HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

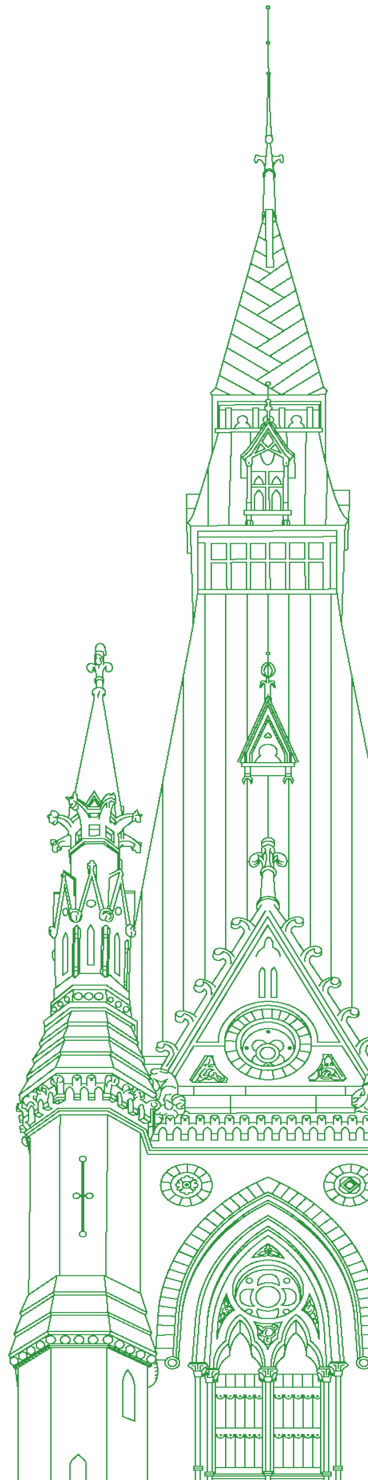
45th PARLIAMENT, 1st SESSION

Standing Committee on Environment and Sustainable Development

EVIDENCE

NUMBER 034

Tuesday, April 21, 2026



Chair: Shannon Miedema

Standing Committee on Environment and Sustainable Development

Tuesday, April 21, 2026

● (1540)

[*English*]

The Chair (Shannon Miedema (Halifax, Lib.)): I call the meeting to order.

This is meeting 34 of the Standing Committee on Environment and Sustainable Development.

For those in person, please remember to follow health and safety guidelines on the cards on the table to prevent audio or feedback incidents.

As a reminder to committee members and witnesses, you don't need to worry about pressing the button on your microphone. It will turn red when you begin to speak.

The clerk has distributed a list of organizations that have requested the blues as per our discussion at the last meeting. It's at the committee's discretion, as we discussed, how narrowly or widely we distribute these blues. The previous chair decided that it should be a narrow distribution, but I'd like us to go to a vote on whether we make the blues more easily accessible and transparent to everyone who requests them.

The motion we are voting on is to give access to the blues upon request. Does anyone have any questions or concerns before we do the vote?

[*Translation*]

Mr. Bonin, you have the floor.

Patrick Bonin (Repentigny, BQ): Thank you, Madam Chair.

I didn't quite understand why this request was made and how it will change anything, given that the transcripts are available. I even wonder if it doesn't give an advantage to certain lobbies, for example, who have more money. We're even talking about artificial intelligence. It's a choice that carries certain risks or brings about some changes, and the justification for it isn't clear to me.

Why make this change at this time?

[*English*]

The Chair: Mr. Clerk.

[*Translation*]

The Clerk of the Committee (Leif-Erik Aune): Thank you, Madam Chair.

Mr. Bonin, it takes about two weeks for the minutes to be published and become available to the general public. However, the blues are available within 48 hours of adjournment. That's why a number of sectors are asking for access. There is nothing to be justified. Rather, each member must decide whether or not to agree to these requests. That's the explanation.

● (1545)

Patrick Bonin: However, the video is available in real time, isn't it?

The Clerk: Yes, absolutely.

Patrick Bonin: Okay.

[*English*]

The Chair: We will take it to a vote.

(Motion agreed to [*See Minutes of Proceedings*])

The Chair: We are going to make that change.

There are two quick announcements before we begin with our witnesses today.

I have sent a letter to the Office of the Parliamentary Budget Officer requesting that the 2023 report on the energy sector and agriculture be updated. The House has not yet ratified a nomination for the appointment of a new Parliamentary Budget Officer, but the committee's request will promptly be brought to the attention of the Parliamentary Budget Officer once an appointment is made.

The next announcement is further to the motion adopted by this committee on April 14. Other committees have requested that the Major Projects Office and Dawn Farrell appear before them on April 28. This is not within our control, but we are working to schedule Ms. Farrell in. We are currently looking at the meeting on the 28th being on fresh water, because no one was available on the 28th. Then we hope that the meetings on the 30th and May 5 work for ECCC, the Secretary of State for Nature, the Parks Canada Agency, Ms. Farrell, Simon Donner and Catherine Abreu.

The clerk has been hard at work, trying to get all of those fit in on the 30th and May 5, but it's still a bit of a question mark. If we have to go out another week to schedule them in, we will, but we should get a final confirmation tomorrow. We will share that with the committee once we do.

I'd like to welcome the witnesses we have here today.

In person, we have Caroline Brouillette, the executive director of Climate Action Network Canada. Online, we have Jim Keating, the chief executive officer of the Oil and Gas Corporation of Newfoundland and Labrador.

Witnesses, you will each have five minutes to provide opening remarks, and then we will go to questions from committee members. I have a little timer to give you a one-minute notice. When your time is up, please finish as quickly as possible.

Madame Brouillette, we will begin with you. The floor is yours.

[*Translation*]

Caroline Brouillette (Executive Director, Climate Action Network Canada): Members of the committee, thank you for having me.

I represent Climate Action Network Canada, which brings together nearly 200 unions, development groups, faith groups, indigenous groups and the country's leading environmental organizations working together on climate change.

Climate Action Network Canada and its members have been working for years to ensure that the biggest polluters in the Canadian economy are held accountable and pay the costs they are imposing on society as a whole.

[*English*]

Canada's latest national inventory report, which was published last week, makes clear that climate progress has stalled. Oil and gas emissions continue to rise, while other sectors like electricity are decreasing their impact. Since key measures have been weakened, paused or set aside during the past year, progress towards the 2030 and 2035 targets as well as the net-zero by 2050 commitment will now depend even more on the strength and credibility of Canada's industrial carbon pricing, as will our ability to maintain competitiveness in a global economy that is rapidly accelerating the adoption of net-zero technologies. This matters. It matters for Canadian workers, consumers and industries, especially given the complex times that we find ourselves in.

It's been quite troubling to note that some witnesses to this committee have failed to understand how industrial carbon-pricing systems work or have amplified common misinformation. Industrial carbon pricing does not increase household costs. Unlike the consumer carbon levy, industrial pricing does not affect the price of fuel used by households and has very little pass-through to other household purchases or services.

Analysis by the Canadian Climate Institute shows that the impact of the industrial carbon price on the average household out to 2030 is negligible. The policy, likewise, has minimal impact on the agricultural sector. This marginal impact, however, is completely overshadowed by the far more significant effect of inflation driven by war, by climate change and by the Canadian economy's over-dependence on fossil fuels, whether as consumer or producer. The surge in global prices following Russia's invasion of Ukraine as well as the shock caused by the U.S. and Israeli war on Iran illustrate the consequences of this over-dependence.

As climate change accelerates, food prices are increasingly being affected by extreme weather events, drought and unfavourable growing conditions. All of these have inflationary impacts on Canadians. For instance, the Centre for Future Work has found that from 2022 to 2024, the cumulative direct and indirect costs caused by fossil fuel-driven inflation totalled roughly $12,000 of inflation per household.

Despite all of this evidence, in its efforts to eviscerate climate policy in this country, the oil and gas industry and its supporters have been promoting the idea that the trajectory of industrial carbon pricing will lead to an additional $20 per barrel in 2030. The Canadian Climate Institute has calculated the real compliance cost from oil sands facilities, using data published by Alberta; and they find the effective average cost, across all facilities, comes closer to 50¢ per barrel in 2030.

If fuel prices remain at current levels, Canadian oil and gas companies are projected to rake in profits of $90 billion from the Iran war. I am sincerely struggling to find words to respond to the suggestion that they can't afford to pay the cost of a Timbit per barrel.

● (1550)

[*Translation*]

It's been nearly one year since the new government was elected, and Climate Action Network Canada and its members are getting impatient to see the Carney administration show its cards and implement this policy. It's high time that the government showed its resolve to the many voters who cast a vote of confidence based on the Prime Minister's climate credibility and are wondering what happened to that enthusiasm.

At this point, the network and its members are ready for our industrial carbon pricing system to finally be updated. We're waiting for you.

Thank you very much.

I will be pleased to answer your questions.

[*English*]

The Chair: Thank you so much.

We will now go to Mr. Keating, online, for five minutes.

The floor is yours.

Jim Keating (Chief Executive Officer, Oil and Gas Corporation of Newfoundland and Labrador): Thank you for your kind invitation.

As the CEO of a Crown corporation, I sit in a magic spot between the investor—one who participates on a commercial basis in this industry—and on the other side, I represent the people, the government. I look for maximum economic rent extraction, and hope to strike a balance for the benefit of the sector and those within it.

What brings me here is to note that it's very striking that across the global competitive landscape—

[*Translation*]

Patrick Bonin: I'm sorry to interrupt you, Mr. Keating.

Madam Chair, there's a problem with the interpreting. I'm hearing two voices at the same time on the French interpretation channel.

[*English*]

The Chair: We'll pause for just a moment, Mr. Keating.

You can now go ahead.

● (1555)

Jim Keating: What's striking is that in this globally competitive landscape for offshore exploration investment, Canada, and specifically Newfoundland and Labrador—and soon, I hope, Nova Scotia, with its licensing rounds—stand almost alone in applying a carbon price to a resource that we collectively and overwhelmingly export and rely on for economic security.

If we look at our comparators, we find only a narrow subset of OECD countries—Norway, the U.K. and Australia—in a similar situation, but this comparison quickly breaks down. The U.K. has effectively stepped away from exploration. It's no longer a meaningful competitor. Also, an Australian system introduced recently, in 2023, is largely oriented towards LNG and natural gas. Meanwhile, jurisdictions that are the most active and most successful in attracting offshore oil exploration—the United States, Guyana, Suriname, Brazil, Namibia, Malaysia, India, and Indonesia—apply no carbon price at all.

The question becomes, how do we remain competitive in that environment?

To answer that, it's worth looking a little more closely at Norway. If you want to understand effective energy policy, Norway is one of the few places to study it seriously. It is not perfect, by any means, but it has built a durable model, one that maximizes the long-term value of its natural resources while maintaining strong environmental and societal support. It is a model that Canada should be learning from, not ignoring.

Norway's carbon pricing system is particularly relevant because it applies directly to upstream oil and gas, as it does here. Norway uses two overlapping mechanisms: a CO2 tax in place since 1991 and participation in the EU emissions trading system. These apply directly to offshore fuel, combustion flaring, diesel use, gas turbines and so on and are charged on the per tonne basis of CO2 emitted. The resulting cost is amongst the highest in the world, often in the range of $80 to $150 U.S. per tonne, but here's a crucial point: These costs are treated as operating expenses and are deductible within Norway's petroleum system. With a marginal tax rate of 78%, the state effectively shares a large part of that carbon cost.

Yes, the carbon price was real and significant, but so was the fiscal offset. The result is that Norwegian producers face a meaningful and predictable carbon cost, particularly in operations, but within a system that has been deliberately designed to preserve investment attractiveness.

At first glance, Norway appears contradictory: high carbon prices alongside strong exploration activity. By comparison, Norway had 50 exploration wells last year offshore and Canada had zero, but this is not by accident. It is by design. Norway operates two parallel policy tracks serving different objectives. It seeks to de-risk the front end on investment, but discipline the back end on operations.

With regard to the front end, Norway aggressively reduces exploration risks with 78% marginal tax paired with refunds of approximately 78% of exploration costs, with the immediate expensing and investing of incentives. If a well is dry, companies recover most of those costs. If it's successful, of course, they retain a meaningful upside. Critically, new entrants, even those with no taxable income in Norway, receive cash refunds from the government in the next fiscal year. This dramatically lowers the risk-adjusted cost of exploration and keeps drilling activity strong, even for smaller players.

In the back end, once production begins, the system now tightens. Hydrocarbon pricing applies to all oil production, from the very first tonne. A combined CO2 tax and EU ETS exposure provides strong incentives for electrification, efficiency and low-emissions design. In other words, Norway does not discourage exploration—it shapes it.

Carbon pricing does not suppress investment. It disciplines how projects are developed and operated. It creates a culture of investment in Norway. The result is that Norway continues to attract significant exploration investments, not despite its carbon pricing system, but alongside it, because the exploration risk is materially reduced.

The carbon regime is predictable and fully integrated into project economics, and the overall fiscal system delivers competitive, risk-adjusted returns. High carbon prices alone would deter investment, but Norway does not rely on carbon pricing alone. It deploys a complete and balanced system.

Canada, by contrast, appears largely indifferent to investment attraction. Our approach is fragmented. We focus heavily on regulating and taxing existing production, the back end of the value chain, while paying insufficient attention to the front end.

● (1600)

Thank you.

The Chair: Thank you very much, Mr. Keating.

We will now go to questions from committee members.

We will begin with Ms. Anstey for six minutes.

Carol Anstey (Long Range Mountains, CPC): Thank you, Mr. Keating, for the great work you do for Newfoundland and Labrador and for appearing again on this committee for this important discussion.

I just want to dig into some of the points you've raised. Most importantly, we've just struck a deal on the offshore. It's a milestone agreement with Equinor and BP to advance the Bay du Nord project. This would be Equinor's very first operatorship offshore of Canada and BP's first production.

I want to frame this question with respect to where we've been over the last number of years and where we are now. How important are new international investors to Newfoundland and Labrador's offshore?

Jim Keating: New investors are paramount. We are not like western Canada where largely all good acreage is taken and subscribed. We are only 7% or 8% subscribed in terms of the available offshore licensed area. We very much depend on the entry of new companies like Equinor and BP to make sure our industry continues and flourishes.

Carol Anstey: Just for a more fulsome picture of that for the benefit of the committee, can you describe where we've been from an investment perspective in the province of Newfoundland and Labrador on our offshore over the last number of years, when you've gone out for rounds of investment?

Jim Keating: We have a tale of two solitudes. Between 2013 and 2018, we had a fairly significant level of interest. We had over 14 companies bid over $4 billion of work commitments in over 20 exploration licences. Unfortunately, COVID-induced and compounded by a subsequent layering of regulatory policy and uncertainty, in the last three years we have received zero bids for the first time in our 50-year history and zero exploration wells for the first time in our 50-year history.

Carol Anstey: What does that mean for the province of Newfoundland and Labrador when these sorts of things happen in an economic environment that's extremely dependent on this industry?

Jim Keating: Oil and gas are the lifeblood of all industries. It's been 23% to 26% of GDP on average in the last several years, and almost the same amount for basic government revenue. It is larger than the next six industrial sectors combined. As it goes, the province goes.

With great excitement, we built expectations on this new project called Bay du Nord, but there is much more out there. There are many more projects like Bay du Nord just waiting to be discovered. It's my job, of course, to make sure that happens.

Carol Anstey: That's a great segue to my next question.

When you're looking for this investment and when these investors are looking at our industry and at Canada, how do they encounter this price on carbon? You've talked about other countries. Can you just expand on that a little bit?

Jim Keating: We're very much an outlier. For the first instance, we have to kind of characterize that. Those who are familiar with Norway will kind of quickly understand that this is part of another economic rent. Unlike Norway, like I said, there's no equal and opposite offset to balance that risk, so it simply has to be modelled. What they don't understand and don't appreciate are the nuances and the complexity in the systems that exist here in Canada, so they end up modelling the worst-case outcome. It's not 50 cents as I've heard before, but it may go as high as two dollars to $2.50. On a $60 barrel, when $45 is your target price, that starts to become meaningful.

● (1605)

Carol Anstey: Would you agree that it's not just the price, but it's also the complexity?

Jim Keating: Very much so. The complexity is of great concern. This is a program in Canada that was first discussed in 2017, initiated in 2019, reviewed in 2022 and modified again in 2023. Now we're talking about it today in 2026 with more discussions to be had in 2027 and 2028. It's a constantly moving target and topic. It is more than an irritant; it is something that needs to be managed.

When we have had no investment and no activity, that's just one further obstacle in our way.

Carol Anstey: For the benefit of people who may not understand the offshore industry, can you explain how the complexities and time frames really impact this industry uniquely when we're talking about the development?

Jim Keating: Our offshore oil projects are almost as long-life as the oil sands: 25- to 30-year trajectories are common. Companies must model that and understand what their trade-offs are. With the carbon pricing mechanism, you have an escalating price per tonne, but you also have a diminishing floor, a cap to which this tax is not applied, so they are divergent. Unfortunately, as the oil projects age, the emissions intensity worsens over time. That adds a level of complexity that needs to be reckoned with.

The Chair: Thank you very much.

We will now move to Mr. Grant for six minutes.

Wade Grant (Vancouver Quadra, Lib.): Thank you very much, Madam Chair.

Thank you to the witnesses for being here.

It's a pleasure to see you again, Ms. Brouillette. I want to touch on the letter that the Climate Action Network jointly signed to the Prime Minister earlier this year, in March.

The industrial carbon pricing is “widely agreed to be the most efficient road to industrial decarbonization”. Can you explain to the committee what is meant by “efficient”?

Caroline Brouillette: A group of CAN-Rac member organizations, including the David Suzuki Foundation, the Pembina Institute, West Coast Environmental Law, the Conservation Council of New Brunswick and the International Institute for Sustainable Development recently submitted a letter to the committee with our recommendations.

It's been modelled that industrial carbon pricing could be the tool in our policy tool box right now that drives the largest share of emissions reductions in Canada, which is why we're very impatient to see the government move forward with it.

The efficiency argument is also from an economic perspective in terms of the marginal cost of reductions happening first. That's what we mean by efficiency, that investors and companies will be investing first in those emissions that are lower cost and increasing the investments in those that are higher over time.

Wade Grant: There's a concern we often hear that pricing industrial emissions in Canada pushes production and investment to countries where there's no carbon price without actually reducing global emissions.

Can you walk the committee through why a well-designed output-based system like OBPS addresses that concern?

Caroline Brouillette: The first thing to keep in mind is that the world is increasingly shifting to electric and zero-emissions-based technologies. For our industries, our workers and our markets to remain competitive, we have to make sure that our economy is incentivized to move into those sectors, which is where the world is moving.

The second thing is that major jurisdictions, including markets like the European Union and China, which Canada is seeking to diversify to, especially in this context, as we're seeking to loosen our dependence on exports to the United States, have policies in place that either take into account emissions, like the EU's upcoming carbon border adjustment mechanism, or have pricing mechanisms in place.

There are approximately 14 individual countries, excluding the EU's original system, that have emissions trading systems that are comparable to Canada's OBPS. If we want to compete, it's really important that the government incentivize our industries to reduce emissions.

● (1610)

Wade Grant: How does industrial carbon pricing support investment certainty for clean energy and decarbonization projects in the country?

Caroline Brouillette: An industrial carbon price basically forces companies to internalize the cost of their pollution. It's a polluter pay mechanism.

Right now, these sectors, in particular the largest polluting sectors of the Canadian economy, namely the oil and gas sector, which accounts for over a third of our national emissions, often are not fully paying the social cost of carbon that is imposed on Canadians and on the world. Forcing these companies to price that out in their investments will mean that they will prioritize technologies that are less polluting over time. If we look at the bigger macro picture, the Canadian economy and specific sectors of the economy will grow where there are less emissions and where there is compatibility with not only that competitive outlook we were describing earlier, but also in terms of a healthy environment, which is better for people and the planet.

Wade Grant: Can you speak further to what it would cost the industry and Canada's competitive position if we didn't have industrial carbon pricing?

Caroline Brouillette: I don't have that data with me, but I would be happy to submit it in writing.

Wade Grant: I'll go back to the OBPS then. How does the way the OBPS is structured help keep production here while still creating an incentive to reduce emissions?

The Chair: Give a short answer, please.

Caroline Brouillette: It ensures that our products and our industries invest in sectors of the economy where emissions are progressively reducing so that we can compete in a global market that's shifting towards net zero.

Wade Grant: Thank you.

The Chair: Thank you very much, Mr. Grant.

[*Translation*]

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

Patrick Bonin: Thank you, Madam Chair.

Earlier, we talked about the Bay du Nord project.

Ms. Brouillette, do you think it's normal for the government to want to strengthen industrial carbon pricing while continuing to support the Bay du Nord project, for example?

He talked about giving $1 billion to the oil company. So he wants to give the oil and gas sector $1 billion in subsidies.

Do you think that makes sense?

Caroline Brouillette: No.

Patrick Bonin: Okay.

If I understand correctly, you're proposing that there be carbon pricing, but that fossil fuel subsidies be eliminated.

Is that correct?

Caroline Brouillette: Climate Action Network Canada and its members have very emphatically requested that fossil fuel subsidies be reduced and eliminated.

The climate crisis is caused by the burning of oil and gas. It's good to invest in new sectors and provide incentives to oil and gas or other sectors to gradually reduce their emissions. However, we also have to stop encouraging investments to increase oil and gas production through other incentives, such as fossil fuel subsidies.

The first step is to stop increasing production, and this kind of subsidy unfortunately does the exact opposite.

Patrick Bonin: Today in The Globe and Mail, there was an article stating that Alberta and the federal government have agreed to withdraw the greenhouse gas emissions cap for the oil and gas sectors. It also talks about a proposed project to expand Trans Mountain by 300,000 barrels a day, a new pipeline that could carry a million barrels a day. Meanwhile, the government says it wants to strengthen carbon pricing and give billions of dollars to oil and gas companies for carbon sequestration.

In your opinion, is this agreement between the government and Alberta a responsible approach to the climate crisis?

Caroline Brouillette: Personally, I'm very concerned, first of all, to see that the April 1 deadline wasn't met. As for Alberta, we found that it didn't commit to certain key elements of the climate policy that was laid out in that well-known memorandum.

I am all the more concerned to hear about possible public investments in new pipelines, especially when we recall the financial disaster that investing taxpayers' money in the Trans Mountain pipeline turned out to be. Are we really going to continue to play this game in 2026? I think that's very concerning.

● (1615)

Patrick Bonin: You mentioned that the oil and gas companies are making an estimated $90 billion in profits right now.

How much of those profits can be attributed to the war in Iran, for example, compared to what we would normally see?

Caroline Brouillette: If current fuel prices had stayed the same prior to the war, profits were expected to reach about $30 billion. They've tripled to almost $90 billion because of the devastating war in Iran.

A number of members of Climate Action Network Canada are emphasizing how important it is that the government tax this excess profit and reinvest it in measures to help Canadians who have to deal with rising energy prices.

Higher energy prices have a direct impact on their wallets, whether it's the price of gas or the price of heating. It's very important to think about how to address this unfair situation and to describe what's really happening right now. People talk about putting the fuel tax on hold, but they don't address the issue of those who are benefiting from this situation.

Patrick Bonin: From what I understand, you're saying that companies can afford to pay for industrial carbon pricing, among other things.

Caroline Brouillette: When I see that profits are going to be as high as $90 billion and that, until 2030, industrial carbon pricing would cost the equivalent of a Timbit doughnut per barrel of oil, I find it hard to believe the argument that the industry can't afford it.

Patrick Bonin: Okay.

You mentioned a letter that you sent to the committee.

What are your key recommendations to really strengthen industrial carbon pricing?

Caroline Brouillette: One point was raised earlier about the importance of maintaining policy certainty. They also talked about how important this has been in Norway to attract investment.

Our recommendations are as follows.

We have to make sure that the minimum price is high and that it gradually increases.

We also need to determine a credible trajectory beyond 2030. Right now, we know that in 2030, it should be $170 per tonne. What's going to happen between now and 2050? It's important to have certainty on that.

[*English*]

We also need to restore a level playing field across jurisdictions. The federal government must implement the federal backstop in provincial jurisdictions. Right now, it's not doing that.

We need to ensure that the effective price signal is not undermined by loopholes that permit offsets in emissions reduction accounts.

Finally, improving the transparency and durability of the carbon price signal is key.

The Chair: Thank you.

We will return to Ms. Anstey for five minutes.

Carol Anstey: Thank you, Chair.

Mr. Keating, I want to pick up on the conversation we were just having.

We often hear about the profits in the oil and gas companies, but we don't often talk about the royalties to provinces.

Can you explain, for the benefit of the committee, what the impact is on the Province of Newfoundland and Labrador, in terms of offshore sector royalties that get paid to the province?

Jim Keating: Certainly.

The fiscal system in Newfoundland and Labrador's offshore is fairly consistent among all the projects. It's a progressive royalty system, which means it grows over time as profitability increases. At any particular time, between 20% and 45% of every profit dollar flows through to the province.

This generally means that in 2025, there could have been in the order of about $2 billion in gross royalties from other forms of economic rent. For a province of half a million people, that's a pretty significant component. As I mentioned, it's almost 25% of the total governmental revenue.

● (1620)

Carol Anstey: Thank you so much.

This carbon pricing was implemented in 2019. For the benefit of the committee, are there specific cases where projects were delayed or scaled back due to the system?

Jim Keating: I can't specifically say, with respect to this particular component.

I could say with some degree of confidence that the emissions cap policy probably bears more scrutiny with regard to, particularly, investment at the exploration phase. As I've said before this committee in the past, investors didn't see any opportunity for new projects so long as the emissions cap policy, as discussed, was in place.

Carol Anstey: Quickly, since you brought it up, do you have some concerns about the Alberta MOU based on the comment you just made?

Jim Keating: Yes. The fact that it's not been resolved....

Actually, I should back up a bit.

I was very pleased to see that a grand bargain, so to speak, was struck. In my mind, we struck one in 2019 when we adopted an analog for the carbon price regime here for the offshore. I stood in front of rooms of 500 or 600 people in London and Houston and basically proclaimed that our emissions cap concern was largely being alleviated by virtue of this MOU, as it was communicated and as I understood it. Now I'm somewhat concerned that I don't see it formally resolved yet, and that it's still lingering.

For Newfoundland and Labrador offshore, I'd say that, on a scale of magnitude, the emissions cap is far more harmful to investment than, for example, its carbon pricing mechanism.

Carol Anstey: Thank you.

Something else that was recently mentioned was carbon leakage. It was brought up earlier.

Being that you are a person who is acutely in tune with the investment climate, especially around offshore development in Newfoundland and Labrador, I want to know what your thoughts are with respect to carbon leakage and the risk that we run of investment going to other jurisdictions that don't have policies that are as tight.

Jim Keating: First and foremost, in terms of leakage from a practical, physical way and as a practical cross-jurisdictional perspective, they're both the same in terms of how our regime adequately protects ourselves from leakage, particularly in the upstream emissions category.

We look at each project on an individual basis as we set our benchmarks. We, again, provide for the particularities of those projects in a way that is meaningful for the operators to actively manage and reduce their carbon. In terms of leakage from a financial or geographical point of view, we're well managed by our system. As a practical matter, in terms of even fugitive leakage and emissions, an offshore platform can't provide for it. We don't see it. We don't have it. It's monitored 24-7.

Whether you're talking leakage practically or fiscally, I think our system is a robust one.

Carol Anstey: I'm talking more about the production of oil going elsewhere.

Jim Keating: The investment is clear to me.... Right now, as I mentioned at the upfront, Guyana is attracting 60 billion dollars' worth of investment from international oil and gas companies. That's within the last five-year time frame, in which I said we had zero. Guyana had no active production in 2013 to 2015 when we were at our highest results from our licence rounds.

This has been a complete upside down—

The Chair: Thank you, Mr. Keating. Time is up for this question.

We are now going to go to Mr. Greaves online for five minutes, please.

Will Greaves (Victoria, Lib.): Thank you, Madam Chair.

Good afternoon, colleagues.

Thank you to the witnesses for joining us today. My first question is for Madame Brouillette.

Thank you very much for your testimony. I very much appreciated how you spoke to the fact that the design of Canada's industrial carbon price is often misunderstood and sometimes perhaps wilfully misrepresented. I'm wondering if we could delve into one aspect of how output-based pricing operates in terms of providing funds back to the provinces of origin in order to fund decarbonization and green efforts.

Could you speak to how important a funding stream that provides to municipalities and provinces, as far as funding necessary investments in green and sustainable infrastructure is concerned?

● (1625)

Caroline Brouillette: The first piece here to mention is that it's a federal policy, so there's a federal backstop. Provinces decide if they either take on their own system and comply with that federal backstop, or implement it according to their own policy design and circumstances.

The thing I'd like to mention here is that the backstop relies wholly on ministerial discretion, and it's unclear under which circumstances, if any, it's being implemented. If we want to make sure that we're seeing this revenue being directed to green projects but also alleviating consumer costs of energy—as we're facing right now—that backstop being implemented more thoroughly and systematically would be very important.

Will Greaves: Thank you for that.

Would it be fair to say that this is an important source of funding for those provinces and territories where the federal backstop does apply—that this is a valuable, necessary source of revenue for communities?

Caroline Brouillette: Yes. I wish I had the numbers to tell you more about it, but I don't. Again, I'm happy to submit that in writing.

Will Greaves: Okay. Thank you for that.

I want to turn to the global level—you spoke to this in your comments as well, Madame Brouillette—in terms of what the potential implications for Canada are of missing the global market transition toward cleaner energy and lower emissions.

In your view, is there another policy lever available to the federal government that could achieve the same scale of emissions reductions as output-based pricing?

Caroline Brouillette: I think the main policy tool that has been discussed is the emissions cap. The government has decided to move with the OBPS as the most potent tool for emissions reductions.

That said, we need to make sure, given that we're not going ahead, unfortunately, with the oil and gas emissions cap, that the current industrial pricing system is made a lot more robust in order to be able to deliver reductions comparable to those resulting from existing weak systems and the cap, and also to ensure that industrial carbon pricing is not the only policy tool we're deploying. Methane regulations are extremely important, especially for the oil and gas sector. Strong equivalency agreements with provinces who want their own regulations will also be really important.

Will Greaves: I appreciate your pointing out that there are multiple tools and policies that the government has in effect to try to address Canada's emissions. Perhaps to reframe the question, do you think it would be a strategic risk for Canada, in terms of achieving both our economic and environmental goals, to move away from a national industrial carbon pricing system?

Caroline Brouillette: Yes.

Will Greaves: What would be the risks to Canada or Canadian investments of not keeping this policy?

Caroline Brouillette: It would be incredibly risky. It would further entrench us in a North American fossil fuel economy, which seems to be the desire of President Trump in terms of the geopolitics that are happening right now.

Other countries and jurisdictions in the world, as I said earlier, are moving very fast to adopt and accelerate their adoption of electric-based technology. The war on Iran has increased that. Whether we're looking at France, China, Korea or India, those are markets that account for a very large share of the global population. We don't want to wake up in a couple of years and realize that we have invested in sectors that are not competitive in a net-zero economy.

The Chair: Thank you very much, Mr. Greaves.

[*Translation*]

I will now turn over the floor to Mr. Bonin for two and a half minutes.

Patrick Bonin: Thank you, Mr. Chair.

Ms. Brouillette, we've seen the government backtrack a number of times, at least 20 times in the past year, in terms of combatting climate change.

Do you think Canada is currently on the right track to meet its climate commitments?

Caroline Brouillette: The data is clear. The national inventory report published last week by the United Nations Framework Convention on Climate Change shows that, right now, progress has stopped. That data was collected in 2024, before all the backtracking you mentioned. Because of that, unfortunately we clearly won't meet our 2030 target.

The question now is, do we need to accelerate to meet our 2035 targets and do we need to get on track to achieve net zero by 2050?

● (1630)

Patrick Bonin: Would weakening industrial carbon pricing further jeopardize the achievement of these targets?

Caroline Brouillette: Absolutely.

However, the government says that it's the main tool that will be deployed to reduce greenhouse gas emissions in Canada. We must therefore ensure that it will be done and updated robustly and credibly by 2030, 2035 and 2050.

Isn't that right?

Patrick Bonin: This past fall in Alberta, we saw the price of carbon credits in the pricing system fall. They even went down to as low as $25 per tonne. However, the federal government did nothing. It didn't step in to ensure strong enough equivalency in Alberta.

Do you think that's acceptable?

Would you like the government to have a real carbon pricing policy to force recalcitrant provinces to put a fairly high minimum price on carbon?

Caroline Brouillette: This is an important issue, especially when it comes to shared federal and provincial jurisdictions.

Right now, as I was saying earlier, the federal government is failing to ensure that the provinces put an effective price on carbon for industry.

In addition, we must ensure that the federal system is regulated. That's what some of our members, like Ecojustice and West Coast Environmental Law, are suggesting.

The provinces have to trust that the government is going to put in place a federal backstop if they don't meet the criteria. As you described in the case of Alberta, the federal government made no move whatsoever to step in. Federal policy is ineffective in such circumstances.

[*English*]

The Chair: Thank you very much.

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

Ellis Ross (Skeena—Bulkley Valley, CPC): Thank you, Madam Chair.

Thank you, Mr. Keating, for coming here and being a witness.

We're in a different area here. We're at a crossroads. It's been quite a while since I've actually talked about this in terms of global trade, economics and geopolitics. Canada has the ambition of becoming an energy superpower, but not really mentioning how. Right now, we're celebrating the fact that there will be more oil being sent to the United States in a pipeline. We sell them the majority of our oil already.

Energy Newfoundland and Labrador said that the proposed oil and gas emissions cap would have a chilling effect on investment decisions. Could you elaborate on how industrial carbon pricing and measures like the emission caps are affecting the economic investment outlook and long-term viability of offshore energy production in Newfoundland and Labrador? Just for a little bit of context, I had the same issue in Kitimat, B.C., with a $40-billion LNG project, which is basically under the same umbrella and under the same conditions.

Jim Keating: Certainly.

Again, I'm going to separate the two, although they are common in that they are climate-focused policies. The emissions cap is indeed the investment killer. I said this in a conference here last year. It's simply because, as was presented, when you model it, there is simply no room for any other project beyond the Bay du Nord project, which was just advanced by the provincial government and the energy companies a few months ago. It is a non-starter for the industry. We just manage the decline of the existing fields. That's not going to bring us to the realities of this current energy security-driven world by any stretch. It would certainly show that Canada is not investable by any means.

The price on carbon is something that can be meaningful and can motivate and can drive more efficient and better performance and behaviour amongst investors. My point in raising the Norwegian example is that right now in the upstream, maybe 98% of the world's production is not subject to a direct carbon tax as it is in Norway. That would include our humble offshore stuff, as well as what you see in the U.K. and Australia. That's a vast competitive gap. My concern, though, is that if you're going to install a policy like this, which is meant to stoke a behaviour in an investor and which I agree with fundamentally, you should also look at the front end and drive investment in those critical industries that the world is screaming out for. Otherwise, if we fail in that, the investment and its emissions will simply go elsewhere.

● (1635)

Ellis Ross: Thank you. I agree. In fact, what's happening in B.C. right now with LNG Canada is that the lead proponent, Shell, is actually looking for a buyer for three-quarters of its stake in LNG Canada, which is a $40-billion investment, the largest private investment in Canadian history. Mitsubishi is actually looking for buyers for its 15% stake. Both companies are saying it's to rebalance their risk profile, meaning Canada is too risky.

There are a lot more jurisdictions that don't have these regulations and legislation in place, and they're going to do a lot better. I mean, look at Russia. They're selling more oil and more gas, as is Venezuela. It seems to me we're pricing ourselves out with these new geopolitics and new geo-energy politics that we're facing. In fact, phase two of LNG Canada is still up in the air. We're not sure if it's Canada or if it's B.C. actually holding back phase two in terms of emissions, or even carbon pricing for that matter.

In the midst of all this, I assume that you have some type of approval process in place, maybe a preferred one. Does the Major Projects Office have anything to do with the projects happening in Labrador and Newfoundland?

Jim Keating: At this point, no, the Major Projects Office is not engaged in the Bay du Nord project. Will it be in the future? I don't know. It's a decision of the proponents.

What's clear about that particular project is that it will have an output of emissions between six to 10 kilograms per barrel—among the lowest in the world, inclusive of Norway. How can you deny these barrels and many more like it from Canada? Of course, natural gas from the west coast is transition fuel. Why would we seek to burden, obstruct, delay and obfuscate those great projects when as much as 20% or 25% of oil and gas is now being constrained in the Strait of Hormuz, for example? It makes no sense.

The Chair: Thank you, Mr. Keating.

Thank you, Mr. Ross.

We're on the last round of questions.

[*Translation*]

Mr. St-Pierre, you have the floor for five minutes.

Eric St-Pierre (Honoré-Mercier, Lib.): Thank you.

[*English*]

Mr. Keating, very quickly, did you say that the emissions cap was more harmful than the industrial carbon price?

Jim Keating: Yes, by multiple orders of magnitude.

Eric St-Pierre: Okay. Thank you.

[*Translation*]

Ms. Brouillette, thank you for being with us. I also commend you for getting involved. I think this is the second time we've seen you at this committee. Thank you for the work you're doing for Canadians and for all of your members.

I think Climate Action Network Canada has about 200 members, as you mentioned. You also represent a lot of Canadians.

What are you hearing about carbon pricing, not only from your members on the ground, but also from Canadians?

Caroline Brouillette: Thank you.

Let me first clarify that the oil and gas emissions cap was never put in place. It's important to say that.

Our members tell us that many people are impatiently waiting for the review of the carbon pricing system for Canadian industry. We saw that this was really a central issue in the government's platform during the election.

There's been no progress for nearly a year now. The very powerful and rich lobbies in the oil and gas sector argue that any cost imposed on their sector is too much, even when oil and gas prices are high.

Right now, we need the government to be firm and update this system. Otherwise, we're going to be thrown off our climate trajectory.

● (1640)

Eric St-Pierre: Thank you.

My colleague referred to a letter that was sent.

Are there any reports from Climate Action Network Canada or any of your 200 members that could be referred to the committee for our study?

Can you send us reports on industrial carbon pricing?

Caroline Brouillette: I will make sure that letter is sent to you again. We also submitted it as a background document for the committee.

As I was saying earlier, in this letter, we present our five recommendations to ensure an effective review of industrial carbon pricing. It also provides long-term certainty, which is absolutely essential if we want to be on track to net zero.

Eric St-Pierre: Climate Action Network Canada also has a strong international presence.

Can you tell us how many other countries have industrial carbon pricing systems in place?

Caroline Brouillette: There are 14 or so, plus the entire European Union. They have set up trading systems that are comparable to industrial carbon pricing.

Many more countries have put a price on carbon for industry in a different way, including Germany, Austria, Montenegro, Australia and Kazakhstan.

It's important to mention that these countries are doing very well economically. In fact, most of the countries with the greatest economic growth have cap and trade systems, including Indonesia, China, Mexico and many others.

Eric St-Pierre: Often, when we listen to the Conservatives, we get the impression that those economies are going to collapse.

Do you think those economies are thriving because of industrial carbon pricing?

Caroline Brouillette: Generally speaking, there is tons of empirical evidence to show that policy, including carbon pricing, has a negligible impact on the economy.

Not only does policy not hinder growth, it spurs it on. We're seeing that in Europe in particular. In 2023, a major study was published in a prestigious U.S. journal in the macroeconomics sector. It said:

[*English*]

> We find no evidence for a negative impact on employment or GDP growth but rather find a zero to modest positive impact.

[*Translation*]

Eric St-Pierre: Almost every day in the House, we hear Conservatives say that industrial carbon pricing will drive up the cost of groceries.

Could you talk for 30 seconds about the impact of carbon pricing on the price of groceries and all essentials?

Caroline Brouillette: As I said in my speech, a very small portion of the cost to industry is passed on to consumers. The Canadian Climate Institute has modelled the effect on Canadian households. It concluded that, on the current trajectory, which leads to a price of $170 per tonne in 2030, the effect on consumer prices would be equivalent to a 0.1% reduction in 2030. Obviously, that's an average.

[*English*]

The Chair: Thank you very much.

I'd like to thank the witnesses for their time today.

[*Translation*]

Thank you, Ms. Brouillette.

[*English*]

Thank you very much, Mr. Keating.

You are now free to go.

We will suspend briefly while we switch over and get our next set of witnesses.

● (1640)

_____________________(Pause)_____________________

● (1645)

The Chair: We'll get back to continuing our study of industrial carbon pricing.

Welcome, witnesses. Thank you so much for spending some time with us this afternoon.

We have three witnesses for this hour: Jennifer Winter, professor, from the University of Calgary, who is online; Adam Auer, president and chief executive officer of the Cement Association of Canada, who is here with us in person; and Thomas Green, senior manager of climate solutions with the David Suzuki Foundation, who is online.

Welcome. You will each have five minutes to present your opening statements. Then we will go to questions by committee members.

We will start with Ms. Winter for five minutes.

The floor is yours.

● (1650)

Jennifer Winter (Professor, University of Calgary, As an Individual): Thank you, and good afternoon.

Thank you for inviting me to appear before the committee on this very important issue. It is a privilege to speak to you today.

I'm a professor in the Department of Economics and the School of Public Policy at the University of Calgary. My comments are based on my expertise as a researcher on carbon pricing issues and climate policy design.

Canada faces a challenge in reducing emissions and simultaneously protecting the quality of life and economic growth that we enjoy. Adaptation to and mitigation of climate change is a complex problem, and addressing it deserves careful evaluation of policy options. We are also facing unprecedented global uncertainty and numerous economic shocks, which place new constraints on feasible policy actions. My comments today reflect both my support for emissions reductions and my desire to see careful climate policy design that maximizes benefits and minimizes costs to Canadians.

I will make two points today.

First, Canada's existing industrial emissions pricing systems, the federal OBPS and those put in place by provincial and territorial governments, are designed to incentivize emissions reductions and protect competitiveness. The systems achieve these two objectives by pricing emissions, an economic bad, and subsidizing output, an economic good. Subsidizing output reduces the cost of compliance for regulated firms and maintains domestic and international competitiveness. All of these systems are designed to increase stringency over time as the need to protect competitiveness decreases with more global action to reduce emissions.

An additional benefit of protecting competitiveness is that it also mitigates the cost effects on households and businesses. My research, and that of my colleagues Trevor Tombe and Kent Fellows, among others, demonstrate that the overall effect of emissions pricing on the economy is small. For example, at $80 per tonne, the average increase in food prices from the federal OBPS is 0.5%. Importantly, a consequence of protecting competitiveness is that Canada's emissions are higher compared to an alternative policy that does not offer that protection, such as a full carbon tax.

Second, these systems can and should be improved in response to domestic and international changes. Canada's decentralized federation and shared federal-provincial jurisdiction over the environment means flexibility in design for provinces and territories. While flexibility allows for policy experimentation and customization for each jurisdiction's unique economic context, it also has negative consequences. The 10 different systems differ in share of emissions priced, thresholds for when facilities are subject to pricing, performance standards for regulated facilities, and the time path of stringency increases, just to name a few key differences.

One important consequence of this flexibility is different emissions credit prices across Canada, which matters for more than just fairness. Differential treatment of a specific sector or facility reallocates capital and labour throughout the economy, moving these production inputs away from their most productive use. This artificially expands some sectors and shrinks others and lowers Canada's productivity. Differential emissions prices, either implicit or explicit, in different sectors result in some firms engaging in more costly emissions reductions than would otherwise be the case. The consequence is more costly emissions reductions overall, increasing the cost of meeting Canada's targets. Another way to think about this issue is that differential system design and price levels are a barrier to internal trade. This impedes economic growth and reduces productivity.

An important opportunity for improvement is working to harmonize markets and harmonize the policy environment, reducing the total cost of emissions reductions and reducing the total cost of addressing climate change. This requires co-operation across Canada. Federal action alone is insufficient.

Thank you for your time. I look forward to answering your questions.

The Chair: Thank you very much, Ms. Winter.

We will now go to Mr. Auer for five minutes, please.

● (1655)

Adam Auer (President and Chief Executive Officer, Cement Association of Canada): Madam Chair, members of the committee, thank you for the opportunity to appear.

My name is Adam Auer. I'm the president and CEO of the Cement Association of Canada. Our six members operate 14 cement plants across five provinces, supporting more than 62,000 direct and indirect jobs, and contributing $5.1 billion to Canadian wages and salaries in 2024 alone.

Canada's cement industry has been clear and transparent since we began this journey over a decade ago. We support well-designed industrial carbon pricing. Despite the current economic headwinds facing our industry and the country, our position has not changed. We continue to believe that industrial carbon pricing, when thoughtfully designed and implemented, can attract investment, support competitiveness and accelerate the cement and concrete industry's decarbonization.

Cement manufacturing accounts for approximately 7% to 8% of global CO2 emissions and about 1.5% of Canada's. Decarbonizing our sector matters, and our member companies take that responsibility seriously. Cement is also among the most trade-exposed sectors in the economy. If industrial carbon pricing is done wrong, it will shift Canadian cement production to lower-cost, higher-carbon jurisdictions, which threatens Canadian jobs, communities and our businesses, as well as our climate emissions reduction goals. This means we need carbon pricing to do the job it was intended to do: drive investment toward cutting emissions and support the transition to an economy that values increasingly lower-carbon goods and services.

There's a global reconciliation of cement manufacturing capacity under way right now. Aging plants will be modernized or closed, and new investment will flow to the jurisdictions that present the strongest business case. A predictable, well-calibrated industrial carbon pricing policy is a central component of that business case.

Fundamentally, decarbonization is modernization and productivity improvement by another name. Fuel switching, clinker substitution, thermal heat recovery—these investments make plants more efficient, more competitive and less emissions-intensive all at once, but these projects sit at the margin of investability. The engineering confirms that the projects are viable, but the business case is lacking. Payback periods are long, and demand-side signals for new products are not yet strong enough to close that gap.

Carbon pricing is a bridge, a necessary component of closing that gap to make these projects investable today rather than in a decade from now. In a global reconciliation, in which capital decisions are being made now, timing is the difference between Canada winning or losing that investment.

Our support for industrial carbon pricing does not mean that the current system is working. It is not. Our members operate under five different provincial pricing regimes, each with their own rules and regulations. For example, in British Columbia, stringency is so high that we've lost market share to imports. In Alberta, TIER credits trade far below the regulated price, undermining the investment signal that should be driving carbon capture and other decarbonization projects. This fragmentation is an interprovincial trade barrier that undermines the very investor confidence the system is meant to build. It must be addressed through greater market integration and, ultimately, a harmonized national market capable of linking with international systems like the Western Climate Initiative and the European Union's emissions trading system.

Canada's cement industry is not here to ask you to weaken industrial carbon pricing. We're here to ask you to fix it so that it works as intended. The moment calls for it, and that opportunity is grounded in national interest. Cement and concrete are as strategic to Canada's economy as energy. There is no housing, no infrastructure, no defence project, no renewable energy installation and no trade corridor that does not depend on a secure domestic supply of cement. Maintaining a competitive, modern and increasingly clean supply is not simply good industrial policy; it's a matter of economic sovereignty.

If we get the policy conditions right, we can ensure that investment drives demand for lower-carbon concrete and accelerates the modernization of the plants that produce it, aligning Canada's economic and infrastructure agenda with its climate objectives at the same time.

Thank you. I welcome your questions.

The Chair: Thank you very much, Mr. Auer.

We now go to Mr. Green for five minutes.

Thomas Green (Senior Manager, Climate Solutions, David Suzuki Foundation): Thank you.

My name is Thomas Green, senior manager, climate solutions. I've been at the David Suzuki Foundation for eight years, and I've been working on carbon pricing since the very beginning.

DSF was one of the environmental organizations that signed on to the letter to the Prime Minister, which was sent in March. We've also sent the committee a more detailed written submission.

Canada's climate policy tool kit has been depleted. We've lost the consumer carbon levy and the oil and gas emissions cap. The electric vehicle availability standard is going to be replaced with yet-to-be drafted tailpipe standards. What is left is the powerful lever of industrial carbon pricing, and it's really important to get it right.

• (1700)

[*Translation*]

The government has rightly placed climate competitiveness at the heart of Canada's economic strategy, and that strategy depends on robust, predictable and actionable industrial carbon pricing.

[*English*]

Industrial carbon pricing is supported by leading economists. There was a recent letter with 200 economists supporting continuing with industrial carbon pricing.

We're very concerned that the Alberta MOU—and how it's implemented—risks undermining industrial carbon pricing. Indeed, a week after the MOU was signed, Alberta weakened its system further with regulatory changes that flood the market with credits. Prices predictably collapsed.

Why does carbon pricing matter beyond climate? It's a competitiveness policy. As the EU carbon border adjustment policy takes effect, global markets are increasingly pricing carbon intensity into trade and investment decisions.

A June 2025 survey of industrial carbon pricing participants showed that it is working to reduce emissions in Canada, to support business performance and to advance low-carbon investments, yet confidence was lacking that the price will reach $170 by 2030. That's in part because we see a lot of pressure both from industry and from some across the political spectrum to weaken it or get rid of it entirely.

The question is not whether Canada can afford robust industrial carbon pricing but whether Canada can afford to be caught without it when trading partners come looking at the carbon content of our exports. The Canadian Climate Institute showed that $57 billion in decarbonization projects are linked to the carbon price signal. Those are real investments in jobs and government revenues that are at stake.

On actual costs, you've heard referenced before the CCI study showing that oil sands' compliance costs are about nine cents per barrel today, rising to 50¢ by 2030, which is hardly a competitiveness risk. We've also heard reference to the Fraser Institute's flawed findings, and we caution the committee on basing its recommendations on a model that hasn't been validated and that doesn't do an adequate job of modelling how industrial carbon pricing works. It's an outlier, and sectors with little or no industrial carbon pricing appear in the Fraser Institute's analysis to have the largest model impacts, which shows that it's not working properly. It doesn't price how industrial carbon pricing protects competitiveness and how industry reacts by investing in decarbonization.

New Economy Canada's vice-president of government relations had this supportive statement on carbon pricing when the budget came out, saying, “The newly announced climate competitiveness strategy sends the right signal on the importance of industrial pricing for global competitiveness. At the same time, businesses need certainty as soon as possible to unlock investment”.

The task for the government—and our core ask—is to ensure that the 2026 review results in a robust system that includes a strong, rising and enforced minimum industrial carbon price; a clear and credible, post-2030 industrial carbon price trajectory; the restoration of a level playing field across jurisdictions; and a few other elements like this.

[*Translation*]

Economists support industrial carbon pricing, and the World Bank recognizes it as a powerful tool for driving efficiency and innovation.

[*English*]

This committee has an opportunity to see it and act accordingly with these recommendations.

Thank you. I welcome your questions.

The Chair: Thank you, Mr. Green.

We will now move to questions by committee members.

We will begin with Mr. Bexte for six minutes.

David Bexte (Bow River, CPC): Thank you, Madam Chair.

Welcome, witnesses. I really appreciate your presence here today. I hope to benefit from your knowledge, and I hope it helps us make good decisions.

Dr. Winter, I'd like to start with you.

If investors hate uncertainty, as you've said, why should industry trust a system where the rules keep changing?

Jennifer Winter: That is a great question.

We are in unprecedented times of uncertainty. Some of this is beyond our control—I'm speaking about geopolitical events.

What we can control in Canada are the choices of governments. One thing that governments can do to reduce uncertainty and maintain confidence is implement set review periods. This is something that the Government of Canada has done and the provinces and territories implementing their own systems. The rules of the game are set for a certain amount of time. After that, there is a review period to evaluate the effectiveness, the stringency and whether the systems are doing the right job. Within that review period, it leads to change.

● (1705)

David Bexte: Thank you.

You've also expressed dissatisfaction with the carbon credit system. You've agreed that inconsistent pricing signals undermine efficiency and competitiveness. It causes confusion in industry. That's not good.

Based on that, are we underestimating the cumulative economic impact of the policy situation we're in today and going forward?

Jennifer Winter: That is a great question.

I haven't done the modelling myself, so I wouldn't want to mislead you. I'll defer and follow up with a written statement.

David Bexte: Thank you.

I will go back to something you mentioned in your opening statement, and it relates to how predictable the current circumstances are. I've been in industry for a long time and in politics for a very short time. I remember a number of geopolitical upheavals over the last forty years, and they happened in 10-year intervals. Wasn't this predictable, what we're in right now? Maybe not the magnitude of it, but.... How should that be incorporated into economic models? The uncertainty related to big upheavals like the Persian Gulf situation, shouldn't they be part of our planning?

Jennifer Winter: It's difficult to plan for unexpected shocks by their nature. I will say, though, the existing carbon pricing design, by subsidizing output, does protect competitiveness. That also buffers the regulated firms against the shocks they face.

David Bexte: I would suggest that we need to be a little more robust in how we risk things because we know an oil price shock is going to come every 10 years. Then it will abate, and then another one will come and abate.

I'll move to Mr. Auer from the cement industry. It's another industry that I like a lot, and I spent a lot of time in it.

At what point does carbon pricing begin creating carbon leakage rather than creating emissions reductions?

Adam Auer: That's an excellent question. Carbon leakage is our number one concern, obviously, with the design of any carbon pricing system. It goes back to the question of calibration. Effectively, if the compliance costs become so great that it creates—

David Bexte: Do you have an estimate of how high that is?

Adam Auer: I can't give you a dollar figure.

David Bexte: Is it higher than it is now, or is it happening now?

Adam Auer: The design of the system we have now, in most provinces, is such that it is protective against those leakage concerns. As I mentioned in my remarks, we have experienced leakage in British Columbia, particularly in the previous system, which was a direct carbon tax, not an output-based pricing system.

David Bexte: That's evidence that we're close and that we're at the point where....

Adam Auer: It was under the old system. British Columbia has since transitioned to an output-based pricing system, which offers some level of protection, although it still remains significantly more stringent than other provinces.

David Bexte: If cement is a core input in housing and infrastructure, how much do rising carbon prices add to the typical housing unit or major infrastructure project?

Adam Auer: For cement, they don't. That is the point of an EITE design. The market will not absorb those additional costs.

David Bexte: How much of the Canadian production—

The Chair: I'm sorry, Mr. Bexte. Your time is up.

David Bexte: Did I have five minutes or six?

The Chair: I apologize. You have another minute.

David Bexte: Thank you very much, Chair. I appreciate it.

What percentage of Canada's production, like the plant and infrastructure for a cement manufacturer, is at risk of obsolescence? How close is it to the end of its normal economic life?

Adam Auer: I would not say that there are any plants that are in imminent danger of closure at this moment, but as I mentioned in my remarks, we are undergoing a global reconciliation. Essentially, the world has an oversupply of cement. Because decarbonization investments are productivity improvements, you'll see some plants that are able to produce more cement more efficiently. That is going to increase pressure.

● (1710)

David Bexte: I remember a couple of shocks, where a great deal of production from Russia and China, as the current crisis abates, will flood the markets. I see that as being a major risk of upheaval for the Canadian cement manufacturing industry. The carbon pricing is just going to make that worse.

I appreciate your comments. Thank you.

My time is up.

The Chair: Next up, we have Mr. St-Pierre.

[*Translation*]

You have the floor for six minutes, not five.

Eric St-Pierre: Thank you for giving me six minutes.

Mr. Green, thank you for speaking in French. I'm going to ask you a question in French, if I may.

Why is carbon pricing for large emitters considered a pillar of effective climate policy in Canada?

Why would it be seen as one of the most important climate policies?

Thomas Green: Thank you for the question.

When it comes to the industrial carbon pricing system, first, it's important to understand that the industrial sector in Canada is significant. It is therefore responsible for a large proportion of emissions. The industrial carbon pricing system is a very effective tool because of how it’s designed. It's not just a price on emissions. Pricing doesn't apply to all emissions; it depends. It's performance-based pricing.

Some companies that have emissions below a certain threshold will even be able to make money by selling their credits to other, more polluting companies in the same industry.

The design is very well done to maintain industrial competition and avoid costs for consumers.

Eric St-Pierre: Does the industrial carbon price target certain sectors that produce more emissions than others in the Canadian economy?

Thomas Green: It depends on the systems in place in the various provinces, for example. In a sector like cement, which we were discussing earlier, a large portion of emissions isn't subject to pricing, so it depends. It varies by sector. In the oil and gas sector, it's very important to ensure that there's proper pricing, because it accounts for 30% of national emissions. In addition, it's a sector that hasn't made any progress at all so far.

Eric St-Pierre: That's perfect. Thank you.

[*English*]

Dr. Winter, I might move on to you. I noticed your Clean50 award in your background. I'm also a Clean50 award recipient, so I want to do a secret handshake there. I'm also getting texts from my colleague Corey Hogan from Calgary Confederation, who is saying hello, but I digress.

Over the last few years, you've written many reports on industrial carbon pricing and its impact on the economy. There are two in particular. In 2021, I think, you wrote one called “Carbon Pricing Costs for Households and the Progressivity of Revenue Recycling Options in Canada”. In 2024, you wrote another report called “Does Emissions Pricing Hurt Affordability? Quantifying the Effects on Canadian Households”.

Can you provide copies of those two reports to the ENVI committee and any other reports that you might find pertinent? Can you very quickly summarize those findings in less than a minute?

Jennifer Winter: Yes, absolutely. The basic premise of the federal fuel charge, which was the carbon tax on households and small businesses, was to charge for emissions and then use the revenue through lump sum transfers in the tax system to reduce the overall effect. That substantially minimized the cost on households.

For many households, the revenue they received was greater than their expected carbon tax burden. That, combined with the OBPS, which, as I mentioned, also dampens the effects on households and businesses, means that the overall effect on prices, from food to other consumer goods, was less than 1%.

● (1715)

Eric St-Pierre: That's great. Thank you.

Mr. Auer, would you say that the Cement Association of Canada fully supports the industrial carbon price?

Adam Auer: With, I would say, a well-designed and well-calibrated carbon price...yes.

Eric St-Pierre: Can you unpack why your association and many of your members support a well-designed industrial carbon pricing system?

Adam Auer: The main driver is that we are a large emitter of emissions globally. That means there is some pressure on the sector, both from governments and from investors, to find solutions to that footprint. Obviously, we're an essential material, particularly in the conversation in Canada right now about building out big infrastructure, so we have a role to play in making sure that infrastructure is not only well built, durable and resilient to the climate, but also low-carbon.

I think the broader context is really about this global reconciliation piece that the modernization of our industry is effectively decarbonization. It's improving efficiency, improving competitiveness and investing in technologies that are overall good for the business but where the market signal is just not there yet.

It's these government interventions, like carbon pricing, that are making the difference in terms of decisions on where our capital is flowing for modernization. We see carbon pricing as one of the tools. There are other elements around that tool—revenue recycling, investment tax credits—that we can talk about, if you like, but it's one of the tools that ensures Canada remains a destination for that modernization capital.

The Chair: Thank you very much, Mr. St-Pierre.

[*Translation*]

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

Patrick Bonin: Thank you, Madam Chair.

Thank you to the witnesses.

Mr. Green, do you have any other examples of countries that produce oil and gas and that have implemented an industrial carbon pricing system that could be described as ambitious and functional?

Thomas Green: I think the best way to answer that question is to refer you to the World Bank's study on carbon pricing systems around the world. I would be very happy to provide a summary of the relevant information on that topic.

I'm very pleased to hear the representative of the cement industry acknowledge that carbon pricing can help decarbonize the industry. It's unfortunate that we don't see the same attitude in the oil and gas sector, which is now making excessive profits and continues to resist a tool that would help with decarbonization.

Patrick Bonin: Mr. Auer, what does your association think about the carbon border adjustment, a mechanism that was proposed in the government's election platform?

Are you in favour of this kind of initiative, like the one Europe has put in place?

Adam Auer: I apologize for not being able to answer completely in French.

[*English*]

We are one of the sectors that is subject to the carbon border adjustment in Europe. We have been offered qualified support for the introduction of that measure as a tool that Europe plans to use to reduce the amount of protection that currently exists under the trading system.

It's fair to say that we think it's a promising tool. Obviously, the geopolitics and economics in Canada are slightly different, given our deeply integrated economy with the United States, but in principle, we see it as a potentially valuable tool in providing carbon-leakage protections.

[*Translation*]

Patrick Bonin: Thank you.

Mr. Green, thank you for your recommendations.

One of those recommendations addresses a post-2030 price and a pricing trajectory.

Could you tell us more about what you're proposing in relation to the social cost of carbon after 2030?

Thomas Green: Sure. Thank you.

We see that climate change is already causing significant damage. I'm thinking of flooding, wildfires, all the health effects, and risks for the future.

As a result, the social cost of carbon is far higher than the current carbon price under the carbon pricing system. We'd like to see the two converge, with the carbon price increasing more quickly to align with that social cost. Every tonne emitted into the environment carries a social cost.

● (1720)

Patrick Bonin: You also spoke about the need to have comparable rules of the game across the provinces and territories.

Is that currently the case? Let's compare, for example, Alberta, which has very low-cost credits, to a system like Quebec's. Are they equivalent? If not, how can they be made equivalent?

Thomas Green: Right now, the federal government isn't taking action when the provinces eliminate or weaken their systems. For example, Saskatchewan decided to stop industrial carbon pricing, and Alberta froze it at $95 a tonne. Then it made changes so that the credits would be so inflated that the price collapsed.

The federal government isn't doing enough, and it's not good for competitiveness and it's not good for investment. There's also a question of the fairness and effectiveness of the output-based pricing system.

Patrick Bonin: So there is a risk that, if there is no carbon price in other provinces, or even if it is lower, a province like Quebec will be at a disadvantage.

Is that correct?

Thomas Green: I wouldn't say it's at a disadvantage. In fact, we're currently seeing, in the context of the ongoing crisis in the Persian Gulf, that decarbonization helps companies in the long term. That's because it leads to less carbon waste and less energy waste. Through electrification and related measures, polluting technologies are being replaced with cleaner, more efficient ones. As a result, this is economically advantageous.

Patrick Bonin: You're also saying that there should be no offsets, or there should be very few.

Can you tell us more about that?

Thomas Green: We're afraid that these offset credits don't really represent reductions in emissions and are instead credits created on paper. They're not valid, and they're going to lower the price of carbon. It undermines decarbonization. So we are afraid that these offsets will weaken the system.

Patrick Bonin: The regulations—

The Chair: Thank you, Mr. Bonin.

[*English*]

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

Branden Leslie (Portage—Lisgar, CPC): Thank you, Madam Chair.

I'll start with Mr. Auer.

A couple of times, you used the phrase “thoughtfully designed” when trying to describe what would be an effective industrial carbon tax. Is this one thoughtfully or well designed?

Adam Auer: We believe that the original design of the federal backstop and the output pricing system was well calibrated to address carbon leakage and competitiveness concerns.

Now we exist in a world where there are significant differences in the equivalency of systems that the provinces have adopted, which is creating some lack of fairness across the different systems and a lack of flexibility, with lost opportunities for the kind of integration that would provide the predictability and stability that is core to the function of these markets in the long term.

When the backstop was initially implemented, I think there was a sense of confidence and visibility in terms of where it was going in the longer term, and I can't say that's currently the case.

● (1725)

Branden Leslie: You wrote a letter alongside a number of fuel associations, gas associations, propane associations, steel producers and the chemistry, fertilizer, forestry and mining industries—a pretty big range of associations. It was a gently worded letter, but combined with what you just described, is it fair to assume that as a sector, or multiple sectors, you don't feel like the necessary consultations are happening right now to make the adjustments that will be adequate to protect that competitiveness and prevent that carbon leakage?

Adam Auer: The main point of that letter was to respond to a consultation on benchmarks and stringency going forward. It was the collective consensus of the industries involved in that letter that it was not the right place to start a conversation about the evolution of the system and that there were more fundamental issues with the system that should be addressed first. It's not that the system itself was opposed by the sector, but the starting point for our conversation on where the system was going.

Branden Leslie: In that letter, you talked about how the world has changed and investment decisions are changing with it.

What is it that the Liberals are not understanding and that should be addressed, as you just outlined, before any changes are made to enhance and strengthen the system, or make it more expensive?

Adam Auer: When the initial output-based pricing system was crafted, there was a fairly significant competitiveness risk analysis process that every sector underwent. Sectors were ranked by their level of exposure and then, as was mentioned in other remarks, the percentage of emissions that were subject to the carbon price were then calibrated based on the level of risk.

We believe that before we get into a conversation about changing benchmarks and other stringency measures, another competitiveness review should be completed.

Branden Leslie: The idea being floated here is that those companies that are under 25,000 tonnes are not currently impacted, but they're over 10,000 so they may soon be impacted. They're dealing with high prices for everything, just like every other Canadian—higher payrolls, higher costs for equipment and compliance.

What happens when that threshold gets lowered and a whole bunch of them get grouped into this? What is that going to do for those specific smaller companies? What impact is that going to have on the price of all the products that, ultimately, we use in our municipal infrastructure, housing and everything else?

Adam Auer: I can only speak for the cement sector. I can't really speak for other sectors on what the impacts might be for those industries.

Branden Leslie: You're a smaller cement producer. You're not subject to it because the threshold is above what your emissions are. If they lower that stringency, you're going to enter that space. It's going to have an impact on—

Adam Auer: You're talking about the benchmark, not the threshold for being captured by the system. Is that correct?

Branden Leslie: Yes.

Adam Auer: That's what the competitiveness analysis is meant to determine: What is the appropriate benchmark for each sector covered under the system to ensure that those price impacts are not acute?

Branden Leslie: You also mentioned the flexibility to be maintained for provinces. It seems as though that is being further restricted. What flexibility is still left to be maintained, in your view?

Adam Auer: That is to be determined, I think. At the moment, the provinces have all developed their own systems calibrated to the particular sectors they find in their jurisdictions.

The evolution of the next system will determine how much of that flexibility will be preserved. We believe there should be some flexibility preserved.

The Chair: Thank you very much, Mr. Leslie.

We'll now turn to Mr. Fanjoy for five minutes.

Bruce Fanjoy (Carleton, Lib.): Thank you.

I'd like to note, as this is the environment and sustainable development committee, that tomorrow is Earth Day, and Canadians are counting on us to do good work here.

I'd also like to point out that all across the country, nature is applying its own carbon price right now. There is sandbagging happening in my riding. As I look around at my colleagues here, I can think of incidents in most, if not all, of our ridings, where we have seen nature's carbon price wreak havoc on our communities.

What we're talking about with an industrial carbon price is a thoughtful approach to address the problem of rising emissions that are wreaking havoc on our climate. I appreciate every member here who doesn't take that responsibility lightly.

My colleague Mr. Bexte spoke about regular repeating patterns of geopolitical upheavals, and he's quite right that these happen with great regularity.

My question is for you, Dr. Winter.

Do these geopolitical upheavals impact clean and renewable energy?

● (1730)

Jennifer Winter: Absolutely. I think any global disturbance will impact renewables, say, through supply chains and the demand for these renewables, and it will also affect your more traditional energy sectors, like oil and gas and nuclear.

It's beyond my expertise to quantify that for you, but the extent to which these upheavals affect these sectors will really depend on how tied they are into the global economy.

Bruce Fanjoy: I know that electricity, particularly from solar, wind and hydro, is not being held up in the Strait of Hormuz.

Perhaps I'll address this question to Mr. Green. What is it going to take for more Canadians to take advantage of the solutions available to help them deal with the affordability crisis that geopolitical upheavals cause?

Thank you.

Thomas Green: At the foundation, we've been working hard to strengthen the east-west grid across Canada. We think the federal government should be investing in that. We should be adding more renewables to the grid. We should be supporting Canadian households to electrify and replace furnaces with heat pumps. We should be replacing more electrified public transit and have more EVs on the road.

All of these switches mean that we get off the roller coaster of fossil fuels and the kind of inflation that it causes and that we'd be better positioned for when the next crisis happens.

I noticed in the last panel that there was a discussion about there not being investment in certain oil and gas projects. One of the reasons there's a lack of investment in some of these projects is that the world is moving so quickly to renewables. Batteries have come down in cost. Solar and wind have come down in cost. It doesn't make sense to invest in more fossil fuel supply when, as you point out, your constituents are responding to floods and other people are facing or will face wildfires this summer.

It makes much more sense to try to reduce how much fossil fuel we produce, export and use, and to electrify our economy.

Bruce Fanjoy: Thank you.

Mr. Auer, I'll turn to you. You've mentioned that cement and concrete are responsible for fairly large emissions.

Can you briefly tell us what the industry is doing and what innovations it's pursuing to reduce that?

Adam Auer: Sure.

The lowest hanging fruit in our sector has to do basically with two strategies. Here, I should point out that we actually have a road map for decarbonization that's been published for a number of years now, and if you want to dig into the details, you can look at it. That said, basically we need fuel substitution to lower carbon alternatives; clinker substitution, which means new cement recipes that reduce the most carbon-intensive ingredients in the formulation; and then, ongoing, more traditional process and efficiency improvements.

In the longer term, it's carbon capture technology that will be required to get us into the deep reduction territory.

The Chair: Thank you very much.

Bruce Fanjoy: Thank you.

Quickly, Madam Chair, could we have that road map provided to the committee?

Adam Auer: Yes.

Bruce Fanjoy: Thank you.

The Chair: Excellent.

[*Translation*]

Mr. Bonin, you have the floor for two and a half minutes.

Patrick Bonin: Ms. Winter, you talked about the negative effects on productivity that too big a difference from one province to another can have on carbon pricing.

Do you think it's a disadvantage if Quebec maintains its carbon pricing when Canada doesn't enforce its safety net, the famous benchmark, compared to the carbon price for industry in the other provinces?

Could that cause economic problems?

● (1735)

[*English*]

Jennifer Winter: No, I do not believe it would be disadvantageous for Quebec to maintain its cap and trade system. The federal backstop and federal benchmark allow for flexibility amongst provinces. The benefit of Quebec's system is quantity certainty with the cap and trade system. Thus, relative to the rest of Canada, Quebec has more certainty on its emissions reduction path. The other provinces and territories have chosen price certainty rather than quantity certainty.

[*Translation*]

Patrick Bonin: I'll clarify my question. I'm not sure if you caught it.

Quebec has its system in place. If Canada doesn't maintain an equivalent system, could the fact that there's a price in Quebec and that there's no price elsewhere be a disadvantage for Quebec businesses?

[*English*]

Jennifer Winter: Yes, technically speaking, if Quebec were the only province with emissions pricing, then it would be a higher cost jurisdiction relative to the other provinces and territories. It could, of course, mitigate this through free allocations of emissions permits, which would protect competitiveness both within Quebec, for importers of goods, and outside Quebec, for Quebec exporters.

[*Translation*]

Patrick Bonin: Mr. Auer, I think you mentioned the importance of having up-to-date analyses regarding the exposure of various sectors, among other things.

To your knowledge, when was this last done at the federal level?

[*English*]

Adam Auer: I think it was with the original ouput-based pricing launch in 2018 or 2019.

[*Translation*]

Patrick Bonin: Does your industry and the sector as a whole currently benefit from the free allocation of emissions units provided under the systems in place in Canada? For instance, in Quebec, we're talking about up to 99% free allocations for large emitters, depending on the sector.

Do you have this information, and if so, could you send it to us? If not, could you tell us where we might find this information?

[*English*]

Adam Auer: I certainly would be willing to share.

The short answer is that every province has its own benchmark. As for the federal backstop for cement, we're in the highest category. Ninety-five per cent of the emissions above the benchmark are covered.

[*Translation*]

The Chair: Thank you, Mr. Bonin.

[*English*]

We'll now go to Mr. Ross for five minutes.

Ellis Ross: Thank you, Madam Chair.

Dr. Winter, thank you for your testimony.

I do like the conversation we're having here, because we're trying to have a thoughtful discussion of consequences and trade-offs.

I was an MLA in the B.C. legislature for a few years and was quite shocked when the Business Council of B.C. did an analysis of CleanBC's plan. A lot of mayors across B.C. were also shocked when the BCBC took the B.C. government's numbers and facts and basically compiled them to show that the cumulative economic loss to B.C. would be $109 billion to $132 billion, over 10 years.

Are you aware of that analysis, and did you agree with the thought process that went into it?

Jennifer Winter: I have not seen that analysis. I'm sorry.

If I could briefly comment, my impression is that it's quite possible it is accurate, but it does lack the other side of the coin, in that, by continuing to emit, there are climate damages—

Ellis Ross: Hold on a minute. If you haven't read it, I'll wait until you read it, and then maybe you can give me a thorough analysis of what you think of it.

The B.C. government basically tried to downplay it, saying that the Business Council of B.C., the biggest business advocate in B.C., didn't know what they were talking about, even though the author took it from all the graphs and numbers and compiled it. He had to dig for it through all the government pages on the Internet. He had to dig for it, and that's what came out. They didn't deny it.

Also, in that same report, the BCBC actually predicted that annual household income would decline by $11,000 annually. When we're talking about the consequences and trade-offs, I don't like to forget the human element.

Have you done an analysis of all these policies, whether they be national or provincial, in terms of the impact on the household of the average Canadian individual?

● (1740)

Jennifer Winter: My work on household impacts has been limited to carbon pricing.

I do have work that enumerates Canadian emissions mitigation policies, and we have ongoing work to evaluate the combined impact of those policies.

Ellis Ross: Until I see something else, I'll go by the Business Council of B.C.'s analysis, which the B.C. government hasn't denied.

In that context, when we're talking about the consequences and trade-offs—I'm looking at your bio, by the way—I've yet to come across anybody, in terms of the EV mandate, talking about the impact on the land and water. We're all geared towards the emissions, which is good, especially when we're talking about Canada's commitment to it, but nobody seems to talk about what this means to the land base.

Whether we're talking about Canada or South Africa, or whether we're talking about different regions around the world that still use forced or slave labour or don't have worker standards or environmental standards.... Has your office actually looked into these consequences or trade-offs?

Jennifer Winter: I have done some work on this—project-specific analyses of the consequences and trade-offs, such as coal mining in Alberta and the partial upgrading of facilities. That's fairly similar to what the Impact Assessment Agency of Canada does in evaluating the benefits and burdens.

Ellis Ross: Have you done this internationally?

Jennifer Winter: No, I haven't done it internationally.

Ellis Ross: We've heard reports of child labour in Africa, for instance. We've heard about the Uyghurs' treatment in China. This is relevant because the EV mandate has the Liberal government bringing in 49,000 electric vehicles from a country that's reported to have human rights issues. If we're going to have this thoughtful discussion on consequences and trade-offs, I think it has to include everything, including the supply chain.

Would you agree with that comment?

Jennifer Winter: I would say so, in part. For me, it depends on—forgive me for being a bit academic—the reference group you care about. If it's Canada, we would exclude other countries. If not, then yes, we'd include other human rights issues.

The Chair: Thank you very much, Mr. Ross.

For the last set of questions, we'll go to Mr. Grant for five minutes.

Wade Grant: Thank you to the witnesses.

I'll start with you, Dr. Winter.

I want to talk about this context: The EU's carbon border adjustment mechanism is now fully entering its definitive phase, where Canadian exporters in sectors like steel and aluminum face potential border carbon charges.

Is there a credible argument that having a robust, well-enforced OBPS actually protects those industries from double exposure, and is a strong domestic carbon price an asset rather than a liability in that trading environment?

Jennifer Winter: I'm not sure about double exposure.

I will comment that the border adjustment accounts for emissions pricing in other countries. Canadian firms would just pay the difference between the headline rate in Canada and the EU's headline carbon price. The OBPS provides what I'll call protection.

Alternatively, in a counterfactual world where Canada does not have industrial emissions pricing, Canadian firms would face the full brunt of the EU CBAM, and the revenues would also go to the EU rather than be used within Canada.

Wade Grant: Thank you.

Mr. Auer, as I understand it, cement is a hard-to-abate sector. The chemistry of making the cement itself accounts for the majority of emissions, meaning efficiency improvements and fuel switching can only take you so far. There, CCUS is ultimately a valuable tool.

In that context, how essential is a stable, long-term carbon price trajectory paired with the existence of investment tax credits?

● (1745)

Adam Auer: Thank you for the question.

Carbon capture and storage is the technology of last resort in some ways. There are companies—including the Canadian company Heidelberg and its facility in Edmonton—that are actively exploring full-scale carbon capture, so the technology is a real conversation in Canada. There are also active capture systems in cement facilities in other jurisdictions around the world.

The business case for carbon pricing is the farthest away, among any of the solutions in our sector, I would say. An ecosystem of pricing, credits and other forms of financing support such as contracts for difference are absolutely essential for getting those technologies off the ground.

Wade Grant: To follow up, would uncertainty regarding carbon pricing—if industrial carbon pricing were not on the table—be a major barrier to the achievement of a net-zero cement sector?

Adam Auer: From where we sit today, yes, it would be. The uncertainty we have experienced in the past number of years has already stalled projects.

Wade Grant: I'll go back to you, Dr. Winter.

The Canadian Climate Institute found that approximately $4.3 billion in annual clean energy investment is linked directly to the existence of industrial carbon pricing systems.

Does your own research support the view that pricing certainty is what enables companies to make the business case for large clean-energy technology capital expenditures?

Jennifer Winter: I would say that this has two components.

One is pricing certainty so they have the time path of expected policy and expected revenue from, say, selling credits. The other part of this, which is also important, is price level, in that the incentive provided by $95 a tonne is very different from the incentive provided by a price of five dollars a tonne.

Wade Grant: Conversely, what does the economic literature suggest happens to that investment if the price signal becomes uncertain or is removed?

Jennifer Winter: If the price signal is uncertain or removed, there is limited or no investment in low-carbon technologies or emissions reduction technologies, or investments at existing firms, because the impetus and the requirement have been eliminated.

Wade Grant: Quickly, what sectors of the Canadian economy stand to benefit the most from a strong, stable industrial carbon price over the next decade?

Jennifer Winter: I would say any sector that is low-emission or a technology that relies on the existence of pricing for its revenue stream, such as carbon capture and storage or direct air capture.

Wade Grant: Thank you.

The Chair: Thank you.

I would like to thank all of the witnesses for taking the time to be with us today.

Our next meeting is scheduled for Thursday at 11, when we're going to do our final two hours of this study.

I wish a very happy Earth Day to all those who celebrate.

The meeting is adjourned.