HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

44th PARLIAMENT, 1st SESSION

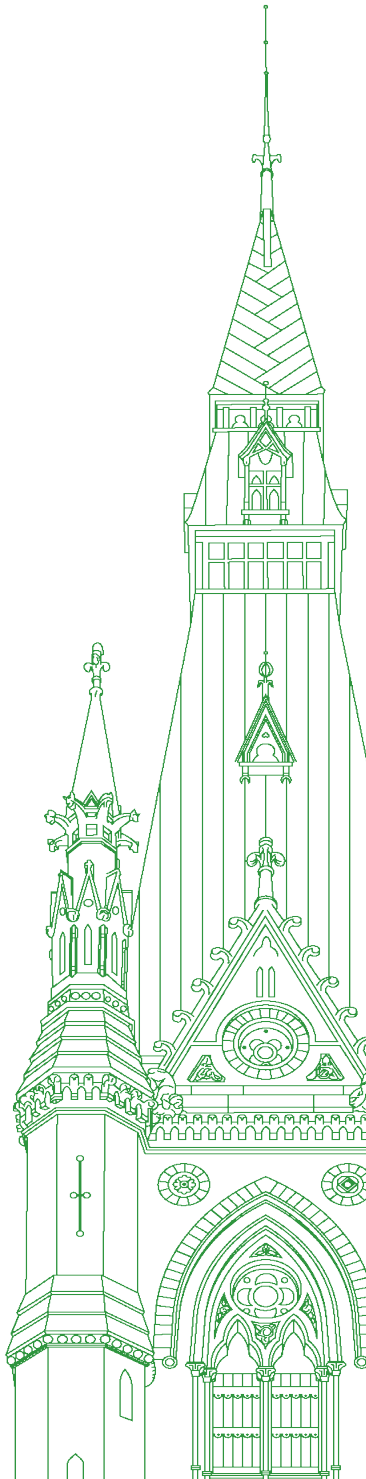
Standing Committee on Natural Resources

EVIDENCE

NUMBER 011

PUBLIC PART ONLY - PARTIE PUBLIQUE SEULEMENT

Monday, March 21, 2022



Chair: Mr. John Aldag

Standing Committee on Natural Resources

Monday, March 21, 2022

● (1535)

[*English*]

The Chair (Mr. John Aldag (Cloverdale—Langley City, Lib.)): Good afternoon, everyone. We have quorum. I will call the meeting to order.

I'd like to welcome everyone to meeting number 11 of the House of Commons Standing Committee on Natural Resources. Pursuant to Standing Order 108(2), the committee is continuing its study of a greenhouse gas emissions cap for the oil and gas sector. Today is our sixth of nine meetings with witnesses for this study.

Please note that today we will be meeting in public to hear from our witnesses up until 5 p.m. Then we will go in camera from 5 p.m. until 5:30 p.m. for committee business.

Today's meeting is taking place in a hybrid format, pursuant to the House order of November 25, 2021. Members are attending in person or remotely using the Zoom application. We ask everybody to note that the webcast will always show the person speaking rather than the entire committee.

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

I'd like to begin by welcoming Mr. Kurek and Mr. Bragdon to the committee.

Mr. Morrice, it's always good to see you here as well.

Today the health and safety protocols changed in Ontario but not in the House. I've been asked to remind people who are moving about the room in person to put a mask on. When seated and for interventions, members are allowed to take their masks off. People are encouraged but not required to have a mask on when they're not speaking.

For witnesses and members, here are a few rules to help us have an orderly and efficient meeting. Interpretation services are available for the meeting. You have the choice at the bottom of your screen of either the floor, English or French, the language being used in real time. Members and witnesses may speak in the official language of their choice.

For members in the room, it's the same as always. Raise your hand if you'd like to speak. The clerk and I will do our best to keep track of the speaking order. For members on Zoom, please use the "raise hand" function. We'll do our best to make sure we're balancing who's in person and who's on screen in the order. Before speaking, wait until I recognize you by name. If you are on Zoom, you will have to unmute yourself. When you're done, please mute yourself. In the room here, we have our technical staff who will help with that. All comments by members and witnesses should be addressed through the chair.

For our guests who are here, if you haven't been in front of a committee before, each member is allocated time for their speaking. They'll usually direct their question to a specific witness. If you have something you would like to say, you can use the "raise hand" function, but let the person asking the questions decide if they're going to involve you in the discussion or not. It's fairly fast-paced, and the members often have specific things they want to get to, so the time generally is left to them to manage. So that's how the process will work.

We also have a handy card system here. When you get down to the last 30 seconds, I raise the yellow flag. When the time is up, I raise the red card. That's simply a sign to wrap up your thoughts. You don't have to stop mid-sentence, but wrap up as quickly as possible so that we can go on to the next person.

With that, I'd like to officially welcome our guests for today.

As individuals, we have Martin Olszynski, associate professor, University of Calgary; Louis-César Pasquier, associate professor, Institut national de la recherche scientifique; Nicholas Rivers, associate professor, University of Ottawa; Charles Séguin, professor, Université du Québec à Montréal; and Andrew Weaver, professor, University of Victoria.

From Mikisew Cree First Nation, we have Melody Lepine, director, who will be speaking, and Benjamin Sey, manager, environmental affairs.

Each witness will have five minutes for opening statements. Using the card system, I'll let you know when your time is up.

With that, we'll turn it right over to Mr. Olszynski.

You can now proceed with your opening statement. You have five minutes.

● (1540)

Prof. Martin Olszynski (Associate Professor, Faculty of Law, University of Calgary, As an Individual): Good morning, Chair, and members of this committee.

I understand that you've all received a copy of my brief, so in the time allotted to me today I will just reiterate the main points.

I've also managed to watch some of your previous hearings and I will address some of the issues I've seen raised.

First, I want to acknowledge Russia's invasion of Ukraine, its tragic and unacceptable toll on the people of Ukraine, and also its emergent influence on energy policy and politics in Canada. Like the vast majority of Canadians, I support economic sanctions and bans on Russian oil and gas.

At the same time, the existential threat of climate change remains. Indeed, climate change is widely understood as a threat multiplier. It makes war and conflict more likely. Consequently, in its response to this and future crises, Canada's government must heed the IPCC's most recent warning that further delay in concerted global action will miss a brief and rapidly closing window of opportunity to secure a livable and sustainable future.

Second, Canada, like other countries, has committed to achieving net-zero emissions by 2050. The question before this committee, then, is how to get there. More specifically, is an emissions cap on the oil and gas sector necessary or desirable for getting there? You have heard some witnesses say that it is. Others have suggested that existing policy tools could be sufficient if they were made more stringent.

I submit to you that the answer depends on your evaluative framework. All policy tools have their strengths and weaknesses. As one example, while carbon pricing may be the most economically efficient, hard emission caps provide more certainty in terms of reductions. Feasibility and legal certainty are also relevant considerations. From my perspective, and considering recent events especially, a hard, declining emissions cap is an appropriate additional tool in the federal law and policy tool box.

Third, in terms of constitutionality, in my opinion, Parliament's criminal law power provides the necessary jurisdictional anchor for an emissions cap, which could take the form of a regulation under CEPA 1999. The Supreme Court of Canada has been clear that section 91.27 of the Constitution Act refers to the criminal law in its widest sense. It can be used to protect both human health and the environment and the exercise of this power is not rendered invalid simply because it affects matters that fall within provincial jurisdiction.

Fourth, and finally, to the extent that the government appears committed to tax credits for CCS, you need a clearer sense of the ledger here. This applies equally to the broader conversation about the role of Canadian oil and gas in the world.

The facts are these: Despite some improvement over the years, the best available evidence suggests that Canada's oil sands are still amongst the most GHG intensive in the world. Oil sands mining has resulted in the creation of 1.4 trillion litres of toxic tailings. Plans to release oil sands-processed water and to reclaim the remaining tailings ponds remain highly uncertain. The estimated environmental liabilities from all of this range from $34 billion to $130 billion, for which less than $1 billion has currently been set aside by industry.

None of this is to suggest that Canadian oil and gas shouldn't compete in the international markets while they exist. They absolutely should, but there is reason to question further subsidies to the sector, bearing in mind current profits in particular.

With that, I will end my remarks.

● (1545)

The Chair: Perfect. Thank you for that.

I will also mention to our witnesses that Mr. Olszynski spoke at a perfect pace. We have translation going on, so we ask people not to try to pack in as much as they can, because that does make it very challenging for the interpreters. A nice, casual, conversational speed is appreciated.

We'll go now to Monsieur Pasquier.

You'll have five minutes.

[*Translation*]

Mr. Louis-César Pasquier (Associate Professor, Institut National de la Recherche Scientifique, As an Individual): Thank you, Mr. Chair.

Honourable members of the committee, thank you for the opportunity to testify today on capping greenhouse gas emissions for the oil and gas sector.

I'm a chemist by training, and my research focuses on the development of environmental technologies to reduce GHG emissions through the diversion of alkaline waste that can capture CO_2. The goal is to provide new products and contribute to a low-carbon circular economy. For example, I can use mine tailings or construction waste and have them react with CO_2—

[*English*]

Ms. Yvonne Jones (Labrador, Lib.): Excuse me, Mr. Chair.

My translation is not working.

The Chair: I'm sorry. The translation is mixed up. We're on the French channel for English. Just pause for one second.

Are we good now?

Ms. Yvonne Jones: I can hear you now.

The Chair: I'm sorry about that interruption. Please continue.

Mr. Louis-César Pasquier: Is the sound good? Okay.

[*Translation*]

For example, I can take mine tailings or construction waste and have them react with CO_2 to create high value-added materials and new construction materials. So I'm basing my remarks today on that expertise.

This has already been mentioned, but the sixth report of the IPCC, published a few weeks ago, makes a clear observation. According to the IPCC, the cumulative scientific evidence is unequivocal: Climate change is a threat to human well-being and planetary health. The IPCC estimates that any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all.

According to the latest inventory, the country's emissions in 2019 were down 1.1% from 2005 levels. While emissions are generally declining or stagnant, emissions from the oil and gas and transportation sectors are increasing significantly. Specifically, emissions from oil and gas extraction increased from 63 million tonnes to 105 million tonnes of CO_2, an increase of 40% due to an increase of almost 200% in production. The emission intensity reduction per unit of hydrocarbon produced is insufficient and a net emission reduction should be sought.

In 2016, the Pan-Canadian Framework on Clean Growth and Climate Change was adopted. One of the plans was to reduce emissions from the oil sector by 40% to 45% below 2012 levels by 2025, three years from now. The results show that emissions are up 13%.

Carbon capture, utilization and storage technology, or CCUS, which I am very familiar with, has been put forward by industry players to achieve reduction targets. This technology has been in use in Canada since 2014. According to the latest report from the Global CCS Institute, just over 4 million tonnes of CO_2 is captured annually in Canada. CO_2 comes from the energy sector, and hydrogen and fertilizer production. However, only 1.2 million tonnes of CO_2 is stored, while the rest is used for enhanced oil recovery, which in my view negates any environmental benefit.

Currently, no emissions from oil and gas production and refining are captured or stored in Canada. Projects in development focus on emissions from areas other than those of interest to us today. Only the Edmonton Region Hydrogen HUB identifies petroleum refining as part of its broader portfolio of emissions under consideration.

Therefore, it seems that CCUS will not be the solution for achieving the sector's specific reduction targets in the short term.

Still, CCUS remains a key technology for the energy transition, especially for reducing emissions from hard-to-kill industrial sectors, such as cement and steel, and even for bioenergy. CCUS must absolutely dissociate itself from enhanced oil recovery, which makes no sense. CO_2 must be stored in geological reservoirs or used as feedstock to decarbonize supply chains, including construction materials, chemicals and fuels such as methanol.

Considering the too many reduction targets not met in the past and current trends, considering the increase in net production and emissions in the Canadian oil and gas sector, considering the current failure of CCUS to reduce emissions from the oil and gas sector, considering the recent observations reported by the IPCC, as well as the urgent need for concrete action, my recommendations are as follows.

First, a cap on emissions from the oil sector must be introduced quickly. The cap could be progressive, but it must definitely meet the reduction targets set out in the Pan-Canadian Framework on Clean Growth and Climate Change.

Second, we need to continue and strengthen carbon pricing to consolidate and stimulate the market in order to accelerate the development of clean technologies, such as CCUS, but separate from the oil industry.

Finally, I recommend an energy transition based on renewable and local energy that will move away from fossil fuels and provide greater security for Canadians in the face of climate and geopolitical tensions, while enabling economic prosperity.

In other words, we aren't talking about not fossil fuel self-sufficiency, but about truly low-carbon energy self-sufficiency.

Thank you.

● (1550)

The Chair: Thank you, Mr. Pasquier.

[*English*]

We'll go now to Mr. Rivers for five minutes, please.

Dr. Nicholas Rivers (Associate Professor, University of Ottawa, As an Individual): Thank you for inviting me to speak to you today.

According to Environment and Climate Change Canada's most recent national inventory report, the oil and gas sector produces over a quarter of all greenhouse gas emissions in Canada. As high as that value is, it includes only greenhouse gases emitted during production of oil and gas, and not the much larger emissions that are released when oil and gas are eventually combusted for energy. Moreover, since 2005, emissions from the oil and gas sector have grown faster than those of any other sector. Future growth in emissions from the oil and gas sector threatens the possibility for Canada to achieve its climate change targets.

Nevertheless, I do not believe a new mandatory cap on oil and gas sector emissions is required. Instead I believe we can achieve deep cuts in emissions from this and other sectors through continued improvement in existing regulations.

To understand my position, it's important to recognize that oil and gas emissions, along with emissions from other large industries, are already regulated under the federal output-based pricing system as well as provincial carbon pricing systems that cover large emitters. A higher carbon price in these systems results in more incentive to reduce emissions.

In contrast, the oil and gas cap under consideration would likely be implemented using a cap-and-trade approach. In this case, an overall emissions cap would be allocated across all oil and gas producers, who could trade permits with one another to achieve the cap. Just like the existing output-based pricing system, companies would determine how much to reduce emissions based on the prevailing price of emissions permits, otherwise known as the “carbon price”.

In other words, at the level of the individual oil and gas producer, the existing system of output-based regulations and the proposed oil and gas cap both provide incentives to reduce emissions via the same mechanism: a carbon price. My basic argument is that we don't need a new sector cap on emissions since we already have in place a policy that can motivate emission reductions in exactly the same manner as would occur under this proposed policy.

While a sector cap on oil and gas emissions would provide similar incentives to firms as existing regulations, there are two reasons it might be promoted anyway. First, a cap on emissions from the oil and gas sector may enable the pursuit of more aggressive emission reductions in this sector than under existing regulations. In my view, however, we should not single out a particular sector for more ambitious emission reductions, which is a costly way to achieve our environmental goals, but instead seek to generate more emission reductions from across all sectors. This can be done by strengthening our existing cross-sectoral regulations.

The second reason a cap on oil and gas might be promoted is that it might provide more certainty of achieving a given emission reduction target in the oil and gas sector. This is true in theory, although in practice cap-and-trade systems typically contain provisions like compliance flexibility or credit banking that reduce the certainty that a particular emission target is reached in any given year.

In other words, there is little to be gained from introducing a new cap on the oil and gas sector that cannot already be achieved by strengthening the existing output-based regulatory system for large industry, and while there is little to be gained, there is a cost associated with introducing a sector cap on oil and gas emissions.

First, there's an administrative cost. Setting up a new cap-and-trade system for the oil and gas sector would require new regulatory resources and there is no guarantee that it could be implemented quickly. With increased climate ambition, there are many demands on regulators, and regulatory time could be better spent.

Second, there is a cost associated with concentrating emission reductions in the oil and gas sector rather than spreading them across all sectors, as under the current output-based regulations.

Third, concentrating emission reductions in one regionally concentrated sector could increase political division associated with climate policy.

Overall, I see little reason to introduce a new cap on oil and gas emissions. Instead, to more quickly reduce oil and gas emissions, I recommend that the federal government continue to revise and strengthen the output-based regulations that reduce emissions both in the oil and gas sector as well as other sectors. Two actions are most critical.

First, the federal government should develop output-based benchmarks and prices that are consistent with 2030 and 2050 emission reduction targets. By 2050, emissions intensity benchmarks should reach zero across all regulated sectors, with limited compliance flexibility. Effectively, this implies a hard cap of zero on all industrial emissions by 2050, not just oil and gas emissions.

Second, the federal government should increase efforts to ensure that provincial large emitter carbon pricing policies achieve the same emission reductions as the federal benchmark.

● (1555)

In sum, the proposed cap on oil and gas emissions is unnecessary. Instead the focus should be on increasing the ambition of our existing regulations for all large emitters.

Thank you very much.

The Chair: That's great. Thank you for that.

Now we'll move to Mr. Séguin.

[*Translation*]

You have five minutes.

Dr. Charles Séguin (Associate Professor, Université du Québec à Montréal, As an Individual): Thank you, Mr. Chair.

Honourable members of the committee, it is with great pleasure and some humility that I offer my thoughts on the emissions cap for the oil and gas sector. My views are based on my detailed knowledge of Quebec's cap-and-trade emissions system and the economic literature on controlling polluting emissions.

Reducing greenhouse gas emissions is necessary to mitigate climate change, but it is also costly for the companies that produce them. It is this trade-off between benefits and costs that calls for a gradual reduction over time. Depending on costs, different emitters should reduce their emissions at different rates. Those for whom it is the least costly should do it the fastest; those for whom it is the most expensive, the slowest.

The issue of the costs of reducing emissions is particularly important in the context of climate change. Canada alone cannot hope to significantly change the global climate trajectory, as it is responsible for less than 2% of global emissions. One of the ways we can draw other countries along is to show that it's possible to reduce emissions while maintaining a robust economy, and the better way to do that is to reduce emissions at the lowest possible cost.

Ideally, regulations would send a common signal to all GHG emitters and let market forces determine the speed of reductions in each sector of the economy. Current regulations in Canada are far from that ideal. It could even be described as Byzantine. A number of stakeholders have pointed out to this committee the risks of adding a new element to the existing regulatory mix. I share many of their concerns.

Nevertheless, I would like to use my time before the committee to highlight the important elements to be considered, should the cap on emissions for the oil and gas sector be introduced. This approach would be imperfect, but it would still leave room for regulatory choices that could be more or less effective. I have five points to make in this regard.

First, a cap can only be effectively implemented if emissions are properly measured. It's notable that emissions in the oil and gas sector are imperfectly measured, particularly fugitive emissions. It is imperative that the measurement of emissions from the sector be clarified before a cap is put in place.

Second, it is important that a cap be associated with tradable permits, both to send a clear cost signal to emitters through the price of those permits, and to allow emitters to trade permits, thereby reducing the total cost of meeting the cap.

Third, marginal cost of reducing emissions for the oil and gas sector should not be too different, either upwards or downwards, compared to the cost for other sectors of the economy. One way to achieve this goal is to impose limits on the price of permits in the cap-and-trade system. Introducing a floor price and a ceiling price, which could move in tandem with the federal carbon tax, would create a virtual connection between the regulated sector and the rest of the economy's emitters. This would avoid excessive differences in carbon prices between sectors.

Fourth, a system applying only to the oil and gas sector should nevertheless seek to cover the broadest possible share of emissions from that sector. A system with broad coverage would promote greater liquidity in the secondary market for permits, which would increase its value. A market with too few players could also suffer from a lack of competition in the acquisition and trading of permits, which would distort their price in the market. To remedy this situation, it would be interesting to open the permit allocation processes, such as auctions, to investors who are not only GHG emitters in the sector.

Fifth, it must be recognized that the oil and gas sector is exposed to the risk of emissions leakage abroad. This is particularly the case for oil, because of the strong capacity of the Organization of Petroleum Exporting Countries to increase production. To reduce leakage, emitters can be granted permits free of charge for a fraction of their historical emissions.

The five elements mentioned each have complex issues. In this regard, the federal government could benefit from Quebec's experience with its cap-and-trade system, which includes the elements mentioned, including a floor price, investor participation in permit auctions and a dynamic mechanism for allocating free permits.

In conclusion, I would like to reiterate that simply introducing an emissions cap for the oil and gas sector is no guarantee of success. This cap can be useless, if set too high, or unnecessarily costly, if it is poorly linked to the rest of the greenhouse gas emitting sectors. The devil is in the details, so the details will have to be carefully worked out to avoid the many pitfalls of this cap.

Thank you.

● (1600)

[*English*]

The Chair: Thank you for your opening comments.

We'll now move to a witness from my beautiful home province of British Columbia, Mr. Weaver.

Let's turn it over to Mr. Weaver for five minutes, please.

Dr. Andrew Weaver (Professor, University of Victoria, As an Individual): Thank you very much. It's an enormous honour for me to be here. I'm speaking to you as a scientist who has been working in the field as a climate scientist since the late 1980s. I served as a lead author in the second IPCC assessment, the third IPCC assessment, the fourth IPCC assessment and the fifth IPCC assessment, and numerous other international committees.

Like you, I have some experience also in political decision-making, having served as the leader of the B.C. Green Party, holding the balance of power in a minority government in British Columbia when we put in place CleanBC, the policy plan in British Columbia.

I'm speaking to you largely as a climate scientist today. I want to emphasize some of the historical misconceptions with respect to the carbon cycle, as well as emissions reductions or lack thereof in Canada. For example, we all know that you around the table, the decision-makers of today, have very difficult decisions to make, yet the irony is that you will never have to live the consequences of the decisions you've made, for the warming we have and the climate change over the next decade or so, the next couple of decades, your political lifetime, is in essence in the cards as a direct consequence of inertia in our socio-economic systems. However, the decisions you make today will have a profound effect on the future generations who are not here to be part of the decision-making process. Therefore, fundamentally the question is do we, the present generation, owe anything to future generations in terms of the quality of the environment we leave behind, yes or no? If the answer is yes, you have no choice but to implement bold action today, for failing to do so will lead us to a planet that frankly is in a lot of strife.

The two biggest issues, of course, are geopolitical instability associated with the rapidly changing climate, for which our built environment cannot adapt; and widespread species extinction, which is ongoing as we speak.

Coming to Canada, many people will say that Canada accounts for 2% of the global emissions, or a small player. In actual fact, Canada is the eleventh greatest emitter as a nation in the world, behind countries such as China, India, United States, Germany, Iran and South Korea, ahead of countries such as South Africa, Brazil and many others. Per capita, Canada is, if not the worst, one of the worst developed nations. I'm not counting small petro states such as Qatar or Palau, but in terms of nations.

However, what is also often not understood in the political decision-making process is that it is not the emissions of any given year that matter; the climate system and its response reflects cumulative emissions since pre-industrial times. In the cumulative sense, Canada is the eighth biggest emitter ever.

Canada's emissions since pre-industrial times are on par with those of India, which has a population greater than 38 times our nation's size. Therefore, we cannot as a developed nation, for which we have historically created the problem, point to others and say, “Well, you know, we'll only do this if you do,” because the problem that exists today, those cumulative emissions, is ours and that of other parts of the developed world.

Many have thought that the Kyoto protocol was somehow a failure. I would suggest that the Kyoto protocol, put in place in 1997, was a resounding success. It was a resounding success despite Canada. As you know, Canada joined the Kyoto protocol and then pulled out of it. However, collectively, the Annex B nations, even if you included Canada and the U.S. pulling out, had emissions go 9.9% below 1990 levels when averaged over the 2008-12 period. The Kyoto protocol was targeting 5.2% reductions globally. Some countries such as the U.K. averaged over the 2008-12 period emissions that were 24% below 1990 levels. Canada's shamefully were 16% above 1990 levels.

However, as I mentioned, even with Canada and the U.S. included, the Kyoto target was met. If Canada and the U.S. are excluded, the Kyoto target was met by more than 20% reductions from 1990 levels, averaged over 2008-12.

We know where emissions are coming from in Canada. We know the single biggest provinces of emitters are Alberta and Saskatchewan, and we know which sectors those emissions are coming from. We have per capita emissions, we know exactly where those sectors are, and we cannot ignore said sectors or give preferential treatment to said sectors.

Finally, in terms of further negotiations moving forward, it's absolutely critical that the notion of border tax adjustments also be put on the table, and perhaps a global carbon price to ensure that jurisdictions that show leadership are not left behind economically by being penalized by others in various sectors.

● (1605)

With that, I'll stop and summarize by saying that there is nothing preventing a cap and trade system and carbon pricing from being put in place. In fact, in British Columbia, when we introduced the first carbon pricing in Canada back in the 2008-09 era, we actually had enabling legislation there as well to tackle carbon. Thank you.

The Chair: Thank you, Mr. Weaver.

Now, for our final opening statement before we get into our rounds of question, it's Ms. Lepine.

Ms. Lepine, over to you for your five minutes.

Ms. Melody Lepine (Director, Mikisew Cree First Nation): Thank you.

Good afternoon, everyone. My name is Melody Lepine, and I'm a member of the Mikisew Cree First Nation. I'm joining you all from Treaty 8 territory in northeastern Alberta, my ancestral homelands of the Cree and Dene, and of my Métis relatives.

I'll just introduce the Mikisew Cree First Nation. We're one of five first nations in this region that are basically heavily impacted by oil sands development. My key position with the Mikisew Cree is as director for government and industry relations, so I oversee the interaction with not only oil sands developers but also policy and regulators such as the federal government. This is an important policy being developed to address a significant impact of climate change.

I'll talk a little about our territory. We come from the Wood Buffalo National Park, a UNESCO World Heritage Site and one of the world's largest freshwater deltas. Significant impacts of climate change have been felt and seen over decades. This is not new to the federal government and provincial government, I think, as we participated in numerous joint federal and provincial hearings, raising not only the impacts of climate change but also the direct impacts from oil sands development. These include cumulative effects such as impacts on our way of life, our rights and our culture; the loss and decline of important key species such as boreal caribou and medicinal plants; and, most importantly, the our ability to access our traditional lands as we witness the drying of one of the world's largest freshwater deltas, the Peace-Athabasca Delta.

Our submission was shared with the Athabasca Chipewyan First Nation and really highlights some of our concerns about carbon capture, mainly because we feel that more can be done in addressing climate change in developing policy and legislation—not only looking at reducing emissions, but also at other ways of addressing climate change, perhaps by introducing things like an emissions cap.

Additionally, I would add that if the federal government is only going to look at carbon capture, as one example, how does something like that address loss of biodiversity? How does it address the tailings issue, the potential release of tailings?

For us, when we look at things, we look at it from a much broader and cumulative nature. Is there an opportunity to address things like the impacts on our treaty rights, cumulative effects, tailings treatment, loss of biodiversity, potential listing of a world heritage site and an endangered listing? There are many other factors to consider when looking at this.

The Mikisew Cree have called for reductions, and for issues to be addressed to deal with climate change. Many of you know that we are dealing with significant impacts from oil sands development, but climate change is really exacerbating things. We are a small, remote community. Tomorrow, our ice road closes, and it's not only a food security issue and a matter of getting goods to our fly-in remote community. The duration of the season for us to commute and travel to our community is also diminishing. I will also add that it's not only a safety issue. We've had a 2016 wildfire here. We've had floods in this area. We're also seeing unforeseen impacts such as those events happening more frequently.

I guess my overall ask is that there be an opportunity here to protect our treaty rights. There's an opportunity here to protect our way of life and to deal with cumulative impacts, deal with the loss in biodiversity such as the woodland caribou, which are really deteriorating before our eyes. We've had a 50% reduction in the population of caribou, likely due to the impacts of the oil sands development, but also impacts from climate change.

● (1610)

Is there a way to address all of these things? Yes, it's by dealing with climate change and effective policy to reduce emissions and putting an emissions cap in place as one of the ways. With that I'll just conclude.

Thank you again for the opportunity to present.

The Chair: Great. Thank you to each of you for your opening comments. I think it sets the stage for a very good conversation today.

Up first, we have Mr. Melillo, for six minutes in this first round.

Mr. Eric Melillo (Kenora, CPC): Thank you very much, Mr. Chair. Allow me to thank all of the witnesses for joining us today to be part of this very important discussion.

I'd like to start with Ms. Lepine, if I may. There has been a lot of very important testimony and insight so far. I'll start with a question not just around the oil and gas sector but around industry more broadly. There has been some previous discussion at the committee given the urgency of the issue we're dealing with, namely climate change.

Would you suggest that when we are investigating a potential emissions cap on the oil and gas sector, there should be a discussion about having, perhaps not the same cap but, a similar cap imposed on other industries, such as concrete or other industries across the country?

Ms. Melody Lepine: In addition to oil sands, are you asking?

Mr. Eric Melillo: Yes, for all industries.

Ms. Melody Lepine: I really don't know the answer to that. I would look to my colleagues or the others on the panel, but I would say yes, anything to reduce emissions is a good thing, I think. That's the goal. If it could be applied elsewhere, then I would assume the answer is yes.

Mr. Eric Melillo: Okay. I certainly appreciate that. I know it's.... We don't expect all witnesses to have all of the answers, but of course, I think we're on the same page where, obviously, it's important that the energy sector and the oil and gas sector continue to innovate and find greener ways of doing this. I just wanted to make the point that there's an opportunity in this discussion to talk about industry in Canada more broadly.

I'd like to ask a bit of a more personal question, for lack of a better term, about your community.

I represent the Kenora riding in northwestern Ontario, which touches treaties 3, 5 and 9. I know there is a real sense of community in the first nations I represent, perhaps more so than in any other communities in my riding, with the importance of traditional land and traditional practices. Given that the oil and gas sector specifically employs many first nations and indigenous people in Alberta, would there be any concern from your point of view that if there were an emissions cap that were to impact production and lead to some job losses and if the transition were not executed in a seamless way, there would be people who have to leave their community for work and lose out on some of those cultural and community aspects of staying in their community?

● (1615)

Ms. Melody Lepine: That's a great question.

There has to be a transition framework, especially for us northern, isolated indigenous communities. It's not fair to allow us to become highly dependent on an oil and gas sector and then, all of a sudden, shut the lights off and expect us to sustain.... There has to be a transition plan and diversification. We have a lot of other great resources in our region beyond the oil sands. This is where we look to the federal government for support, to allow us to become active stewards within our territory so that we continue to sustain our economic and indigenous cultural way of life.

I think it's a balance. I definitely seek that support for this transition.

Mr. Eric Melillo: Thank you.

You mentioned as well in your opening remarks the importance of treaty rights. I think that's a very important aspect of this conversation as well. In previous meetings we've talked a lot about the United Nations Declaration on the Rights of Indigenous Peoples, and about consultation and consent. I'd like to ask you, because so many indigenous people and indigenous communities are impacted by the oil and gas sector, if you believe that the government would need to seek the consent of indigenous communities before moving forward with a policy like an emissions cap.

Ms. Melody Lepine: Because there's going to be an impact on our rights, our way of life, then most definitely I think seeking our consent.... We need to understand what impacts there are to our rights. We need to minimize those impacts, and if at all possible avoid those impacts. It's protected under our Constitution.

With any means where the government is going to make a decision that may impact those rights, then you must seek our consent so that we understand what those impacts are. Consent may be a variety of different things. It could include ways where we can work with you to address those impacts and where we are able to avoid those impacts altogether.

That's a long answer, but I think you get my point.

Mr. Eric Melillo: I certainly appreciate that.

I know I don't have much time left, so I'll give it back to the chair.

The Chair: Did you want Mr. Sey to weigh in?

Mr. Eric Melillo: Oh, sorry, I didn't see the hand. Absolutely.

Dr. Benjamin Sey (Manager, Environmental Affairs, Mikisew Cree First Nation): Thank you, Mr. Chair.

I wanted to add that there's another factor that needs to be considered, which is future reclamation work and potential treatment of tailings going forward. Any cap has to factor those in, because those are in the interest of the people as well.

The Chair: Perfect. Thank you for that.

We're going to move now to Ms. Jones for six minutes.

Ms. Yvonne Jones: Thank you very much, Mr. Chair.

I'm speaking to you today from my riding in Labrador in eastern Canada. I'm coming to you from the unceded lands of the Inuit and the Innu people of Labrador.

I'd like to first of all thank you for your expertise and for the work that you do every day around this important topic of climate carbon reduction and emissions. Education of Canadians is very critical in the work we need to do together to move forward and to be able to transition from fossil fuel. I appreciate your expertise and testimony.

I'm going to start with Mr. Séguin.

When you presented today, you talked about five requirements that you felt should be implemented. We've been hearing testimony from witnesses relating to a possible cap on emissions and focusing on a decrease in emissions rather than a decrease in production. I'm wondering what your thoughts would be around this or if you would have some recommendations that you'd like to propose on those two things.

● (1620)

Dr. Charles Séguin: If what we're trying to achieve here is decreasing GHG emissions, then that's what the cap should be on. There are definite possibilities of decoupling production from emissions. It's not certain at this moment if these possibilities will be economic in the long term.

It's possible that at some point decreasing emissions will necessarily be decreasing production as well, but it would be better to leave that flexibility to the private sector to see whether they can manage the production with the cap on emissions rather than the cap on production. That relates to my comment on the accurate measurement of these emissions. If things are not well measured, then you might want to have a cap on something that's easier to measure and, of course, the production is easier to measure than the emissions.

Ms. Yvonne Jones: My second question is for Mr. Rivers.

Over the last several meetings that we've held on this study, we've heard from witnesses for both direct carbon pricing and cap and trade as tools for possible options. In your opinion, what would be the most effective approach to an emissions cap on this particular sector and why would you think that way?

Dr. Nicholas Rivers: Thanks very much for your question.

I think you're right to point out that carbon pricing comes in different flavours. One flavour of carbon pricing is a carbon tax, and another flavour of carbon pricing is a cap and trade system, and another flavour of carbon pricing, which we currently have in place in Canada, is some sort of tradable performance standard. These are all quite similar. They all provide incentives to industry to reduce emissions based on the level of the carbon price.

I think there are fairly minimal differences between these systems. The main difference will be determined by the level of the carbon price in any of these systems.

My contention is that the existing carbon pricing system doesn't need to be replaced with another carbon pricing system implemented through cap and trade. We have the tools to mandate deproduction and generate deproduction in oil and gas and other sectors through the existing system of carbon pricing that's already in place. We don't need another type of system. I think there are relatively minimal differences between these systems.

Ms. Yvonne Jones: Thank you very much.

I would also like to ask a question of Ms. Lepine. I know that in your area, not unlike a lot of communities I represent, many first nation areas across Canada are heavily dependent upon fossil fuels for electricity and many of the companies that are operating there are the same.

When we talk about implementing a cap or reducing the dependency on these fossil fuels, what recommendations would you have for the government in how we work with indigenous communities to do a full transition off fossil fuels? We know many of them are highly dependent upon that source right now.

Ms. Melody Lepine: We're actually one of them. All my family's homes in Fort Chipewyan are heated with diesel fuel. We also just last year announced the largest solar farm in northern Canada. It's those kinds of success stories that we need to see and, again, more support from the federal government to transition us into these renewables.

It was a great day when we opened the solar farm, but yes, are there other means? Is there geothermal?

I don't have all the answers, but we need to look at those sources, because I tell you, when our ice road is gone, we have no way to heat our homes. There's no way to truck in fuel, as well as other necessities in our community.

Ms. Yvonne Jones: Thank you, Mr. Chair.

The Chair: Thank you.

Unfortunately, Mr. Weaver, we're out of time in that round.

We're going to move now to Mr. Simard.

[*Translation*]

You have six minutes.

Mr. Mario Simard (Jonquière, BQ): Thank you very much, Mr. Chair.

I'd like to ask Mr. Pasquier a question.

In his opening remarks, he was fairly clear that he felt that carbon capture and storage strategies weren't the solution for the oil and gas sector. I don't know if he's aware, but the Minister of Environment and Climate Change announced that they wanted to end ineffective subsidies by 2023. He made it clear that these were ineffective measures.

I'd like to know if Mr. Pasquier feels that the support that the federal government would provide to set up CCUS is a form of ineffective subsidies.

● (1625)

Mr. Louis-César Pasquier: Thank you for the question.

To me, CCUS is not one of the technological solutions we can use for the transition. However, CCUS must not be a hindrance and make us deviate from our appetite for fossil fuels. We really have to differentiate between the two. Yes, we would need carbon capture and utilization technology to use CO_2 not as a waste but as a value-added product. However, it would be better to invest money to help people make an energy transition than to give the industry the means to continue.

Mr. Mario Simard: Thank you very much.

I want to follow up on that with Dr. Séguin. In his presentation, he said something that struck me: He talked about reducing emissions at the lowest cost possible.

There are two major CCUS projects in Alberta that will cost $2.5 billion, and 57% of that will come from public funds.

The question I've been asking myself since this study began is whether carbon capture strategies are cost-effective for the industry, or whether it will inevitably be public funds that will pay for these strategies.

Dr. Charles Séguin: Thank you for the question.

It's pretty hard to say at this point, because the costing has to be done over time. If these technologies were to become very effective in the future, then perhaps we would find that the amounts currently invested were not so high after all. However, we can't know. Governments haven't always been in the best position to determine the best technologies to develop for the future.

What's interesting about an explicit carbon price is that there is already an incentive to develop technologies through pricing. That's not always enough, but I think pricing should be the main channel to encourage technology development, rather than the subsidy, because it's pretty hard for the government to know which solution is better to subsidize.

Mr. Mario Simard: In short, the most effective tool we have is carbon pricing. Is that correct?

Dr. Charles Séguin: I agree with that.

Mr. Mario Simard: Great.

Mr. Pasquier, I'd like to hear your opinion on what I just said.

Technically speaking, if you look at the oil and gas industry as a whole, these are huge volumes. Based on your knowledge of carbon capture and storage, would this type of technology be suitable for large volumes?

Mr. Louis-César Pasquier: Yes, it would be possible and even advisable to use this technology for this type of industry. It must be understood that it's much easier to capture CO_2 right at the emission source than to chase after CO_2 that has been emitted and is moving through the air.

Indeed, from an investment standpoint, it's more attractive to invest in a plant where large volumes of CO_2 can be captured, as opposed to a plant that captures smaller volumes.

Just look at the current cost of capturing a tonne of CO_2. For CO_2 captured from ambient air, it's about $600 per tonne, whereas it's $50 to $100 for more concentrated emissions.

Mr. Mario Simard: I'd like to clarify one thing.

Mr. Pasquier and Mr. Séguin, do you feel that the oil and gas sector could self-regulate to reduce emissions without any financial support from the government in the form of subsidies or tax credits, or that instead it will need money from the public coffers?

Generally, the guiding principle in environmental matters is the polluter pays, not the polluter gets paid. What bothers me is that I get the impression in the Canadian strategy, the reverse logic is being applied.

I'd like to hear your thoughts on this.

● (1630)

Mr. Louis-César Pasquier: As Ms. Lepine mentioned, we also have remote communities. You can't just stop everything all at once.

To use my colleague's example, I'd say that we should move toward solutions that are easier to implement, at a lower cost, and leave no one behind.

Mr. Séguin, I will let you finish.

Dr. Charles Séguin: In the medium term, it's hard to predict the future. The government has to have emissions regulations, but it's not clear whether oil and gas development will continue in the future or be replaced in large part by other energy sources. Most likely, it will eventually be replaced for the most part, but we can't know to what extent that will happen.

Of course, it's in the industry's interest to get subsidies. I don't believe that should be the primary focus, but we have to recognize that some communities depend on these sectors. Pricing provides incentives to businesses and the things I mentioned are also taken into consideration.

Mr. Mario Simard: Thank you.

[*English*]

The Chair: Thank you.

Mr. Angus, it's over to you for six minutes.

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

Madame Lepine, I'm so glad that you are here. I'm going to ask a number of questions because I'm trying to get a picture for our committee for us to understand some of the impacts.

I come from Treaty No. 9, a little bit east of Treaty No. 8. I'm no stranger to tailings ponds. We call them “slimes” back home. Kids played on them. There's one pretty close to my house.

I'm trying to get a picture of just how big the tailings ponds from the oil sands are. One example I had for 1.4 trillion litres of water was 560,000 Olympic-size swimming pools running back to back from Fort McMurray to Australia and back again. That would be the amount of water. Or you could fit two cities of Vancouver in the tailings ponds that exist now at Fort McMurray and the oil sands operations to the north. Where does that water come from?

Ms. Melody Lepine: That's a good question.

It comes from our Athabasca River, which is actually declining in flow and inhibiting us from navigating and using our watersheds. It directly flows all the way down to the Peace-Athabasca Delta.

Mr. Charlie Angus: We know the famous story of the 1,600 birds that died as they were migrating. They had made the mistake of stopping at Syncrude for a visit. Since then we've had multiple bird die-offs. Would you tell me that this water isn't really the most benign water on the planet, if birds flying over it just step down and die en masse?

Ms. Melody Lepine: Well, absolutely, what's within those tailings pond is highly toxic.

Mr. Charlie Angus: I was reading about what's in those tailings ponds: benzene, toluene, hydrocarbons, cresols, cadmium and arsenic. I dealt with benzene, hydrocarbons and toluene in the community of Attawapiskat and the cancers they caused in children, and that site was minuscule compared to what's in these sites. Have you found...we've heard reports of elevated cancer in Fort Chip and other communities.

Ms. Melody Lepine: Yes.

Mr. Charlie Angus: Yes, and we have reports that these ponds are leaking.

Ms. Melody Lepine: Yes, that's correct. I believe the federal government has reports that verify that. It was part of an investigation that I believe was under—Martin correct me if I'm wrong.... The name escapes me right now.

There was a commission that was looking at that not too long ago.

Mr. Charlie Angus: I'm asking this because in five years the Trudeau government has given over $100 billion in subsidies to big oil. These subsidies are tax write-offs, incentives, grants and direct monies, but we don't talk about the subsidies that are given in the taking of your land and your water.

Am I correct that it takes four to six barrels of water from the Athabasca to make one barrel of bitumen?

Ms. Melody Lepine: That's roughly the amount. Yes, it could be three to four barrels, but yes, they use a lot of water.

Mr. Charlie Angus: They don't pay for that water.

● (1635)

Ms. Melody Lepine: No, and they don't return it. They're looking to return it with this treatment and release technology that has not been developed yet.

Mr. Charlie Angus: I guess I want to ask about that, then, because we keep hearing this concept: polluter pays. Everyone says "polluter pays" and we look after this, but we're looking, according to the Canada Energy Regulator, at a million-barrel increase a year in the coming years. That's going to increase a massive amount of pressure on the Athabasca River, which will put an enormous pressure on the tailings.

The solution, we're being told from industry, is, well, just let us dump it, and we'll make it a lot better for you. Do you believe that before that water is dumped in any capacity it has to be restored, reclaimed and made safe so that it is no threat to people, to the wildlife and to the fragile ecosystem of the Athabasca and the Mackenzie Delta?

Ms. Melody Lepine: Absolutely—we take the position of zero risk and zero liability not only today but for the future.

Mr. Charlie Angus: I'm asking that because I was reading the thing about the mining associations. They have the obligation, which is the same in my region of Treaty No. 9, to restore the land.

They say they will restore the land back to nature, and their argument is that "[t]he more water that's stored on site, the less of the site itself is able to be reclaimed until there's an opportunity to release water and free up that space", as though by allowing them to pump all of this cadmium, toulene and benzenes into the water, it will allow them to do the job of reclaiming the land.

Shouldn't they have to reclaim the water first and foremost, before any of that is released, or should any of it be released without guarantees?

Ms. Melody Lepine: None of it should be released—

Mr. Charlie Angus: Okay.

Ms. Melody Lepine: —and on reclamation, yes, they promised reclamation 40 years ago when they started mining.

Mr. Charlie Angus: I'm going to end on this, then, because they are making record profits. They've asked the Canadian government to give them $75 billion for carbon capture. They're making money hand over fist right now. They're going to look at an increase in production of a million barrels a year.

Wouldn't it be just reasonable to say, before you do any increase, we want to know what you're going to do to protect the water, how you're going to deal with the damage that you've done, and how you're going to ensure that any new water going forward will be returned in a manner that is protecting the environment, protecting the people and protecting the rights of the Cree, Dene and Métis people of the region?

The Chair: We'll have a brief response to that and then move on to our next questioner.

Ms. Melody Lepine: That is our goal, Mr. Angus. It's to protect the treaty, the ecological health of our region, including one of the world's largest freshwater deltas, a world UNESCO site, Canada's largest national park, and really important to me is the health of the people. We have some of the highest rates of cancer and diseases that are not known to many places in Canada in our community.

Mr. Charlie Angus: Thank you for that, and I would love to visit at some point.

The Chair: We're going next to Mr. Bragdon if he's ready.

In this round, we have five minutes.

Mr. Richard Bragdon (Tobique—Mactaquac, CPC): Thank you, Mr. Chair.

I'm going to give my spot to my colleague, Mr. Maguire. We're changing spots here.

The Chair: Mr. Maguire, we'll go over to you for five minutes.

Mr. Larry Maguire (Brandon—Souris, CPC): Thanks, Mr. Chair, and thank you to the witnesses today for their testimony.

I want to follow up a bit with you, Ms. Lepine. Your Mikisew Cree First Nation has been one of the leaders in oil sands partnership, specializing in the construction, maintenance, servicing and logistics in the field.

The Liberal government is looking at introducing an action plan to implement UNDRIP. Do you see any challenges with the government imposing an emissions cap on indigenous-led energy projects?

Ms. Melody Lepine: No, I don't think so. I can't think of any challenges right now.

Mr. Larry Maguire: Thank you.

I think it's vital that first nations be economically independent. As we've heard from previous witnesses in this study, natural resource projects are an excellent way to accomplish this, through employment and partnerships. If the oil and gas production does go down, how would this impact the indigenous jobs in your sector in your communities?

Ms. Melody Lepine: There could definitely be job loss, for sure. There are a lot of employment and economic opportunities provided by the oil and gas sector, and that's why we are asking for a transition.

We had a very vibrant economy well before the oil sands, so we would like to look at solutions for other alternatives to our economic well-being. I don't think the answer is being dependent on one natural resource sector. First nations can thrive in many different economic opportunities, within natural sources or within community sustainability initiatives such as tourism and protecting culture.

I mentioned that we're within Canada's largest national park. There are many opportunities for economic sustainability within that resource, as an example.

● (1640)

Mr. Larry Maguire: I'll give you a chance to expand on that.

When the government is looking at designing an emissions cap—this emissions cap—what would be the best way for them to support the indigenous partnerships?

Ms. Melody Lepine: I think it's adaptation, transition, seeking ways to find alternatives, seeking ways to transition, not allowing small indigenous communities to be solely dependent on one sector and basically putting all of our eggs in one basket. We have to sacrifice so many other things to solely be dependent on one thing.

Mr. Larry Maguire: Thanks.

According to a study by the Macdonald-Laurier Institute, the oil, gas and mining sectors represent about eight of the top 10 highest-paying occupations for indigenous peoples in Canada. How would the indigenous peoples be affected economically if oil and gas production declined? There's one thing to lose jobs, but of course there's an economic impact as well, and you have a lot of investment there, I understand.

Ms. Melody Lepine: I think a lot more research and studies could be looking at economics. The new buzzword I'm hearing today is “economic reconciliation”. What does that mean? Exploring that notion of economic reconciliation could mean the presentation of untapped economic opportunities that may not have been considered before a lot of the more traditional practices of today.

Mr. Larry Maguire: I heard your comment earlier about it not being fair to start a development like that and then shut it down. It does impact the lives of a lot of people.

I had the opportunity of being in Fort Mac about 10 or 12 years ago to look at the types of reclamation going on there, which were pretty tremendous. There's change there, no doubt about it, and they use a lot less water now than they did 10 or 15 years ago in that process.

I thank you for your comments in regard to the impacts.

I want to switch to Mr. Rivers for a minute.

The Canadian Climate Institute put out a report this month outlining the framework of Canada's emissions reductions plan, in which you're acknowledged as a reviewer. It's a key observation that “Global oil prices are one of the major determinants of the oil and gas sector's output, and therefore its emissions. Since international oil prices are beyond Canada's control and given the oil and gas sector's large share of national emissions, policies in all sectors should be flexible and adaptable enough to respond to changing global conditions.”

Given the current events, do you think this statement should make the government pause and think before establishing an emissions cap?

The Chair: Can you answer that very briefly? We've run out of time, so it won't do you much justice.

Mr. Larry Maguire: Thanks, Mr. Chair.

Dr. Nicholas Rivers: Thanks for the question.

I would emphasize that the social costs of oil and gas are consistent regardless of the international context. I think we want to be designing our institutions and policies around oil and gas for the long term.

Of course, we want to be thinking about the day-to-day events but we want to be designing these policies to reduce emissions over the half-century to century time frame.

Mr. Larry Maguire: Thank you.

The Chair: Thank you.

Now we're going to go to Mr. Chahal.

You have five minutes.

Mr. George Chahal (Calgary Skyview, Lib.): Thank you, Chair.

I want to thank all the witnesses for their testimony today. I want to start with Monsieur Pasquier. He talked a little bit about the role of CCUS and the importance of the technology.

Monsieur Pasquier, do you believe that CCUS is an important technology and is within the government's role of supporting emerging technologies?

● (1645)

Mr. Louis-César Pasquier: The short answer is yes. CCUS is an important technology but it is not the only technology. It should be amongst a lot of solutions. Furthermore, it should not be the reason that we actually fail to make the changes we need to make regarding our use of fossil fuels and energy in general.

Mr. George Chahal: You do believe it's an important technology and that we should look at this technology and at other technologies in reducing emissions?

Mr. Louis-César Pasquier: Yes. To put it more in context, I've been in this field for more than 10 years. The evolution is very slow. I would say that before the SaskPower capture plant was started, people were thinking that it was the solution and that we had the solution for clean energy, clean oil and gas, but the fact is that today, that's not the case.

On the other side, in Europe, the price on carbon is pushing a lot of new projects that put CCS or CCU in front.

My conclusion or observation is that the energy, and more specifically the oil and gas sector, has had its chance and has not yet met the target regarding the use of CCUS.

Mr. George Chahal: Thank you, Mr. Pasquier, for your comments.

Mr. Séguin, you talked about leakage of oil and gas abroad. How could Canada work with key trading partners like the United States in developing carbon adjustments?

Dr. Charles Séguin: I'm not sure what is being referred to. Do you mean carbon border adjustments or...?

Mr. George Chahal: That's correct. It's carbon border adjustments.

Dr. Charles Séguin: Good. The big challenge here will be moving from regulation that targets facilities to regulation that targets the product, because the facilities don't move, but the products get traded.

In oil and gas, it's probably a little bit easier because projects are more homogenous. If we wanted to work that out with the United States, we would have to agree on a common measurement, because the oil and gas flow both ways across the border. We would want the price to be applied the same way. It would be more difficult because right now, I don't know if the Americans have Canada in mind very much. They really have Europe in mind, which is more advanced on carbon border adjustments, and they want non-price measures to be taken into account in the tariff that would be applied at the border. It's very hard to evaluate the monetary impact of these non-price measures because they are imperfectly translated into the price of the different products.

It's very challenging, and I think it won't come to be implemented for many years.

Mr. George Chahal: Thank you for your insights on that.

I'm going to go to Mr. Rivers.

Mr. Rivers, what role do you believe natural gas should have in helping us transition to net zero?

Dr. Nicholas Rivers: That's a really difficult question, and I think there's not a clear answer for that from the academic community. It's clear that gas has a lower carbon footprint per unit of energy than coal or oil does, so, from that perspective, there's potentially some opportunity, and historically I think that's what we've thought.

There have been extraordinarily rapid improvements in renewable technologies in the last decade, however, and I think that's leading a lot of people to rethink their conception of natural gas as a bridge fuel. It looks as though we may be able to leapfrog over gas in many contexts rather than having to step through gas because of how quickly renewable technologies have developed.

I'll leave it there.

● (1650)

Mr. George Chahal: Do we have enough renewable—?

The Chair: We're out of time on that one now.

We're going to move on, with regrets.

Monsieur Simard, it's over to you for two and a half minutes.

[*Translation*]

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

Mr. Olszynski, in your presentation you suggested that emissions from the oil sands have intensified. I, for one, am concerned about businesses attempting to use CCUS to try to increase production. It's not a cap on production, it's a cap on emissions. I get the impression that we're now trying to make oil a little more palatable in connection with the climate crisis we're experiencing. However, making oil a little more palatable involves a considerable investment of public funds.

If you have an opinion on this, I'd love to hear it.

Prof. Martin Olszynski: Thank you for the question.

[*English*]

I think what I would say is that, insofar as the federal government is concerned, it's the totality of emissions we're concerned with. Here we're talking about roughly 26% of Canada's national emissions, so I think the position has to be, speaking both practically and constitutionally, that if oil can be produced more effectively and efficiently, resulting in lower GHGs, then there should be no problem with producing that oil.

The evil we are concerned about is rising GHG emissions and their impact on climate. My understanding—and this is certainly more of a technical issue outside of my wheelhouse—is that we could make not insignificant gains in efficiency and reduce emissions through to 2030 even without CCS. Then from that point on moving forward, if CCS were feasible and it worked, then there might be further gains to be had.

So from the long policy perspective, we say that's your motive; that's your driver there. The cap would simply say very clearly that absolute emissions have to stay at that cap, and then over time that cap is going to decline.

We're talking about an emissions cap that is not just intensity-based. We are talking here about an absolute cap on emissions for the sector. So it would drive that innovation and those investments, and what we would see, and what the companies have all committed to, would be a net-zero pathway by 2050.

Whether or not it can be used to greenwash oil, at the end of the day we know that the downstream emissions—the scope 3 emissions from our vehicles and from other processes—have to be dealt with for sure. So I think this is really an interim step: As long as oil is being used, can we make Canadian oil and gas drive down its emissions so that it is more competitive, frankly, in a low carbon scenario?

[*Translation*]

Mr. Mario Simard: Thank you.

[*English*]

The Chair: We're out of time there.

We're going to move to Mr. Angus for two and a half minutes.

Mr. Charlie Angus: Thank you.

Mr. Olszynski, I just want to follow up on what my colleague was asking, because one of the things we've been hearing here is that the Canada Energy Regulator is planning for a massive increase in production of a million barrels a day. Certainly even before the war in Ukraine, they were looking to promote that for export.

It would be theoretically possible for us to be at net zero with a massive increase, since none of the emissions from this million barrels a day is going to be counted because it's burned offshore. Is that logical?

Prof. Martin Olszynski: Well, I think it's baked into the system that we're dealing with, both internationally and domestically. I had a chance today to quickly review the Net-Zero Advisory Board's submissions to the government, and that same perspective is shared there. What I think it does is that it just makes it clear that overall here, this isn't a panacea. We are driving—and need to drive—towards decarbonization of our economies. We need to move in that direction as hard and as fast as possible.

If, in the interim, the oil and gas industry sees fit to invest in these technologies so that it can get that last barrel, or whatever it wants to get, then my own view is that.... I'm fairly agnostic on that. I will say—and I made this clear, I hope, in my comments and in my submissions to you—that I have strong concerns about using any more public money towards that, in the current context in particular.

● (1655)

Mr. Charlie Angus: Yes, I guess the thing is that I feel this would have been the best conversation to have in 1998. In 2022, to be told, well, you know, let us do a massive increase in oil production, and I'm sure we're going to find efficiencies....

You mentioned the IPCC report. When I read that, the clock is ticking in a serious way. It may already have run out for us, and yet we're talking about an emissions cap that Mr. Guilbeault has now punted off to someplace in the distant future.

You say we need a hard cap. You also say that federally we have the jurisdiction. Why is it that we have the jurisdiction of the federal government to have a hard cap on emissions when we're talking about actually meeting our international obligations? Could you just explain that?

Prof. Martin Olszynski: I'll suggest that it is in part a question of constitutional law. Sections 91 and 92 have to be interpreted in relation to each other. Parliament has certain heads of legislative power under section 91 and the provinces under section 92.

When you look at the criminal law power, for instance, it clearly can be used to protect the environment, but we know, for instance, that the provinces have very strong jurisdiction over natural resources and the development of natural resources. Production falls very squarely in that.

I think it's absolutely a reasonable conclusion for Parliament to say, well, maybe in a hypothetical world in five years we can produce oil and gas and not have emissions, so we don't need to criminalize the production of oil and gas per se, but we criminalize and prohibit emissions, and we work on reducing emissions, and that's our goal. That's a valid use of the federal criminal law power. It is not a valid federal use of the criminal law power to micromanage production within the provinces. It might seem....

I'll leave it there.

Mr. Charlie Angus: Thank you so much.

The Chair: Thanks, everybody.

Regrettably, we are at the end of our time today. The final part of this would be 10 minutes, and that would eat into the time that we need to....

Mr. Larry Maguire: Mr. Chair?

The Chair: Yes, Mr. Maguire.

Mr. Larry Maguire: Do we have another couple of minutes to start another question? Or is there a minute each or something for maybe a few questions?

The Chair: The issue we're going to run into is that we have to go out of open session and into a closed session, which takes about five minutes.

Mr. Larry Maguire: Okay.

The Chair: I think it would be great, but what I was going to say to all of our witnesses who have joined us today is that if you have additional thoughts based on the conversation, or other thoughts that have come to mind, you are invited to submit a written brief of up to 10 pages. We have had many who, as part of the study, have built on the conversations we've had during our time together. That invitation extends to each of you.

I do want to thank each of you for all the information you've provided us today. There is a lot more for us to consider as we work on our report, which, hopefully, we will be tabling in Parliament soon to help the government deal with this very important issue. Thank you, everybody, for your participation today.

I'm going to suspend the meeting. For the members who are online, there's a new link for you to get into the closed session.

We'll be shutting down this part of the meeting. We invite people to get back in as quickly as possible so that we can get going with the in camera portion of the meeting for our committee business.

With that, I'll suspend.

[*Proceedings continue in camera*]