HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

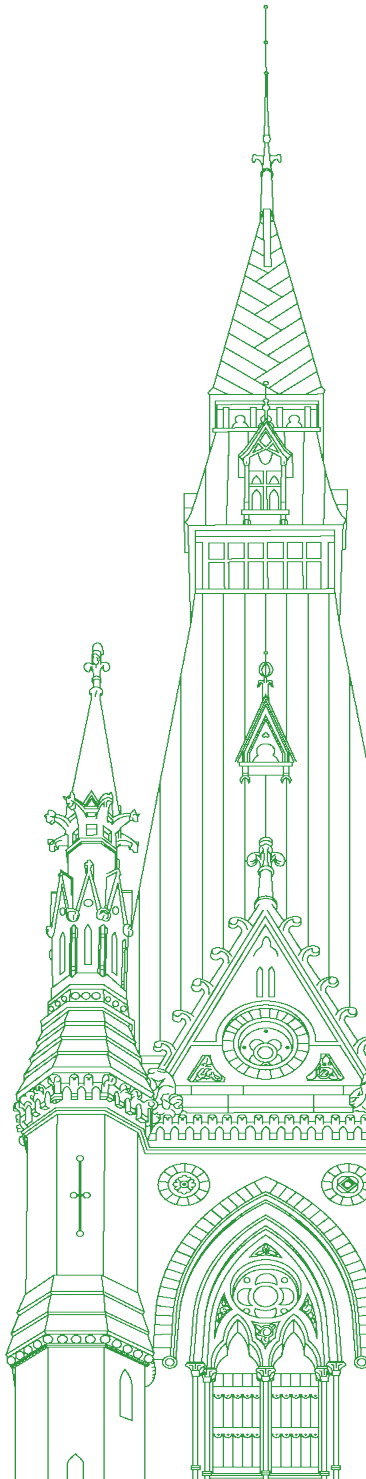
44th PARLIAMENT, 1st SESSION

Standing Committee on Environment and Sustainable Development

EVIDENCE

NUMBER 013

Tuesday, April 26, 2022



Chair: Mr. Francis Scarpaleggia

Standing Committee on Environment and Sustainable Development

Tuesday, April 26, 2022

● (1100)

[*English*]

The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): Good morning, everyone.

I call this meeting to order.

I'll just go over some routine matters.

For those who are in the room, we're still under public health measures here on the Hill. We need to respect the two-metre rule. We need to socially distance. If you're around the table and you're socially distanced, of course you don't need to wear a mask, but all others in the room, including staff, should be wearing a mask.

For those who are appearing today as witnesses via Zoom, please keep your mike on mute when you are not speaking. You can, of course, speak in either official language.

I think that pretty much covers it.

Before we get going, though, I would ask members to adopt, if they wish to, obviously, the third report of the subcommittee on agenda and procedure.

Do I have agreement to adopt the report?

I see thumbs up and no objections, so the report is deemed adopted.

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

The Chair: That was nice and easy.

This is our second-to-last meeting, as part of the fossil fuel subsidy study.

[*Translation*]

In the first hour this morning, we have Justin Leroux, who is appearing as an individual. He's a professor of applied economics at HEC Montréal, and co-director of ethics and economics at the Centre de recherche en éthique. Also as an individual, we welcome Jason MacLean, assistant professor at the University of New Brunswick's Faculty of Law.

We also have representatives from Export Development Canada, Mairead Lavery, president and CEO, Justine Hendricks, chief corporate sustainability officer and senior vice-president of sustainable business enablement, and Sarah Fulton, senior advisor, environmental, social, and governance policy.

Each witness will have three minutes to deliver their opening remarks, and then we will proceed to rounds of questions from all parties.

Professor Leroux, we will begin with you. You have the floor for three minutes.

Prof. Justin Leroux (Professor of Applied Economics at HEC Montréal, Co-Director, Ethics and Economics at Centre de recherche en éthique, As an Individual): Thank you, Mr. Chair.

I'd like to thank the committee for the opportunity to contribute to this important discussion.

[*English*]

My contribution will aim at clarifying certain economic arguments and ethical concerns, but first I would like to get the definition of an inefficient subsidy on record. A subsidy is any government support that confers a market advantage. For example, a tax credit is a subsidy and the OBPS is a subsidy.

As far as inefficiency is concerned, economic principles tell us that any program that does not pass the cost-benefit test is inefficient. As a result, some fossil fuel subsidies, such as small and temporary programs that aim at providing energy security to remote communities until they can transition, may not be inefficient. However, most fossil fuel subsidies are inefficient because the oil and gas sector is already a profitable one. They amount to funnelling taxpayer money to shareholders and executives while undermining emissions reduction efforts.

Now I'll move on to the CCUS tax credit. I claim it is both inefficient and unethical. It is inefficient because the oil and gas sector has the wherewithal to invest in this technology on their own. If they do not find it profitable, it is because the reward for cleaning up—meaning the carbon price—is too low. It's better to increase the carbon price and use public dollars to support vulnerable households. It is unethical because taxpayer dollars should go towards furthering the transition, not slowing it down. CCUS is not a transition technology. It is a cleanup technology. It is imperfect and unproven at scale and it does not capture a host of other pollutants. If your teenager smokes cigarettes inside the house while Grandma is ill and getting worse from second-hand smoke, you don't buy your child an air purifier. You scold them when they smoke—that's the carbon price—and you encourage them to chew gum instead—that's the transition.

I would like to clarify a few things related to plastics, jobs and meeting global demand.

This discussion is not about the elimination of fossil fuels but about the elimination of fossil fuel subsidies. Those who fear a shortage of polymers, like plastics and rubber, should not worry. Whether it will ever arrive, the polymer crisis is far away and we'll tackle it then. Better to kick that can down the road than the climate can, if you will.

Next, the jobs argument is a fallacious one. Yes, removing subsidies may cost jobs in this sector, but these jobs are jobs that will be shifted to other sectors that require the valuable knowledge and skills these workers hold, such as the development of clean energy, energy consultancy and so on. This can be scary, especially for workers who are in the later stages of their careers. That is why public dollars are better spent on reskilling, upskilling and generous relocation packages for oil and gas workers and their families.

Finally, I am unmoved by the argument that the world needs Canadian oil and that we should step up our production to meet global demand out of solidarity with other countries facing an oil crunch. Meeting global demand is not the duty of Canada as a nation. Honouring our climate pledge is, and it is the best act of solidarity we can perform right now.

I'm happy to talk about other topics, like inflation and competitiveness, should you ask about them.

Thank you.

● (1105)

The Chair: Thank you, Professor Leroux.

Dr. MacLean, you have three minutes.

Dr. Jason MacLean (Assistant Professor, Faculty of Law, University of New Brunswick, As an Individual): Good morning. Thank you for the opportunity to discuss fossil fuel subsidies and Canadian climate and energy policy.

I'd like to make three points and signal their most important implications.

The first and most important point is this: The imperative of eliminating all fossil fuel subsidies is a means to an end, and we must not lose sight of the end goal. The end goal is not the elimination of all fossil fuel subsidies. The end goal is phasing out all fossil fuel extraction, production, export and use in Canada as soon as possible.

Eliminating all fossil fuel subsidies is a necessary but, in itself, insufficient means of achieving this end goal. Eliminating all fossil fuel subsidies may be the easiest of all steps necessary to phase out Canadian fossil fuel industry production, and it should be done immediately. Subsidies will only prolong and complicate this inevitable phase-out.

I'm mindful of the possibility that my statement this morning may sound radical outside the Canadian Overton Window. This is a testament to the fossil fuel industry's ongoing regulatory capture of Canada's climate and energy policy imagination, but this is not a radical proposition. It is based instead on leading independent, peer-reviewed climate science and policy research.

Climate modelling now shows that, in order to have only a 50% chance of limiting global warming to 1.5°C above the pre-industrial norm, rich producer countries, including Canada, must cut oil and gas production by 74% by 2030 and completely phase out oil production by 2034. Removing all fossil fuel subsidies is an important step toward this larger climate and energy policy goal.

Second, we can no longer afford—with great respect—to engage in semantic wordplay with respect to the meaning of the term “subsidy”, as so many in Canada are wont to do. There is no basis in international law or policy for distinguishing between efficient and inefficient subsidies, nor is there any basis for adopting a narrow definition of the term “subsidy” in relation to fossil fuels. The World Trade Organization's definition is well established and longstanding: A subsidy is a financial contribution by a government or any public body that confers a benefit. This is plainly a broad definition, and it's a definition that other international bodies follow, notably the United Nations Environment Programme.

Third, eliminating all fossil fuel subsidies will reduce greenhouse gas emissions and support the transition to decarbonization. In its latest major assessment report on climate change mitigation, the UN's Intergovernmental Panel on Climate Change discusses the following benefits of complete fossil fuel subsidy removal. According to the IPCC, removing fossil fuel subsidies will reduce emissions, improve public revenue and macroeconomic performance, and yield other environmental and sustainable development benefits.

Finally, I want to emphasize the three most important policy implications of these three points for Canada's current climate and energy policy.

First, the government should immediately cancel the Trans Mountain pipeline expansion project. The government should not approve or otherwise support any new fossil fuel development in Canada, meaning that it should also rescind its recent and improper approval of the Bay du Nord offshore oil project.

Second, the government should rescind the investment tax credit for carbon capture, utilization and storage announced in the recent federal budget, and cancel all other financial support—

● (1110)

The Chair: Thank you.

Dr. Jason MacLean: Can I briefly make my third point?

The Chair: Yes, you have five seconds.

Dr. Jason MacLean: Third, Canada must not only continue to raise its carbon price but also shore up all the loopholes.

Thank you very much. I look forward to your questions.

The Chair: Thank you very much.

We will now go to Ms. Lavery.

[*Translation*]

Ms. Mairead Lavery (President and Chief Executive Officer, Export Development Canada): Mr. Chair, honourable members, it's a pleasure to join you today, to assist the committee in its study of subsidies relating to the oil and gas sector, and to provide some insight into Export Development Canada's role in this industry.

This is a role rooted in EDC's mandate, which is to promote and support Canadian exports worldwide, across all sectors of the economy and in every region of the country.

[*English*]

As the committee may be aware, EDC operates on commercial terms providing financing solutions, equity and insurance. The funds we use for our export financing are drawn from our revenues, the returns of our commercial activities. Consistent with this model, EDC does not provide grants or subsidies.

Our mandate is also bound by the additional expectations of the Government of Canada and indeed the Canadian public that we help Canada meet the challenge of global warming. Growing Canadian exports, contributing to Canada's economy and responding to the crisis of climate change—this is our business landscape today, and it has been evolving dramatically in recent years.

As such, EDC's approach to oil and gas has evolved as well. In just three years, between 2018 and 2021, EDC's support for this sector has decreased by approximately 65%. EDC has committed to cease any new financing to international fossil fuel companies or their projects by the end of this year.

Today we continue to review our lending portfolio, making decisions on where to divest and where to end current international relationships that are inconsistent with our low-carbon goals. Of course, where we choose to invest is just as critical. Today, EDC is one of Canada's largest financial backers of clean technology. Over the last 10 years, we have facilitated approximately $20 billion in clean-tech exports. Last year, for the first time, our support for clean technology surpassed our support for the oil and gas sector. That is a trend we expect to continue.

EDC has worked with hundreds of companies, large and small, across all of Canada and across the oil and gas sector. From all of them we hear the same expectation: Canada's transition to a low-carbon economy must be orderly, and the companies engaged in that transition will require significant capital to make the green investments needed.

Just as EDC plays a key role in supporting clean technology, we believe equally that we can help oil and gas companies make their transition within a low-carbon Canadian economy. That is the balance EDC seeks to strike in this fast-evolving landscape.

Thank you for this opportunity. My colleagues and I look forward to your comments and questions.

The Chair: Thank you, Ms. Lavery.

We'll go to Mr. Dreeshen for six minutes, please.

Mr. Earl Dreeshen (Red Deer—Mountain View, CPC): Thank you very much, Mr. Chair.

Thank you to all of the witnesses who are here today.

As a politician and a person from Alberta, listening to some of the commentary I've heard here this morning gives me somewhat of a pause. I think about the amazing things that have been done environmentally in my province, and I try to look to the future as a world where we are looking at lithium pit mines and all of the other types of things that will be required in order to meet the government goals, whether they be in 2030, 2035 and so on.

I do believe that those people who are suggesting that we move as quickly as possible have their hearts in the right place and that they feel that this is something that will be useful. Sadly, if you think that your community and those of us who are members of Parliament.... If you think that in your community an open pit mine is going to be welcome, I think we're missing the point.

If people want, perhaps they can go up to Fort McMurray and take a look at what an open pit mine looks like after 40 years of reclamation. If that's what's going to happen in this country, then it'll be great for everyone.

I think the war in Ukraine has brought into focus a real energy dilemma, and there's a real dramatic shift in energy security as the world is no longer looking at the future through green-coloured glasses.

I want to speak specifically to EDC because I have been on international trade meetings throughout the world, and we have talked about how our businesses and our energy are able to help those people in places where they need to have a strong, functioning product so that they can do what is necessary to improve their lives. If Canadian energy is blocked from these markets, I'm sure that your offices in EDC would know what other countries will fill the void.

What type of strategy do you have such that it removes our ability to supply ethically produced and managed hydrocarbon products just to have these products replaced by other players?

● (1115)

Ms. Mairead Lavery: Thank you, Mr. Dreeshen, for your comments and for the question.

As I mentioned in my remarks, we think of this situation, the economy and environment, as two sides of the same coin. You can't address one without the other. There are economic opportunities and challenges linked to any environment action.

Our strategy at EDC is quite appropriate: It's that we continue to support Canadian companies. We indicated pre-COP26, last year, that we are withdrawing support for international fossil fuel companies and their projects and diverting our attention to the support of Canadian companies, and really working with the industry to understand their own pathway.

Many of the Canadian oil and gas companies have signed up to a net-zero commitment. We want to work with them to understand what that means, what that means for technology, for clean technology in particular, and their investments in research and development, so that we can be with them on that journey as they work towards a low-carbon future.

Mr. Earl Dreeshen: Thank you very much.

I think it's important for people to realize what you are saying about other international companies. You're not going to be including them in opportunities with Canadian research or Canadian dollars. It's going to be the Canadian companies doing as they have always done, and that is to be the most ethically minded and environmentally sensitive producers of oil and gas on the planet, and you are going to be working with them in order to make sure that works.

Now, the other point—and again we are talking about subsidies—is that we have heard around this table that money is lent to these companies at commercial rates and so on, which in itself is a subsidy, and that is why you hear about these billions of dollars where Canadians are subsidizing the oil and gas industry.

Can you talk a little bit about the commercial rates and the commercial aspect of EDC?

The Chair: You have about a minute, Ms. Lavery.

Ms. Mairead Lavery: I would just say that very often we work in support of commercial partners, particularly the banks—the Canadian banks—so we are always operating at market rates. They may change depending on the outlook or the situation within a respective company, but we are very careful to ensure that we are always participating at market rates and often do that with other partners.

Mr. Earl Dreeshen: You can categorically say that it is not a subsidy that is being given to Canadian companies that are using EDC as one of the tools for management throughout the world.

Ms. Mairead Lavery: Yes, I can.

Mr. Earl Dreeshen: Thank you very much.

The Chair: We now have Mr. Weiler, please.

Mr. Patrick Weiler (West Vancouver—Sunshine Coast—Sea to Sky Country, Lib.): Thank you, Mr. Chair.

I'd also like to thank our witnesses for joining the committee meeting today.

Last year, the IEA said that there should be no new unabated fossil fuel extraction projects going forward. Countries like the U.K., which also produces a significant amount of oil, have already directed their export finance to stop funding fossil fuel projects. This year, Canada has committed to ending overseas funding for fossil fuels.

In your testimony, you mentioned that EDC is committed to ceasing any new financing to international fossil fuel companies or their projects by the end of this year, which is a welcome improvement on EDC's commitment of a 40% reduction in the finance plan for fossil fuel this year.

My question for EDC, through you, Mr. Chair, is whether EDC is prepared to cease funding to unabated fossil fuel production this year.

● (1120)

Ms. Mairead Lavery: We made our statements, pre-COP26, that said we are absolutely exiting any new financing for international companies and their projects by the end of 2022. We have stated that.

Mr. Patrick Weiler: Okay. I have a follow-up to that. Does that include unabated fossil fuel projects that are led by Canadian companies?

Ms. Mairead Lavery: We said that we would want to continue to review the domestic production and the domestic companies and our support for them. As with all EDC transactions, they involve a review of individual companies and individual transactions.

We just announced our sustainable bond framework, and indicated that we are pivoting our support towards transition financing and the reduction of GHG and making the production more efficient at this stage.

Mr. Patrick Weiler: Okay.

You mentioned in your testimony that EDC had provided financing of $20 billion for clean-tech exports. How does EDC define what a clean-tech export is?

Ms. Mairead Lavery: We have actually quite a broad definition of clean technology. It includes anything from renewable energy to waste management to water management to green buildings. We were very particular in defining in our new "sustainable bond framework" what we consider to be green projects and what we consider to be social as well as transition financing projects.

Mr. Patrick Weiler: Thank you for that.

Building on that point about the sustainable bond framework, you mentioned that it does allow money to flow to fossil fuel companies, which of course Canada's green bond does not. Why does EDC target supporting or financing fossil fuel projects through a new finance product that's being created this year?

Ms. Mairead Lavery: Very similar to the Government of Canada, we have our green bond product, which does not support...but this is a new product, the transition bond. It's a recognition that we need to get in and help these companies move faster toward reducing their GHG emissions.

That's why we have the purpose of a transition financing product. It really has some drivers in it to force more efficiency faster. It also includes disclosure requirements. It includes monitoring and a link to a Paris-linked plan for transition by those companies. Therefore, we believe we're actually using our leverage to work with existing companies to help them change faster.

Mr. Patrick Weiler: You mentioned that there's a requirement within this bond framework to have a Paris-aligned plan. Does that just mean net zero by 2050? What are the interim targets that EDC is looking at for companies to abide by as part of this bond framework?

Ms. Mairead Lavery: I think 2050 is perhaps the endgame for any of us working in this space. It's about actually interim targets. It's about looking at pathways. It's about looking at scope 1, scope 2 and scope 3 emissions and actually working on a plan to get there. A plan cannot just be "we will be net zero by 2050". It has to have interim elements attached to it. It has to show progress. Like any plan, it must be monitored. We will need to see progress in the reporting from the companies that would be applicable for transition financing.

Mr. Patrick Weiler: As part of this bond framework and the other products that are offered by EDC, what proportion, if any, is being set aside to ensure that we're supporting projects like renewable energy products and companies that will actually lead to more of a transition to renewable energy rather than having this support go to fossil fuel companies to help them reduce their emissions?

The Chair: You have 30 seconds, please.

Ms. Mairead Lavery: We have looked at our portfolio of the future and indicated how we would like to pivot that. That results in the teams having very clear capital allocations for the purposes of clean technology. It's linked as well to our statement saying that we are not supporting new international financing of fossil fuel companies and their projects going forward.

● (1125)

Mr. Patrick Weiler: How is EDC looking at the risk of new financing for fossil fuel projects in light of stranded assets that might be financed through some of these new products?

The Chair: I'm sorry. We're out of time. Maybe you could address that as a preamble in your answer to another question. That's how we tend to do it in the committee to get around these time limits.

Ms. Mairead Lavery: Certainly.

[*Translation*]

The Chair: Ms. Pauzé, you have the floor.

Ms. Monique Pauzé (Repentigny, BQ): First, I'd like to thank all the witnesses, who have made themselves available to answer our questions.

My questions are for Professor Leroux.

I know that 400 academics signed a letter calling on the federal government to end tax credits for carbon capture and storage initiatives. The letter mentioned that this technology was not to be rejected, but it proposed decarbonization solutions that would limit the use of concrete and cement and it recommended that the oil and gas sector be excluded. Unfortunately, that's not what we're seeing in the 2022 budget.

It's clear to you that this tax credit constitutes a subsidy to the sector.

Recently, I heard about the carbon takeback obligation, which brings extended producer responsibility into full force. For example, if you produce a barrel that emits one tonne of greenhouse gases, you have to capture one tonne of greenhouse gases. This approach would be incremental and predictable.

In your opinion, would a regulation of this kind appropriately place the cost of carbon capture, utilization and storage on the shoulders of the industry and fossil fuel consumers, rather than on all taxpayers by siphoning off public funds?

Prof. Justin Leroux: Thank you for the question, Ms. Pauzé.

The carbon takeback obligation is a regulatory constraint for the oil and gas industry. As you just said, the industry has to offset a certain percentage of greenhouse gas emissions from the production and combustion of fossil fuels by capturing CO2. The percentage would be incremental and we would reach 100% in 2050, that is, net zero.

This policy puts the burden on industry and doesn't siphon off public funds, as you put it. However, it's important to note two things. First, the most important thing about this measure is that it accounts for carbon not only from fossil fuel production, but also combustion. Downstream emissions are included. That's a key consideration, and the same thing could be done with respect to carbon pricing.

The flip side of this is that it doesn't prevent the political impulse to subsidize investments in carbon capture, utilization and storage, or CCUS, with public funds, in the same way that all sorts of loopholes exist for carbon pricing. It's a political impulse. So while the measure itself makes sense and puts the burden on industry, what's to stop government from subsidizing those investments?

I hope that answers your question.

Ms. Monique Pauzé: Yes, absolutely. Thank you very much.

You're also a member of the Canadian Climate Institute. Your research focuses on fair distribution and cost sharing.

With other witnesses, we've talked about the fact that Canada provides 14.5 times more support to the oil and gas sector than to the renewable energy sector. We found that lopsidedness unsettling.

Can you tell us what qualifies as fair at this point in federal public policy to address the climate crisis?

Couldn't support be a little more evenly distributed?

Prof. Justin Leroux: All right.

First, you mentioned my membership in the Canadian Climate Institute. Of course, I'm speaking as an individual, not on behalf of the institute.

It's hard to talk about fairness between industries. At least that's not the focus of my work, which is more about sharing the burden between Canadians and different levels of government.

In other words, disproportionate public support across different energy sectors doesn't necessarily go against the principle of fairness, but it is a political choice. By massively supporting an industry that's already profitable, I remind you, Canada has made its political choice.

That's about all I can say in terms of fairness. As I said, between industries, the lines become more blurred.

● (1130)

Ms. Monique Pauzé: So they can't be compared as easily as I would like.

Now, you established in your opening remarks what a subsidy is.

Based on your definition, is a loan at a preferred rate a subsidy or not?

The Chair: You have 45 seconds, Professor Leroux.

Prof. Justin Leroux: I will be okay with that.

The key word is “preferred”. When you offer a preferred rate, you're giving someone a business advantage. So that constitutes a subsidy to me, absolutely.

Ms. Monique Pauzé: Thank you very much, Professor Leroux.

Prof. Justin Leroux: Thank you.

The Chair: You have about 30 seconds left, Ms. Pauzé, if you care to comment.

Ms. Monique Pauzé: When the vice-president of the Canadian Association of Petroleum Producers came to speak to us—I believe it was the first time—he told us that the industry was in no position to make investments to capture carbon. I just wanted to reiterate that.

The Chair: It's duly noted.

Ms. Monique Pauzé: The industry is too poor. Ha ha!

The Chair: Ha ha!

Ms. Collins, you have the floor.

[*English*]

Ms. Laurel Collins (Victoria, NDP): Thank you, Mr. Chair.

My first question is for Dr. MacLean. You spoke about how the oil and gas industry has captured Canada's regulatory framework. The government seems to be listening to fossil fuel companies instead of experts. You are one of the signatories of the letter signed by 400 academics urging the government not to go ahead with the CCUS tax credit. At a recent natural resources committee meeting, Minister Wilkinson dismissed that letter by saying, “The 400 were not experts in the field”. How would you respond to that?

Dr. Jason MacLean: I would respond by saying that's it plainly not true. The over-400 signatories of the letter, me included, are all experts in a variety of aspects when it comes to climate change research, whether it's climate science or climate policy or energy modelling. There's just absolutely no basis for that remark.

Ms. Laurel Collins: Thank you so much.

Mr. Leroux, I'll ask you the same question.

Prof. Justin Leroux: It's the same answer, really. I'm also a signatory to that letter. My expertise is not in technical climate science, it's in economics. There is an economic argument to be made within that letter and this is why I signed it.

Ms. Laurel Collins: Wonderful, thank you.

Can both of you speak a bit more about the government being captured by the oil and gas industry? Who are they listening to when developing these policies?

Prof. Justin Leroux: This one is for Dr. MacLean.

Dr. Jason MacLean: Thank you. I appreciate the question.

When we refer to regulatory capture, we're talking about a situation where the public interest in laws and regulations has been shifted to serving the interest of special, vested interests. This has long been the case with respect to environment, energy and climate policy in Canada, and it unfortunately remains the case. The investment tax credit is a perfect example. It's pouring billions of dollars into an unproven technology that's been researched and publicly financed for decades and remains utterly ineffective.

This will help prop up an industry that otherwise has to be phased out, and there can be no debate about the fact that it has to be phased out. That's an unequivocal finding of climate science, but instead the government....

I would note about the letter that we, the signatories, requested a meeting with the government to air our concerns, and the government didn't even meet with us to hear them. That's exhibit A of regulatory capture, when you have over 400 interdisciplinary experts on the most pressing policy problem facing the country and you decide not to even meet. It's because your mind is already made up, and your mind has been made up by the oil and gas industry. That's what regulatory capture is.

● (1135)

Ms. Laurel Collins: Thank you so much. You both answered this in other ways, but I'll ask a quick yes-or-no question and I'll go to go to all three witnesses.

First I'll go to you, Dr. MacLean. Do you consider money that the government gives to fossil fuel subsidies to engage in CCUS to be a fossil fuel subsidy?

Dr. Jason MacLean: Absolutely.

Ms. Laurel Collins: Go ahead, Mr. Leroux.

Prof. Justin Leroux: If you mean as a tax credit, then yes, absolutely.

Ms. Laurel Collins: Go ahead, Ms. Lavery.

Ms. Mairead Lavery: I can't speak about all government funding. I can only speak about what EDC does, and it is not a subsidy.

Ms. Laurel Collins: Thank you.

To Ms. Lavery or the others at EDC, you were asked by one of my colleagues about how easy it is to assess the risks of stranded assets and carbon lock-in in financing decisions. Do you mind answering that question?

Ms. Mairead Lavery: No, not at all. We've been working on climate stress tests for quite a considerable period of time. We've been working with some methodologies. We're looking forward to the Bank of Canada's methodology that's very specific to Canada. That's how we look at our own financing book to ensure that we understand the risk of stranded assets. It's that, together with our divesting strategy over the last three years, which is to reduce any risk that existed in 2018.

Ms. Laurel Collins: You talked a bit about how EDC is currently defining clean tech. Clearly, this includes CCUS and blue hydrogen—a.k.a. fossil fuel hydrogen—in the definition of clean tech. This seems like it will impact the credibility and won't really help the reputation of EDC when it comes to financing fossil fuel subsidies.

First of all, would you mind sharing with the committee all of the transactions EDC includes in its clean tech number? That can be a follow-up to our committee, if you don't mind submitting that to us after this.

I'm curious to know if EDC has plans to come up with a clear sustainable finance taxonomy that excludes fossil fuel financing, like the Canada green bond framework, or if it's going to continue shovelling public money towards fossil fuels under the name of clean tech, which is what it sounds like.

The Chair: I hate to do this to you again, Ms. Lavery, but you'll have to reserve the answer as the preamble to an answer to another question.

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

Mr. Colin Carrie (Oshawa, CPC): Thank you, Mr. Chair.

Ms. Laurel Collins: Mr. Chair, could I just get a confirmation that we'll be provided with those documents?

The Chair: Yes.

Ms. Lavery, can you confirm that the information will be forthcoming?

Ms. Mairead Lavery: I'll just confirm that it's an analysis of the types of clean technology support that we provide, by category. Is that what—

Ms. Laurel Collins: All the transactions.

Ms. Mairead Lavery: All of our transactions are recorded on our website. I assume you want some combination of that.

Ms. Laurel Collins: The number of clean tech.

The Chair: Great.

Mr. Carrie, please go ahead.

Mr. Colin Carrie: Thank you very much, Mr. Chair.

Thank you, Ms. Lavery, and to all the witnesses for being here.

My first question is to you.

We saw a 2022 report. Environmental Defence found that in 2021 the federal government provided $8.6 billion in financial support to the oil and gas sector, which included over $5 billion in public funding provided through EDC.

In your opening statement you said that you do not provide subsidies and things like that. Where does that number come from in the Environmental Defence report?

Ms. Mairead Lavery: So that I am very clear, we do not provide subsidies. EDC has provided support to the oil and gas industry, and companies in the oil and gas industry. That number has been significantly reducing in the last three years. In fact, it has reduced by 65%.

I can't speak to the specifics of the Environmental Defence report, but I can confirm that in 2021 we did provide $4.4 billion in financial support to the oil and gas industries.

Mr. Colin Carrie: As I look at this entire issue, one of the problems we have is the agreed definition of what is a subsidy, and what's not a subsidy.

Could I get your thoughts on that? I come from Oshawa, and Oshawa has an auto industry. Internationally, it doesn't necessarily mean it's Canada's desire to play the game—if I can use that term—but if other countries are going to support their sector, and if we don't have some type of support, then our sectors die and the jobs go with it.

We see that with the energy sector, especially for national security, and we're seeing that with the war in Europe. I don't necessarily agree with witnesses who say that we have to phase out the sector 100%. I think that in the future we're going to have certain requirements.

Are there are any internationally agreed upon definitions that we could look at as far as what is a subsidy and what's not a subsidy?

● (1140)

Ms. Mairead Lavery: I am not aware of any agreed upon international definitions. I do understand that there are a number of government departments that are currently looking at that, and we provide our advice to them.

Export Development Canada has been operating for 76 years. We operate under OECD and WTO principles, which actually ensure that we are not conferring a subsidy, because it's a level playing field operation that we are part of as an export credit agency.

The work with our partners is to ensure we are really supporting commercial partners, like our banks, and ensuring that we're not conferring a subsidy. We are at market rates.

Mr. Colin Carrie: I appreciate that very much.

Again, my experience in Oshawa is that if there is something that is declared a subsidy, you're opening yourself up to WTO challenges, and things like that.

On another point, we've had different groups in front of us, and some of the things that oil companies do when they go into a community...They're producing oil and gas. They have support programs for different indigenous groups, and things like that.

Would this be something that people, or some players, would define as a subsidy of sort?

Ms. Mairead Lavery: I am not sure, Mr. Carrie. Typically, we would put that under the definition of community investment.

Under ESG and the way ESG definitions are changing, community investment, while appreciated and often needed in these specific communities, is not enough to deal with the environmental challenge.

When we look at the definitions, and when we look at what we're looking for, we are looking for specific action plans to address emissions reductions, and then looking for activities that companies are doing for their social licence.

You're absolutely right. We do see significant amounts of research and development in clean technology done by oil and gas companies. Oil and gas companies and mining companies are some of the largest supporters, through their supply chain, of indigenous companies.

Mr. Colin Carrie: Thank you very much.

I do, again, have experience with Canadians who tend to be—and I hate to use the term—like Boy Scouts. Internationally, when you're looking at reporting things along those lines, do you know of different international agreements on reporting and transparency that you might be able to comment on?

I worry. Again, you see the east coast of Canada importing oil from places like Venezuela and Saudi Arabia, places where human rights are concerning. I think many of us make moral judgements when asking where this oil and gas comes from.

If we could have it through Canadian sources—

The Chair: I'm afraid we're out of time, Mr. Carrie.

Mr. Longfield, for five minutes, please.

Mr. Lloyd Longfield (Guelph, Lib.): Thank you, Mr. Chair, and thank you to the witnesses.

I want to continue the line of questioning about EDC and the definition of subsidy. We have heard a couple of definitions in our meeting so far this morning. I know there are many more definitions out there.

You were mentioning to Mr. Carrie about the operationalizing of the word “subsidy” within EDC and the use of market rates as a way of ensuring that subsidies aren't being used to unlevel the playing field.

Is there more you can add to that comment?

Ms. Mairead Lavery: Certainly. Thank you for that.

It's just normal operational practice at EDC regardless of the sector. This is something we're very conscious of. We are there to fill market gaps and, therefore, always operate under market principles and practices. That means we are always benchmarking our rates, whether in our insurance products or our financing products, but very particularly in our financing products.

Oftentimes we are part of a commercial syndication or a commercial deal, so we have access to very specific information from commercial players on the rates in those transactions and, therefore, we would not be setting the specific rates. We would be taking the commercial rate in the specific transaction.

Where we are operating stand-alone, then we ask for evidence to prove the market rates, so we're always looking at previous transactions and monitoring the rates in the market, etc.

Hopefully, that helps answer your question.

● (1145)

Mr. Lloyd Longfield: That does.

I think part of this study that isn't addressed in the room is the global market that we're operating within that has oil and gas as a commodity that's sought around the world and produced in many countries, including Canada.

The definition of subsidy that's being used in the world is one that is still in development. We don't have a solid definition. The World Trade Organization's definition is one that most countries are leaning towards.

The United States is a very significant player in this market and has operations in Canada that can easily move back to the United States—which we see in Alberta every time there's a drop in the price of oil in the global market.

How does EDC evaluate the opportunities Canada has in the global market, such as exporting natural gas or hydrogen that's produced in Canada?

Ms. Mairead Lavery: It's something that we continuously monitor. We do have an economics team at EDC that are monitoring Canadian export trends, as well as continuing to update themselves on the 196 countries we support around the world. They are continually watching that.

We don't necessarily get involved in the pricing of oil other than to understand the trends and what those might mean for the portfolio and the level of support provided to the industry overall from commercial banking partners, because that plays a significant role in the support of commercial players.

Mr. Lloyd Longfield: Thank you for that.

You mentioned ESG briefly in one of your answers.

Could you expand on the environmental, social and governance aspect of risk management. We're looking at getting to a net-zero electric grid by 2035. I know that Electricity Canada is very keen on advancing that goal.

How do you use that in your decision-making?

Ms. Mairead Lavery: We use it everywhere in our decision-making, and we have come out very clearly and said it underpins all of our strategy.

Perhaps I may share with the committee some of the dilemmas that it can raise for you. One of the current dilemmas that is very challenging is, in fact, with respect to the solar industry. Of course, we all want to support it given that it's a renewable and an energy source for the future, yet there are significant challenges and questions of human rights in the solar supply chain.

This is where you cannot take the economy and environment as two separate questions. You cannot take the environment away from the social question, the just transition, the labour transition, the human rights question, nor can you take it away from what we would consider governance, which is responsible business, whether that includes ethical business conduct, proper financial conduct of transactions.... We need to have due diligence that looks at all of those elements.

The Chair: Thank you.

[*Translation*]

Ms. Pauzé now has the floor for two and a half minutes.

Ms. Monique Pauzé: I only have two and a half minutes, so we'll have to be quick.

Ms. Lavery, I have a request for you. You said that, for the first time, your investments in clean technology have surpassed investments in the fossil fuel sector. In the next few weeks, I would like you to submit a record of those investments to the committee.

Now I have a question for Mr. MacLean or Professor Leroux. They could both respond.

I'm going to circle back to what I said in the last 30 seconds of my previous turn. I said that in 2021, a total of $79 million was paid out to the top executives of each of the six largest oil and gas companies. At the same time, these companies say they can't transition without public funds. However, they're not innovating and they want to keep producing. What does that say to you?

Wouldn't the time wasted on defining what works and what doesn't be better spent starting a real transition?

● (1150)

The Chair: Who would like to respond first?

Prof. Justin Leroux: I can respond.

I don't know the exact figures for the companies, so I will trust you on those numbers. Clearly, they're looking to secure the profitability of an industry and companies, and rightly so. It's important that they remain profitable. I'm talking about companies in general, not just those in the oil and gas sector. That said, profitability also means that the companies in question don't need assistance. It would be wrong to assist a profitable company. If they're as profitable as you say they are, then they can't justify getting subsidies or assistance—whatever you want to call it. There's no use debating whether or not they should get subsidies, in my opinion. The question is whether to support these businesses or simply let market forces play out.

Ms. Monique Pauzé: Would Mr. MacLean like to complete the response?

[*English*]

The Chair: You have about 15 seconds.

Dr. Jason MacLean: I completely agree with that point. Fiddling with and playing semantic word games over “subsidy” versus “financial support” is deeply irresponsible and a waste of time. We have to eliminate all support to this industry.

Furthermore, on all these supports that industry is asking for, whether they're making record profits or not, I think that maybe there's a moral issue to that, but it's really beside the point. The climate science is clear. We have to phase out fossil fuel production and we have to do it quickly.

The Chair: We're out of time, unfortunately.

Go ahead, Ms. Collins.

Ms. Laurel Collins: Thank you so much, Mr. Chair.

First, for Dr. MacLean, you have mentioned in the past the WTO and the UN Environment Programme definitions of fossil fuel subsidies. These are well established and widely accepted.

We've just heard from EDC that they're not familiar with well-established and widely accepted international definitions. Do you see a benefit for our Crown corporations, our government and Export Development Canada to adopt a broad, internationally recognized definition of “subsidy”? Why do you think the government hasn't done so?

Dr. Jason MacLean: Yes. I would say to those and to EDC in particular, with all due respect, that when it says it is not providing subsidies but is providing supports, it's drawing a distinction without a difference when it comes to phasing out fossil fuel production.

If it's going to continue to ignore well-established and long-standing definitions of “subsidy” that have been adopted internationally, which are very broad, then it ought to provide Canadians with the rationale for why, but really, we should move beyond this pointless debate. We shouldn't be propping up an industry that we know—and we don't have any choice about it, whether you like it or not—we have to phase out.

Ms. Laurel Collins: Thank you.

Mr. Leroux, Canada's biggest emitters are paying the lowest carbon tax rate. We just received another scathing report from the environment commissioner on carbon pricing. These big companies are contributing only about one-fourteenth of the full carbon price. Would you consider these carbon tax loopholes a fossil fuel subsidy?

Prof. Justin Leroux: If you're talking about the OBPS in particular, the answer is yes. You might want to do this to be competitive, but I think also that the tax break is too large. In any case it is imperative that the tax break be phased out over time.

The OBPS addresses competitiveness abroad. It should be complemented with a policy that ensures competitiveness domestically. Border tax adjustments, which are tariffs on imports that depend on their carbon content and the carbon price paid in the country of origin so that the Canadian market is not flooded with carbon-intensive imports, are another avenue.

The broad answer is yes.

The Chair: Thank you.

We'll go now to Mr. Mazier.

Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC): Thank you, Chair.

Thank you to the witnesses for coming out.

Mr. MacLean, I'm listening to your very concerning comments about our energy future, which you're predicting.

To clarify, you do honestly believe that we should absolutely stop oil and gas production, at the very least, by 2034 if not sooner. Are you absolutely in complete agreement with that statement?

● (1155)

Dr. Jason MacLean: I believe in climate science, and that's what it tells us we have to do to be on path to meet 1.5°C and our net-zero target.

Mr. Dan Mazier: So you would say the sooner Canada can phase out oil and gas production the better?

Dr. Jason MacLean: I think that Canada, as a rich, highly developed country and a country that bears a disproportionate responsibility for having contributed to climate change, owes the world an obligation of leadership, which is expressly set out in article 4.4 of the Paris Agreement, which we are obligated to follow.

Mr. Dan Mazier: So for 2% of emissions in all the world, we should shut down our own gas emissions. That's good.

Dr. Jason MacLean: That's a misleading number, sir.

Mr. Dan Mazier: Do you have any idea what it would cost Canadians if we shut down oil and gas?

Dr. Jason MacLean: Absolutely there will be costs. There will be—

Mr. Dan Mazier: What's the number?

Dr. Jason MacLean: —distributional costs, but we can address those by shifting financing away from the fossil fuel industry, retraining workers and shifting our economy to a green economy.

This isn't a new concern, and we have plenty of guidance and work that's being done on how to achieve a just transition.

Mr. Dan Mazier: Mr. MacLean, one word that's been out of your vocabulary today is “affordability”.

Are you aware of any concerns with this transition, anything about energy affordability?

Dr. Jason MacLean: Oh, absolutely affordability is a key issue.

Mr. Dan Mazier: How do you address that?

Dr. Jason MacLean: Again, we can address affordability by not propping up the fossil fuels industry.

Mr. Dan Mazier: In your talks and anything you said today, how are you addressing that? How are you addressing the affordability of energy in Canada today?

Dr. Jason MacLean: Well, the best way to address it, sir, would be through what's called a subsidy swap. We can achieve a just transition to sustainability and achieve energy justice by switching out subsidies to the fossil fuel industry, and helping those who are most vulnerable who will be affected by the transition. It's simple.

Mr. Dan Mazier: Where are we going to get our energy from?

Dr. Jason MacLean: We'll use renewable energy, sir.

Mr. Dan Mazier: And how are we going to afford it?

I'll give you an example. I represent a very rural riding. They have no other choices.

What should I tell those families that are trying to decide whether they should go pick up groceries, what they can afford and how many miles they should put on their vehicle? How do you tell them what to choose when it comes to affordability and living in Canada? What do I tell that young family that says they can't afford the gas to fuel their vehicle?

Dr. Jason MacLean: With respect, sir, the transition to decarbonization and sustainability is a systemic issue, and it can't be answered on an individual-by-individual basis. However, what you could tell them is that smart policy choices would redistribute public finance away from fossil fuel industry players who do not need it and toward families like the ones that you represent.

Mr. Dan Mazier: That doesn't fill their fridge up though. They can't feed their families when they can't afford the food.

Dr. Jason MacLean: I don't follow your reasoning.

Mr. Dan Mazier: To be quite honest, you don't really care about the affordability of it. We're just going to shut down the oil and gas industry, and there's no regard for Canadians' ability to purchase energy in this country.

Dr. Jason MacLean: With all due respect, sir, that's not true.

If you refer to my opening statement, I quote at length from the most recent report of the IPCC on climate mitigation, which addresses the distributional impacts of this transition and suggests ways of addressing those particular distributional impacts. A subsidy swap is a very good way of doing that.

The Chair: We're out of time, Mr. Mazier.

Ms. Taylor Roy, you are next.

Ms. Leah Taylor Roy (Aurora—Oak Ridges—Richmond Hill, Lib.): Thank you very much, Mr. Chair.

Thank you to our witnesses here today, not just for being here today but also for the work you're doing in your respective fields.

I was interested in the conversation that the member opposite was having regarding affordability. I think affordability for Canadians is a very good point, but I don't think it has a lot to do with fossil fuel subsidies. Our government is addressing affordability through a number of programs that we've introduced over the years. One of them is the climate action incentive, which provides a rebate. There are other things, like the Canada child benefit and programs of support for seniors and people who live with disabilities, and most recently, the child care program and dental care.

We can address affordability separately from fossil fuel subsidies. I think they're both important and they both need to be addressed, but I think our discussion today is around subsidies.

I have some questions for Export Development and Madame Lavery.

I really want to go to basics. There are a lot of questions about the definition, and I don't think the exact definition matters as much. If Export Development Canada is providing financial instruments, whether they're loans or guarantees, at market rates—and we are talking about the oil and gas industry, which is a mature and profitable industry—I'm wondering why they need your help. What are the market gaps that exist, and why is it that EDC needs to continue to support that industry?

● (1200)

Ms. Mairead Lavery: I would say that two things really came out. One is that there has been a withdrawal of support for the industry, and particularly the industry in Canada. One of your fellow committee members noted the situation vis-à-vis the U.S. and the withdrawal. We have seen a withdrawal of financial support for the industry itself. This means that while we have continued to reduce the level of financing support that we've put into the industry, there are players who have needed that support. That was particularly acute in 2020, with the geopolitical situation and then the onset of the COVID pandemic. That has been what has triggered it.

As we look to it now, what we really want to ensure is that the financing is going towards transition-type products. This is capital expenditure specifically focused on reducing greenhouse gas emissions. Actually having the capacity there, we hope will make sure that they put in place that capital expenditure faster.

Ms. Leah Taylor Roy: Thank you.

As a follow-up to that, why is it, especially if you're talking now about funding transitional programs and trying to get to things that fall into the ESG category, that the market isn't funding that? I've seen a real move in a lot of our commercial banks to ESG-type projects, and there's a lot of talk about that. Why are there still gaps, if in fact we're talking about programs that fall under that rubric, if you will?

Ms. Mairead Lavery: I think there are a few root causes for that one.

Sometimes it could be linked to the technology and that the technology is more new or not as well tested. You see that a lot in the clean technology space. Then, it's actually introducing it into larger producers. Early adoption of technology isn't something that the market necessarily does, either the financial market or the companies themselves, so that's one of the reasons why you see that.

I think the other one, which one of your other fellow committee members mentioned, is the actual taxonomy. One thing we don't have is a Canadian taxonomy; we didn't necessarily have even Canadian stress test parameters. So getting it into the language of the Canadian financial community and the investing community is really important. It was one of the reasons we went out first with our sustainable bond framework, to do that specifically, to actually put a taxonomy and language out there.

I fully expect that as conditions change, as I hope we see an acceleration towards 2050, the taxonomy will need changing. At the very least, it establishes a baseline. In working with our two partners, BMO and RBC, as well as getting it externally rated, we hope that will put confidence into the market and allow other financial players to come in. In that instance, we see ourselves as leading to try to encourage other investors.

Ms. Leah Taylor Roy: Thank you.

The Chair: I know the time goes quickly.

I want to thank the witnesses for a very engaging discussion that obviously helps clarify our thinking. That's the whole point of these meetings.

We'll now break for a short time to connect the next panel, and we'll take it from there.

Thank you again for appearing; we really appreciate it.

● (1200)

_____(Pause)_____

● (1205)

The Chair: We will now move on to the next panel.

[*Translation*]

Today, we welcome Annie Chaloux, associate professor and climate policy specialist at Université de Sherbrooke. We also have Craig Golinowski, president and managing partner at Carbon Infrastructure Partners Corp. Finally, we are pleased to welcome Aaron Cosbey, senior associate at the International Institute for Sustainable Development.

Each witness will have three minutes for their opening remarks.

Professor Chaloux, you have the floor.

Ms. Annie Chaloux (Associate Professor, Climate Policy Specialist, Université de Sherbrooke, As an Individual): I'd like to thank the committee for the opportunity to speak at this meeting of the Standing Committee on Environment and Sustainable Development.

I'm an associate professor at Université de Sherbrooke and I specialize in Canadian and Quebec climate policy as well as international climate negotiations.

You will soon receive my more detailed brief, which presents my thoughts surrounding the committee's work.

First off, I will say that my remarks come at a time when the scientific community of the Intergovernmental Panel on Climate Change, or IPCC, and the international community have recognized the urgency of taking action on climate change.

Canada has committed to doing its part—

The Chair: One moment, please, Professor Chaloux.

[*English*]

Is there a problem with interpretation?

A voice: Yes, she's speaking too quickly.

[*Translation*]

Professor Chaloux, please slow down for the interpreters.

Ms. Annie Chaloux: Okay.

The Chair: You may resume your remarks, Professor Chaloux.

Ms. Annie Chaloux: Thank you, Mr. Chair.

Canada has committed to working together to reduce its greenhouse gas emissions by 40 to 45% by 2030, and to achieving net zero by 2050. It has also promised, through a series of international commitments, to end fossil fuel subsidies. Canada must reach this goal to retain its credibility on the international stage and do its fair share to deal with the climate crisis. It's about the consistency of Canadian climate policy, both at home and abroad.

As you know, time is running out. The most recent IPCC report demonstrates that we must stringently reduce our greenhouse gas emissions, and that that won't happen if we continue to support the fossil fuel industry—the main problem is that sector.

Fossil fuel subsidies simultaneously create three major issues with respect to addressing climate change.

First, no matter what you care to call them, subsidies support the production of greenhouse gases. If Canada supports this sector, it can't adequately curb its GHG emissions.

This in turn limits funding to low-emission energy. It slows the emergence of renewables, as subsidies to the fossil fuel sector prevent the real cost of the pollution generated by that sector from being attributed to it, to the detriment of renewables.

Finally, this hinders the energy transition. It provides additional funding for the problem, not climate change solutions. For example, redirecting oil and gas subsidies to the just transition rationale, whether to workers affected by the transition or to more vulnerable communities, would accelerate the transition and move the country away from its dependence on oil and gas.

● (1210)

The Chair: Excellent.

We now go to Mr. Golinowski for three minutes.

[*English*]

Mr. Craig Golinowski (President and Managing Partner, Carbon Infrastructure Partners Corp.): Thank you, Mr. Chair, and thanks to the committee for inviting me to present today on this critically important issue.

Carbon Infrastructure Partners is a private equity firm that is invested in oil and gas production, and we've also created a fund product to advance investment in carbon capture and storage.

It is clear and urgent that we have to reduce greenhouse gas emissions caused by fossil fuels, and that reaching our net-zero goal by 2050 is an unprecedented challenge.

In the past 100 years, the global population has grown nearly fourfold to almost eight billion people because of reliable and affordable energy, largely from fossil fuels. Solving climate change by 2050 is not as simple as eliminating fossil fuels and may be self-defeating. The objective should not be to eliminate fossil fuels. The objective should be to eliminate greenhouse gas emissions.

I can summarize my message today in four key points.

One, we cannot reach net zero by 2050 without fossil fuels. It is simply physically impossible. Two, attempting to reach 2050 goals without fossil fuels raises serious risk for policy-makers and governments in their being able to sustain the long-term public support required for climate action. Three, while we cannot use fossil fuels without carbon capture and storage, this is the purpose of the investment tax credit announced by the government, and it needs to be promoted aggressively. Four, the investment tax credit needs to be complemented by the carbon tax. Investors in carbon capture and storage need to have certainty that carbon pricing is entrenched and that a new government cannot kill it or reduce it.

Let me qualify these points further.

First, we have 28 years to do away with 750 million tonnes of GHG emissions in Canada, and it is simply impossible to rally the magnitude of capital needed to invest in sufficient alternative energies.

Second, without sufficient and reliable alternative energy, in times of high energy demand, the risk is inherent that energy prices will spike. People will not be able to afford to heat and cool their homes, and industry will not be able to produce many of the products we all rely upon. This is not speculation. This is precisely what happened in Europe prior to the Russian invasion, where insufficient reliable alternative energies forced a surge in fossil fuel use, including coal, pushing natural gas prices to $60 per mcf versus $3 to $4, as it is now in Canada.

Support for CCUS is not a subsidy for the oil and gas industry, as some argue. It's a critical investment in reaching net zero.

The Chair: This will be a topic of debate in the round of questions.

I'm sorry, Mr. Golinowski, I have to stop you at the three-minute mark because time is very tight.

We'll now go to Mr. Cosbey for three minutes.

Mr. Aaron Cosbey (Senior Associate, International Institute for Sustainable Development): Thank you very much for the opportunity to speak to you today.

The International Institute for Sustainable Development is a non-partisan Canadian policy think tank with over 30 years of experience and almost 20 years of globally respected work on fossil fuel subsidies in countries the world over.

Our 2021 report, which surveyed federal fossil fuel subsidies, found subsidies worth $1.9 billion. Our 2022 report, which focused on provincial subsidies, found subsidies in four different provinces of $2.5 billion. These are conservative numbers. Many of the intervenors you've heard have already told you that these kinds of subsidies, which increase consumption and production of fossil fuels in a time of climate crisis, are perverse and that they frustrate our commitments to achieving our Paris Agreement targets.

In my short time I want to focus on a specific category of fossil fuel subsidies, which are not those that increase production and consumption of fossil fuels—these have been well covered—but rather subsidies to decarbonize the oil and gas sectors.

We now have a target of net-zero emissions in those sectors by 2050 and a target of 42% decrease by 2030. There are two very different pathways that will get us there. One forces firms to undertake emissions reductions. The other forces Canadian taxpayers to fund them. The CCUS tax credit, budgeted at over $2.6 billion over five years, shows which pathway we seem to have chosen and it is the wrong pathway.

To be clear, we support many types of subsidies to address climate change. We can't hope to decarbonize industrial sectors like steel, cement and aluminum without major public subsidies and other support, but subsidies to oil and gas are not like subsidies to those other sectors in three ways.

Subsidies to steel, cement and critical minerals help ensure the viability of industries whose product the world needs more of, whereas all of the modelling agrees that we need less oil and gas to avoid catastrophic climate change.

Second, any public funds that result in more investment in oil and gas sectors simply build up assets that are at risk of being stranded. Our 2021 report, “In Search of Prosperity”, shows that post-2030 global demand for oil is going to be in secular decline, with low and volatile prices. If we don’t properly manage the ramp-down of investment and production in that sector, the economic impacts are going to be acutely painful for oil-dependent regions, communities and workers.

Third, subsidies to oil and gas are therefore inefficient. By any metric—pick your metric—those scarce taxpayer dollars would be more effectively spent supporting sectors that do have a bright future, like carbon fibre from bitumen, electric vehicles, green hydrogen, critical minerals, and on just transition measures for communities and workers in declining sectors.

In closing, the oil and gas sectors are not like other sectors. They are not an appropriate target for subsidies aimed at reducing emissions. We should be investing our scarce fiscal resources in sectors that have long-term prosperity in mind for Canada. We should not be encouraging investments in assets that are going to be stranded by global demand pressures long before the end of their useful economic life.

● (1215)

The Chair: Thank you.

I will go to the rounds of questioning. I'd ask you to be as brief as possible, so that we come in under the allotted time.

We'll start with Mr. Seeback for six minutes.

Mr. Kyle Seeback (Dufferin—Caledon, CPC): Mr. Golinowski, you finished your statement at, “Support for CCUS is not a subsidy for the oil and gas industry, as some argue. It's a critical investment in reaching net zero.”

Do you want to expand upon that? I'll give you a few more moments to talk about that.

Mr. Craig Golinowski: Yes, thank you.

The basic reality of it is that fossil fuel demand by human beings is growing today on earth, and that it's very, basically, impossible to replace fossil fuels. We need to reduce emissions, so carbon capture and storage provides the means to do that, but it's also the case that industries like cement, steel, power generation and ammonia fertilizer production essentially use fossil fuels to produce those products, and carbon capture and storage can be equipped to reduce the emissions from the use of fossil fuels in those particular situations.

The basic reality of it is that we need to meet energy demands from eight billion people, and we can see what happens if that starts not happening. Right now, globally, we have a very large fertilizer shortage. Ammonia fertilizer production in Europe was required to be reduced as a result of insufficient natural gas over the course of the past several months. Now we have an ammonia fertilizer problem globally.

These unintended consequences to eliminating fossil fuels can show up in various places, including in the production of food and in the production of solar panels. Solar panels are made from coal. The cost of solar panels has increased significantly in the last 12 to 18 months because coal prices have skyrocketed.

The point I'm simply making is that the energy system is a complex system, and ensuring that we have sufficient amounts of energy is how we will be able to reduce emissions. It costs energy and it costs capital and materials to reduce emissions, so this is a complex problem, and carbon capture has an important role.

I could talk more about how we finance that, but I'll pause there with respect to the general question.

● (1220)

Mr. Kyle Seeback: Thanks. That was very informative.

We had some testimony in the previous panel saying that Canada should stop producing all oil and gas by 2035. I think you would say invest in CCUS to reduce those emissions and continue to produce. I take it you'd agree with my statement there.

What do you think would be the effect to the Canadian economy if we stopped producing oil and gas by 2035 as was suggested by a previous panellist?

Mr. Craig Golinowski: It's completely outrageous to even say that. The history of the last century is that the human population has grown to eight billion people, and we've consumed ever-increasing amounts of fossil fuels to do that.

Vaclav Smil, an eminent professor from the University of Manitoba, clearly lays out the reasons that the modern world exists, and it's substantially because of fossil fuels, and the reverse is true. If we are unable to supply a sufficient quantity of energy to the human population, we'll have famine, we'll have war and we'll have chaos. It is not an acceptable answer to just simply ignore how we achieved what we have in 2022.

With respect to the Canadian economy itself, the fact is that demand for oil and gas is growing in the world. It is incorrect that there's a peak demand; there's no evidence of that whatsoever. The Canadian economy's role in the world in many respects in terms of supplying things like grain, fertilizer, oil and gas products and a variety of industrial products is because we use fossil fuels. This idea that we can just switch off fossil fuels is ridiculous.

Mr. Kyle Seeback: I guess what you'd say is that using technology like CCUS and this “subsidy” is going to get oil and gas and other parts of the Canadian economy towards net zero without causing damage to the economy, prices and everything else.

Mr. Craig Golinowski: Precisely. That's our view. We fully accept the goal of net zero. How does humanity reduce greenhouse gas emissions from 40 billion tonnes annually down to a much lower number, perhaps net zero? Carbon capture and storage allows you to directly capture the emissions of CO2 and sequester those back into the subsurface.

The capital that's needed to do that is significant. The operating cost needed to do that is significant. It does require investment, but the comparison is what happens if we don't have sufficient energy. What happens if there's insufficient energy? The cost of doing carbon capture is cheaper than not having—

The Chair: We'll have to stop there and go to Ms. Thompson for six minutes.

Ms. Joanne Thompson (St. John's East, Lib.): Thank you, Mr. Chair.

Mr. Golinowski, I'd like to continue with that thread. Would you speak about the timelines and how quickly organizations can move to net-zero emissions?

We've heard so much today about the need to understand the temperature of 1.5°C that we need to move to net zero. I don't think that's a question, but for me the confusion is around how we do this, understanding geopolitical realities and how our world relies on energy, to move from one end of our day to the other.

Mr. Craig Golinowski: It's an unprecedented challenge. It's absolutely extraordinary.

In terms of carbon capture and storage, perhaps I can speak to that in a Canadian context and with respect to energy development generally. Ten years is a planning cycle for energy projects. If we endeavour today to set off for perhaps a 15- to 30-million tonne annual goal of capturing and sequestering CO2 emissions, it's probably an eight- to 10-year process to realize that, to fully do the engineering, with the permitting process, the financing and construction.

I look at what we can accomplish in a decade and what we need to do with respect to regulations, pore space allocation, financing structures and engineering to realize the goal of, say, between 15 and 30 million tonnes annually. Once we achieve that phase one, in the next decade, perhaps that could be doubled or tripled. Perhaps in the following decade, you could double or triple it thereafter.

This is an incredible engineering problem to solve as well.

● (1225)

Ms. Joanne Thompson: Somewhat along the same line of thought, would you speak about public financing of the fossil fuel sector? There's not a lot of common thought on what it is that we're speaking about, so I'd be really interested in your thoughts and your perspective.

Mr. Craig Golinowski: With respect to carbon capture and storage specifically, the range of applications includes power, cement and fertilizer. It could also include the production of oil sands. This spans a wide range. The capital investment needed to build a carbon capture and storage device and the sequestration, the wells, requires a certain amount of upfront capital. After that, the operating costs are significant.

The way the United States has approached this problem is to create a tax credit for 12 years that would pay for the capital and operating costs, and they've done that through one program, the section 45Q tax credit. In Canada, the investment tax credit allows for perhaps half of the capital up front to be shared between the government and the private sector, and then the government will need to contractually guarantee or ensure that the carbon tax remains in place.

When the private sector looks at financing these projects, the investment rates of return and how it would do those calculations, that's in law. As a fiduciary and a manager of capital, how we make these decisions is enshrined in law. Basically, there needs to be a rate of return for a pension fund or other sorts of institutional investors to invest in the space.

The framework of the investment tax credit, combined with a guarantee on the carbon tax, will allow institutional capital to invest in this broader asset class, which we've called carbon management infrastructure.

Ms. Joanne Thompson: Thank you. Again, I'm interested in your thoughts on this. We've heard so much about oil and gas, and the timelines of when we need to move away from the resource and move into other resources that are net zero.

Do you see a role for oil and gas in that transition in being able to continue to supply resources that fuel the world's needs, so that it's not one or the other, but how all stakeholders become part of a transition and move into the realities of a world of net zero?

The Chair: Basically, you have 30 seconds left.

Mr. Craig Golinowski: Sure. Our perspective is that the binary that we need to eliminate oil and gas and do renewables is impossible. Renewables are made from fossil fuels. The copper that goes into solar panels is fundamentally made from diesel in the mining process. It is impossible to eliminate oil and gas, because you reuse oil and gas to make renewables.

The system is not simple. It's complex, and carbon capture allows you to still use the energy embedded in fossil fuels while we build out renewables, nuclear and the other alternatives.

[*Translation*]

The Chair: Thank you.

Ms. Pauzé, you have six minutes.

Ms. Monique Pauzé: Good afternoon.

I'd like to thank our witnesses. I will address Professor Chaloux first.

I'm very happy to see you again, Professor Chaloux, it has been a long time. You do a lot of work in environmental paradiplomacy, federalism, the environment and cross-border relations. You mentioned the fact that, despite Canada's statements in various international diplomatic forms about its intentions to fight the climate crisis, the actions the government takes unfortunately often contradict those statements.

Given Canada's ranking with respect to global oil and gas production, and therefore in downstream greenhouse gas emissions, what implications do you see for environmental paradiplomacy?

● (1230)

Ms. Annie Chaloux: Thank you for your question.

It's also about the responsibility of Canadian provinces that are committed to fighting climate change. It's a challenge of consistency. We see some provinces being very proactive and making very ambitious commitments, while others drag their feet a bit, for economic reasons and reasons related to oil and gas production, which we're discussing today.

One challenge with respect to subsidies is that any funding that goes to this industry puts a substantial drag on the fight against climate change and it prevents Canada from not only meeting its commitments, but doing its part. Historically, Canada has been a major contributor to the climate change issue. It must recognize this, because any added emissions will have an impact on the entire planet. This is a major international responsibility that must be acted upon. In the case of oil and gas, Canada has made an international commitment and it must act on it as quickly as possible to transition to a low-carbon society.

Ms. Monique Pauzé: Surely you study existing legislation elsewhere in the world.

What will Canada face, given these other policies that seem to be much more restrictive than what we have here?

Ms. Annie Chaloux: Currently, Canada's commitments to end subsidies are not binding. Canada is committed in good faith to eventually ending inefficient subsidies to the oil and gas sector. However, for the past 30 years, Canada has had a reputation for making very ambitious commitments and then failing to meet them. This undermines our credibility on the international stage, of course. As more and more countries want to set ambitious targets, there could be penalties economically and in terms of our reputation, because Canada can't be seen as a credible player.

This is where I think the oil and gas issue is fundamental, because it's the big issue that no one is talking about in terms of addressing climate change. As long as we continue to support this industry directly and indirectly, we're investing in the issue rather than in solutions. As a result, this has consequences elsewhere in the world.

Ms. Monique Pauzé: In the current environment, given the IPCC report, do you believe that if the federal government chooses to maintain financial support for the oil and gas sector, it should consider mechanisms to ensure producer accountability?

Ms. Annie Chaloux: I feel it has to go beyond that. Canada needs to end all direct and indirect subsidies to the oil and gas sector right now. This investment made in the form of credit can be redirected to help the workers in this problem sector get through the transition and maintain their quality of life. That's the key. It's also about assisting communities that are more vulnerable because of their dependence on oil and gas so that they can quietly make the transition.

As for the companies and industries in the sector, they're not the ones we should be supporting, because they are the bearers of the climate change issue. We must therefore find ways to curb their production. Subsidies artificially bring down the costs associated with this sector of activity. If the externalities generated by the oil and gas sector in Canada were taken into account, the costs would be much more substantial and therefore much less appealing, and the transition would naturally occur much more quickly.

Ms. Monique Pauzé: We have the Canadian Council of Ministers of the Environment, but I don't hear much about its work, and I wonder if it's up to snuff. Could the council be instrumental in getting the various jurisdictions moving in the right direction? Would we need other tools as well?

Ms. Annie Chaloux: In Canada, we face a great challenge in terms of intergovernmental and interprovincial cooperation. We must all raise our greenhouse gas emission reduction targets and our climate ambitions together. The Canadian Council of Ministers of the Environment, which you mentioned, may be a solution, although the commitments it makes are also non-binding. In addition, some have brought up the question of the Council of the Federation, since the premiers sit on it.

The more forums we have to talk about this issue and how we can share good practices and raise climate ambitions, the easier it will be. However, shared jurisdiction in Canada being what it is, it's a very difficult thing to bring about. That's why we need the federal government to be very proactive in reducing greenhouse gas emissions.

● (1235)

The Chair: Your time is more or less up, Ms. Pauzé.

Ms. Monique Pauzé: That means I can't ask any more questions.

The Chair: No, but only for the time being.

Ms. Monique Pauzé: Okay.

The Chair: Ms. Collins, you have the floor.

[*English*]

Ms. Laurel Collins: Thank you, Mr. Chair.

My first question is for Mr. Cosbey.

In our last panel we heard a bit about how Canada's regulatory framework has been captured by the fossil fuel industry. The government has met with oil and gas companies thousands of times, but refused to meet with any of the 400 experts who collectively called on the government not to fund CCUS. You mentioned that we have two paths—to either regulate the industry and get fossil fuel companies to pay for reducing their own pollution, or to make taxpayers pay for it.

Can you speculate on why the government continues to choose a path where it hands over public dollars to profitable fossil fuel companies?

Mr. Aaron Cosbey: I can speculate. Obviously, you would have to ask the government for a definitive opinion on that, but my speculation is that it's political expediency. It's a way to have your cake and eat it too, or so they think. However, it is short-term thinking. The idea that you can meet your Paris Agreement commitments and have a healthy economy by subsidizing a solution like CCUS ignores two facts. One is that if everybody did that, if we did it the world over, you're only solving 20% of the problems from fossil fuels. The other 80% occurs when you burn those fossil fuels in generation facilities or cars. That's where the real pollution happens. So you haven't solved that.

The other problem is that you can't imagine a future in which you chug away happily producing the same level of fossil fuels we're producing now, plus 2030.... In contradiction to what a previous witness said, there is a peak. Even the Canada Energy Regulator says there's a peak by 2032, followed by continuing demand—and that's based on assumptions that I would question. I would say it's coming even earlier than that. That implies a disaster for the Canadian economy, if we allow ourselves to continue being so dependent on the oil and gas sectors.

Ms. Laurel Collins: Thank you so much.

Can you describe Canada's progress on phasing out fossil fuel subsidies and how this progress might compare with that of our international peers?

Mr. Aaron Cosbey: Our performance in the G20 peer review process has been abysmal and is an international embarrassment. There have been three peer reviews that were conducted before the current one, which we're undertaking with Argentina, all of which were concluded in two years or less. We started ours over four years ago and there's been no progress since then. The facts speak for themselves. We have not progressed well by international benchmarks in the process of phasing out our fossil fuel subsidies, nor have we progressed well on the important question of trying to define what is an efficient or inefficient subsidy, which is crucial to our commitment.

Ms. Laurel Collins: Thanks so much.

We heard in our last panel that Export Development Canada is not not familiar with well-established and widely accepted international definitions. Can you just quickly talk about the benefit of Canada adopting a broad internationally recognized definition of a subsidy and what you think about Export Development Canada's claim they're not familiar with that?

Mr. Aaron Cosbey: There are two things on that question. One, we have an internationally accepted definition of subsidies. It's the WTO definition. It is not just used by the WTO, of which Canada is a member, of course, but also by the OECD in compiling its statistics on fossil fuel subsidies and by the IEA as it compiles its statistics. It's used as an indicator for the sustainable development goal 12.1, which benchmarks international achievement of fossil fuel subsidy reduction. This is an internationally accepted definition. That's one point.

The second point, though, is that I would agree with the sentiment that came out in the last set of discussions. It doesn't matter so much. The really important question is not, is this dollar spent on a subsidy? The really important question is, is this dollar spent in a way that is a good use of public funds? The criterion for that is not the same as whether it's a subsidy or not; the criterion is whether it is in line with our Paris Agreement targets. Is it an efficient use of funds, considering the target? Are there better ways you could use that money and are you contributing to the risk of stranded assets? Those are the kinds of criteria we really need to be worrying about.

● (1240)

Ms. Laurel Collins: When it comes to the $2.6 billion for the CCUS tax credit, Mr. Cosbey and Ms. Chaloux, just quickly, do you both consider that to be an inefficient use of public funds?

Mr. Aaron Cosbey: Efficiency depends on what your goal is. If your goal is employment retention, if your goal is future prosperity for Canadians, if your goal is—

Ms. Laurel Collins: The goal is keeping global warming below 1.5°C.

Mr. Aaron Cosbey: No, because 80% of the emissions that come from the gas that's extracted are emitted in the process of combustion in cars and the fossil fuel gas generation plants.

[*Translation*]

Ms. Annie Chaloux: I fully agree with what Mr. Cosbey said. Clearly, any subsidies to this industry, even for CCUS, allow for the generation of even more greenhouse gas emissions and prevent the transition in an industry that drastically needs to transition.

[*English*]

Ms. Laurel Collins: Thank you.

Mr. Chair, how long do I have?

The Chair: You have about 35 seconds.

Ms. Laurel Collins: Very quickly, can you, Mr. Cosbey, talk about some of the policies that would accelerate the development of clean renewable energy initiatives?

The Chair: You have 20 seconds, Mr. Cosbey.

Mr. Aaron Cosbey: Sure. Let's invest in diversifying the Alberta and Saskatchewan economies, using the resources we have: the project management capacity and the natural resources.

Let's focus on what you can do with bitumen other than burning it in cars. You can make carbon fibre, you can make asphaltene or you can make lithium out of the by-products. There are a million ways of using—

The Chair: Thank you.

We have to move on to Mr. Mazier for five minutes, please.

Mr. Dan Mazier: Thank you, Chair.

This is for the IISD and Mr. Cosbey.

You published a 2021 report, “Federal Fossil Fuel Subsidies in Canada”. In that report, you listed the following as fossil fuel subsidies: $6 million for “Indigenous Natural Resource Partnerships”, $2.37 million for a “diesel generating station” in a northern Ontario community and various “Indigenous Services Canada investments in natural gas and diesel projects and electricity price support for Indigenous communities”.

We've heard at this committee that these investments are very important to some communities. However, you also stated in your report that “fossil fuel subsidies are not consistent with net-zero commitments”.

Do you see any concern with the impact that eliminating these investments, which you have defined as subsidies, will have on Canadians in the name of net zero?

Mr. Aaron Cosbey: Thank you for a careful reading of our report, during which you will have noted that we support some types of fossil fuel subsidies. It's a matter of record, which I repeated in this committee testimony. There are some fossil fuel subsidies that may be necessary, and I consider subsidies to energy in remote and northern communities to be part of those, although at the same time we should be sinking as much or more money into diversifying the energy sources in those communities away from diesel generators.

This comes back to my point. It's not a question of whether it's a subsidy or not. Some subsidies are good. Some subsidies are bad. It's a question of whether it's a good use of public funds.

Mr. Dan Mazier: Thank you.

Mr. Golinowski, global energy demand is rising and countries around the world are begging for clean Canadian oil and gas to displace Russian energy. Do you believe that it is better for the global environment to be supplied by Canadian oil and gas?

Mr. Craig Golinowski: I do unequivocally believe that we have no alternative to the use of oil and gas to supply energy for the population of eight billion people, and that we need to capture the emissions from the use of that oil and gas and sequester it to meet our net-zero goals. Power generation, cement production, steel production and fertilizer production are all based on fossil fuels, and so too are renewables. Solar panels are made from coal. Wind turbines are made from coal. This is just a reality.

If we are unable to accept that proposition and we constrain the ability to supply reliable energy, then Putin can weaponize energy. He can weaponize food, which is what he's doing by restricting exports of fertilizer.

This idea that we can just simply eliminate fossil fuels will result in a lot of problems, so Canada's role is to be able to deliver energy while we reduce our emissions using a proven technology, nascently deployed—proven, though. We need to establish that carbon capture and storage is a global-scale solution to emissions.

● (1245)

Mr. Dan Mazier: That's a nice segue into my next question for you. I see that your organization has a lot of research on carbon capture, utilization and storage. Do you believe the government needs to invest in this technology for the sector to succeed in Canada?

Mr. Craig Golinowski: The way we think about this basic problem is that it's like any other form of utility infrastructure—for example, water infrastructure or sewage infrastructure—where value needs to be put on an avoided emission. The government is the only entity that can do that. It's started to do that with the carbon tax.

Basically, the investors in the carbon capture equipment and that infrastructure need to know that there's a rate of return for their invested capital. We can look at models like municipal utility infrastructure and how we reduce the cost of capital so that every dollar of public money that goes into this on the investment tax credit achieves the largest number of tonnes. We have to reduce the risk as much as possible for the capital providers that invest in this space.

Mr. Dan Mazier: Good. We do need to invest in it.

Have there been any barriers that you think...? I'm wondering if you have something top of mind that you can tell the committee, such as, “Here—if you focused on this, this would make your job and our job a lot easier in getting this project moving forward”.

The Chair: You will have to keep that answer for another question, Mr. Golinowski.

Go ahead, Mr. Duguid.

Mr. Terry Duguid (Winnipeg South, Lib.): Thank you, Mr. Chair.

I would like to thank our witnesses for some great testimony. I would also like to welcome our friend Mr. Cosbey from IISD, which is located in Winnipeg. We're very proud to host them. I congratulate them on the support for the experimental lakes area that we provided in the 2022 budget.

Mr. Chair, I have a couple of comments and then a question or two for Mr. Golinowski, who I am very happy is with us today.

Mr. Golinowski, I think you probably followed with interest our emissions reduction plan that was released a few weeks ago. It's a mix of measures, with pricing, which I think everyone has emphasized is important, but also support for clean technology and a variety of technologies, including CCUS. A number of our witnesses have portrayed the technology as “unproven” and “utterly ineffective”. Those are direct quotes. Mr. Cosbey has just raised some concerns about stranded assets, and that this would not be a particularly good use of public funds.

In your view, can we get to our ambitious targets? I know that some people think they're not ambitious enough, but they're 40% to 45% by 2030 and net zero by 2050.

As well, given what is happening in the U.S. with the 45Q tax credit that the Biden administration is not only supporting but amplifying, what would happen if that incentive were not in the 2022 budget? Where would that investment go, and where would it leave our country?

Mr. Craig Golinowski: That's an important point. I think the United States is taking a much more realistic view of reducing emissions in terms of integrating carbon capture and storage as a solution.

You know, for industries, if Canada is not competitive, then perhaps you could just shut down the fertilizer plant here and move it to Montana, for example. If you're facing a carbon tax without an ability to reduce those emissions in an industrial way, when across the border the alternative would be that the United States government essentially pays for your capture and sequestration solutions straight away, it's simple. You shut down in Canada and reinvest in the United States.

Mr. Terry Duguid: Thank you for that.

My follow-up question, Mr. Chair, will probably bring me to the end of my time.

The UN International Energy Agency and I believe the IPCC "working group III" report both say that CCUS is essential to meeting global targets for greenhouse gases. That's my understanding. Yet, on the other hand, they do say that we do need to phase out the use of fossil fuels. I wonder if you would have a comment on that.

In terms of scaling up this technology globally, isn't technology transfer to China, to India, really where we need to go? Again, I take Mr. Mazier's point. We have some of the highest per capita emissions, but in the great scheme of things, our emissions as compared with China and India, of course, are not as large. We need to help those nations with technology transfer. Of course, the atmosphere is the commons, and we are experiencing the tragedy of the commons with increasing greenhouse gas emissions.

● (1250)

Mr. Craig Golinowski: These projections and scenarios that show the elimination of fossil fuels are total speculation; there's no evidence for it. They're projections made on simulation models to show a mathematical process of how you could possibly do this.

China and India are rich, natively, in coal; they will continue to use coal. If we are unable to show how to use carbon capture and storage so that we can export that to China and India, they'll use coal unabatedly, and we will have no chance of meeting any of our global targets. These are the harsh realities.

The Chair: Perfect.

[*Translation*]

Ms. Pauzé, you have two and a half minutes.

Ms. Monique Pauzé: Mr. Chair, I am going to give my two and a half minutes to Ms. May.

The Chair: All right.

You have the floor, Ms. May.

Ms. Elizabeth May (Saanich—Gulf Islands, GP): Thank you so much, my friend.

[*English*]

There's so much to cover on the evidence we've had in the two rounds.

I'm going to focus my questions to Aaron Cosbey, and I'm doing this in tribute to my Conservative friends, because I was at the press conference where Brian Mulroney and Gary Filmon launched the International Institute for Sustainable Development. I recall that the first prime minister who promised to eliminate fossil fuel subsidies was Stephen Harper at the G20 in Cincinnati. I like to sometimes use my memory and challenge Google. I can't find, on the IISD website, Aaron Cosbey, the first report, but my memory says that Aaron Cosbey and IISD may have done the first groundbreaking work on fossil fuel subsidies before we pledged to get rid of them.

My question to you, Mr. Cosbey is this: Am I right? How long have you been working on this? Give us your best advice about how fossil fuel subsidies are preventing us from holding to a habitable planet.

Mr. Aaron Cosbey: My memory is not much better than yours; I'm getting advanced in years. It has been a couple of decades, so yes, you are right, our work on this stuff precedes Canada's commitment to phase out fossil fuel subsidies.

At the foundation of that work is what you imply, the basic premise that subsidizing fossil fuel consumption in a time of climate emergency is akin to putting your foot on the accelerator as you head toward a cliff, when what you should be doing is braking and changing course. We don't need more production and consumption of fossil fuels—that's what fossil fuel subsidies encourage—we need less. We need those same public dollars to go towards finding the very real solutions, the replacements for fossil fuels, which exist. Green hydrogen is a replacement for fossil fuels in fertilizer production and in steel production.

We have the technologies to replace fossil fuels in industrial production, in transport, in residential heating. They exist; it's not a fairy tale.

Ms. Elizabeth May: Do I have any time left?

The Chair: You have 10 seconds for a comment.

Ms. Elizabeth May: To Aaron Cosbey, do we need coal to make solar panels?

Mr. Aaron Cosbey: No, we do not. You usually use it to make copper.

The Chair: Okay.

Ms. Elizabeth May: It was a bit absurd, but I didn't get anything on the record in 10 seconds.

Thank you.

The Chair: We did get the answer to that question.

Ms. Collins.

Ms. Laurel Collins: Thank you so much, Mr. Chair.

My colleague, Mr. Duguid, just said that the IPCC says that carbon capture utilization and storage is essential. That's not how I read the report.

My question is to Mr. Cosbey. It turns out that we recently found out that Canada actually lobbied the IPCC to increase the importance of carbon capture in the text. I'm curious if you have any comments on this.

● (1255)

Mr. Aaron Cosbey: I always have a comment.

Carbon capture and storage is essential, especially in sectors like cement, where we don't see a clear pathway to deep decarbonization. We used to think it was essential in sectors like steel, but technological progress has pushed us to a point where now we see those pathways, and I'm sure we'll see those pathways in future in cement too; but for the moment, it's useful in those sectors.

It is not necessarily useful in the oil and gas sector. I go back to my point. These sectors are very different. The IPCC report, the third working group report that just came out, ranked all the possible solutions in terms of feasibility, and cost and carbon capture was this small, red-coloured portion at the bottom—high cost, high risk. If you want to pick a solution to decarbonization, it's not CCUS.

Ms. Laurel Collins: You mentioned that you support some subsidies, especially those that support northern, remote indigenous communities.

Can you give us a picture of how the dollar amounts compare, which those current subsidies make up, versus the subsidies that you wouldn't support?

Mr. Aaron Cosbey: I can give you a snapshot of how much we are currently putting in public support toward renewables versus fossil fuels. It's 12:1. Let that sink in. That doesn't speak well to how we are prioritizing real climate action.

Ms. Laurel Collins: Would you like to respond to Mr. Golinowski's comments about how we rely on fossil fuels to make renewable energy, and that we need to invest in fossil fuel companies?

Mr. Aaron Cosbey: We currently use coal to produce copper. That's true. We use diesel in the vehicles which mine the copper and process it, but you can also use hydrogen in those vehicles. Hydrogen can be produced through electrolysis.

Green hydrogen is the wave of the future. If you want to invest in the green energy of the future that has a promising sustained prosperity for the future of Canadians, invest there, because that is also possible. Because we do it now doesn't mean we have to do it.

The Chair: Thank you.

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

Mr. Colin Carrie: Thank you, Mr. Chair, and thank you to the witnesses. I find the conversation incredibly informing and interesting.

I did want to go back to Mr. Golinowski.

One of the comments you made, which I think was poignant, was that the goal should be eliminating greenhouse gases, not fossil fuels. I would like to investigate some of the pragmatic solutions you may have on the top of your head. I know in Europe, for example, Germany did eliminate some of its traditional ways of generating electricity. Now, under times of stress, I think it was forced to increase production with coal. Mr. Duguid mentioned how we in Canada have some technology, and we should be helping some of these emerging economies move forward.

Could you comment on some of these pragmatic solutions that perhaps Canada could be sending out around the world to help achieve our goals as a global contributor in decreasing greenhouse gases?

Mr. Craig Golinowski: As a starting position, a price on carbon is absolutely essential. Valuing carbon is the starting point for all the discussions, so that fossil fuels, renewables, cement, steel, power, and fertilizer...We all compete to solve the emissions problems by knowing precisely what the value is for avoiding that carbon emission. That's absolutely essential.

Carbon price must not be subject to political change. In other words, the biggest challenge we're facing right now, when we speak to institutional investors like pension funds, is that people don't believe the federal carbon tax is durable up to $170 a tonne, and that it will ultimately be changed through the political process. Having contractual guarantees, or some sort of assurance, that the value of an avoided emission remains in place is absolutely critical.

The problem, generally, is if the government is picking winners or losers, or the market forces are not functioning. In Germany, for example, the Germans shut down effectively their nuclear industry on the advice of environmentalists perhaps who suggested that renewables would be able to replace that baseload energy. In fact, the result has been an increase in the use of coal, and an ability for Russia to weaponize energy supply to Germany. Taking away reliable baseload energy on the basis of perhaps an ideology is something we absolutely have to avoid.

Carbon capture is an overall solution. I deeply believe that it plays a pragmatic role, because I start from the basic proposition that the growth in the human population, how the modern world works, is based on fossil fuels. This idea that we're just going to simply eliminate fossil fuels, I don't accept that. I start from, what are we actually going to do about this problem, given what the reality is today? What can I do when I wake up tomorrow?

We've committed ourselves to advancing carbon capture and storage, because we genuinely see a pathway to using our skills in a subsurface, our engineering skills, our financial structuring skills, to deploy capital, and have projects come to fruition that begin to reduce emissions.

● (1300)

Mr. Colin Carrie: Can I ask you to comment as well on the competitive side of things? You mentioned Canada and the U.S., and I think you had a good example on fertilizer.

The U.S. used to be our best customer for energy, and now they're a competitor, though they are moving back to customer status. The Americans have different ways of subsidizing and supporting their industry. You mentioned the carbon tax. In Canada we have one, but the Americans don't.

Can you comment on the importance of certainty one way or another? The Americans seem to be eating our lunch internationally on a lot of these contracts and investments. What are they doing that perhaps we could be doing as well to help our competitiveness, especially in North America?

The Chair: Unfortunately, we're out of time.

We'll have to go to Mr. Longfield for five minutes. Mr. Longfield is the last questioner before we adjourn.

Mr. Lloyd Longfield: Thank you, Mr. Chair.

Would you like to answer the last question from Mr. Carrie? Mr. Carrie and I seem to be sharing brainwaves today, and that's a scary thought.

This is to Mr. Golinowski.

Mr. Craig Golinowski: I spent a year living in California, and I was able to attend a variety of seminars and conferences at Stanford on carbon capture and storage, and there are two observations I made while being there. One was that the capital market, the financial system, has to be the funders of climate solutions generally, so the project finance principles, the fiduciary duty principles of investors, are well known in law. The first point is that the United States is trying to create a market mechanism for capital formation to manage carbon emissions.

Point two is that the United States doesn't hate industry. They want industry to be productive, and what we saw, in particular at the state level—states like North Dakota, Wyoming, Illinois, Louisiana, the industrial states that have sequestration opportunities—want those industries to stay in business; they don't want those industries to be phased out. At the state level, they try to support carbon capture as a means of keeping those jobs and industries alive and those facilities continuing to operate for the long term.

Mr. Lloyd Longfield: Thank you.

Talking about market mechanisms, this morning we had some reports come from the commissioner of the environment and sustainable development from the Auditor General's office saying that our carbon pricing mechanisms we've put in place are not achieving some of the results on the high emitters. I haven't gone through all of the details, but in the summary report, I think it was pointing the finger at Alberta, saying that we need to have a higher price on carbon in Alberta in order to have a more equitable policy so that the higher emitters will be paying more for the carbon that they're producing.

How would our having to look at that report and move forward on changing pricing mechanisms...? You talked about price stability and investment potential if we're changing the field of play. My initial reaction would be that this would be good for your business around carbon capture and storage if the price went up, but it could be bad for the oil industry if we don't have some kind of relief for them through carbon capture and storage.

● (1305)

Mr. Craig Golinowski: The price of carbon emissions does need to go up for carbon capture and storage to make sense. It probably needs to be somewhere in the order of $100 a tonne because of the costs of doing carbon capture. For the industries, for example, the power industry in Alberta, the consumer in Alberta will end up paying for the carbon capture and storage because the cost of electricity will be higher, and the extent to which the price of electricity is higher is partially related to the investment tax credit. If the investment tax credit was lower, the price of electricity just needs to go up further in order to justify the carbon capture and storage. The calculation on how to figure out the rate of return on the invested capital is not a very complex calculation.

I want to emphasize the point that many of these projects require billions of dollars of capital, so investors are rightly asking how durable the carbon tax is.

Mr. Lloyd Longfield: Right. I think the indication from the Auditor General's office is that it should be durable. In fact, it should be progressing faster than what we're putting out into the market right now.

[*Translation*]

The Chair: Thank you.

We'll stop there.

I'd like to thank the witnesses and the committee members for this stimulating in-depth discussion.

I remind committee members that we will be welcoming the Commissioner of the Environment and Sustainable Development on Thursday.

Is it the pleasure of the committee to adjourn the meeting? It appears that it is.

The meeting is adjourned.