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Chair: Mr. John Aldag



Standing Committee on Natural Resources

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• (1535)

[English]

The Chair (Mr. John Aldag (Cloverdale—Langley City, Lib.)): I call this meeting to order.

I'm going to go through my opening comments, and then I think we have a couple of points of order.

I'd like to welcome everyone to meeting number four of the House of Commons Standing Committee on Natural Resources.

Pursuant to Standing Order 108(2), the committee is commencing its study of a greenhouse gas emissions cap for the oil and gas sector. Today will be the first of eight meetings with witnesses for this study.

Today's meeting is taking place in a hybrid format, pursuant to the House order of November 25, 2021. Members attending in person in the room, or remotely, can use the Zoom application. Please note the webcast will always show the person speaking, rather than the entire committee.

I'd like to take this opportunity to remind all participants that screenshots or taking photos of your screen are not permitted. Today's proceedings will be televised and made available via the House of Commons website.

Given the ongoing pandemic situation and in light of the recommendations from public health authorities, as well as the directive of the Board of Internal Economy on October 19, 2011, to remain healthy and safe, the following recommendations are made for all those attending the meeting in person.

Anyone with symptoms should participate by Zoom, and not attend the meeting in person. Everyone must maintain two-metre physical distancing, whether seated or standing. Non-medical masks are required to be worn in committee rooms, and may only be removed when members are seated in their place during the meeting, and are speaking. However, it is strongly recommended that members wear their masks at all times, including when seated. Non-medical masks are available in the room and provide better clarity than cloth masks for our interpreters ability to hear our interventions. Everyone present must maintain proper hand hygiene. There's hand sanitizer at the room entrance. The committee rooms are cleaned before and after each meeting. To maintain this, everyone is encouraged to clean surfaces, such as the desk, chair, and microphone with the provided disinfectant wipes when vacating or taking a seat.

As the chair, I will be enforcing these measures for the duration of the meeting, and I thank the members in advance for their cooperation.

To ensure an orderly meeting, I'd like to outline a few quick rules to follow.

Interpretation services are available for this meeting. You have the choice at the bottom of your screen of either the floor, English or French. Members and witnesses may speak in the official language of their choice. For those presenting today, our guest panelists, we always ask you speak slowly to allow our interpreters time to keep up with what you're saying. For the members in the room, if you wish to speak, please raise your hand. The clerk and I will do our best to keep track of the speaking order. For members on Zoom, please use the "raise hand" function and you'll be placed in order. As I'm sure you can all appreciate, it can sometimes be challenging when members raise their hands both in the room and on Zoom, so the clerk and I will manage the speaking order as best we can. We appreciate your patience and understanding in this regard.

Before speaking, please wait until I recognize you by name. If you're on Zoom, please click on the microphone icon to unmute yourself. For members in the room, your microphone will be controlled as usual by the proceedings and verification officer. When you're not speaking, your mike should be on mute. I remind you that all comments by members and witnesses should be addressed through the chair.

As I mentioned, today we'll begin our study of a greenhouse gas emissions cap for the oil and gas sector. We initially had the first panel, the Net-Zero Advisory Body, scheduled to be here with us from 3:30 p.m. to 4:30 p.m. I don't know if everybody was in the room when the clerk said there was a technical problem with one of the presenters. The presentation was designed to be in a copresentation format, so the Net-Zero Advisory Body requested being taken off today's schedule, which we've had to accommodate. We will not be hearing from the Net-Zero Advisory Body today. We will be moving the second panel up to 3:30 p.m., ending at 4:30 p.m., when I'm hoping to move to our in camera subcommittee meeting at 4:30 p.m.

For our second panel, we had invited Simon Langlois-Bertrand, but he is ill today. We will try to get Simon brought in at a future panel. There's been lots of shuffling of the schedule today, and I appreciate everyone's flexibility.

When we get started, once I hear the points of order that have been raised, we'll be moving to Sara Hastings-Simon, assistant professor, University of Calgary, who is testifying as an individual. I think Mark Jaccard, professor, Simon Fraser University, will also be joining us. We will also have, from the Canada West Foundation, Colleen Collins, vice-president.

Before we get into opening statements, Ms. Rempel Garner, I see you have your hand up.

Just before I go to you, I also want to welcome Ms. Goodridge to the committee as a substitute member for today. Mr. Morrice is joining us. We have Mr. Rogers, who is also acting as a substitute. That is our committee for today.

Ms. Rempel Garner, I will now go over to you.

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): Thanks, Mr. Chair.

I'm curious as to when you found out about these issues. We're essentially wasting an hour of a committee meeting, and I don't believe that you sent out a notice for a change in the agenda. That violates my privilege a little bit. We put a considerable amount of effort into preparing for these meetings, and to have them changed without notice at the last minute isn't acceptable, really.

I don't know why, when the technical issues came up, they weren't dealt with well in advance of this meeting and whether it was in the notice of a change of agenda. We can't run the committee this way.

I know things happen. I know people get COVID. But we're not doing our diligence as committee members here if this [*Technical difficulty—Editor*].

I'd like to give you an opportunity to explain what's happened and how you plan to rectify this in the future, or if this is something that we're going to have to address through formal motions.

I want to thank the witnesses who are on the panel right now, but at the same time, we came prepared for the Net-Zero Advisory Body. We had no heads-up that this was a change.

The Chair: If I could speak to that—

Hon. Michelle Rempel Garner: I don't know if we're going to have another meeting in the future. Now we've moved our committee meetings forward, many times. It's problematic.

The Chair: Perhaps I could speak to that before I go to Mr. Angus.

I was informed by the clerk at 2:54 that she was doing the audio checks with the Net-Zero panel participants. One of the members had poor Internet. He did not have the headset with him that had been sent from the House of Commons, which, as everyone knows, is required for participating via Zoom for interpretation purposes. This was during question period that I was notified. This is why we were doing the tech checks in advance. But one person was not able to get his technology working. At about three o'clock we did everything we could to see if there were alternate arrangements. He ended up having to decline.

We pushed hard to see if the second panellist would come. I have a text, during question period, showing that I asking the clerk if we could coax, cajole or otherwise encourage the remaining panellists from Net-Zero to still be here so that we wouldn't lose this panel. They declined. It was a hard no. They said they needed to appear as a team. It had been planned that way.

At that point, I asked the clerk to see if our second panel would be flexible in their time and move up to 3:30 so that we wouldn't lose the first hour. I had asked if we could keep going back to the Net-Zero panel to see if they could get their tech problems worked out by 4:30, with the hope that we might be able to bring them in after our first panel.

At this point they have not been able to resolve those issues, and that's where we are right now.

That's the explanation I can offer on that.

I will go to Mr. Angus for a point of order, and then Ms. Rempel Garner, I'll come back to you.

• (1540)

Mr. Charlie Angus (Timmins—James Bay, NDP): Thank you, Mr. Chair.

I don't want to belabour the point, and I'm sorry that our second-round panellists are having to listen to this, but I want to thank them for their willingness to step up in the breach while we've been caught out.

I certainly have enormous respect for the work of the clerk and you, Chair. I think my frustration is this. If we're going to be looking at this issue, the Net-Zero Advisory Body, to me, is the foundation. What we hear from them, we then work out elsewhere.

As for having them possibly come at 4:30, at this point I see the day as being lost with them. I want an assurance—and I'm sure I'm going to get it—that as soon as possible, you will give us the date, and it has to be a hard date. It's very difficult for me to do my work and know what questions to ask without knowing the parameters of how they are proceeding, because they are the key element, I think, to a lot of this study.

The Chair: I agree with you absolutely. That's why we had designed the panel to have the Net-Zero Advisory Body be the first witness at the start of the study. The testimony that we're hoping to hear from them will be critical to how the panel unfolds.

Like I say, it was a very unfortunate situation, and now that we know there were tech issues, we will be working with them to see how quickly we can get them back and make sure that we do everything to resolve those issues in advance. We will also make sure that the headset that was sent out is in hand for when we are able to reschedule them, which will be sooner, rather than later. We can always talk at the subcommittee, if that's the appropriate place, to determine if we want to look at revisiting the schedule that's been set for this study to make sure we get the adequate testimony.

I'm working off of two sets of notes.

For anyone watching us today, I want to also mention that we are trying to get as many witnesses as we can to this study. It is a very important one, but we're not going to be able to accommodate everybody out there. There may be people who feel they have something to contribute, so I wanted to say that anyone is able to make up to a 10-page submission to our committee on this study, which they can send by email to RNNR@parl.gc.ca. I'll ask the clerk to have this available on the website so that we are able to try to add as much valuable testimony as we can to this study.

Mr. Angus, I don't know if that answers your question or addresses your concern, but that's where we are.

Mrs. Rempel Garner, we're back to you for a point of order.

Hon. Michelle Rempel Garner: Thank you, Chair.

I'd like to echo Mr. Angus's thanks to the witnesses for making themselves available. I would also like to echo Mr. Angus's concerns, because a lot of the questions that I had for the second panel were predicated on question lines that we had set up for the Net-Zero Advisory Body.

For clarification, you asked the remaining members of the Net-Zero Advisory Body to appear this afternoon and they declined.

• (1545)

The Chair: That's correct. The explanation that we were given was that their presentation was set up as a copresentation, and the one remaining panellist with the working technology was uncomfortable going alone.

I didn't have that conversation. I was in question period, but the clerk had this conversation and it was a hard no—that is how it was put to us—and the person would not appear alone today. That's what we're left dealing with.

Hon. Michelle Rempel Garner: Thank you, Chair.

With that, I would move:

That the committee re-invite the Net-Zero Advisory Board to appear for one hour this week.

The Chair: I would say that we could go through the formal motion process if we need to. This was on a point of order and we're moving into something beyond, but I'm more than willing to work with the clerk and our committee to extend that offer and to see if we can get the issue worked out. The commitment remains to try to get them here as quickly as possible and to give as much notice in advance to the committee so that you can be prepared for your rounds of questions.

I have two people in the room who are ahead of Mr. Maloney and Mr. Angus, so I'll hear them.

We have witnesses who have rearranged their schedules to be here with us, and I would love to get to them as soon as we can, out of respect for their time. We have time when we could carry on with this conversation, but after we hear the panellists, so we're not taking up their entire afternoon.

Hon. Michelle Rempel Garner: Chair, I didn't move the motion on a point of order. You recognized me to speak without a point of order being raised, so it is valid and I would like the purpose.... I

would argue that it's in order because it is very pertinent to the matter at hand.

To me, this isn't about politics. What the Net-Zero Advisory Body is going to present to this committee is going to set the foundation for other witness appearances. Many other witnesses I know are waiting to see what they have to say, as well as what our question lines are.

My purpose in moving this is to have the committee endorse you to go and ask them to come back this week to work with the House of Commons to ensure that there are resources available. If they're coming at the [*Technical difficulty—Editor*] problematic.

I would like to have it on the record that the committee moved that you are going to try to get them here this week for an hour so that we can prepare accordingly. That would be my argument for my motion, Chair.

I hope that we can dispense with it quickly. It still gives you flexibility to work with them, but we need that timing this week.

The Chair: I'm trying to be flexible. I thought I said at the beginning I would hear the points of order before we moved into the study, so if it's a technicality I've been caught on by not saying that at the beginning every time I acknowledge a person, then I apologize and we've probably been caught on this.

I will entertain your motion right now. If you'd like to make it, we'll go through that process as quickly as we can, and then come to the other points of order in the room and on the screen that have been moved.

Hon. Michelle Rempel Garner: Thank you.

I have made the motion and I've made it technically correct by moving it in committee. I would like us to vote on it. It seems pretty straightforward. We would reinvite them this week and find an hour for us to have them here as a panel so the rest of our deliberations aren't set back because of their inability to appear today.

The Chair: Is there a seconder?

Mr. Maguire.

Is there any debate on the motion?

Hon. Michelle Rempel Garner: We don't need a seconder, by the way.

The Chair: Okay. I'm trying to work with two clerks here to make sure we're not caught again on a procedural issue.

Mr. Larry Maguire (Brandon—Souris, CPC): Can I make a point about this, Mr. Chair?

The Chair: Yes, Mr. Maguire.

Mr. Larry Maguire: It's not really debate; it's just backing up what's been asked for.

It's great that there are folks from the Canada West Foundation. I applaud them for doing the yeoman's work here stepping up to be witnesses today, but I felt that the Net-Zero Advisory Body was the key to the whole thing, to set the stage for what we're going to be talking about with all witnesses down the road. That's why I would have liked to have them and was glad to see they were the first witnesses on the committee. Therefore, I would also look at.... We'll hear the Canada West Foundation today and we'll have great questions, answers and dialogue with them, I'm sure, but in the event we feel that there's something missed or that they wanted to have something more to say, I would suggest we also include the opportunity to have them come back as a witness, if anyone on the committee felt it necessary, so we could perhaps cover something that might have been missed that the advisory body is going to bring up later.

Thank you.

• (1550)

Mr. James Maloney (Etobicoke—Lakeshore, Lib.): Mr. Chair.

The Chair: Just a moment Mr. Maloney, Monsieur Simard and Mr. Angus.

We're entertaining the motion. What Mr. Maguire has put out has essentially been an amendment to the motion. I have other people who want to make an intervention, so I'll move through those to see if it relates to the motion that has been made.

For clarification, are you moving an amendment to Ms. Rempel Garner's motion?

Mr. Larry Maguire: If it is acceptable; otherwise, it's just a suggestion on my behalf.

The Chair: We have the amendment.

Now I have Mr. Maloney, Monsieur Simard and Mr. Angus.

Mr. Maloney.

Mr. James Maloney: Mr. Chair, it seems we're spending a lot of time agreeing on this. As I understand it, everyone on this committee wants them to be here, feels they need to be here, and it sounds like they want to be here and only are not here because of a technical problem. As fascinating as this discussion is, I think we could all agree to dispense with the motion and that we will get them here as soon as possible, recognizing that there's increased demand and pressure on translators and whatnot.

I'm agreeing with you, Ms. Rempel Garner. I just don't want to be in a position where we've having a similar discussion on Thursday with other witnesses if for some technical reason we can't get them here before then. That's all. I think we're all on the same page here. It's unfortunate they couldn't be here right now. If there's a way to accommodate that without further delaying these witnesses or other witnesses, then I think we should find it. Perhaps Mr. Maguire has hit the nail on the head.

Thank you, Mr. Chair.

The Chair: Thank you.

We'll move to Monsieur Simard.

[*Translation*]

Mr. Mario Simard (Jonquière, BQ): I want to make a quick comment.

Mr. Chair, you clearly explained why it wasn't possible for the Net-Zero Advisory Body to give their presentation today. Right now, we're wasting valuable time debating motions when we could be doing so later in the Subcommittee on Agenda and Procedure. The subcommittee was already scheduled to meet after this meeting anyway. It would be much more efficient that way. It would give us the opportunity to hear from the witnesses here immediately.

[*English*]

The Chair: Yes. Unfortunately, the reality is that we now have an amendment and a motion before us that we need to dispense with so that we can go on to the business at hand.

I have Mr. Angus and Ms. Rempel Garner next. Then, if nobody else has anything, we'll go on to dealing with the amendment and then the motion, and then hopefully we can go on to hearing from our witnesses. I'm sure they will have many interesting things to say, despite not having the net-zero group coming before us first.

Go ahead, Mr. Angus.

Mr. Charlie Angus: Thank you.

I haven't seen the amendment, so I don't know what the amendment is. I think that would be helpful.

I would have said that I trust the goodwill of the chair to negotiate for us, I trust the goodwill of the clerk and I trust the goodwill of Net-Zero Advisory Body. Now we have a motion about this. If we have a motion to invite them back on Wednesday this week, if possible, yes. If it's not possible, then there could be an explanation. I trust that you'll be able to get that to us as soon as you're aware of it.

I have to assume that we're all working in good faith here. Let's make it known that we want them to be invited as soon as possible. If there are problems with finding translation or finding that hour, we can work around that, but I do think we should get to work. I think we're starting off on a really important study, and I trust the goodwill of everybody here.

• (1555)

The Chair: Thank you, everybody, for your comments.

What we'll do is we'll go to the amendment. Then we'll go to the amended motion of Ms. Rempel Garner—depending on whether the amendment carries or not—and then we'll get into our testimony.

Mr. Charlie Angus: I'm sorry. I couldn't hear any of that.

The Chair: I'm just getting.... We're just clarifying this with Mr. Maguire.

Mr. Charlie Angus: Okay.

The Chair: The amendment is that the committee re-invite today's witnesses after the Net-Zero group testifies.

Mr. Larry Maguire: Mr. Chair?

The Chair: Yes, Mr. Maguire.

Mr. Larry Maguire: The latter part of that says that it's if anyone on the committee asks for it. Otherwise, they don't need to come back.

The Chair: Okay.

So it's if anyone asks for it. That's where we're at.

Go ahead, Ms. Rempel Garner.

Hon. Michelle Rempel Garner: Chair, I think that actually changes the entire substance of my motion. My motion was for you to find an hour this week, be it on Wednesday or outside of regularly scheduled committee time, to get the Net-Zero Advisory Board here. If my colleague is asking for that to be tacked on to the end of that motion, that would be correct.

I think that's how I interpreted his intervention. It was not to replace the substance of my motion.

Mr. Larry Maguire: No. That's absolutely clear.

Mr. Chair, I was not negating anything. My amendment was to be added on to the end of Ms. Rempel Garner's motion.

The Chair: So then are we in agreement that...?

Go ahead, Mr. Angus.

Mr. Charlie Angus: Well, you know, they do say that a camel was a racehorse that was designed by a committee. Now we have maybe two or three humps on the back of the camel.

As much as I respect Mr. Maguire, I'm not going to support an amendment that says we're going to make an invitation for witnesses to appear twice. If we want them to appear twice, we will call them back. It seems we're giving an extraordinarily extra amount just over a mistake with the first panel.

So I can't support the amendment, but I'm willing to support Ms. Rempel Garner's motion.

The Chair: Go ahead, Mr. Maloney.

Mr. James Maloney: I suspect that these witnesses will not want to come back here ever again after witnessing this. But that's neither here nor there. I guess we have to vote on Mr. Maguire's amendment and then go to the original motion. Is that the way this needs to go now?

The Chair: Yes.

Mr. Angus, is your hand still up? No. Okay.

I think we've had all of the interventions, from what I'm seeing....

Go ahead, Mr. Maguire.

Mr. Larry Maguire: There seems to be agreement on the first motion from Ms. Rempel Garner. If there isn't agreement on the amendment, I can withdraw it.

The Chair: Do we have unanimous consent for Mr. Maguire to withdraw it?

We have received unanimous consent to withdraw the amendment, so now we go to Ms. Rempel Garner's motion. I'm just getting it from the clerk, so we can share that out.

Ms. Rempel Garner, tell me if this is what you had put forward: "That the committee re-invite the Net-Zero Advisory Board to appear for one hour this week."

Hon. Michelle Rempel Garner: That will do.

The Chair: Are we ready for the question? Do you want a recorded vote?

Hon. Michelle Rempel Garner: I think that in this format it helps if we do.

The Chair: Our virtual clerk will call it.

(Motion agreed to: yeas 11; nays 0)

The Chair: We will make every effort to invite Net-Zero back for an hour this week. We will communicate their availability and all the logistics.

Now I'd like to move on to the panellists who are joining us.

Is Mr. Jaccard with us?

● (1600)

Dr. Mark Jaccard (Professor, Simon Fraser University, As an Individual): Yes.

The Chair: Thank you.

We also have Sara Hastings-Simon, assistant professor, University of Calgary. You're there?

Dr. Sara Hastings-Simon (Assistant Professor, University of Calgary, As an Individual): Hello.

The Chair: Thank you.

From the Canada West Foundation we have Colleen Collins, vice-president. I see Colleen.

We're going to go for five-minute opening statements by the three of you. I have a handy card system. I'm going to give you the yellow card when there are 30 seconds left and the red card when the time is up. This applies when we're doing questions and answers as well.

Don't cut yourself off mid-sentence when you see the red card. Make every effort to wrap up as quickly as possible, so we can get to the next statements or questions.

With that, I will turn it over to Ms. Hastings-Simon for her opening statement of five minutes.

Dr. Sara Hastings-Simon: Thank you.

Thanks for the opportunity to appear today.

I'd like to offer three observations and principles related to the plan for a greenhouse gas emissions cap for the oil and gas sector.

The first is that Canada's production of oil and gas takes place within a global market that is showing signs of a rapid change. This is important because the future demand for Canadian oil and gas is heavily dependent on the actions other countries take to respond to the climate crisis, and the price received by Canadian producers will depend on the global supply/demand balance.

The emissions caps design therefore should take into account how the demand and price may change. I'd like to offer one example to illustrate the speed at which markets are changing, which is the acceleration of the adoption of electric vehicles.

The IEA net-zero report published in May 2021 outlines the pathway for the global energy system that would allow the globe to reach a goal of net zero by 2050. The report highlights electric cars as one of three key technologies that would need to dramatically scale up by 2030 to achieve such a goal. The graph that I have provided shows the scale-up required, which is to 25% of vehicle sales by 2025 and just over 60% by 2030.

While the scale-up required is significant, the trajectory of sales of EVs through 2021 and sales expected in 2022, which is shown in bars on the same graph, are more than on pace with this ambitious target, demonstrating the potential to achieve this portion of the net-zero goal.

The report also examines the implications of following a net-zero pathway on the global fossil fuels supply and demand, showing that it would decline from 2022 onwards, with prices ultimately declining to \$35 a barrel in 2030. Moreover, the current high oil prices are not incompatible with a sector under transition and instead are what one would expect in terms of significant volatility in prices during a transition period.

While the net-zero target remains ambitious and personal transportation is not the only source of demand for oil, it is significant both in its impact as well as an example of the potential pace of change. For example, in the United States, one of the largest importers of Canadian oil, 44% of oil consumption is in the form of motor gasoline. As a result, rapid adoption of electric vehicles would have a meaningful impact on the supply/demand balance.

My second point is on the structure of the cap and integration with existing mechanisms. If the intention is to implement a firm quantity limit, I believe the appropriate policy approach would be a cap-and-trade structure with full auctioning of permits. Decisions would need to be made as to the use of revenues from the permits, but they could be recycled in such a way as to support workers and communities and mitigate global competitiveness concerns. Such a cap should be integrated with existing mechanisms such as the OBPS system or provincial-level policies such as the OBA in Alberta.

It is, however, important also to identify areas where the current policy is not efficient. For example, in Alberta, the use of facility-level benchmarks in the carbon pricing system within the oil and gas sector creates different effective carbon prices for different projects. Without making changes to the system to revert to facility-level benchmarks, a declining cap could lead to a reduction in production from resources with a lower carbon footprint over those

with a higher footprint because of the structure of the existing policy.

My third point is on the need for complementary measures to drive reduction under a cap. There are significant non-economic barriers to reduction of emissions within the oil and gas sector, just as there are across other industrial sectors. While a cap can be part of a policy approach to reduce emissions, it must be supplemented by policies that address these barriers directly.

There are also practical challenges and timeline constraints that support the use of complementary measures. Relying only on a cap is risky, as the experience with cap-and-trade systems elsewhere shows that systems are typically designed with some form of relief mechanism that distorts a hard cap, and even an ambitious timeline for design and implementation of a new cap would require one to two years to design, followed by some period for implementation.

Complementary measures can ensure emission reductions continue during this time period. These complementary measures could include, for example, increasing the stringency of methane regulations as well as introducing energy efficiency regulations or requirements for electrification.

Where complementary measures and, in particular, direct public financial support for emission reductions are introduced, they should be done in a way that fairly shares the risk and reward of emission reduction technologies between the public and private sectors. This includes, for example, integrating support within the current carbon pricing system, and where public funds are used to pay for emission reductions, the future value of those reductions from the carbon price should be returned to the public.

Thank you.

● (1605)

The Chair: That's perfect timing. You are right on the five-minute mark. Thank you.

Mr. Jaccard, if you're ready, we'll move right to you for your opening five minutes.

Dr. Mark Jaccard: Thanks for this opportunity to appear.

In my remarks, I'm just going to focus on two challenges. The first is setting the level of the greenhouse gas cap, and the second is the design of a policy mechanism to achieve the cap, and I'm sure you're hearing a lot in both of those areas.

First, with setting the level of a greenhouse gas emissions cap, we need to clarify that this is an emissions cap, not a production of oil and gas cap. That might seem obvious to everyone here, but I hear a lot of environmentalists who will talk about a mandated decline in oil and gas production. This would be unnecessarily harmful to fossil fuel-endowed regions in our country and probably would be unconstitutional as a federal policy anyway.

Second, though, understand that an emissions cap that ultimately reaches zero is already technically feasible today, so this case on the other side.... There are environmentalists on one side and industry on the other. I hear people saying that it's not technically possible to get to zero emissions and that we're going to need offsets or other things, and that's not true, and it wasn't true 20 years ago. The issue is cost, of course, and more innovation would certainly help to decrease the cost, but we can get to zero now. We have the technologies.

The third point is to aim for a cap where the incremental costs of additional greenhouse gas reduction in the oil and gas sector in, say, 2030, 2040 or 2050 should approximate the incremental costs of reductions in other sectors. The idea is that you do that because this minimizes the cost to your whole economy of reducing greenhouse gases, but there is a qualification to that. The cost to the economy of greenhouse gas reduction in trade-exposed industrial sectors like oil and gas as well as steel, chemicals, aluminum and cement will be greater if Canada's policies are more stringent than those of the industries' foreign competitors.

In practice, this means that, while we might have a 40% national reduction target for 2030, we might require significantly more than a 40% reduction in some of our domestic sectors like electricity, transport, buildings and land use, and perhaps only a 15% to 25% reduction in trade-exposed sectors like oil and gas. I've also heard people say that the national target is this and therefore that's the cap level in oil and gas, and that, again, doesn't make sense to me.

In terms of the mechanisms—the second part of my talk—to achieve the cap, there's much to discuss here. Obviously in an opening comment I can't say a lot, but I would say that, given the importance of oil and gas in total Canadian emissions—some 25% and above—and its role in producing secondary energy products whose combustion is the main cause of climate change, it might be administratively easiest to remove oil and gas from the current output-based pricing system and establish its own sector-specific cap and trade system.

Within that system, producers within the oil and gas sector would of course trade with each other, and you would try to set it up in the way that Ms. Hastings-Simon was talking about, although I'm not sure you need to auction all the permits. Those are big discussions that one can have. Also producers within the sector could acquire lower-cost external kinds of offsets; but I'm talking about offsets that really do take CO₂ from the atmosphere and put it underground, not the offsets that many of us analysts are finding somewhat bogus in many cases. Instead, it would be extracting CO₂ from the atmosphere, something called direct air capture. We have the technologies now. They're in their early stages in burying the CO₂ underground or even bioenergy capturing the CO₂ and putting that underground.

My final point is that governments, whether federal or provincial, enacting the policy will want to adjust the sector target. So there's going to be some signalling from the federal government, and we may need to provide some public support to sustain the competitive position of Canada's oil and gas industry relative to foreign competitors in jurisdictions with laggard greenhouse gas efforts.

• (1610)

That was the point I was making earlier. You're going to look at what you achieve in oil and gas, and it can be different or less ambitious because it's a trade-exposed sector, and you may even provide some kinds of public support.

I will end my comments there and thank you very much for your attention.

The Chair: Thank you for those opening comments.

Ms. Collins, we will go right to you, in the interest of time. You have five minutes.

Ms. Colleen Collins (Vice-President, Canada West Foundation): Thank you for inviting the Canada West Foundation to appear at your committee today.

The policy's purpose is to achieve emissions reduction. That's the central point of this policy and the Canada West Foundation certainly does not disagree with that purpose.

We also recognize there are many pathways to get there. There's no silver bullet. It's going to take carbon capture, energy efficiency, process improvements, fuel switching, electrification, renewables, nuclear, hydro, and new technologies on the horizon.

There are also many policy tools. Carbon pricing alone can't do it. We already have a complex mix of carbon pricing, cap and trade, methane regulations, fuel standards, emissions standards, incentives for innovation, investments in new technologies like carbon capture, and then there are emission caps.

As one of the big emitters, emissions reductions from oil and gas sectors is a big part of the solution. A 2020 Canada West Foundation report found that 43% of all emissions regulations in place across the country at that time specifically addressed the oil and gas sector and that number increases to 65% when you include large emitters.

You also, I am sure, are aware that Alberta already has an emissions cap for the oil sands. A 100 megatonne cap was introduced in 2015 as part of the climate leadership plan. The Oil Sands Emissions Limit Act remains in place despite changes to other climate policies since then. Since then, other provinces have enacted targets or caps or cap and trade programs.

Before extending this tool across the entire oil and gas sector across several provincial jurisdictions, I would like to bring three points to the committee's attention as it considers whether there are sufficient expected benefits from this proposed policy to compensate for the additional costs to producers and the economies of producing provinces and the rest of Canada.

The Alberta cap works because there is room for growth under the cap. It supports economic growth and innovation to reduce emissions, so the environment and the economy are explicitly recognized in the design of that cap. It's one thing to regulate 35 oil sands sites with six producers, but it's a whole other thing to regulate 200,000 sites across different provincial jurisdictions to establish this cap.

Finally, this additional regulation will create even more complexity, uncertainty and federal-provincial wrangling. The Supreme Court decision on the Greenhouse Gas Pollution Pricing Act was narrow. This proposal is very broad. There will be federal-provincial battles over the cap. There will be battles over measurement and the validity of the policy itself, none of which is good for investment required in new technologies to reduce emissions or for the economy. Uncertainty is the reason Teck declined to proceed with the Frontier oil sands mine in 2020, and that was only [*Technical difficulty—Editor*] of emissions. Uncertainty is the reason Canada has one LNG facility, which is under construction, while Australia has 16, the U.S. has seven, and the rest of the world has 70 LNG facilities.

Are these benefits primarily symbolic? Canada and its provinces are already recognized leaders in emissions reduction policy. One has to ask what the value is of additional legislation that creates even more uncertainty and distracts from the business of implementing existing policies.

I will cede the rest of my time for additional questions.

• (1615)

The Chair: Thank you.

We're going into some rounds of questioning.

First up for six minutes, we have Ms. Rempel Garner.

Hon. Michelle Rempel Garner: I wish I had 20 minutes, Chair.

For all the witnesses here, anticipate calls from me.

How I'm going to structure this is I tried to distill some recommendations based on all your presentations and I would like to get a yes or no on if I have summarized this right.

The first one is that this needs to be a cap on emissions, not on production, in order to respect jurisdiction. Is that correct? Do any of the witnesses object to that?

Dr. Sara Hastings-Simon: I don't object to the cap on emissions rather than production. I don't have a comment about the jurisdiction piece of that.

Hon. Michelle Rempel Garner: The second would be to avoid carbon leakage by including a system for measuring carbon leakage in the cap and then setting an equilibrium point to ensure that we're not having a perverse incentive.

Does that make sense?

Dr. Mark Jaccard: It's Mark Jaccard here.

Yes, but it's also leakage. It's also how you decide how much you're doing in other sectors in Canada. There are two parts to it.

Hon. Michelle Rempel Garner: That brings me to my other one.

You stole my thunder, Mr. Jaccard. It's a terrible place to be.

We need to have a simultaneous sector-by-sector approach on emissions caps to ensure that we're not creating the situation that you just talked about and that we're also not disadvantaging one region of the country over another. Is that correct?

Dr. Mark Jaccard: That's my view.

Hon. Michelle Rempel Garner: Ms. Hastings, is that accurate?

Dr. Sara Hastings-Simon: I don't think it has to be done that way. I think there are different ways to reduce emissions across the sectors.

Hon. Michelle Rempel Garner: Why wouldn't we cap all sectors simultaneously?

Dr. Sara Hastings-Simon: At what level would that be? When you say "cap", it sort of—

Hon. Michelle Rempel Garner: If the government's going through the process for the oil and gas sector, is there any reason why they shouldn't be looking at, let's say, concrete or cement, at the same time?

Dr. Sara Hastings-Simon: So you're talking about other industrial sectors?

Hon. Michelle Rempel Garner: That's correct.

Dr. Sara Hastings-Simon: I think it would make sense to look at other sectors—not necessarily at the same level, though.

Hon. Michelle Rempel Garner: Of course.

Is there any reason, though, that you would say we shouldn't do it at the same time?

Dr. Sara Hastings-Simon: Do you mean at the same level? Yes, because—

Hon. Michelle Rempel Garner: No, I mean at the same time, not at the same level,.

Dr. Sara Hastings-Simon: If it's at the same time, then no.

Hon. Michelle Rempel Garner: Okay, that's great.

We also need complementary measures during this period of transition as the cap is implemented. Some ways were mentioned, such as CCUS and direct air capture, yes?

Ms. Colleen Collins: Yes, we need all of them.

Hon. Michelle Rempel Garner: I'm going to blast through this and then I'm going to open it up for discussion.

We have to ensure that any incentives for substitute goods, like low-carbon substitute goods—Ms. Hastings talked about electric vehicles—don't cause inadvertent carbon leakage. For example, if we're going to incentivize the use of electric vehicles and we haven't accounted for carbon leakage in the oil and gas sector or coal fire production, that we're not actually increasing demand, because we've created a substitute good, or demand for a substitute good, without taking care of that.

I'm sorry—I'm kind of off my game today, but you get what I'm saying, right? If we're going to incentivize electric vehicles, then we have to ensure that our electricity production is less reliant on carbon-emitting sources than it is right now in Canada. Would that be correct?

• (1620)

Dr. Sara Hastings-Simon: No. I think we need to get to net zero, but the current emissions by Canada's electricity sector for the use of electric vehicles is lower on a total life cycle basis.

Hon. Michelle Rempel Garner: Can you send the committee some data to that effect?

Dr. Sara Hastings-Simon: Yes.

Hon. Michelle Rempel Garner: Thank you.

The last thing is that, as Ms. Collins said, any cap needs to have stability. So we should not be announcing caps without details, so that they will not be a disincentive to innovation and the development of complementary measures. Would that be correct?

Ms. Colleen Collins: Yes.

Hon. Michelle Rempel Garner: Okay.

Dr. Mark Jaccard: Yes, but with regard to the word “stability”, it actually should be something that's declining over time.

Hon. Michelle Rempel Garner: How about “no surprises to industry”? Is that better?

Dr. Mark Jaccard: Yes.

Hon. Michelle Rempel Garner: Okay.

The other thing I would say, since I have a little bit of time, is that we also need to recognize externalities in a set way.

Ms. Hastings, you made an assumption that the decline in demand was based solely—that's how I took it, anyway—on an industry in transition. Did you factor the pandemic or any other loss of production into your statement? Or is there a set of externalities that Canada uses right now that you used to make that statement?

Dr. Sara Hastings-Simon: No, my statement was purely about the sale of electric vehicles, independent of any change in demand or changes in traffic patterns.

Hon. Michelle Rempel Garner: Would you say we need to have a set of externalities that we're looking at, both in terms of the actual reduction of greenhouse gas emissions, however we measure that, and in actual supply and demand? You were talking about price volatility when we're designing this cap.

Dr. Sara Hastings-Simon: I'm sorry but I don't understand the question.

Dr. Mark Jaccard: Could I just jump in?

Hon. Michelle Rempel Garner: Go ahead, yes.

Dr. Mark Jaccard: When you use the word “externality”, we pedantic academics are thinking about environmental damage somewhere else. I think what you're talking about right now is that we have to account for anything that's outside of our system, like a war in the Middle East or a higher price of oil.

Hon. Michelle Rempel Garner: Yes, exactly.

Dr. Mark Jaccard: Absolutely.

When you do this kind of work, you do modelling, which is what I and the people I've trained do, and we have to see what is outside and what is inside.

Hon. Michelle Rempel Garner: I have five seconds left.

Do you think we have adequate levels of modelling right now in Canada?

Yes, yes, yes, no, no, no.

Ms. Colleen Collins: No, we do not.

Dr. Mark Jaccard: Absolutely yes.

Dr. Sara Hastings-Simon: Yes.

Ms. Colleen Collins: No.

Hon. Michelle Rempel Garner: That's spicy.

My time is up.

The Chair: Thank you, everybody, for what seemed like a bit of a rapid-fire round there. I appreciate everybody jumping in as they could.

I think as we go through this, it must be hard for the interpreters and for record-keeping if we're doing thumbs-up as opposed to being using the mike somehow. Well, we'll see how we work that out.

Anyway, thank you, a good round.

We're going to go now to Mr. Maloney for six minutes of questions.

Mr. James Maloney: Thank you, Chair.

Ms. Rempel's right: there's a lot of information to cover here.

I'm tempted to say to the witnesses, do any of you want to expand on those yes-no answers she tried to get you to give during her six minutes, because she covered a lot of ground? Feel free to do so during the six minutes if there is more you want to add.

Professor Jaccard, I want to start with you.

I was going to start by saying the problem with this discussion any time I have it is that the enemy is greenhouse gas emissions, not the oil and gas industry, and I think that's what you were trying to get at when you said you contrasted emissions versus production. That's a narrative that has to be reinforced over and over again whenever we're having this discussion, because even at this committee sometimes we get into the polarized debate about you're after the sector.... You know where I'm going.

I appreciate you for saying that. I guess my first question would be to you, sir. Generally speaking are the policies that have been put in place in recent years reflective of that approach?

Dr. Mark Jaccard: Thank you for that.

Yes, they have. It's taken us a while to get there but it is to get the policies focused on the pollutant, on the greenhouse gases, and not harming a particular industry or region.

I'll just quickly say that I published a book 20 years. It did quite well. It won the Donner Prize. It was called *Sustainable Fossil Fuels*, and the reason I wrote that book was to get people to understand that if you care about climate, it doesn't mean that you have to be against fossil fuels.

We have tons of fossil fuels in the earth's crust—they're all over the planet—and so we need to make sure that we stop polluting whether in the production of fossil fuels or in the consumption of products made from them, like hydrogen and electricity. That's the focus of my remarks.

To me it almost seems trivial to say that, but I do know that in the dialogue across the country, the very reason I wrote that book was because people still say, oh, you're trying to hammer Alberta, Saskatchewan, Newfoundland and so on. The idea is to solve a global problem, so we have to focus on emissions, not the production.

• (1625)

Mr. James Maloney: Absolutely, and that was Ms. Rempel Garner's point, which I agree with for the record.

Does anybody else have anything to add to what Professor Jaccard said?

Ms. Collins.

Ms. Colleen Collins: I guess my concern is that while I do appreciate that the language is around emissions, it all depends on how the cap is set.

If the cap is set that will allow for additional production in response to oil prices due to a war in the Middle East, or in response to increasing process improvements that reduce emissions, then it's fine. However, that's the challenge. Are we actually going to talk about this policy with respect to an opportunity for increasing pro-

duction when there are efficiencies available, or will the cap basically claw back any production efficiencies that reduce emissions?

Mr. James Maloney: I'm going to assume, and Professor Jaccard can correct me if I'm wrong, that what he meant when he started making his second point on policy was that you have to adjust the sector targets to maintain a competitive nature for the oil and gas sector. I think that's what he was getting at, because the last thing we want to do is to hurt the sector by having hard and fast rules that are going to do exactly what Ms. Collins just said.

Professor Jaccard, am I right about that?

Dr. Mark Jaccard: Yes, but at the same time, Ms. Collins, I would just emphasize that it could be that production over the next 20 or 30 years goes down, because for humanity we need that to happen, and we're pretty high-cost producers. You wouldn't want to delude people in a region and say, hey, let's just keep increasing production, because then you're just building a house of cards, which is what we partly did over the last couple of decades, so you want to be careful about that.

Mr. James Maloney: Fair enough.

Ms. Colleen Collins: That's where the Alberta policy set that direction, and you now have the six oil sands producers with their pathways to net-zero programs. Because it was very targeted, it had a positive impact and got that part of the sector on board.

Mr. James Maloney: It's an expensive pathway.

There have to be different levels of government working together and all striving to do this the same way, at the same speed and at the same time. I don't think we see that right now, frankly. I honestly believe that everybody on this committee wants the same thing. We're just taking different routes and going at different speeds to get there.

Do you have recommendations? Let me back up. What is your view on provincial versus federal regulations right now, which are trying to achieve what we're trying to achieve in working toward these targets?

I'll start with Dr. Jaccard.

Dr. Mark Jaccard: Humanity is way too slow in getting global greenhouse gas emissions down. First, wealthier countries need to be going fast like us, and then we also need to be using trade measures to make sure that other countries around the world are acting and following that.

The policies we need, I really argue, should be at a federal level, and they should be focused on emissions. That was my first point, so I will stick with that point. We're so much closer to that than we were 10 to 20 years ago, so I'm quite encouraged.

I'll stop there.

Mr. James Maloney: I think we all have to stop there, because I'm out of time.

Thank you very much.

The Chair: We'll now go to Monsieur Simard, for six minutes.

[Translation]

Mr. Mario Simard: Thank you, Mr. Chair.

I want to thank the witnesses.

I'd like to start by asking Mr. Jaccard and Ms. Collins a question.

I must say that I was a little confused by your comments. I'm having some trouble understanding how we can reduce emissions without capping production. I want to understand your reasoning better.

In your view, when we say that we must reduce emissions from the oil and gas sector, it means that we must reduce emissions from producers. However, the gas and oil that they produce will be consumed afterwards, whether for transportation or for industrial processes, and that too will create GHGs. Without a cap on production, I don't see how we can reduce greenhouse gases.

Am I making sense or am I off the mark?

• (1630)

Dr. Mark Jaccard: Indeed, the producers must reduce their emissions. They have the technology to do so, even if they produce oil products for consumption in Canada or for export.

In Canada, we have policies such as the carbon tax and regulations for cars and oil to reduce emissions from domestic consumption to zero. When it comes to exports, however, the emissions produced by the consumption of gas and diesel from Canada fall under the responsibility of the countries to which these products are exported. That's what the Intergovernmental Panel on Climate Change says, and that's fine. It's better that way. It should be noted that, in these countries—

Mr. Mario Simard: I understand. We can be irresponsible, because we aren't the ones burning the oil. Nevertheless, I understand the logic.

I want to quickly hear from Ms. Collins on this topic.

[English]

Ms. Colleen Collins: You can't just focus on production without focusing on consumption. We have a set of policies that address consumption. Production doesn't just go to producing gasoline. For example, there's been a challenge in British Columbia. British Columbia introduced an emissions cap, and the debate has begun. How can B.C. expand its LNG production and exports if that production causes the province to exceed its cap?

Since the time that initial policy was introduced, we've seen LNG production in B.C. declining very rapidly in terms of its GHG intensity. That LNG, despite the fact that China has installed more renewables in the last five years than the rest of the world combined, has—

[Translation]

Mr. Mario Simard: Thank you, Ms. Collins. Sorry to interrupt you. I don't mean to be rude, but I don't have much time.

You spoke about technology to reduce the carbon footprint of the oil and gas sector. Everything I've seen about carbon capture strategies indicates that they're possible as long as the sector has government support.

I'm not an economist. However, I know that, in economics, the first principle is competitiveness and profitability. In my view, a low-carbon oil and gas sector is neither profitable nor competitive, so it needs government support. The proof lies in the two major carbon sequestration projects worth \$2.5 billion, 57% of which comes from either the Alberta or Canadian governments.

This means that the decarbonization of the oil and gas sector will be accomplished through a massive investment of public funds.

Do you agree?

Dr. Mark Jaccard: The issue is that this constitutes a global objective. The logic that you just explained applies equally to the aluminum or cement sector, for example. Basically, all sectors engaged in international trade must receive support in order to reduce their emissions, because this affects the cost of production.

Mr. Mario Simard: I don't want to contradict you, Mr. Jaccard, but do you know the amount of federal government support for the forestry sector? In Quebec alone, this industry generates \$20 billion, and the federal government support accounts for 0.3% of this amount. Moreover, 75% of federal support is provided through loans. The forestry sector isn't dependent on the Canadian or Quebec governments, and it can generate profits. It also doesn't generate greenhouse gases.

When we start looking for net-zero oil, I gather that the Quebec government and the Quebec and Canadian taxpayers will pay for this technology.

• (1635)

Dr. Mark Jaccard: I'm not talking about forestry. I'm talking about the sectors that produce high levels of GHG emissions. That's why I'm talking about the aluminum industry in Quebec, for example. As part of the transition, the federal government must help these sectors, including in Quebec.

[English]

The Chair: I see Ms. Collins has her hand up, but we're out of time on this one.

Ms. Colleen Collins: I wanted to make a comment on carbon capture in particular. The Boundary Dam carbon capture project in Saskatchewan was, indeed, subsidized by the taxpayers of Saskatchewan as ratepayers of SaskPower.

The contributions of that project are not just for capturing carbon in Saskatchewan. That was the first commercial project of that size and already because of that experience, the next large-scale carbon capture project will be 30% cheaper.

This is what—

The Chair: Ms. Collins, I'm going to have to jump in. We're over time, but Mr. Simard will have another chance, if he wants to come back to that in his next round.

We now are going to go to Mr. Angus for his six minutes.

Mr. Angus, it's over to you.

Mr. Charlie Angus: Thank you.

Ms. Hastings-Simon, thank you so much, and thank you to all of the other witnesses too.

I've been in politics now for 18 years. This would have been a great discussion in 2004. Now, it's kind of ridiculous: Canada is an outlier, and we get worse every year, but we're always coming up with these great scams about how we are going to be world leaders when we have been identified as world outliers.

We have to start breaking this scam down. Let's talk about emissions.

Ms. Simon, how important is it to count all of the life-cycle emissions of what's coming out of the oil and gas sector, as opposed to just what's coming out of either an oil sands operation or the wellhead?

Dr. Sara Hastings-Simon: When you talk about the upstream emissions, it's important to count them all, as you say. Those are both process emissions and things like methane, as well, that I mentioned.

If one is designing a cap around a specific sector, I agree with the comments of the other witnesses, that it should focus on the emissions from that sector, and that the majority of the use of that product and the emissions that arise from the combustion of fossil fuels should be addressed by other policies that target that consumption.

As I mentioned in my opening comments, I believe that we are starting to finally see some global traction on that point, and that's actually... I would echo something that Professor Jaccard said about the need to consider the fact that we may very soon see a decline in demand for the consumption of Canadian oil and gas arising from that.

Mr. Charlie Angus: The International Energy Agency has warned us about future investments in oil and gas being stranded assets. Mark Carney has talked about stranded assets. Canada is a very high-cost producer, and we have highest GHG emissions in the world coming out of our fields and we are making these increases for export. Would it not be better to have an honest conversation about what that emissions cap is going to mean and what we actually have to do, if the rest of the world is shifting?

I know there may be a war in the Middle East, but I also know it's just as likely that the planet is going to burn in the meantime, because that's what we're seeing from the scientific studies. We don't have a lot of time to mess around. How important is it that this is Canada's idea of an economic strategy, if we're talking about a mass expansion of a million barrels a day, identified for an export market that may not be there?

Dr. Sara Hastings-Simon: I have two thoughts on that.

I think we are starting to see that companies are not investing in new greenfield production from, for example, the oil sands exactly for that reason. There are questions and a lot of doubt about the future of demand for that product.

I think it is very important for Canada to think about the risk of stranded assets and, in particular, liabilities, which might be left behind as demand for oil and gas declines. It's important to think about that now, while the price of oil is high. This is something that I would encourage the committee to consider.

Mr. Charlie Angus: Thank you for that.

I'm concerned about this. I represent a natural resource region, and the last thing I want to do is tell workers that we're going to be there for them if the market is shifting and we have international obligations. This idea that we're going to continue to increase production heavily but we're going to have an emissions cap...maybe only a Liberal government could come up with something like that.

Mr. Jaccard, do you believe it's possible? The Canada Energy Regulator says we're going to have an increase of a million barrels a day, while the rest of the world is projecting decreases. With an increase of a million barrels a day, are we going to decrease our emissions?

• (1640)

Dr. Mark Jaccard: As I answered before, you can produce a lot of oil for export and have virtually zero emissions at some point. I guess my point is—

Mr. Charlie Angus: But how much would that cost us? Our emissions have gone up in the oil sands, so these markets for export have the highest GHG emissions in the world, and we're increasing by a million barrels a day. Yes, I guess it's possible that we can have massive increases and somehow emissions are going to go down, but it's not really credible, is it?

Dr. Mark Jaccard: It really depends where the price of oil is. My answer is similar to Ms. Hastings-Simon's. The point I'm trying to make is that you don't need to go to war with Albertans to tell them, "You have to get your production down." You say, "You have to get your emissions down," and then the global economy will determine—

Mr. Charlie Angus: This is not about going to war. This is about us meeting our international obligations.

Dr. Mark Jaccard: That's why I focused on emissions.

Mr. Charlie Angus: The emissions from our oil exports are larger than all the domestic emissions from all sectors combined.

Dr. Mark Jaccard: I answered that question.

Mr. Charlie Angus: But don't you think we should be counting how our foreign...? God help the planet. We'll send it to China, but it's not going to count. That's a scam. If we have—

Dr. Mark Jaccard: So I—

Mr. Charlie Angus:—more emissions from our exports than all the other sectors combined, I think we have to be honest with Canadians.

Dr. Mark Jaccard: I'm on the IPCC. The IPCC rightly determined 30 years ago that the emissions should be counted where they happen, because that creates the incentive for people to possibly take petroleum and convert it to hydrogen and bury the CO₂.

Mr. Charlie Angus: It certainly creates an incentive to ship it off to China, where they burn it and we can say we're net zero. It's ridiculous.

Dr. Mark Jaccard: I disagree with you profoundly.

Mr. Charlie Angus: Thank you.

The Chair: Thank you.

We're going to go into our second round. These ones are a bit shorter. First up, for five minutes, we have Mr. Maguire.

Mr. Larry Maguire: Thanks, Mr. Chair.

I really appreciate the witnesses' presentations today, and the questions.

I've always been a proponent of saying we recognize borders, but greenhouse gases don't recognize those borders. If the production cost here in Canada goes up due to whatever new regulations are imposed, I fear that countries that have a very weak environmental standard will step up to fill in the gap. You've each commented on that at some point.

Is it possible that, if Canadian oil production goes down, global greenhouse gas emissions go up due to these countries increasing their own domestic production to fill the gap? That's why I think it's important to talk about the cap on emissions, not on production. We're 1.6% or something, China is 26%, and we're sitting beside a major country in the world that has a lot of emissions, as well. There are lots of opportunities for technology development here; our companies are already doing that.

Can each of you expand on that?

Ms. Colleen Collins: I'd like to say that customers buy our product. That's determined by our customers; that's not determined by us. That's the way global markets work, and at the pace we're going, we're bringing down by 20% the emissions in the oil sands since 2015, and that's just the beginning.

I agree with Professor Jaccard. I don't see any reason why we can't reduce the per-barrel intensity as well as reduce the total intensity and at the same time not reduce production, or even increase it slightly.

Dr. Sara Hastings-Simon: In answer to your question about the risk of what I understand to be carbon leakage, if we were to reduce production of Canadian oil and that production were transferred elsewhere, as Mr. Jaccard said, there are ways to avoid doing that by reducing the emissions. But if that were to happen, it's unlikely that overall emissions would increase, because while there has been progress made to reduce the emissions from Canadian oil production and Canadian oil sands production, it does remain one of the highest emissions intensity products worldwide because of the nature of the product itself. So the emissions footprint overall from other sources that would replace it would on average be significantly lower. I'm not suggesting that is what should happen, but as to your question whether there would be a carbon leakage, I think it's unlikely.

• (1645)

Dr. Mark Jaccard: I'll just say I agree with Ms. Hastings-Simon's answer.

Mr. Larry Maguire: Thanks.

We have a Liberal government that's already announced that a carbon capture tax credit is going to be coming down the road shortly. Do you have any advice on how it should be designed to help meet the emissions targets and spare our Canadian innovation in the industries?

Dr. Sara Hastings-Simon: I have a point on that. Given that we have a carbon price within Canada, one that is planned to increase, I think it's really important that a tax credit be designed so that it does not provide a sort of unnecessary windfall to producers. If a tax credit is designed in a way that brings that higher price sooner so that producers can make investment decisions because of certainty, I think that's a good thing, but then the value of that emission reduction in the long term doesn't need to be sort of double counted. So you could do that by either basically ensuring that the environmental attributes are purchased through the design of that carbon price, or more generally to provide essentially a contract for difference or carbon pricing guarantee so that not only carbon capture and storage could take advantage of that, but all sectors and all emission production opportunities. You would have the ability to provide that certainty.

Mr. Larry Maguire: Thank you.

Could I have a comment from the others as well?

Ms. Colleen Collins: I think the big thing, the reason they're talking about incentives, is that the carbon price is paid on existing production, but the carbon capture has to be developed, designed and built today. I think that's the reason they're talking about incentives: you have to get engineers' pencils working and "think guys" building stuff now.

Dr. Mark Jaccard: I'll just say I'm a strong supporter of this particular policy, and the others have given the reasons.

Mr. Larry Maguire: There's a good example to be set for the low Canadian carbon that we can use to help save the world, I guess, if you can put it that way, but the technology that needs to be developed could well be exported.

I have a quick question on other sources here. Other than nuclear, are there any large-scale sources of energy that could theoretically replace the oil and gas energy production in Canada that is currently used to provide electricity to, say, our homes and businesses or used in the oil sands? Nuclear is one that I think of, but is there anything else?

Dr. Mark Jaccard: We're going to shift towards an electricity economy in many respects, and we're going to have enormous production of electricity from solar and wind, and that's going to have to be linked up with our hydro reservoirs and other energy storage and so on. There's going to be massive economic development as part of the transition to a zero-emission economy.

The Chair: Thank you. That's the end of the time there. We're just a little bit over.

We're going to go now to Ms. Lapointe for five minutes.

Ms. Viviane Lapointe (Sudbury, Lib.): Thank you, Mr. Chair.

Thank you to all the witnesses for appearing today. We are very fortunate to have you here to share your experience and knowledge with us.

My first question is for Dr. Hastings-Simon.

How can we help the oil and gas sector shift to net-zero emissions through our current industry lens while also considering what the sector might look like and what it might need in 10 to 15 years?

Dr. Sara Hastings-Simon: I think providing long-term certainty is critical in both policies and things like the price of carbon, for example. Finding ways to provide certainty will allow companies to make investments in technologies that reduce emissions, on the back of knowing the ultimate value of those technologies. I think that's one of the most important things that can be done. As I mentioned, I think there are also certainly non-price barriers to the deployment of technology. When it comes to things like methane emissions, more direct regulations around the use of different equipment that can reduce methane emissions, for example, is very helpful in enabling those emission reductions to happen.

Ms. Viviane Lapointe: Thank you.

My next question is for Mr. Jaccard.

I was fascinated to hear you say that we currently have the technology available to produce at net-zero emissions levels. What would you say we need to do from a policy and legislative perspective to get us there?

• (1650)

Dr. Mark Jaccard: Well, it's the same as 20 years ago, and we only have two options. There are only two kinds of policies that actually overcome the fact that you shouldn't use the atmosphere as a free waste receptacle—putting a price on carbon or regulating the carbon emissions or the technologies. We're doing a mix of these, and Ms. Hastings-Simon talked about that.

She mentioned that it's good to try to get some price certainty, so there's your rising carbon price, which we have in Canada, whether it's the output-based pricing system for industry or the pricing system for consumers. That's price certainly for investors, but the emissions cap is another way of having that certainty. The trading of permits under that cap might create some price uncertainty.

In energy environment economics, we talk about this trade-off between giving investors some price certainty or some emissions certainty. Each one has its own trade-offs. The policies are really simple. Don't let anybody fool you that there are a whole bunch of tricky policies out there. That's all it is, and we have those policies. They need to be more stringent.

Ms. Viviane Lapointe: Thank you.

Dr. Hastings-Simon, what would be your response? Would you have anything to add to that question that I just asked?

Dr. Sara Hastings-Simon: The certainty we would like to create from an increasing carbon price, I think, is not certain enough to be “bankable” or “financeable” for investors. I think that when industry is going to financial institutions to get loans or equity on the back of a rising carbon price, that is not certain enough. There are things that government could do to provide more of a guarantee to lower the costs of financing there.

Ms. Viviane Lapointe: Thank you.

Ms. Collins, there is an incredible potential for indigenous businesses and leaders in the energy sector. I would want to know what we can do now as a government to ensure that those opportunities are there for strong indigenous partnerships.

Ms. Colleen Collins: I think we have increasingly developed financial pathways, financial regulation. The equity participation and equity partnerships that we're seeing right now are a huge step forward. Again, clarity around how we count things, what counts and how it's counted, I think, will also go a long way in helping make those opportunities bankable. Anything we can do to improve that, I think, would go a long way. It really does go to transparency of information.

I disagree with Dr. Jaccard about the quality of the models. We have great models, my concerns is they're just not very transparent. I think that will also go a long way to help reduce uncertainty in the whole sector for everyone, including indigenous investors.

Ms. Viviane Lapointe: Thank you.

Mr. Jaccard, given that Canada is currently a major exporter of oil and gas, what can be done if the global demand for product reduces as net-zero economies proceed?

Dr. Mark Jaccard: We've seen this so many times. It happens all the time, but at least these sectors will go down very slowly, so, for workers, a transition may not be as harsh as people try to portray it.

The Chair: Great. Thank you.

We're now going to go over to Monsieur Simard. These next two are slightly shorter, so two-and-a-half minutes.

Mr. Simard, you have two minutes and 30 seconds.

[*Translation*]

Mr. Mario Simard: Thank you, Mr. Chair.

Mr. Jaccard, I don't want to end on a sour note. I was a bit hard on you.

I want to address one of your earlier comments when you said that this wasn't about waging war on Alberta. I also want to reassure my colleague, Ms. Rempel Garner, that I don't want to wage war on Alberta. For me, it's a matter of fairness. I'll tell you why.

One of the first principles of economics is scarcity. We know that resources are limited. At least, I believe that the government's resources are limited. You gave the example earlier of the aluminum sector. It's a key sector in my area, so I know quite a bit about it. There's the inert anode technology, which will produce net-zero aluminum. Since 2018, this technology has received about \$60 million in federal funding. To me, that's peanuts, if I consider that the oil and gas sector brings in about \$24 billion year in and year out. When I talk about fairness, that's what I mean.

The sectors that could play a leading role in the fight against climate change are unfortunately not supported by the government. A considerable, even excessive, portion of our resources goes to the oil and gas sector.

I don't know whether you have ever done this type of reflection process. I'm thinking in particular of the forestry sector, which can replace certain products. With lignin, you can replace products from the oil industry. However, the costs are enormous, so the government will never want to embark on this. A biorefinery is a \$2 billion project. The federal government currently prefers to invest in carbon capture strategies. We mustn't forget that.

I want to hear your thoughts on this.

● (1655)

Dr. Mark Jaccard: I'm not in a position to discuss or dispute the figures that you provided. That said, I've done a great deal of modelling work for governments and for industries. In my view, there's some equality.

Mr. Mario Simard: I want to ask Ms. Hastings-Simon a question. She said earlier that the electrification of transportation is a good way to reduce oil production.

Does she feel that electrification of transportation is receiving enough support from the government to ensure that we meet our climate change targets?

[*English*]

The Chair: We're at the end of the time, but I'll give you the floor for a minute to respond.

Dr. Sara Hastings-Simon: There certainly is financial support toward the electrification of transportation, both subsidies for vehicles and charging stations. I think the policies that are missing on transportation electrification are actually policies that would help make electric vehicles more available for consumers, things like requirements or targets for manufacturers for the number they must sell in the country in a given year.

The Chair: Thank you.

We'll now go to Mr. Angus, for two and a half minutes.

Mr. Charlie Angus: Thank you folks. This has been a fascinating discussion.

My concern is that I feel in Canada it's so very parochial, because when we start looking inward and our failures to address these issues, it somehow becomes that we're being mean to the oil sector and to Alberta, when that's not the issue. The issue is, how do we get through this as a country and as a planet?

I think of the environment commissioner, who's just stated:

Canada was once a leader in the fight against climate change. However, after a series of missed opportunities, it has become the worst performer of all G7 nations since the landmark Paris Agreement.

He adds:

we need action and results, not just more targets.

To that, Dr. Hastings-Simon, I'd like to talk about "bankable", because we have this thing that we're floating here, that we can do massive increases in production, but somehow those are separate from emissions.

Yet in the last three years, the insurance giant The Hartford has pulled out of Canada. The Swedish central bank has pulled out. The financial giant BlackRock has pulled out. Agence AXA International has pulled out. AP7, the Swedish company has divested. BNP Paribas group has divested. Le groupe Société Générale of France has pulled out. The Norway sovereign wealth fund has pulled out. The Swiss Re Group and Zurich Insurance have pulled out. They all don't believe that Canada is serious about having a credible environmental plan for our oil and gas sector.

This is what Mark Carney is talking about. The financial sectors are making decisions, and they are leaving Canada because they simply don't believe us.

What do you think we need to do to stabilize employment, particularly in western Canada, by starting to make some investments in the new clean technologies, as opposed to continuing with this ongoing, ongoing, ongoing claim that we're going to increase oil production and somehow save the planet?

Dr. Sara Hastings-Simon: That's a big question.

As far as opportunities to invest in clean technologies are concerned, as Professor Jaccard mentioned, a big part of the future energy system will be electric and electrification. There are substantial opportunities for the growth of wind and solar in the western and prairie provinces. One thing that would help to unlock that further would be the build-out of transmission lines between provinces. That could be done to enable Canada to develop more of its renewable energy resources.

● (1700)

Mr. Charlie Angus: To close on that, I believe that to get to a secure environmental future, Alberta and Saskatchewan are essential because of their expertise.

How do we start to shift this conversation to ask what infrastructure we need in order to make investments in all the other opportunities we have in western Canada?

Dr. Sara Hastings-Simon: I'm not sure if that was the question, or—

Mr. Charlie Angus: Absolutely.

Dr. Sara Hastings-Simon: One of the biggest infrastructure pieces are the transmission lines. It's to make the electricity lines that connect those provinces to their neighbouring provinces and to the U.S. much larger.

We've already seen significant private-sector investment in Alberta in the build-out of wind and solar in just the past two years because of the opportunity there. Building up that infrastructure will enable much more of that to happen.

Mr. Charlie Angus: Thank you so much.

The Chair: All right.

I'm looking now to the committee and the witnesses. We had booked one hour for this panel. We started at four o'clock with the panellists, so we've had the one full hour. There's been lots of really good testimony.

I've checked with our clerk and was reminded that the motion was to have eight two-hour meetings on this particular study. We can either adjourn at this point and go into our subcommittee business, or, if it's the will of the committee and if the witnesses are available, we can continue for a bit. That would be subject to the witnesses being available and the desire of the panel to continue.

Mr. Angus.

Mr. Charlie Angus: I would prefer to get to subcommittee business because I'm concerned about going too much further without hearing from the net-zero advisory panel.

The Chair: Would everybody be good with ending at this point?

Just before we gavel out, go ahead Ms. Rempel Garner.

Hon. Michelle Rempel Garner: I just want to say thank you to all the witnesses for appearing today despite the glitch at the front end and for answering our questions so thoroughly. You can probably expect to have follow-up from all of us.

Thank you.

Mr. Charlie Angus: Yes, thank you.

The Chair: We do have other business to get to, but I, too, would like to thank each of the witnesses for their time today and

the insight they brought at our very first meeting on a very important topic.

I apologize that we didn't get right to you at 3:30, but at committee it's important to make sure we're working through all of our procedural issues. Thank you for your patience today. As you heard, if there is a desire or if you are able to follow along when the net-zero panel is able to get to us and if you have additional thoughts, you can reach out to Hilary, our clerk. We can get back to you and see if you'd like to be added back to another panel or perhaps send a supplementary brief of up to 10 pages to respond to whatever we hear from that panel.

Thank you, everybody.

I have one quick item that has come up. As many of you know, Mr. Morrice has been joining our panel. He made a request to the clerk to have access to materials that have come before the committee, such as submissions and the Library of Parliament briefings. This requires unanimous consent from the committee to agree to that because we're not allowed to share it if the party doesn't have official status within the House.

I'm just putting it out there. We could talk about it at the subcommittee, but it still needs to come back to this committee. I'd like to throw it out there now, if we're willing to deal that. It would require unanimous consent to share those materials.

Ms. Rempel Garner.

Hon. Michelle Rempel Garner: Could we discuss that at the subcommittee?

The Chair: Okay. We can move that over there, and it will have to be brought back.

With that, ladies and gentlemen, we will adjourn. Once I gavel out, I'll ask the subcommittee members, if you're on Zoom, to log out. There's a new link for the in camera subcommittee meeting, so get back in as quickly as you can.

Thank you, everyone, and have a great day.

The committee is adjourned.

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