all of our witnesses. This has been a very fulsome conversation, and I'm learning a lot, which I appreciate.

I'd like to start with Dr. Khan, if I may.

Ms. Paul talked earlier in detail about the legislative issues that we're looking at in terms of amendments.

What's missing for me in this discussion right now is the importance of consulting indigenous Canadians and taking indigenous knowledge into account in fighting climate change. We've talked a lot about the nuts and bolts of these pieces, but they are a key stakeholder in this conversation.

I'd like some insight from you, Dr. Khan.

**Dr. Sabaa Khan:** Thank you.

I would say that I'm not in a place to speak for indigenous peoples' communities at this moment.

I would say that Canada has ratified the United Nations Declaration on the Rights of Indigenous Peoples. I do think those rights have to be upheld in the implementation of Bill C-12.

**Ms. Ya'ara Saks:** Thank you.

I'm going to move to Ms. Paul, if I may.

We've heard quite a number of concerns about the advisory body being formed before Bill C-12 has passed, and I'm a bit confused about that.

There seems to be some hesitation by some sides to act, even on just forming an advisory body when we've already set the 2030 and 2050 targets. To me, it seems that Bill C-12 is codifying in law what we're already trying to do to ensure that the government makes changes and that a new government can't ignore the issue. It has been made very clear by all of you that this is pivotal legislation for this time.

It would make sense to me that we'd establish formal requirements in the advisory body, like reporting requirements in Bill C-12. Isn't it reasonable that we should be formalizing a body into the law now, even if amendments to it might be needed?

[*Translation*]

**Ms. Geneviève Paul:** Thank you for your question, Ms. Saks. I'll answer in French, if that's okay with you.

**Ms. Ya'ara Saks:** Certainly.

**Ms. Geneviève Paul:** To follow up on a comment from Ms. McLeod, it's not too late to amend what's already there and make sure that the body is independent and science-based. Provided that the necessary details are in the act, it's possible. The body's terms of reference could then be adjusted, and some would be easy to deal with. The important thing is to make sure that the majority of its members are scientists.

At the CQDE, we had suggested that an advisory committee should recommend appointments to this independent body to the Governor in Council. I am aware that there already is such a committee, but we feel that even though it is highly competent in its fields of expertise, it does not match the terms of reference and disciplines that should be guiding its work in terms of the advice it would be giving the government to ensure that science is central to all decisions and advice.

It's not impossible at this point to strengthen the body's structure in the act and then amend its terms of reference afterwards.

[*English*]

**Ms. Ya'ara Saks:** Thank you, Ms. Paul.

I'm going to shift gears a little bit, if I may, because all of this legislation is happening because change is hard. Fundamentally, we know as humanity and as Canadians that we are creatures of habit. We know that reaching net zero will require a tremendous amount of change and effort from industry, as guided by science and also really with a nod to what we produce, how we consume it, how we use it and how we dispose of it.

I would like to switch to Professor Meadowcroft.

We haven't had a chance to hear from you. Where do you see Canada making strides to achieve net zero in terms of where we should be focusing our efforts to essentially get the best bang for our buck?

• (1710)

**The Chair:** You have about 45 seconds, Professor Meadowcroft.

**Prof. James Meadowcroft:** Wow.

**Ms. Ya'ara Saks:** There's no pressure.

**Prof. James Meadowcroft:** I think people should think about the economic opportunities for net zero. Let me take the automotive sector as an example. Gasoline sales have peaked in North America. This is a declining industry. We need to be building EVs and autonomous vehicles and developing the technologies of the future.

There's huge potential here. If we wait five years, we'll be buying everything from China and from the U.S. We have to get ahead of these changes. The key things now are transport, buildings and de-

carbonizing the electricity sector really fast, which are all bangs for the buck. There are emerging technologies like hydrogen where we could also play an important role if we act quickly.

One of the other panellists mentioned that we produce lots of hydrogen. Yes, it's dirty, grey hydrogen mostly, except for the project that used to be called Shell Quest. Blue hydrogen could play a role as well as green hydrogen, but we should not be focused on just dealing with the emissions of present oil and gas extraction but also on building a net-zero economy for the future.

**The Chair:** Thank you.

[*Translation*]

Go ahead, Ms. Pauzé.

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

I'd like to return to Ms. Paul.

Ms. Paul, it was pointed out earlier that it was important to achieve carbon neutrality as quickly as possible out of concern for intergenerational equity.

Do you feel that the current Bill includes provisions that could lead to long-term carbon neutrality? Would the measures adopted be applicable in the future, even if there were a change of government?

Please answer briefly, because I have only two and a half minutes left and I have a question I'd like to ask Ms. Khan.

**Ms. Geneviève Paul:** Thank you for your question, Ms. Pauzé.

The various amendments put forward around the table aiming at strengthening accountability would avoid shifting the burden onto future generations. Mr. Fauteux discussed the recent decision in Germany, which is an interesting one and reminds the government that we can't continually delay the measures that need to be taken and that it's essential to deal with these very difficult problems now<sup>x</sup>.

Increasing accountability and requiring the government to explain itself when it strays from science would be a way of responding to what young people want and of explaining the decision for a particular trajectory, in addition to requiring the government to adopt interim targets as of 2025 so that it can no longer wait to take action and to report to Parliament as a whole.

These few steps would enable us to abide by the principle of intergenerational equity.

**Ms. Monique Pauzé:** Thank you, that's very interesting.

Ms. Khan, several organizations, including yours, are in favour of Bill C-12, on condition that some amendments are made.

You say that it's important to take a giant step. I always say that it's more of a leap, because it needs to be done quickly. We are in the middle of a climate emergency right now.

Canada appears to be saying that the reduction of GHG emissions should be in the 40% to 45% range.

Can you tell us what you feel would be the most important measure to add to Bill C-12?

**Dr. Sabaa Khan:** Thank you for your question Ms. Pauzé.

Generally speaking, Bill C-12, in its current form, has all the essentials.

The really important thing to make sure is that targets are science-based. As I mentioned previously, we agree with the other non-government organizations on a target of 60% by 2030.

Something very important that is not in Bill C-12 at the moment is that the target should be science-based. This is imperative because otherwise, there is no chance that within the next decade, we would take the action required to achieve our carbon-neutral objective within 25 years.

Someone mentioned earlier that there appeared to be a dichotomy between the economy and the environment. I believe that this is a false dichotomy. It's been shown that the climate perspective is now built into the federal budget. The budget also includes a climate analysis and a quality-of-life analysis.

I'd like to see us approach Bill C-12 in the same way.

• (1715)

**The Chair:** Thank you.

**Ms. Monique Pauzé:** Thank you.

**The Chair:** Go ahead, Mr. Bachrach.

[English]

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

Perhaps staying with Ms. Khan, the question of how we make Bill C-12 work within Canada's federalism has come up several times. I believe that in this meeting we've heard a bit about the role of the provinces vis-à-vis the federal government. How do you see that aspect of this working? How can Bill C-12 adequately address the provincial climate plans?

**Dr. Sabaa Khan:** That's an interesting question. Federalism is not only a challenge for Canada. Germany is a federation within the EU, which is also a complex challenge. This is a framework law, so we're not looking at prescribing policy; what it does is lay down a foundation, a process, so that the government can organize a transition—its inevitable transition toward decarbonization.

We have in Canada a model of co-operative federalism. We have Supreme Court judgments that have carefully laid out, through legal doctrines, that the pith and substance of legislation really determines its constitutionality. There are always incidental effects on different jurisdictions—it's inevitable—but we have a long history.

Back in 1887, the Privy Council ruled that the provincial tax on banks was in fact constitutional because it was not an attempt to regulate banks, but simply an effort to raise revenue for the provinces. I think we have to take into consideration that every national law is adopted within a certain legal culture. We have a strong legal culture of co-operative federalism in Canada that can ensure there is a spirit of co-operation.

During COVID, we saw a team Canada approach, and we saw federal discretionary transfers to the provinces, so we know that in fact the federal government and the provinces can co-operate very tightly when it comes to public health crises, and this is the public health crisis of our lifetimes.

**Mr. Taylor Bachrach:** I very much agree.

I think the direction of my question was more about the fact that we've seen some provinces carve out spaces as real leaders on climate, and we've seen other provinces do much less and even move in the wrong direction. How does the federal government handle the divergence of approaches provincially within the context of this bill?

**Dr. Sabaa Khan:** As I mentioned, this bill is about process. It's about transparency. It's about going toward a certain goal. When Canada reports to the UNFCCC, it includes in its national inventory the provincial and territorial emissions and the sectoral breakdowns.

It's no different when it comes Bill C-12. With this legislation, we're not telling the provinces what to do; we're creating transparency over what those emissions are. That's in the spirit of democracy, transparency and accountability, and it can allow... Transparency itself is not an infringement on the constitutional division of powers.

**The Chair:** Thank you for that interesting perspective.

We will now go to Mr. Albas for five minutes.

**Mr. Dan Albas (Central Okanagan—Similkameen—Nicola, CPC):** Thank you to all of our witnesses for being here today. Canada is great because we can have a diversity of views, ask respectful questions and engage on what are the best paths for our country in the short and long term, so I appreciate everyone's views.

Ms. Khan, I'm going to continue in the vein that Mr. Bachrach has gone. You talked about co-operative federalism and about how important transparency is. Right now, the minister has the choice that he may comment on provincial undertakings, but that leaves an open book for future government to polarize the issue and only report on the actions it likes or the actions it doesn't like. Do you believe there should be a summary of provincial actions so that the Canadian public can look to one document as to what is happening right across our country?

**Dr. Sabaa Khan:** I absolutely do think we need to see where the emissions are coming from and that transparency has to be clear. There's no other way around it. It will help each province take the steps it needs to take to make its contribution toward the net-zero goal.

**Mr. Dan Albas:** Ms. Khan, I was also listening to your opening comments, and you particularly mentioned the need for public transparency, independent science and also climate resiliency. When I meet with environmental stakeholders, I hear more and more about nature-based climate solutions. Actually, COP26 is going to be focusing on this. Right now, this particular bill is completely silent when it comes to non-anthropogenic emissions as well as sequestration. Do you believe that we can do a better job by including in the bill a provision that would require a report outlining the non-anthropogenic emissions as well as sequestration?

• (1720)

**Dr. Sabaa Khan:** I think that when it comes to the concept of sequestration or even...we can't answer this question without addressing offsets. The bill is silent on carbon offsets, and there's an opportunity there. If we want to be really clear and transparent about what our emissions are, then we have to address the issue of offsets. French law explicitly excludes offsets. The guiding principle under Danish law is real domestic reductions. German law explicitly allows intra-EU trading, so I think we have to include provisions that stipulate limited use or exclusion of offsets. Then, in that context, we can also take into consideration the non-anthropogenic emissions.

**Mr. Dan Albas:** What I think I'm more discussing, though, is the state of, let's say, Canada's forest and its other nature-based inventory, because much of that is either Crown land or is under direct policy control of government. That's really what I'm getting at—not necessarily the offsets, but just the state of nature in Canada. We're the second-largest landmass.

I'm going to go to Professor Meadowcroft just briefly.

Sir, you mentioned electrification particularly when it comes to transportation. Again, this bill is silent on electrification. While individual provinces do decide what policies they'll pursue on the electrical grid, I think we all agree that there's a growing role particularly around electric vehicles and the change in the greening of our grid. Do you not agree that there should be some sort of summary as to the state of Canada's electrical grid so that the public knowledge of this can be improved?

**Prof. James Meadowcroft:** I'm slightly hesitant to prescribe in too much detail the exact headings under which reporting should be done in this legislation as it goes forward, but I completely agree with your substantive point that the state of Canada's electric grid is a critical issue. Canada has coasted for quite a while on the fact that we have a kind of 80% decarbonized grid. That's great and it's the envy of many countries, but east-west connections are weak and even north-south connections. There's enormous potential to accelerate decarbonization both in the United States and in Canada by increasing these interties, making the grid more resilient and increasing distributed generation in order to power the electrification of both transport and heating.

**Mr. Dan Albas:** I didn't mean to put you on the spot, sir, because I do know you said you weren't here to talk about amendments to the bill. I do have limited time, so I'm just going to move to Ms. Joseph.

**Prof. James Meadowcroft:** Yes.

**Mr. Dan Albas:** Thank you, Professor.

Ms. Joseph, you mentioned that the advisory board and the people who are put on to that report are going to bring in different views. Right now it's completely at the discretion of just one minister. Do you think that's the right approach? In a country as big as Canada, I would imagine there are lots of qualified people with varied backgrounds, and it would be difficult for any one department or any one minister to know all of the people it should be representing to flesh out Canada's net-zero future.

**The Chair:** You have 20 seconds for a brief response.

**Ms. Shannon Joseph:** I agree that it should not be one minister. In our view the Governor in Council and a diversity of ministers—the industry minister, the finance minister, and the employment minister—should have a role in determining who is at that table.

**The Chair:** Thank you.

Am I correct that it is Mr. Bittle who will be battling cleanup today?

**Mr. Chris Bittle:** I believe so, but if my colleagues want to prove me wrong, they're more than welcome to jump in.

I will start with Dr. Khan. I was wondering if you could respond to the Canadian Association of Petroleum Producers and their suggestion that economic targets need to be baked into this legislation.

**Dr. Sabaa Khan:** If we are to talk about economics in general, I think we can't hide the fact that there's a huge divestment happening from the fossil fuel sector. BlackRock investments, the biggest asset manager in the world, came out with research recently showing that \$15 trillion has been divested from the fossil fuel sector from different portfolios over the last decade. Yes, if we're thinking about economics, we have to face the fact that the fossil fuel sector is in decline.

Fossil fuel companies are investing in renewable energy. Is that out of goodwill, or do they see that decarbonization is inevitable? If we're talking about jobs in the fossil fuel sector, Jim Stanford released a report for Environmental Defence in January 2021 showing that there were about 170,000 jobs directly tied to fossil fuels. Since 2014, 33,000 of those have been lost. Since COVID another 17,500 jobs in the fossil fuel sector have been lost. Is that because of climate policy or because of other fluctuations in the economy? Between 2014 and 2019 for every job lost in the fossil fuel sector, 42 were created in other industries. I think if we're going to talk economics, we should be clear and we should make visible where the jobs are growing, where we're losing them and why we're losing them. As I said before I don't see economy and environment as being separate. The federal budget clearly placed a climate lens at the heart of the economy. We don't think about just GDP. The federal budget placed a well-being quality of life framework to assess what our economy really is. You know there is an expansion happening, and we have to take that into consideration.

• (1725)

**Mr. Chris Bittle:** Mr. Chair, can we pause for a minute? I believe Madame Pausé has a—

**The Chair:** Yes. I just got a message from the clerk as well.

It's about the translation, Madame Pauzé?

[*Translation*]

**Ms. Monique Pauzé:** Yes, that's it exactly.

[*English*]

**The Chair:** Obviously, we will pause here and see if we can get the interpretation back on track.

Is it working now, by any chance? Can some of you hear me in French?

[*Translation*]

Can you hear me in English?

[*English*]

Okay.

Go ahead, Mr. Bittle.

**Mr. Chris Bittle:** I appreciate the answer, Dr. Khan, but with respect to this bill, do you think this is the appropriate legislation to do that in, as the Canadian Association of Petroleum Producers suggests in terms of an—

**Dr. Sabaa Khan:** This is not an innovative bill in the sense that it follows other national climate framework laws. In that respect, I don't see the rationale of including an economic objective. I see net zero as an investment opportunity.

For instance, if we look at the U.K. example, what has an assessment of the first 10 years of the U.K. legislation given us? Well, it's been hugely influential in terms of investment security for the renewables. It has unlocked huge capital investments that needed to be made, because they are carbon budgets that are planned for five years and planned for 10 years. That's visibility, and that is an economic stimulus. That's what we need. That's what is holding Canada back at the moment.

**Mr. Chris Bittle:** I'd ask you to comment again on Ms. Joseph's comments with respect to having many different sector representatives on the panel. I don't know how many dozens of people this

could include. Does there need to be sector-specific individuals, or are other individuals, climate scientists, able to provide insight on how best to advise the government even across different sectors and across the economy?

**Dr. Sabaa Khan:** Again, I have to say that we have to take into consideration the political and legal culture of Canada. A minister never decides on their own that they're going to take this. The statutory duty of the minister should be interpreted in light of our legal culture as well. Even though we're talking about a statutory duty, it's basically about how to steer the cumulative conduct of a wide range of actors in the best way they can.

Really, if you look at other jurisdictions, it's not just a single person sitting at a desk doing this work. In reality, this happens across the board. The minister will be constrained, obviously, because certain powers and financial influence, economic powers, sit in different ministries. It's actually naive to think that this is how the process will play out in practice.

**The Chair:** You're pretty much at the five-minute mark, Mr. Bittle.

**Mr. Chris Bittle:** Thank you so much.

**The Chair:** We have arrived on time. It's 5:29 p.m.

I want to thank the witnesses for a really interesting discussion this afternoon, both this panel and the one before. I want to thank all of the panellists for being here. We do know that it requires a lot of preparation and that a lot of work goes into this. Thank you very much.

Thank you, members, for your stimulating questions. We'll meet again tomorrow afternoon—same time, same channel—and next week we will go into clause-by-clause on the bill, well informed by the testimony we've been hearing.

I'll ask for a motion to adjourn.

● (1730)

**Mr. Dan Albas:** I so move.

**The Chair:** I don't see anyone objecting to that. I will therefore bring the meeting to a close. Thank you.







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